Infotainment system

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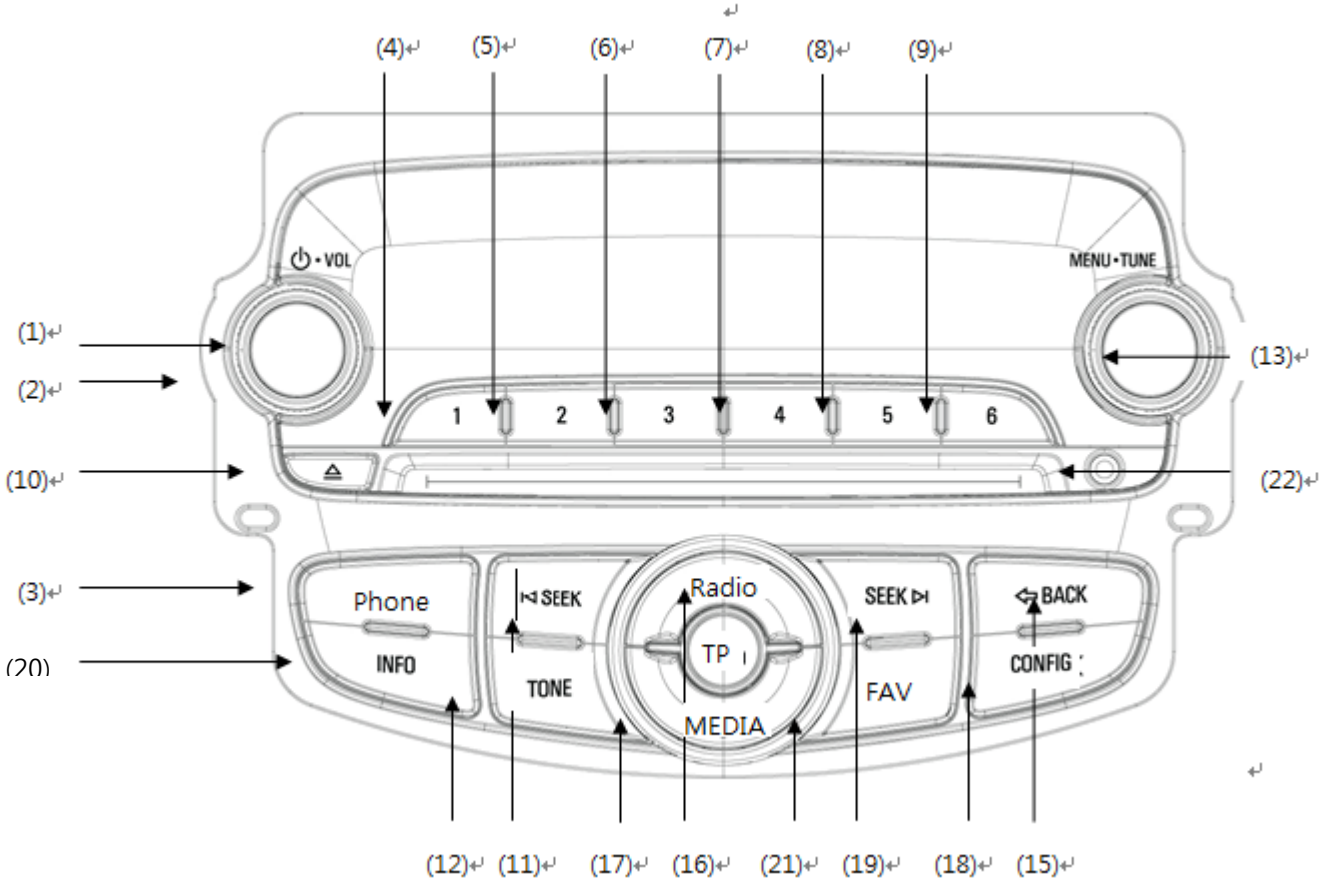


1. **[POWER]**
   When the power is ON:
   -.Short press: Audio mute on/off.
   -.Long press: Turns on/off the radio.

   When the power is OFF:
   Pressing the power button turns the power ON.

