

entoneTM

Universal Remote Control

URC PLUS (v3)

User's Guide

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P/N: HYDRA_UG 1.0

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FCC Information

FCC ID S4A99-990120-00

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

NOTE: 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 or more 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.

Caution – any changes or modifications not expressly approved by Entone Incorporated could void the user's authority to operate this equipment.

Chapter 1

1.1 Introduction

The Entone Universal Remote Control Plus (URC PLUS) is designed to work either on Radio Signals (RF) or InfraRed (IR). It can control Hydra Multi-Television Gateway using RF from another room where is not at direct sight distance from the Hydra. Or, it can use IR to control Amulet Video Receiver at direct sight distance. The URC PLUS can also be used to control other A/V devices such as TV, DVD player and audio equipment using IR.

The URC PLUS differs from the old URC on the followings :

- The old URC can only support old Hydra hardware. URC PLUS supports both the old Hydra and new Hydra hardware (with URC PLUS logo printed on the front panel).
- URC PLUS supports Amulet
- URC PLUS supports more A/V devices

Loading Batteries

The URC PLUS comes with AA-size batteries, which need to be installed when you first receive your system. When you replace old batteries, you should replace all of the batteries. Use batteries of the same kind, for example alkaline or carbon zinc, and do not mix batteries of different kinds. Alkaline batteries last longer than carbon zinc.

Warning: Mixing old and new batteries or different types of batteries poses a fire hazard.

To load batteries to URC PLUS:

1. Press down on the battery cover's top latch and slide the cover off.
2. If you are changing out batteries, take out all of the old batteries.
3. Put the new batteries in. Make sure you match the plus ("+") ends with the plus markings on the battery case.
4. Slide the cover back into place.

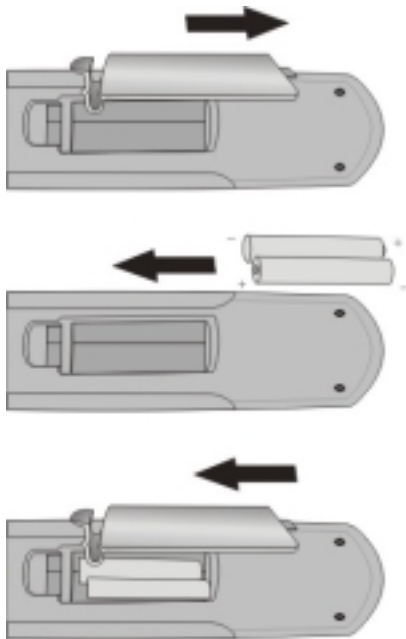


Figure 1-1 Loading Batteries to URC PLUS

Chapter 2

2.1 Controlling the Hydra

Hydra is a multi-television gateway. It can support multiple TVs in multiple rooms viewing different channels or TV programs. You can use URC PLUS to control Hydra using radio signals (RF). These radio signals travel over long distances and go through walls and other solid objects. You must connect the RF Remote Control Antenna to the rear panel of the Hydra.

Your Hydra comes with 3 URC PLUS. (Additional URC PLUS can be purchased separately.) Your URC PLUS must be registered to one of the 3 decoders before it can be used. One URC PLUS can only be registered to one decoder. However, you can register at most 3 URC PLUS to a decoder. After registration, you need to use the corresponding URC PLUS to control the decoders.

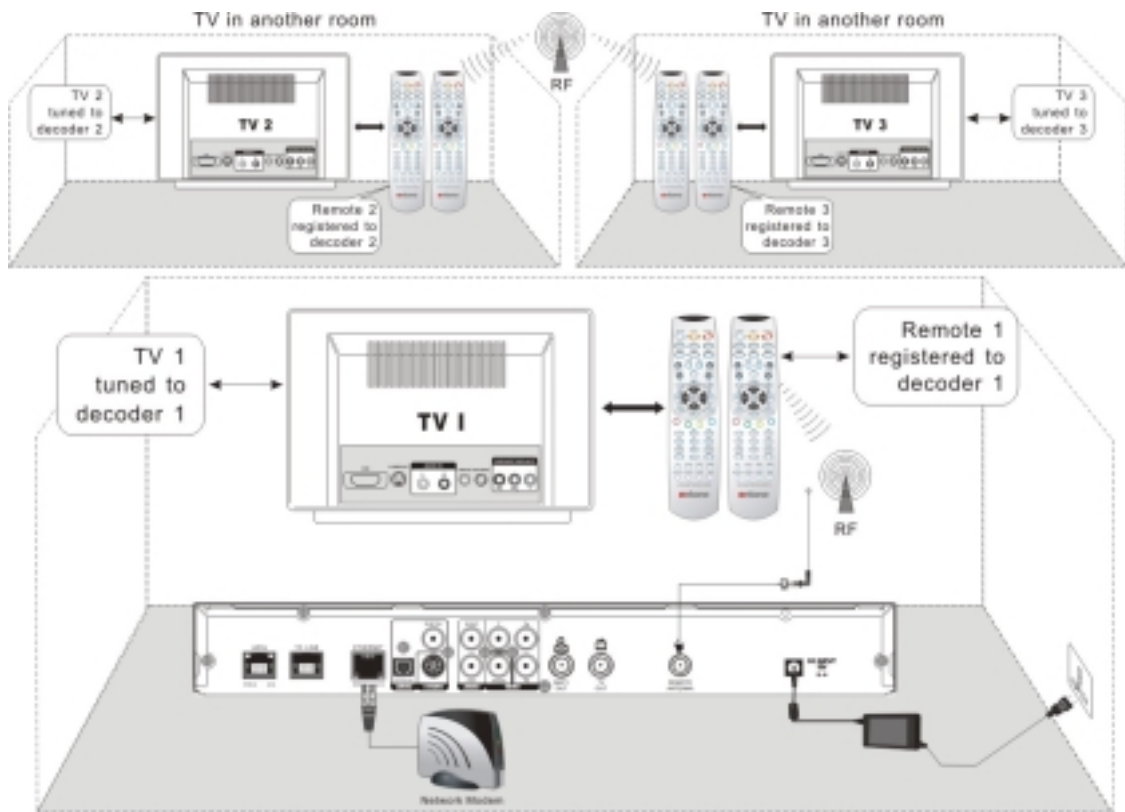


Figure 2-1 Controlling Hydra using RF URC PLUS

Here are some principles of the remote registration method:

