

AV Receiver HTR-5065 HTR-4065 Owner's Manual

Read the supplied booklet "Safety Brochure" before using the unit.

English

CONTENTS

Accessories	•••	4
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FEATURES

What you can do with the unit 5 Part names and functions 7	
Front display (indicators)	8
Rear panel	9
Remote control	10

PREPARATIONS

General setup procedure	11
1 Placing speakers	12
2 Connecting speakers	15
5.1-channel system	
7.1-channel system	
Connecting front speakers that support bi-amp connections	
Connecting Zone B speakers	
Input/output jacks and cables	17
3 Connecting a TV	
4 Connecting playback devices	23
Connecting video devices (such as BD/DVD players)	
Connecting audio devices (such as CD players)	
Connecting to the jacks on the front panel	
5 Connecting the FM/AM antennas	26
6 Connecting to a network	27

7 Connecting recording devices
8 Connecting the power cable
9 Selecting an on-screen menu language
10 Optimizing the speaker settings automatically (YPAO)
Error messages
Warning messages

PLAYBACK

5

11

Basic playback procedure	34
Selecting the input source and favorite settings with one touch	
(CCENE)	25
(SCENE)	35
Configuring scene assignments	35
Selecting the sound mode	36
Enjoying sound field effects (CINEMA DSP)	
Enjoying unprocessed playback	
Enjoying pure high fidelity sound (direct playback)	40
Enjoying compressed music with enhanced sound (Compressed Music Enhancer)	41
Enjoying surround sound with headphones (SILENT CINEMA)	41
Listening to FM/AM radio	42
Selecting a frequency for reception	42
Registering favorite radio stations (presets)	43
Radio Data System tuning	45
Playing back iPod music	46
Connecting an iPod	46
Playback of iPod content	47
Playing back music stored on a USB storage device	50
Connecting a USB storage device	
Playback of USB storage device contents	

34

Playing back music stored on media servers (PCs/NAS)	53
Media sharing setup	53
Playback of PC music contents	53
Listening to Internet radio	56
Playing back iTunes/iPod music via a network (AirPlay)	58
Playback of iTunes/iPod music contents	58
Playing back music in multiple rooms (HTR-5065 only)	60
Preparing Zone B	60
Configuring playback settings for different playback sources	
(Option menu)	62
Option menu items	62

CONFIGURATIONS

Configuring various functions (Setup menu)	
Setup menu items	67
Speaker	
HDMI	
Sound	
ECO	
Function	
Network	
Language	
Configuring the system settings (ADVANCED SETUP me	nu) 80
ADVANCED SETUP menu items	
Changing the speaker impedance setting (SP IMP.)	
Selecting the remote control ID (REMOTE ID)	
Switching the video signal type (TV FORMAT)	
Restoring the default settings (INIT)	
Updating the firmware (UPDATE)	
Checking the firmware version (VERSION)	
Controlling external devices with the remote control \ldots	
Registering the remote control code for a TV	

U	pdating the unit's firmware	85
	Resetting remote control codes	.84
	Registering the remote control codes for playback devices	.83

APPENDIX

66

86	

Frequently asked questions	
Troubleshooting	
Power and system	8
Audio	8
Video	
FM/AM radio	90
USB and network	
Remote control	9
Error indications on the front display	
Glossary	
Audio information	9
HDMI and video information	94
Yamaha technologies	
Video signal flow	
Information on HDMI	
HDMI Control	
HDMI signal compatibility	
Reference diagram (rear panel)	
Trademarks	
Specifications	10 1
Index	

Accessories

Check that the following accessories are supplied with the product.

□ Remote control







□ AM antenna



🗆 FM antenna



*One of the above is supplied depending on the region of purchase.

□ YPAO microphone



Easy Setup Guide

<u> </u>





Safety Brochure



Operating range of the remote control

Point the remote control at the remote control sensor on the unit and remain within the operating range shown below.



- The illustrations of the main unit and remote control used in this manual are of the HTR-5065 (U.S.A. model), unless otherwise specified.
- Some features are not available in certain regions.
- Due to product improvements, specifications and appearance are subject to change without notice.
- · This manual explains operations using the supplied remote control.
- This manual describes all the "iPod", "iPhone" and "iPad" as the "iPod". "iPod" refers to "iPod", "iPhone" and "iPad", unless otherwise specified.



indicates precautions for use of the unit and its feature limitations.

indicates supplementary explanations for better use.

FEATURES

What you can do with the unit



□ Connecting various devices (p.23)

A number of HDMI jacks and various input/output jacks on the unit allow you to connect video devices (such as BD/DVD players), audio devices (such as CD players), game consoles, camcorders, and other devices.



Playing back TV audio in surround sound with a single HDMI cable connection (Audio Return Channel: ARC) (p.18)

When using an ARC -compatible TV, you only need one HDMI cable to enable video output to the TV, audio input from the TV, and the transmission of HDMI Control signals.



□ Creating 3-dimensional sound fields (p.37)

The Virtual Presence Speaker (VPS) function allows you to create a 3-dimensional sound field in your own room (CINEMA DSP 3D).



Listening to FM/AM radio (p.42)

The unit is equipped with a built-in FM/AM tuner. You can register up to 40 favorite radio stations as presets.

□ Enjoying pure high fidelity sound (p.40)

When the direct playback mode is enabled, the unit plays back the selected source with the least circuitry, which lets you to enjoy Hi-Fi sound quality.

□ Easy operation with a TV screen

You can operate the iPod or USB storage device, view information, or easily configure the settings using the on-screen menu.

□ Low power consumption

The ECO mode (power saving function) reduces the unit's power consumption and helps to create an eco-friendly home theater system (p.76).

Useful tips

The combination of video/audio input jacks does not match an external device...

Use "Audio In" in the "Option" menu to change the combination of video/audio input jacks so that it matches the output jack(s) of your external device (p.24).

Video and audio are not synchronized...

Use "Lipsync" in the "Setup" menu to adjust the delay between video and audio output (p.74).

I want to hear audio from the TV speakers...

Use "Audio Output" in the "Setup" menu to select the output destination of signals input into the unit (p.72). Your TV speakers may be selected as an output destination.

I want to change the on-screen menu language...

Use "Language" in the "Setup" menu to select a language from English, French, German, Spanish, Russian and Chinese (p.29).

I want to update the firmware...

Use "Network Update" (p.85) in the "Setup" menu or "UPDATE" (p.81) in the "ADVANCED SETUP" menu to update the unit's firmware.

Many other settings are available that let you to customize the unit. For details, see the following pages.

- Scene settings (p.35)
- Sound/video settings and signal information for each source (p.62)
- Various function settings (p.67)
- System settings (p.80)

Part names and functions

Front panel



🕦 🕛 (power) key

Turns on/off (standby) the unit.

Standby indicator

Lights up when the unit is in standby mode under any of the following conditions.

- HDMI Control is enabled (p.72)
- Standby Through is enabled (p.72)
- Network Standby is enabled (p.78)
- An iPod is being charged (p.46)

3 YPAO MIC jack

For connecting the supplied YPAO microphone (p.30).

4 Remote control sensor

Receives remote control signals (p.4).

INFO key

Selects the information displayed on the front display (p.34).

6 MEMORY key

Registers FM/AM radio stations as preset stations (p.43).

PRESET keys

Select a preset FM/AM radio station (p.44).

6 FM and AM keys

Switch between FM and AM (p.42).

O TUNING keys

Select the radio frequency (p.42).

(i) Front display Displays information (p.8).

DIRECT key

Enables/disables the direct playback mode (p.40).

PHONES jack

For connecting headphones.

(B) INPUT keys Select an input source.

10 TONE CONTROL key

Adjusts the high-frequency range and low-frequency range of output sounds (p.63).

(5) SCENE keys

Select the registered input source and sound program with one touch. Also, turns on the unit when it is in standby mode (p.35).

PROGRAM keys

Select a sound program or a surround decoder (p.36).

STRAIGHT key

Enables/disables the straight decode mode (p.39).

VIDEO AUX jacks

For connecting devices, such as camcorders and game consoles (p.26).

USB jack

For connecting a USB storage device (p.50) or an iPod (p.46).

Ø VOLUME knob

Adjusts the volume.



HDMI

Lights up when HDMI signals are being input or output.

OUT

Lights up when HDMI signals are being output.

2 CINEMA DSP

Lights up when CINEMA DSP (p.37) is working.

CINEMA DSP 3

Lights up when CINEMA DSP 3D (p.39) is working.

8 ENHANCER

Lights up when Compressed Music Enhancer (p.41) is working.

4 ADAPTIVE DRC

Lights up when Adaptive DRC (p.63) is working.

STEREO

Lights up when the unit is receiving a stereo FM radio signal.

TUNED

Lights up when the unit is receiving an FM/AM radio station signal.

6 ZONE indicators (HTR-5065 only)

"SP A" lights up when the Zone A speaker output is enabled and "SP B" lights up when the Zone B speaker output is enabled (p.61).

SLEEP

Lights up when the sleep timer is on.

8 MUTE

Blinks when audio is muted.

Olume indicator

Indicates the current volume.

Cursor indicators

Indicate the remote control cursor keys currently operational.

Information display

Displays the current status (such as input name and sound mode name). You can switch the information by pressing INFO (p.34).

12 Speaker indicators

Indicate speaker terminals from which signals are output. SW Subwoofer Front speaker (L) Front speaker (R) C Center speaker SL Surround speaker (L) SR Surround speaker (R) SE Surround back speaker (L)* SER Surround back speaker (R)* SB Surround back speaker*

* HTR-5065 only

Rear panel



1 HDMI OUT jack

For connecting to an HDMI-compatible TV and outputting video/audio signals (p.18). When using ARC, TV audio signal can also be input through the HDMI OUT jack.

2 HDMI 1–4 jacks

For connecting to HDMI-compatible playback devices and inputting video/audio signals (p.23).

3 ANTENNA jacks

For connecting to FM and AM antennas (p.26).

4 NETWORK jack

For connecting to a network (p.27).

6 Power cable

For connecting to an AC wall outlet (p.28).

6 AV 1–6 jacks

For connecting to video/audio playback devices and inputting video/audio signals (p.23).

AV OUT jacks

For outputting video/audio to a recording device (such as a VCR) (p.28).

8 AUDIO jacks

For connecting to an audio playback device and inputting audio signals (p.25).

SUBWOOFER jack

For connecting to a subwoofer (with built-in amplifier) (p.15).

MONITOR OUT jacks COMPONENT VIDEO jacks:

For connecting to a TV that supports component video and outputting video signals (p.22).

VIDEO jack:

For connecting to a TV that supports composite video and outputting video signals (p.22).

SPEAKERS terminals

For connecting to speakers (p.15).



 The SURROUND BACK/BI AMP/ZONE B jacks are available on HTR-5065 only.

Remote control



(HTR-5065)

Remote control signal transmitter

Transmits infrared signals.

SOURCE () key

Turns on/off an external device.

SOURCE/RECEIVER key

Changes the device (the unit or external device) that is operated with the remote control (p.83). You can operate the unit when this key lights up in orange, and an external device when this key lights up in green.

RECEIVER () key

Turns on/off (standby) the unit.

Input selection keys

Select an input source for playback.

HDMI 1–4	HDMI 1–4 jacks
AV 1–6	AV 1–6 jacks
AUDIO	AUDIO jacks
V-AUX	VIDEO AUX jacks (on the front panel)
USB	USB jack (on the front panel)
NET	NETWORK jack (press repeatedly to select a
	desired network source)
TUNER	FM/AM radio

4 Radio keys

Operate the FM/AM radio when "TUNER" is selected as the input source (p.42).

FM	Switches to FM radio.
AM	Switches to AM radio.

- **MEMORY** Registers FM/AM radio stations as presets.
- **PRESET** Select a preset station.
- TUNING Select the radio frequency.

INFO key

Selects the information displayed on the front display (p.34).

Sound mode keys

Select a sound mode (p.36).

SLEEP key

Switches the unit to standby mode automatically after a specified period of time has elapsed (sleep timer). Press repeatedly to set the time (120 min, 90 min, 60 min, 30 min, off).

8 SCENE keys

Select the registered input source and sound program with one touch. Also, turns on the unit when it is in standby mode (p.35).

SETUP key

Displays the setup menu (p.66).

Menu operation keys

Cursor keys	Select a menu or a parameter.
ENTER	Confirms a selected item.
RETURN	Returns to the previous screen.

MODE key

Switches between "Stereo" and "Mono" for FM radio reception (p.42). Switches the iPod operation modes (p.48).

(2) External device operation keys

Let you play back and select menus and perform other operations for external devices (p.83).

18 Numeric keys

Let you enter numerical values, such as radio frequencies.

1 TV operation keys

Let you select TV input and volume, and perform other TV operations (p.82).

CODE SET button

Registers remote control codes of external devices on the remote control (p.82).

(6) ZONE keys (HTR-5065 only)

Enable/disable the audio output to Zone A or Zone B (p.61).

★/★★ keys (HTR-4065 only)

Change the external device to be controlled without switching the input source (p.83).

OPTION key

Displays the option menu (p.62).

18 VOLUME keys

Adjust the volume.

1 MUTE key

Mutes the audio output.

• To operate external devices with the remote control, register a remote control code for each device before using (p.82).

PREPARATIONS

General setup procedure Placing speakers (p.12) Select the speaker layout for the number of speakers that you are using and place them in your room. **Connecting speakers (p.15)** 2 Connect the speakers to the unit. Connecting a TV (p.18) 3 Connect a TV to the unit. Connecting playback devices (p.23) Connect video devices (such as BD/DVD players) and audio devices (such as CD players) to the unit. Connecting the FM/AM antennas (p.26) 5 Connect the supplied FM/AM antennas to the unit. Connecting to a network (p.27) 6 Connect the unit to a network. **Connecting recording devices (p.28)** Connect recording devices to the unit. Connecting the power cable (p.28) 8 After all the connections are complete, plug in the power cable. Selecting an on-screen menu language 9 Select the desired on-screen menu language (default: English). (p.29) **Optimizing the speaker settings** Optimize the speaker settings, such as volume balance and acoustic parameters, to suit your room 10 automatically (YPAO) (p.30) (YPAO).

This completes all the preparations. Enjoy playing movies, music, radio and other content with the unit!

1 Placing speakers

Select the speaker layout for the number of speakers that you are using and place the speakers and subwoofer (with built-in amplifier) in your room. This section describes the representative speaker layout examples.

Caution

• (U.S.A. model only)

Under its default settings, the unit is configured for 8-ohm speakers. When connecting 6-ohm speakers, set the unit's speaker impedance to "6 Ω MIN". In this case, you can also use 4-ohm speakers as the front speakers. For details, see "Setting the speaker impedance" (p.14).

 (Except for U.S.A. model) Use speakers with an impedance of at least 6 Ω.

Speakertype	Abbr	Eurotion	Speaker system (the number of channels)					
Speaker type	ADDI.	Function		6.1*	5.1	4.1	3.1	2.1
Front (L)	E	Produce front right/left channel sounds (stargo sounds)	•	•	•	•	٠	•
Front (R)	FR		•	•	•	•	•	•
Center		Produces center channel sounds (such as movie dialogue and vocals).	•	•	•		•	
Surround (L)	SL	Dradues surround right/left shapped sounds	•	•	•	•		
Surround (R)	SR	Produce surround right/reit channel sounds.	•	•	•	•		
Surround back (L)*	SBL	Produce surround back left/right shapped sounds	•					
Surround back (R)*	SBR		٠					
Surround back*	SB	Produces sounds mixed from surround back left/right channel sounds.		•				
Subwoofer	SW	Produces LFE (low-frequency effect) channel sounds and reinforces the bass parts of other channels. This channel is counted as "0.1".	•	•	•	•	•	•

* HTR-5065 only

• HTR-5065 supports 2- to 7.1-channel system, and HTR-4065 supports 2- to 5.1-channel speaker system.

7.1-channel system (HTR-5065 only)



6.1-channel system (HTR-5065 only)



5.1-channel system



4.1-channel system



3.1-channel system



2.1-channel system



Setting the speaker impedance

(U.S.A. model only)

Under its default settings, the unit is configured for 8-ohm speakers. When connecting 6-ohm speakers, set the speaker impedance to "6 Ω MIN". In this case, you can also use 4-ohm speakers as the front speakers.

- Before connecting speakers, connect the power cable to an AC wall outlet.
- $\mathbf{2}$ While holding down STRAIGHT on the front panel, press \oplus (power).



3 Check that "SP IMP." is displayed on the front display.

SP IMP...8ΩMIN

- **4** Press STRAIGHT to select "6 Ω MIN".
- **5** Press (1) (power) to set the unit to standby mode and remove the power cable from the AC wall outlet.

You are now ready to connect the speakers.

2 Connecting speakers

Connect the speakers placed in your room to the unit. The following diagrams provide connections for 5.1and 7.1-channel systems as examples. For other systems, connect speakers while referring to the connection diagram for the 5.1-channel system.

Caution

- Remove the unit's power cable from an AC wall outlet and turn off the subwoofer before connecting the speakers.
- Ensure that the core wires of the speaker cable do not touch one another or come into contact with the unit's metal parts. Doing so may damage the unit or the speakers. If the speaker cables short circuit, "Check SP Wires" will appear on the front display when the unit is turned on.

Cables required for connection (commercially available)

Speaker cables (x the number of speakers)

```
+
```

Audio pin cable (x1: for connecting a subwoofer)



5.1-channel system



7.1-channel system

(HTR-5065 only)



• When using only one surround back speaker, connect it to the SINGLE jack (L side).

Connecting speaker cables

Speaker cables have two wires. One is for connecting the negative (-) terminal of the unit and the speaker, and the other is for the positive (+) terminal. If the wires are colored to prevent confusion, connect the black wire to the negative and the other wire to the positive terminal.

- ① Remove approximately 10 mm (3/8") of insulation from the ends of the speaker cable and twist the bare wires of the cable firmly together.
- 2 Loosen the speaker terminal.
- ③ Insert the bare wires of the cable into the gap on the side (upper right or bottom left) of the terminal.
- ④ Tighten the terminal.



Using a banana plug

(U.S.A. and China models only)

- ① Tighten the speaker terminal.
- ② Insert a banana plug into the end of the terminal.



Connecting the subwoofer

Use an audio pin cable to connect the subwoofer.



Connecting front speakers that support bi-amp connections

(HTR-5065 only)

When using front speakers that support bi-amp connections, connect them to the FRONT jacks and SURROUND BACK/BI-AMP/ZONE B jacks.

To enable the bi-amp function, set "Power Amp Assign" (p.69) in the "Setup" menu to "BI-AMP" after connecting the power cable to an AC wall outlet.



Caution

- Before making bi-amp connections, remove any brackets or cables that connect a woofer with a tweeter. Refer to the instruction manual of the speakers for details. If you are not making bi-amp connections, make sure that the brackets or cables are connected before connecting the speaker cables.
- Surround back speakers cannot be used during bi-amp connections.

Connecting Zone B speakers

(HTR-5065 only)

The Zone A/B function allows you to playback an input source in the room where the unit is installed (Zone A) and in another room (Zone B). To connect the Zone B speakers, see "Playing back music in multiple rooms (HTR-5065 only)" (p.60).

Input/output jacks and cables

Video/audio jacks

□ HDMI jacks

Transmit digital video and digital sound through a single iack. Use an HDMI cable.





- Use a 19-pin HDMI cable with the HDMI logo. We recommend using a cable less than 5.0 m (16.4 ft) long to prevent signal quality degradation.
- To connect a device that has a DVI jack, an HDMI/DVI-D cable is required.

- The unit's HDMI jacks support the HDMI Control, Audio Return Channel (ARC), and 3D and 4K video transmission (through output) features.
- Use high speed HDMI cables to enjoy 3D or 4K videos.

Video jacks

COMPONENT VIDEO jacks

Transmit video signals separated into three components: luminance (Y), chrominance blue (PB), and chrominance red (PR). Use a component video cable with three plugs.





□ VIDEO jacks

Transmit analog video signals. Use a video pin cable.



Audio jacks

OPTICAL jacks

Transmit digital audio signals. Use a digital optical cable. Remove the tip protector (if available) before using the cable.



COAXIAL jacks

Transmit digital audio signals. Use a digital coaxial cable.



□ AUDIO jacks

(Stereo L/R jacks)

Transmit analog stereo audio signals. Use a stereo pin cable







(Stereo mini jack)

Transmits analog stereo audio signals. Use a stereo mini-plug cable.



3 Connecting a TV

Connect a TV to the unit so that video input to the unit can be output to the TV. You can also enjoy playback of TV audio on the unit.

The connection method varies depending on the functions and video input jacks available on your TV.

Refer to the instruction manual of the TV and choose a connection method.



When connecting a video device with an analog video output

- If you will connect any video device to the AV 1–2 (COMPONENT VIDEO) jacks of the unit, you also need to connect the TV to the MONITOR OUT (COMPONENT VIDEO) jacks (p.22).
- If you will connect any video device to the AV 3–6 (VIDEO) jacks or the VIDEO AUX (VIDEO) of the unit, you also need to connect the TV to the MONITOR OUT (VIDEO) jack (p.22).

About HDMI Control

HDMI Control allows you to operate external devices via HDMI. If you connect a TV that supports HDMI Control to the unit with an HDMI cable, you can control the unit's power and volume with the TV's remote control. You can also control playback devices (such as an HDMI Control-compatible BD/DVD player) connected to the unit with an HDMI cable. For details, see "HDMI Control" (p.96).

About Audio Return Channel (ARC)

ARC allows audio signals to travel both ways under HDMI Control. If you connect a TV that supports HDMI Control and ARC to the unit with a single HDMI cable, you can output video/audio to the TV or input TV audio to the unit.

Connection Method 1 (HDMI Control/ARC-compatible TV)

Connect the TV to the unit with an HDMI cable.

.

• The following explanation is based on the assumption that you have not changed the "HDMI" parameters (p.72) in the "Setup" menu.



• By connecting a TV to the unit with an HDMI cable, you can navigate the iPod, USB storage device and network sources, or configure the settings of the unit with the menu displayed on the TV.

1 2 3 TV connection 4 5 6 7 8 9 10

Necessary settings

To use HDMI Control and ARC, you need to configure the following settings. For details on settings and operating your TV, refer to the instruction manual for the TV.

After connecting external devices (such as a TV and playback devices) and the power cable to the unit, turn on the unit, TV, and playback devices.

2 Configure the settings of the unit.

- ① Check that ARC is enabled on the TV.
- ② Switch the TV input to display video from the unit.
- ③ Press SETUP.



④ Use the cursor keys to select "HDMI" and press ENTER.



⑤ Press ENTER again.

(6) Use the cursor keys ($\triangle/\bigtriangledown$) to select "HDMI Control" and the cursor keys ($\triangleleft/\triangleright$) to select "On" as shown below.

HDMI Control	•	On৷≽
Standby Through		
TV Audio Input		AV4
Standby Sync		Auto
ARC		On
SCENE		
	Back:	RETURN

Press SETUP.

3 Configure the settings for HDMI Control.

- ① Enable HDMI Control on the TV and playback devices (such as HDMI Control-compatible BD/DVD player).
- (2) Turn off the TV's main power and then turn off the unit and playback devices.
- 3 Turn on the unit and playback devices and then turn on the TV's main power.
- ④ Switch the TV input to display video from the unit.
- (5) Check the following.

On the unit: The input to which the playback device is connected is selected. If not, select the input source manually.

On the TV: The video from the playback device is displayed.

(6) Check that the unit is properly synchronized with the TV by turning off the TV or adjusting the TV volume with the TV remote control.

This completes the necessary settings.

If you select a TV program with the TV remote control, the input source of the unit will be automatically switched to "AV 4" and the TV audio will be played back on the unit.

If you cannot hear the TV's audio, check that "ARC" (p.73) in the "Setup" menu is set to "On".

!

- If HDMI Control does not work properly, try turning off and on (or unplugging and then plugging in again) the devices. It may solve the problem.
- If the unit is not synchronized to the TV's power operations, check the priority of the audio output setting on the TV.
- If the audio is interrupted while using ARC, set "ARC" (p.73) in the "Setup" menu to "Off" and use a digital
 optical cable to input TV audio to the unit (p.20).

 "AV 4" is set as TV audio input at the factory. If you have connected any external device to the AV 4 jacks, use "TV Audio Input" (p.72) in the "Setup" menu to change the TV audio input assignment. To use the SCENE function (p.35), you also need to change the input assignment for SCENE(TV).

Connection Method 2 (HDMI Control-compatible TV)

Connect the TV to the unit with an HDMI cable and a digital optical cable.

1

 The following explanation is based on the assumption that you have not changed the "HDMI" parameters (p.72) in the "Setup" menu.



• By connecting a TV to the unit with an HDMI cable, you can navigate the iPod, USB storage device and network sources, or configure the settings of the unit with the menu displayed on the TV.

Necessary settings

To use HDMI Control, you need to configure the following settings. For details on settings and operating your TV, refer to the instruction manual for the TV.

After connecting external devices (such as a TV and playback devices) and power cable of the unit, turn on the unit, TV, and playback devices.

2 Configure the settings of the unit.

Switch the TV input to display video from the unit.
 Press SETUP.



③ Use the cursor keys to select "HDMI" and press ENTER.

	Setup	
80	Speaker	Configuration
- C	HDMI 🕨	
u))	Sound	
Ť	ECO	
Ϋ́Τ	Function	
- <u>-</u>	Network	
(ABC	Language	

④ Press ENTER again.

(5) Use the cursor keys ($\triangle/\bigtriangledown$) to select "HDMI Control" and the cursor keys ($\triangleleft/\triangleright$) to select "On" as shown below.

Configuration		
HDML Control		0.0.0
HDMI CONTION	4	
Audio Output		Auto
Standby Through		Auto
TV Audio Input		AV4
Standby Sync		Auto
ARC		On
SCENE		
	Back: R	ETURN

6 Press SETUP.

3 Configure the settings for HDMI Control.

- ① Enable HDMI Control on the TV and playback devices (such as a HDMI Control-compatible BD/DVD player).
- 2 Turn off the TV's main power and then turn off the unit and playback devices.
- ③ Turn on the unit and playback devices and then turn on the TV.
- ④ Switch the TV input to display video from the unit.
- (5) Check the following.

On the unit: The input to which the playback device is connected is selected. If not, select the input source manually.

On the TV: The video from the playback device is displayed.

(6) Check that the unit is properly synchronized with the TV by turning off the TV or adjusting the TV volume with the TV remote control.

This completes the necessary settings.

If you select a TV program with the TV remote control, the input source of the unit will be automatically switched to "AV 4" and the TV audio will be played back on the unit.

!

- If HDMI Control does not work properly, try turning off and on (or unplugging and then plugging in again) the devices. It may solve the problem.
- If the unit is not synchronized to the TV's power operations, check the priority of the audio output setting on the TV.

 "AV 4" is set as TV audio input at the factory. If you have connected any external device to the AV 4 jacks or if you want to use another input jack (other than OPTICAL) for connecting the TV, use "TV Audio Input" (p.72) in the "Setup" menu to change the TV audio input assignment. To use the SCENE function (p.35), you also need to change the input assignment for SCENE(TV).

Connection Method 3 (TV with HDMI input jacks)

Connect the TV to the unit with an HDMI cable and a digital optical cable.

The unit (rear) HDMI OUT jack



If you switch the input source of the unit to "AV 4" using the AV 4 or SCENE(TV) keys, the TV audio will be played back on the unit.

- By connecting a TV to the unit with an HDMI cable, you can navigate the iPod, USB storage device and network sources, or configure the settings of the unit with the menu displayed on the TV.
- If you have connected any external device to the AV 4 jacks or if you want to use another input jack (other than OPTICAL) for connecting the TV, connect the TV to one of the AV 1–6 and AUDIO jacks. To use the SCENE function (p.35), you also need to change the input assignment for SCENE(TV).

Connection Method 4 (TV without HDMI input jacks)

When connecting any video device to the AV 1–2 (COMPONENT VIDEO) jacks of the unit, connect the TV to the MONITOR OUT (COMPONENT VIDEO) jacks.

When connecting any video device to the AV 3–6 (VIDEO) jacks or the VIDEO AUX (VIDEO) jack of the unit, connect the TV to the MONITOR OUT (VIDEO) jack.

If you select "AV 4" as the input source by pressing AV 4 or SCENE(TV), the TV audio will be played back on the unit.

- If you connect your TV to the unit with a cable other than HDMI, video input to the unit via HDMI cannot be output to the TV.
- · Operations with TV screen are available only when your TV is connected to the unit via HDMI.

 If you have connected any external device to the AV 4 jacks or if you want to use another input jack (other than OPTICAL) for connecting the TV, connect the TV to one of the AV 1–6 and AUDIO jacks. To use the SCENE function (p.35), you also need to change the input assignment for SCENE(TV).

COMPONENT VIDEO connection (with a component video cable)

□ VIDEO (composite video) connection (with a video pin cable)





4 Connecting playback devices

The unit is equipped with a variety of input jacks including HDMI input jacks to allow you to connect different types of playback devices. For information on how to connect an iPod or a USB storage device, see the following pages.

- Connecting an iPod (p.46)
- Connecting a USB storage device (p.50)

Connecting video devices (such as BD/DVD players)

Connect video devices such as BD/DVD players, set-top boxes (STBs) and game consoles to the unit. Depending on the video/audio output jacks available on your video device, choose one of the following connections. We recommend using an HDMI connection if the video device has an HDMI output jack.

• If the combination of video/audio input jacks available on the unit does not match your video device, change its combination according to the output jacks of your device (p.24).

HDMI connection

Connect a video device to the unit with an HDMI cable.



If you select the input source by pressing HDMI 1–4, the video/audio played back on the video device will be output from the unit.

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 To watch videos input to the HDMI 1–4 jacks, you need to connect your TV to the HDMI OUT jack of the unit (p.18 to 21).

Component video connection

Connect a video device to the unit with a component video cable and an audio cable (digital optical or digital coaxial). Choose a set of input jacks (on the unit) depending on the audio output jacks available on your video device.

Output jacks on video device		Input jacks on the unit		
Video	Audio			
Component video	Digital optical	AV 1 (COMPONENT VIDEO + OPTICAL)		
Component video	Digital coaxial	AV 2 (COMPONENT VIDEO + COAXIAL)		



If you select the input source by pressing AV 1–2, the video/audio played back on the video device will be output from the unit.



 To watch videos input to the AV 1–2 (COMPONENT VIDEO) jacks, you need to connect your TV to the MONITOR OUT (COMPONENT VIDEO) jacks of the unit (p.22).

Composite video connection

Connect a video device to the unit with a video pin cable and an audio cable (digital coaxial, digital optical, or stereo pin cable). Choose a set of input jacks (on the unit) depending on the audio output jacks available on your video device.

Output jacks on video device		Input jacks on the unit
Video	Audio	
	Digital coaxial	AV 3 (VIDEO + COAXIAL)
Composite video	Digital optical	AV 4 (VIDEO + OPTICAL)
	Analog stereo	AV 5–6 (VIDEO + AUDIO)



If you select the input source by pressing AV 3–6, the video/audio played back on the video device will be output from the unit.

!

 To watch videos input to the AV 3–6 (VIDEO) jacks, you need to connect your TV to the MONITOR OUT (VIDEO) jack of the unit (p.22).

Changing the combination of video/audio input jacks

If the combination of video/audio input jacks available on the unit does not match your video device, change its combination according to the output jacks of your device. You can connect a video device that has the following video/audio output jacks.

Output jacks on video device		Input jacks on the unit		
Video	Audio	Video	Audio	
	Digital optical	HDMI 1–4	AV 1 (OPTICAL) AV 4 (OPTICAL)	
HDMI	Digital coaxial	HDMI 1–4	AV 2-3 (COAXIAL)	
	Analog stereo	HDMI 1–4	AV 5–6 (AUDIO) AUDIO	
Component video	Analog stereo	AV 1–2 (COMPONENT VIDEO)	AV 5–6 (AUDIO) AUDIO	

Necessary setting

For example, if you have connected a video device to AV 2 (COMPONENT VIDEO) and AV 5 (AUDIO) jacks of the unit, change the combination setting as follows.



- After connecting external devices (such as a TV and playback devices) and power cable of the unit, turn on the unit.
- Press AV 2 to select "AV 2" (video input jack to be used) as the input source.



3 Press OPTION.

4 Use the cursor keys (\triangle / ∇) to select "Audio In" and press ENTER.



5 Use the cursor keys (⊲/▷) to select "AV 5" (audio input jack to be used).



6 Press OPTION.

This completes the necessary settings.

If you select "AV 2" as the input source by pressing AV 2, the video/audio played back on the video device will be output from the unit.

Connecting audio devices (such as CD players)

Connect audio devices such as CD players and MD players to the unit. Depending on the audio output jacks available on your audio device, choose one of the following connections.

Audio output jacks on audio device	Audio output jacks on the unit
Digital optical	AV 1 (OPTICAL) AV 4 (OPTICAL)
Digital coaxial	AV 2–3 (COAXIAL)
Analog stereo	AV 5–6 (AUDIO) AUDIO





If you select the input source by pressing AV 1–6 or AUDIO, the audio played back on the audio device will be output from the unit.

Connecting to the jacks on the front panel

Use the VIDEO AUX jacks on the front panel to temporarily connect devices such as camcorders and portable audio players to the unit.

Before making a connection, stop playback on the device and turn down the volume on the unit.



If you select "V-AUX" as the input source by pressing V-AUX, the video/audio played back on the device will be output from the unit.

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- To watch videos input to the VIDEO AUX (VIDEO) jack, you need to connect your TV to the MONITOR OUT (VIDEO) jack of the unit (p.22).
- You need to prepare the video/audio cables that match the output jacks on your device.

- For details on how to connect an iPod or a USB storage device, see "Connecting an iPod" (p.46) or "Connecting a USB storage device" (p.50).
- When "USB" is selected as the input source, video signals input to the VIDEO AUX (VIDEO) jack are output from the MONITOR OUT (VIDEO) jack.

5 Connecting the FM/AM antennas

Connect the supplied FM/AM antennas to the unit.

Fix the end of the FM antenna to a wall, and place the AM antenna on a flat surface.



Assembling and connecting the AM antenna



• Unwind only the length of cable needed from the AM antenna unit.

• The wires of the AM antenna have no polarity.

6 Connecting to a network

Connect the unit to your router with a commercially-available STP network cable (CAT-5 or higher straight cable).

You can enjoy Internet radio or music files stored on media servers, such as PCs and Network Attached Storage (NAS), on the unit.



- If you are using a router that supports DHCP, you do not need to configure any network settings for the unit, as the network parameters (such as the IP address) will be assigned automatically to it. You only need to configure the network settings if your router does not support DHCP or if you want to configure the network parameters manually (p.77).
- You can check whether the network parameters (such as IP address) are properly assigned to the unit in "Information" (p.79) in the "Setup" menu.

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- Some security software installed on your PC or the firewall settings of network devices (such as a router)
 may block the access of the unit to the network devices or the Internet. In these cases, configure the
 security software or firewall settings appropriately.
- · Each server must be connected to the same subnet as the unit.
- To use the service via the Internet, broadband connection is strongly recommended.

