CONTENTS

| Media Gateway Hardware |
|--|
| Getting to Know Your Media GatewayE-1 |
| Media Gateway Front PanelE-1 |
| Media Gateway Back PanelE-2 |
| Media Player Front PanelE-2 |
| Media Player Back PanelE-3 |
| MP 2050 FrontE-3 |
| MP 2050 Back E-4 |
| MP 2000E-5 |
| MP 2150E-5 |
| MP 2050E-5 |
| DCX3635 and IP815 Hardware Interfaces |
| and General Specifications E-6 |
| DCX3635 Front Panel E-6 |
| DCX3635 Rear PanelE-6 |
| IP815 Features and General SpecificationsE-7 |
| External Hard Drive E-8 |
| Troubleshooting Your Media GatewayE-9 |
| Frequently Asked Questions E-9 |
| Wireless Network ConfigurationE-10 |
| Connecting Devices to Your |
| NetworkE-10 |
| Battery Replacement E-11 |
| Digital Adapter |
| Digital Adapter - |
| Self-Install InstructionsE-13 |
| Programming Your RemoteE-14 |
| Digital Adapter TroubleshootingE-14 |
| WOW! Universal Remote Control |



MEDIA GATEWAY HARDWARE

Manage the features and configuration of your Media Gateway.

Your Media Gateway is not only the central hard drive for recorded content enabling Whole Home DVR, it is also an advanced cable modem and wireless router supporting WOW! Internet and WOW! Phone. Your Media Gateway will be installed by a WOW! technician but should you decide to change the configuration of your home network, or need to troubleshoot your services, this section will help guide you through working with your Media Gateway.

Getting to Know Your Media Gateway

Media Gateway Front Panel



1. USB

The USB port is not active.

2. POWER LED

Illuminates when the Media Gateway is powered on.

3. DOWNSTREAM LED

Illuminates when your Media Gateway is downloading.

4. UPSTREAM LED

Illuminates when your Media Gateway is uploading.

5. ONLINE LED

Illuminates when your Media Gateway is online.

6. LINK LED

Illuminates when a computer is connected directly via the Ethernet to the Media Gateway.

7. MOCA LED

Illuminates when the Media Gateway is connected to a Media Player.

8. RECORDING

Glows red when the Media Gateway is recording.

9. WIFI LED

Illuminates when the Wi-Fi is on and connected.

10.TEL1 LED

Illuminates when the first telephone line is provisioned and functioning.

11. TEL2 LED

Illuminates when the second telephone line is provisioned and functioning.

12. BATTERY LED

Illuminates when the battery is present and charged.



Media Gateway Back Panel



- 1. TEL 1/ TEL 2
- 2. RESET
- 3. COAX
- **4. USB**The USB port is not active.

5. eSATA

Where you connect a DVR-certified eSATA external hard drive.

- 6. CableCARD
- 7. ETHERNET
- 8. POWER



Media Player Front Panel

- 1. IR SENSOR Infrared sensor.
- **2. CLOCK**Displays the current time.
- MENU
 Acts the same as the MENU button on your remote.
- 4. ARROW KEYS/OK
- 5. USB

The USB port is not active.



Media Player Back Panel



- 1. COAX
- 2. COMPOSITE
- 3. COMPONENT
- 4. DIGITAL AUDIO COAX
- 5. DIGITAL AUDIO OPTICAL
- 6. HDMI

- 7. USB
- 8. ETHERNET
- 9. IR BLASTER
- 10.RESET
- 11. POWER

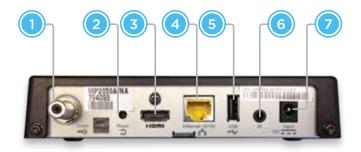
MP 2050 Front



- 1. POWER LIGHT
- 2. MOCA LIGHT



MP 2050 Back



- 1. COAX
- 2. RESET
- 3. HDMI
- 4. ETHERNET

- 5. USB
- 6. IR EXTENDER
- 7. POWER





MP 2000



MP 2150



MP 2050

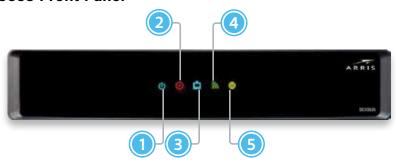


| | MP 2000 | MP2150 | MP 2050 |
|--|-------------|-------------|-------------|
| Full HD 3D graphics | > | > | ~ |
| HD/SD, MPEG4-10/H.264, MPEG-2 | > | > | ✓ |
| Ethernet connector | ✓ | ✓ | ~ |
| USB 2.0 Host ports | 2 | 1 | 1 |
| F connector (MoCA 1.1) | ✓ | > | ~ |
| One HDMI connector (supporting up to 1080p: 24/30/50/60 Hz) | 1.3b | 1.4 | 1.4 |
| One IR RC-6 compatible remote control interface output | ✓ | > | > |
| Reset switch | ✓ | > | ~ |
| One set of component video outputs supporting up to 1080i | ~ | > | X |
| One composite video output with stereo audio outputs for left and right channels | ~ | > | Х |
| One electrical S/PDIF digital audio output | ✓ | ✓ | Х |
| One optical S/PDIF digital audio output | ~ | > | Х |
| Navigation buttons — arrows (left, right, up, down), OK, Menu | ✓ | ✓ | Х |
| Clock Display | ✓ | ✓ | Х |

DCX3635 and IP815 Hardware Interfaces and General Specifications

The DCX3635 and IP815 support the following standard interfaces on the front and rear panels. The list of general specifications follows the hardware descriptions.