2. **[VOLUME]**
   Volume adjustment

3. **[PHONE/MUTE]**
   Case 1: without hands-free function
   -.Audio mute on/off

   Case 2: with hands-free function
   -.Short press: Entrance to phone mode
   -.Long press: Audio Mute on/off

4~9. **[PRESET] #1~#6**
   Radio Mode
   -.Short Press: Recall the pre-memorized station in the preset memory
   -.Long Press: Store to preset memory

10. **[EJECT]**
   Eject the disc from the CD deck.

11. **[TUNE DOWN]**
   Radio mode
   -.Short Press: FM Memory Skipping Down
   -.Long Press: Seek Down

   CD mode
   -.Short Press: previous track or file playback
   -.Long Press: Fast-reverse playback

12. **[TONE]**
   Entrance to audio setting menu

13. **[MENU]**
   Rotation in Primary Page
   Radio mode
   -.Clockwise Direction: Next Frequency
   -.Anti-clockwise Direction: Previous Frequency

Playback mode like CD, USB iPod and so on
-.Clockwise Direction: Show track lists and next track
-.Anticlockwise Direction: Show track lists and previous track

Push on Primary Page
-.Entrance to each menu

Push on Sub-menu Page
-.selection

Rotation in Sub-menu Page
-.Clockwise Direction: Show track lists and next track
-.Anticlockwise Direction: Show track lists and previous track

15. **[BACK]**
Return to previous display or cancel

16. **[Radio]**
Radio Mode selection
AM or FM radio band selection

17. **[MEDIA]**
Entrance to CD, Auxiliary Input and A2DP

19. **[TUNE UP]**
Radio mode
-Short Press: FM Memory Skipping Up
-.Long Press: Seek Up

CD mode
-.Short Press: Next track or file playback
-.Long Press: Fast-forward playback

20. **[INFO]**
Information display about current mode

21. **[FAV]**
Radio Mode
-.Short Press: Selection favorite page
- .Long Press: Auto-store function, Search and memory the best 12 stations.

22. **Aux Socket**
Stereo Jack input

28. **[CONFIG]**
Entrance to configuration menu

Operation Power On/Off

Power On F Press [POWER] to turn on the radio.

Power off Press [POWER] turn off the radio.

Audio Mute

Press [PHONE/MUTE] to make audio mute when the power is on.

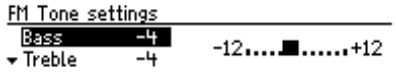
Volume Adjustment

Turn the volume knob clockwise to increase the audio volume.

Turn the volume knob counter-clockwise to decrease the audio volume.

Audio Adjustment Bass Tone Adjustment

In the radio or playback mode, Press the [TONE] you can see the tone main menu.



Radio

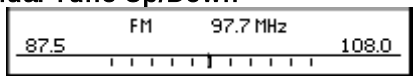
AM-FM Radio Radio Mode Selection

Press the [BAND] to listen the radio from other mode.

Band Change

The band changes from AM to FM or FM to AM all times [BAND] pressed.

Manual Tune Up/Down



Seek Up/Down

Press [SEEK UP]/[SEEK DOWN] to find next/previous station automatically.

Favorite preset page

Each time push [FAV], Favorite Preset Page is increased

Favorite Page1, Favorite Page 2, …, Favorite Page6

The number of favorite page can adjust in configuration menu.

Favorite preset memory

It have 6 favorite pages and store up to 48 stations regardless of AM or FM band.

It can store current station by the following procedure

Step 1: Seek station or tune station manually you want.

Step 2: Select the favorite page by pressing [FAV/INFO].

Step 3: Press and hold [PRESET #] more than 1 second

By above procedure, the 48 stations are stored in the favorite preset memory.

Recall favorite preset

You can listen to the station stored in the favorite preset by the following procedure.

Step 1: Select the favorite page by pressing [FAV/INFO].

Step 2: press [PRESET #] which is stored the station you want to listen to.

Auto-store Function Auto-store

Press [FAV] more than 1 second, then radio starts auto-store function.

Traffic announcement reception

Press the [TP] to listen the traffic announcement from other station.

Traffic announcement reception cancel

Press the [TP/MENU] to cancel the traffic announcement reception the radio make the traffic announcement disable.

Traffic station seek

Press the [TP/MENU] in the station don't have traffic information, the **Infotainment system 87** radio search the next station that have the traffic announcement.