- Each decoder allows a maximum of 3 URC PLUS to be registered and a registration list is maintained. If the user has registered 3 URC PLUS and tries to register another URC PLUS, the first registered URC PLUS will be removed from the registration list. This works as a first-in-first-out fashion.
- Each URC PLUS can only be registered for one decoder. If user tries to register a URC PLUS which is already registered to another decoder, that remote registration will be removed from the original registration list.
- The registration list is maintained in order. If the secondly registered URC PLUS is removed from the list, the third entry will move forth to the second and the third will be blank for a new URC PLUS to be registered.

You must install the RF Remote Control antenna before doing the registration. Please refer to the previous section for installing the RF Remote Control Antenna.

Attach the RF Remote Control Antenna

You need to attach the RF Remote Control Antenna to the Hydra's rear panel "REMOTE ANTENNA" input in order to use the radio control remotes.

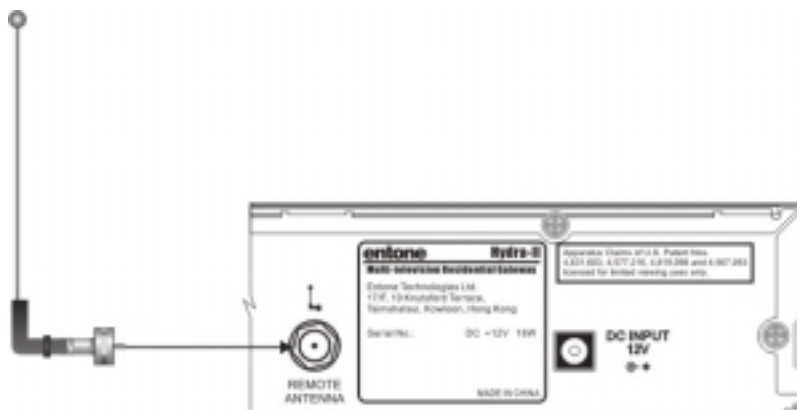


Figure 2-2 Attaching RF Remote Control Antenna

NOTE: Be sure to set the antenna straight up so that you can use the URC PLUS from as far away as possible. Don't let the antenna touch anything.

ATTENTION: If your URC PLUS isn't working very well from far away, you may be experiencing interference from objects near your receiver. To improve your URC PLUS's reception range, try any or all of the followings:

1. Place the receiver higher than all of the other equipment in your entertainment center.
2. Provide room above the receiver so that the antenna can be installed straight up. If this is not possible, tilt the RF Antenna at about a 30° angle.
3. Place the RF antenna outside the entertainment center by using a coaxial cable to connect the antenna to the Hydra.
4. Try moving the Hydra to other locations.

URC PLUS Registration with Hydra

There are 2 types of Hydra boxes, the new one with the URC PLUS logo on top of the front panel and the old one without the URC PLUS logo. The registration method for the new box and the old box is different.



Figure 2-3 URC PLUS Logo



Figure 2-4 New Hydra with URC PLUS logo

The following table lists the new and old Hydra box type :

New Hydra with URC PLUS logo	Hydra HD B Series, Amulet HD
Old Hydra without URC PLUS logo	Hydra II, Hydra HD A Series

Check your Hydra box type and use the corresponding registration method.

URC PLUS Registration with Hydra having URC PLUS logo

1. Press and hold the "OK" button on the Hydra front panel for approx. 5 seconds. When releasing the "OK" button, the Hydra front panel will display "RC REG". The Hydra is now in remote registration mode.

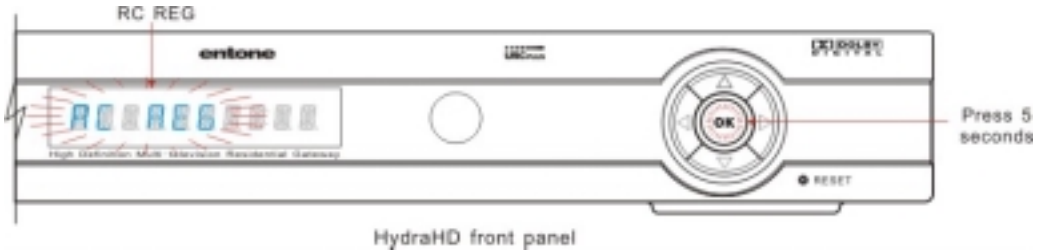


Figure 2-5 Hydra in Remote Registration Mode

2. On the URC PLUS, press and hold the "STB" button for approx. 5 seconds. The "STB" button backlight will illuminate.

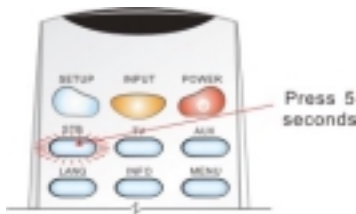


Figure 2-6 URC PLUS in Remote Registration Mode – Step 1 (for box with URC PLUS logo)

On the URC PLUS, press "STB" once again. Both the "STB" and "AUX" button backlight will illuminate.

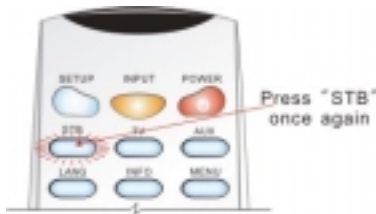


Figure 2-7 URC PLUS in Remote Registration Mode – Step 2 (for box with URC PLUS logo)



Figure 2-8 URC PLUS in Remote Registration Mode – Step 3 (for box with URC PLUS logo)

Now the URC PLUS is in registration mode.

3. Select the decoder to register by:
 - Press “1” to register URC PLUS to decoder 1.
 - Press “2” to register URC PLUS to decoder 2.
 - Press “3” to register URC PLUS to decoder 3.

After you enter a registration event, the “STB” button backlight on the URC PLUS will blink twice to indicate that the registration process was successful.

The Hydra front panel will display “RC REG Dx” to indicate that the registration process was successful.

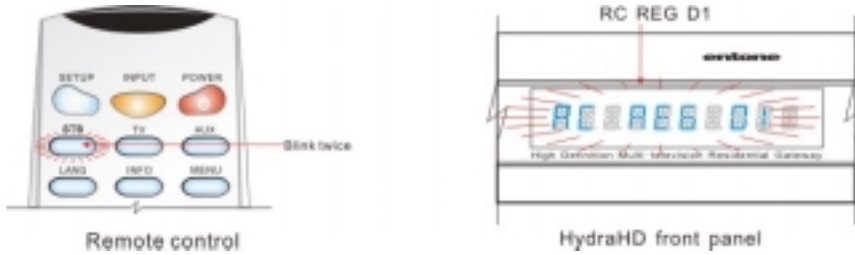


Figure 2-9 Remote Registration Successful

Pressing a key other than “0”, “1”, “2”, “3” or a button is not pressed within 10 seconds, the “STB” backlight will extinguish and the URC PLUS registration process will be terminated.

4. If the Hydra does not receive any URC PLUS registration event within 30 seconds, the process will be terminated.

The Hydra front panel displays the following messages during remote control registration:

Front Panel Message	Description
RC REG TO	Registration times out
RC REGERR	Registration error
RC REG	In registration mode
RC REGEND	Registered to IR only mode
RC REG D1	Registered to decoder 1
RC REG D2	Registered to decoder 2
RC REG D3	Registered to decoder 3

Table 2-1 Remote Registration Messages

NOTE:

- While the URC PLUS is in “STB” mode, the volume +/- and MUTE key signal will be sent to the TV.
- By Default, if the URC PLUS is in “STB” mode, the POWER key signal will be sent to the STB ONLY.
- If the URC PLUS is in “TV” mode, the “POWER” key signal will be sent to the TV ONLY.
- However, the POWER key can be configured to control both the STB and TV while the URC PLUS is in “STB” mode, please refer to the section “Toggle Power Key Punch Through Functionality” in Chapter 4 for details.

URC PLUS Registration with Hydra without URC PLUS logo

1. Press and hold the OK button on the Hydra front panel for about 5 seconds. When the OK button is released, the Hydra front panel Standby/On indicator blinks twice (alternates red and green), then stays lit red to indicate that the Hydra is now in remote registration mode.



Figure 2-8 Hydra in Remote Registration Mode

2. On the URC PLUS, press and hold the "STB" button for approx. 5 seconds. The "STB" button backlight will illuminate. Now the URC PLUS is in registration mode.

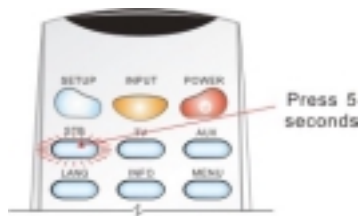


Figure 2-9 URC PLUS in Remote Registration Mode (for box without URC PLUS logo)

3. Select the decoder to register by:
 - Press "1" to register URC PLUS to decoder 1.
 - Press "2" to register URC PLUS to decoder 2.
 - Press "3" to register URC PLUS to decoder 3.

After you enter a registration event, the "STB" button backlight on the URC PLUS and the Hydra front panel Standby/On indicator will blink twice to indicate that the registration process was successful.

Pressing a key other than "0", "1", "2", "3" or a button is not pressed within 10 seconds, the "STB" backlight will extinguish and the URC PLUS registration process will be terminated.

4. If the Hydra does not receive any URC PLUS registration event within 30 seconds, the process will be terminated.

NOTE:

- While the URC PLUS is in "STB" mode, the volume +/- and MUTE key signal will be sent to the TV.
- By Default, if the URC PLUS is in "STB" mode, the POWER key signal will be sent to the STB ONLY.
- If the URC PLUS is in "TV" mode, the "POWER" key signal will be sent to the TV ONLY.
- However, the POWER key can be configured to control both the STB and TV while the URC PLUS is in "STB" mode, please refer to the section "Toggle Power Key Punch Through Functionality" in Chapter 4 for details.

Chapter 3

3.1 Controlling the Amulet

Amulet is a single television video receiver. You can connect Amulet to a primary TV only. Amulet only uses InfraRed (IR) to receive remote control signals.

Unlike Hydra, you do not need to do remote registration in order to use URC PLUS to control Amulet. However, you have to program the URC PLUS to use IR.

To set the URC PLUS to use IR to control Amulet:

1. On the URC PLUS, press and hold the "STB" button for approx. 5 seconds. The "STB" button backlight will illuminate. Now the URC PLUS is in registration mode.

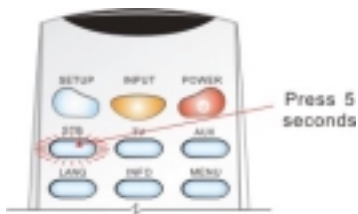


Figure 3-1 URC PLUS in Remote Registration Mode – Step 1 (for Amulet using IR mode)

2. On the URC PLUS, press "STB" once again. Both the "STB" and "AUX" button backlight will illuminate.

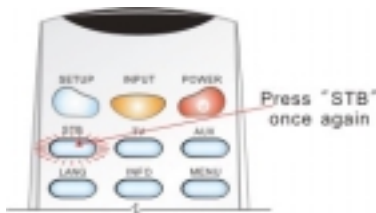


Figure 3-2 URC PLUS in Remote Registration Mode – Step 2 (for Amulet using IR mode)



Figure 3-3 URC PLUS in Remote Registration Mode – Step 3 (for Amulet using IR mode)

3. Press "0" to set URC PLUS to IR mode only. The URC PLUS will not send any RF signal.

The "STB" button backlight on the URC PLUS will blink twice to indicate that the setting was successful.

Pressing a key other than "0", "1", "2", "3" or a button is not pressed within 10 seconds, the "STB" backlight will extinguish and the URC PLUS registration process will be terminated.

IR Reception Range

IR signals travel only short distances (40 feet or less), and cannot go through walls or other solid objects. You must point the URC PLUS to the Amulet, with no objects blocking the line of sight.

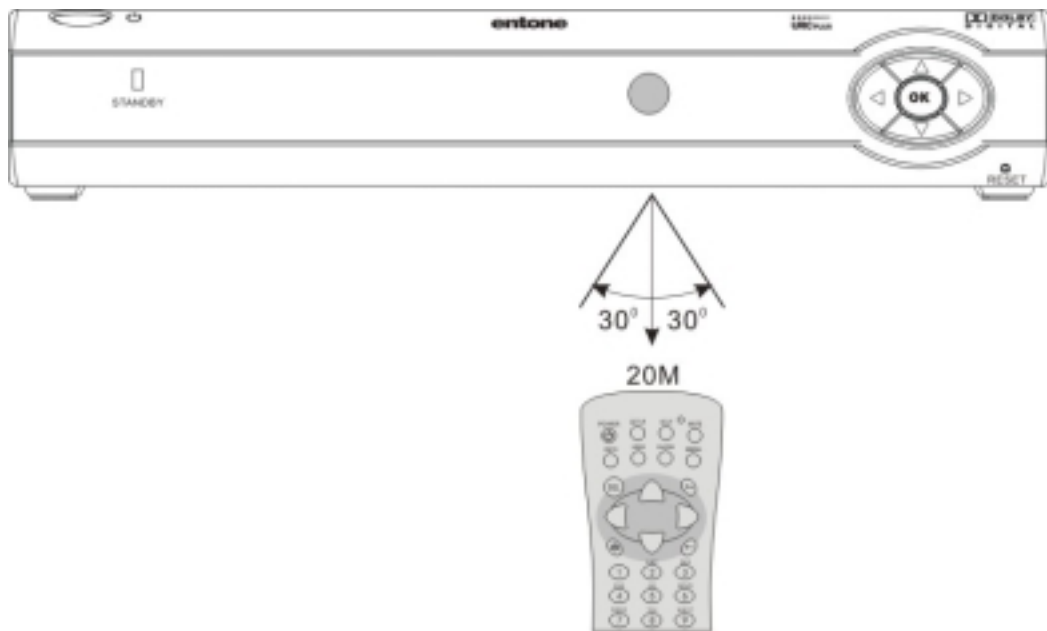


Figure 3-4 IR Reception Range

Chapter 4

4.1 Controlling Your Television and other A/V Devices

The URC PLUS can also be used to control TVs and other A/V devices such as DVD players and recorders. The URC PLUS uses InfraRed (IR) light signals to control other devices that the remote is programmed to control. IR signals travel only short distances (40 feet or less), and cannot go through walls or other solid objects. You must point the URC PLUS directly at these devices, with no objects blocking the line of sight.

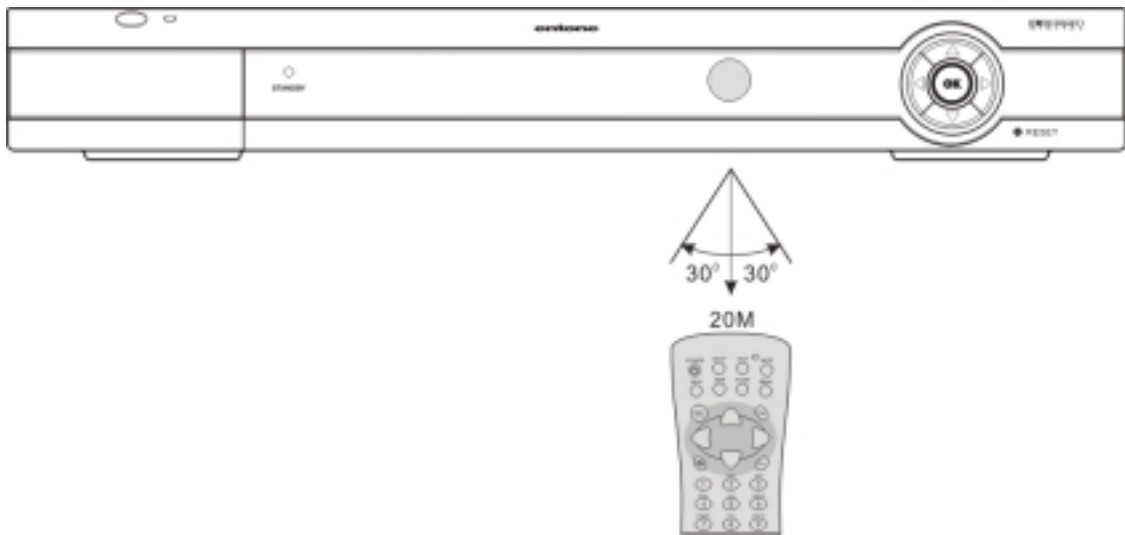


Figure 4-1 Controlling Devices using IR URC PLUS

You can program URC PLUS to control one TV and one AUX device. Use the remote control's mode keys (i.e., "STB", "TV", or "AUX") to control a specific device. When pressed, the selected mode key will light up confirming your choice. Then you can use the URC PLUS to control your STB, TV or AUX device.

You have to program the URC PLUS what TV and AUX devices you are using by either 1) entering the 4-digit device code 2) doing an auto search.

NOTE:

- While the URC PLUS is in "STB" mode, the volume +/- and MUTE key signal will be sent to the TV.
- By Default, if the URC PLUS is in "STB" mode, the POWER key signal will be sent to the STB ONLY.
- If the URC PLUS is in "TV" mode, the "POWER" key signal will be sent to the TV ONLY.
- However, the POWER key can be configured to control both the STB and TV while the URC PLUS is in "STB" mode, please refer to the section "Toggle Power Key Punch Through Functionality" in Chapter 4 for details.

To Program a TV or AUX device

1. Locate the device code for your desired device in the device code table provided in the Appendix. If you could not find the device code for your device or it does not work after trying the listed device codes for your device brand, then you can go to the next section to try the auto search procedures.
2. Turn on your device and with media inserted (if applicable).
3. On the remote control, press a device mode key once (i.e., "TV" or "AUX").



Figure 4-2 Select the device mode

NOTE: Use the "AUX" mode key to program control of VCR, DVD player, cable box, satellite set-top-box and audio device.

4. Press and hold the "Setup" key until the selected mode key backlight blinks twice, then release "Setup". The device mode key will light up.

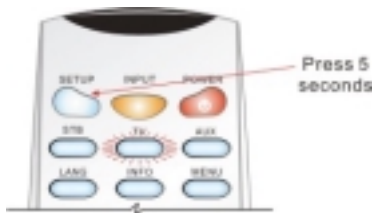


Figure 4-3 Press SETUP for 5 seconds to enter device setup mode

5. Enter the four-digit device code for you device. If you perform this procedure correctly, the selected device mode key backlight will blink twice.

NOTE: If you enter an invalid device code, the selected device mode key will fast blink 7 times. Device program mode will be terminated.

6. Aim the remote control at your device and press the "Power" once. The device should be turn off. If it does not respond, repeat the above steps.

Toggle Power Key Punch-through Functionality

By default, if the remote control is in STB mode, the URC Power button switches STB off ONLY. To control the URC Power button functionality to switch off either both the TV and/or STB, do the following:

1. On the remote control, press "STB" once to ensure it is in STB mode.
2. Press and hold the "Setup" key until the "STB" mode key backlight blinks twice, then release "Setup". The "STB" device mode key backlight will light up.
3. Press "POWER" key once.
4. Either do the following:
 - a. Press 1 to control both the STB and TV, OR
 - b. Press 0 to control the STB ONLY

Auto Search Procedures

If your device does not respond to the remote control after trying all devices codes listed for your brand, or if your brand is not listed at all, try searching for your device code as follows:

1. Turn on your TV or your A/V device.
2. On the remote control, press a device mode key once (i.e., TV or AUX).

NOTE: Use the AUX mode key to program control of VCR, DVD player, cable box, satellite set-top-box and audio device.

3. Press and hold the "Setup" key until the selected device mode key blinks twice, then release "Setup". The device mode key will light up.
4. Press the "POWER" key once.
5. Aim the remote control at the TV. Press either the "CHANNEL UP" key or "CHANNEL DOWN" key to do device auto-scan:
 - a. Press the "CHANNEL UP" key to start searching upward at an approx. 5 seconds interval for each device code. The TV/AUX mode key will be on and blink every 5 seconds while in the device scan mode.

NOTE: In this search mode, the remote control will send IR codes from the library starting from the lowest code set number to the end of code set for that device; **OR**

- b. Press the "CHANNEL DOWN" key to start searching downward at an approx. 5 seconds interval for each code set. The TV mode key will be on and blink every 5 seconds while in the device scan mode.

NOTE: In this search mode, the remote control will send IR codes from the highest code set number to the beginning of code set of that device.

6. If the TV turns off, a working code has been found. Press OK once to lock in the code. The selected mode key will blink twice
7. If all code sets of that device is exhausted in the search and the OK is not pressed, the selected device key will fast blink 7 times and the search mode will be terminated.

NOTE: During the auto-scan, you can press "UP" arrow or "DOWN" arrow to advance to the next device code immediately without waiting for 5 seconds. You can also use "UP" arrow or "DOWN" arrow to change the direction of the search.

Appendix

Appendix A – Device Code

Your URC Plus can control many brands and models of television, VCR, DVD and other types of audio-visual equipment. The following pages list device codes for many categories and brands of equipment. You may need to test several codes to find the best match for your equipment. Your equipment may be supported even if your brand is not shown in the list below. If you cannot locate your brand, or none of the listed device codes works, then you may still use the Auto-Search feature to try to locate a suitable device code. Instructions for using the Auto-Search feature is located on page 15 of this guide.

TV

Admiral	0001, 0020
Adventura	0012
Aiwa	0071
Akai	0002, 0018, 0053
Albatron	0013
Alleron	0009
America Action	0023
Amtron	0008
Anam	0023
Anam National	0003, 0008
AOC	0004, 0005, 0006, 0018, 0080
Apex	0021, 0025, 0041
Audiovox	0008, 0023
Aventura	0022
Bang & Olufsen	0031
Belcor	0004
Bell & Howell	0001
Beng	0015, 0083
Bradford	0008, 0023
Brilliant	0028
Brockwood	0004
Broksonic	0023, 0075
Candle	0004, 0006, 0012, 0018
Carnivale	0018
Carver	0019
CCE	0029
Celebrity	0002
Celera	0025
Changhong	0025
Citizen	0004, 0006, 0008, 0018
Clarion	0023
Coby	0076
Colortyme	0004, 0006
Concerto	0004, 0006

Contec	0023
Contec/Cony	0007, 0008
Craig	0008, 0023
Crosley	0019
Crown	0008, 0023
CTX	0082
Curtis Mathes	0000, 0004, 0006, 0018, 0019, 0020, 0053
CXC	0008, 0023
Cytron	0085
Daewoo	0004, 0005, 0006, 0043
Daytron	0004, 0006
Dell	0065
DiamondVision	0032
Dimensia	0000
Dumont	0004, 0011, 0017
Durabrand	0016, 0022, 0023, 0045
Dwin	0020
Electroband	0002
Electrograph	0026
Electrohome	0002, 0003, 0004, 0006
Emerson	0004, 0006, 0007, 0008, 0009, 0022, 0023, 0043
Envision	0004, 0006, 0018
Epson	0081
ESA	0022
Fujitsu	0009
Funai	0008, 0009, 0022, 0023
Futuretech	0008, 0023
Gateway	0026, 0027
GE	0000, 0003, 0004, 0006, 0010, 0034, 0037, 0061
Gibraltar	0004, 0011, 0017, 0018
Goldstar	0004, 0005, 0006, 0007, 0018
Gradiente	0087
Grunpy	0008, 0009, 0023

Haier	0016, 0030
Hallmark	0004, 0006
Harman/Kardon	0019
Harvard	0008, 0023
Havermy	0020
Hewlett Packard	0072
Hisense	0091
Hitachi	0004, 0006, 0007
Hyundai	0014
IMA	0008
Infinity	0019
Insignia	0045, 0084
Inteq	0017
Janeil	0012
JBL	0019
JC Penney	0000, 0004, 0005, 0006, 0010
JCB	0002
Jensen	0004, 0006
JVC	0007, 0010, 0067
Kawasho	0002, 0004, 0006
KEC	0023
Kenwood	0004, 0006, 0018
KLH	0025
Kloss Novabeam	0008, 0012
KTV	0008, 0018, 0023, 0029
LG	0004, 0005, 0013
Logik	0001
Luxman	0004, 0006
LXI	0000, 0006, 0019, 0021
Magnavox	0004, 0006, 0018, 0019, 0038, 0040, 0059, 0064, 0065
Majestic	0001
Marantz	0004, 0006, 0018, 0019, 0040
Matsushita	0024
Maxent	0026

Megapower	0013
Megatron	0006
Memorex	0001, 0005, 0006, 0063
MGA	0004, 0005, 0006, 0018
Midland	0010, 0011, 0017
Mitsubishi	0004, 0005, 0006, 0020
Monivision	0013
Montgomery Ward	0001
Motorola	0003, 0020
MTC	0004, 0005, 0006, 0018
Multitech	0008, 0023, 0029
NAD	0006, 0021
NEC	0003, 0004, 0005, 0006, 0018
Net-TV	0026
Nikko	0006, 0018
Norcent	0080
Olevia	0073, 0079
Onwa	0008, 0023
Optimus	0024
Optonica	0020
Orion	0045
Panasonic	0003, 0010, 0024, 0035, 0047
Penney	0018, 0021
Philco	0003, 0004, 0005, 0006, 0007, 0018, 0019
Philips	0003, 0004, 0007, 0019, 0038, 0040, 0065
Philips Magnavox	0038
Pilot	0004, 0018
Pioneer	0004, 0006
Polaroid	0025, 0077
Portland	0004, 0005, 0006
Prima	0086
Princeton	0013
Prism	0010
Proscan	0000
Proton	0004, 0006, 0007
Protron	0074
Proview	0090
Pulsar	0004, 0011, 0017
Quasar	0003, 0010, 0024
Radio Shack	0018, 0023
Radio Shack/Realistic	0000, 0004, 0006, 0007, 0008
RCA	0000, 0003, 0004, 0005, 0006, 0033, 0037, 0044, 0057
Realistic	0018, 0023
Runco	0011, 0017, 0018
Sampo	0004, 0006, 0018, 0026
Samsung	0004, 0005, 0006, 0007, 0018, 0029, 0042, 0053, 0054
Sansui	0045
Sanyo	0004, 0070

Scotch	0006
Scott	0004, 0006, 0007, 0008, 0009, 0023
Sears	0000, 0004, 0006, 0009, 0019, 0021, 0022
Sharp	0004, 0006, 0007, 0020, 0055
Sheng Chia	0020
Shogun	0004
Signature	0001
Sony	0002, 0036, 0039, 0050, 0051, 0052, 0056
Soundesign	0004, 0006, 0008, 0009, 0023
Squareview	0022
SSS	0004, 0008, 0023
Starlite	0008, 0023
Superscan	0020
Supre-Macy	0012
Supreme	0002
SVA	0030
Sylvania	0004, 0006, 0018, 0019, 0022
Symphonic	0008, 0022, 0023, 0063
Syntax	0073
Syntax-Brilliant	0073
Tandy	0020
Tatung	0003, 0027
Technics	0010, 0024
Techwood	0004, 0006, 0010
Teknika	0001, 0004, 0005, 0006, 0007, 0008, 0009, 0019, 0023
Telefunken	0053
TMK	0004, 0006
TNCi	0017
Toshiba	0021, 0046, 0048, 0049, 0058, 0060, 0062, 0066
Vector Research	0018
Vidikron	0019
Vidtech	0004, 0005, 0006
Viewsonic	0026, 0078
Viking	0012
Vizio	0027, 0089
Wards	0000, 0001, 0004, 0005, 0006, 0009, 0018, 0019
Waycon	0021
Westinghouse	0069
White Westinghouse	0043
Yamaha	0004, 0005, 0006, 0018
Zenith	0001, 0004, 0011, 0017

DVD

Accurian	2027
Advent	2006
Aiwa	2074
Akai	2000
Alco	2004
Allegro	2022
Amphion MediaWorks	2085
AMW	2085
Apex	2013, 2014, 2031, 2059
Arrgo	2023
Aspire	2007
Audiovox	2004
Bang & Olufsen	2016
Blaupunkt	2014
Blue Parade	2012
Broksonic	2000, 2069
California Audio Labs	2002
CineVision	2022
Coby	2060
Curtis Mathes	2024
CyberHome	2023, 2029
Daewoo	2022, 2066
Denon	2002, 2056, 2073
Disney	2062
Durabrand	2025
Emerson	2001, 2017, 2026
Enterprise	2017
ESA	2026
Fisher	2018
Funai	2026
GE	2011, 2014, 2063
Go Video	2022, 2067
Gradiente	2002
Greenhill	2014
Harman/Kardon	2019, 2077
Hitachi	2046
Hiteker	2013
Initial	2014, 2049
Insignia	2026, 2084
Integra	2012
JBL	2019
JVC	2048
Kawasaki	2004
Kenwood	2002, 2076
KLH	2004, 2014
Koss	2003, 2009, 2070
Landel	2028

Lasonic	2020
Lenoxx	2008, 2025
LG	2017, 2022, 2064, 2082
Liquid Video	2009
Liteon	2027, 2071
Magnavox	2001, 2010, 2026, 2057
Memorex	2000, 2062
Microsoft	2011
Mintek	2014, 2021
Mitsubishi	2065
Nesa	2014
Next Base	2028
Onkyo	2010
Oppo	2015
Oritron	2003, 2009
Panasonic	2002, 2010, 2034, 2036, 2053, 2056, 2079, 2080, 2081
Philips	2010, 2057
Pioneer	2012, 2051, 2083
Polaroid	2043
Proceed	2013
Proscan	2011, 2055
Qwestar	2003
RCA	2004, 2011, 2012, 2014, 2038, 2055
Regent	2008
Rio	2022
Rowa	2005
Samsung	2002, 2039, 2041, 2046, 2050, 2052, 2058, 2067, 2078
Sansui	2000
Sanyo	2000, 2018
Sharp	2068
Shinsonic	2021
Sonic Blue	2022
Sony	2032, 2033, 2037, 2042, 2044, 2045, 2047, 2054, 2075
Superscan	2001
Sylvania	2001, 2026
Teac	2004
Technics	2002
Theta Digital	2012
Toshiba	2000, 2010, 2030, 2035, 2040, 2061, 2072
Urban Concepts	2010
US Logic	2021
Venturer	2004
Xbox	2011
Yamaha	2002, 2034
Zenith	2010, 2017, 2022, 2064

VCR

ABS	1008
Adventura	1005
Aiwa	1005
Alienware	1008
American High	1004
Asha	1002
Audio Dynamics	1000
Audiovox	1003
Beaumarck	1002
Bell & Howell	1001
Calix	1003
Candle	1002, 1003
Canon	1004
Citizen	1002, 1003
Colorzyme	1000
Craig	1002, 1003
Curtis Mathes	1000, 1002, 1004
Cybernex	1002
CyberPower	1008
Daewoo	1005
DBX	1000
Dell	1008
DIRECTV	1007
Durabrand	1009
Dynatech	1005
Electrohome	1003
Electroponic	1003
Emerson	1003, 1004, 1005
Fisher	1001
Fuji	1004
Funai	1005
Garrard	1005
Gateway	1008
GE	1002, 1004
Goldstar	1000, 1003
Gradiente	1005
Harley Davidson	1005
Harman/Kardon	1000
Headquarter	1001
Hewlett Packard	1008
HNS	1007
Howard Computers	1008
HP	1008
Hughes Network Systems	1007
Humax	1007
Hush	1008
iBUYPOWER	1008
Instant Replay	1004
JC Penney	1000, 1001, 1002, 1003, 1004
JCL	1004

JVC	1000, 1001, 1014
Kenwood	1000, 1001
Kodak	1003, 1004
LG	1003
Linksys	1008
Lloyd's	1005
LXI	1003
Magnavox	1004, 1009, 1016
Magnin	1003
Marantz	1000, 1001, 1004
Marta	1003
Matsushita	1004
Media Center PC	1008
MEI	1004
Memorex	1001, 1002, 1003, 1004, 1005, 1009, 1010
MGN Technology	1002
Microsoft	1008
Mind	1008
Mitsubishi	1015
Motorola	1004
MTC	1002
Multitech	1002, 1005
NEC	1000, 1001
Nikko	1003
Niveus Media	1008
Noblex	1002
Northgate	1008
Olympus	1004
Optimus	1003
Orion	1010, 1018
Panasonic	1004, 1006, 1012
Philco	1004
Philips	1004, 1007, 1016
Philips Magnavox	1016
Pilot	1003
Pulsar	1009
Quarter	1001
Quartz	1001
Quasar	1004
Radio Shack	1003
Radio Shack/Realistic	1001, 1002, 1003, 1004, 1005
Radix	1003
Randex	1003
RCA	1002, 1004, 1007, 1011
Realistic	1001, 1002, 1003, 1004, 1005
ReplayTV	1006
Ricavision	1008
Runco	1009
Samsung	1002, 1007
Sanky	1009
Sansui	1010, 1018
Sanyo	1001, 1002

Sears	1001, 1003, 1004
Sharp	1017
Shogun	1002
Singer	1004
Sonic Blue	1006
Sony	1008, 1013
Stack	1008
STS	1004
Sylvania	1004, 1005
Symphonic	1005
Systemax	1008
Tagar Systems	1008
Tandy	1001
Tashiko	1003
Teac	1005
Technics	1004
Teknika	1003, 1004, 1005
Tivo	1007
TMK	1002
Toshiba	1008, 1019
Totevision	1002, 1003
Touch	1008
Unitech	1002
Vector Research	1000
Video Concepts	1000
Videosonic	1002
Viewsonic	1008
Voodoo	1008
Wards	1002, 1003, 1004, 1005
XR-1000	1004, 1005
Yamaha	1000, 1001
Zenith	1009
ZT Group	1008

Cable Box

ABC	3000, 3001, 3002, 3004, 3024, 3025
Americast	3033
Antronix	3006, 3007
Archer	3007
AT&T	3041
Bell South	3033
Cable Vision	3036
Cabletenna	3006
Cableview	3005
Clearmaster	3032
ClearMax	3032
Colour Voice	3009
Comcast	3037, 3038
Comtronics	3010
Contec	3011

Coolmax	3032
COX	3039
Director	3031
Eastern	3012
Everquest	3026
Focus	3030
GC Electronics	3007
GE	3000, 3001
Gemini	3013, 3026
General Instrument	3001, 3029, 3031, 3037
Goldstar	3027
Hamlin	3014, 3015
Hitachi	3001
Jasco	3026
Jerrold	3001, 3013, 3024, 3026, 3029, 3031
Magnavox	3016
Memorex	3017, 3025
Motorola	3029, 3031, 3038, 3039, 3041
Movie Time	3018
Multitech	3032
NEC	3003
NET Brazil	3042
NSC	3018
Oak	3011
Pace	3028
Panasonic	3021, 3023, 3025
Paragon	3025
Philips	3008, 3009, 3016
Pioneer	3019, 3027, 3035
Popular Mechanics	3030
Proscan	3000, 3001
Pulsar	3025
Quasar	3025
Radio Shack	3026, 3032
RCA	3005, 3023
Realistic	3007
Recoton	3030
Regal	3015
Regency	3012
Rembrandt	3001
Runco	3025
Samsung	3019, 3027
Scientific Atlanta	3004, 3041
Signal	3013, 3026
Signature	3001
Sony	3034, 3036
Sprucer	3023
Standard Component	3020
Starcom	3013, 3024, 3026
Stargate	3013, 3026
Starquest	3013, 3026
Supercable	3029

Supermax	3032
TIME WARNER	3040
Tocom	3002
Toshiba	3025
Tristar	3032
Tusa	3013, 3026
TV86	3018
Unika	3006, 3007
United Cable	3024
Universal	3006, 3007
V2	3032
View Star	3011, 3016, 3018
Viewmaster	3032
Vision	3032
Vortex View	3032
Zenith	3022, 3025, 3033
Zentek	3030

Satellite

Alphastar	4010
CaptiveWorks	4053
Chaparral	4004
Coolsat	4054
DIRECTV	4013, 4015, 4016, 4019, 4021, 4022, 4028, 4029, 4031, 4035, 4036, 4041, 4042, 4043, 4046, 4047
Dish Network	4000, 4001, 4002, 4003, 4014, 4020, 4023, 4033, 4044, 4045
Dishpro	4000, 4014
Drake	4005
Echostar	4000, 4014, 4033, 4044, 4045
Expressvu	4000
General Instrument	4006, 4017
GOI	4000
Hisense	4018
Hitachi	4011
HTS	4000
Hughes Network Systems	4013, 4019, 4022, 4024, 4041
Humax	4055
Ilo	4018
Jerrold	4017
JVC	4000, 4033, 4044, 4045
LG	4048
Magnavox	4016
Memorex	4016
Mitsubishi	4022
Motorola	4017
Next Level	4017
Panasonic	4043, 4047, 4049

Pansat	4051
Paysat	4016
Philips	4013, 4016, 4024, 4031, 4042
Pioneer	4013
Primestar	4009
Proton	4018
Radio Shack	4017
RCA	4024, 4025, 4026, 4028, 4029, 4030, 4034
Realistic	4007
Samsung	4013, 4024, 4036, 4038
Sharp	4050
Sony	4015, 4021, 4027, 4032, 4035, 4037, 4039, 4040
Star Choice	4017
STS	4012
Tivo	4013, 4024
Toshiba	4041
UltimateTV	4015
Uniden	4008, 4016
US Digital	4018
USDTV	4018
Viewsat	4052
Voom	4017
Zenith	4046

Audio

ADC	5005
Adcom	5067
Aiwa	5055
Alco	5011
Amphion Media Works	5012
AMW	5012
Anam	5007
Apex	5064
Audiotronic	5008
Audiovox	5011, 5063
B & K	5068
Bang & Olufsen	5017
BOSE	5028, 5046
Capetronic	5005
Carver	5008
Coby	5059
Curtis Mathes	5001
Denon	5052, 5053, 5054
Fisher	5013
GE	5000
GPX	5065
Harman/Kardon	5002, 5060
Hitachi	5013
Integra	5004
JVC	5056
Kenwood	5009, 5031
KLH	5011
Koss	5010
Left Coast	5002
Magnavox	5005, 5008, 5033
Marantz	5002, 5008
Mitsubishi	5062

NAD	5016
Nakamichi	5015
NEC	5003
Onkyo	5034, 5037, 5038, 5045, 5049, 5051
Optimus	5001, 5005, 5006, 5007
Oritron	5010
Panasonic	5027, 5035, 5047
Philips	5002, 5008, 5061
Pioneer	5001, 5005, 5006, 5021, 5026, 5029
Polk Audio	5002
RCA	5001, 5005, 5006, 5007, 5011, 5057
Rio	5014
Samsung	5041
Sanyo	5013
Sharp	5066
Sherwood	5058
Shure	5003
Sonic Blue	5014
Sony	5018, 5019, 5020, 5022, 5023, 5024, 5025, 5030, 5032, 5042, 5043
Soundesign	5000
Stereophonics	5006
Sunfire	5009
Teac	5007, 5011
Technics	5044
Thorens	5008
Venturer	5011
Wards	5000
Yamaha	5004, 5036, 5040, 5048, 5050

Appendix B – Other Features

Showing URC PLUS Firmware Version

The URC PLUS firmware version is in the format of x.y.z, where x, y and z is digit 0-9. Use the following procedures to show the URC PLUS firmware version:

1. Press "STB".
2. Press and hold "SETUP" for 5 seconds.
3. The "STB" backlight will illuminate.
4. Press "INFO" once.
5. The 3 digits of the firmware version (x, y and z as described above) will be displayed in the following manner.
 - a. The "STB" backlight blinks to indicate the digit. One blink indicates 1, 2 blinks indicates 2, etc until 9 blinks indicates 9. A 0 is indicated by a short, long, short, long, short, long blink.
 - b. In between each digit, the "STB" backlight will be off for 1 second.
 - c. For example, the following blink pattern shows a firmware version of 2.0.4.

In addition, the URC PLUS Firmware version will also be shown on the sticker at the back of the remote control.



Showing Programmed Device Code

You can display the 4-digit device code by the following procedures:

1. Press "TV" to display the TV device code or "AUX" to display the AUX device code.
2. Press and hold "SETUP" for 5 seconds.
3. The "TV" or "AUX" backlight will illuminate.
4. Press "INFO" once.
5. The 4-digits device code will be displayed in the following manner.
 - a. The "TV"/"AUX" backlight blinks to indicate the digit. One blink indicates 1, 2 blinks indicates 2, etc until 9 blinks indicates 9. A 0 is indicates by a shot, long, short, long, short, long blink.
 - b. In between each digit, the "TV"/"AUX" backlight will be off for 1 second.
 - c. For example, the following blink pattern shows a device code of 0123.

... ..