DCX3635 Front Panel

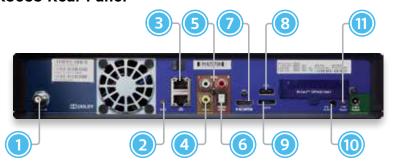


DCX3635 Front Panel Interfaces

- 1. Power
- 2. Record
- 3. Home LAN

- 4. Wi-Fi
- 5. High Speed Data LEDs

DCX3635 Rear Panel



DCX3635 Rear Panel Interfaces

- F-connector for Cable input/ MoCA 2.0
- 2. Cable Modem Reset and WPS Buttons
- 3. (2) 10/100/1000 Ethernet interface
- 4. Baseband composite video output
- 5. L/R audio output

- 6. Optical S/PDIF digital audio output
- 7. HDMI™ 1.4 output
- 8. USB 2.0 Host Type A port
- 9. eSATA interface
- 10. Mini-phone 3.5mm serial port and External IR input
- 11. Cable Modem Reset and WPS Buttons



IP815 Features and General Specifications IP815 Front Panel



IP815 Rear Panel



IP815 Rear Panel Interfaces

- 1. F-connector for Cable input/ MoCA 2.0
- 2. Mini-phone 3.5mm serial port and **External IR input**
- 3. HDMI™ 1.4 output
- 4. 10/100 Ethernet interface
- 5. USB 2.0 Host Type A port
- 6. Optical S/PDIF digital audio output
- 7. Baseband composite video output
- 8. L/R audio output



E-7

External Hard Drive

The ULTRA hard drive is 500GB and will store up to 300 hours of SD programming or 75 hours of HD programming. You can expand the amount of hard drive storage on your Media Gateway by connecting a DVR-certified eSATA external hard drive.

When you first insert the external drive into the Media Gateway, you'll see a dialog on all connected Media Players indicating that the drive needs to be formatted. You can choose to respond on any Media Player; formatting can take up to 30 minutes, and you will lose any existing content on the drive. You will receive notification when the formatting is complete.

Before you physically disconnect an external hard drive, you must eject it using software. Although the external hard drive is connected only to the Media Gateway, you can eject an external hard drive using any Media Player. To disconnect an external hard drive, from any Media Player, go to the Settings category on the main menu and choose External Hard Drive. Choose disconnect and wait for notification that you may now disconnect the drive. If you disconnect the hard drive, stored content will not be accessible, although it will not be erased from the hard drive. Reconnect the hard drive and ensure that the power is on to access stored programming.

Setting Up Your External Hard Drive:

- 1. Plug the eSATA connector into the eSATA port on the rear of the Media Gateway.
- 2. Wait for the confirmation on all of your Media Players that the Media Gateway recognizes the external hard drive. You will receive this confirmation on all Media Players and can respond on any that's convenient.
- **3.** If this is the first time this hard drive has been connected to this system, or if the hard drive is not properly formatted for any reason, the system will ask if you want to reformat the external hard drive. (Reformatting deletes all data on the hard drive). Select yes to confirm the reformatting of the external hard drive.
- **4.** Once the external hard drive is recognized and properly formatted, the scheduler will include the additional space in scheduling decisions.

Disconnecting Your External Hard Drive:

Disconnecting an external hard drive while it is in use (playing a recording or recording a show), can result in corrupting stored data.

- 1. Manually stop all recordings in progress by selecting the program card in the main menu, and then choosing "stop recording."
- 2. In the Settings category, select the External Hard Drive card.
- 3. Select disconnect, and then press OK.
- **4.** You may be presented with a message that the drive is still busy. If this happens, please repeat the disconnect process at a later time.



Troubleshooting Your Media Gateway

The lights on the front panel of the Media Gateway provide a quick indication of how ULTRA is functioning.

If your Media Gateway is not performing as expected, these following tips may help. If you need further assistance, please contact WOW!.

- Check that your coaxial cable, power, Ethernet/USB, and Media Gateway connections are tight. If the connection becomes loose at one of these places, you will not be able to send or receive data. Secure the connection.
- Check to see if your Media Gateway is connected to the WOW! network. Look at your Media Gateway and confirm that the lights are correct per the table above.
- If you checked the connections and you are still experiencing problems, press and release the Reset button to reboot the Media Gateway.

Frequently Asked Questions

What if my Internet connection is not working?

If none of your WOW! services are working, there may be a cable outage in your area. Call WOW! at 1-855-4WOW-WAY (1-855-496-9929). If you're WOW! Cable is working but WOW! Internet is not, proceed with the troubleshooting steps below.

What should I do if my cable TV is working but I don't have Internet connection or dial tone?

Reset your Media Gateway by pressing and releasing the reset button once. Be careful not to hold the button down for more than ten seconds as that will cause your router to reset to factory defaults, eliminating any home network configurations you may have set.