Radio Reception

Radio reception may be disrupted by static, noise, distortion or loss of reception due to „ changes in distance from thetransmitter,multi-path reception due to reflection andshadowing.

Audio players

CD Player

As each CD is inserted, the radio will appear on the display and as each CD is loading, File check will appear on the display.

Once playback begins, the track and track number will appear on the display.

If the ignition or radio is turned off with a CD in the player, it will stay in the player. When a CD is in the player and the ignition is turned on, the radio must be turned on before the current CD will start playback. When the ignition and radio are turned on, the CD will start playing where it stopped, if it was the last selected audio source.

The CD player can play the smaller 3 inch (8cm) single CDs with an adapter ring. Full-size CDs and the smaller CDs are loaded in the same manner.
If playing a CD-R, the sound quality may be reduced due to CD-R quality, the method of recording, the quality of the music that has been recorded, and the way the CD-R has been handled. There may be an increase in skipping, difficulty in finding tracks, and/or difficulty in loading and ejecting. If these problems occur, check the bottom surface of the CD. If the surface of the CD is damaged, such as cracked, broken, or scratched, the CD will not play properly. If the surface of the CD is soiled, see Care of Your CDs for more information.

If there is no apparent damage, try a known good CD.

Do not add any label to a CD, it could get caught in the CD player. If a CD is recorded on a personal computer and a description label is needed, try labeling the top of the recorded CD with a marking pen instead.

Caution

If you add any label to a CD, insert more than one CD into the slot at a time, or attempt to play scratched or damaged CDs, you could damage the CD player. When using the CD player, use only CDs in good condition without any label, load one CD at a time, and keep the CD player and the loading slot free of foreign materials, liquids, and debris.

Disc Insert

Insert a CD into a CD slot with CD label up, then the radio insert into the slot automatically and does playback.

CD Playback Mode Selection

Insert a CD into CD deck, then the radio goes to the playback mode. Or press the [CD] to playback the disc from other mode when CD is inserted.

Infotainment system 89 CD EJECT

Press the [EJECT], then the disc willbe ejected from the radio.Pull out the disc out of the radio.

Pause

Press [CD] to pause playback while a CD is playing back."PAUSE' will flash on the display.Press [CD] again to start playback.

Next/Previous Track

Press [TUNE UP/TUNE DOWN], then the radio starts playback of the next/previous track.

Fast forward/Fast reverse

Press and hold [TUNE UP/TUNE DOWN], then the radio plays back fast forward/fast reverse.

Next/Previous Folder - only MP3/WMA disc

Press [SEEK UP/SEEK DOWN], then the radio start playback of the next/previous track.

RPT (Repeat)

Press [2 RPT], then radio plays back current track repeatedly. To cancel this function, press [2 RPT] again.

RDM (Random):

Press [3 RDM], then radio plays back tracks randomly.To cancel this function, press [3RDM] again.

INT (Intro-Scan):

Press [4 INT], then radio plays back just 10 seconds of the current track, jump to next track and do this actionrepeatedly.To cancel this function, press [4 INT] again.

All/Directory Mode - only MP3/WMA disc

Repeat, intro-scan and random function operates in this folder when"all mode" is active.Press [1 DIR] then radio operates inthe directory mode.To cancel this function, press [1 DIR] again.

ID3 Tag information display - only MP3/WMA disc

Press [FAV/INFO], the radio displays the ID3 tag information of the current files.

Auxiliary Devices USB playback mode USB Playback Mode Selection

Press the [USB] to change to play back the USB files from other mode.

USB memory insertion

Insert a USB memory into the USB socket, so the radio plays back the USB files automatically.

USB Extraction

Pull the USB memory from the USB socket by hand.

*** Other functions are same with CD mode.**

AUX mode

The radio has one auxiliary input jack(diameter 3.5mm) located on the lower right side of the faceplate.

This is not an audio output; do not plug the headphone set into the front auxiliary input jack.

You can however, connect an external audio device such as an iPod, laptop computer, MP3 player, CD changer, or XM™, receiver, etc. to the auxiliary input jack for use as another source for audio listening.

AUX In Mode Selection

Press [AUX] in the other playback mode. If the auxiliary jack isn't detected for the presence of an output jack, the aux mode will be prevented.