7 Connecting recording devices

You can connect video/audio recording devices to the AV OUT jacks. These jacks output analog video/audio signals selected as the input.

- To copy video/audio from a video device, connect the video device to the AV 5–6 jacks or VIDEO AUX (VIDEO/AUDIO) jacks of the unit.
- To copy audio from an audio device, connect the audio device to the AV 5–6 jacks, AUDIO jacks, or VIDEO AUX (AUDIO) jacks of the unit.
- Be sure to use the AV OUT jacks only for connecting recording devices.



8 Connecting the power cable

After all the connections are complete, plug in the power cable.

The unit (rear)



1 2 3 4 5 6 7 8 9 Language setting 10



9 Selecting an on-screen menu language

Select the desired on-screen menu language from English (default), French, German, Spanish, Russian and Chinese.

- Press RECEIVER () to turn on the unit.
- 2 Turn on the TV and switch the TV input to display video from the unit (HDMI OUT jack).

!

Operations with TV screen are available only when your TV is connected to
the unit via HDMI. If not, carry out operations while viewing the front display.

3 Press SETUP.

4 Use the cursor keys to select "Language" and press ENTER.

🕮 Setup	
Para Speaker → HOMI ■ Sound ■ ECO ↓ Function ↓ Network ↓ Anguage →	English Français Deutsch Español Русский Ф文

5 Use the cursor keys to select the desired language.

E Setup	
🕽 🖣 Speaker	English
🛨 номі	Français
Sound Sound	Deutsch
ECO	Español
∬_ Function	Русский
🥵 Network	中文
🥋 Language	

6 To exit from the menu, press SETUP.



• The information on the front display is provided in English only.



10 Optimizing the speaker settings automatically (YPAO)

The Yamaha Parametric room Acoustic Optimizer (YPAO) function detects speaker connections, measures the distances from them to your listening position(s), and then automatically optimizes the speaker settings, such as volume balance and acoustic parameters, to suit your room.

Place the YPAO microphone at your listening position (same height as your ears) and connect it to the YPAO MIC jack on the front panel.

The unit (front) 0. 0 0000 0 0000000 FR FL SW YPAO microphone Listening SL SR position Ear height Place the YPAO microphone at vour listening position (same height as your ears). We recommend the use of a tripod as a microphone stand. You can use the tripod screws to stabilize the microphone.

The following screen appears on the TV.



"Power Amp Assign" setting (p.69) (HTR-5065 only)

• Please note the following when using YPAO.

- Use YPAO after connecting a TV and speakers to the unit
- During the measuring process, test tones are output at high volume. Ensure that the test tones do not frighten small children. Also, refrain from using this function at night when it may be a nuisance to others.
- During the measuring process, you cannot adjust the volume.
- During the measuring process, keep the room as quiet as possible.
- Do not connect headphones.

Press RECEIVER () to turn on the unit.

2 Turn on the TV and switch the TV input to display video from the unit (HDMI OUT jack).

!

 Operations with TV screen are available only when your TV is connected to the unit via HDMI. If not, carry out operations while viewing the front display.

3 Turn on the subwoofer and set the volume to half. If the crossover frequency is adjustable, set it to maximum.



!

(HTR-5065 only)

If you are using bi-amp connection or Zone B speakers, set "Power Amp Assign" (p.69) in the "Setup" menu to the appropriate setting before starting YPAO.

1 2 3 4 5 6 7 8 9 10 Automatic speaker setup

SETUP

ENTER

RETURN

Cursor keys

 To cancel the operation, disconnect the YPAO microphone, or use the cursor keys to select "Exit" and press ENTER, before starting the measurement.

- Do not stand between the speakers and the YPAO microphone during the measurement process (about 3 minutes).
- Move to the corner of the room or leave the room.

5 To start the measurement, use the cursor keys to select "Start" and press SETUP.

The measurement will start in 10 seconds. Press ENTER to start the measurement immediately.

• To stop the measurement temporarily, press RETURN and follow the procedure in "Error messages" (p.32).

The following screen appears on the TV when the measurement finishes.

Lato Setup Start Exit

- The number of speakers (front side/rear side/subwoofer)
- Ø Speaker distance (nearest/farthest)
- 8 Adjustment range of speaker output level
- Warning message (if available)

 If any error message (such as E-1) or warning message (such as W-1) appears, see "Error messages" (p.32) or "Warning messages" (p.33).

- A speaker with a problem is indicated by blinking of the speaker indicators in the front display.
- If multiple warnings are given (when operating with the front display), use the cursor keys (\triangle/\heartsuit) to check the other warning messages.

5 To save the measurement results, use the cursor keys (⊲/⊳) to select "SAVE" and press ENTER.



The adjusted speaker settings are applied.

• To finish the measurement without saving the result, select "CANCEL".

7 Disconnect the YPAO microphone from the unit.

This completes optimization of the speaker settings.

Caution

 The YPAO microphone is sensitive to heat, so should not be placed anywhere where it could be exposed to direct sunlight or high temperatures (such as on top of AV equipment).

Error messages

If any error message is displayed during the measurement, resolve the problem and perform YPAO again.



TV screen



Front display

Procedure to handle errors

- Check the content of error message and press ENTER.
- 2 Use the cursor keys (⊲/▷) to select the desired operation.

To exit the YPAO measurement:

1 Select "EXIT" and press ENTER.

- O Use the cursor keys ($\bigtriangleup/\bigtriangledown$) to select "Exit" and press ENTER.
- ③ Disconnect the YPAO microphone from the unit.

To retry the YPAO measurement from beginning:

Select "RETRY" and press ENTER.

To proceed with the current YPAO measurement (for E-5 and E-9 only):

Select "PROCEED" and press ENTER.

Error message	Cause	Remedy		
E-1:No Front SP (E-1:NO FRNT SP)	Front speakers are not detected.	Exit YPAO, turn off the unit, and then check the speaker connections.		
E-2:No Sur. SP (E-2:NO SUR SP)	One of the surround speakers cannot be detected.			
E-4:SBR → SBL (E-4:SBR → SBL)	A surround back speaker is connected to the R side only.	When using only one surround back speaker, you need to connect it to the SINGLE jack (L side). Exit YPAO, turn off the unit, and then reconnect the speaker.		
E-5:Noisy (E-5:NOISY) The noise is too loud.		Keep the room quiet and retry YPAO. If you select "PROCEED", YPAO takes the measurement again and ignores any noise detected.		
E-6:Check Sur. (E-6:CHECK SUR) Surround back speakers are connected, but no surround speakers are connected.		Surround speakers need to be connected in order to use surround back speakers. Exit YPAO, turn off the unit, and then reconnect the speakers.		
E-7:No MIC (E-7:NO MIC) The YPAO microphone has been removed.		Connect the YPAO microphone to the YPAO MIC jack firmly and retry YPAO.		
E-8:No Signal (E-8:NO SIGNAL) The YPAO microphone cannot detect test tones.		Connect the YPAO microphone to the YPAO MIC jack firmly and retry YPAO. If this error occurs repeatedly, contact the nearest authorized Yamaha dealer or service center.		
E-9:User Cancel (E-9:CANCEL) The measurement has been canceled.		Retry or exit YPAO as necessary.		
E-10:Internal Err. (E-10:INTERNAL)	An internal error has occurred.	Exit YPAO, and turn off and on the unit. If this error occurs repeatedly, contact the nearest authorized Yamaha dealer or service center.		

· Texts in parentheses denote indicators on the front display.

1 2 3 4 5 6 7 8 9 10 Automatic speaker setup

Warning messages

If a warning message is displayed after the measurement, you can still save the measurement results by following on-screen instructions. However, we recommend you perform YPAO again in order to use the unit with the optimal speaker settings.



TV screen



Front display

Procedure to handle warnings

- Check the content of warning message and press ENTER.
- 2 Use the cursor keys (⊲/▷) to select the desired operation.
 - To save the measurement results:

Select "SAVE" and press ENTER.

To discard the measurement result:

Select "CANCEL" and press ENTER.

3 Disconnect the YPAO microphone from the unit.

Warning message	Cause	Remedy
W-1:Out of Phase (W-1:PHASE)	A speaker cable may be connected with the reverse polarity (+/-).	Check the cable connections (+/-) of the problem speaker. If the speaker is connected incorrectly, exit YPAO, turn off the unit, and then reconnect the speaker cable. Depending on the type of speakers or room environment, this message may appear even if the speakers are connected correctly.
W-2:Over Distance (W-2:DISTANCE)	A speaker is placed more than 24 m (80 ft) from the listening position.	Exit YPAO, turn off the unit, and place the problem speaker within 24 m (80 ft) of the listening position.
W-3:Level Error (W-3:LEVEL)	There are significant volume differences between the speakers.	Check the usage environment and cable connections (+/-) of each speaker, and the volume of the subwoofer. If there is any problem, exit YPAO, turn off the unit, and then reconnect speaker cable or correct the speaker positions. We recommend using the same speakers or speakers with specifications that are as similar as possible.

• Texts in parentheses denote indicators on the front display.



PLAYBACK

Basic playback procedure

- Turn on the external devices (such as a TV or BD/DVD player) connected to the unit.
- 2 Use the input selection keys to select an input source.
- 3 Start playback on the external device or select a radio station.

Refer to the instruction manual for the external device.

For details on the following operations, see the corresponding pages.

- Listening to FM/AM radio (p.42)
- Playing back iPod music (p.46)
- Playing back music stored on a USB storage device (p.50)
- Playing back music stored on media servers (PCs/NAS) (p.53)
- Listening to Internet radio (p.56)
- Playing back iTunes/iPod music via a network (AirPlay) (p.58)

4 Press VOLUME to adjust the volume.

- To mute the audio output, press MUTE. Press MUTE again to unmute.
- To adjust the treble/bass settings, use the "Option" menu or TONE CONTROL on the front panel (p.63).

Switching information on the front display

Press INFO.

Each time you press the key, the displayed item changes.



Item name

About 3 seconds later, the corresponding information for the displayed item appears.

• Available items vary depending on the selected input source. The displayed item can also be applied separately to each input source group.

Input source group	Item
HDMI 1-4 AV 1-6 AUDIO V-AUX	Input (input source name), DSP Program (sound mode name), Audio Decoder (decoder name)
USB SERVER	Song (song title), Artist (artist name), Album (album name), DSP Program (sound mode name), Audio Decoder (decoder name)
AirPlay	* During simple playback of iPod: Input (input source name), DSP Program (sound mode name), Audio Decoder (decoder name)
NET RADIO	Song (song title), Album (album name), Station (station name), DSP Program (sound mode name), Audio Decoder (decoder name)
	Frequency (frequency), DSP Program (sound mode name), Audio Decoder (decoder name)
TUNER	 * (Europe model only) Radio Data System data is also available when the unit is tuned into a Radio Data System broadcasting station (p.45).



Selecting the input source and favorite settings with one touch (SCENE)

The SCENE function allows you to select the assigned input source, sound program, Compressed Music Enhancer on/off, and target zones (HTR-5065 only) with just one touch.

Press SCENE.

The input source and settings registered to the corresponding scene are selected. The unit turns on automatically when it is in standby mode.

By default, the following settings are registered for each scene.

SCENE	Input	Sound program	Compressed Music Enhancer	Target zone (HTR-5065 only)	SCENE link playback
BD/DVD	HDMI 1	MOVIE (Sci-Fi)	Off	Zone A: enabled Zone B: disabled	On
TV	AV 4	STRAIGHT	On	Zone A: enabled Zone B: disabled	On
NET	NET RADIO	MUSIC (7ch/5ch Stereo*)	On	Zone A: enabled Zone B: disabled	Off
RADIO	TUNER	MUSIC (7ch/5ch Stereo*)	On	Zone A: enabled Zone B: disabled	Off

* HTR-5065: 7ch Stereo, HTR-4065: 5ch Stereo

 The SCENE link playback function allows you to automatically turn on the TV or start playback of an external device connected to the unit via HDMI, in conjunction with a scene selection. To enable SCENE link playback, set "SCENE" (p.73) in the "Setup" menu to "On".

Configuring scene assignments

Perform the following operations to prepare the settings you want to assign to a scene.

- Select an input source (p.34)
- Select a sound program (p.36)
- Enable/disable Compressed Music Enhancer (p.41)
- (HTR-5065 only) Enable/disable the audio output to Zone A/B (p.61)
- 2 Hold down the desired SCENE key until "SET Complete" appears on the front display.



If you want to control the corresponding playback device after selecting the scene, hold down the corresponding SCENE key and input selection key together for more than 3 seconds.

Once the setting is completed successfully, SOURCE/RECEIVER blinks twice.

• If you have not registered the remote control code of the playback device yet, see "Registering the remote control codes for playback devices" (p.83) to register it.



Selecting the sound mode

The unit is equipped with a variety of sound programs and surround decoders that allow you to enjoy playback sources with your favorite sound mode (such as sound field effect or stereo playback).

Selecting a sound program suitable for movies (p.37)

Press MOVIE repeatedly.

Selecting a sound program suitable for music or stereo playback (p.38)

Press MUSIC repeatedly.

Selecting a surround decoder (p.40)

Press SUR.DECODE repeatedly.

Switching to the straight decode mode (p.39)

Press STRAIGHT.

Switching to the direct playback mode (p.40) Press DIRECT.

Enable Compressed Music Enhancer (p.41)

Press ENHANCER.

- You can also switch the sound programs and surround decoder by pressing PROGRAM on the front panel.
- The sound mode can be applied separately to each input source.
- When you play back audio signals with a sampling rate of higher than 96 kHz or playing back DTS Express, the straight decode mode (p.39) is automatically selected.
- You can check which speakers are currently outputting sound by looking at the speaker indicators on the unit's front panel (p.8).
Enjoying sound field effects (CINEMA DSP)

CINEMADSP

The unit is equipped with a variety of sound programs that utilize Yamaha's original DSP technology (CINEMA DSP). It allows you to easily create sound fields like actual movie theaters or concert halls in your room.

Sound program category





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• When you play back DTS-HD sources, the DTS decoder is automatically selected.

• You can adjust the sound field effect level in "DSP Level" (p.63) in the "Option" menu.

Sound programs suitable for movies (MOVIE)

The following sound programs are optimized for viewing video sources, such as movies, TV programs, and games.

Standard	This program creates a sound field that emphasizes the surround feeling without disturbing the original acoustic positioning of multichannel audio, such as Dolby Digital and DTS. Its design is based on the concept of the ideal movie theater, in which the audience is surrounded by beautiful reverberations from the left, right, and rear.
Spectacle	This program delivers the scale and grandeur of spectacular movie productions. It delivers an expansive sound space to match the cinemascope wide-screen, and boasts a broad dynamic range, providing everything from small delicate sounds to powerful loud booms.
Sci-Fi	This program clearly reproduces the finely elaborated sound design of the latest Sci-Fi and SFX movies. You can enjoy a variety of cinematographically created virtual spaces reproduced with clear separation between dialogue, sound effects, and background music.
Adventure	This program is ideal for reproducing the sound design of action and adventure movies precisely. The sound field restrains reverberations, but puts emphasis on reproducing a sensation of expansiveness on both sides, powerful space expanded widely to the left and right. The restrained depth creates a clear and powerful space, while also maintaining the articulation of the sounds and the separation of the channels.

Drama	This program features stable reverberations that match a wide range of movie genres, from serious dramas to musicals and comedies. The reverberations are modest, but suitably stereophonic. The sound effects and background music are reproduced with a gentle echo that does not impinge on the articulation of the dialogue. You'll never get tired listening for long periods.	
Mono Movie	This program reproduces monaural video sources, such as classic movies, in an atmosphere of a good old movie theater. The program creates a pleasant space with depth, by adding breadth and the appropriate reverberation to the original audio.	
Sports	This program allows listeners to enjoy the rich vividness of sport broadcasts and light entertainment programs. In sports broadcasts, the commentators' voices are positioned clearly at the center, while the atmosphere inside the stadium is realistically conveyed by the peripheral delivery of the sounds of the fans in a suitable space.	
Action Game This program is suitable for action games, such as car racing and fight games. The reality of, and emphasis on, various effects makes the play feel like they are right in the middle of the action, allowing for greater concentration. Use this program in combination with Compressed Musi Enhancer for a more dynamic and strong sound field.		
Roleplaying Game	This program is suitable for role-playing and adventure games. This program adds depth to the sound field for natural and realistic reproduction of background music, special effects, and dialogue from a wide variety of scenes. Use this program in combination with Compressed Music Enhancer for a clearer and more spatial sound field.	

Sound programs suitable for music/stereo playback (MUSIC)

The following sound programs are optimized for listening to music sources. You can also select stereo playback.

Hall in Munich	This program simulates a Munich concert hall with approximately 2,500 seats that uses stylish wood for the interior finishing. Fine, beautiful reverberations spread richly, creating a calming atmosphere. The listener's virtual seat is at the center left of the arena.	
Hall in ViennaThis program simulates a 1700-seat, middle-sized concert hall with a shoebox shape that is traditional in Vienna. Pillars and ornate carving create extremely complex reverberations from all around the audience producing a very full, rich sound.		
Chamber	This program creates a relatively wide space with a high ceiling, like an audience hall in a palace. It offers pleasant reverberations that are suitable for courtly music and chamber music.	
Cellar Club	This program simulates an intimate concert venue with a low ceiling and homey atmosphere. A realistic, live sound field delivers powerful sounds that make you feel as if you are sitting in the front row in front of a small stage.	
The Roxy Theatre	This program creates the sound field of a 460-seat rock music concert venue in Los Angeles. The listener's virtual seat is at the center left of the hall.	
The Bottom LineThis program creates the sound field at stage front in The Bottom Line famous New York jazz club once. The floor can seat 300 people to the and right in a sound field offering real and vibrant sound.		
Music Video This program allows you to enjoy videos of pop, rock, and jazz concerts, a if you were there yourself. Immerse yourself in the hot concert atmospher thanks to the vividness of the singers and solos on stage, a presence sound field that emphasizes the beat of rhythm instruments, and a surrour sound field that reproduces the space of a big live hall.		
2ch Stereo	Use this program to mix down multichannel sources to 2 channels. When multichannel signals are input, they are down mixed to 2 channels and output from the front speakers (this program does not utilize CINEMA DSP).	
7ch Stereo 5ch Stereo	(HTR-5065: 7ch Stereo, HTR-4065: 5ch Stereo) Use this program to output sound from all speakers. When you play back multichannel sources, the unit mixes down the source to 2 channels, and then outputs the sound from all speakers. This program creates a larger sound field and is ideal for background music at parties.	



Enjoying stereoscopic sound fields (CINEMA DSP 3D)

CINEMADSP 3D

CINEMA DSP 3D creates a natural stereoscopic sound field in your room.

CINEMA DSP 3D functions when both of the following conditions are met.

- One of the sound programs (except 2ch Stereo and 7ch/5ch Stereo) is selected (p.37).
- "CINEMA DSP 3D Mode" (p.73) in the "Setup" menu is set to "On".





Enjoying sound field effects without surround speakers (Virtual CINEMA DSP)

If you select one of the sound programs (except 2ch Stereo and 7ch/5ch Stereo) when no surround speakers are connected, the unit automatically creates the surround sound field using the front-side speakers.

Enjoying unprocessed playback

You can play back input sources without any sound field effect processing.

Playing back in original channels (straight decode)

When the straight decode mode is enabled, the unit produces stereo sound from the front speakers for 2-channel sources such as CDs, and produces unprocessed multichannel sounds for multichannel sources.

Press STRAIGHT.

Each time you press the key, the straight decode mode is enabled or disabled.



• (HTR-5065 only)

To enable 6.1/7.1-channel playback from 5.1-channel sources when surround back speakers are used, set "Extended Surround" (p.63) in the "Option" menu to a setting other than "Off".



Playing back 2-channel sources in multichannel (surround decoder)

The surround decoder enables unprocessed multichannel playback from 2-channel sources. When a multichannel source is input, it works the same way as the straight decode mode. For details on each decoder see "Glossary" (p.93).

Press SUR.DECODE to select a surround decoder.

Each time you press the key, the surround decoder changes.

SURJEC DDPro	> Logic . ∎ ⁸ ∎	
Pro Logic	Uses the Dolby Pro Logic decoder suitable for all sources.	
PLII Movie	Use the Dolby Pro Logic II decoder (or Dolby Pro	
DPLIIx Movie*	Logic IIx decoder) suitable for movies.	
PLII Music	Use the Dolby Pro Logic II decoder (or Dolby Pro Logic IIx decoder) suitable for music.	
PLIIx Music*		
PLII Game	Use the Dolby Pro Logic II decoder (or Dolby Pro Logic IIx decoder) suitable for games.	
PLIIx Game*		
Neo: 6 Cinema	Uses the DTS Neo: 6 decoder suitable for movies.	
Neo: 6 Music	Uses the DTS Neo: 6 decoder suitable for music.	

* HTR-5065 only



(HTR-5065 only)

 You cannot select the Dolby Pro Logic IIx decoders when headphones are connected or when "Surround Back" in the "Setup" menu is set to "None".



• You can adjust the surround decoder parameters in "DSP Parameter" (p.73) in the "Setup" menu.

Enjoying pure high fidelity sound (direct playback)

When the direct playback mode is enabled, the unit plays back the selected source with the least circuitry in order to reduce the electrical noise from other circuitry (such as the front display). It allows you to enjoy Hi-Fi sound quality.

Press DIRECT.

Each time you press the key, the direct playback mode is enabled or disabled.



- When the direct playback mode is enabled, the following functions are not available.
- Selecting sound programs
- Adjusting the tone control
- Operating the on-screen menu
- Viewing information on the front display (when not in operation)



Enjoying compressed music with enhanced sound (Compressed Music Enhancer)

compressed music ENHANCER

Compressed Music Enhancer adds depth and breadth to the sound, allowing you to enjoy a dynamic sound close to the original sound before it was compressed. This function can be used along with any other sound modes.

Press ENHANCER.

Each time you press the key, Compressed Music Enhancer is enabled or disabled.

"ENHANCER" lights up





- · Compressed Music Enhancer does not work on the following audio sources.
- Signals whose sampling rate is over 48 kHz
- High-definition streaming audio

• You can also use "Enhancer" (p.64) in the "Option" menu to enable/disable Compressed Music Enhancer.

Enjoying surround sound with headphones (SILENT CINEMA)

CINEMA SILENT [™]

You can enjoy surround or sound field effects, like a multichannel speaker system, with stereo headphones by connecting the headphones to the PHONES jack and selecting a sound program or a surround decoder.



Listening to FM/AM radio

You can tune into a radio station by specifying its frequency or selecting from registered radio stations.

- .
- The radio frequencies differ depending on the country or region where the unit is being used. The explanation of this section uses a display with frequencies used in a Europe model.
- If you cannot obtain good reception on the radio, adjust the direction of the FM/AM antennas.

Selecting a frequency for reception

- Press TUNER to select "TUNER" as the input source.
- Press FM or AM to select a band.



3 Use the following keys to set a frequency.

TUNING: Increase/decrease the frequency. Hold down the key for about a second to search stations automatically.

Numeric keys: Enter a frequency directly. For example, to select 98.50 MHz, press "9", "8", "5" and "0" (or ENT).



"TUNED" lights up when a signal is received from a radio station.

"STEREO" also lights up when a stereo signal is received.

!

• "Wrong Station!" appears when you enter a frequency that is out of reception range.

- You can switch between "Stereo" (stereo) and "Mono" (monaural) for FM radio reception by pressing MODE. When the signal reception for an FM radio station is unstable, switching to monaural may improve it.
- You can watch videos input from external devices while listening to radio by selecting the video input jack in "Video Out" (p.65) in the "Option" menu.



Registering favorite radio stations (presets)

You can register up to 40 radio stations as presets. Once you have registered stations, you can easily tune into them by selecting their preset numbers.

Registering radio stations automatically (Auto Preset)

Automatically register FM radio stations with strong signals (up to 40 stations).

- To register AM radio stations, follow "Registering a radio station manually".
- (Europe model only)
 Only Radio Data System broadcasting stations are stored automatically by the Auto Preset function.

Press TUNER to select "TUNER" as the input source.

Press OPTION.

3 Use the cursor keys to select "Auto Preset".



4 To start the Auto Preset process, press ENTER.

The registration will start in 5 seconds. Press ENTER again to start the registration immediately.

"SEARCH" appears during Auto Preset



Preset number from which to start the registration

- To specify the preset number from which to start the registration, press PRESET or cursor keys (△/▽) to select a preset number within 5 seconds after step 4 (while "READY" is displayed) and then press ENTER (or just wait for 5 seconds).
- To cancel the Auto Preset process, press RETURN.

When the Auto Preset process finishes, "FINISH" appears and the "Option" menu closes automatically.



Registering a radio station manually

Select a radio station manually and register it to a preset number.

- **1** Follow "Selecting a frequency for reception" (p.42) to tune into the desired radio station.
- 2 Hold down MEMORY for more than 2 seconds.

The first time that you do register a station, the selected radio station will be registered to the preset number "01". Thereafter, each radio station you select will be registered to the next empty (unused) preset number after the most recently registered number.



 To select a preset number for registering, press MEMORY once after tuning into the desired radio station, press PRESET to select a preset number, and then press MEMORY again.



"Empty" (not in use) or the frequency currently registered



Selecting a preset station

Tune into a registered radio station by selecting its preset number.

- **1** Press TUNER to select "TUNER" as the input source.
- 2 Press PRESET repeatedly to select the desired radio station.

You can also enter a preset number (01 to 40) directly by using the numeric keys after pressing PRESET once.





- "No Presets" appears when no radio stations are registered.
- · "Wrong Num." appears when an invalid number is entered.
- "Empty" appears when a preset number not in use is entered

Clearing preset stations

Clear radio stations registered to the preset numbers.

- Press TUNER to select "TUNER" as the input source.
- 2 Press OPTION.
- **3** Use the cursor keys to select "Clear Preset" and press ENTER.



4 Use the cursor keys (△/▽) to select a preset station to be cleared and press ENTER.



Preset station to be cleared

If the preset station is cleared, "Cleared" appears and then the next in-use preset number is displayed.



- 5 Repeat step 4 until all desired preset stations are cleared.
- **6** To exit from the menu, press OPTION.



Radio Data System tuning

(Europe model only)

Radio Data System is a data transmission system used by FM stations in many countries. The unit can receive various types of Radio Data System data, such as "Program Service", "Program Type," "Radio Text" and "Clock Time", when it is tuned into a Radio Data System broadcasting station.

Displaying the Radio Data System information

Tune into the desired Radio Data System broadcasting station.

• We recommend using "Auto Preset" to tune into the Radio Data System broadcasting stations (p.43).

Press INFO.

Each time you press the key, the displayed item changes.



About 3 seconds later, the corresponding information for the displayed item appears.

98.50 CLA Inform	stereo TUNED mation	
Program Service	Program service	name

Program Type	Current program type	
Radio Text	Information on the current program	
Clock Time	Current time	
DSP Program	Sound mode name	
Audio Decoder	Decoder name	
Frequency	Frequency	

!

 "Program Service", "Program Type", "Radio Text", and "Clock Time" are not displayed if the radio station does not provide the Radio Data System service.

Receiving traffic information automatically

When "TUNER" is selected as the input source, the unit automatically receives traffic information. To enable this function, follow the procedure below to set the traffic information station.

When "TUNER" is selected as the input source, press OPTION.

2 Use the cursor keys to select "Traffic Program" (TrafficProgram) and press ENTER.

The traffic information station search will start in 5 seconds. Press ENTER again to start the search immediately.

- To search upward/downward from the current frequency, press the cursor keys ($\bigtriangleup/\bigtriangledown)$ while "READY" is displayed.
- To cancel the search, press RETURN.
- · Texts in parentheses denote indicators on the front display.

The following screen appears for about 3 seconds when the search finishes.



Traffic information station (frequency)

 "TP Not Found" appears for about 3 seconds when no traffic information stations are found.

Playing back iPod music

You can play back iPod music on the unit using a USB cable supplied with the iPod.

- Some features may not be compatible, depending on the model or software version of the iPod.
- To play back iPod videos on the unit, an Apple Composite AV Cable (not supplied) is required. Connect the USB and composite video plugs of the Apple Composite AV cable to the USB jack and VIDEO AUX (VIDEO) jack of the unit, and connect your TV and the unit with a video pin cable (p.22). To select a video, operate the iPod itself in the simple play mode (p.48).

Supported iPods (as of December 2011)

- iPod touch, iPod nano (2nd gen. to 6th gen.)
- iPhone 4S, iPhone 4, iPhone 3GS, iPhone 3G, iPhone
- iPad2, iPad

Connecting an iPod

Connect your iPod to the unit with the USB cable supplied with the iPod.

Connect the USB cable to the iPod.



2 Connect the USB cable to the USB jack.

The unit (front)





 The iPod charges while it is connected to the unit. If you set the unit to standby mode while the iPod is charging, the iPod continues to charge up to 4 hours. If "Network Standby" (p.78) in the "Setup" menu is set to "On", it continues to change until full.

• Disconnect the iPod from the USB jack when it is not in use.



Playback of iPod content

Follow the procedure below to operate the iPod contents and start playback.

You can control the iPod with the menu displayed on the TV screen.

!

- Operations with TV screen are available only when your TV is connected to the unit via HDMI. If not, carry out operations while viewing the front display, or directly operate the iPod itself in the simple play mode (p.48).
- "_" (underscore) will be displayed for characters not supported by the unit.

Press USB to select "USB" as the input source.

The browse screen is displayed on the TV.



If playback is ongoing on your iPod, the playback screen is displayed.

2 Use the cursor keys to select an item and press ENTER.

If a song is selected, playback starts and the playback screen is displayed.



- · To return to the previous screen, press RETURN.
- To switch between the browse and playback screens during playback, press DISPLAY.
- To operate the iPod manually to select content or control playback, switch to the simple play mode (p.48).

Browse screen



List name

2 Contents list

Displays the list of iPod content. Use the cursor keys to select an item and press ENTER to confirm the selection.

Item number/total

4 Status indicators

Display the current shuffle/repeat settings (p.49) and playback status (such as play/pause).

Operation menu

Use the cursor keys to select an icon and press ENTER to confirm the selection.

lcon		Function
	*	Moves 10 pages backward.
	^	Moves to the previous page of the list.
	~	Moves to the next page of the list.
	≽	Moves 10 pages forward.
	J	Moves to the playback screen.



Playback screen



Status indicators

Display the current shuffle/repeat settings (p.49) and playback status (such as play/pause).

Playback information

Displays the artist name, album name, song title, and elapsed time/song length.

Use the following remote control keys to control playback.

External device operation keys	Function	
	Resumes playback from pause.	
	Stops playback.	
	Stops playback temporarily.	
H4	– Skips forward/backward.	
*	 Searches forward/backward (by holding down). 	

Operating the iPod itself or remote control (simple play)

Press MODE to switch to the simple play mode.

The TV menu screen turns off and iPod operations are enabled.

To display the TV menu screen, press MODE again.

2 Operate your iPod itself or the remote control to start playback.

Operational remote control keys	Function
Cursor keys	Select an item.
ENTER	Confirms the selection.
RETURN	Returns to the previous screen.
► 	Starts playback or stops playback temporarily.
	Stops playback.
External device operation keys	- Skips forward/backward.
*	Searches forward/backward (while holding down).



Repeat/shuffle settings

You can configure the shuffle/repeat settings of your iPod.

 During simple play, configure the shuffle/repeat settings directly on your iPod or press MODE to display the TV menu screen and then follow the procedure below.

When "USB" is selected as the input source, press OPTION.

2 Use the cursor keys to select "Shuffle" (Shuffle) or "Repeat" (Repeat) and press ENTER.



• To return to the previous screen during menu operations, press RETURN.

• Texts in parentheses denote indicators on the front display.

3 Use the cursor keys (\triangleleft / \triangleright) to select a setting.

Item	Setting	Function
Shuffle (Shuffle)	Off (Off)	Turns off the shuffle function.
	Songs (Songs)	Plays back songs in random order. "X" appears in the TV screen.
	Albums (Albums)	Plays back albums in random order. "X" appears in the TV screen.
	Off (Off)	Turns off the repeat function.
Repeat (Repeat)	One (One)	Plays back the current song repeatedly. """" appears in the TV screen.
	All (All)	Plays back all songs repeatedly. "

4 To exit from the menu, press OPTION.



Playing back music stored on a USB storage device

You can play back music files stored on a USB storage device on the unit. Refer to the instruction manuals for the USB storage device for more information.

The unit supports USB mass storage class devices (FAT16 or FAT32 format).

- The unit supports WAV (PCM format only), MP3, WMA, MPEG-4 AAC and FLAC files.
- The unit is compatible with sampling rate of up to 96 kHz for WAV and FLAC files, and 48 kHz for other files.
- Some features may not be compatible, depending on the model or manufacturer of the USB storage device.

Connecting a USB storage device

Connect the USB storage device to the USB jack.





• If the USB storage device contains many files, it may take time to load the them. In this case, "Loading..." appears in the front display.

1

· Disconnect the USB storage device from the USB jack when it is not in use.

Playback of USB storage device contents

Follow the procedure below to operate the USB storage device contents and start playback.

You can control the USB memory device with the menu displayed on the TV screen.

- Operations with TV screen are available only when your TV is connected to the unit via HDMI. If not, carry out operations while viewing the front display.
- "_" (underscore) will be displayed for characters not supported by the unit.

Press USB to select "USB" as the input source.

The browse screen is displayed on the TV.

USB Top	
■ Blues ■ Classical	
™ Electronica ™ Jazz	
Pop Prock Prock	≥
Speaking	
1/12	

• If playback is ongoing on your USB storage device, the playback screen is displayed.



2 Use the cursor keys to select an item and press ENTER.

If a song is selected, playback starts and the playback screen is displayed.



- To return to the previous screen, press RETURN.
- To switch between the browse and playback screens during playback, press DISPLAY.
- · Files not supported by the unit cannot be selected.

Browse screen



List name

2 Contents list

Displays the list of USB storage device contents. Use the cursor keys to select an item and press ENTER to confirm the selection.

Item number/total

4 Status indicators

Display the current repeat/shuffle settings (p.52) and playback status (such as play/pause).

6 Operation menu

Use the cursor keys to select an icon and press ENTER to confirm the selection.

Icon	Function
*	Moves 10 pages backward.
^	Moves to the previous page of the list.
~	Moves to the next page of the list.
∢	Moves 10 pages forward.
٩	Moves to the playback screen.



Playback screen

Ö	JSB Now Playing	Ŀ	►⇔≭	
	Artist Name			
	🕐 Album Name			
	🎵 Song Title			
	④ 2:30			

Status indicators

1 C

Display the current repeat/shuffle settings (p.52) and playback status (such as play/pause).

Playback information

Displays the artist name, album name, song title, and elapsed time.

Use the following remote control keys to control playback.

xternal device peration keys	Function	
	Resumes playback from pause.	
	Stops playback.	
	Stops playback temporarily.	
Ŧ	Skips forward/backward	
	- Skips loi walu/backwalu.	

Repeat/shuffle settings

You can configure the repeat/shuffle settings for playback of USB storage device contents.