What if I reset my Media Gateway I still don't have dial tone?

If you have reset the Media Gateway and still don't have dial tone, check the status of the lights on the front of the Gateway. The Telephone 1 line (and / or Telephone 2 for a second line) light should be solid if the phone is on the hook. If the Telephone light is blinking, check all of your phones to see if one is off hook.



Wireless Network Configuration

When your installer leaves your home after setting up your ULTRA, your network will be configured and functional.

There are a few settings that you may want to alter at some point in the future that are accessible from the Gateway's eRouter website at http://192.168.0.1

The default user name to log in to the website is Admin. Your installer should leave you with information about the login password.

You may, at some point, want to change the following settings:

SSID: The default SSID for your router is taken from the Media Gateway serial number on the bottom of the Gateway. You have the option to change the SSID to a more friendly, recognizable name.

Passphrase: The passphrase for your wireless network is printed on the label on the bottom of your Media Gateway. You may want to change this passphrase initially to something more secure. In addition, you may want to change it periodically to maintain security levels.

RF Channel: If you're experiencing interference from a neighbor's wireless network, for example, try changing the RF channel frequency.

If, at any point, you forgot your SSID or passphrase and need to access them to add additional devices to your network, you can use the reset button to reset the router to default settings. See the previous section for details.

Connecting Devices to Your Network

If you are using a wireless network, you will need to enter the SSID and passphrase to connect additional devices. Each device that you connect should have instructions on where to enter this information. For more information on WOW! Home Networking, see the Internet chapter.



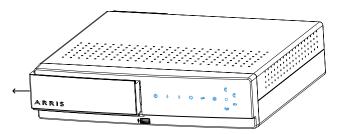
Battery Replacement

Your Media Gateway has a battery that provides up to eight hours of backup power for WOW! Phone in the event of a loss of power. The battery only supports WOW! Phone and will not provide alternate power for cable and Internet services. If the Battery LED is not fully illuminated, your Media Gateway battery needs replacement. When the "Replace Battery" light is illuminated, the battery is not functioning and consequently your phone service will not function in the event of a power outage. When the "Battery Low" light is illuminated, the battery is functioning, but will provide for less time than a fully charged battery in the event of a power outage. It is your responsibility alone and now WOW!'s to regularly check the battery indicator lights located on your EMTA and to immediately replace teh battery in the event the EMTA indicates "replace battery" or "battery low." For instructions on obtaining and installing replacement batteries in your EMTA (phone battery), please go to http://www. wowway.com/ or call 1-855-496-9929.

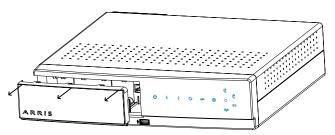
To replace the Media Gateway battery:

1. Remove the Battery Compartment Door

a. Press your thumbs firmly against the front of the battery compartment door (on the front left side of the Media Gateway where it reads ARRIS). Slide the door slightly to the left until it stops.



b. Pull the door straight out toward you to remove it. Use the battery pull strap to dislodge the battery.

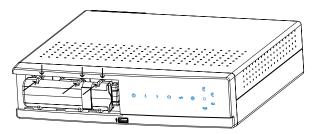




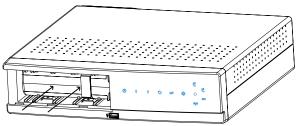
E-11

2. Insert New Battery

a. Hold the new battery pack so that the guides on it align with the slots on the Media Gateway battery compartment. Slide the battery pack partially into the bay until it contacts the two raised stops on the bottom of the battery compartment. **Note:** The battery pack will not insert completely into the Media Gateway if not oriented correctly. The battery should slide part way into the bay up to the raised stops with very little resistance.

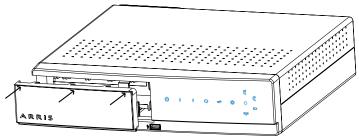


b. Apply even pressure on both ends of the battery pack with your thumbs until the battery pack slides over the raised stops and snaps firmly into place.

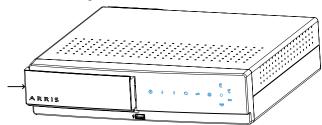


3. Replace the Door

a. Push the door straight onto the front of the Media Gateway until the tabs on the door insert into the matching slots on the battery compartment.



b. Slide the door to the right until it closes.





DIGITAL ADAPTER – SELF-INSTALL INSTRUCTIONS

It's simple to install the Digital Adapter. Just follow the five easy steps and you'll be on your way to enjoying the digital experience.

Step A: Connect the Digital Adapter to the cable outlet

- 1. Find the coax cable that runs from the cable wall outlet to your TV.
- 2. Disconnect the coax cable from your TV.
- **3.** Connect this cable to the "Cable In" port on the back of the Digital Adapter.
- **4.** Leave the other end of this cable plugged into the cable wall outlet.



- **1.** Take the coax cable provided in your self-install kit.
- Connect one end to the "To TV" port on your Digital Adapter and connect the other end to the "Cable In" or "RF In" port on your TV.



To Cable Wall Outlet

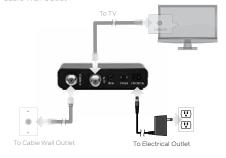
Step C: Connect the power cord

- 1. Take the power cord provided in your self-install kit.
- Connect the power cord to the electrical wall outlet and the "+5V DC In" port on the Digital Adapter.

Step D: Set the channel

- 1. Turn on your TV and tune it to channel 3 (Channel 4 in Cleveland area).
- 2. Make sure the channel "3/4" switch on the Digital Adapter is set to the same channel as your TV.

 If you don't have a picture after completing the activation steps, you may need to switch your TV and Digital Adapter to channel 4.







Step E: Activating your Digital Adapter

Once you have connected your Digital Adapter(s), they are ready to be activated, which will authorize your Digital Adapter(s) to begin receiving signals from WOW!'s network and send cable channels to your TV. Once your Digital Adapter(s) are activated you will be able to enjoy your WOW! Cable.

All Digital Adapter's must be connected prior to activation.

To activate your Digital Adapter(s), visit **www.wowdigitaladapter.com** or call 1-888-268-5872.

Programming Your Remote

Use the following instructions to program the remote for a TV and/or Audio device.

- 1. Turn on the TV you wish to control.
- 2. Locate the code for your TV among the Manufacturer's Codes on pages E12-E15 of this user manual. Brands are listed in alphabetical order with the most popular codes listed first.
- **3.** Press and hold in the **MENU** and **OK** buttons until the Power button flashes twice and release both buttons.
- **4.** Enter in the first 5 digit code for your brand of device. The Power button will flash twice
 - **NOTE**: If the red light emits one long flash, the remote has timed out or the code was not entered correctly. Repeat steps 3 4 entering the same code.
- **5.** Aim the remote at the TV and press the Power key. If the TV turns off you have found the correct code. If the TV does not respond repeat steps 2-5 trying each code listed for your brand of TV. If none of the codes work, refer to "SEARCHING FOR A CODE" on your Universal Remote Control manual.
- 6. Repeat steps 2 through 5 to program in your Audio device.

Note: Depending on which device(s) you have programmed, the last device programmed will be the volume control source. See "VOLUME CONTROL" on your Universal Remote Control manual to change this setting.

Digital Adapter Troubleshooting

How do I program my VCR to record using a WOW! Digital Adapter?

To record a program using your Digital Adapter and VCR:

- 1. Set your VCR to record channel 3 (4 in Cleveland) for the time the program is airing.
- 2. Tune the Digital Adapter to the channel you want to record.

The VCR can only record the channel that your Digital Adapter is tuned to. To record different programs at different times, you will need to change the channel on your Digital Adapter.

My Digital Adapter takes too long to change the channels. What can you do about that?

We understand that the experience may be different from what you are used to. Unfortunately, there may be a slight delay when you are changing channels as the Adapter works to tune from one digital signal to the next.

My Digital Adapter remote stopped working, loses its programming or won't power off/on.

If your remote loses its programmed codes, try replacing the batteries with high quality Alkaline batteries. When replacing the batteries, try not to push any buttons, and the codes should remain intact.

For a list of Frequently Asked Questions, visit wowway.com.



WOW! Universal Remote Control Codes

Use these codes for the WOW! Remotes (page xii-xv)

For the most current WOW! remote programming, please visit www.wowway.com/referenceguide

| SETUP CODES F | OR TVS: | CCE | 10623 | | 10178, 10171, 11661, |
|----------------|----------------------|---|----------------------|-----------------|----------------------|
| A-Mark | 10003 | Celebrity | 10000 | | 11997, 11963, 11944, |
| Accurian | 11803 | Celera | 10765 | | 11911, 11905, 11665, |
| Action | 10873 | Champion | 11362 | | 10623, 10282, 10280, |
| Admiral | 10093, 10463, 10179 | Changhong | 10765 | | 10179, 10177, 10039, |
| Advent | 10761, 10817, 11933 | Cineral | 10451, 10092 | | 10019 |
| Adventura | 10046 | Citizen | 10060, 10030, 10092, | Emprex | 11422, 11765 |
| Aiko | 10092 | | 10039, 10046, 10056, | Encross | 10876, 11474 |
| Aiwa | 10032, 10701, 11362, | | 10186, 10280, 11669, | Envision | 10030, 10813, 11365, |
| | 11955 | | 11671, 11672, 11935 | | 12014, 12087 |
| Akai | 10812, 11675, 10030, | Clarion | 10180 | Epson | 11122 |
| | 10672, 11207, 11385, | Classic | 11984 | ESA | 10812, 10171, 11944, |
| | 11676, 11688, 11689, | Coby | 11634, 12306, 12315, | | 11963 |
| | 11692, 11935, 12232 | , | 12326, 12340, 12344, | Fisher | 10154, 10159 |
| Alaron | 10179 | | 12345, 12347, 12348, | FlexVision | 10713 |
| Albatron | 10700, 10843 | | 12351, 12560 | Fujitsu | 10809, 10179, 10186, |
| Alfide | 10672 | Commercial Solut. | 10047 | , | 10683, 10853 |
| Ambassador | 10177 | Concerto | 10056 | Funai | 10000, 10180, 10171, |
| America Action | 10180 | Contec | 10180 | | 10179, 11904, 11963 |
| Anam | 10180 | Craig | 10180 | Futuretech | 10180 |
| AOC | 10030, 10003, 10019, | Crosley | 10000, 10054 | Gateway | 11755, 11756 |
| | 10052, 11089, 11365, | Crown | 10180, 10039, 10672 | GE | 10047, 10051, 10451, |
| | 11590, 12014, 12087 | Crown Mustang | 10672 | | 10178, 10021, 10027, |
| Aomni | 11623 | CTX | 10700 | | 10282, 10747, 11907, |
| Apex Digital | 10748, 10879, 10765, | Curtis | 11200, 11326, 12352, | | 11922 |
| , ipon Digital | 10890 11217, 12397 | | 12466 | GFM | 10171, 11665, 11963, |
| Archer | 10003 | Curtis Mathes | 10047, 10054, 10154, | 5 | 12167 |
| Astar | 11531, 11738 | J a. | 10451, 10093, 10060, | Gibralter | 10017, 10030, 10019 |
| Audinac | 10180 | | 10030, 10145, 10166, | Go Video | 10886, 11823 |
| Audiovox | 10451, 10180, 10092, | | 11661, 10016, 10039, | GoldStar | 10178, 10030, 10019, |
| radiovox | 12513, 12413, 11952, | | 10056, 10466, 10747, | Goldotai | 10039, 10056 |
| | 11951, 11937, 11868, | | 11959 | GPX | 10179 |
| | 11803, 11769, 11766, | CXC | 10180 | Gradiente | 10053, 10056 |
| | 11284, 10875, 10846, | Cytron | 11326 | Grundig | 10672, 10683 |
| | 10802, 10713, 10623, | Daewoo | 10154, 10451, 10092, | Grunpy | 10180, 10179 |
| | 10003 | Buowoo | 11661, 10019, 10039, | H & B | 11366 |
| Aventura | 10171 | | 10623, 10661, 10672 | Haier | 11034, 10768, 11748, |
| Axion | 11937 | Daytron | 10019 | Tidioi | 12494 |
| Baysonic | 10180 | Dell | 11264, 11080, 11178 | Hallmark | 10178 |
| Belcor | 10019 | Delta | 11369 | Hanns.G | 11783 |
| Bell & Howell | 10154, 10016 | Denon | 10145 | Hannspree | 11348, 11745, 11783 |
| BenQ | 11032, 11315 | Diamond Vision | 11996, 11997 | Harley Davidson | 10179, 11904 |
| BGH | 10876 | Digistar | 11565 | Harman/Kardon | 10054 |
| Blue Sky | 11254 | Digital Lifestyles | 11765 | Harvard | 10180 |
| Bradford | 10180 | Disney | 11665, 12152 | Havermy | 10093 |
| Brillian | 11007 | Dumont | 10017, 10019 | Hewlett Packard | 11494, 11088, 11089, |
| Brockwood | 10019 | Durabrand | 10463, 10180, 10178, | HEWIELLI ACKAIU | 11101 |
| D 1 : | 10236, 10463, 10003, | Durabrana | 10171 11034, 10003, | Himitsu | 10180 |
| Broksonic | 11905, 11911, 11935 | | 11665 | Hisense | 10748, 11314, 11660, |
| Byd:sign | 11309 | Dwin | 10747 | THISCHISC | 12089, 12355 |
| C&M | 10700 | Dynex | 12049, 11463, 11758 | Hitachi | 11145, 10145, 10016, |
| Cadia | 11283 | Electroband | 10000 | intaom | 10056, 10096, 10679, |
| Candle | 10030, 10046, 10056, | Electrograph | 11755, 11623 | | 10797, 11345, 11904 |
| Januic | 10186 | Electrohome | 10463, 11670, 11672 | HP | 11494, 11088, 11089, |
| Carnivale | 10030 | Element | 11687, 12183 | 111 | 11101 |
| Carrivale | 10054 | Emerson | 11864, 10154, 10451, | Hyundai | 10849,11219, 11294 |
| | 11205 | FILICIOUII | | | 11746 |
| Casio | 11200 | | 10236, 10463, 10180, | I-Inc | 11/40 |



| iLo | 11286, 11603, 11665, | Matsushita | 10250 | | 10019, 10020, 10096, |
|----------|---------------------------------------|-----------------|----------------------|---------------|-------------------------------|
| | 11684, 11990 | Maxent | 11755, 11211, 11714, | _ | 10179, 10187, 10786, |
| Infinity | 10054 | _ | 11757 | | 11665, 11911, 11963 |
| Initial | 11603, 11990 | MB Quart | 11868 | Philips | 11454, 10054, 11744, |
| Insignia | 12049, 11423, 10463, | Megapower | 10700 | | 11961, 12372, 12597 |
| ū | 10171, 11204, 11326, | Megatron | 10178, 10145, 10003 | Pilot | 10030, 10019, 10039 |
| | 11385, 11517, 11660, | Memorex | 10154, 10463, 10150, | Pioneer | 11457, 10166, 10679, |
| | 11785, 11892, 11963 | | 10178, 10016, 10179, | | 11260, 11398 |
| | 12417 | | 10877, 11665, 11670, | Planar | 11496 |
| Inteq | 10017 | - | 11892, 11911, 11924 | Polaroid | 10765, 12120, 12117, |
| IURTIRIS | 12189 | MGA | 10150, 10178, 10030, | _ | 12063, 11769, 11767, |
| IRT | 10451, 11661 | - | 10019, 11907 | | 11766, 11762, 11687, |
| IX | 10877 | Micro | 11436 | _ | 11565, 11385, 11341, |
| Janeil | 10046 | Midland | 10047, 10017, 10051, | _ | 11328, 11327, 11326, |
| JBL | 10054 | - | 10039, 10747 | | 11316, 11314, 11286, |
| JCB | 10000 | Mintek | 11603, 11990 | _ | 11276, 11262, 10865 |
| JCM | 12189, 12256 | Minutz | 10021 | Portland | 10451, 10092, 11661, |
| Jensen | 10761, 10817, 11299, | Mitsubish | 11250, 10093, 10150, | _ | 10019, 10039 |
| | 11326, 11933 | | 10178, 10019 | Prima | 10761, 10817, 11785, |
| JVC | 10463, 10053, 10731 | Monivision | 10700, 10843 | _ | 11933 |
| Kaypani | 10052 | Motorola | 10093 | Princeton | 10700, 10717 |
| KDS | 11687 | MTC | 10060, 10030, | Prism | 10051 |
| KEC | 10180 | - | 10019,10056, | Proscan | 10047, 10030, 10466, |
| Kenwood | 10030, 10019 | Multitech | 10180 | - | 10747, 11922, 12147, |
| Kioto | 10054, 10706 | NAD | 10156, 10178, 10056 | _ | 12256 |
| KLH | 10765 | Nakamichi | 11493 | Proton | 10178, 10003, 10052, |
| Kloss | 10046 | Naxa | 11998 | - | 10466 |
| KMDS | 12278 | NEC | 10030, 10019, 10056, | Proview | 11687 |
| Konka | 10632, 10638, 10707, | - | 11398 11797 | Pulsar | 10017, 10019 |
| | 11385, 11939 | NetTV | 11755 | Pyle | 11200 |
| Kost | 11262 | Nexus Electroni | cs 12183 | Quasar | 10250, 10051, 10165, |
| Kreisen | 10876, 11474 | Nikko | 10178, 10030, 10092 | | 11924 |
| KTV | 10180, 10030, 10039, | Niko | 11581 | RadioShack | 10047, 10154, 10180, |
| | 10280 | Nimbro | 12104 | _ | 10178, 10030, 10019, |
| LG | 11423, 10017, 10178, | Noblex | 10430 | _ | 10039, 10056, 10165, |
| | 10030, 10056, 10700, | Norcent | 10748, 10824, 11089, | _ | 10747, 11904 |
| | 10856, 11178, 11325, | | 11365, 11590, 11591 | RCA | 12434, 10047, 10051, |
| | 11934 | Norwood Micro | 11286, 11296 | _ | 10093, 10060, 11661, |
| LiteOn | 10088 | Noshi | 10018 | _ | 10018, 10019, 10090, |
| Lloyd's | 11904 | NTC | 10092 | _ | 10679, 10747, 11907, |
| Logik | 10016 | NuVision | 11657, 12518 | _ | 11922, 11953, 11958, |
| Luce | 11031 | Olevia | 11610, 11144, 11240 | _ | 12746 |
| Luxman | 10056 | Onwa | 10180 | Realistic | 10154, 10180, 10178, |
| LXI | 10047, 10054, 10154, | Optimus | 10250, 10154, 10166, | _ | 10030, 10019, 10039, |
| | 10178, 10747 | · | 11924 | | 10056, 10165 |
| M&S | 10054, 10236 | Optoma | 10887, 11348 | RevolutionHD | 11623 |
| MAG | 11678 | Optonica | 10093, 10165 | Runco | 10017, 10030, 11398 |
| Magnavox | 11454, 11755, 10054, | Orion | 10236, 10463, 11463, | Sampo | 11755, 10030, 10039, |
| · · | 10051, 10030, 10171, | | 10179, 11905, 11911 | • | 10052 |
| | 10706, 12597, 12372, | Panasonic | 11480, 10250, 11457, | Samsung 10812 | , 10060, 10178, 10030, 10019, |
| | 11990, 11963, 11944, | | 10051, 11924 | · · | 10039, 10056, 10587, |
| | 11931, 11904, 11525, | Park | 12104 | _ | 10766, 10814, 11959 |
| | 11365, 11254, 11198, | PDI | 11474 | Samsux | 10039 |
| | 10802, 10386, 10187, | Penney | 10047, 10156, 10051, | Sansei | 10451 |
| | 10186, 10179, 10096, | • | 10060, 10178, 10030, | Sansui | 10463, 10171, 10165, |
| | 10020 | | 10003, 10018, 10019, | | 11670, 11892, 11904, |
| Magnin | 11907 | _ | 10021, 10027, 10039, | | 11911, 11935 |
| Majestic | 10016 | _ | 10747, 11907 | Sanyo | 10054, 10154, 10088, |
| Marantz | 11454, 10054, 10030, | Philco | 10054, 10463, 10030, | _ , | 11362, 11907 |
| - | 10854, 11398, 11714, | - | 10145, 10171, 11661, | Sceptre | 10878, 11217, 11360, |
| - | · · · · · · · · · · · · · · · · · · · | _ | | • | |



| | 44500 40500 |
|-------------------------|---|
| 0 - i i | 11599, 12506 |
| Scimitsu | 10019 |
| Scotch | 10178 |
| Scott | 10236, 10180, 10178, |
| Casus | 10019, 10179, 11711 |
| Sears | 10047, 10054, 10156, |
| | 10154, 10178, 10171, |
| | 10056, 10179, 10747, 11007, 11904 |
| Semivox | 10180 |
| Semp | 10156 |
| Sharp | 10093, 10039, 10165, |
| Silaip | 10386, 10854, 12495 |
| Sharper Image | 11950 |
| Sheng Chia | 10093 |
| Shogun | 10019 |
| Signature | 10054, 10016 |
| Signet | 11262 |
| Simpson | 10186, 10187 |
| Skyworth | 11799 |
| Sole | 11031, 11366, 11623, |
| 00.0 | 12075, 12076 |
| Sonv | 10810, 10000, 11685, |
| , | 11904 |
| Soundesign | 10180, 10178, 10179, |
| . | 10186 |
| Sova | 11952 |
| Soyo | 11746, 11824, 11826, |
| Spectricon | 10003 |
| Spectroniq | 11687 |
| Squareview | 10171 |
| SSS | 10180, 10019 |
| Starlite | 10180 |
| Studio Experience | 10843 |
| SunBrite | 11420, 12337 |
| Superscan | 10093, 10864, 01944 |
| Supre-Macy | 10046 |
| Supreme | 10000 |
| SVA | 10748, 10587, 10768, |
| | 10865, 10871, 10872, |
| | 11963 |
| Sylvania | 11864, 10054, 10030, |
| | 10171, 10020, 10096, |
| | 10187, 10587, 11314, |
| | 11665, 11931, 11944, |
| | 11963 |
| Symphonic | 10180, 10171, 11904, |
| Comtany | 11944 |
| Syntax | 11610, 11144, 11240 |
| Tandy | 10093 |
| Tatung | 10003, 11101, 11286, |
| Toohnios | 11288, 11361, 11756 |
| Technics Technol Ace | 10250, 10051 |
| Techview | 10179 12004 |
| Techwood | |
| Teknika | 10051, 10003, 10056 10054, 10180, 10150, |
| i Jillinu | 10060, 10092, 10016, |
| | .5550, 10002, 10010, |

| | 10179, 10186 |
|------------------|--|
| Telefunken | 10056 |
| Thomas | 11904 |
| TMK | 10178, 10056, 10177 |
| TNCi | 10017 |
| Tophouse | 10180 |
| Toshiba | 11524, 10156, 10154, |
| | 10093, 10060, 10003, |
| | 11325, 11343, 11369, |
| | 11935, 11959, 12006 |
| Totevision | 10039 |
| TruTech | 11665, 11723, 12066 |
| TVS | 10463 |
| Universal | 10027 |
| US Logic | 11286 |
| Vector Research | 10030 |
| Venturer | 11865 |
| VEOS | 11007 |
| Victor | 10053 |
| Vidikron | 10054, 11398 |
| Vidtech | 10178, 10019 |
| Viewsonic | 11755, 10797, 10857, |
| | 10864, 10885, 11330, |
| | 11365, 11578, 11627, |
| | 11742, 12014, 12087 |
| Viking | 10046 |
| Viore | 11207, 11684, 11811, |
| | 12104, 12352 |
| Visart | 11336 |
| Vizio | 11758, 10864, 10885, |
| | 11756 |
| Wards | 10000, 10047, 10054, |
| | 10017, 10156, 10154, |
| | 10051, 10180, 10060, |
| | 10178, 10030, 10187, |
| | 10186, 10179, 10165, |
| | 10096, 10056, 10016, |
| | 10027, 10021, 10020, |
| | 10019, 10018 |
| Waycon | 10156 |
| Westinghouse | 11712, 10451, 10885, |
| vvestingnouse | 10889, 10890, 11217, |
| | 11282, 11300, 11577, |
| | 12499 |
| White Westingho | |
| vville vvesungno | 10463, 11661, 11909 |
| Wyse | 11365 |
| | |
| Yamaha Zenith | 10030, 10019, 10797 |
| ∠eiliui | 11423, 10000, 10047, 10017, 10463, 10178, |
| | |
| | 10030, 11145, 10145, |
| | 10092, 11661, 10016, |
| | 11325, 11365, 11904, |
| | 11911 |
| Zonda | 10003 |

| SETUP CODES FO | |
|---------------------|----------------------|
| Adcom | 31100 |
| Bose | 30674 |
| Denon | 32134 |
| GE | 30078 |
| Marantz | 31892 |
| Optimus | 30395, 30823 |
| Pioneer | 30823 |
| Polk Audio | 32242 |
| RCA | 30823 |
| Realistic | 30395 |
| Sony | 30689 |
| Soundesign | 30078 |
| Wards | 30078 |
| Yamaha | 30354 |
| Tumunu | 00001 |
| SETUP CODES FO | OR TUNFR'S: |
| ADC | 30531 |
| Aiwa | 30158, 30189, 30121, |
| | 31089, 31388, 31641 |
| Akai | 31512 |
| | 31390 |
| Alco | |
| Altec Lansing | 32595 |
| AMC | 31077 |
| Amphion Media | 31563 |
| AMW | 31563 |
| Anam | 31609 |
| Apex Digital | 31257, 31430, 31774 |
| Arcam | 31189, 30189 |
| Audiotronic | 31189 |
| Audiovox | 31390 |
| B & K | 30820 |
| Bose | 31229, 31841, 31933 |
| Cambridge Sound | 31370 |
| Capetronic | 30531 |
| Carver | 31189, 30189, 30121, |
| | 31089 |
| Coby | 31389 |
| Curtis | 30797, 31389 |
| Daewoo | 31250 |
| Denon | 32857, 31360, 30176, |
| | 31142, 32279 |
| Dynex | 32971 |
| Electrohome | 32026 |
| Fisher | 31801 |
| Garrard | 30463 |
| Gateway | 31517 |
| Harman/Kardon | 30110, 30189, 30891, |
| riailliaily Natuull | |
| Uitaahi | 31306, 32443 |
| Hitachi | 31273, 31801 |
| Insignia | 31030, 31077, 31751, |
| | 31893, 32126, 32169, |
| | 32175, 32929, 32966, |
| | 32472 |
| Integra | 31805, 30135, 31298 |
| iSymphony | 32018, 32258, 32442 |
| JBL | 30110, 31306 |
| JVC | 30074, 30531, 31495, |
| | 31871 |
| | |

SETUP CODES FOR AMP's:



10019, 10039, 10056,

E-17

| Kenwood | 31313, 30077, 30186 |
|---------------|----------------------|
| KLH | 31390, 31412, 31428 |
| Koss | 31366 |
| Lexicon | 31076 |
| LG | 31293, 32284 |
| Linn | 30189 |
| Magnavox | 31189, 31269, 30189, |
| · · | 30391, 30531, 31089, |
| | 31514 |
| Marantz | 31189, 31269, 30039, |
| | 30189, 31089, 31289 |
| McIntosh | 31289 |
| MCS | 30039 |
| Micromega | 31189 |
| Mitsubishi | 31393 |
| Musicmagic | 31089 |
| Myryad | 31189 |
| NAD | 31743 |
| Nakamichi | 31313, 30097, 31555 |
| NexxTech | 31751 |
| Norcent | 31389, 31751 |
| Nova | 31389 |
| Onkyo | 31805, 30135, 31298, |
| Ulikyu | 32451 |
| Optimus | 31023, 30186, 30531 |
| Oritron | 31366 |
| Panasonic | 31308, 31518, 30039, |
| ranasonic | 30367, 31316, 31548, |
| | |
| Philco | 31633 |
| | 31390 |
| Philips | 31189, 31269, 32311, |
| | 30189, 30391, 30891, |
| <u></u> | 31089, 31266 |
| Pioneer | 31023, 30176, 30531, |
| B | 30630, 31384, 31935 |
| Polaroid | 31508 |
| Polk Audio | 30189, 31289 |
| Proscan | 31254 |
| Quasar | 30039 |
| RCA | 31023, 31609, 31254 |
| | 30531, 31390, 31511, |
| | 32041 |
| Rio | 31869 |
| Samsung | 31868 |
| Sansui | 30189, 31089 |
| Sanyo | 31251, 31469, 31801 |
| Sharp | 30186 |
| Sherwood | 31077, 31423, 31517, |
| - | 31653, 32169 |
| Sherwood Newc | astle |
| | 32169 |
| Sonic Blue | 31869 |
| Sony | 31622, 30158, 31758 |
| Stereophonics | 31023 |
| Teac | 30463, 31390, 31528 |
| Technics | 31308, 31518, 30039, |
| | 31633 |
| Thorens | 31189 |
| Toshiba | 31788 |
| | |

| Venturer | 31390 |
|---|----------------------------------|
| /ictor | 30074 |
| Vizio | 31517 |
| Yamaha | 32061, 30176, 30186, |
| | 30376, 31176, 31276, |
| | 31331, 31375, 31376, |
| | 31476, 32455, 32467, |
| | 32471 |
| | |
| Zenith | 30857, 31293 |
| Zenith | 30857, 31293 |
| | , |
| AUDIO ACCESS | , |
| AUDIO ACCESS Altec Lansing | SORY CODES: |
| AUDIO ACCESS Altec Lansing B&W | SORY CODES: 32720 |
| AUDIO ACCESS Altec Lansing B&W Denon | 32720 32441 |
| AUDIO ACCESS Altec Lansing B&W Denon Samsung Vizio | 32720 32441 32502 |
| AUDIO ACCESS Altec Lansing B&W Denon Samsung | 32720 32441 32502 32609 |