BLUETOOTH Mode

Pairing and connection.

1. Using Configuration.
   Step 1. Press Config button.
   Step 2. Choice Bluetooth Settings
   Step 3. Choice Bluetooth
   Step 4. Choice Pair device(Add device) -> "Waiting for Pairing [0000]"
   Step 5. Try to pair with set by phone.
   Step 6. If phone support auto connection, phone would be connected automatically after paring with set.
   If phone doesn't support auto connection, you have to try to connect by using device lists.

2. Using Phone menu.
   Step 1. Press phone button. ("No phone available")
   Step 2. Press phone button again.
   Step 5. "Waiting for Pairing [0000]"
   Step 6. Try to pair with set by phone.

Make a call

Step 1 : Connect phone and set (refer to pairing and connection)
Step 2. Press phone button. (“Phone’s name”)
Step 3. Press phone button again. (“Enter number, Phonebook, Call lists, Bluetooth”)
Step 4 : Choice enter number (By pressing menu button at enter number)
Step 5 : Choice number that you want to make a call (By pressing menu button at number)
Step 6 : Make a call (By pressing menu button at number)

Phonebook Download

Whenever turn on the radio, radio download phonebook automatically.

Call list

(If phone send car audio call lists data, car audio will display cell phone’s call list, otherwise car audio display call lists only after connection with car audio.)

Step 1 : Connect phone and set (refer to pairing and connection)
Step 2. Press phone button. (“Phone’s name”)
Step 3. Press phone button again. (“Enter number, Phonebook, Call lists, Bluetooth”)
Step 4 : Choice Call list (By pressing menu button at Call list)
Step 5 : Choice Incoming call (pressing menu button at Incoming call)
Step 5 : Choice Outgoing call (pressing menu button at Incoming call)
Step 5 : Choice missed call (pressing menu button at missed call)

Adjust Ring volume and Ring tone

(If phone send car audio phone’s ring tone, phone’s ring tone will be heard to user, in this case, user can’t adjust ring volume by car audio, otherwise user can adjust ring tone and volume by car audio)

Step 1. Press phone button. (“Phone’s name” or “No phone available.)
Step 2. Choice Bluetooth Settings (By pressing menu button at Bluetooth settings)
Step 3. Choice Sound&Signals (By pressing menu button at Sound&Signals)
Step 4. Choice Ring volume (By pressing menu button at Ring volume)
Step 4. Choice Ring tone (By pressing menu button at Ring tone)

1. Adjust Ring volume
   Ring volume means that let user know incoming call’s ringing.
   Ring volume is louder toward 3

2. Adjust Ring Tone

User can choice incoming ring tone. The number of ring tone are 5.

Bluetooth factory restore

Step 1. Press phone or config button

Step 3. Choice Bluetooth Settings (By pressing menu button at Bluetooth settings)

Step 4. Choice Factory restore (By pressing menu button at Factory restore)

Step 5. Choice Ring volume (By pressing menu button at Ring volume)

Step 5. Choice Ring tone (By pressing menu button at Ring tone)

**** While device is downloading phonebook, connection would be disconnected => After downloading complete, device could be connected automatically****

⇨ **During download phonebook, our device doesn't support Handsfree function.**

**** A2DP could not be played, if you don't have tried to start to play music by phone after connection.****

Steering wheel audio controls

[PWR]

Power on: Press this button. Power off: Press this button more than 1 second.

Audio mute: Press this button when the power is on.

[+]

Press [+] button to increase the audio volume. Press this button, then the radio increases the audio level. If this button is pressed more than 1 second, then the radio increases the audio volume step by step.

[–]

Press [–] button to decrease the audio volume. Press this button, then the radio increases the audio volume. If this button is pressed more than 1 second, then the radio decrease the audio volume step by step.

[SEEK]

RADIO MODE

Press this button to move to next preset station. (Favorite preset #1 → #2→ #3→ #4...)

Press this button more than 1 second to search for the next station.

.

CDP MODE

Press this button to jump to the next track. (Track01 →Track02→...) Press this button more than 1 second to play back the track fast forward.