- When "USB" is selected as the input source, press OPTION.
- Use the cursor keys to select "Shuffle" (Shuffle) or "Repeat" (Repeat) and press ENTER.

I

- To return to the previous screen during menu operations, press RETURN.
- Texts in parentheses denote indicators on the front display.

3 Use the cursor keys $(\triangleleft/\triangleright)$ to select a setting.

Item	Setting	Function
	Off (Off)	Turns off the shuffle function.
Shuffle (Shuffle)	On (On)	Plays back songs in the current album (folder) in random order. "그다" appears on the TV screen.
	Off (Off)	Turns off the repeat function.
Repeat	One (One)	Plays back the current song repeatedly. """ appears on the TV screen.
(Hepeat)	All (All)	Plays back all songs in the current album (folder) repeatedly. "C" appears on the TV screen.

To exit from the menu, press OPTION.



Playing back music stored on media servers (PCs/NAS)

You can play back music files stored on your PC or DLNA-compatible NAS on the unit.

To use this function, the unit and your PC must be connected to the same router (p.27). You can check whether the network parameters (such as the IP address) are properly assigned to the unit in "Information" (p.79) in the "Setup" menu.

- The unit supports playback of WAV (PCM format only), MP3, WMA, MPEG-4 AAC and FLAC files.
- The unit is compatible with sampling rates of up to 96 kHz for WAV and FLAC files, and 48 kHz for other files.
- To play back FLAC files, you need to install server software that supports sharing of FLAC files via DLNA on your PC or use a NAS that supports FLAC files.

Media sharing setup

To play back music files stored on your PC or DLNA-compatible NAS, first you need to configure the media sharing setting on each music server.

For a PC with Windows Media Player installed

- Check that Windows Media Player 11 or later is installed on your PC.
- 2 In the media sharing settings, enable media sharing and allow media to be shared with the device.

For a PC or a NAS with other DLNA server software installed

Refer to the instruction manual for the device or software and configure the media sharing settings.

Playback of PC music contents

Follow the procedure below to operate the PC music contents and start playback.

You can control the PC/NAS with the menu displayed on the TV screen.

!

- Operations with TV screen are available only when your TV is connected to the unit via HDMI. If not, carry out operations while viewing the front display.
- "_" (underscore) will be displayed for characters not supported by the unit.

Press NET repeatedly to select "SERVER" as the input source.

The browse screen is displayed on the TV.





 If playback of a music file selected from the unit is ongoing on your PC, the playback screen is displayed.

2 Use the cursor keys to select a music server and press ENTER.



3 Use the cursor keys to select an item and press ENTER.

If a song is selected, playback starts and the playback screen is displayed.



- To return to the previous screen, press RETURN.
- To switch between the browse and playback screens during playback, press DISPLAY.
- · Files not supported by the unit cannot be selected.

Browse screen



1 List name

Ontents list

Displays the list of PC content. Use the cursor keys to select an item and press ENTER to confirm the selection.

Item number/total

4 Status indicators

Display the current repeat/shuffle settings (p.55) and playback status (such as play/pause).

Operation menu

Use the cursor keys to select an icon and press ENTER to confirm the selection.

Icon	Function
*	Moves 10 pages backward.
^	Moves to the previous page of the list.
~	Moves to the next page of the list.
∢	Moves 10 pages forward.
٩	Moves to the playback screen.



Playback screen

SE No	RVER w Playing	►⇔≭	
Γ	🏝 Artist Name		
	🗞 Album Name		
	JJ Song Title		

Status indicators

Display the current repeat/shuffle settings (p.55) and playback status (such as play/pause).

2 Playback information

Displays the artist name, album name, song title, and elapsed time.

Use the following remote control keys to control playback.

External device operation keys	Function
	Resumes playback from pause.
	Stops playback.
	Stops playback temporarily.
H44	Skips forward/backward
	- Ships loi wald, backwald.

 You can also use a DLNA-compatible Digital Media Controller (DMC) to control playback. For details, see "DMC Control" (p.78).

Repeat/shuffle settings

You can configure the repeat/shuffle settings for the playback of PC music content.

- When "SERVER" is selected as the input source, press OPTION.
- 2 Use the cursor keys to select "Shuffle" (Shuffle) or "Repeat" (Repeat) and press ENTER.

- To return to the previous screen during menu operations, press RETURN.
- Text in parentheses denotes indicators on the front display.

3 Use the cursor keys $(\triangleleft/\triangleright)$ to select a setting.

tem	Setting	Function
	Off (Off)	Turns off the shuffle function.
Shuffle Shuffle)	On (On)	Plays back songs in the current album (folder) in random order. "X" appears on the TV screen.
	Off (Off)	Turns off the repeat function.
Repeat	One (One)	Plays back the current song repeatedly. " " " " " " " " " " " " "
Repeat)	All (All)	Plays back all songs in the current album (folder) repeatedly. " " " appears on the TV screen.





Listening to Internet radio

You can listen to Internet radio stations from all over the world. You can control the Internet radio with the menu displayed on the TV screen.

- Operations with TV screen are available only when your TV is connected to the unit via HDMI. If not, carry out operations while viewing the front display.
- To use this function, the unit must be connected to the Internet (p.27). You can check whether the network parameters (such as the IP address) are properly assigned to the unit in "Information" (p.79) in the "Setup" menu.
- · This service may be discontinued without notice.
- · You may not be able to receive some Internet radio stations.
- · The unit uses the vTuner Internet radio station database service.

Press NET repeatedly to select "NET RADIO" as the input source.

The browse screen is displayed on the TV.

🛍 NET RADIO	
	2
BOOKMARKS Locations Genres	
Popular Stations	
Podcasts Help	
1/7	

2 Use the cursor keys to select an item and press ENTER.

If an Internet radio station is selected, playback starts and the playback screen is displayed.



- · To return to the previous screen, press RETURN.
- To switch between the browse and playback screens during playback, press DISPLAY.
- You can register your favorite Internet radio stations to the "Bookmarks" folder by accessing the following website with the web browser on your PC. To use this feature, you need the vTuner ID of the unit and your e-mail address to create your personal account. You can check the vTunerID (MAC address of the unit) in "Information" (p.79) in the "Setup" menu. http://yradio.vtuner.com/



Browse screen



List name

Ontents list

Displays the list of Internet radio content. Use the cursor keys to select an item and press ENTER to confirm the selection.

Item number/total

4 Playback indicator

Operation menu

Use the cursor keys to select an icon and press ENTER to confirm the selection.

lcon	Function
*	Moves 10 pages backward.
^	Moves to the previous page of the list.
~	Moves to the next page of the list.
∢	Moves 10 pages forward.
•	Moves to the playback screen.

Playback screen



Playback indicator

Playback information

Displays the station name, album name, song title, and elapsed time.

- Use the external device operation key (■) to stop playback.
- Some information may not be available depending on the station.

Playing back iTunes/iPod music via a network (AirPlay)

The AirPlay function allows you to play back iTunes/iPod music on the unit via network.



. To use this function, the unit and your PC or iPod must be connected to the same

router (p.27). You can check whether the network parameters (such as the IP

Supported iTunes/iPods (as of December 2011)

· iPod touch, iPhone or iPad with iOS 4.3.3 or later

• iTunes 10.2.2 or later (Windows/Mac)

menu.

address) are properly assigned to the unit in "Information" (p.79) in the "Setup"

Playback of iTunes/iPod music contents

Follow the procedure below to play back iTunes/iPod music contents on the unit.

Turn on the unit, and start iTunes on the PC or display the playback screen on the iPod.

If the iTunes/iPod recognizes the unit, the AirPlay icon () appears.

iTunes (example)

iPod (example)





• If the icon does not appear, check whether the unit and PC/iPod are connected to the router properly.

On the iTunes/iPod, click (tap) the AirPlay icon and select the unit (network name of the unit) as the audio output device.



Network name of the unit

Select a song and start playback.

The unit automatically selects "AirPlay" as the input source and starts playback.

The playback screen is displayed on the TV.

• The playback screen is available only when your TV is connected to the unit via HDMI.



- You can turn on the unit automatically when starting playback on iTunes or iPod by setting "Network Standby" (p.78) in the "Setup" menu to "On".
- You can edit the network name (the unit's name on the network) displayed on iTunes/iPod in "Network Name" (p.78) in the "Setup" menu.
- If you select the other input source on the unit during playback, playback on the iTunes/iPod stops automatically.
- To adjust the unit's volume from the iTunes/iPod, set "Volume Interlock" (p.65) in the "Option" menu to "Limited" (default) or "Full".

Caution

 When you use iTunes/iPod controls to adjust volume, the volume may be unexpectedly loud. This could result in damage to the unit or speakers. If the volume suddenly increases during playback, stop playback on the iTunes/iPod immediately.

Playback screen

AirPlay Now Playing		
🕼 Artist Name		
🕐 Album Name		
🎵 Song Title		
(¹) 2:30	5:30	

Playback indicator

Playback information

Displays the artist name, album name, song title, and elapsed time/song length.

Use the following remote control keys to control playback.

External device operation keys	Function	
	Resumes playback from pause.	
	Stops playback.	
	Stops playback temporarily.	
	Skips forward/backward	
	- Skips lorward, backward.	

 To control iTunes playback with the remote control of the unit, you need to configure the iTunes preferences to enable iTunes control from remote speakers in advance.

iTunes (example of English version) Devices Preferences B General Playback Sharing Store Parental Advanced Device backups Delete Backup... Prevent iPods, iPhones, and iPads from syncing automatically Warn when more than 5% v of the data on this computer will be changed Check this box Allow iTunes audio control from remote speakers iTunes is not paired with any Remotes Forget All Remotes Reset Sync History ? OK Cancel

Playing back music in multiple rooms (HTR-5065 only)

The Zone A/B function allows you to play back an input source in the room where the unit is installed (Zone A) and in another room (Zone B).

For example, you can turn on Zone A (turn off Zone B) when you are in the living room, and turn on Zone B (turn off Zone A) when you are in the study room. Also, you can turn on both zones when you want to enjoy the same input source in those rooms simultaneously.



- Multichannel sources are mixed down to 2 channels and output to the zone B.
- · The same input source and volume setting are applied to both zones.
- You can automatically enable/disable the audio output to Zone A/B in conjunction with a scene selection (p.35)

Preparing Zone B

Connect the device that will be used in Zone B to the unit.

Caution

- Remove the unit's power cable from the AC wall outlet before connecting speakers.
- Ensure that the core wires of the speaker cable do not touch one another or come into contact with the unit's metal parts. Doing so may damage the unit or the speakers. If the speaker cables short circuit, "Check SP Wires" will appear on the front display when the unit is turned on.



To utilize the SURROUND BACK/BI AMP/ZONE B jacks for Zone B speakers, set "Power Amp Assign" (p.69) in the "Setup" menu to "ZoneB" after connecting the power cable to an AC wall outlet.





Basic playback procedure

Press ZONE A or ZONE B to enable/disable audio output to Zone A or Zone B.

"SP A" lights up in the front display when the Zone A output is enabled and "SP B" lights up when the Zone B output is enabled.

"SP A" and/or "SP B" light up



- 2 Use the input selection keys to select an input source.
- 3 Start playback on the external device or select a radio station.
- **4** Press VOLUME to adjust the volume.

Adjusting the volume for Zone B

If you are bothered by volume differences between Zone A/B, follow the procedure below to adjust the volume for Zone B.

Press OPTION.

Use the cursor keys to select "Volume Trim" (Volume Trim) and press ENTER.

- To return to the previous screen during menu operations, press RETURN.
- Text in parentheses denotes indicators on the front display.
- 3 Use the cursor keys (△/▽) to select "ZoneB Trim" (ZB.Trim) and the cursor keys (⊲/▷) to adjust the setting.

Setting range -10.0 dB to +10.0 dB (0.5 dB increments)

Default 0.0 dB



Configuring playback settings for different playback sources (Option menu)

You can configure separate playback settings for different playback sources. This menu is available on the front panel (or on the TV screen), allowing you to easily configure settings during playback.

Press OPTION.



Front display



TV screen

2 Use the cursor keys to select an item and press ENTER.

• To return to the previous screen during menu operations, press RETURN.

- **3** Use the cursor keys (\triangleleft / \triangleright) to select a setting.
- **4** To exit from the menu, press OPTION.

Option menu items

· Available items vary depending on the selected input source.

• Text in parentheses denotes indicators on the front display.

Item		Function	Page
Tone Control (Tone Control)		Adjusts the high-frequency range and low-frequency range of sounds.	63
	DSP Level (DSP Level)	Adjusts the sound field effect level.	63
DSP/Surround (DSP/Surround)	Adaptive DRC (A.DRC)	Sets whether the dynamic range (from maximum to minimum) is automatically adjusted when the volume is adjusted.	63
	Extended Surround (EXTD)	(HTR-5065 only) Selects how to play back 5.1- to 7.1-channel sources when surround back speakers are used.	63
	Enhancer (Enhancer)	Enables/disables Compressed Music Enhancer.	64
	Input Trim (In.Trim)	Corrects volume differences between input sources.	64
Volume Trim (Volume Trim)	Subwoofer Trim (SW.Trim)	Fine-adjusts the subwoofer volume.	64
	ZoneB Trim (ZB.Trim)	(HTR-5065 only) Corrects volume differences between Zone A/B.	61
Lipsync (Lipsy	nc)	Enables/disables the "Lipsync" setting in the "Setup" menu.	64
Signal Info (Sig	inal Info)	Displays information about the video/audio signal.	64
Audio In (Audio	o In)	Combines the video jack of the selected input source with an audio jack of others.	65
Video Out (Vide	eo Out)	Selects a video to be output with radio sounds.	65
Auto Preset (Auto Preset)		Automatically registers FM radio stations with strong signals as presets.	43
Clear Preset (C	lear Preset)	Clear radio stations registered to preset numbers.	44
Traffic Program	ı (TrafficProgram)	(Europe model only) Automatically searches for a traffic information station.	45

Item	Function	Page
Repeat (Repeat)	Configures the repeat setting for the iPod (p.49), USB storage device (p.52), or media server (p.55).	_
Shuffle (Shuffle)	Configures the shuffle setting for the iPod (p.49), USB storage device (p.52), or media server (p.55).	_
Volume Interlock (Interlock)	Enables/disables volume controls from iTunes/iPod via AirPlay.	65

Tone Control (Tone Control)

Adjusts the high-frequency range (Treble) and low-frequency range (Bass) of sounds.

Choices

Treble (Treble), Bass (Bass)

Setting range

-6.0 dB to Bypass (Bypass) to +6.0 dB, *0.5 dB increments

Default

Bypass (Bypass)

• If you set an extreme value, sounds may not match those from other channels.

Adjusting with the front panel controls

Press TONE CONTROL to select "Treble" or "Bass".
 Press PROGRAM to make an adjustment.

DSP/Surround (DSP/Surround)

Configures the sound field program and surround settings.

DSP Level (DSP Level)

Adjusts the sound field effect level.

Setting range

-6 dB to +3 dB (1 dB increments)

Default

0 dB

□ Adaptive DRC (A.DRC)

Sets whether the dynamic range (from maximum to minimum) is automatically adjusted when the volume level is adjusted. When it is set to "On", it is useful for listening to playback at a low volume at night.

Settings

On (On)	Automatically adjusts the dynamic range.
Off (Off) (default)	The dynamic range is not automatically adjusted.

If "On" is selected, the dynamic range becomes narrow at a low volume and wide at a high volume.



Extended Surround (EXTD)

(HTR-5065 only)

Selects how to play back 5.1- to 7.1-channel sources when surround back speakers are used.

Settings

Auto (Auto) (default)	Automatically selects the most suitable decoder if signals that contain surround back channel signals are input, and reproduces the signals in 6.1- or 7.1-channel. If two surround back speakers are connected, the unit reproduces the 5.1-channel signals in 7.1-channel.
PLIIx Movie (MPLIIxMo)	Always reproduces signals in 7.1-channel using the Dolby Pro Logic IIx Movie decoder. This setting is available only when two surround back speakers are connected.
PLIIx Music (DPLIIxMu)	Always reproduces signals in 6.1- or 7.1-channel using the Dolby Pro Logic IIx Music decoder. This setting is available only when one or two surround back speakers are connected.
EX/ES (EX/ES)	Automatically selects the Dolby EX or DTS-ES decoder, and reproduces signals in 6.1- or 7.1-channel.
Off (Off)	Always reproduces signals in their original channels. (Even when DTS-ES or Dolby Digital EX signal is input, the unit reproduces the signal in 5.1-channel.)

 Some Dolby Digital EX or DTS-ES sources do not contain a flag for reproducing surround back channel. In this case, the unit reproduces the signals in 5.1-channel if "Extended Surround" is set to "Auto". To reproduce the signals in 6.1 or 7.1-channel, set it to "DPLIX Movie", "DPLIX Music", or "EX/ES".

Enhancer (Enhancer)

Enables/disables Compressed Music Enhancer (p.41).

- · This setting is applied separately to each input source.
- You can also use ENHANCER on the remote control to enable/disable Compressed Music Enhancer (p.41).

Settings

Off (Off)	Disables Compressed Music Enhancer.	
On (On)	Enables Compressed Music Enhancer.	

Default

USB, SERVER, NET RADIO, AirPlay, TUNER: On (On) Others: Off (Off)

Volume Trim (Volume Trim)

Fine-adjusts volume difference between input sources or subwoofer volume.

Input Trim (In.Trim)

Corrects volume differences between input sources. If you are bothered by volume differences when switching between input sources, use this function to correct it.

• This setting is applied separately to each input source.

Setting range

-6.0 dB to +6.0 dB (0.5 dB increments)

Default

0.0 dB

Subwoofer Trim (SW.Trim)

Fine-adjusts the subwoofer volume.

Setting range

-6.0 dB to +6.0 dB (0.5 dB increments)

Default

0.0 dB

Lipsync (Lipsync)

Enables/disables the adjustment configured in "Lipsync" (p.74) in the "Setup" menu.

· This setting is applied separately to each input source.

Settings

Off (Off)	Disables the "Lipsync" adjustment.
On (On) (default)	Enables the "Lipsync" adjustment.

Signal Info (Signal Info)

Displays information about the video/audio signal.

Choices

Format (FORMAT)	Audio format of the input signal
Channel (CHAN)	The number of source channels in the input signal (front/surround/LFE) For example, "3/2/0.1" means 3 front channels, 2 surround channels, and LFE.
Sampling (SAMPL)	The number of samples per second of the input digital signal
Bitrate (B RATE)	The amount of data per second of the input bitstream signal
Input (V IN)	Type and resolution of input signal
Output (V OUT)	Type and resolution of output signal

• To switch the information on the front display, press the cursor keys (△/▽) repeatedly.

Audio In (Audio In)

Combines the video jack of the selected input source (HDMI 1–4 or AV 1–2) with an audio jack of others. For example, use this function in the following cases.

- Connecting a playback device that supports HDMI video output, but not HDMI audio output
- Connecting a playback device that has component video jacks and analog stereo jacks (such as game consoles)

Input sources

HDMI 1-4, AV 1-2

Setup procedure

(To input audio through a digital optical jack)

Select "AV 1" or "AV 4" and connect the device to the unit's corresponding audio jacks with a digital optical cable.

(To input audio through a digital coaxial jack)

Select "AV 2" or "AV 3" and connect the device to the unit's corresponding audio jacks with a digital coaxial cable.

(To input audio through analog audio jacks)

Select "AV 5", "AV 6", or "AUDIO", and connect the device to the unit's corresponding audio jacks with a stereo pin cable.

Video Out (Video Out)

Selects a video to be output with radio sounds.

Settings

Off (Off) (default)	Does not output video.
HDMI 1–4, AV 1–6, V-AUX	Outputs video input through the corresponding video input jacks.

Volume Interlock (Interlock)

Enables/disables volume controls from iTunes/iPod via AirPlay.

Settings

Off (Off)	Disables volume controls from iTunes/iPod.
Limited (Ltd) (default)	Enables volume controls from iTunes/iPod within the limited range (-80 dB to 0 dB and mute).
Full (Full)	Enables volume controls from iTunes/iPod in the full range (-80 dB to $+16.5$ dB and mute).

CONFIGURATIONS

Configuring various functions (Setup menu)

You can configure the unit's various function with the menu displayed on the TV screen.

Operations with TV screen are available only when your TV is connected to the unit via HDMI. If not, carry
 out operations while viewing the front display.

Press SETUP.



Setup	_
Be Speaker HDMI Sound ECO H Function Network Case Language	Configuration Distance Level Equalizor Test Tone

3 Use the cursor keys to select an item and press ENTER.



• To return to the previous screen during menu operations, press RETURN.

- **4** Use the cursor keys $(\triangleleft/\triangleright)$ to select a setting and press ENTER.
- 5 To exit from the menu, press SETUP.

Setup menu items

Menu	Item		Function	Page
		Power Amp Assign	(HTR-5065 only) Selects a speaker system.	69
		Subwoofer	Selects whether or not a subwoofer is connected.	69
		Front	Selects the size of the front speakers.	69
		Center	Selects whether or not a center speaker is connected and its size.	69
	Configuration	Surround	Selects whether or not surround speakers are connected and their size.	70
Speaker		Surround Back	(HTR-5065 only) Selects whether or not surround back speakers are connected and their size.	70
		Crossover	Sets the lower limit of the low-frequency component that can be output from speakers whose size is set to "Small".	70
		Subwoofer Phase	Sets the phase of the subwoofer.	70
		Extra Bass	Sets the speakers to produce the front channel low-frequency components.	70
	Distance		Sets the distance between each speaker and listening position.	71
	Level		Adjusts the volume of each speaker.	71
	Equalizer		Adjusts the tone with an equalizer.	71
	Test Tone		Enables/disables the test tone output.	71
		HDMI Control	Enables/disables HDMI Control.	72
		Audio Output	Selects a device to output audio.	72
		Standby Through	Selects whether to output videos/audio (input through HDMI jacks) to the TV when the unit is in standby mode.	72
HDMI	Configuration	TV Audio Input	Selects an audio input jack of the unit to be used for TV audio input.	72
		Standby Sync	Selects whether to use HDMI control to link the standby behavior of the TV and the unit.	73
		ARC	Enables/disables ARC.	73
		SCENE	Enables/disables SCENE link playback.	73

Menu	Item		Function	Page
	DSP Parameter	CINEMA DSP 3D Mode	Enables/disables CINEMA DSP 3D.	73
		Panorama	Enables/disables the broadening effect of the front sound field.	73
		Center Width	Adjusts the broadening effect of the center sound field.	74
		Dimension	Adjusts the difference in level between the front and surround sound fields.	74
Cound		Center Image	Adjusts the center orientation level (broadening effect) of the front sound field.	74
Sound	Lineure	Select	Selects the method to adjust the delay between video and audio output.	74
	Lipsync	Adjustment	Adjusts the delay between video and audio output manually.	74
		Dynamic Range	Selects the dynamic range adjustment method for bitstream audio (Dolby Digital and DTS signals) playback.	75
	Volume	Max Volume	Sets the maximum volume to prevent excessive loudness.	75
		Initial Volume	Sets the initial volume for when this receiver is turned on.	75
	Auto Power Down		Sets the amount of time for the auto-standby function.	75
ECO	ECO Mode		Enables/disables the eco mode (power saving mode).	76
	Input Rename		Changes the input source name displayed on the front display.	76
Function	Dimmer		Adjusts the brightness of the front display.	77
	Memory Guard		Prevents accidental changes to the settings.	77
	IP Address		Configures the network parameters (such as IP address).	77
	MAC Address Filter		Sets the MAC address filter to limit access to the unit from other network devices.	78
	DMC Control		Selects whether to allow a DLNA-compatible Digital Media Controller (DMC) to control playback.	78
Network	Network Standby		Selects whether to enable/disable the function that turns on the unit from other network devices.	78
	Network Name		Edits the network name (the unit's name on the network) displayed on other network devices.	78
	Information		Displays the network information on the unit.	79
	Network Update		Updates the firmware via the network.	79
Language			Select an on-screen menu language.	79

Speaker

Configures the speaker settings manually.



Configuration

Configures the output characteristics of the speakers.

• When you configure the speaker size, select "Large" if the woofer diameter of your speaker is 16 cm (6-1/4") or larger or "Small" if it is smaller than 16 cm (6-1/4").

Power Amp Assign

(HTR-5065 only)

Selects a speaker system.

In addition to the 5.1- or 7.1-channel speaker system, various speaker configurations are possible using the Zone B speakers or bi-amp connection.

Settings

Basic (default)	Select this option when you use a normal speaker system (not using Zone B speakers or a bi-amp connection).
BI-AMP	Select this option when you connect front speakers that support bi-amp connections (p.16).
ZoneB	Select this option when you use Zone B speakers (p.60) in addition to the speaker system in the main zone (Zone A).

Subwoofer

Selects whether or not a subwoofer is connected.

Settings

Use (default)	Select this option when a subwoofer is connected. The subwoofer will produce LFE (low-frequency effect) channel audio and low-frequency components from other channels.
None	Select this option when no subwoofer is connected. The front speakers will produce LFE (low-frequency effect) channel audio and low-frequency components from other channels.

Front

Selects the size of the front speakers.

Settings

Small (default)	Select this option for small speakers. The subwoofer will produce front channel low-frequency components (configurable in "Crossover").
Large	Select this option for large speakers. The front speakers will produce all of the front channel frequency components.

• "Front" is automatically set to "Large" when "Subwoofer" is set to "None".

Center

Selects whether or not a center speaker is connected and its size.

Settings

Small (default)	Select this option for small speakers. The subwoofer or front speakers will produce center channel low-frequency components (configurable in "Crossover").
Large	Select this option for large speakers. The center speaker will produce all of the center channel frequency components.
None	Select this option when no center speaker is connected. The front speakers will produce center channel audio.

Surround

Selects whether or not surround speakers are connected and their sizes.

Settings

Small (default)	Select this option for small speakers. The subwoofer or front speakers will produce surround channel low-frequency components (configurable in "Crossover").
Large	Select this option for large speakers. The surround speakers will produce all of the surround channel frequency components.
None	Select this option when no surround speakers are connected. The front speakers will produce surround channel audio. Virtual CINEMA DSP works when you select a sound program.

Surround Back

(HTR-5065 only)

Selects whether or not surround back speakers are connected and their sizes.

Settings

Small x1	Select this option when one small speaker is connected. The subwoofer or front speakers will produce surround back channel low-frequency components (configurable in "Crossover").
Small x2 (default)	Select this option when two small speakers are connected. The subwoofer or front speakers will produce surround back channel low-frequency components (configurable in "Crossover").
Large x1	Select this option when one large speaker is connected. The surround back speaker will produce all of the surround back channel frequency components.
Large x2	Select this option when two large speakers are connected. The surround back speakers will produce all of the surround back channel frequency components.
None	Select this option when no surround back speakers are connected. The surround speakers and subwoofer (or front speakers) will produce surround back channel audio.

 "Surround Back" is automatically set to "None" when "Power Amp Assign" is set to "BI-AMP" or "ZoneB", or when "Surround" is set to "None".

Crossover

Sets the lower limit of the low-frequency components that can be output from a speaker whose size is set to "Small". A frequency sound lower than the specified value will be produced from the subwoofer or front speakers.

Settings

40 Hz, 60 Hz, 80 Hz (default), 90 Hz, 100 Hz, 110 Hz, 120 Hz, 160 Hz, 200 Hz

Š.

• If the volume and crossover frequency are adjustable on your subwoofer, set the volume to half and crossover frequency to maximum.

Subwoofer Phase

Sets the phase of the subwoofer. When the bass sound is lacking or unclear, switch the subwoofer phase.

Settings

Normal (default)	Does not reverse the subwoofer phase.
Reverse	Reverses the subwoofer phase.

🗆 Extra Bass

Sets the speakers to produce the front channel low-frequency components.

Settings		
Off (default)	Depending on the size of the front speakers, either the subwoofer or front speakers produce the front channel low-frequency components.	
On	Both the front speakers and subwoofer produce the front channel low-frequency components.	

• This setting is not available when "Subwoofer" is set to "None", or when "Front" is set to "Small".

Distance

Sets the distance between each speaker and listening position so that sounds from the speakers reach the listening position at the same time. First, select the unit of distance from "Meter" or "Feet".

Choices

Front L, Front R, Center, Surround L, Surround R, Surround Back L (HTR-5065 only), Surround Back R (HTR-5065 only), Subwoofer

Setting range

0.30 m to 24.00 m (1.0 ft to 80.0 ft), *0.05 m (0.2 ft) increments

Default

Front L, Front R, Subwoofer: 3.00 m (10.0 ft) Center: 2.60 m (8.6 ft) Others: 2.40 m (8.0 ft)

Level

Adjusts the volume of each speaker.

Choices

Front L, Front R, Center, Surround L, Surround R, Surround Back L (HTR-5065 only), Surround Back R (HTR-5065 only), Subwoofer

Setting range

-10.0 dB to +10.0 dB (0.5 dB increments)

Default

Front L, Front R, Subwoofer: 0.0 dB Others: -1.0 dB

Equalizer

Adjusts the tone with an equalizer.

EQ Select

Selects the type of equalizer to be used.

Settings

PEQ	Applies the parametric equalizer values obtained by the YPAO measurement (p.30).
GEQ (default)	Select this option when you want to adjust the equalizer manually. For details, see "Manual equalizer adjustment".
Off	Does not use the equalizer.

• "PEQ" is available only when the YPAO has been performed (p.30).

Manual equalizer adjustment

- Set "EQ Select" to "GEQ".
- 2 Use the cursor keys (△/▽) to select "Channel" and the cursor keys (⊲/▷) to select the desired speaker channel.
- 3 Use the cursor keys (△/▽) to select the desired band (frequency) and the cursor keys (⊲/▷) to adjust the gain.

Setting range

-6.0 dB to +6.0 dB

Equalizer	
EQ Select GEQ Edit	GEQ
Channel 63Hz	Front L
160 H z	
400 H z	+++++++ - [+++++++++++++++++++++++++++++
1kHz	+-++++
2.5 k H z	- -]
6.3 k H z	- -]
16kHz	-
	Back:RETURN

4 To exit from the menu, press SETUP.

Test Tone

Enables/disables the test tone output. Test tone output helps you to adjust the speaker balance or equalizer while confirming its effect.

Settings

Off (default)	Does not output test tones.
On	Outputs test tones automatically when you adjust the speaker balance or equalizer.

HDMI

Configures the HDMI settings.

Configuration

HDMI Control

Enables/disables HDMI Control (p.96).

Settings

Off (default)	Disables HDMI Control.
On	Enables HDMI Control. Configure the settings in "TV Audio Input", "Standby Sync", "ARC", and "SCENE".

!

To use HDMI control, you need to perform the HDMI Control link setup (p.96) after connecting HDMI Control-compatible devices.

Audio Output

Selects a device to output audio.

• This setting is available only when "HDMI Control" is set to "Off".

Amp

Enables/disables the audio output from the speakers connected to the unit.

Settings

Off	Disables the audio output from the speakers.
On (default)	Enables the audio output from the speakers.

HDMI OUT (TV)

Enables/disables the audio output from a TV connected to the HDMI OUT jack.

Settings

Off (default)	Disables the audio output from the TV.
On	Enables the audio output from the TV.

Standby Through

Select whether to output videos/audio (input through HDMI jacks) to the TV when the unit is in standby mode. If this function is set to "On", you can use the input selection keys (HDMI 1–4) to select an HDMI input even when the unit is in standby mode (the standby indicator on the unit blinks).

Settings

Off (default)	Does not output videos/audio to the TV.
On	Outputs videos/audio to the TV. (The unit consumes approximately 1 W of power.)

• This setting is available only when "HDMI Control" is set to "Off".

TV Audio Input

Selects an audio input jack of the unit to be used for TV audio input when "HDMI Control" is set to "On". The unit's input source automatically switches to TV audio when the TV input is switched to its built-in tuner.

Settings

AV 1-6, AUDIO

Default

AV 4

• When using ARC to input TV audio to the unit, you cannot use the input jacks selected here for connecting an external device because the input will be used for TV audio input.
Standby Sync

Select whether to use HDMI control to link the standby behavior of the TV and the unit when "HDMI Control" is set to "On".

Settings

Off	Does not set the unit to standby mode when the TV is turned off.
On	Sets the unit to standby mode when the TV is turned off.
Auto (default)	Sets the unit to standby mode when the TV is turned off only when the unit is receiving TV audio or HDMI signals.

□ ARC

Enables/disables ARC (p.18) when "HDMI Control" is set to "On".

Settings

Off	Disables ARC.
On (default)	Enables ARC.

 You do not need to change this setting normally. In case noises are produced from the speakers connected to the unit because TV audio signals input to the unit via ARC are not supported by the unit, set "ARC" to "Off" and use the TV's speakers.

SCENE

Enables/disable SCENE link playback when "HDMI Control" is set to "On".

When SCENE link playback is enabled, HDMI Control-compatible devices connected to the unit via HDMI automatically works as follows, with a scene selection.

• TV: turning on and displaying video from the playback device

• Playback device: starting playback

Choices (SCENE keys)

BD/DVD, TV, NET, RADIO

Settings

Off	Disables SCENE link playback for the selected SCENE key.
On	Enables SCENE link playback for the selected SCENE key.

Default

BD/DVD, TV: On NET, RADIO: Off

.

SCENE link playback may not work properly due to the compatibility between devices. We recommend
using TV and playback devices from the same manufacturer so that HDMI Control works more effectively.

Sound

Configures the audio output settings.

Setup		
E Speaker → HDMI FO ECO ↓ Function ↓ Function ↓ Sound Network ↓ anguage	DSP Parameter Lipsync Volume	

DSP Parameter

Configures the surround decoder settings.

CINEMA DSP 3D Mode

Enables/disables CINEMA DSP 3D (p.39). If this function is set to "On", CINEMA DSP 3D functions with the selected sound programs (except 2ch Stereo and 7ch/5ch Stereo).

Settings

Off	Disables CINEMA DSP 3D.
On (default)	Enables CINEMA DSP 3D.

Panorama

Enables/disables the broadening effect of the front sound field. When this function is enabled, you can wrap front right/left channel sounds around the field and generate a spacious sound field in combination with the surround sound field. This setting is effective when "IPLII Music" or "IPLIIX Music" (HTR-5065 only) is selected.

Settings

Off (default)	Disables the broadening effect of the front sound field.
On	Enables the broadening effect of the front sound field.

Center Width

Adjusts the broadening effect of the center sound field. Higher to enhance the broadening effect, and lower to reduce it (closer to center). This setting is effective when "TPLII Music" or "TPLIIx Music" (HTR-5065 only) is selected.

Setting range 0 to 7 Default

3

Dimension

Adjusts the difference in level between the front and surround sound fields. Higher to strengthen the front sound field and lower to strengthen the surround sound field. This setting is effective when "DPLII Music" or "DPLIIx Music" (HTR-5065 only) is selected.

Setting range -3 to +3 Default 0

Center Image

Adjusts the center orientation level (broadening effect) of the front sound field. Higher to strengthen the center orientation level (less broadening effect) and lower to weaken (more broadening effect). This setting is effective when "Neo:6 Music" is selected.

Setting range

0.0 to 1.0

Default

0.3

Lipsync

Adjusts the delay between video and audio output.

• You can enable/disable the Lipsync function by input sources in "Lipsync" (p.64) in the "Option" menu.

Select

Selects the method to adjust the delay between video and audio output.

Setting range

Manual	Select this option when you want to adjust the delay between video and audio output manually. Adjust the audio output timing in "Adjustment".
Auto (default)	Adjusts the delay between video and audio output automatically when a TV that supports an automatic lipsync function is connected to the unit via HDMI. If necessary, you can fine-adjust the audio output timing in "Adjustment".

• "Select" is automatically set to "Manual" depending on the TV connected to the unit.

Adjustment

Adjusts the delay between video and audio output manually when "Select" is set to "Manual". You can fine-adjust the audio output timing when "Select" is set to "Auto".

Setting range

0 ms to 250 ms (1 ms increments)

Default

0 ms

Volume

Configures the volume settings.

Dynamic Range

Selects the dynamic range adjustment method for bitstream audio (Dolby Digital and DTS signals) playback.

Settings

Maximum (default)	Produces audio without adjusting the dynamic range.
Standard	Optimizes the dynamic range for regular home use.
Min/Auto	Sets the dynamic range for clear sound even at night or at low volumes. When playing back Dolby TrueHD signals, the dynamic range is automatically adjusted based on the input signal information.

Max Volume

Sets the maximum volume to prevent excessive loudness.

Setting range

-30.0 dB to +15.0 dB (5.0 dB increments), +16.5 dB

Default

+16.5 dB

Initial Volume

Sets the initial volume when the receiver is turned on.

Settings

Off (default)	Sets the level to the volume level of the unit when it last entered standby mode.
Mute	Sets the unit to mute the audio output.
-80.0 dB to +16.5 dB (0.5 dB increments)	Sets the level to the specified volume level.

ECO

Configures the power supply settings.

📰 Setup	
Speaker HDMI Sound ECO I Function Network Language	Auto Power Down ECO Mode

Auto Power Down

Sets the amount of time for the auto-standby function. If you do not operate the unit for the specified time, the unit will automatically go into standby mode.

Settings

Off	Does not set the unit to standby mode automatically.
2 hours, 4 hours, 8 hours, 12 hours	Sets the unit to standby mode when you have not operated the unit for the specified time. For example, when "2 hours" is selected, the unit will switch to standby mode if you do not operate it for 2 hours.

Default

Europe model: 8 hours Other models: Off

Just before the unit enters standby mode, "AutoPowerDown" appears and then countdown starts in the front display.

ECO Mode

Enables/disables the eco (power saving) mode.

When the eco mode is enabled, you can reduce the unit's power consumption.

Settings

Off (default)	Disables the eco mode.
On	Enables the eco mode.

- Be sure to press ENTER to restart the unit after selecting a setting. The new setting will take effect after the unit is restarted.
- When "ECO Mode" is set to "On", the front panel display may become dark.
- If you want to play audio at high volume, set "ECO Mode" to "Off".

Function

Configures the functions that make the unit easier to use.

[翻譯] Setup	
Hong Speaker HDMI HDMI HOMI Hong Honcion Network Mage Language	Input Rename Dimmer Memory Guard

Input Rename

Changes the input source name displayed on the front display.

Input sources

HDMI 1-4, AV 1-6, AUDIO, USB, V-AUX

Procedure

1 Use the cursor keys (Δ / ∇) to select an input source to be renamed and press ENTER.

- To select a name from the presets, use the cursor keys (△/▽) to select an input source and the cursor keys (⊲/▷) to select a preset name.
- 2 Use the cursor keys (⊲/▷) to move the edit position and the cursor keys (△/▽) to select a character.

Ï↓ Input Rename
∢Blu-ray 🕨
OK:ENTER Cancel:return

3 To confirm the new name, press ENTER.



• To cancel the entry, press RETURN.

- **4** To change another input source name, repeat steps 1 to 3.
- 5 To exit from the menu, press SETUP.

Dimmer

Adjusts the brightness of the front display.

Setting range

-4 to 0 (higher to brighten)

Default

0

• The front display may become dark when "ECO Mode" (p.76) is set to "On".

Memory Guard

Prevents accidental changes to the settings.

Settings

Off (default)	Does not protect the settings.
On	Protects the settings until "Off" is selected.

• When "Memory Guard" is set to "On", the lock icon (1) is displayed on the menu screen.



Network

Configures the network settings.



IP Address

Configures the network parameters (such as IP address).

Select whether to use a DHCP server.

Settings

Off	Does not use a DHCP server. Configure the network parameters manually. For details, see "Manual network settings".
On (default)	Uses a DHCP server to automatically obtain the unit's network parameters (such as IP address).

Manual network settings

1 Set "DHCP" to "Off".

2 Use the cursor keys (\triangle / ∇) to select a parameter type.

IP Address	Specifies an IP address.
Subnet Mask	Specifies a subnet mask.
Default Gateway	Specifies the IP address of the default gateway.
DNS Server (P)	Specifies the IP address of the primary DNS server.
DNS Server (S)	Specifies the IP address of the secondary DNS server.

- 3 Use the cursor keys (⊲/▷) to move the edit position and the cursor keys (△/▽) to select a value.
- **4** To exit from the menu, press SETUP.

MAC Address Filter

Sets the MAC address filter to limit access to the unit from other network devices.

Filter

Enables/disables the MAC address filter.

Settings

Off (default)	Disables the MAC address filter.
On	Enables the MAC address filter. In "MAC Address 1–10", specify the MAC addresses of the network devices that will be permitted access to the unit.

MAC Address 1–10

Specifies the MAC addresses (up to 10) of the network devices that will be permitted access to the unit when "Filter" is set to "On".

Procedure

- 1 Use the cursor keys (\triangle / ∇) to select an MAC address number (1 to 10).
- 2 Use the cursor keys (⊲/▷) to move the edit position and the cursor keys (△/▽) to select a value.
- **3** To exit from the menu, press SETUP.

DMC Control

Selects whether to allow DLNA-compatible Digital Media Controller (DMC) to control playback.

Settings

Disable	Does not allow DMCs to control playback.
Enable (default)	Allows DMCs to control playback.

• A Digital Media Controller (DMC) is a device that can control other network devices through the network. When this function is enabled, you can control playback of the unit from DMCs (such as Windows Media Player 12) on the same network.

Network Standby

Selects whether the unit can be turned on from other network devices (network standby).

Settings

Off (default)	Disables the network standby function.
On	Enables the network standby function. (The unit consumes approximately 2 W of power.)

Network Name

Edits the network name (the unit's name on the network) displayed on other network devices.

Procedure

- Press ENTER to enter the name edit screen.
- 2 Use the cursor keys (⊲/▷) to move the edit position and the cursor keys (△/▽) to select a character.



- 3 To confirm the new name, press ENTER.
- 4 To exit from the menu, press SETUP.

Information

Displays the network information on the unit.

MAC Address	MAC address
IP Address	IP address
Subnet Mask	Subnet mask
Default Gateway	The IP address of the default gateway
DNS Server (P)	The IP address of the primary DNS server
DNS Server (S)	The IP address of the secondary DNS server
Status	The connection status of the NETWORK jack
vTuner ID	The ID of the Internet radio (vTuner)

Network Update

Updates the firmware via the network.

Perform Update

Starts the process to update the unit's firmware. For details, see "Updating the unit's firmware" (p.85).

Firmware Version

Displays the version of the firmware installed on the unit.

System ID

Displays the system ID number.

Language

Select an on-screen menu language.

English	
Français	
Deutsch	
Español	
Русский	
中文	
	English Français Deutsch Español Русский Ф文

Settings

English (default)	English
Français	French
Deutsch	German
Español	Spanish
Русский	Russian
中文	Chinese



- Chinese characters used in content information (such as song titles) cannot be displayed.
- The information on the front display is provided in English only.

Configuring the system settings (ADVANCED SETUP menu)

Configure the system settings of the unit while viewing the front display.

Set the unit to standby mode.

2 While holding down STRAIGHT on the front panel, press 0 (power).



- **3** Press PROGRAM to select an item.
- 4 Press STRAIGHT to select a setting.
- 5 Press (b) (power) to set the unit to standby mode and turn it on again.
 The new settings take effect.

ADVANCED SETUP menu items

Item	Function	Page
SP IMP.	(U.S.A. model only) Changes the speaker impedance setting.	80
REMOTE ID	Selects the unit's remote control ID.	80
TV FORMAT	Switches the video signal type of HDMI output.	81
INIT	Restores the default settings.	81
UPDATE	Updates the firmware.	81
VERSION	Checks the version of firmware currently installed on the unit.	81

Changing the speaker impedance setting (SP IMP.)

(U.S.A. model only)

SP IMP.··8ΩMIN

Change the unit's speaker impedance settings depending on the impedance of the speakers connected.

Settings

6 Ω MIN	Select this option when you connect 6-ohm speakers to the unit. You can also use 4-ohm speakers as the front speakers.
$8 \Omega \text{MIN}$ (default)	Select this option when you connect 8-ohm or higher speakers to the unit.

Selecting the remote control ID (REMOTE ID)

REMOTE ID. ID1

Change the unit's remote control ID so that it matches the remote control's ID (default: ID1). When using multiple Yamaha AV receivers, you can set each remote control with a unique remote control ID for its corresponding receiver.

Settings

ID1 (default), ID2

Changing the remote control ID of the remote control

Perform each of the following steps within 1 minute. Otherwise, the setting will be automatically canceled.

- 1 Press CODE SET on the remote control using a pointed object, such as the tip of a ballpoint pen.
- 2 Press SOURCE/RECEIVER.
- 3 Use the numeric keys to enter "5019" (ID1) or "5020" (ID2).

Once the remote control ID is registered successfully, SOURCE/RECEIVER blinks twice. If it blinks six times, registration failed. Repeat from Step 1.

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• The registered remote control codes (p.82) are not cleared even if you change the remote control ID.

Switching the video signal type (TV FORMAT)

TV FORMAT .NTSC

Switch the video signal type of HDMI output so that it matches to the format of your TV. Since the unit automatically selects the video signal type so that it matches to the TV, it is unnecessary to change the setting normally. Change the setting only when images on the TV screen do not appear correctly.

Settings

NTSC, PAL

Default

U.S.A. model: NTSC Other models: PAL

Restoring the default settings (INIT)

INIT••••CANCEL

Restores the default settings for the unit.

Choices

ALL	Restores the default settings for the unit.
CANCEL	Does not perform an initialization.

Updating the firmware (UPDATE)

UPDATE USB

New firmware that provides additional features or product improvements will be released as needed. Updates can be downloaded from our website. If the unit is connected to the Internet, you can download the firmware via the network. For details, refer to the information supplied with updates.

Firmware update procedure

Do not perform this procedure unless firmware update is necessary. Also, make sure you read the information supplied with updates before updating the firmware.

Press STRAIGHT repeatedly to select "USB" or "NETWORK" and press INFO to start firmware update.

Choices

USB	Update the firmware using a USB memory device.
NETWORK	Update the firmware via the network.

 If the unit detects newer firmware over the network, the envelope icon (≤) will appear in the "Network Update" screen. In this case, you can also update the unit's firmware by following the procedure in "Updating the unit's firmware" (p.85).

Checking the firmware version (VERSION)

VERSION · · xx.xx

Check the version of firmware currently installed on the unit.

• You can also check the firmware version in "Network Update" (p.79) in the "Setup" menu.



Controlling external devices with the remote control

You can use the unit's remote control to operate external devices (such as BD/DVD players) if you have registered the remote control code of the external device.

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- · You cannot control an external device that does not have a remote control sensor.
- Ensure that the remote control ID of the external device is set to "ID1". If any other ID is selected, the remote control operations may not work properly.
- If the unit's remote control is without batteries for more than 2 minutes, the registered codes may be cleared. If this happens, insert new batteries and register the codes again.

 Under the unit's default settings, the amplifier code (Yamaha: 5098) is set for all the input selection keys. With this setting, you can control HDMI Control-compatible devices connected to the unit with the remote control. (This function may not work depending on the specification of the external device.)

Registering the remote control code for a TV

You can use the unit's remote control to operate a TV if you have registered its remote control code.



- You can also register your TV's remote control code to the unit's input selection keys (p.83). This would allow you to use the cursor keys or numeric keys to operate the TV (this function may not be available on some TV models).
- Use "Remote Control Code Search" in the CD-ROM to find your TV's remote control code.

• If there are multiple remote control codes, register the first code in the list. If that does not work, try the other codes.

Press CODE SET using a pointed object such as the tip of a ballpoint pen.

SOURCE/RECEIVER blinks twice.

Perform each of the following steps within 1 minute. Otherwise, the setting will be canceled. If this happens, repeat from Step 2.

子 Press TV 少.

Use the numeric keys to enter the 4-digit remote control code.

Once the remote control code is successfully registered, SOURCE/RECEIVER blinks twice.

If it blinks six times, registration has failed. Repeat from Step 2.

TV operations

Once you have registered the remote control code for your TV, you can control it using the TV operation keys, regardless of the input source selected on the unit.

	INPUT	Switches the video inputs of the TV.
	MUTE	Mutes the audio output of the TV.
TV operation keys	TV VOL	Adjust the volume of the TV.
	TV CH	Switch the channels of the TV
	TV (J	Turns on/off the TV.



Registering the remote control codes for playback devices

You can use the unit's remote control to operate playback devices if you have registered their remote control codes. You can also use the input selection keys to change the playback devices that are controlled by the remote control, because their remote control codes are assigned to the input selection keys.

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• (HTR-4065 only)

If you assign the remote control code for an external device to the star (\star or $\star\star$) key, you can operate the device with the remote control without switching the input source after pressing the star key.

Use "Remote Control Code Search" in the CD-ROM to find the remote control code for your playback device.

 If there are multiple remote control codes, register the first code in the list. If that does not work, try the other codes.

Press CODE SET using a pointed object such as the tip of a ballpoint pen.

SOURCE/RECEIVER blinks twice.

Perform each of the following steps within 1 minute. Otherwise, the setting will be canceled. If this happens, repeat from Step 2.

3 Press the input selection key.

For example, press HDMI 1 to set the remote control code for the playback device connected to the HDMI 1 jack.

4 Use the numeric keys to enter the 4-digit remote control code.

Once the remote control code is registered successfully, SOURCE/RECEIVER blinks twice.

If it blinks six times, registration has failed. Repeat from Step 2.

• For details on how to register a remote control code to a SCENE key, refer to "Configuring scene assignments" (p.35).

Playback device operations

Once you have registered the remote control code for your playback device, you can control it using the following keys after selecting the input source or scene.

 By pressing SOURCE/RECEIVER, you can switch the devices (the unit or external device) that are operated by the menu operation keys, DISPLAY and numeric keys. You can operate the unit when SOURCE/RECEIVER lights up in orange, and an external device when SOURCE/RECEIVER lights up in green.
 For example, if you register the remote control code of your external device on TUNER, you can operate the unit's built-in FM/AM radio when SOURCE/RECEIVER lights up in orange, and the external device when SOURCE/RECEIVER lights up in green.

SOURCE 🛈		Turns on/off the playback device.	
Menu operation keys	Cursor keys	Select an item.	
	ENTER	Confirms a selected item.	
	RETURN	Returns to the previous screen.	
DISPLAY		Switches information on the display.	
	TOP MENU	Displays the top menu.	
	POP-UP MENU	Displays the pop-up menu.	
		Stops playback.	
		Stops playback temporarily.	
External device operation keys		Starts playback of the selected song/video.	
	←	Searches forward/backward (by holding down).	
		- Skips forward/backward.	
Numeric keys		Enter numerical values.	
TV operation keys		Control the TV (p.82).	

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• These keys work only if the corresponding function is available on your playback device and if the device can be operated with an infrared remote control.



Resetting remote control codes

You can reset a remote control code registered to each input selection key.

Press CODE SET using a pointed object such as the tip of a ballpoint pen.

SOURCE/RECEIVER blinks twice.

Perform each of the following steps within 1 minute. Otherwise, the setting will be canceled. If this happens, repeat from Step 1.

2 Press the input selection key.

3 Use the numeric keys to enter "5098".

Once the remote control code is reset successfully, SOURCE/RECEIVER blinks twice. If it blinks six times, resetting has failed. Repeat from Step 1.

To reset the remote control to factory default settings

Press CODE SET using a pointed object such as the tip of a ballpoint pen.
 Press SOURCE/RECEIVER.
 Use the numeric keys to enter "9981".



Updating the unit's firmware

New firmware that provides additional features or product improvements will be released as needed. If the unit is connected to the Internet, you can download the firmware via the network and update it.

Note

- Do not operate the unit or disconnect the power cable or network cable during firmware update. Firmware update takes about 20 minutes or more (depending on your Internet connection speed).
- To perform the following procedure, your TV must be connected to the unit via HDMI. If not, perform the update from the "ADVANCED SETUP" menu (p.81).

• You can also update the firmware using the USB memory device from the "ADVANCED SETUP" menu (p.81).

Press SETUP.

- 2 Use the cursor keys to select "Network" and press ENTER.
- **3** Use the cursor keys to select "Network Update" and press ENTER.

If new firmware is available, the envelope icon (🛥) appears in the "Network Update" screen.



4 Use the cursor keys to select "Perform Update" and press ENTER.

The on-screen display turns off and the firmware update starts.

5 If "UPDATE SUCCESS PLEASE POWER OFF!" appears on the front display, press () (power) on the front panel.

The firmware update is complete.

• To cancel the operation without updating the firmware, press SETUP.

APPENDIX

Frequently asked questions

The new speaker system does not provide an ideal sound balance...

If you have changed speakers or have a new speaker system, use YPAO to optimize the speaker settings again (p.30). If you want to adjust the speaker settings manually, use "Speaker" in the "Setup" menu (p.69).

Since we have small children, we want to set limitations on the volume control...

If a small child accidentally operates the controls on the main unit or remote control, the volume may suddenly increase. This may also cause injury or damage the unit or speakers. We recommend using "Max Volume" in the "Setup" menu to set the maximum volume level for the unit in advance (p.75).

I am occasionally startled by a sudden loud sound when turning on the unit...

By default, the volume level when the unit last entered standby mode is automatically applied. If you want to fix the volume, use "Initial Volume" in the "Setup" menu to set the volume to be applied when the receiver is turned on (p.75).

I made HDMI connections but HDMI Control does not work at all...

To use HDMI Control, you need to perform the HDMI Control link setup (p.96). After connecting HDMI Control-compatible devices (such as BD/DVD players) to the unit, enable HDMI Control on each device and perform the HDMI Control link setup. This setup is required every time you add a new HDMI Control-compatible device to your system. For information on how HDMI Control works between your TV and playback devices, refer to the instruction manuals for each device.

I want to display a device name or a manufacture name on the front display when selecting an input source...

By default, input source names (such as "HDMI 1" and "AV 1") are displayed on the front display when an input source is selected. If you want to rename them as you like, use "Input Rename" (p.76) in the "Setup" menu. You can also select a name from the presets (such as "Blu-ray" and "DVD").

I want to prevent accidental changes to the settings...

You can protect the settings configured on the unit (such as speaker settings) by utilizing "Memory Guard" in the "Setup" menu (p.77).

The unit's remote control is simultaneously controlling another Yamaha product as well as the unit...

When using multiple Yamaha products, the remote control may work on another Yamaha product or another remote control may work on the unit. If this happens, register different remote control IDs for the devices that you want to control with each remote control (p.80).

Troubleshooting

Refer to the table below when the unit does not function properly.

If the problem you are experiencing is not listed below or if the instructions below do not help, turn off the unit, disconnect the power cable, and contact the nearest authorized Yamaha dealer or service center.

First, check the following:

- 1 The power cables of the unit, TV and playback devices (such as BD/DVD players) are connected to AC wall outlets securely.
- 2 The unit, subwoofer, TV and playback devices (such as BD/DVD players) are turned on.
- ③ The connectors of each cable are securely inserted in to jacks on each device.

Power and system

Problem	Cause	Remedy
The power does not turn on.	The protection circuitry has been activated three times consecutively. If the unit is in this condition, the standby indicator on the unit blinks when you try to turn on the power.	As a safety precaution, capability to turn on the power is disabled. Contact your nearest Yamaha dealer or service center to request repair.
The power does not turn off.	The internal microcomputer has frozen, due to an external electric shock (such as lightning or excessive static electricity) or to a drop in the power supply voltage.	Hold down \textcircled{O} (power) on the front panel for more than 10 seconds to initialize and reboot the unit.
The power turns off (standby mode) immediately.	The unit was turned on while a speaker cable was shorted.	Twist the bare wires of each speaker cable firmly and reconnect to the unit and speakers (p.16).
The unit enters standby mode automatically.	The sleep timer worked.	Turn on the unit and start playback again.
	The auto-standby function kicked in because the unit was not used for the specified time.	To disable the auto-standby function, set "Auto Power Down" in the "Setup" menu to "Off" (p.75).
	The speaker impedance setting is incorrect.	Set the speaker impedance to match your speakers (p.80).
	The protection circuitry has been activated because of a short circuit.	Twist the bare wires of each speaker cable firmly and reconnect to the unit and speakers (p.16).
The unit is not reacting.	The internal microcomputer is frozen, due to an external electric shock (such as lightning or excessive static electricity) or to a drop in the power supply voltage.	Hold down \textcircled{O} (power) on the front panel for more than 10 seconds to initialize and reboot the unit.

Audio

Problem	Cause	Remedy
	Another input source is selected.	Select an appropriate input source with the input selection keys.
No sound.	Signals that the unit cannot reproduce are being input.	Some digital audio formats cannot be played back on the unit. To check the audio format of the input signal, use "Signal Info" in the "Option" menu (p.64).
	(HTR-5065 only) Audio output to Zone A (or Zone B) is disabled.	Press ZONE A (ZONE B) to enable audio output to Zone A (or Zone B).
	The cable connecting the unit and playback device is defective.	If there is no problem with the connection, replace with another cable.
	The maximum volume is set.	Use "Max Volume" in the "Setup" menu to adjust the maximum volume (p.75).
The volume cannot be increased.	A device connected to the output jacks of the unit is not turned on. (This may happen due to the nature of AV receivers.)	Turn on all devices connected to the output jacks of the unit.
	The playback source does not contain a signal for the channel.	To check it, use "Signal Info" in the "Option" menu (p.64).
	The currently selected sound program/decoder does not use the speaker.	To check it, use "Test Tone" in the "Setup" menu (p.71).
	Audio output of the speaker is disabled.	Perform YPAO (p.30) or use "Configuration" in the "Setup" menu to change the speaker settings (p.69).
No sound is coming from a specific speaker.	The volume of the speaker is set too low.	Perform YPAO (p.30) or use "Level" in the "Setup" menu to adjust the speaker volume (p.71).
	(HTR-5065 only) Audio output to Zone A (or Zone B) is disabled.	Press ZONE A (ZONE B) to enable audio output to Zone A (or Zone B).
	The speaker cable connecting the unit and the speaker is defective.	If there is no problem with the connection, replace with another speaker cable.
	The speaker is malfunctioning.	To check it, replace with another speaker. If the problem persists, the unit may be malfunctioning.
(HTR-5065 only) No sound is coming from the surround back speaker.	The extended surround is disabled.	Use "Extended Surround" in the "Option" menu to select a decoder to be used (p.63).
	"Power Amp Assign" is set to "BI-AMP" or "ZoneB".	When "Power Amp Assign" in the "Setup" menu is set to "BI-AMP" or "ZoneB", you cannot use the surround back speakers. To use the surround back speakers, set "Power Amp Assign" to "Basic" (p.69).
	The playback source does not contain LFE or low-frequency signals.	To check it, set "Extra Bass" in the "Setup" menu to "On", in order to output the front channel low-frequency components from the subwoofer (p.70).
No sound is coming from the subwoofer.	Subwoofer output is disabled.	Perform YPAO (p.30) or set "Subwoofer" in the "Setup" menu to "Use" (p.69).
	The volume of the subwoofer is too low.	Adjust the volume on the subwoofer.
	The subwoofer has been turned off by its auto-standby function.	Disable the auto-standby function of the subwoofer or adjust its sensitivity level.

Problem	Cause	Remedy
No sound from the playback device (connected to the unit with HDMI).	The TV does not support HDCP (High-bandwidth Digital Content Protection).	Refer to the instruction manuals for the TV and check the TV's specifications.
	The unit is set not to output audio input through HDMI jacks from the SPEAKERS terminals.	In "Audio Output" in the "Setup" menu, set "Amp" to "On" (p.72).
	The number of devices connected to the HDMI OUT jack exceeds the limit.	Disconnect some of the HDMI devices.
No sound from the TV (when HDMI Control is used).	The TV is set to output audio from the TV speakers.	Change the audio output setting on your TV so that the TV audio is output from the speakers connected to the unit.
	(If the TV is connected to the unit with an audio cable) The TV audio input setting does not match the actual connection.	Use "TV Audio Input" in the "Setup" menu to select the correct audio input jack (p.72).
	(If you are trying to use ARC) ARC is disabled on the unit or TV.	Set "ARC" in the "Setup" menu to "On" (p.73). Also, enable ARC on the TV.
Only the front speakers work on multichannel audio.	The playback device is set to output 2-channel audio (such as PCM) only.	To check it, use "Signal Info" in the "Option" menu (p.64). If necessary, change the digital audio output setting on the playback device.
Noise/hum is heard.	The unit is too close to another digital or radio frequency device.	Move the unit further away from the device.
	The cable connecting the unit and playback device is defective.	If there is no problem with the connection, replace with another cable.
The sound is distorted.	The volume of the unit is too high.	Turn down the volume. If "ECO Mode" is set to "On", set it to "Off" (p.76).
	A device connected to the unit's output jacks is not turned on. (This may happen due to the nature of AV receivers.)	Turn on all devices connected to the unit's output jacks.

Video

Problem	Cause	Remedy
No video.	Another input source is selected on the unit.	Select an appropriate input source with the input selection keys.
	Another input source is selected on the TV.	Switch the TV input to display the video from the unit.
	The video signal output from the unit is not supported by the TV.	Check the video output setting of the playback device. For information about video signals supported by the TV, refer to the instruction manuals for the TV.
	The cable connecting the unit and TV (or playback device) is defective.	If there is no problem with the connection, replace with another cable.
No video from the playback device (connected to the unit with HDMI).	The input video signal (resolution) is not supported by the unit.	To check the information about the current video signal (resolution), use "Signal Info" in the "Option" menu (p.64). For information about video signals supported by the unit, see "HDMI signal compatibility" (p.98).
	The TV does not support HDCP (High-bandwidth Digital Content Protection).	Refer to the instruction manuals for the TV and check the TV's specifications.
	The number of devices connected to the HDMI OUT jack is over the limit.	Disconnect some of the HDMI devices.

Problem	Cause	Remedy
The menu of the unit is not displayed on the TV.	The TV is not connected to the unit via HDMI.	You can display the menu of the unit on the TV only when they are connected with an HDMI cable. If necessary, use an HDMI cable to connect them (p.18 to 21).
	Another input source is selected on the TV.	Switch the TV input to display the video from the unit (HDMI OUT jack).

FM/AM radio

Problem	Cause	Remedy
FM radio reception is weak or noisy.	There is multi-path interference.	Adjust the FM antenna height or orientation, or place it in a different location.
		Press MODE to select monaural FM radio reception (p.42).
	Your area is too far from the FM station transmitter.	Use an outdoor FM antenna. We recommend using a sensitive multi-element antenna.
AM radio reception is weak or noisy.	The noises may be caused by fluorescent lamps, motors, thermostats, or other electrical equipment.	It is difficult to completely eliminate noise. It may be reduced by using an outdoor AM antenna.
Radio stations cannot be selected automatically.		Select the station manually (p.42).
	Your area is too far from the FM station transmitter.	Use an outdoor antenna. We recommend using a sensitive multi-element antenna.
	The AM radio signal is weak.	Adjust the AM antenna orientation.
		Select the station manually (p.42).
		Use an outdoor AM antenna. Connect it to the ANTENNA (AM) jack together with the supplied AM antenna.
AM radio stations cannot be registered as presets.	Auto Preset has been used.	Auto Preset is for registering FM radio stations only. Register AM radio stations manually (p.43).

USB and network

Problem	Cause Remedy		
	The USB device is not connected to the USB jack securely.	Turn off the unit, reconnect your USB device, and turn the unit on again.	
The unit does not detect the USB device.	The file system of the USB device is not FAT16 or FAT32.	Use a USB device with FAT16 or FAT32 format.	
Folders and files in the USB device cannot be viewed.	The data in the USB device is protected by the encryption.	Use a USB device without an encryption function.	
The network feature does not function.	The network parameters (IP address) have not been obtained properly.	Enable the DHCP server function on your router and set "DHCP" in the "Setup" menu to "On" on the unit (p.77). If you want to configure the network parameters manually, check that you are using an IP address which is not used by other network devices in your network (p.77).	

Problem Cause		Remedy	
	The media sharing setting is not correct.	Configure the sharing setting and select the unit as a device to which music contents are shared (p.53).	
The unit does not detect the PC.	Some security software installed on your PC is blocking the access of the unit to your PC.	Check the settings of security software installed on your PC.	
	The unit and PC are not in the same network.	Check the network connections and your router settings, and then connect the unit and the PC to the same network.	
The files in the PC cannot be viewed or played back.	The files are not supported by the unit or the media server.	Use the file format supported by both the unit and the media server. For information about the file formats supported by the unit, see "Playing back music stored on media servers (PCs/NAS)" (p.53).	
The Internet radio cannot be played.	The selected Internet radio station is currently not available.	There may be a network problem at the radio station, or the service may have been stopped. Try the station later or select another station.	
	The selected Internet radio station is currently broadcasting silence.	Some Internet radio stations broadcast silence at certain of times of the day. Try the station later or select another station.	
	Access to the network is restricted by the firewall settings of your network devices (such as the router).	Check the firewall settings of your network devices. The Internet radio can be played only when it passes through the port designated by each radio station. The port number varies depending on the radio station.	

Remote control

roblem Cause		Remedy	
The unit cannot be controlled using the remote	The unit is out of the operating range.	Use the remote control within the operating range (p.4).	
	The batteries are weak.	Replace with new batteries.	
	The unit's remote control sensor is exposed to direct sunlight or strong lighting.	Adjust the lighting angle, or reposition the unit.	
control.	The remote control is set to control external devices.	Press SOURCE/RECEIVER to set the remote control to control the unit (the key lights up in orange).	
	The remote control IDs of the unit and the remote control are not identical.	Change the remote control ID of the unit or the remote control (p.80).	
External devices cannot be controlled using the	The remote control is set to control the unit.	Press SOURCE/RECEIVER to set the remote control to control external devices (the key lights up in green).	
remote control.	The corresponding remote control code is not set properly.	Set the remote control code again (p.82). Even if the remote control code is registered properly, some products may not respond to the remote control.	

Error indications on the front display

Message	Cause	Remedy	
Access denied Access to the PC is denied.		Configure the sharing settings and select the unit as a device to which music contents are shared (p.53).	
	The unit cannot access the USB device.	Turn off the unit and reconnect your USB device. If the problem persists, try another USB device.	
Access offer	The unit cannot access the iPod.	Turn off the iPod and turn it on again.	
Access enoi	There is a problem with the signal path from the potwork to the upit	Make sure your router and modem are turned on.	
	There is a problem with the signal path norm the network to the unit.	Check the connection between the unit and your router (or hub) (p.27).	
Check SP Wires	The speaker cables short circuit.	Twist the bare wires of the cables firmly and connect to the unit and speakers properly.	
Connect error	The unit has detected the iPod, but cannot access it.	Turn off the iPod and then turn it on again.	
Internal Error	An internal error has occurred.	Contact the nearest authorized Yamaha dealer or service center.	
No content There are no playable files in the selected folder.		Select a folder that contains files supported by the unit.	
No dovico	The unit cannot detect the USB device.	Turn off the unit and reconnect your USB device. If the problem persists, try another USB device.	
NO DEVICE	The unit cannot detect the iPod.	Turn off the iPod and then turn it on again.	
Please wait	The unit is preparing for connecting to the network.	Wait until the message disappears. If the message stays more than 3 minutes, turn off the unit and turn it on again.	
RemID Mismatch	The remote control IDs of the unit and the remote control are not identical.	Change the remote control ID of the unit or the remote control (p.80).	
	The unit cannot play back the songs stored on the iPod for some reason.	Check the song data. If it cannot be played on the iPod itself, the song data or storage area may be defective.	
Unable to play	The unit cannot play back the songs stored on the PC for some reason.	Check if the format of files you are trying to play is supported by the unit. For information about the formats supported by the unit, see "Playing back music stored on media servers (PCs/NAS)" (p.53). If the unit supports the file format, but still cannot play back any files, the network may be overloaded with heavy traffic.	
Unknown iPod	The connected iPod is not supported by the unit.	Use an iPod supported by the unit (p.46).	
USB Overloaded	An overcurrent is flowing through the USB device.	Turn off the unit and reconnect your USB device. If the problem persists, try another USB device.	

Glossary

Audio information

Audio decoding format

Dolby Digital

Dolby Digital is a compressed digital audio format developed by Dolby Laboratories, Inc. that supports 5.1-channel audio. This technology is used for audio on most DVD discs.

Dolby Digital EX

Dolby Digital EX creates total 6.1-channel audio from 5.1-channel sources that are recorded with Dolby Digital Surround EX. This decoder adds a surround back sound to the original 5.1-channel sound.

Dolby Digital Plus

Dolby Digital Plus is a compressed digital audio format developed by Dolby Laboratories, Inc. that supports 7.1-channel audio. Dolby Digital Plus remains fully compatible with the existing multichannel audio systems that support Dolby Digital. This technology is used for audio on BD (Blu-ray discs).

Dolby Pro Logic II

Dolby Pro Logic II enables 5-channel playback from 2-channel sources. There are three modes available: "Music mode" for music sources, "Movie mode" for movie sources, and "Game mode" for game sources.

Dolby Pro Logic IIx

Dolby Pro Logic IIx enables 7-channel playback from 2-channel or multichannel sources. There are three modes available: "Music mode" for music sources, "Movie mode" for movie sources and "Game mode" for game sources (for 2-channel sources only).

Dolby TrueHD

Dolby TrueHD is an advanced lossless audio format developed by Dolby Laboratories, Inc. to offer a high-definition home theater experience with the quality of the studio master. Dolby TrueHD can carry up to eight channels of 96 kHz/24-bit audio (up to six channels of 192 kHz/24-bit audio) simultaneously. This technology is used for audio on BD (Blu-ray discs).

DTS 96/24

DTS 96/24 is a compressed digital audio format that supports 5.1-channel and 96 kHz/24-bit audio. This format remains fully compatible with the existing multichannel audio systems that support DTS Digital Surround. This technology is used for music DVDs, etc.

DTS Digital Surround

DTS Digital Surround is a compressed digital audio format developed by DTS, Inc. that supports 5.1-channel audio. This technology is used for audio on most DVD discs.

DTS-ES

DTS-ES creates total 6.1-channel audio from 5.1-channel sources that are recorded with DTS-ES. This decoder adds a surround back sound to the original 5.1-channel sound. In the DTS-ES Matrix 6.1 format, a surround back sound is recorded in the surround channels, and in the DTS-ES Discrete 6.1 format, a discrete surround back channel is recorded.

DTS Express

DTS Express is a compressed digital audio format that supports 5.1-channel audio and allows a higher compression rate than the DTS Digital Surround format developed by DTS, Inc. This technology is developed for audio streaming services on the Internet and secondary audio on BD (Blu-ray discs).

DTS-HD High Resolution Audio

DTS-HD High Resolution Audio is a compressed digital audio format developed by DTS, Inc. that supports 7.1-channel and 96 kHz/24-bit audio. DTS-HD High Resolution Audio remains fully compatible with the existing multichannel audio systems that support DTS Digital Surround. This technology is used for audio on BD (Blu-ray discs).

DTS-HD Master Audio

DTS-HD Master Audio is an advanced lossless audio format developed to offer a high-definition home theater experience with the quality of the studio master by DTS, Inc. DTS-HD Master Audio can carry up to eight channels of 96 kHz/24-bit audio (up to six channels of 192 kHz/24-bit audio) simultaneously. This technology is used for audio on BD (Blu-ray discs).

DTS Neo:6

DTS Neo:6 enables 6-channel playback from 2-channel sources. There are two modes available: "Music mode" for music sources and "Cinema mode" for movie sources. This technology provides discrete full-bandwidth matrix channels of surround sound.

DSD (Direct Stream Digital)

DSD (Direct Stream Digital) technology stores audio signals on digital storage media, such as SACD (Super Audio CDs). The signals are stored at a high-frequency sampling rate of 2.8224 MHz. The highest frequency response is equal to or higher than 100 kHz, with a dynamic range of 120 dB. This technology offers better audio quality than that used for CDs.

FLAC

FLAC is a file format for lossless audio data compression. FLAC is inferior to lossy compressed audio formats in compression rate but provides higher audio quality.

MP3

One of the compressed digital audio format used by MPEG. With psychoacoustic technologies, this compression method achieves a high compression rate. Reportedly, it is capable of compressing data quantity by about 1/10 maintaining a certain level of audio quality.

MPEG-4 AAC

An MPEG-4 audio standard. It is used for mobile telephones, portable audio players, and audio streaming services on Internet because it allows a high compression rate of data while maintaining better audio quality than MP3.

PCM (Pulse Code Modulation)

PCM is a signal format under which an analog audio signal is digitized, recorded, and transmitted. This technology is the basis of all other audio format. This technology is used as a lossless audio format called Linear PCM for audio on a variety of media, including CDs and BD (Blu-ray discs).

Sampling frequency/Quantization bit

Sampling frequency and quantization bits indicate the quantity of information when an analog audio signal is digitized. These values are noted as in the following example: "48 kHz/24-bit".

Sampling frequency

Sampling frequency (the number of times the signal is sampled per second) is called the sampling rate. When the sampling frequency is higher, the range of frequencies that can be played back are wider.

Quantization bit

The number of quantization bits indicate the degree of accuracy when converting the sound level into a numeric value. When the number of quantized bits is higher, the expression of the sound level is more accurate.

WAV

Windows standard audio file format, which defines the method of recording the digital data obtained by converting audio signals. By default, the PCM method (no compression) is used, but you can also use other compression methods.

WMA (Windows Media Audio)

One of the compressed digital audio formats developed by Microsoft Corporation. With psychoacoustic technologies, this compression method achieves a high compression rate. Reportedly, it is capable of compressing data quantity by about 1/20 maintaining a certain level of audio quality.

Others

Bi-amplification connection (Bi-amp)

A bi-amplification connection uses two amplifiers for a speaker. When you use the bi-amplification connection, the unit drives the tweeter and woofer in a speaker with the discrete amplifiers. As a consequence, the tweeter and woofer provide clear audio signal without the interference.

LFE (Low Frequency Effects) 0.1 channel

This channel reproduces low-frequency bass signals and has a frequency range from 20 Hz to 120 Hz. This channel is added to the channels for all bands with Dolby Digital or DTS to enhance low frequency audio effects. This channel is labeled 0.1 because it is limited to only low frequency audio.

Lip sync

Video output sometimes lags behind audio output due to the complexity of signal processing caused by an increase in video signal capacity. Lip sync is a technique for automatically correcting the timing lag between audio and video output.

HDMI and video information

Component video signal

With the component video signal system, the video signal is separated into the Y signal for luminance and the Pb and Pr signals for chrominance. Color can be reproduced more faithfully with this system because each of these signals is independent.

Composite video signal

With the composite video signal system, color, brightness, and synchronization data signals are combined and transmitted with a single cable.

Deep Color

Deep Color is a technology that HDMI specification supports. Deep Color increases the number of available colors within the boundaries defined by the RGB or YCbCr color space. Conventional color systems process the color using 8 bits. Deep Color processes the color with 10, 12, or 16 bits. This technology allows HDTVs and other displays to increase from millions of colors to billions of colors and eliminate on-screen color banding for smooth tonal transitions and subtle gradations between colors.

HDMI

HDMI (High-Definition Multimedia Interface) is the world-wide standard interface for digital audio/video signal transmission. This interface transmits both digital audio and digital video signals using a single cable without any loss. HDMI complies with HDCP (High-bandwidth Digital Content Protection) and provides a secure audio/video interface. For further information on HDMI, visit the HDMI website at "http://www.hdmi.org/".

x.v.Color

"x.v.Color" is a technology that the HDMI specification supports. It is a more extensive color space than sRGB and allows the expression of colors that were not hitherto possible. While remaining compatible with the color gamut of sRGB standards, "x.v.Color" expands the color space, and thus can produce more vivid, natural images.

Yamaha technologies

CINEMA DSP (Digital Sound Field Processor)

Since the Dolby Surround and DTS systems were originally designed for use in movie theaters, their effect is best experienced in a theater that has many speakers designed for acoustic effects. Since home conditions (such as room size, wall material, and number of speakers) can differ so widely, it is inevitable that there are differences in the sound that you hear. Based on a wealth of actually measured data, CINEMA DSP, Yamaha's original DSP technology provides the audiovisual experience of a movie theater in your own home.

CINEMA DSP 3D

The actually measured sound field data contain the information of the height of the sound images. CINEMA DSP 3D mode achieves the reproduction of the accurate height of the sound images so that it creates the accurate and intensive 3D sound fields in a listening room.

Compressed Music Enhancer

The Compressed Music Enhancer feature compensates for missing harmonics in compression music formats (such as MP3). As a result, this technology provides improved performance for the overall sound system.

SILENT CINEMA

Yamaha has developed a natural, realistic sound effect DSP algorithm for headphones. Parameters for headphones have been set for each sound program, so that accurate representations of all the sound programs can be enjoyed on headphones.

Virtual CINEMA DSP

Virtual CINEMA DSP allows the system to virtually reproduce the sound field of the surround speakers with front left and right speakers. Even if the surround speakers are not connected, the unit creates the realistic sound field in a listening room.

Video signal flow

Video signals input from a video device to the unit are output to a TV as shown below.



Information on HDMI

HDMI Control

HDMI Control allows you to operate external devices via HDMI. If you connect a TV that supports HDMI Control to the unit with an HDMI cable, you can control the unit (such as power and volume) with TV remote control operations. You can also control playback devices (such as HDMI Control-compatible BD/DVD players) connected to the unit with an HDMI cable.

For details on connections, see "Connecting a TV" (p.18) and "Connecting video devices (such as BD/DVD players)" (p.23).

Operations available from the TV's remote control

- Standby synchronization
- Volume control including mute
- Switching to input audio from the TV when the TV input is switched to its built-in tuner
- Switching to input video/audio from the selected playback device
- Switching between audio output devices (the unit or TV speaker)

(Example)



Operations available from the unit's remote control

- Starting playback on the playback device and turning on the TV with a scene selection (p.35)
- Switching the TV input to display the "Setup" menu (when SETUP is pressed)
- Controlling the playback device (playback and menu operations) without registering remote control codes (p.83)

(Example)



To use HDMI Control, you need to perform the following HDMI Control link setup after connecting the TV and playback devices.

• This setup is required every time you add a new HDMI Control-compatible device to your system.

- Turn on the unit, TV, and playback devices.
- 2 Enable HDMI Control on the unit, TV, and playback devices (such as HDMI Control-compatible BD/DVD players).

To enable HDMI Control on the unit, set "HDMI Control" (p.72) in the "Setup" menu to "On" and configure the related items ("TV Audio Input", "Standby Sync", "ARC", and "SCENE").

- 3 Turn off the main power of the TV and then turn off the unit and playback devices.
- **4** Turn on the unit and playback devices and then turn on the TV.
- 5 Switch the TV input to display the video from the unit.

6 Check the followings.

On the unit: The input to which the playback device is connected is selected. If not, select the input source manually.

On the TV: The video from the playback device is displayed.

Check that the unit is properly synchronized with the TV by turning off the TV or adjusting the TV volume with the TV remote control.

- []
- If HDMI Control does not work properly, try unplugging the TV in Step 2 and plugging in the TV again in Step 3. It may solve the problem. Also, HDMI Control may not work if the number of connected devices exceeds the limit. In this case, disable HDMI Control on the devices not in use.
- If the unit is not synchronized to the TV's power operations, check the priority of the audio output setting on the TV.
- We recommend using TV and playback devices from the same manufacturer so that HDMI Control works more effectively.

HDMI signal compatibility

Audio signals

Audio signal type	Audio signal format	Compatible media (example)
2ch Linear PCM	2ch, 32 to 192 kHz, 16/20/24 bit	CD, DVD-Video, DVD-Audio
Multichannel Linear PCM	8ch, 32 to 192 kHz, 16/20/24 bit	DVD-Audio, BD (Blu-ray disc), HD DVD
DSD	2/5.1ch, 2.8224 MHz, 1 bit	SACD
Bitstream Dolby Digital, DTS		DVD-Video
Bitstream (High definition audio) Dolby TrueHD, Dolby Digital Plus, DTS-HD Master Audio, DTS-HD High Resolution Audio, DTS Express		BD (Blu-ray disc), HD DVD

Video signals

The unit is compatible with the video signals of the following resolutions:

• VGA	• 720p/60 Hz, 50 Hz
• 480i/60 Hz	• 1080i/60 Hz, 50 Hz
• 576i/50 Hz	• 1080p/60 Hz, 50 Hz, 24 Hz
• 480p/60 Hz	• 3840 x 2160p/30 Hz, 25 Hz, 24 Hz (4K signals)
• 576p/50 Hz	• 4096 x 2160p/24 Hz (4K signals)

.

- When CPPM copy-protected DVD-Audio is played back, video/audio signals may not be output, depending on the type of the DVD player.
- The unit is not compatible with HDCP-incompatible HDMI or DVI devices. For details, refer to the instruction manual for each device.
- To decode audio bitstream signals on the unit, set the input source device appropriately so that the device outputs the bitstream audio signals directly (does not decode the bitstream signals on the playback device).
 For details, refer to the instruction manual for the playback device.

Reference diagram (rear panel)



(HTR-5065 U.S.A. model)

• The area around the video/audio output jacks is marked in white on the actual product to prevent improper connections.

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@dtsнĎ

(For HTR-4065)

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Fraunhofer Institut Integrierte Schaltungen

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.



This receiver supports network connections.



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x.v.Color™

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Specifications

Input jacks

- Analog Audio
 Audio x 4 (AV 5–6, AUDIO, V-AUX [Mini Jack])
- Digital Audio (Supported frequencies: 32 kHz to 96 kHz) Optical x 2 (AV 1, AV 4) Coaxial x 2 (AV 2–3)
- Video
 Composite x 5 (AV 3–6, V-AUX)
 Component x 2 (AV 1–2)
- HDMI Input HDMI x 4 (HDMI 1–4)
- Other
 USB x 1 (USB2.0)
 NETWORK x 1 (100Base-TX)

Output jacks

- Analog Audio
- [HTR-5065]
- Speaker Out x 7 (FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R*)
- * Note: assignment is possible. [SURROUND BACK, BI-AMP (FRONT L/R), ZONE B]
- Subwoofer Out x 1
- AV OUT x 1
- Headphone x 1
- [HTR-4065]
- Speaker Out x 5 (FRONT L/R, CENTER, SURROUND L/R)
- Subwoofer Out x 1
- AV OUT x 1
- Headphone x 1
- Video
- MONITOR OUT
- Component x 1
- Composite x 1
- AV OUT
- Composite x 1

HDMI Output
 HDMI OUT x 1

HDMI

- HDMI Specification: Deep Color, "x.v.Color," Auto Lip Sync, ARC (Audio Return Channel), 3D, 4K
- Video Format (Repeater Mode)
- VGA
- 480i/60 Hz
- 576i/50 Hz
- 480p/60 Hz
- 576p/50 Hz
- 720p/60 Hz, 50 Hz
- 1080i/60 Hz, 50 Hz
- 1080p/60 Hz, 50 Hz, 24 Hz
- 3840 x 2160p/30 Hz, 25 Hz, 24 Hz
- 4096 x 2160p/24 Hz
- Audio Format
- Dolby TrueHD
- Dolby Digital Plus
- Dolby Digital
- DTS-HD Master Audio
- DTS-HD High Resolution Audio
- DTS Express
- DTS
- DSD 6-ch
- PCM 2-ch to 8-ch (Max. 192 kHz/24-bit)
- Content Protection: HDCP compatible
- Link Function: CEC supported

TUNER

Analog Tuner
 [Europe model]
 FM/AM with Radio Data System x 1 (TUNER)
 [Other models]
 FM/AM x 1 (TUNER)

USB

- Capable of iPod, Mass Storage Class USB Memory
- Current Supply Capacity: 2.1 A

Network

- PC Client Function
- Compatible with DLNA ver. 1.5
- AirPlay supported
- Internet Radio

Compatible Decoding Formats

- Decoding Format
- Dolby TrueHD, Dolby Digital Plus
- Dolby Digital EX
- Dolby Digital
- DTS-HD Master Audio, DTS-HD High Resolution Audio, DTS Express
- DTS, DTS 96/24, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1
- DTS Digital Surround
- Post Decoding Format
- [HTR-5065]
- Dolby Pro Logic
- Dolby Pro Logic II Music, Dolby Pro Logic II Movie, Dolby Pro Logic II Game
- Dolby Pro Logic IIx Music, Dolby Pro Logic IIx Movie, Dolby Pro Logic IIx Game
- DTS Neo:6 Music, DTS Neo:6 Cinema [HTR-4065]
- Dolby Pro Logic
- Dolby Pro Logic II Music, Dolby Pro Logic II Movie, Dolby Pro Logic II Game
- DTS Neo:6 Music, DTS Neo:6 Cinema

Audio Section

 Rated Output Power (2-channel driven) 	
[U.S.A. model] (20 Hz to 20 kHz, 0.09% THD, 8	Ω)
[Other models] (20 Hz to 20 kHz, 0.09% THD,	6 Ω)
Front L/R	80 W+80 W
[U.S.A. model] (1 kHz, 0.9% THD, 8 Ω)	
Front L/B	95 W+95 W
Center	95 W
Surround L/B	95 W+95 W
Surround Back L/R [HTR-5065]	95 W+95 W
 Rated Output Power (1-channel driven) 	
[U.S.A. model] (1 kHz, 0.9% THD, 8 Ω)	
[Other models] (1 kHz, 0.9% THD, 6 Ω)	
Front L/R	115 W/ch
Center	115 W/ch
Surround L/R	115 W/ch
Surround Back L/B [HTB-5065]	115 W/ch
• Maximum Effective Output Dever (IEITA 1 H I	
• Maximum Effective Output Power (JETA, T KHz [China model]	, 10% THD, 6 Ω)
Front L/R	135 W/ch
Center	135 W/ch
Surround L/R	135 W/ch
Surround Back L/R [HTR-5065]	135 W/ch
Dynamic Power (IHF)	
[U.S.A. model]	
Front L/B (8/6/4 Ω)	110/130/160 W
[Other models]	,
Front L/B ($6/4 \Omega$)	110/130 W
Dynamic Headroom [U.S.A. model]	
8Ω	0.2 dB
Damping Factor	
Front L/R, 20 Hz to 20 kHz, 8 Ω	120 or more
 Input Sensitivity / Input Impedance 	
AV 5 etc. (1 kHz, 100 W/8 Ω)	200 mV/47 kΩ
Maximum Input Signal	·
AV 5 etc. (1 kHz, 0.5% THD, Effect On)	2.3 V

Output Level / Output Impedance
AV OUT200 mV/1.2 kΩ
SUBWOOFER 1 V/1.2 kΩ
Headphone Jack Rated Output / Impedance AV 5 etc. (1 kHz, 50 mV, 8 $\Omega)$
• Frequency Response AV 5 etc. to Front (10 Hz to 100 kHz)+0/-3 dB
 Signal to Noise Ratio (IHF-A Network) AV 5 etc. (Input Shorted 250 mV, Speaker Out)
 Residual Noise (IHF-A Network) Front L/R (Speaker Out)150 μV or less
• Channel Separation AV 5 etc. (Input 5.1 k Ω Shorted, 1 kHz/10 kHz)
60 dB/45 dB or more
Volume Control
Volume Control Range
Volume Control Range
Volume Control Range
Volume Control Range
 Volume Control Range
 Volume Control Range

Video Section

Video Signal Type [U.S.A. model]NTSC [Other models]PAL
 Video Signal Level Composite1 Vp-p/75 Ω Component
Y1 Vp-p/75 Ω Pb/Pr0.7 Vp-p/75 Ω
Video Maximum Input Level1.5 Vp-p or more
• Video Signal to Noise Ratio 50 dB or more
Monitor Out Frequency Response Component5 Hz to 60 MHz, -3 dB
FM Section
• Tuning Range [U.S.A. model]
 50 dB Quiet Sensitivity (IHF, 1 kHz, 100% MOD.) Mono3 μV (20.8 dBf)
Signal to Noise Ratio (IHF) Mono
Harmonic Distortion (IHF, 1 kHz) Mono0.3% Stereo0.5%
• Antenna Input
AM section
• Tuning Range

,	Tuning Range		
	[U.S.A. model]	530 to	1710 kHz
	[Other models]	531 kHz to	1611 kHz

General

Power Supply	
[U.S.A. model]	AC 120 V, 60 Hz
[China model]	AC 220 V, 50 Hz
[Europe model]	AC 230 V, 50 Hz

٠	Power	Consumption
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[U.S.A. model]	
Standby Power Consumption HDMI Control Off, Standby Through Off0.1 W or less HDMI Control On, Standby Through On (No Signals) 1.0 W (Twiscel)	
Network Standby On2.0 W (Typical)	
• Dimensions (W x H x D)	
• Weight	
[HTR-5065]	
[HTH-4065]8.1 kg (17.9 lbs)	

* Specifications are subject to change without notice.

Index

Symbols

★/★★ keys	10
Envelope icon (🛥)	85
Lock icon (1)	77

Numerics

2.1-channel system
(Speaker placement)14
2ch Stereo (Sound program)
3.1-channel system
(Speaker placement)14
4.1-channel system
(Speaker placement)13
4K signal (Video resolution)98
5.1-channel system
(Speaker connection)15
5.1-channel system
(Speaker placement)13
5ch Stereo (Sound program)
6.1-channel system
(Speaker placement)13
7.1-channel system
(Speaker connection)15
7.1-channel system
(Speaker placement)13
7ch Stereo (Sound program)

A

A.DRC (Option menu)	63
Action Game (Sound program)	37
Adaptive DRC (Option menu)	63
Adjustment (Setup menu, Lipsync)	74
ADVANCED SETUP	80
AirPlay	58
AM antenna	26

ARC	18
ARC (Setup menu, HDMI)	73
ARC-compatible TV (Connection)	18
Audio Decoder (Front display)	34
Audio device connection	25
Audio In (Option menu) 25,	65
AUDIO jack	17
Audio Output (Setup menu, HDMI)	72
Audio Return Channel	18
Auto Power Down (Setup menu, ECO)	75
Auto Preset (FM radio)	43
Automatic preset (FM radio)	43
AV OUT jack	28

В

B RATE (Signal information)	64
Banana plug	16
Bass (Option menu)	63
Battery	4
BI-AMP (Setup menu)	69
Bi-amp speaker connections	16
Bi-amplification connection	94
Bitrate (Signal information)	64

С

CAT-5 (Network cable)	27
Cellar Club (Sound program)	38
Center (Setup menu, Speaker)	69
Center Image	
(Setup menu, DSP Parameter)	74
Center Width	
(Setup menu, DSP Parameter)	74
Chamber (Sound program)	38
CHAN (Signal information)	64
Channel (Signal information)	64

Charge (iPod)	. 46
CINEMA DSP	. 37
CINEMA DSP 3D	. 39
CINEMA DSP 3D Mode	
(Setup menu, DSP Parameter)	. 73
COAXIAL jack	. 17
Combination of video/audio input jacks	. 24
Component video cable	. 17
Component video connection	
(Playback devices)	23
	. 17
Composite video connection	
(Playback devices)	24
Compressed Music Enhancer	41
Configuration (Scene function)	35
Configuration (Setup menu HDMI)	72
Configuration (Setup menu, Speaker)	60
Connection (Audio devices)	25
Connection (iPod)	. 20 46
Connection (NAS)	27
Connection (PC)	27
Connection (Recording device)	28
Connection (Speaker cables)	. 20 16
Connection (Subwoofer)	16
Connection (LISB storage device)	50
Connection (Video devices)	29
Controlling external devices	. 20 82
Crossover (Setup menu Speaker)	. 02 70
Crossover frequency setting	
(Subwoofer)	ЗL
Crossover frequency setting (the unit)	. 00 70

D

Default Gateway

7
7
7
8
7

(Setup menu, DSP Parameter)	74
Dimmer (Setup menu, Function)	77
DIRECT (Sound mode)	40
Direct playback	40
Distance (Setup menu, Speaker)	71
DLNA-compatible NAS	53
DMC (Digital Media Controller)	78
DMC Control (Setup menu, Network)	78
DNS Server (Setup menu, IP Address)	77
Dolby Digital EX (Extended Surround)	63
Dolby Pro Logic (Surround decoder)	40
Dolby Pro Logic II (Surround decoder)	40
Dolby Pro Logic IIx (Surround decoder) .	40
Drama (Sound program)	37
DSP Level (Option menu)	63
DSP Parameter (Setup menu, Sound)	73
DSP Program (Front display)	34
DSP/Surround (Option menu)	63
DTS Neo: 6 (Surround decoder)	40
DTS-ES (Extended Surround)	63
Dynamic Range (Setup menu, Volume)	75

Е

ECO (Setup menu)	75
ECO Mode (Setup menu, ECO)	76
Enhancer (Option menu)	64
ENHANCER (Sound mode)	41
EQ Select (Setup menu, Equalizer)	71
Equalizer (Setup menu, Speaker)	71

Error indications on the front display	92
Error message (YPAO)	32
EX/ES (Extended Surround)	63
EXTD (Option menu)	63
Extended Surround (Option menu)	63
External device operation keys	10
Extra Bass (Setup menu, Speaker)	70

F

Firmware update	85
Firmware version	81
FM antenna	26
FORMAT (Signal information)	64
Format (Signal Information)	64
Frequency (FM/AM radio)	42
Front (Setup menu, Speaker)	69
Front display (Part name and functions)	8
Front display information	34
Front panel (Part names and functions)	7
Function (Setup menu)	76

G

GEQ (Setup menu,	Equalizer)		71
------------------	------------	--	----

Η

Hall in Munich (Sound program)	38
Hall in Vienna (Sound program)	38
HDMI (Setup menu)	72
HDMI cable	17
HDMI connection (Playback devices)	23
HDMI Control	96
HDMI Control (Setup menu, HDMI)	72
HDMI Control-compatible TV	
(Connection)	20
HDMI jack	17
HDMI OUT (TV) (Setup menu, HDMI)	72
Headphones	7
High definition audio	98
-	

High speed HDMI cable	17
I	
Impedance (Speaker)	12
In.Trim (Option menu)	64
Indicators (Part name and functions)	8
INFO key	34
Information (Front display)	34
Information (Setup menu, Network)	79
INIT (ADVANCED SETUP)	81
Initial Volume (Setup menu, Volume)	75
Input (Front display)	34
Input (Signal information)	64
Input Rename (Setup menu, Volume)	76
Input selection keys	10
Input Trim (Option menu)	64
Interlock (Option menu)	65
Internet radio	56
IP Address (Setup menu, Network)	77
iPad	46
iPhone	46
iPod	46
iTunes	58

L

Language	29
Language (Setup menu)	29
Level (Setup menu, Speaker)	71
LFE	94
Lipsync (Option menu)	64
Lipsync (Setup menu, Sound)	74
Low Frequency Effects	94

Μ

 Manual speaker configuration

(Setup menu)6	39
Max Volume (Setup menu, Volume)	'5
Media Sharing5	53
MEMORY (FM/AM radio)	13
Memory (FM/AM radio)	13
Memory Guard (Setup menu, Function)7	77
MODE key	12
Monaural reception mode (FM radio)4	12
Mono Movie (Sound program)	37
MOVIE (Sound program category)	37
Multiple room playback	30
MUSIC (Sound program category)	38
Music Video (Sound program)	38
MUTE key	34
Muting	34

Ν

NAS	53
Neo: 6 Cinema (Surround decoder)	40
Neo: 6 Music (Surround decoder)	40
NET RADIO (Input)	56
Network (Setup menu)	77
Network cable	27
Network information	79
Network Name (Setup menu, Network)	78
Network Standby	
(Setup menu, Network)	78
Network Update	
(Setup menu, Network)	79
NTSC (Video signal type)	81

0

OPTICAL jack17
Optimizing the speaker settings
automatically
OPTION key

Option menu	62
Option menu item list	62
Output (Signal information)	64

Ρ

PAL (Video signal type)	81
Panorama	
(Setup menu, DSP Parameter)	73
PC	53
PEQ (Setup menu, Equalizer)	71
PHONES jack	. 7
Placement (Speakers)	12
Playback (iPod)	47
Playback (NAS)	53
Playback (PC)	53
Playback (Server)	53
Playback (USB storage device)	50
Playback device operations	
(Remote control)	83
PLII Game (Surround decoder)	40
PLII Movie (Surround decoder)	40
PLII Music (Surround decoder)	40
PLIIx Game (Surround decoder)	40
PLIIx Mo (Extended Surround)	63
PLIIx Movie (Extended Surround)	63
PLIIx Movie (Surround decoder)	40
PLIIx Mu (Extended Surround)	63
PLIIx Music (Extended Surround)	63
PLIIx Music (Surround decoder)	40
Power Amp Assign	
(Setup menu, Speaker)	69
Preparation (Zone B)	60
Preset (FM/AM radio)	43
Preset station select (FM/AM radio)	44
Preset stations (FM/AM radio)	43
· · · ·	

R

Radio Data System	45
Rear panel (Part name and functions)	9
Recording device connection	28
Remote control	10
(Part name and functions)	10
Remote control code for a TV	82
Remote Control Code Search	83
Remote control codes for playback	
devices	83
Remote control ID	80
Remote control sensor	4
Remote control signal transmitter	10
REMOTE ID (ADVANCED SETUP)	80
Restore of the default settings	81
Roleplaying Game (Sound program)	37
Router	27
S	
SAMPL (Signal information)	64
Sampling (Signal information)	64
	35
SCENE (Setup menu, HDMI)	73
SCENE function	35
Scene function	35
Scene function configuration	35
Sci-Fi (Sound program)	37
Server	53
SERVER (Input)	53
Setup menu	66
Setup menu item list	67
Sharing Setup	53
Signal Info (Option menu)	64
SILENT CINEMA	41
Simple play (iPod)	48
SLEEP key	10
Sleep timer	10

Sound (Setup menu)	73
sound field effect	37
Sound mode	36
Sound program	37
Sound program category	37
SP A indicator	61
SP B indicator	61
SP IMP. (ADVANCED SETUP)	14
Speaker connection	15
Speaker connection (Bi-amp)	16
Speaker connection (Zone B)	60
Speaker impedance	12
Speaker impedance setting	14
Speaker indicators	8
Speaker placement	12
Spectacle (Sound program)	37
Sports (Sound program)	37
Standard (Sound program)	37
Standby indicator	7
Standby Sync (Setup menu, HDMI)	73
Standby Through (Setup menu, HDMI) .	72
Stereo mini jack	17
Stereo mini-plug cable	17
Stereo pin cable	17
STP network cable	27
STRAIGHT (Sound mode)	39
Straight decode	39
Subnet Mask (Setup menu, IP Address)	77
Subwoofer (Setup menu, Speaker)	69
Subwoofer connection	16
Subwoofer Phase	
(Setup menu, Speaker)	70
Subwoofer Trim (Option menu)	64
SUR.DEC (Sound mode)	40
SUR.DECODE (Sound mode)	40
Surround (Setup menu, Speaker)	70

Surround Back (Setup menu, Speaker)	70
Surround decoder	40
SW.Trim (Option menu)	64
System ID (Setup menu, Network)	79

Т

Test Tone (Setup menu, Speaker)	71
The Bottom Line (Sound program)	38
The Roxy Theatre (Sound program)	38
Tone Control (Option menu)	63
TONE CONTROL key	63
TP (Traffic Program)	45
Traffic information	45
Traffic Program (Option menu)	45
Treble (Option menu)	63
Tuning (FM/AM radio)	42
TV Audio Input (Setup menu, HDMI)	72
TV connection	18
TV FORMAT (ADVANCED SETUP)	81
TV operation keys	10
TV operations (Remote control)	82
TV with HDMI input jacks (Connection)	21
TV without HDMI input jacks	
(Connection)	22

U

UPDATE (ADVANCED SETUP)	81
Update of the unit's firmware	85
Updating the firmware	81
USB (Input)	47, 50
USB jack	7
USB mass storage class	50
USB storage device	50

V

V IN (Signal information)	64
V OUT (Signal information)	64
VERSION (ADVANCED SETUP)	81

VIDEO AUX jacks	26
VIDEO jack	17
Video Out (Option menu)	65
Video pin cable	17
Video signal flow	96
Video signal type	81
Video/audio input jack combination	24
Virtual CINEMA DSP	39
Virtual Presence Speaker	6
Volume (Setup menu, Sound)	75
Volume Interlock (Option menu)	65
Volume Trim (Option menu)	64
VPS	6
vTuner ID (Network information)	79

W

Warning message (YPAO)	33
Windows Media Player	53

Y

YPAO	30
YPAO MIC jack	30
YPAO microphone	30

Ζ

ZB.Trim (Option menu) ZONE A key Zone B ZONE B key Zone B operation Zone B preparation Zone B speaker connections Zone B volume adjustment ZoneB (Setup menu) ZoneB Trim (Option menu)	61 60 61 60 60 60 61 69 61
ZoneB Trim (Option menu)	61



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This code grew slowly over time without much design or planning, with features being tacked on as required.

It's not representative of my normal coding style.

About FLAC codec Library

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Anam

Anglo

AOC

Apex

ASA

Astra

Asuka

Atori

Awa

Baur

Axion Baird

Arcam

TV

A.R. Systems	0320
Acme	0342
Acura	0323, 0343
ADC	0337
Admiral	0054, 0178, 0336, 0337,
	0339, 0346, 0347
Advent	0158
Adventura	0057
Adyson	0277, 0282, 0342
Agashi	0277, 0282
Agazi	0337
Aiko	0277, 0282, 0320, 0323,
	0342, 0343
Aim	0320
Aiwa	0078, 0379
Akai	0050, 0055, 0109, 0159,
	0181, 0277, 0282, 0320,
	0323, 0340, 0343, 0349,
	0350
Akiba	0320, 0340
Akura	0320, 0323, 0337, 0340
Alaron	0277
Alba	0161, 0277, 0320, 0323,
	0340, 0342, 0343, 0344,
	0349, 0351, 0372, 0382
Albatron	0140
Alcyon	0171
Alleron	0059
Allorgan	0282
Allstar	0320, 0350
America Action	0179
AMOi	0276
Amplivision	0161, 0282, 0321, 0342
Amstrad	0320, 0323, 0337, 0340,
	0343
Amtron	0058

0179.0343 Anam National 0052, 0058 0323, 0343 Anitech 0171, 0320, 0323, 0337, 0343 0161, 0168, 0320, 0323, Ansonic 0341.0343 0008, 0026, 0050, 0053 0039, 0111, 0217 0277.0282 Arcam Delta 0342 Aristona 0320, 0349, 0350 Arthur Martin 0321 0339.0347 Asberg 0171, 0320, 0350 0343 0277.0282.0337.0340. 0342 0277, 0320, 0342, 0349, Atlantic 0350 0323.0343 Auchan 0321 Audiosonic 0161, 0282, 0320, 0340, 0342, 0343, 0349, 0350 AudioTon 0161, 0282, 0342 0058, 0179, 0194 Audiovox Ausind 0171 0171, 0282, 0337, 0339, Autovox 0342 0051 Aventura 0277.0282 0156 0282 Bang & Olufsen 0180, 0339 Basic Line 0282, 0320, 0323, 0340, 0343,0350 0282.0342 Bastide 0320.0349

Lijst met afstandsbedieningscodes Liste over fjernbetjeningskoder Liste over fjernkontrollkoder Список кодов дистанционного управления 遥控器代码列表 리모콘코드목록

Citv

Bazin 0282 Beko 0161, 0269, 0294, 0302, 0311, 0320, 0328, 0351 Belcor 0008 Bell & Howell 0019,0054 Beng 0097, 0242, 0361 Beon 0320, 0349, 0350 0161 Bestar 0161, 0320, 0350 0282,0342 Binatone Blue Sky 0320, 0340 Blue Star 0348 Boots 0282,0342 0320.0348 Bradford 0058,0179 Brandt 0322,0345 Brillian 0182 Brinkmann 0320 0320, 0339, 0349, 0350 Brionvega Britannia 0277, 0282, 0342 Brockwood 0008 Broksonic 0109,0179 Bruns 0339 0340 Bush 0269, 0282, 0283, 0304, 0320, 0323, 0328, 0332, 0340, 0343, 0344, 0346, 0348, 0349, 0350, 0372, 0382, 0463, 0470, 0472 byd:sign 0093 Candle 0008, 0026, 0050, 0057 Capsonic 0337 Carena 0320 Carnivale 0050 Carrefour 0344 Carver 0010 Cascade 0320, 0323, 0343 Casio 0367

Best

BPL

BTC

Cathav 0320, 0349, 0350 CCE 0183,0282 Celebrity 0055,0107 Celera 0039 Centurion 0320, 0349, 0350 Century 0339 CGE 0161.0171 0039 Changhong Chimei 0273 0323, 0343 Cimline Citizen 0007, 0008, 0026, 0050, 0058 0323.0343 Clarion 0179 Clarivox 0349 Clatronic 0161, 0171, 0282, 0320, 0323, 0337, 0340, 0342, 0343, 0350, 0351 CMS 0277 CMS Hightec 0282 0197 Coby Colortyme 0008,0026 Commercial Solutions 0021 Concerto 0008,0026 Concorde 0323.0343 Condor 0161, 0277, 0320, 0323, 0342, 0350, 0351 Contec 0179, 0277, 0323, 0342, 0343,0344 Contec/Conv 0012.0058 Continental Edison 0345 Cosmel 0323.0343 Craig 0058.0179 Crosley 0010, 0037, 0171, 0339

Crown	0058, 0161, 0171, 0179,	Elcit	0339	Frontech	0282, 0323, 0337, 0343,	Grunpy	0058, 0059, 0179
	0320, 0323, 0343, 0349,	Electa	0348		0346, 0347	Haier	0157, 0233
	0350, 0351	ELECTRO TECH	0343	Fujitsu	0059, 0069, 0074, 0075,	Halifax	0277, 0282, 0337, 0342
CS Electronics	0277, 0340, 0342	Electroband	0055, 0107	•	0282	Hallmark	0008, 0026, 0031
CTC Clatronic	0341	Electrograph	0176	Fujitsu General	0282	Hampton	0277, 0282, 0342
CTX	0205	Electrohome	0008, 0026, 0052, 0055	Fujitsu Siemens	0504, 0505, 0507, 0510,	Hanseatic	0161, 0168, 0282, 0320,
Curtis Mathes	0007, 0008, 0010, 0019,	Element	0230	0	0511		0323, 0342, 0343, 0344,
	0021, 0026, 0049, 0050,	Elin	0277, 0320, 0323, 0342,	Funai	0051, 0058, 0059, 0112,		0349, 0350
	0178		0349, 0350		0113, 0115, 0118, 0119,	Hantarex	0320, 0323, 0343
CXC	0058, 0179	Elite	0320, 0340, 0350		0179, 0337, 0488, 0489	Hantor	0320
Cybertron	0340	Elman	0341	Futuretech	0058, 0179	Harman/Kardon	0010
Cvtron	0152	Elta	0277, 0323, 0343	Galaxi	0320, 0351	Harvard	0058,0179
Daewoo	0007, 0008, 0026, 0037,	Emerson	0000, 0007, 0008, 0012,	Galaxis	0161.0320	Harwood	0320, 0323
	0053, 0167, 0266, 0275,		0013, 0019, 0026, 0031,	Gateway	0176, 0177, 0241	Havermy	0178
	0277 0282 0315 0320		0037 0051 0058 0059	GBC	0323 0343 0344	HCM	0282 0320 0323 0337
	0323 0331 0335 0342		0161 0179 0320 0339	GE	0008 0021 0023 0026		0342 0343 0348
	0343 0350 0381 0465	Emprex	0154	0L	0027 0031 0034 0049	Hema	0282 0323
Dainichi	0277 0340	Envision	0008 0026 0050		0052 0056 0209	Hewlett Packard	0192
Dansai	0277 0282 0320 0337	Envision	0155 0206 0359	Geant Casino	0321	Higashi	0277
Dulisui	0349 0350	Erres	0320 0349 0350	GEC	0282 0320 0342 0347	Hil ine	0320
Dantax	0161 0349	ESA	0051	OLC	0349 0350	Hinari	0320 0323 0340 0343
Dawa	0320	ESC	0282	Geloso	0323 0343 0346	1 IIIIdi I	0344 0349 0350
Dawa	0007 0008 0026 0323	Esc	0343	General Technic	0323, 0343	Hicawa	0321 0340 0348
Dayuon	0343	Eurofeel	0282	General Technic	0320, 0340, 0347, 0350	Licanca	0247
Do Croof	0346	Euro Eaal	0282	CEM	0128 0227	Litaabi	0008 0012 0026 0066
De Graar	0340 0382 0320 0342 0340	Euroline	0340	Giont	0282	Intacin	0084 0002 0003 0120
Decca	0282, 0520, 0542, 0549,	Euroman	0161 0277 0282	Giant	0282		0172 0173 0255 0270
D-11	0330	Euroman	0101, 0277, 0282	Gibialter	0008, 0050, 0050, 0002		0172, 0173, 0235, 0270,
Dem	0145, 0245	Euromann	0520, 0557, 0542, 0550	GoldHand	0220		0271, 0282, 0320, 0333,
Denver	0338, 0302	Europhon	02/7, 0282, 0320, 0341,	Goldline	0320		0338, 0342, 0344, 0346,
Desmet	0320, 0349, 0350	E	0342, 0350	GoldStar	0007, 0008, 0012, 0026,		0347, 0365, 0382, 0448,
Diamant	0320	Expert	0321		0031,0050,0053,0161,		0456, 0467, 0482, 0484,
Diamond	0277	Exquisit	0320		0277, 0282, 0320, 0323, 0242		0487
Diamond Vision	0135, 0143	Fenner	0323, 0343		0342, 0343, 0346, 0349,	Hornyphon	0320, 0350
Dimensia	0049	Ferguson	0322, 0345, 0349	<i>a</i> .	0350	Hoshai	0340
Disney	0219	Fidelity	0277, 0320, 0342, 0346	Goodmans	0246, 0272, 0282, 0320,	Huanyu	0277, 0342
Dixi	0282, 0320, 0323, 0343,	Filsai	0282		0323, 0337, 0343, 0344,	Hygashi	0277, 0282, 0342
	0349, 0350	Finlandia	0346		0349, 0350, 0462, 0473,	Hyper	0277, 0282, 0323, 0342,
Dream Vision	0461, 0498	Finlux	0171, 0282, 0320, 0339,		0477		0343
DTS	0323, 0343		0341, 0342, 0349, 0350	Gorenje	0161, 0351	Hypson	0282, 0320, 0321, 0337,
Dual	0282, 0320, 0342	FIRST LINE	0342, 0343, 0350	GPM	0340		0342, 0348, 0349, 0350
Dual-Tec	0342, 0343	Firstline	0277, 0282, 0320, 0323	GPX	0129	Hyundai	0141
Dumont	0008, 0030, 0062, 0282,	Fisher	0019, 0161, 0282, 0339,	Gradiente	0240	Iberia	0320
	0339, 0341, 0342		0342, 0344, 0351	Graetz	0347	ICE	0277, 0282, 0320, 0323,
Durabrand	0031, 0051, 0179, 0215	Flint	0320, 0350	Granada	0171, 0282, 0320, 0321,		0337, 0340, 0342, 0343,
Dux	0349	Formenti	0171, 0277, 0336, 0339,		0342, 0344, 0346, 0349,		0350
Dwin	0178		0342, 0349		0350	ICeS	0277
Dynatron	0320, 0349, 0350	Formenti/Phoenix	0277	Grandin	0340, 0343, 0348, 0349	Ilo	0148, 0153
Dynex	0228, 0231	Fortress	0336, 0339	Gronic	0282	IMA	0058
EIZO	0509	Fraba	0161, 0320	Grundig	0160, 0161, 0171, 0310,	Imperial	0161, 0171, 0320, 0347,
Elbe	0161, 0168, 0282, 0320	Friac	0161		0320		0350, 0351

0320, 0349, 0350
0010
0250, 0327, 0363, 0479,
0508
0347
0323, 0343
0153
0171, 0282, 0320, 0323,
0340 0342 0343 0349
0350
0337 0343
0131 0228 0236 0238
0030
0161
0323 0343
0161 0220 0220 0247
0101, 0320, 0359, 0347,
0349, 0330
0277
0161, 0282, 0320, 0337,
0341, 0342
01/1, 0320, 0323, 0340,
0343, 0349, 0350
0320, 0340
0282, 0342
0277, 0320, 0340, 0348,
0350
0343, 0347
0320, 0343, 0349
0057
0010
0007, 0008, 0026, 0027,
0049, 0053, 0056
0055, 0107
0008, 0026
0012, 0014, 0015, 0056,
0064, 0065, 0067, 0169,
0174, 0297, 0314, 0344,
0350, 0375
0277, 0282, 0320, 0323,
0340, 0342, 0343, 0348
0342
0277, 0342
0347
0161, 0320, 0342, 0343,
0349
0008, 0026, 0055, 0277
0179
0161, 0320, 0341, 0346
0008, 0026, 0050
0282

Vin aulas.	0277 0242
Kingsley	0277, 0342
KLH	0039
Kloss Novabeam	0057, 0058
Kneissel	0161, 0168, 0320
Kolster	0320, 0350
Konka	0340
Kornel	0320 0349 0350
Korting	0161 0339
Korung	0320
KOSIIIOS	0320
Koyoda	0343
KTV	0007, 0050, 0058, 0179,
	0183, 0282, 0342
Kyoto	0277, 0282
Lasat	0161
Lenco	0323, 0343
Lenoir	0323 0342 0343
Levco	0320 0337 0349 0350
LC	0021 0052 0066 0116
LG	0051, 0055, 0000, 0110,
	0117, 0140, 0161, 0164,
	0175, 0195, 0269, 0277,
	0282, 0300, 0309, 0317,
	0320, 0323, 0328, 0342,
	0343, 0346, 0349, 0350,
	0366, 0368, 0377, 0466,
	0471 0478
I G/GoldStar	0164
Liocont	0240
Lieselik	0349
Liesenkotter	0320
Life	0337, 0343
Lifetec	0320, 0323, 0337, 0343
Lloyds	0323
Loewe	0161, 0168, 0265, 0320,
	0330, 0352
Loewe Opta	0339 0349 0350
Logik	0054
Luma	0320 0323 0346 0349
Lumatron	0320, 0323, 0340, 0349
Lumation	0282, 0320, 0340, 0349,
	0350
Lux May	0350
Luxman	0008, 0026
Luxor	0282, 0342, 0346
LXI	0010, 0019, 0021, 0026,
	0027, 0031, 0049, 0111
M Electronic	0342, 0343, 0345, 0347,
	0349 0350
MAG	0096
Magnaduna	0330 0341 0340
Magnauyne	0171 0277 0241 0242
wagnaton	01/1, 02/7, 0341, 0342

Magnavox	0008, 0009, 0010, 0013,
c	0026, 0032, 0033, 0048,
	0050, 0128, 0211, 0212,
	0224, 0226, 0239
Magnum	0337, 0343
Majestic	0054
Mandor	0337
Manesth	0282, 0320, 0337, 0342,
	0349, 0350
Marantz	0008, 0010, 0026, 0050,
	0204, 0320, 0349, 0350
Marelli	0339
Mark	0277, 0282, 0320, 0323,
	0349, 0350
Masuda	0282
Matsui	0282, 0320, 0323, 0342,
	0343, 0344, 0346, 0349,
	0350, 0455
Matsushita	0017
Maxent	0147,0176
Mediator	0320, 0349, 0350
Medion	0320, 0337, 0343
Megapower	0140
Megatron	0026,0031
MElectronic	0277, 0282, 0320, 0323
Melvox	0321
Memorex	0019, 0026, 0031, 0053,
	0054, 0137, 0215, 0323,
	0343
Memphis	0323, 0343
Mercury	0320, 0323
Metz	0339
MGA	0008, 0026, 0031, 0050,
	0053
Micromaxx	0337, 0343
Microstar	0337, 0343
Midland	0007, 0021, 0023, 0027,
	0030, 0056, 0062
Minerva	0171
Minoka	0320, 0350
Mintek	0153
Mitsubishi	0008, 0026, 0031, 0053,
	0066, 0084, 0093, 0098,
	0150, 0178, 0289, 0320,
	0339, 0344, 0350, 0376
Mivar	0161, 0168, 0171, 0277,
	0282, 0342
Monivision	0140
Montgomery Wa	rd
2 9	0054

Motion 0171 0052,0178 Motorola MTC 0008, 0026, 0050, 0053, 0161, 0277 Multi System 0349 Multitech 0058, 0161, 0179, 0183, 0277, 0282, 0320, 0323, 0341, 0342, 0343, 0344, 0346,0349 Murphy 0277,0342 NAÔ 0026, 0031, 0111 0346 Naonis NEC 0008, 0026, 0050, 0052, 0053, 0072, 0103, 0282, 0344 Neckermann 0161, 0282, 0320, 0339, 0342, 0346, 0349, 0350, 0351 NEI 0320, 0349, 0350 Net-TV 0176 Neufunk 0320, 0323 0343,0350 New Tech New World 0340 NewTech 0282, 0320, 0323 Nicamagic 0277.0342 Nikkai 0277, 0282, 0320, 0323, 0337, 0340, 0342, 0349, 0350 Nikko 0026,0031,0050 Nobliko 0171, 0277, 0341, 0342 Nokia 0347 0201 Norcent Nordic 0282 0339, 0345, 0347, 0350 Nordmende Nordvision 0349 Novatronic 0320 Oceanic 0321, 0347 Okano 0161, 0320, 0351 Olevia 0102, 0199, 0200, 0207, 0222 ONCEAS 0342 Onwa 0058,0179 0320 Opera Oppo 0130 0017,0019 Optimus 0144 Optoma 0178 Optonica Orbit 0320, 0350

Orion	0043, 0146, 0283, 0320,	Phonola	0277, 0320, 0339, 0349,	RCA	0008, 0021, 0024, 0025,	Schneider	0282, 0316, 0318, 0320,
	0323, 0328, 0343, 0349,	D'1	0350		0026, 0027, 0042, 0049,		0333, 0340, 0342, 0349,
~ "	0350	Pilot	0007, 0008, 0050		0052, 0053, 0063, 0136,	~ .	0350, 0382
Orline	0320	Pioneer	0008, 0026, 0094, 0095,		0225	Scotch	0026,0031
Osakı	0282, 0320, 0337, 0340,		0161, 0320, 0345, 0347,	Realistic	0019, 0031, 0050, 0179	Scott	0008, 0012, 0026, 0031,
	0342		0349, 0350, 0458, 0480	Recor	0320	~	0058, 0059, 0149, 0179
Oso	0340	Plantron	0320, 0323, 0337, 0350	Redstar	0320	Sears	0008, 0010, 0019, 0021,
Otto Versand	0282, 0320, 0336, 0342,	Playsonic	0282	Reflex	0320		0026, 0027, 0031, 0049,
	0344, 0348, 0349, 0350	Polaroid	0039, 0142, 0202, 0234	Revox	0161, 0320, 0349, 0350		0051, 0059, 0111
Pael	0277, 0342	Рорру	0323, 0343	Rex	0337, 0346, 0347	SEG	0277, 0282, 0320, 0323,
Palladium	0161, 0282, 0320, 0342,	Portland	0007, 0008, 0026, 0053	RFT	0161, 0168, 0339		0337, 0341, 0342, 0344,
	0351	Prandoni-Prince	0171, 0346	Rhapsody	0277		0349, 0382
Palsonic	0282	Precision	0282, 0342	R-Line	0320, 0349, 0350	SEI	0320
Panama	0277, 0282, 0320, 0323,	Prima	0157, 0243, 0323, 0343,	Roadstar	0323, 0337, 0340, 0343	SEI-Sinudyne	0339, 0341, 0347
	0337, 0342, 0343		0347	Robotron	0339	Seleco	0344, 0346, 0347
Panasonic	0016, 0017, 0020, 0022,	Princeton	0140	Rowa	0277, 0282	Sencora	0323, 0343
	0023, 0035, 0052, 0056,	Prism	0023, 0056	Royal Lux	0161	Sentra	0323
	0084, 0085, 0133, 0163,	Profex	0323, 0343	RTF	0339	Serino	0277
	0193, 0284, 0286, 0290,	Profi-Tronic	0320, 0350	Runco	0030, 0050, 0062	Sharp	0000, 0001, 0002, 0003,
	0292, 0320, 0325, 0347,	Proline	0320, 0350	Saba	0298, 0322, 0339, 0345,		0007, 0008, 0012, 0026,
	0356, 0483, 0485, 0490	Proscan	0021, 0027, 0049		0347		0060, 0088, 0089, 0091,
Panavision	0320	Prosonic	0161, 0277, 0282, 0320,	Saisho	0282, 0323, 0337, 0342,		0138, 0165, 0170, 0178,
Pathe Cinema	0161, 0168, 0277, 0321,		0342, 0349		0343		0198, 0229, 0262, 0278,
	0342	Protech	0282, 0337, 0341, 0342,	Salora	0346, 0347		0279, 0291, 0308, 0312,
Pausa	0323, 0343		0343, 0349, 0350	Sambers	0171,0341		0336, 0344, 0354, 0370,
Penney	0021, 0023, 0031, 0050,	Proton	0008, 0012, 0026, 0031	Sampo	0007, 0008, 0026, 0050,		0449, 0450, 0451, 0464,
-	0111	Protron	0196	[^]	0176		0474, 0476, 0481
Perdio	0277, 0320	PROVIEW	0096, 0246	Samsung	0004,0005,0006,0007,	Sheng Chia	0178
Perfekt	0320	Provision	0320, 0349	C	0008, 0012, 0026, 0031,	Shogun	0008
Philco	0008, 0009, 0010, 0012,	Pulsar	0008, 0030, 0062		0036, 0050, 0053, 0076,	Siarem	0320, 0339, 0341
	0026, 0050, 0052, 0053,	Pye	0256, 0320, 0349, 0350,		0077, 0079, 0114, 0124,	Sierra	0320, 0350
	0161, 0171, 0320, 0339	2	0378		0125, 0126, 0127, 0139,	Siesta	0161
Philharmonic	0282, 0342	Pymi	0323, 0343		0161, 0183, 0185, 0190,	Signature	0054
Philips	0008, 0009, 0010, 0011,	Ouandra Vision	0321		0191, 0258, 0264, 0277,	Silva	0277
I.	0012, 0032, 0048, 0049,	Quasar	0017, 0023, 0052, 0056		0282, 0320, 0323, 0334,	Silver	0344
	0052, 0122, 0128, 0134,	Ouelle	0282, 0320, 0337, 0342,		0337, 0342, 0343, 0349,	Singer	0321, 0339, 0341
	0186, 0187, 0213, 0221,		0349, 0350		0350, 0351, 0373, 0453,	Sinudyne	0320, 0339, 0341, 0349
	0224, 0226, 0239, 0256,	Ouesta	0344		0468	Skantic	0347
	0257, 0259, 0261, 0263,	Radialva	0320	Sandra	0277, 0282, 0342	Solavox	0347
	0267 0280 0281 0287	RadioShack	0019 0021 0031 0050	Sansui	0043 0109 0320 0350	Sonitron	0161 0282
	0296 0299 0301 0303	radiobilitien	0179 0320	Sanyo	0008 0019 0068 0070	Sonoko	0282 0320 0323 0337
	0305 0313 0319 0320	RadioShack/Rea	alistic	Bullyo	0071 0099 0161 0168	bonono	0342 0343 0349 0350
	0324 0333 0339 0342		0007 0008 0012 0026		0223 0237 0277 0282	Sonolor	0321 0347
	0349, 0350, 0353, 0357,		0049, 0058		0288, 0295, 0323, 0342,	Sontec	0161, 0320, 0349, 0350
	0360 0380 0383 0452	Radiola	0282 0320 0349 0350		0344 0369 0469		, 0020, 00 19, 0000
	0459 0460	Radiomarelli	0320, 0339	SBR	0320 0349		
Philins Magnavoy	x 0011 0032 0033	Radiotone	0161 0320 0323 0350	Scentre	0235 0244		
Phoenix	0161 0277 0320 0339	Rank	0344	Schaub Lorenz	0347		
1 100111	0349, 0350	- cann		Solidio Loioliz	00.17		

dots, 1000, 1014, 1016, 1007, 1011, 0121, 0134, 2022, 1024, 1024, 0134, 2022, 1024, 1034, 0134, 2022, 1024, 1034, 0134, 2022, 1024, 0134, 0134, 2022, 0140, 0154, 2022, 0140, 0154, 2024, 2	Sony	0038, 0044, 0045, 0047,	Teac	0282, 0320	Uher	0161, 0171, 0320, 0347,	Yamishi	0282, 0320
0107, 0110, 0122, 0184, 0122, 024, 0233, 0243, 0243, 0246, 027, 0046, 007, 0046, 007, 0046, 007, 0046, 007, 0026, 0015, 0016, 027, 022, 0243, 0235, 0236, 0237, 0336, 033		0055, 0090, 0104, 0105,	Tec	0282, 0323, 0342, 0343	***	0350	Yokan	0320
0220 0240 0240 0242 0242 0242 0242 0242 0242 0242 0242 0242 0243 <td< td=""><td></td><td>0107, 0110, 0123, 0184,</td><td>Technics</td><td>0017, 0023, 0056</td><td>Ultravox</td><td>0277, 0320, 0339, 0341,</td><td>Yoko</td><td>0161, 0277, 0282, 0320,</td></td<>		0107, 0110, 0123, 0184,	Technics	0017, 0023, 0056	Ultravox	0277, 0320, 0339, 0341,	Yoko	0161, 0277, 0282, 0320,
022, 022, 023, 025, 025, 025, 025, 0025, 0025, 0025, 0025, 0025, 0025, 0025, 0025, 0025, 0023, 0140 0141, 017, 023, 023, 0140, 023, 0230, 023, 0230, 023, 0230		0220, 0248, 0249, 0251,	TechniSat	0274, 0496, 0497, 0499		0342		0323, 0337, 0340, 0342,
		0252, 0254, 0326, 0343,	Techwood	0008, 0023, 0026, 0056	Unic Line	0320		0343, 0349, 0350
odf 3, 0486 Teknik 0007, 0008, 0010, 0012, 0050, 0179 Universe 0161, 0171, 0222, 0230, 0230 Zamussi 0252, 0234 Moose, 0031, 0052, 0023, 0031, 0054, 0061, 0062 Sounde Vision Soundowne 0025, 0179 Teleavia 0035, 0179 Univox 0320, 0330, 0340, 0340, 0347, 0350, 0351 Zamussi 0252, 0230, 0324, 0062, 0031, 0054, 0061, 0062 Soundowne 0320, 0323, 0330, 0350 Teleavia 0320, 0322, 0323, 0330, 0340, 0330, 0330, 0340, 0330, 0330, 0343, 0330, 0330, 0330, 0340, 0330, 0343, 0330, 0343, 0330, 0340, 0330, 0343, 0330, 0340, 0330, 0343, 0330, 0340, 0330, 0343, 0330, 0340, 0330, 0343, 0330, 0340, 0330, 0343, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0343, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0340, 0330, 0		0344, 0371, 0374, 0457,	TEDELEX	0282	United	0349	Yorx	0340
Sound & Vision 0340, 0341 0026, 0033, 0053, 0054, 0058, 0055, 0179 0037, 0349, 0350, 0351, 0450, 0179 Zenith 0008, 0026, 0030, 0055, 0079, 0330, 0340, 0350, 0341, 0320, 0320, 0340, 0350 0008, 0026, 0029, 0030, 0031, 0054, 0040, 0347 Sundard in Spannerize 0051, 0179 Televin 0332, 0320, 0346, 0337, 0330, 0321, 0346, 0337, 0331, 0349, 0350 Visite 0332, 0320, 0346, 0337, 0349, 0350, 0344, 0350 Visite 0342, 0320, 0344, 0350 ABS 1016 Standard 0322, 0320, 0323, 0332, 03		0475, 0486	Teknika	0007, 0008, 0010, 0012,	Universum	0161, 0171, 0282, 0320,	Zanussi	0282, 0346
Soundacying 0008, 0026, 0031, 0058, 0179 Univox 0320 0031, 0054, 0661, 0062 Soundwave 0020, 0149, 0550 Teleavin 0345 Vector Research 0039, 0350, 0351 Vector Research 0390 Vestel 0390, 0320, 0324, 0340, 0347, Vestel 0390, 0320, 0324, 0340, 0347, Vestel 0390, 0320, 0322, 0343, 0349 Vestel 0390, 0320, 0323, 0343, 0349 Vestel 0390, 0320, 0322, 0343, 0349 ABS 1069 Standard 0320, 0322, 0340, 0322, 0343, 0349 VideoSystem 030, 030, 030, 030, 030, 030, 030, 030,	Sound & Vision	0340, 0341		0026, 0053, 0054, 0058,		0337, 0349, 0350, 0351	Zenith	0008, 0028, 0029, 0030,
Od59, 0179 Telecvia 0321, 0349, 0350 Telecor Overall Outsol	Soundesign	0008, 0026, 0031, 0058,		0059, 0179	Univox	0320		0031, 0054, 0061, 0062
Soundwave 0320, 0349, 0350 Telecor 0232, 0320, 0323, 0340, 0320, 0322, 0345, 0350 Vestel 0330, 0323, 0343, 0349, 0350, 0351, 0344, 0350 VCR Standard 0282, 0320, 0323, 0442, 0343, 0350 Telesonic 0320 Victor 0015, 0344, 0350 ABS 10.6 Standard 0358, 0179, 0320, 0323, 0449 Telestonic 0320 Vilcolocicic 0277, 0222, 0340, 0342 Alyson 1006 Startite 0320, 0323, 0343, 0349 Teletoch 0320, 0323, 0343, 0349 Vilcolocicic 0277, 0222, 0340, 0342 Akia 1024, 1026, 1027, 1069 Sterme 0346, 0347 Teletoch 0320, 0323, 0343, 0349 Vilcolocichic 0277, 0322, 0340, 0342 Akia 1004, 1024, 1026, 1027, 1069 Strato 0320, 0323, 0340, 0323 Televiso 0321, 0323, 0320, 0323, 0340, Victoch 0016, 0027, 0322 Akia 1008, 1009, 1024, 1025, 1027, 1069 Sumkari 0320, 0323, 0343, 0350 Tervion 037, 0342 Visiola 0277, 0342 Ahismasador 1030 Superscan 0350, 0349, 0350 Visiola 0277, 0342 Anitercian tright 1068		0059, 0179	Teleavia	0345	Vector Research	0050		
Spacewiew 0051 Teleguii 0320 0340 0350	Soundwave	0320, 0349, 0350	Telecor	0282, 0320	Vestel	0282, 0320, 0346, 0347,		
SSS 0008, 0038, 0179 Telegazi 0320 Vaca 0322, 0323, 0343, 0349 Victor 0322, 0323, 0330, 0300 Telessine 0320 Victor 0015, 0344, 0350 ABS 1016 0340, 0350, 0350 Telessine 0320 Vibctor 0310, 0321, 0340, 0342 Adventura 1009 0348 Telestar 0320, 0323, 0343, 0349 Videologique 0320, 0320, 0432, 0440, 0342 Aiwa 1024, 1027, 1028 Sterne 0346, 0347 Televideon 0277 Vidicos (008, 0076, 0031, 0053) Akina 1008, 1027, 1029 Strato 0320, 0323, 0343, 0350 Televideon 0341 0350 Vidiceh 0008, 0026, 0031, 0053 Akina 1008, 1027, 1029 Strato 0320, 0323, 0343, 0350 Televideon 0330, 0323, 0343, 0350 Viking 0057 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030 1029, 1030	Squareview	0051	Telefunken	0320, 0322, 0345, 0350		0349, 0350, 0351	VCB	
Standard (342, 034, 0350, 0342, 0323, 0350) Telesnic (320, 0342, 034, 0350) Telesnic (320, 0320, 0323, 0323, 0323, 0323, 0323, 0343, 0349) Victor (ViDECLOCIC) (277, 0282, 0340, 0342) Advenut (320, 0350) Mass (321, 025, 0361) Sterne 0346, 0347 Teleton 0322, 0342, 0343, 0349 VideoSystem (320, 0350) Aiva 1021, 1027 Sterne 0346, 0347 Teleton 0282, 0342, 0340, 0342 VideoSystem (320, 0323, 0343) Aiva 1008, 1027, 1029 Stylandia 0346, 0347 Televiso 0321, 0320, 0323, 0343, 0350 VideoSystem (320, 0323, 0343, 0350) Akira 1008, 1027, 1029 Sumkar 0320, 0323, 043, 0350 Tesin 0320, 0323, 0343 Viore 0148 Alieavare 1016 Sumeod 0320, 0323, 0434, 0350 Tesin 0320, 0223, 0343 American High 1068 SuperLac 0277, 0282, 0342, 0343 Tesin 0320, 0232, 0343 American High 1068 SuperLac 0277, 0282, 0342, 0343 Torn 0320, 0322, 0342, 0343 American High 1068 SuperLac 0277, 0282, 0342, 0343 Tesin 0320, 0322, 0342, 0343 Ameri	SSS	0008, 0058, 0179	Telegazi	0320	Vexa	0320, 0323, 0343, 0349	VOII	
0342, 0343, 0350 Telesonic 0320 Videologing 0277, 0282, 0340, 0342 Adventura 1069 Startile 0058, 0179, 0320, 0323, 0342 Telestech 0320, 0323, 0343, 0349 Videologing 0277, 0282, 0340, 0342 Advson 1024, 1026, 1027, 1069 Sternway 0346, 0447 Televideon 0277, 0282, 0340, 0342 Videotechnic 0277, 0282, 0340, 0342 Akiai 1021, 1027, 1029 Strato 0320, 0323, 0341, 0350 Television 0320, 0323, 0343, 0350 Akiain 1008, 1029, 1024, 1025, 1027, 1029 Strato 0320, 0323, 0343, 0350 Television 0350, 0350, 037, 0343 Videotechnic 077, 0232, 0342, 0340, 1030 Akiana 1008, 1009, 1024, 1025, 1030, 1030 Sumstar 0320, 0323, 0343, 0350 Tesenet 0350, 0139, 0353, 0342 Vision 028, 0320, 0350, 036 Ambras one 016 Superstar 0377, 0282, 0342 Tesenet 0350, 0197, 0282, 0320, 0350 Ambras one 016 008, 0092, 0031 Superstar 0315, 0178 Thormoson 0162, 0188, 0192, 0142 Vision 0280, 0350, 0350 Afsec 1008, 1009, 1026 Supre-Macy 0057, 0172, 0282, 0343 T	Standard	0282, 0320, 0323, 0340,	Telemeister	0320	Victor	0015, 0344, 0350	ABS	1016
Sharfi 0058, 0179, 0320, 0323, Telestar 0320 Videologiue 0277, 0282, 0340, 0342, Adyson 1008, Sternway 0348, Teleton 0282, 0323, 0432, 0343, Videologiue 0277, 0282, 0340, 0350 Aixai 1021, 1027, 1029 Strato 0340, 0323, Televiso 0321, Videologiue 0277, 0282, 0320, 0023, 0053, Akai 1008, 1029, 1029 Strato 0320, 0323, Tensai 0282, 0320, 0323, 0343, 0350 Videologiue 0076, 0026, 0321, 0053, Akura 1008, 1029, 1024, 1025, 1029 Sumstar 0320, 0323, 0343, 0350 Tevino 0337, 0343, Viore 0148 Almbassador 1036 Superfaco 0277, 0282, 0342, 0323, 0343, Toolso 0280, 0350, 037, 043 Ambassador 1036 1089, 1029, 1026 1089, 1029, 1024, 1025, 1027, 0328, 0343, 030, 0364, Ambassador 1036 1080, 1009, 1026, 1029, 0320, 0350, 036, Ameria 1080, 1009, 1026, 1029, 0350, 037, Ameria 1080, 1009, 1026, 1028,		0342, 0343, 0350	Telesonic	0320	VIDEOLOGIC	0277	Adventura	1069
bit 0349 Teletech 0320, 0323, 0343, 0349 VideocSystem 0320, 0350 Aiwa 1024, 1027, 1029 Stermay 0346, 0347 Televideon 0227, 0322 VideocSystem 0320, 0323 Akiba 1008, 1029 Strato 0320, 0323 Televideon 0282, 0320, 0323, 0340, 050 Videoc 0010 Akiba 1008, 1029 Symahai 0343 Clexido 0343, 0350 Videoc 0148 Alhea 1008, 1009 Sumsari 0320, 0323, 0343, 0350 Tesime 0350 Vision 0322, 0320, 0350 Alhea 1008, 1009, 1002, 1024, 1025, 1023, 0324 Sumerata 0320, 0323, 0343, 0350 Tesime 0350 Vision 0282, 0320, 0350 American High 1068 SuperStach 0177, 0282, 0324 Teset 0377, 0382, 0343, 0340 Vision 0282, 0350, 0350 American High 1068 SuperStach 0037, 0282, 0342 Teset 0350 Vision 0320, 0330, 0340 Vision 0320, 0350 Asita 1032, 1033 SuperMard 0370 <td>Starlite</td> <td>0058, 0179, 0320, 0323,</td> <td>Telestar</td> <td>0320</td> <td>Videologique</td> <td>0277, 0282, 0340, 0342</td> <td>Adyson</td> <td>1008</td>	Starlite	0058, 0179, 0320, 0323,	Telestar	0320	Videologique	0277, 0282, 0340, 0342	Adyson	1008
Stern 0346, 0347 Televico 0282, 0342 Videotechnic 0277, 0282 Akai 1021, 1027 Strato 0320, 0323 Televiso 0321 Videotechnic 0008, 0025, 0031, 0053 Akura 1008, 1027, 1029 Strato 0320, 0323 Tensio 0333, 0350 Videotechnic 007, 0232, 0343, Alba 1008, 1007, 1024, 1025, 1029 Sumado 0320, 0323, 0343, 0350 Tevnet 0337, 0343 Visola 0277, 0342, 0320, 032, 0344, 0350 1008, 1009, 1024, 1025, 1029 Sumado 0320, 0323, 0343, 0350 Tevnet 0337, 0343 Visola 0277, 0342, 0320, 0350 American High 1068, 1009, 1024, 1025, 1029 Supersca 0013, 0178 Tomo 0120, 0323, 0343, 0350 Visola 0282, 0320, 0350 Amistad 1008, 1009, 1026 Super 0013, 0174 Thom 0320, 0324, 0345, 0350 Visola 0282, 0320, 0340, 0350 Asha 1008, 1009, 1026 Super 0055, 1017 Thom 0320, 0324, 0345 Vortec 0320, 0339, 0344, 0350 Asha 1070 Suprone 0351		0349	Teletech	0320, 0323, 0343, 0349	VideoSystem	0320, 0350	Aiwa	1024, 1026, 1027, 1069
Stern 0346, 0347 Televideon 0277 Vidikron 001 Akiba 1008, 1027 Strato 0320, 0323, 032 Televiso 0321, 0323, 0330, 0321, 0323, 0340, 0323, 0340, 0323, 0340, 0350 Viewsonic 0176, 0203, 0232, 0364, Alba 1008, 1007, 1029, 1030 Sumkar 0320, 0323, 0343, 0350 Tesnet 0330, 0350 Viewsonic 0176, 0203, 0232, 0364, Alba 1008, 1007, 1029, 1030 Sumstar 0320, 0323, 0343, 0350 Tevin 0337, 0343 Visiola 0277, 0342 Ambassador 1030 Superfac 0277, 0322, 0342 Texet 077, 0282, 0323, 0343 Texin 0320, 0323, 0343 1008, 1029 Super-Saco 0277, 0322, 0342 Tomson 162, 0188, 0189, 0285, Vizio 0500, 6003, 6013, 6031, 6034, 6045, 0031 0300, 0051, 0502, 0503, Anitech 1008, 1029 Super-Macy 0057 Tom 0320, 0349, 0350 Aritech 1038, 028, 0131 Super-Macy 0350 0277, 0342 Mass 1008, 1029, 1028, 0124, 0125, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128, 0124, 0128,	Stenway	0348	Teleton	0282, 0342	Videotechnic	0277, 0282	Akai	1021, 1027
Strato 0320, 0323 Televiso 0321 Videch 0008, 0026, 0031, 0053 Akura 1008, 1002, 1023 Stylandia 0343 0330, 0323, 0343, 0350 Tesme 0330, 0323, 0343, 0350 Tesme 0330 Viking 0057 Albas 1008, 1009, 1024, 1025, 1034 Sumstar 0320, 0323, 0343, 0350 Tevion 0337, 0343 Visiola 0277, 0342 American High 1008, 1009, 1024, 1025 Superscan 0133, 0178 Tevion 0162, 0188, 0189, 0285, Vision 028, 0320, 0350 American High 1008, 1009, 1026 Super 0133, 0178 Tomonon 0162, 0188, 0189, 0285, Vision 028, 0320, 0350 American High 1008, 1009, 1026 Super 0133, 0134 Thom 0120, 0349 Vortec 0320, 0349, 0350 Aska 1008, 1028, 1028, 1031 Super 055, 0107 TMK 0080, 0026, 0031 Vortec 0320, 0349, 0350 Aska 1008, 1026, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 1029, 1028, 10	Stern	0346, 0347	Televideon	0277	Vidikron	0010	Akiba	1008, 1029
Stylania 0282 Tensai 0282, 0320, 0323, 0340, 0343, 0350 Viewsonic 0176, 0230, 0232, 0364, Virig Allo 1008, 1009, 1024, 1025, 1029, 1020 Sunstar 0320, 0323, 0343, 0350 Texmet 0350 Viror 0148 Allenware 1026 Sunward 0270, 0282, 0343, 0350 Texmet 0370, 0323, 0342 Visiola 0277, 0342 Ambassador 1036 Superla 0277, 0282, 0324, 0342 Texmo 0162, 0188, 0189, 0285, Visio 0080, 0077, 0218, 0242, Amstrad 1008, 1009, 1026 Super-Keo 0277, 0320, 0323, 0343 Thomson 0162, 0188, 0189, 0284, 0345, Visio 0050, 600, 600, 600, 600, 600, 600, 600,	Strato	0320, 0323	Televiso	0321	Vidtech	0008, 0026, 0031, 0053	Akura	1008, 1027, 1029
Sinkai 0343 0443, 0350 Viking 0077 0129, 1030 Sunstar 0320, 0323, 0343, 0350 Tevion 0337, 0343 Viore 0148 Alienvare 1030 Sunwod 0320, 0323, 0343, 0350 Tevion 0337, 0343 Visiola 0277, 0342 Ambassador 1030 Superscan 0013, 0178 Towno 162, 0188, 0189, 0285, 0500, 0501, 0502, 0503, Amiercan High 1008, 1029 Superscan 0320, 0322, 0342, 0345, 0350 5056 Apex 1088 Supers 0353, 017 Thorn 0320, 0322, 0342, 0345, 0506 Apex 1088 Supreme 055, 0107 Thorn 0320, 0320, 0320, 0350 Warkan 0320, 0339, 0346, Asha 1070 Susumu 0340 TKCi 0030 Asika 1008, 1026, 1028, 1029, 1031 Sydrey 035, 0147 Tokai 0282, 0320, 0350 Warkan 028, 0320, 0342 1031 Sydrey 0131, 0026, 0048, 0050, 0046, 0073, 0100, 0103, Warkads 00051,	Stylandia	0282	Tensai	0282, 0320, 0323, 0340,	Viewsonic	0176, 0203, 0232, 0364	Alba	1008, 1009, 1024, 1025,
Sunstar 0320, 0323, 0343, 0350 Tesmet 0330, 0333, 0343, 0350 Alienvane 1016 Sumwood 0320, 0323, 0343, 0350 Tevino 0337, 0343, 0337, 0343 Visiola 0277, 0342 Ambasador 1030 Superlac 013, 0178 Thomson 0162, 0188, 0189, 0285, Vision 0282, 0320, 0323, 042, Amstrad 1008, 1009, 1026 Superlac 0277, 0282, 0323, 0343 Thomson 0162, 0188, 0189, 0285, Vision 0500, 0501, 0502, 0503, Anitech 1008, 1009, 1026 Superlac 0277, 0282, 0343 Thom 0320, 0342, 0342, 0343, Oston 0500, 0501, 0502, 0503, Apex 1088 Suprenc 0055 0107 Thor 0320, 0349 Vorsc 0320, 0349, 0350 Asha 1070 Sutron 0340 TNCi 0008 0027, 0342 Wards 0008, 0009, 0010, 0026, Asha 1009 0026, 1028, 1028, 1028, 1028, 1029, 1026, 1028, 1029, 1026, 1028, 1029, 1026, 1028, 1029, 1026, 1028, 1029, 1026, 1028, 1029, 1030, 1016, 1018, 0019, 0040, 0041, 4027, 0280, 0340, 0350 Adidovor 1009 1025, 1026, 1028, 1029, 1030, 1026, 1028, 1020, 1026, 1028, 1010, 1012, 1026, 1028, 0147, 10	Sunkai	0343		0343, 0350	Viking	0057		1029, 1030
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Superla 0277, 0282, 0342 Texet 0277, 0282, 0320, 0350 American High 1068 Superscan 0013, 0178 Thomson 0162, 0188, 0189, 0285, Vision 0088, 0177, 0218, 0242, Amstrad 1008, 1009, 1026 Super 160 0277, 0320, 0323 0320, 0322, 0342, 0342, 0342, 0342, Vision 0506 Apex 1008 1009, 1026 Super Mey 0055, 0107 Thom 0320, 0322, 0349 Vortec 0320, 0332, 0349, 0350 Asha 1070 Supreme 0350 Tokai 0028, 0220, 0350 Waltham 0282, 0320, 0349, 0350 Asuka 1008, 1026, 1028, 1029, 1021, 1021, 1021 Suturon 0340 Tokai 0282, 0320, 0350 Waltham 0282, 0320, 0344 Asuka 1008, 1026, 1028, 1029, 1021, 1021 Sydney 0077, 0282, 0342 Tokai 0320, 0342, 0350 Audiosonic 1003 Sydney 0077, 0282, 0342 Tokai 0138, 0019, 0040, 0041, 0033, 0054, 0059 Audiosonic 1009, 1025, 1026, 1027 Sydney 0051, 0058, 0062, 0128, 0132, 0166, 0208, 0210, Watson	Sunwood	0320, 0323, 0343, 0350	Tevion	0337, 0343	Visiola	0277, 0342	Ambassador	1030
Superscan 0013, 0178 Thomson 0162, 0188, 0189, 0285, 0320, 0322, 0342, 0343 Vizio 0008, 0177, 0218, 0242, 0500, 0501, 0502, 0503, 0506 Amstrad 1008, 1009, 1026 Super 0323, 0343 0350 0350 Apex 1008, 1029 Super 0057 Thorn 0320, 0349 Vortec 0320, 0349, 0350 ASA 1028, 1031 Superme 0055, 0107 TMK 0008, 0026, 0031 Voxson 0171, 0320, 0339, 0346, 0347, 0350 Asua 1008, 1026, 1028, 1029, 1029, 1029, 1031 Sururon 0323, 0343 Tokai 0282, 0320, 0350 Waltham 0282, 0320, 0342 1031 SVA 0151 Tokyo 0277, 0342 Wards 0003, 0009, 0010, 0026, 044, 0050, 0051, 0026, 0048, 0050, 0051, 0128, 0227, 0253 Audio N018, 0019, 0040, 0041, 0046, 0073, 0100, 0113, Watson 0320, 0349, 0350 Baird 1009, 1025, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 1027, 1034, 10342 Symphonic 0051, 0058, 0052, 0128, 0129, 0051, 0128, 0227, 0253 0108, 0109, 0111, 0121, Wat Radio 0277, 0341, 0342 Baur 1009, 1025, 1026, 1027 Symtax 0199 0282, 0283, 0293, 0304, <td>Superla</td> <td>0277, 0282, 0342</td> <td>Texet</td> <td>0277, 0282, 0323, 0342</td> <td>Vision</td> <td>0282, 0320, 0350</td> <td>American High</td> <td>1068</td>	Superla	0277, 0282, 0342	Texet	0277, 0282, 0323, 0342	Vision	0282, 0320, 0350	American High	1068
SuperTech 0277, 0320, 0323 0320, 0322, 0342, 0345, 0500, 0501, 0502, 0503, Anitech 1008, 1029 Supra 0323, 0343 0350 0506 Apex 1088 Supre-Mev 0055, 0107 Thorn 0320, 0349 Vortec 0520, 0349, 0350 ASA 1028, 1031 Supreme 0055, 0107 TMK 0008, 0026, 0031 Voxson 0171, 0320, 0339, 0346, Asha 1070, 1028, 1029, 1028, 1031 Sutron 0323, 0343 Tokai 0282, 0320, 0350 Waltham 0282, 0320, 0342 1031 SVA 0151 Tokyo 0277, 0342 Wards 0008, 0009, 0010, 0026, Audiosonic 1009, 1025, 1026, 1027, 1026, 1027 Sylvania 00078, 0009, 0010, 0011, Toshiba 018, 0019, 0040, 0041, 0053, 0054, 0059 Audiovox 1071 Symphonic 0051, 0128, 0227, 0253 0108, 0109, 0111, 0121, Watson 0320, 0339, 0344 1008, 1009, 1025, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 1027, 1026, 0230, 0350, 0349, 0350 Baur 1028 Symbonic 0051, 0128, 0227, 0253 0180, 019, 0111, 012	Superscan	0013, 0178	Thomson	0162, 0188, 0189, 0285,	Vizio	0008, 0177, 0218, 0242,	Amstrad	1008, 1009, 1026
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Supre-Macy 0057 Thorn 0320, 0349 Vortec 0320, 0349, 0350 ÅSA 1028, 1031 Supreme 0055, 0107 TMK 0008, 0026, 0031 Vorson 0171, 0320, 0339, 0346, Asha 1070 Susumu 0340 TNCi 0030 0347, 0350 Asuka 1008, 1026, 1028, 1029, Sutron 0323, 0343 Tokai 0282, 0320, 0350 Waltham 0282, 0320, 0342 1031 SVA 0151 Tokyo 0277, 0342 Wards 0008, 0009, 0010, 0026, AudioSonic 1064 Sydney 0277, 0282, 0342 Tomashi 0348 0001, 0026, 0048, 0050, 4046, 0073, 0100, 0103, Watson 0320, 0349, 0350 Baird 1009 1051, 1027 Sylvania 0008, 0069, 0010, 0011, Toshiba 018, 0019, 0011, 0012, Wat Radio 0277, 0341, 0342 Baird 1009, 1025, 1026, 1027 Symphonic 0051, 0058, 0062, 0128, 0132, 0166, 0208, 0210, Wat Radio 0277, 0341, 0342 Baird 1009, 1024, 1025, 1026, 1027 Symtax-Brillian 0199 <t< td=""><td>Supra</td><td>0323. 0343</td><td></td><td>0350</td><td></td><td>0506</td><td>Apex</td><td>1088</td></t<>	Supra	0323. 0343		0350		0506	Apex	1088
Supreme 0055, 0107 TMK 0008, 0026, 0031 Voxson 0171, 0320, 0339, 0346, 0347, 0350 Asha 1070 Suumu 0340 TNCi 0030 0347, 0350 Asuka 1008, 1026, 1028, 1029, 1031 Sutron 0323, 0343 Tokai 0282, 0320, 0350 Waltham 0282, 0320, 0342 1031 SVA 0151 Tokyo 0277, 0342 Wards 0008, 009, 0010, 0026, 0031, 0048, 0049, 0050, 0013, 0026, 0048, 0050, 0051, 0013, 0026, 0048, 0050, 0051, 0013, 0026, 0048, 0050, 0051, 0013, 0026, 0048, 0050, 0051, 0018, 0027, 0253 0108, 019, 0040, 0041, 0013, 0126, 00248, 0050, 0013, 0126, 0028, 0210, 0051, 0128, 0022, 1028, 0132, 0166, 0027, 0208, 0210, 0071, 0220, 0329, 0344 Wattson 0320, 0339, 0344 Baird 1009, 1025, 1026, 1027, 1028, 1029, 1030 Symbonic 0051, 0058, 0062, 0128, 0179, 0215 0132, 0166, 0073, 0100, 0103, 0346, 0370, 0329, 0344, 9306, 0370, 0329, 0344, 9306, 0370, 0329, 0344, 9306, 0370, 0329, 0344, 9306, 0370, 0329, 0344, 9349, 0349 Baur 1028 Syntax 0199 0282, 0283, 0293, 0304, 9346, 0377, 0282, 0340, 0340, 7084 Wegavox 0323 Baur 1028 Syntax 0199 0349, 0350 Baur 10065 Bestar 1009, 1025	Supre-Macy	0057	Thorn	0320. 0349	Vortec	0320, 0349, 0350	ÂŜĂ	1028, 1031
Susumu 0340 TNCi 0030 0347, 0350 Asuka 1008, 1026, 1028, 1029, 1031 Sutron 0323, 0343 Tokai 0282, 0320, 0342 1031 1031 SVA 0151 Tokyo 0277, 0342 Wards 0008, 0009, 0010, 0026, 4udio Dynamics 1064 Sydney 0277, 0282, 0342 Tomashi 0348 0031, 0048, 0049, 0050, 0059 Audio Dynamics 1064 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 0108, 0109, 0111, 0121, 0040, 0041, 0043, 0049, 0050, 0051, 0128, 0227, 0253 0132, 0166, 0208, 0210, Waycon 0111 Baird 1009, 1025, 1026, 1027 Symphonic 0051, 0058, 0062, 0128, 00210, 018, 0019, 0011, 0121, 0250, 0226, 0280, 0210, Waycon 0111 Baird 1009, 1024, 1025, 1026, 1028, 1029, 1030 Syntax 0199 0282, 0283, 0293, 0304, Wegavox 0322 0320, 0349, 0350 Baur 1028 Syntax 0199 0346, 037, 0329, 0344, 0491 Westinghouse 007, 0216, 0220 Betl & Howell 1065 Syntax 0178, 0282, 0336, 0340, Towada 0282, 0320, 0347 0037, 0090, 0277, 0320, 0341, 0342, 0349 1009, 1025, 1030	Supreme	0055, 0107	ТМК	0008, 0026, 0031	Voxson	0171, 0320, 0339, 0346,	Asha	1070
Sutron 0323, 0343 Tokai 0282, 0320, 0350 Waltham 0282, 0320, 0342 1031 SVA 0151 Tokai 0282, 0320, 0350 Wards 0008, 0009, 0010, 0026, 0031, 0048, 0049, 0050, 0031, 0048, 0009, 0010, 0010, 0013, 0026, 0048, 0050, 0051, 0128, 0027, 0233 Audio Dynamics 1064 Symphonic 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 0108, 0109, 0040, 0041, 0046, 0073, 0100, 0103, 0179, 0215 Watson 0320, 0349, 0350 Baird 1009, 1025, 1026, 1027 Symphonic 0051, 0128, 0027, 0253 0138, 0109, 0111, 0121, 0179, 0215 Watson 0320, 0349, 0350 Baird 1009, 1024, 1025, 1026, 1027 Symphonic 0051, 0128, 0062, 0128, 0179, 0215 0146, 0073, 0100, 0103, 0214, 0217, 0260, 0268, Wega 0320, 0349, 0350 Baird 1009, 1024, 1025, 1026, 1027 Syntax 019 0282, 0283, 0293, 0304, Wegavox 0320, 0349, 0350 Baur 1029, 1030 Systing 0277 024, 0247, 0250, 0329, 0344, Wetsinghouse 0037, 0090, 0277, 0320, 0349, 0350 Belt Howell 1065 Sytong 0277 0282, 0320, 77 Totevision 0007 Wite Westinghouse Belt Howell	Susumu	0340	TNCi	0030		0347_0350	Asuka	1008, 1026, 1028, 1029,
SVA 0121 Toky 0227, 0320 Wards 0008, 0009, 0010, 0026, 0031, 0048, 0049, 0050, 0010, 0010, 0011, 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 Audio Dynamics 1064 Symphonic 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 Tomashi 0348 0031, 0048, 0059, 0051, 0128, 0227, 0253 Audio oxnamics 1064 Symphonic 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 0046, 0073, 0100, 0103, 0108, 0109, 0111, 0121. Wards 00032, 0349, 0350 Baird 1009, 1025, 1026, 1027 Symphonic 0051, 0058, 0062, 0128, 0179, 0215 0132, 0166, 0208, 0210, 0217, 0217, 0260, 0268, Wards 02320, 0339, 0344 Baird 1009, 1024, 1025, 1029, 1030 Syntax 0199 0282, 0283, 0293, 0304, Wegavox 0322, 0330, 0349, 0350 Baur 1028 Systian 0199 0355, 0454, 0491 Westinghouse 0107, 0216, 0220 Bell & Howell 1065 Systong 0277, 0282, 0336, 0340, 0346, 0347 Totevision 0007 White Westinghouse 0037, 0090, 0277, 0320, 0341, 0342, 0349 Black Panther Line Tashiko 0277, 0282, 0324, 0344, 0342, 0347 Trans Continens 0282, 0320 Wincom 0101, 0106 Blaupunkt 1009, 1025 Tashiko	Sutron	0323 0343	Tokai	0282 0320 0350	Waltham	0282 0320 0342		1031
Sydney 0277, 0282, 0342 Tomshi 0348 0031, 0048, 0049, 0050, 0050, 0053, 0054, 0059 Audiosonic 1009 Sylvania 0008, 0009, 0010, 0011, 0011, 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 0018, 0019, 0040, 0041, 0011, 0053, 0054, 0059 Audiosonic 1009 Symphonic 0051, 0058, 0062, 0128, 0132, 0132, 0166, 0208, 0210, 0132, 0166, 0208, 0210, 0132, 0166, 0208, 0210, 0132, 0166, 0208, 0210, 0132, 0166, 0208, 0210, 0179, 0215 Watr Radio 0077, 0341, 0342 Bang & Olufsen 1017 Syntax 0199 0282, 0233, 0293, 0304, 0282, 0233, 0304, Wega Waycon 0111 Basic Line 1008, 1009, 1024, 1025, 1026, 1027 Syntax 0199 0214, 0217, 0260, 0268, Wega Wega 0320, 0339, 0344 Baur 1028 Syntax 0199 0282, 0283, 0293, 0304, Wegavox Wegavox 0321, 0048, 0049, 0350 Beaumark 1070 Systom 0349 0355, 0454, 0491 Westinghouse 0107, 0216, 0220 Beal # Howell 1065 Sytong 0277 Totevision 0007 White Westinghouse 0037, 0090, 0277, 0320, 0341, 0342, 0349 Black Panther Line 0342, 0347 Trakton 0282, 0320 Wincom 0101, 0106 <th< td=""><td>SVA</td><td>0151</td><td>Tokyo</td><td>0277_0342</td><td>Wards</td><td>0008 0009 0010 0026</td><td>Audio Dynamics</td><td>1064</td></th<>	SVA	0151	Tokyo	0277_0342	Wards	0008 0009 0010 0026	Audio Dynamics	1064
Sylvaria 0018, 0029, 0010, 0011, 0013, 0026, 0048, 0050, 0051, 0128, 0227, 0253 Toshiba 0018, 0019, 0040, 0041, 0046, 0073, 0100, 0103, 0051, 0128, 0227, 0253 0018, 0019, 0040, 0041, 0046, 0073, 0100, 0103, 0051, 0128, 0227, 0253 Audiovox 1071 Symphonic 0051, 0128, 0227, 0253 0108, 0109, 0111, 0121, 0179, 0215 Watson 0320, 0339, 0344 Baird 1009, 1025, 1026, 1027 Syntax 0199 0214, 0217, 0260, 0268, 0179, 0215 0132, 0166, 0207, 0329, 0344, 0282, 0283, 0293, 0304, Wegavox 0323 Baur 1028 Syntax 0199 0366, 0307, 0329, 0344, 0349 Westinghouse 0107, 0216, 0220 Bell & Howell 1065 Sytong 0277 Totevision 0007 White Westinghouse 0037, 0090, 0277, 0320, 0341, 0342, 0349 Bela & Howell 1009, 1025, 1030 Tandy 0178, 0282, 0342, 0344, 0346 Transcontinens 0282, 0320 Wincom 0101, 0106 Blaupunkt 1028 Tatung 0052, 0177, 0282, 0320, 0342, 0349, 0350 Trident 0282 Yamaha 0080, 0081, 0082, 0083, 0086, 0087 Broksonic 1100	Sydney	0277 0282 0342	Tomashi	0348	(fulue)	0031 0048 0049 0050	Audiosonic	1009
b) Hallar 0013, 0026, 0048, 0057, 0014, 0014, 0017, 0100, 0103, 0046, 0073, 0100, 0103, 0051, 0128, 0227, 0253 0046, 0073, 0100, 0103, 011, 0121, 0121, 0125, 0027, 0341, 0342 Baird 1009, 1025, 1026, 1027 Symphonic 0051, 0058, 0062, 0128, 0132, 0166, 0208, 0210, 0179, 0215 0132, 0166, 0208, 0210, 0111, 0121, 0121, 0125, 00268, 0132, 0139, 0344 Watson 01320, 0339, 0344 Baird 1009, 1024, 1025, 1026, 1027 Syntax 0199 0214, 0217, 0260, 0268, 0210, 0133, 004, 0320, 0339, 0344 Wega 0320, 0339, 0344 Baur 1028 Syntax-Brillian 0199 0366, 0307, 0329, 0344, 0491 Wegavox 0323 Baur 1028 Systine 0349 0349, 0350 Betaumark 1070 Betaumark 1070 Systing 0277 Totevision 0007 White Westinghouse 0107, 0216, 0220 Bell & Howell 1065 Sytong 0277 Trakton 0282, 0347 Towaida 0282, 0347 0341, 0342, 0349 1009, 1025, 1030 Tashiko 0277, 0282, 0342, 0344, Trans Continens 0282, 0320 Wincom 0101, 0106 Blaupunkt 1028 Tatung 0052, 0177, 0282, 0320, Trident 0282 Yrypton 0320 <	Sylvania	0008 0009 0010 0011	Toshiba	0018 0019 0040 0041		0053 0054 0059	Audiovox	1071
0051, 0128, 0227, 0253 0108, 0109, 0110, 0121, 012	Sjivania	0013 0026 0048 0050	roomou	0046 0073 0100 0103	Watson	0320 0349 0350	Baird	1009, 1025, 1026, 1027
Symphonic 0051, 0025, 0227, 0225 0100, 010, 010, 010, 010, 010, 010, 010		0051 0128 0227 0253		0108 0109 0111 0121	Watt Radio	0277 0341 0342	Bang & Olufsen	1017
Syntax 0199 0282, 0283, 0293, 0304, 0360, 0307, 0329, 0344, Syntax-Brillian 0199 0282, 0283, 0293, 0304, 0360, 0307, 0329, 0344, 0355, 0454, 0491 Wega 0320, 0339, 0344 1029, 1030 Syntax 0199 0306, 0307, 0329, 0344, 0355, 0454, 0491 Wegavox 0323 Baur 1029, 1030 Syntax 0178, 0282, 0336, 0340, 0355, 0454, 0491 0355, 0454, 0491 Westinghouse 0107, 0216, 0220 Bell & Howell 1065 Sytong 0277 Totevision 0007 White Westinghouse 0107, 0220, 0370, 0370, 0990, 0277, 0320, 0342, 0347 Black Panther Line 1009, 1025, 1030 Tashiko 0277, 0282, 0342, 0344, 0346 Trans Continens 0282, 0320 Wincom 0101, 0106 Blaupunkt 1028 Tatung 0052, 0177, 0282, 0320, 0342, 0349, 0350 Trident 0282 Yamaha 0008, 0026, 0050, 0053, 0080, 0081, 0082, 0083, 0080, 0081, 0082, 0083, 0086, 0087 Blaupunkt 1028 TCM 0337, 0343 Triumph 0320 0086, 0087 Broksonic 1100	Symphonic	0051 0058 0062 0128		0132 0166 0208 0210	Waycon	0111	Basic Line	1008, 1009, 1024, 1025,
Syntax 0199 0214, 011, 020, 0100, 0	Symphome	0179 0215		0214 0217 0260 0268	Wega	0320 0339 0344		1029, 1030
Syntax-Brillian 0199 0306, 0307, 0329, 0344, 0355, 0454, 0491 Weltblick 0282, 0320, 0349, 0350 Beaumark 1070 Systax-Brillian 0349 0355, 0454, 0491 Westinghouse 0107, 0216, 0220 Bell & Howell 1065 Sytong 0277 Totevision 0007 White Westinghouse 01037, 0090, 0277, 0320, 0341, 0342, 0349 Bela & Howell 1009, 1025, 1030 Tandy 0178, 0282, 0336, 0340, 0342, 0347 Towada 0282, 0347 0037, 0090, 0277, 0320, 0341, 0342, 0349 Black Panther Line 1009, 1025 Tashiko 0277, 0282, 0342, 0344, 0346 Trans Continens 0282, 0320 Wincom 0101, 0106 Blaupunkt 1028 Tatung 0052, 0177, 0282, 0320, 0342, 0349, 0350 Trident 0282 Yamaha 0008, 0026, 0050, 0053, 0080, 0081, 0082, 0083, 0086, 0087 Broksonic 1100 TCM 0337, 0343 Triumph 0320 0086, 0087 0086, 0087	Syntax	0199		0282 0283 0293 0304	Wegayox	0323	Baur	1028
Syslin 0349 0355,0454,0491 Westinghouse 0205,0547,0526,0520,0547,0506 Bell & Howell 1065 Syslin 0349 0355,0454,0491 Westinghouse 0107,0216,0220 Bell & Howell 1065 Syslin 0178,0282,0336,0340, Totevision 0007 Wite Westinghouse Bell & Howell 1065 0342,0347 Trakton 0282 0347,0342,0349 1009,1025,1030 Tashiko 0277,0822,0342,0344, Trans Continens 0282,0320 Wincom 0101,0106 Blaupunkt 1028 346 Transtec 0277 Xrypton 0320 Bools,0020,0053,0050,0053,0080,0081,0082,0083,0081,0082,0083,0081,0082,0083,0081,0082,0083,0086,0087 Broksonic 1100 TCM 0337,0343 Traumph 0320 0086,0087 0086,0087	Syntax-Brillian	0199		0202, 0203, 0203, 0203, 0304, 0306, 0307, 0329, 0344	Welthlick	0323	Beaumark	1070
Syting 0347 Totevision 0007 Witstinghouse 0101, 0210 Bestar 1009, 1025, 1030 Tandy 0178, 0282, 0336, 0340, Towada 0282, 0347 0037, 0090, 0277, 0320, Bestar 1009, 1025, 1030 Tandy 0342, 0347 Trakton 0282 0341, 0342, 0349 1009, 1025 Tashiko 0277, 0282, 0342, 0344, Trans Continens 0282, 0320 Wincom 0101, 0106 Blaupunkt 1028 Tatung 0052, 0177, 0282, 0320, Trident 0282 Yamaha 0008, 0026, 0050, 0053, Broksonic 1100 TCM 0337, 0343 Trumph 0320 0086, 0087 0086, 0087 0086, 0087	Systine	0340		0355 0454 0491	Westinghouse	0107 0216 0220	Bell & Howell	1065
Sytong 0277 1000 Minor 00000 00000 000000000000000000000000000000000000	Sytong	0277	Totevision	0007	White Westingho	0107, 0210, 0220	Bestar	1009 1025 1030
Tanky 0342, 0347 Trakton 0282 0341, 0342, 0349 1009, 1025 Tashiko 0277, 0282, 0342, 0344, Trans Continens 0282 0341, 0342, 0349 1009, 1025 Tashiko 0277, 0282, 0342, 0344, Trans Continens 0282 0341, 0342, 0349 1009, 1025 Tatung 0052, 0177, 0282, 0320, Trident 0282 Yamaha 0008, 0026, 0050, 0053, 0074, 0082, 0083, 0081, 0082, 0083, 0081, 0082, 0083, 0081, 0082, 0083, 0086, 0087 TCM 0337, 0343 0342 0342 0343 0086, 0087	Tandy	0178 0282 0336 0340	Towada	0282 0347	white westinght	0037 0090 0277 0320	Black Panther Li	ne
Tashiko 0277, 0282, 0342, 0344, 0282, 0320 Trans Continenes 0282, 0320 Wincom 0101, 0106 Blaupunkt 1028 Tashiko 0277, 0282, 0320, 0346 Transtec 0277 Xrypton 0320 Bondstec 1008, 1030 Tatung 0052, 0177, 0282, 0320, 0342, 0349 Trident 0282 Yamaha 0008, 0026, 0050, 0053, 083, 0080, 0081, 0082, 0083, 0086, 0087 Broksonic 1100 TCM 0337, 0343 0367 0086, 0087 0086, 0087 0086, 0087	Tanay	0342 0347	Trakton	0282		0341 0342 0349	Diatit Function En	1009 1025
Tashiko 0277, 0322, 0342, 0344, 1030 Trains Contines 0202, 020 Witcom 0101, 0100 Data Building 1020, 0100 0346 Transtec 0277 Xrypton 0320 Bondstec 1008, 1030 Tatung 0052, 0177, 0282, 0320, Trident 0282 Yamaha 0008, 0026, 0050, 0053, 0080, 0	Tashiko	0377 0282 0342 0344	Trans Continans	0282 0220	Wincom	0101 0106	Blaupunkt	1028
Tatung 0052, 0177, 0282, 0320, 0342, 0349, 0350 Trident 0282 Yamaha 0008, 0026, 0050, 0053, 0080, 0081, 0082, 0083, 0086, 0087 Broksonic 1100 TCM 0337, 0343 0337, 0343 0086, 0087 0080, 0081, 0082, 0083, 0086, 0087 1000, 1050	Tasiliku	03/6	Transtee	0202, 0320	Vrypton	0320	Bondstec	1008 1030
TCM 0337, 0343 0320 Triumph 0320 0080, 0081, 0082, 0083, 0086, 0087	Tatung	0052 0177 0282 0320	Trident	0282	Vamaha	0008 0026 0050 0053	Broksonic	1100
TCM 0337, 0343 Induipin 0520 0080, 0087	ratung	032, 0177, 0262, 0320,	Triumph	0202	ramana	0000, 0020, 0050, 0055, 0083	Diokoome	
1041 0557, 0557 0000, 0007	TCM	0337 0343	manipii	0520		0086 0087		
	1 (101	0007,0070				0000,0007		

Bush	1008, 1009, 1024, 1025,	ESC	1009, 1025	HTS	1018	Magnavox	1020, 1068, 1114, 1126
	1029, 1049, 1051, 1063,	Etzuko	1008, 1029	Hughes	1111, 1113, 1122	Magnin	1071
	1217	Expressvu	1018	Hughes Network	Systems	Manesth	1008, 1029
Calix	1071	Ferguson	1027		1110, 1116	Marantz	1028, 1064, 1065, 1068
Candle	1070, 1071	Fidelity	1008, 1026	Humax	1012, 1110, 1113	Mark	1009
Canon	1068	Finlandia	1028	Hush	1016	Marta	1071
Cathay	1009	Finlux	1026, 1027, 1028	Hypson	1008, 1009, 1024, 1029	Matsui	1024, 1031
Catron	1030	Firstline	1008, 1024, 1029, 1031	iBUYPOWER	1016	Matsushita	1068
CGE	1026, 1027	Fisher	1065	Impego	1030	Media Center PC	1016
Cimline	1008, 1024, 1029	Flint	1024	Imperial	1026	Mediator	1028
CineVision	1104	Formenti/Phoenix	1028	Inno Hit	1008, 1009, 1025, 1028,	Medion	1024
Citizen	1070, 1071	Frontech	1030		1029, 1030	MEI	1068
Clatronic	1008, 1030	Fuji	1068	Innovation	1024	Memorex	1023, 1026, 1031, 1065,
Colortyme	1064	Fujitsu	1026	Instant Replay	1068		1068, 1069, 1070, 1071,
Condor	1009, 1025, 1030	Funai	1026, 1069	Interbuy	1008, 1031		1098, 1114
Craig	1070, 1071	Galaxy	1026	Interfunk	1028	Memphis	1008, 1029
Crown	1008, 1009, 1025, 1029,	Garrard	1069	Intervision	1009, 1026	MGN Technology	1070
	1030	Gateway	1016	Irradio	1008, 1029, 1031	Micromaxx	1024
Curtis Mathes	1064, 1068, 1070	GBC	1029, 1030	ITT	1027	Microsoft	1016
Cybernex	1070	GE	1068, 1070	ITV	1009, 1025, 1031	Microstar	1024
CyberPower	1016	GEC	1028	JC Penney	1064, 1065, 1068, 1070,	Migros	1026
Daewoo	1009, 1025, 1030, 1038,	Geloso	1029	-	1071	Mind	1016
	1069, 1223	General	1030	JCL	1068	Mitsubishi	1026, 1028, 1079
Dansai	1008, 1009, 1029	General Technic	1024	JVC	1007, 1018, 1027, 1039,	Motorola	1068
Dantax	1024	GOI	1018		1064, 1065, 1066, 1067,	MTC	1070
Daytron	1009, 1025	GoldHand	1008, 1029		1078, 1089, 1092, 1093,	Multitech	1008, 1026, 1028, 1029,
DBX	1064	Goldstar	1026, 1031, 1064, 1071		1094, 1095, 1113, 1208,		1030, 1069, 1070
De Graaf	1028	Goodmans	1008, 1009, 1025, 1026,		1209, 1212, 1213, 1215,	Murphy	1026
Decca	1026, 1027, 1028		1029, 1030, 1031		1218	NEĈ	1027, 1064, 1065
Dell	1016	Gradiente	1069	Kaisui	1008, 1029	Neckermann	1027, 1028
Denko	1008	Graetz	1027	Karcher	1028	NEI	1028
DiamondVision	1096	Granada	1028	Kendo	1008, 1024, 1025, 1030	Nesco	1008, 1029
DigiFusion	1014	Grandin	1008, 1009, 1025, 1026,	Kenwood	1027, 1064, 1065	Nikkai	1008, 1009, 1030
DIRECTV	1019, 1105, 1110, 1111,		1029, 1030, 1031	Kodak	1068, 1071	Nikko	1071
	1113, 1116, 1122	Grundig	1028, 1029	Korpel	1008, 1029	Niveus Media	1016
Dish Network	1018	Hanseatic	1009, 1028, 1031	Kyoto	1008	Noblex	1070
Dishpro	1018	Harley Davidson	1069	Lenco	1025	Nokia	1009, 1027
Dual	1009, 1027, 1028	Harman/Kardon	1064	Leyco	1008, 1029	Nordmende	1027
Dumont	1026, 1028	Harwood	1008	LĠ	1010, 1026, 1031, 1047,	Northgate	1016
Durabrand	1114	HCM	1008, 1029		1054, 1056, 1071, 1103,	Oceanic	1026, 1027
Dynatech	1069	Headquarter	1065		1221	Okano	1008, 1009, 1024
Echostar	1018	Hewlett Packard	1016	Lifetec	1024	Olympus	1068
Elbe	1009	Hinari	1008, 1009, 1024, 1029	Linksys	1016	Optimus	1071
Elcatech	1008	Hisawa	1024	Lloyd's	1069	Orion	1023, 1024, 1051, 1115,
Electrohome	1071	Hitachi	1011, 1026, 1027, 1028,	Loewe Opta	1028, 1031		1217
Electrophonic	1071		1046, 1062	Logik	1008, 1029	Orson	1026
Elsay	1008	HNS	1110	Lumatron	1009, 1025	Osaki	1008, 1026, 1029, 1031
Elta	1008, 1009, 1029	Howard Comput	ers	Luxor	1008	Otto Versand	1028
Emerson	1008, 1020, 1068, 1069,	1	1016	LXI	1071	Palladium	1008, 1027, 1029, 1031
	1071	HP	1016	M Electronic	1026		

Panasonic	1000, 1022, 1044, 1055,	Saisho	1024, 1029	Sylvania	1020, 1068, 1069, 1102,	Weltblick	1031
	1068, 1072, 1085, 1090,	Samsung	1002, 1034, 1041, 1043,	o 1 ·	1126	XR-1000	1068, 1069
D.I.M.	1091, 1120, 1121, 1214		1057, 1060, 1070, 1084,	Symphonic	1008, 1069, 1126	Yamaha	1064, 1065
Pathe Marconi	1027		1110, 1116, 1122, 1124,	Systemax	1016	Yamishi	1008, 1029
Perdio	1026	с ·	1220, 1222	Tagar Systems	1016	Yokan	1008, 1029
Philco	1008, 1068	Samurai	1008, 1030	Taisho	1024	Yoko	1008, 1029, 1030, 1031
Philips	1006, 1013, 1028, 1035,	Sanky	1114	Tandberg	1009	Zenith	1114
	1040, 1045, 1046, 1050,	Sansui	1023, 1027, 1106, 1115	Tandy	1065	Z1 Group	1016
	1058, 1059, 1061, 1068,	Sanyo	1032, 1065, 1070	Tashiko	1026, 10/1		
	10/6, 1101, 1110, 1113,	Saville	1009	Tatung	1026, 1027, 1028		
	1116, 1117, 1122, 1126,	SBR	1028	ТСМ	1015, 1024, 1042	DVD	
	1210, 1211	Schaub Lorenz	1026, 1027	Teac	1009, 1069	41/	2051
Philips Magnavox	10/6	Schneider	1008, 1009, 1024, 1025,	Tec	1008, 1009, 1030	4Kus	2031
Phonola	1028		1026, 1028, 1029, 1030,	Technics	1068	Accurian	2142
Pilot	10/1	<i>a</i>	1031	Teknika	1068, 1069, 1071	Auvent	2155, 2251
Pioneer	1028, 1036	Sears	1065, 1068, 1071	Teleavia	1027	AEG	2362
Polaroid	1088, 1099	SEG	1008, 1009, 1029	Telefunken	1027	Airis	2304
Portland	1009, 1025, 1030	SEI-Sinudyne	1028	Teletech	1008, 1009	Alwa	2322
Prinz	1026	Seleco	1027	Tenosal	1008, 1029	Akai	2145, 2177, 2179, 2248
Profex	1029	Sentra	1008, 1030	Tensai	1008, 1026, 1029, 1031	Akura	2350
Proline	1026	Sentron	1008, 1029	Tevion	1024	Alba	2004, 2103, 2180, 2537,
Proscan	1019	Sharp	1003, 1033, 1077, 1107,	Thomson	1005, 1027	A.1	2346
Prosonic	1009, 1024	a 1 ·	1127, 1219	Thorn	1027	Alco	2149
Pulsar	1114	Shintom	1008, 1029	Tivo	1108, 1110, 1111, 1113,	Alize	2122
Pye	1028, 1102	Shivaki	1031		1117, 1118, 1119, 1122	Allegro	2133
Quarter	1065	Shogun	1070	TMK	1070	Amitech	2302 Warles
Quartz	1065	Siemens	1031	Tokai	1008, 1029, 1031	Amphion Media	2105
Quasar	1068	Silva	1031	Tonsai	1029	A N 4337	2195
Quelle	1026, 1028	Silver	1009	Toshiba	1004, 1016, 1027, 1028,	AMW	2195, 2363
Radialva	1008	Singer	1068		1037, 1049, 1052, 1086,	Apex	2030, 2124, 2125, 2120,
RadioShack	10/1	Sinudyne	1028		1087, 1097, 1109, 1112,	A	2127, 2150, 2151
RadioShack/Rea	alistic	Solavox	1030		1194	Apple	2241
	1065, 1068, 1069, 1070,	Sonic Blue	1022, 1123	Totevision	10/0, 10/1	Arrgo	2138
	1071	Sonneclair	1008	Touch	1016	Asono	2364
Radiola	1028	Sonoko	1009, 1025	Towada	1008, 1029	Aspire	2152, 2222
Radix	10/1	Sontec	1031	Towika	1008, 1029	Astar	2240
Randex	10/1	Sony	1001, 1016, 1048, 1053,	TVA	1030	AIACOM	2061 2140
RCA	1019, 1068, 1070, 1075,		10/3, 10/4, 1080, 1081,	Uher	1031	Audiovox	2001, 2149
	1110, 1113, 1122, 1125		1082, 1083, 1108, 1118,	UltimateTV	1019	Avious	2307
Realistic	1065, 1068, 1069, 1070,	a 1	1216	Ultravox	1009	Awa	2303
D 1 T	10/1	Stack	1016	Unitech	1070	AXION Dama & Olufaan	2249
ReplayIV	1022, 1123	Stack 9	1016	United Quick Star	1009, 1025	Bang & Oluisen	2128
Rex	1027	Standard	1009, 1025	Universum	1026, 1028, 1031	Baze	2307
RFT	1008, 1028, 1030	Stern	1009	Vector Research	1064	BBK	2364
Ricavision	1016	STS	1068	Video Concepts	1064	Bellagio Deut D	2303
Roadstar	1008, 1009, 1025, 1029,	Sunkai	1024	Videon	1024	Best Buy	2359
	1031	Sunstar	1026	Videosonic	1070	Blaupunkt	2151
Royal	1008	Suntronic	1026	Viewsonic	1016	Blue Parade	2137
Runco	1114	Sunwood	1008, 1029	Voodoo	1016	водне	2382
Saba	1027	Superscan	1020	Wards	1068, 1069, 1070, 1071	Brainwave	2362

Brandt	2148, 2188	DVX	2355	Irradio	2053	Memorex	2028, 2145, 2234
Broksonic	2145, 2146	Easy Home	2359	iSymphony	2246	MiCO	2354, 2382
Bush	2064, 2110, 2170, 2268,	Eclipse	2354	JBL	2135	Micromaxx	2182
	2290, 2346, 2358, 2367,	E-Dem	2364	JVC	2020, 2096, 2097, 2099,	Microsoft	2156
	2383	Electrohome	2362		2100, 2101, 2102, 2103,	Microstar	2182
California Audi	o Labs	Elin	2362		2106, 2107, 2160, 2257,	Minoka	2362
	2151	Elta	2341, 2361, 2362		2260, 2262, 2263, 2321,	Minowa	2367
Cambridge Audic	2354	Emerson	2129, 2137, 2150		2324, 2326, 2327, 2343,	Mintek	2131, 2245
CAT	2352, 2353	Enterprise	2129		2464, 2465, 2468, 2469,	Mitsubishi	2003
CAVS	2192	Enzer	2380		2471	Mizuda	2358, 2359
Centrum	2353	Enson	2247	Iwin	2198	Monyka	2380
CGV	2354 2362	ESA	2137	Kansai	2360	Mustek	2186
Changhong	2140	Finlux	2354 2362 2367	Kawasaki	2149	Mx Onda	2354
Cinetec	2363	Fintec	2354, 2362, 2367	Kenney	2149	Mystral	2354
CineVision	2305	Fisher	2134	Kenwood	2041 2151 2248	Naiko	2360
Clatronia	2155, 2257	Funci	2134	Kenwoou	2041, 2151, 2546	Naco	2121
Cahu	2536, 2507	Cotoway	2051	Keyriug	2302	Nesa	2131
Coby	2031, 2040, 2300	Galeway	2031	KIIFO	2302	Neurunk	2380
Conia	2383	GE	2029, 2131, 2156	Kingavon	2358	Nevir	2362
Continental Edi	son	Gericom	2351	KISS	2380	Next Base	2143
~	2363	GFM	2226	KLH	2131, 2149	Nexxtech	2243
Crown	2362	Giec	2382	Koda	2358	NU-TEC	2383
C-Tech	2355	Global Solution	is 2355	Koss	2013, 2148, 2158	Onkyo	2159, 2368
Curtis Mathes	2139	Global Sphere	2355	KXD	2359	Oopla	2051
CVG	2377	Go Video	2133, 2213	Landel	2143	Орро	2196, 2255
CyberHome	2022, 2098, 2138, 2187,	Goodmans	2165, 2280, 2291, 2358,	Lasonic	2132	Optim	2381
	2336		2371, 2376, 2382	Lawson	2355	Optimus	2180
Cytron	2244	GPX	2227	Lecson	2381	Orava	2358
Daenyx	2363	Gradiente	2151	Lenco	2358, 2362, 2367	Orbit	2363
Daewoo	2001, 2133, 2276, 2298,	Graetz	2380	Lenoxx	2136, 2153	Orion	2073, 2110
	2330, 2362, 2363, 2377	Greenhill	2131	LG	2002, 2033, 2038, 2057,	Oritron	2148, 2158
Daewoo Interna	tional	Grundig	2349		2129, 2133, 2189, 2191,	P&B	2358
	2363	Grunkel	2362, 2366		2223, 2238, 2270, 2288,	Pacific	2355
Dalton	2357	GVG	2377		2335, 2373, 2375	Panasonic	2011, 2024, 2034, 2042,
Dansai	2362, 2381	H&B	2358	Life	2182		2058, 2062, 2066, 2067,
Davtek	2184, 2195, 2363	H her	2364	Lifetec	2182		2093, 2116, 2117, 2118,
Dayton	2363	Haaz	2354 2355	Limit	2355		2119 2120 2121 2122
DEC	2358	Haier	2254	Liquid Video	2158		2123 2151 2159 2164
Decca	2362	Harman/Kardor	2047 2135	Liteon	2043 2051 2142		2166 2167 2172 2173
Denon	2059 2151 2193 2332	HiMAX	2359	Loewe	2320		2175 2209 2214 2275
Denver	2356 2358 2360 2370	Hitachi	2062 2090 2115 2274	LogicLab	2355		2277 2278 2281 2282
Denzel	2350, 2550, 2500, 2570	Titaciii	2316 2359 2380	Magnavoy	2025 2050 2137 2150		2283 2301 2374 2470
Decay	2205	Uiteker	2120	wagnavox	2023, 2030, 2137, 2130,	Dorosound	2203, 2301, 2374, 2470
Dismond	2205	Homa Tash Ind	2150	Magnay	2159, 2224, 2250, 2558	raiasounu	2157
DiamondVision	2554, 2555	Home rech mu	2364	Majastia	2360	peekion	2504
Diamond vision	2010 2028	TT	2304	Majestic	2300		
Disney	2010, 2028	Hyundai	2300	Marantz	2328		
DK Digital	2339	110	2245	Marquant	2302		
Dmtech	21/0	Initial	2131, 2245	Matsui	2148, 2378		
Dual	2380	Innovation	2182	McIntosh	2199		
DUNE	2473	Insignia	2002, 2137, 2253	Mecotek	2362		
Durabrand	2136	Integra	2157	Medion	2182		

	Philips	2008, 2012, 2025, 2044,	Samsung	2000, 2045, 2077, 2112,	Symphonic	2108, 2230	Yukai	2186
		2050, 2051, 2053, 2060,		2113, 2114, 2115, 2151,	Synn	2355	Zenith	2002, 2129, 2133, 2159,
		2072, 2108, 2111, 2147,		2200, 2216, 2219, 2228,	T.D.E. Systems	2366		2223
		2159, 2163, 2169, 2174,		2264, 2265, 2271, 2279,	Tatung	2001, 2362		
		2181, 2185, 2230, 2261,		2294, 2303, 2329, 2365	TCM	2182, 2297		
		2266, 2267, 2286, 2287,	Sansui	2073, 2145, 2354, 2355,	Teac	2149, 2333, 2355, 2383		
		2289, 2295, 2300, 2302,		2362	Tec	2356	Blu-ray Dis	SC .
		2317 2328 2338 2342	Sanvo	2134 2145 2217 2292	Technics	2151	Denon	2452, 2500, 2501
		2350, 2467	ScanMagic	2186	Technika	2362 2367	Hitachi	2460, 2461, 2463
	Phonotrend	2367	Schaub Lorenz	2362	Telefunken	2353	JVC	2472, 2473, 2475, 2478,
	Pioneer	2016 2017 2018 2019	Schneider	2176	Tencai	2353		2496 2499 2511
	Tioneer	2010, 2017, 2018, 2019,	Scientific Labo	2255	Tavion	2302	LG	2033 2456 2457
		2055, 2052, 2054, 2055,	Scientific Labs	2355	Thata Diaital	2162, 2333, 2337	Marantz (US)	2454 2455
		2109, 2137, 2180, 2190,	Scou	2101, 2557	Theta Digital	2137	Mitsubishi	2450 2451
		2212, 2209, 2272, 2299,	Seettech	2304	Thomson	2185, 2188, 2554, 2572	Onkyo	2450, 2451
		2304, 2305, 2306, 2307,	SEG	2161, 2355, 2363, 2380	Тока	2356, 2380	Damaaamia	2011 2200 2214 2476
		2308, 2309, 2310, 2311,	Sharp	2006, 2040, 2088, 2091,	Top Suxess	2364	Panasonic	2011, 2209, 2214, 2470,
		2344, 2345, 2347, 2379		2182, 2194, 2220, 2221,	Toshiba	2032, 2036, 2037, 2039,	DI '1'	2477, 2479
	Pointer	2362		2231, 2236, 2293, 2340		2048, 2049, 2054, 2055,	Philips	2510
	Polaroid	2125, 2215, 2235	Shinsonic	2245		2072, 2073, 2076, 2078,	Pioneer	2212, 2506
	Portland	2362	Sigmatek	2359, 2364		2079, 2086, 2145, 2159,	Samsung	2045, 2113, 2498
	Powerpoint	2363	Silva	2356		2218, 2233, 2256, 2259,	Sharp	2194, 2220, 2221, 2497,
	Prima	2252	Singer	2354, 2355		2296, 2369, 2472		2502, 2503
	Proceed	2130	Skymaster	2325, 2355	TRANScontinents	2363, 2367	Sony	2075, 2453, 2458, 2459,
	Proscan	2156	Skyworth	2356	Transonic	2367		2507
	Prosonic	2360, 2377	Slim Art	2362	Trio	2362	Toshiba	2462
	Protron	2202	SM Electronic	2355	Trutech	2242	Yamaha	2064, 2448, 2449, 2474,
	Provision	2358	Sonic Blue	2133	TruVision	2359		2505
	Pve	2144	Sontech	2366	TSM	2364		
,	Owestar	2148	Sony	2004, 2005, 2007, 2009,	Umax	2361		
	Raite	2380	j	2014, 2015, 2023, 2026,	United	2367		
	RCA	2021 2029 2104 2105		2027 2052 2068 2069	Urban Concepts	2159	DVR	
	Ren	2131 2149 2156 2157		2070 2071 2074 2075	US Logic	2245	Bush	2110
		2229		2084 2085 2087 2168	Venturer	2149	Hitachi	2090
	RedStar	2356 2360 2362		2171 2208 2210 2211	Viewmaster	2364	Panasonic	2066, 2067, 2093, 2116,
	Degent	2153		2171, 2208, 2210, 2211,	Vocopro	2204		2117, 2119, 2120, 2122,
	Regent	2155		2236, 2273, 2264, 2265,	VocoPio	2200		2123
	Dimon	2355		2212, 2213, 2214, 2513,	Waitea	2264	Philips	2108 2111
	RIIIIax	2122	Carra dana atau	2318, 2319, 2400	Wallee	2304	Pioneer	2016 2017 2018 2019
		2155	Soundmaster	2355	wentech	2382	rioneer	2002 2004 2005 2109
	Roadstar	2331, 2358	Soundmax	2355	westinghouse	2063, 2250	RCA	2105
	Ronin	2363	Spectra	2363	Wharfedale	2354, 2355	Sameung	2103
	Rotel	2203	Spectroniq	2201	Woxter	2361, 2364	Sharp	2008 2001
	Rowa	2154, 2383	Standard	2355	Xbox	2156, 2183	Sharp	2088, 2091
	Rownsonic	2353	Star Cluster	2355	Xlogic	2355, 2362	Solly Test 1	2084, 2085, 2087
	Saba	2148, 2188	Starmedia	2358, 2364	XMS	2362	Tosmba	2080, 2218
į	Sabaki	2355	Sungale	2204	Xoro	2382	victor	24/3
į	Saivod	2362	Sunkai	2362	Yamada	2051, 2361, 2363	ramaha	2089, 2118
į	Sampo	2141	Superscan	2150	Yamaha	2056, 2064, 2065, 2080,		
			Supervision	2355		2081, 2082, 2083, 2089,		
			Sylvania	2012, 2137, 2150, 2178,		2118, 2151, 2323		
				2230, 2239	Yamakawa	2363, 2380		

DVD Reco	order
Aspire	2222
Astar	2240
Broksonic	2146
Go Video	2213
Litashi	2213
Intacili	2002
Insigma	2002
Irradio	2053
JVC	2100, 2101, 2106, 2107
LG	2033, 2057, 2223, 2238
Liteon	2043
Panasonic	2011, 2034, 2058, 2062,
	2116, 2117, 2119, 2120,
	2121, 2123
Philips	2008, 2044, 2050, 2051,
Ĩ	2147
Pioneer	2017, 2035
Pve	2144
Samsung	2000 2112 2216
Sancui	2000, 2112, 2210
Sanvo	2075
Sanyo	2217
Sony	2004, 2003, 2007, 2032,
	2068, 2069, 2074, 2208,
~	2210, 2211
Sylvania	2239
Toshiba	2032, 2036, 2037, 2039,
	2049, 2054, 2055, 2076
Yamaha	2056
Cable	
ABC	3002 3003 3017 3066
пве	3067 3086 3003 3110
	3122
ADR	3020
ADD	2020
Adelphia	3081
Alcatel	3016
Americast	3124
Amstrad	3022, 3098
Antronix	3065, 3070
Archer	3070
Arcon	3098
AT&T	3095
Axis	3098
Bell South	3124
Cable Vision	3092
Cabletenna	3065

Cabletime

3104

Cableview	3087				
Clearmaster	3127				
ClearMax	3127				
Clyde Cablevision	3105				
Colour Voice	3068				
Comcast	3084, 3088, 3117				
Comcrypt	3107				
Comtronics	3069				
Contec	3074				
Coolmax	3127				
COX	3084				
Cryptovision	3110				
Director	3084				
Eastern	3075				
Everquest	3123				
Fidelity	3098				
Filmnet	3107				
Filmnet Cablecry	/pt				
-	3111				
Filmnet Comcry	pt				
5,	3111				
Finlux	3097				
FIOS	3004				
Focus	3126				
Foxtel	3022				
France Telecom	3100, 3101				
Freebox	3023				
GC Electronics	3070				
GE	3066, 3093				
GEC	3105				
Gemini	3072, 3123				
General Instrume	ent				
	3017, 3025, 3066, 3084,				
	3090, 3096, 3117				
Goldstar	3120				
Gooding	3099				
Grundig	3098, 3099				
Hamlin	3073, 3078				
Hirschmann	3097				
Hitachi	3066				
HomeChoice	3106				
Humax	3021, 3080, 3083				
ITT Nokia	3097				
Jasco	3123				
Jerrold	3017, 3018, 3025, 3066,				
	3072, 3084, 3090, 3096,				
	3119, 3123				
JVC	3099				
Kabel Deutschland					
	3024, 3027, 3121				

Macab	3101
Magnavox	3079
Maspro	3099
Matsui	3099
MegaCable	3117
Memorex	3076, 3122
Minerva	3099
Mnet	3107
Motorola	3025, 3026, 3084, 3088,
	3090, 3095, 3117
Movie Time	3077 3109
Mr Zapp	3101
Multichoice	3107
Multitech	3127
NEC	2064
NET Data:1	2005
NET DIAZII	2007
Nokia	2101
NOOS	3101
NSC	3077
Oak	3074
Pace	3006, 3089, 3121
Palladium	3099
Panasonic	3112, 3118, 3122
Paragon	3122
Philips	3068, 3071, 3079, 3099,
	3100, 3101, 3103
Pioneer	3001, 3006, 3094, 3098,
	3114, 3116, 3120
Popular Mechan	ics
•	3126
Proscan	3066, 3093
Pulsar	3122
PVP Stereo Visu	ual Matrix
	3018
Ouasar	3122
RadioShack	3123 3127
RCA	3030 3031 3087 3118
Realistic	3070
Recoton	3126
Recoton Degel	2078
Degener	2075
Demokran de	2066
Remorandi	3000
Runco	3122
Sagem	20(0, 2020, 2114, 2120)
Samsung	3069, 3089, 3114, 3120
SAT	3098
Scientific Atlanta	3000, 3001, 3002, 3003,
	3006, 3028, 3029, 3081,
	3086, 3089, 3094, 3095,
	3108

3072, 3123 Signal Signature 3066 Sony 3092, 3125 3118 Sprucer Standard Component 3115 3017, 3072, 3119, 3123 Starcom Stargate 3072, 3123 3072, 3123 Starquest Supercable 3090 Supermax 3127 3107, 3111 Tele+1 TELENET 3007 Telepiu 3107 Thomson 3082, 3091 TIME WARNER 3084 Tocom 3067 Torx 3017 3122 Toshiba 3127 Tristar Tudi 3102 Tusa 3072, 3123 TV86 3077 3065, 3070 Unika United Cable 3018, 3119 Universal 3065, 3070 3097, 3099 Universum V2 3127 Videoway 3019 View Star 3074, 3077, 3079 3127 Viewmaster Vision 3127 Visiopass 3097, 3100, 3101 Vortex View 3127 3098 Wittenberg Zenith 3113, 3122, 3124 3126 Zentek

Satellite

AB Sat

AB Sat	4216, 4217
AccessHD	4104
ADB	4220
AGS	4216
Akai	4053, 4055
Alba	4001, 4004, 4006, 4007,
	4062, 4217
Aldes	4005, 4007, 4010
Allsat	4048, 4053, 4055

Allsonic	4005, 4008, 4024	Comag	4080, 4081, 4082, 4083,	Emanon	4001	Hirschmann	4015, 4024, 4210, 4216,
Alltech	4217		4086	Emme Esse	4008, 4024		4218, 4219
Alpha	4053	Commlink	4005	Engel	4217	Hisawa	4013
Alpha Digital	4104	Comtech	4050	Ep Sat	4006	Hisense	4016
Alphastar	4077	Condor	4008, 4024, 4219	EURIEULT	4031	Hitachi	4006, 4114, 4199, 4203
Amitronica	4217	Connexions	4014, 4024	Eurodec	4052	Homecast	4084, 4085, 4087
Amstrad	4011, 4035, 4217, 4218	Conrad	4024, 4215, 4218, 4219	Europa	4053, 4218, 4219	Houston	4048
Anglo	4217	Conrad Electronic	4217, 4219	Europhon	4219	HTS	4117
Ankaro	4005, 4008, 4024, 4217	Contec	4050	Eurosat	4011	Hughes	4064, 4068, 4192, 4194,
Anttron	4001, 4004	Coolsat	4096	Eurosky	4008, 4011, 4215, 4218,		4196, 4202
Apollo	4001	Cosat	4048		4219, 4024	Hughes Network	Systems
Armstrong	4011, 4053	Coship	4109	Eurostar	4011, 4215, 4219		4071
Artec	4100	Crown	4011	Eutelsat	4217	Humax	4025, 4030, 4060, 4097
Asat	4053, 4055	Daeryung	4014	Exator	4001, 4004	Huth	4005, 4011, 4012, 4013,
ASLF	4217	Daewoo	4057, 4217	Expressvu	4117		4048, 4050, 4219, 4223
Astacom	4216	DDC	4007	Fenner	4024, 4212, 4217	Hypson	4031
Astra	4009, 4011, 4054, 4217,	Delega	4007	Ferguson	4006, 4052, 4214	Ilo	4016
	4219	Dew	4050	Fidelity	4218	Imex	4031
Astro	4004, 4008, 4010, 4015,	Diamond	4051	Finlandia	4006	Innovation	4008
	4024, 4213, 4218, 4219	Digiality	4219	Finlux	4006	Insignia	4107
AudioTon	4004, 4048	Digital Stream	4105	FinnSat	4050, 4052	Intertronic	4011
Aurora	4222	DIRECTV	4056, 4064, 4067, 4068,	Flair Mate	4217	Intervision	4048, 4219
Austar	4222		4070, 4071, 4074, 4107,	Foxtel	4222	ITT Nokia	4006
Axiel	4216		4116, 4119, 4121, 4122,	Freecom	4001, 4049, 4218	Jerrold	4019
Axis	4008, 4009, 4024, 4050		4123, 4127, 4192, 4193,	FTEmaximal	4024, 4217	Johansson	4013
BBK	4205		4194, 4195, 4196, 4197,	Fuba	4001, 4008, 4014, 4015,	JOK	4216
Best	4008, 4024		4198, 4199, 4200, 4201,		4024, 4055, 4215	JSR	4048
Blaupunkt	4015		4202, 4203, 4206, 4207,	Galaxis	4005, 4008, 4009, 4024,	IVC	4029, 4065, 4089, 4117
Blue Sky	4217		4221		4048, 4050, 4215, 4222	Kamm	4217
Boca	4011, 4054, 4059, 4217	Discoverer	4212	GE	4066, 4093, 4111, 4197	Kathrein	4015, 4034, 4042, 4053,
Boston	4216	Discovery	4216	General Instrum	ent		4055, 4063, 4215, 4216,
Brain Wave	4013	Diseac	4216	oonora mou an	4019, 4073		4217
Broadcast	4012	Dish Network	4018 4065 4089 4092	GMI	4011	Kathrein Eurostar	4215
Broco	4217	Dish ricerioni	4094 4095 4117	GOI	4117	Klan	4216
BSkyB	4035 4041	Dishpro	4018 4117	Goldbox	4213	Konig	4219
BT	4216	Distrisat	4053	GoldStar	4049	Kosmos	4049
Bubu Sat	4210	Ditristrad	4048	Goodmans	4002 4006 4029	KR	4004
Bush	4006 4045	DNT	4014 4053 4055	Goodmind	4111	Kreiselmever	4015
Cambridge	4000, 4045	Drake	4072	Grandin	4031	K-SAT	4015
Canal Satellite	4210	DSty	4072	Grothusen	4001 4049	Kvostar	4001
Canal Saterine	4213	Dune	4024 4240 4242	Grundig	4004 4006 4015 4035	L&S Electronic	4024
CantiveWorks	4000	Echostar	4014 4018 4065 4080	Orunuig	4211 4218 4222	Lasat	4008 4010 4024 4054
Chapter Works	4033	Lenostai	4014, 4018, 4005, 4089,	Hängel & Gratel	4210, 4210, 4222	Lasai	4008, 4010, 4024, 4054,
Chaparral	4007, 4110	Finhall	4001 4005 4011 4217	Hantor	4001 4013	Lasonia	4212, 4213, 4219
CHEDOKEE	4075	Linnen	4001, 4003, 4011, 4217,	Hanni	4010	Lasonic	4001 4024 4040 4215
Chase	4210	Flan	4210	Houppougo	4010	Leileo	4001, 4024, 4049, 4213,
CityCom	4212, 4217	Elap Elalta	4210, 4217	Haliosom	4044	Long	4217, 4219
Clatrania	4000, 4213, 4219	Elekta	4010	Hellocolli	4219	Leng	4015
Clatronic	4015	EISat	4217	Hellum	4219	Lennox	4048
UNT	4010	Eita	4001, 4008, 4024, 4048,	Hinari	4007	Lenson	4218
			4053, 4055			Lexus	4053

LG	4049, 4103, 4107	Nokia	4006, 4040	Quelle	4015, 4215, 4219	SkySat	4212, 4217, 4218, 4219
Lifesat	4008, 4024, 4212, 4217	Nordmende	4001, 4006, 4007, 4010,	Quiero	4052	Skyvision	4048
Lifetec	4008		4052	RadioShack	4019	SM Electronic	4212, 4217
Lorenzen	4219	Nova	4222	Radiola	4053, 4055	Smart	4215, 4217
Lorraine	4049	Novis	4013	Radix	4014, 4037	Sony	4067, 4070, 4213
Lupus	4008, 4024	Oceanic	4051	Rainbow	4004	SR	4011, 4054
Luxor	4218	Octagon	4001, 4004, 4050	RCA	4066, 4093, 4112, 4113,	Star Choice	4019
Lyonnaise	4052	Okano	4011		4116, 4118, 4119, 4197,	Starland	4217
Macab	4052	Optex	4048		4122, 4207	Starring	4013
Magnavox	4127, 4101	Optus	4213, 4222, 4223	Realistic	4078	Start Trak	4001
Manata	4031, 4216, 4217	Orbitech	4001, 4212, 4213, 4218	Redpoint	4009	Strong	4001, 4004, 4008, 4024,
Manhattan	4006, 4010, 4048, 4216	OSat	4004	Redstar	4008, 4024		4049, 4222
Marantz	4055	Otto Versand	4015	RFT	4005, 4053, 4055	STS	4115
Mascom	4010	Pace	4006, 4015, 4035, 4043,	Roadstar	4217	STVI	4031
Maspro	4006, 4217		4047, 4204, 4216, 4243	Roch	4031	Sumida	4011
Matsui	4216	Pacific	4051	Rover	4024, 4217	Sunny Sound	4024
Max	4219	Packsat	4216	Saba	4010, 4215, 4216, 4219	Sunsat	4217
Mediabox	4213	Palcom	4007	Sabre	4006	Sunstar	4011, 4024, 4054
Mediamarkt	4011	Palladium	4011, 4218	Sagem	4023, 4052	Supermax	4223
Mediasat	4009, 4213, 4218	Palsat	4212, 4218	Sakura	4050	Tandberg	4052
Medion	4008, 4024, 4217	Panasat	4222	Samsung	4000, 4001, 4003, 4032,	Tandy	4004
Medison	4217	Panasonic	4006, 4035, 4036, 4121,		4064, 4069, 4071, 4120,	Tantec	4006
Mega	4053, 4055		4124, 4126, 4198, 4221		4123, 4196, 4200	TCM	4008
Memorex	4127	Panda	4006, 4219	SAT	4007, 4218	Techniland	4012
Metronic	4001, 4004, 4005, 4010,	Pansat	4125	Sat Cruiser	4223	TechniSat	4014, 4021, 4026, 4027,
	4028, 4031, 4217	Patriot	4216	Sat Partner	4001, 4004, 4010, 4013,		4038, 4039, 4053, 4212,
Metz	4015	Paysat	4127		4049, 4218		4213, 4218
Micro electroni	c 4217, 4218, 4219	PCT	4110	Sat Team	4217	Technology	4222
Micro Technolog	y 4217	Philco	4101	Satcom	4012, 4219	Technosat	4223
MicroGem	4106	Philips	4006, 4033, 4053, 4055,	Satec	4217	Technowelt	4219
Micromaxx	4008, 4024		4061, 4068, 4071, 4127,	Satelco	4024	Teco	4011, 4054
Microstar	4008		4196, 4201, 4202, 4203,	Satford	4012	Telanor	4007
Microtec	4217		4206, 4213, 4216	Satmaster	4012	Telasat	4215, 4219
Minerva	4015	Phoenix	4050	Satplus	4212	Telecom	4217
Mitsubishi	4006, 4015, 4202	Phonotrend	4006, 4005, 4048	Schneider	4008, 4212, 4216	Telefunken	4001, 4017, 4216
Mitsumi	4054	Pioneer	4046, 4213	Schwaiger	4051, 4212, 4219	Teleka	4004, 4011, 4014, 4218,
Morgan's	4011, 4053, 4054, 4055,	Polsat	4052	SCS	4215		4219
	4217	Predki	4013	Seemann	4009, 4011, 4014	Telemaster	4010
Motorola	4019, 4088, 4090, 4091	Premiere	4048, 4213	SEG	4001, 4008, 4013, 4024	TELENET	4241
Multichoice	4222	Priesner	4011	Seleco	4048	Telesat	4219
Multitec	4212	Primestar	4076	Servi Sat	4031, 4217	Telestar	4212, 4213, 4218
Muratto	4049	Profile	4216	Siemens	4015	Televes	4006, 4218
Mysat	4217	Promax	4006	Silva	4049	Telewire	4048
Navex	4013	Prosat	4005, 4007	Skantin	4217	Tempo	4223
Neuhaus	4009, 4048, 4217, 4218,	Proscan	4066, 4093, 4122, 4197	Skardin	4009	Tevion	4008, 4217
	4219	Protek	4051	Skinsat	4218	Thomson	4006, 4020, 4052, 4058,
Neusat	4217	Proton	4016	SKR	4217		4208, 4213, 4215, 4216,
Next Level	4019	Provision	4010	Skymaster	4005, 4017, 4022, 4212,		4217, 4219
NextWave	4223	Quadral	4005, 4007, 4008, 4216,	-	4217	Thorens	4051
Nikko	4011, 4217		4024	Skymax	4053, 4055	Thorn	4006
				-			

Tivax	4104	Variosat	4015
Tivo	4196	Vega	4024
Tokai	4053	Ventana	4053, 4055
Tonna	4006, 4012, 4048, 4217,	Viewsat	4098
	4218	Visiosat	4013, 4048, 4216, 4217
Toshiba	4194, 4202, 4203	Voom	4019
Triad	4049	Vortec	4001
Triasat	4218	Welltech	4212
Triax	4015, 4215, 4217, 4218	WeTeKom	4212, 4218
Turnsat	4217	Wevasat	4006
Tvonics	4214	Wewa	4006
Twinner	4031, 4217	Winersat	4013
UEC	4222	Wisi	4006, 4014, 4015, 4218,
Uher	4212		4219
UltimateTV	4070	Woorisat	4010
Uniden	4079, 4127	Worldsat	4216
Unisat	4011, 4050, 4053	Xrypton	4024
Unitor	4013	XSat	4217
Universum	4015, 4215, 4219	Zehnder	4008, 4209, 4010, 4215,
US Digital	4016		4024
		Zenith	4102, 4107, 4195
		Zodiac	4004

CD

Yamaha 5082, 5095

CD Recorder

Yamaha 5083

MD

Yamaha 5080, 5081, 5086

Таре

Yamaha 5084, 5087

Tuner

Yamaha 5066, 5085, 5088, 5090, 5092

LD

Yamaha 2080

Amplifier

Yamaha

5019, 5020, 5098

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