[MODE]

The play mode will be change by following order whenever this button is pressed. FM →AM→(CDP)→(USB)→(AUX)→FM... The radio skips the CDP mode if there is no disc in the radio. The radio skips the USB mode if there is no USB memory on the radio. The radio skips the AUX mode if there is aux jack in the socket on the radio.

General section

Power supply	DC 12V Negative Ground
Speaker impedance	4 ohm
Max. Power	20Wrms per channel into 4 channels at Vbatt = 14.3 V with THD ≤ 5%.
Weight	2210 g
Dimension	226 x 101 x 180
Active Current	Max 10A

MP3[WMA]/CD section

MP3

Variable Bit Rate (VBR)
8~320Kbps
Sample Rates : 16, 22, 32, 44.1, 48KHz
Channel : Mono, Stereo, Joint Stereo
Playlist Format (m3u, pls)
Support ID3 V1, v2X tag, ASCIIand Unicode.

WMA

Support for WMA 9 and over
Support Meta Data (—*.wax, *.asx (*.asf)…)
Presentation of the file system according to ISO file hierarchy and Flat file structure incl. Joliet Extension

CD Optical Disc Format Support

CDDA, CDR, CDRW, CDROM, Mixed Mode CD, Open Session CD, "Book on Disc" audio content

FM/MW/LW Radio section

AM_RANGE

Range Name	Lower Limit	Upper Limit
AMRange1	530kHz	1710kHz
AMRange2	531kHz	1602kHz
AMRange3	530kHz	1710kHz

AMRange4	522kHz	1710kHz
AMRange5	522kHz	1629kHz

FM_RANGE

Range Name	Lower Limit	Upper Limit	FM De-emphasis
FMRange1	87.7 MHz	107.9 MHz	75us
FMRange2	87.5 MHz	108.0 MHz	50us
FMRange3	88.0 MHz	108.0 MHz	75us
FMRange4	76.0 MHz	90.0 MHz	50us
FMRange5	87.0 MHz	108.0 MHz	50us
FMRange6	87.5 MHz	108.0 MHz	75us

Recommended Region Programming

Table 60: The Americas 1:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
Anguil&FGE	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Antigua and Barbuda	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Argentina	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Aruba	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Bahamas	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Barbados	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Belize	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Bermuda	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Boliva	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Brazil	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Canada	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1	Yes Info	$FGU
Cayman Is&FGEnds	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Chile	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Columbia	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Costa Rica	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4
Cuba	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Dominica	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Dominican Republic	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Ecuador	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE

Table 61: The Americas 2:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
El Salvador	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Falk&FGEnd Is&FGEnds	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
French Guiana	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Green&FGEnd	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Grenada	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Guadeloupe	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Guatema&FGE	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Guvana	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Haiti	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Honduras	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Jamaica	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Martinique	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Mexico	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1	Yes Info	$FGU
Montserrat	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Nether&FGEnds	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Nicaragua	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Panama	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Paraguay	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&UL4

Table 62: The Americas 3:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
Peru	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Puerto Rico	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Saint Kitts and Nevis	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Saint Lucia	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
St Pierre and Miquelon	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Suriname	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Trinidad and Tobago	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Turks and Caicos Is&FGEnds	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
USA	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1	YES Info	$FGU
Uruguay	530 - 1710kHz AM_Range_1	10khz AM_Step_2	1kHz AM_Step_2	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		&FGE
Virgin Is&FGEnds (British)	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		$FGU
Virgin Is&FGEnds (USA)	530 - 1710kHz AM_Range_1	10khz AM_Step_1	10kHz AM_Step_1	87.7-107.9 FM_Range_1	200kHz FM_Step_1	75us FM_Range_1		$FGU

Table 63: Africa and Middle East 1:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
Afghanistan	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	N/A	N/A	N/A		&UL8
Algeria	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	&UL8
Angola	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Benin	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Botswana	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Burkina Faso	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Cameroon	531-1602 AM_Range_2	9kHz AM_Step_3	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Central African Republic	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Chad	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	50kHz FM_Step_3	50us FM_Range_3		&UL8
Comoros	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Congo	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Cote d'Ivoire	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Djibouti	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Egypt	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	&UL8
Ethiopia	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	N/A	N/A	N/A		&UL8
Gabon	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Gambia	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Guinea-Bissau	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Gulf Cooperative Council	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8

Table 64: Africa and Middle East 2:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
Iran	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&UL8
Iraq	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Kenya	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Lesotho	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Libya	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Madagascar	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Malawi	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Mali	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Mauritania	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Mauritius	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Mayotte	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Morocco	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Mozambique	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Namibia	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Niger	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Nigeria	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Republic of Guinea	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Sao Tome & Principe	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8

Table 65: Africa and Middle East 3:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
Senegal	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Sierra	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Leone	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
South Africa	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Sudan	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Swaziland	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Tanzania	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Togo	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Tunisia	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Uganda	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Yemen	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Zaire	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8
Zambia	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2		&UL8

Table 66: Pacific and South Asia 1:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
Australia	522-1710 AM_Range_4	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		**&UL1**
Bangladesh	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Brunei Darussalam	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Cambodia	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
China	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.0-108.0 FM_Range_5	100kHz FM_Step_2	50us FM_Step_2		&FCN
Federated States of Micronesia	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Fiji	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Guam	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
India	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Indonesia	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Japan	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	76-90 FM_Range_4	100kHz FM_Step_2	50us FM_Step_2		**&UK1**
Kiribati	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Laos	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Macau	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Malaysia	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Maldives	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Myanmar	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Nauru	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	N/A	N/A	50us FM_Step_2		&FGA
Nepal	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA

Table 67: Pacific and South Asia 2:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	Option Code
New Caledonia	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
New Zealand	522-1710 AM_Range_4	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		**&UL1**
North Korea	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Northern Mariana Islands	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Pakistan	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Papus New Guinea	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Philippines	522-1629kHz AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGF
Singapore	N/A	N/A	N/A	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Solomon Islands	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	N/A	N/A	50us FM_Step_2		&FGA
South Korea	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_6	100kHz FM_Step_2	75us FM_Step_2		&FGA
Sri Lanka	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Taiwan	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.7-107.9 FM_Range_1	200kHz FM_Step_1	50us FM_Step_2		&FGD
Thailand	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	50kHz FM_Step_3	50us FM_Step_2		&FGA
Tonga	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Vanuatu	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA
Vietnam	531-1602 AM_Range_2	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Step_2		&FGA

Table 68: Europe and North Asia 1:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	TMC	Option Code
Albania	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Austria	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Belgium	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Bosnia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Bulgaria	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Canary Islands	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2			&U2L
Croatia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Czech Republic	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Coming soon	&U2L
Denmark	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Finland	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
France	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Germany	531-1602 AM_Range_2	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Greece	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Hungry	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Coming soon	&U2L
Iceland	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Ireland	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Israel	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Italy (Vatican City)	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Jordan	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L

Table 69: Europe and North Asia 2:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	TMC	Option Code
Kazakhstan	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2			&U2L
Lebanon	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Lithuania	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Luxembourg	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Macedonia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Madeira	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2			&U2L
Malta	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Moldova	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Monaco	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Morocco	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Netherlands	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Norway	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Poland	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Portugal	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Coming soon	&U2L
Romania	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Russia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Serbia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Slovakia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Slovenia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L

Table 70: Europe and North Asia 3:

Region Name	AMRange (kHz)	AMStep	AM Manual Tune	FMRange (MHz)	FMStep	FM De-emphasis	RDS	TMC	Option Code
Spain	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Sweden	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Switzerland	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L
Syrian	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2			&U2L
Tunisia	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2			&U2L
Turkey	522-1629 AM_Range_5	9kHz AM_Step_4	1kHz AM_Step_4	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data		&U2L
Ukraine	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2			&U2L
United Kingdom	522-1629 AM_Range_5	9kHz AM_Step_3	9kHz AM_Step_3	87.5-108.0 FM_Range_2	100kHz FM_Step_2	50us FM_Range_2	Yes Data	Yes	&U2L

FCC Information to User

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device mustaccept any interference received, including interference that may cause undesired operation

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

FCC RF exposure requirements

The antenna used with this module must be installed to provide a separation ditance of at least 20cm from all persons, and must not transmit simultaneously with any other antenna or transmiter except in accordance with FCC multi-transmter product procedures.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

FCC Compliance Information :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation