



**Kamai 400 Series**

**Hybrid TV Receiver**

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**User's Guide (North America Edition)**

Version 1.0

**P/N: 95-88xxxx-00**

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**P/N: 95-88xxxx-00**

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## Declaration of Conformity

	<p>To ensure proper use of this product, please read this manual carefully and retain it for future reference. Should the unit require maintenance, contact an authorized service location.</p>
	<p><b>WARNING:</b> This symbol indicates the presence of exposed dangerous voltage within the product's enclosure that constitutes a risk of electric shock. Do not open the product's case.</p> <p><b>CAUTION:</b> This symbol indicates you must take care; there is risk of damage to the equipment or to yourself.</p>
	<p>To prevent fire or shock hazard, do not expose this product to rain or moisture. To reduce the risk of electric shock, DO NOT remove the cover or back. No user serviceable parts are inside. For servicing refer to qualified personnel.</p>
	<p><b>Declaration of Conformity (United States Only)</b></p> <p><b>Federal Communication Commission Interference Statement</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>- Reorient or relocate the receiving antenna.</li> <li>- Increase the separation between the equipment and receiver.</li> <li>- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.</li> <li>- Consult the dealer or an experienced radio/TV technician for help.</li> </ul> <p>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.</p> <p>FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.</p> <p><b>IMPORTANT NOTE:</b> FCC Radiation Exposure Statement:</p> <p>This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.</p> <p>This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.</p>

	<p>IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.</p> <p>This device is intended only for OEM integrators under the following conditions:</p> <ol style="list-style-type: none"> <li>1) The transmitter module may not be co-located with any other transmitter or antenna,</li> <li>2) For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change.</li> </ol> <p>As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).</p> <p><b>IMPORTANT NOTE:</b> In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.</p> <p><b>End Product Labeling</b> The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: RRK-WMPN12A1".</p> <p><b>Manual Information To the End User</b> The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.</p>
	<p>Entone products are designed and tested to meet IEC60065, the standard for the Safety of Information Technology Equipment. This is the international standard for these types of products to reduce the risk of product damage and of personal injury. The standard protects against the following hazards:</p> <ul style="list-style-type: none"> <li>• Electric shock</li> <li>• Hazardous voltage levels</li> <li>• Fire — Overload, temperature, material flammability</li> <li>• Energy — Circuit with high energy or potential as burn hazards</li> <li>• Heat — Accessible part of the product at high temperatures</li> <li>• Radiation</li> <li>• Noise</li> </ul>
 	<p><b>Canada Certification Notice</b> The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective operations and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction. This equipment meets the applicable Industry Canada Terminal Equipment Technical Specification. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment. The Ringer Equivalence Number (REN) is 0.0. The Ringer Equivalence Number that is assigned to each piece of terminal equipment provides an indication of the</p>

	<p>maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.0. Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local Telecommunication Company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Connection to a party line service is subject to state tariffs. Contact the state public utility commission, public service commission, or corporation commission for information. If your home has specially wired alarm equipment connected to the telephone line, ensure that the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer. If you experience trouble with this equipment, do not try to repair the equipment yourself. The equipment cannot be repaired in the field and must be returned to the manufacturer. Repairs to certified equipment should be coordinated by a representative, and designated by the supplier. Users should ensure, for their own protection, that the electrical ground connections of the power utility, telephone lines, and internal, metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.</p> <p><b>CAUTION:</b> Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.</p>
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## **Preface**

### **TYPOGRAPHICAL CONVENTIONS**

The following typographic conventions are used in this manual to provide visual clues as to the purpose or specific features of the Set-Top-Box (STB) application.

- **Bold** text describes menu options and selections displayed on the screen.
- *Italics* emphasize statements and points to reference documentation.
- Ellipses (...) indicate truncated text for long examples depicting output that is too long to be shown in its entirety.
- **NOTE/TIP:** A note or a tip describes actions or conditions that can help you obtain optimum performance from STB.
- **WARNING:** A caution or a warning describes conditions that can result in an error.
- **IMPORTANT:** An important note.

### **OVERVIEW OF THIS USER'S GUIDE**

This User's Guide provides generic information about connecting Kamai to your audio and video equipment. Some of the topics covered in this guide are:

- Safety and regulatory information
- Setup
- Connecting Kamai to your audio and video equipment
- Connecting Kamai to the network
- Powering Kamai
- Using the Remote Controls
- Troubleshooting

For a full listing of all of the topics covered in this User's Guide, see the Table of Contents.

# Chapter 1

## 1 Safety Precautions

Before installing Kamai, be sure to unplug Kamai, TV and any other audio-video equipment you will connect the Kamai to. This precaution will help to prevent danger of electrical shock and damage to Kamai and your equipment.

Be careful when moving your television to avoid accidental tipping or movements that might cause injury to you or those around you.

To ensure proper use of this product, please read this user manual carefully and retain for future reference. Should the unit require maintenance, contact your service provider.

### IMPORTANT SAFETY INSTRUCTIONS

- **WARNING:** To prevent fire or shock hazard, do not expose this product to rain or moisture.
- **CAUTION:** Do not block ventilation holes.
- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prongs are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.









- To reduce the risk of electric shock, **DO NOT** remove cover or back. No user serviceable parts inside. Refer servicing to qualified personnel.
- To help prevent electric shock, plug the power cable into properly grounded sources. Use only properly grounded extension cords and adaptors, if they are needed.
- The AC main plug is used as the disconnect device, the disconnect device shall remain readily operable.
- Make sure nothing is lying on any of the cables.
- Be sure the cables are located where they will not be stepped on or tripped over.
- Do not spill food or liquids onto the unit.
- Do not push any objects into the free slots. Doing so will damage the unit, can cause fire or electrical shock, and can short out interior components.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not block cooling vents.
- Do not place the equipment in a closed-in wall unit.
- When you disconnect a cable, pull on its connector or on its strain relief loop, not on the cable itself. Some cables have a connector with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before disconnecting the cables.
- When you connect a cable, make sure both connectors are correctly oriented and aligned before connecting to avoid bending connector pins.
- For PLUGGABLE EQUIPMENT, the socket-outlet shall be installed near the equipment and shall be easily accessible.
- Changes or Modifications not expressly approved by the party responsible could void the user's authority to operate this device.
- The battery shall not be exposed to excessive heat such as sunshine, fire or the like.
- Batteries are not for domestic waste. Exhausted batteries must be returned to the business or local authorities.

# Chapter 2

## 2 Index to Parts and Controls

### CONTENTS IN THE BOX

Item	Picture	Quantity
Kamai Hybrid Television Receiver (Kamai)		1
Vertical stand		1
RJ45 Ethernet Cable		1
RCA A/V Cable		1
Power Supply with power cord (100-240V, output 12V/2.5A)		1
IR Remote Control		1
Battery (AA-size)		2

**FRONT PANEL AND REAR PANEL**

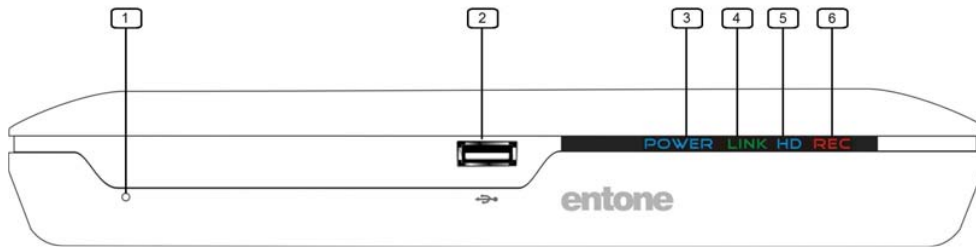


Figure 2-1 Kamai Front Panel

Part Name	Description
1. Factory Reset	Reset the device factory settings with a thin metal probe
2. USB	USB 2.0 port (max 500mA load)
3. POWER Indicator	Blue when Kamai is powered on
4. LINK Indicator	Green when Ethernet connection is active
5. HD Indicator	Blue when the video resolution is HD (720p or higher)
6. REC Indicator	Red when DVR (Digital Video Recording) is recording

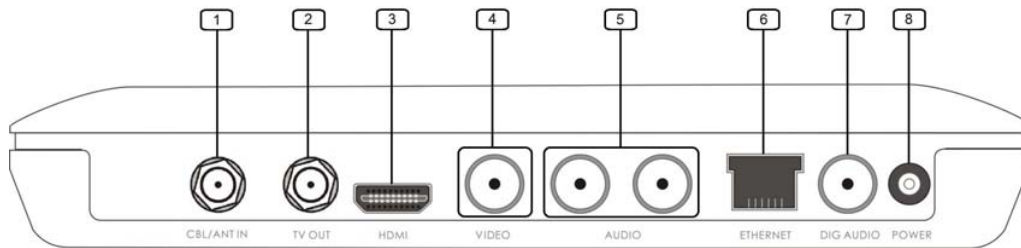


Figure 2-2 Kamai Rear Panel

Part Name	Description
1. CBL/ANT IN	Cable / Antenna IN: IEC/F connector to cable / antenna source (tuner is optional item)
2. TV OUT	F Connector (Male) to TV coaxial connector or home coaxial network
3. HDMI	HDMI output
4. VIDEO	Composite video output
5. AUDIO	Stereo Audio output
6. ETHERNET	RJ45 plug for connecting to ADSL modem or network access equipment
7. DIG AUDIO	Digital Audio: S/PDIF digital audio output
8. DC	DC power jack

**REMOTE CONTROL**

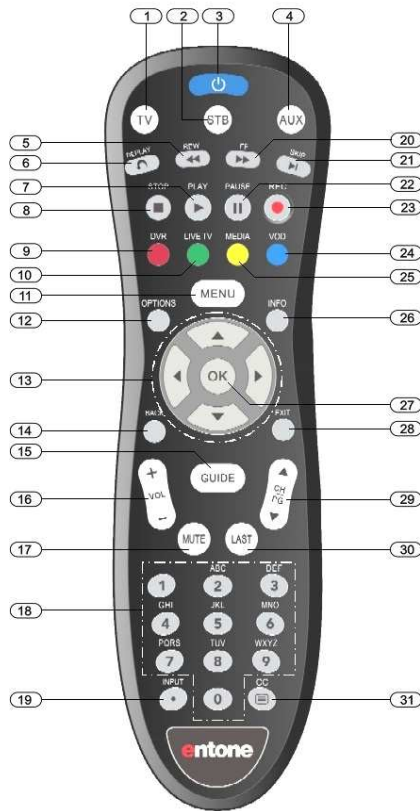


Figure 2-3 URC remote control

**NOTE:** \*Please contact your service operator for detailed functions and usages.

Part Name	Description
1. TV	Selects to control TV
2. STB	Puts remote control in STB mode
3. POWER	Switches the power on/off for the currently selected device. Switches STB to power on / standby mode.
4. AUX	Selects to control AUX device
5. REW	Fast rewinds video for VOD / DVR / live TV
6. REPLAY	Skips backward 30s of video for VOD / DVR
7. PLAY	Plays video for VOD / DVR / live TV
8. STOP	Stops video for VOD / DVR / live TV
9. RED	Feature enabled by service provider, contact service provider for more details
10. GREEN	Feature enabled by service provider, contact service provider for more details
11. MENU	Shows the on-screen menu
12. OPTIONS	Feature enabled by service provider, contact service provider for more details
13. ARROW KEYS	Navigates right, left, up, down in the on-screen guide
14. BACK	Back button for on-screen menu. Feature enabled by service provider, contact service provider for more details
15. GUIDE	Shows the electronic program guide
16. VOL +/-	Increases or decreases volume of the currently selected device
17. MUTE	Turns the volume of the currently selected device off
18. NUMBER KEYS	Allows direct access to specific channels and menu items
19. INPUT	Changes the current A/V input of the selected device
20. FF	Fast-forwards the video for VOD / DVR / live TV
21. SKIP	Skips forward the video for VOD / DVR
22. PAUSE	Pauses video for VOD / DVR / live TV
23. REC	Records live TV
24. BLUE	Feature enabled by service provider, contact service provider for more details
25. YELLOW	Feature enabled by service provider, contact service provider for more details
26. INFO	Shows on-screen information about the current TV / VOD / DVR program
27. OK	Executes the currently selected menu option
28. EXIT	Exits the current menu item
29. CH UP/DOWN	Changes channel up or down
30. LAST	Changes channel to the most recently viewed channel
31. CC	Toggles Closed Captioning on or off

# Chapter 3

## 3 Kamai 400 Series Introduction

### ABOUT THE KAMAI 400 SERIES HYBRID TV RECEIVER

The Kamai Hybrid TV Receiver is Entone's most cost-effective and compact high-definition (HD) Customer Premise Equipment (CPE) solution available in the market. It is a multi-functional platform with HDTV capability and it integrates easily with popular home-networking and broadband services. It is a hybrid TV receiver that integrates traditional IPTV and Over-the-Air TV Broadcast and Cable TV, all in one box. These core features enable service providers to increase their subscriber base and generate more revenue by enabling a variety of advanced video services. Kamai provides hassle-free onsite installation.

With Kamai, subscribers can blend and connect a variety of traditional DSL broadband services (FTTP) with rich cloud-based services, and extend the capabilities of their existing IP home networks. Kamai supports a broad range of established home networking technologies such as HomePlug and 802.11n to distribute video content throughout the home, including isolated locations.

**NOTE:** HomePlug, 802.11n and tuners are optional features.

## **Chapter 4**

### **4 Connecting Kamai to the TV**

Kamai offers several options to deliver audio and video contents to TV/home theatre equipment.

Most TV units nowadays are equipped with standard AV (composite) and TV (RF) input connectors and the Kamai can deliver standard definition (SD), 480i video to the TV through connection to these connectors.

For advance TV models which supports 480p, 720p 1080i or 1080p pictures over HDMI, it is recommended to connect the Kamai to your TV through its HDMI (High Definition Multimedia Interface) connector to get the best viewing experience.

HDMI transfers digital audio and uncompressed digital video on a single cable. As a result, audio cables and video cable do not need to be connected to separate connectors. Viewer can also enjoy HD video channels on their TV through this connection.

The Kamai HDMI output port is fully compliant with HDMI 1.3 specifications.

**CONNECTING TO THE TV USING COAXIAL CABLE (CABLE NOT PROVIDED)**

1. Use the coaxial cable to connect your TV's antenna input to the Kamai's "TV OUT" connector.
2. Tune your TV to channel 3 (i.e. 61.25MHz)

**NOTE:**

- Coaxial cable is not included in the package and has to be purchased separately.

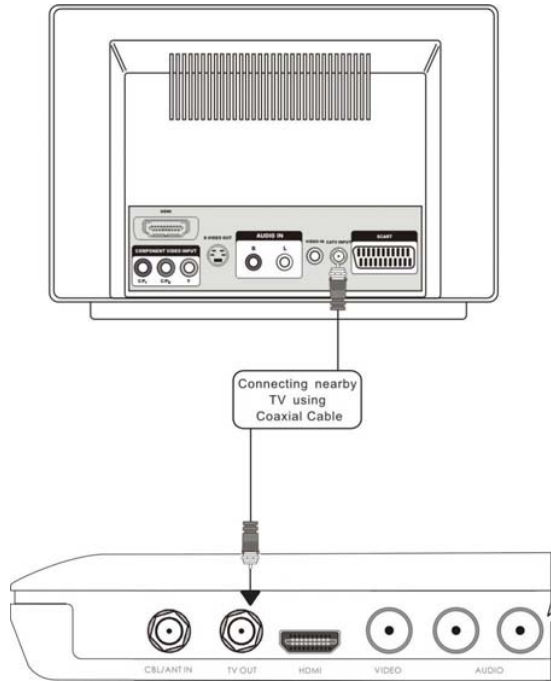


Figure 4-1 Connecting TV using Coaxial Cable

## CONNECTING TO THE TV USING COMPOSITE CABLE

1. Connect the video and audio cables from the Kamai composite "VIDEO" connector to your TV's composite video connector. The same applies to the composite "AUDIO" connector of the Kamai and the composite audio connector of your TV.
2. Tune your TV to AV (Composite input) mode

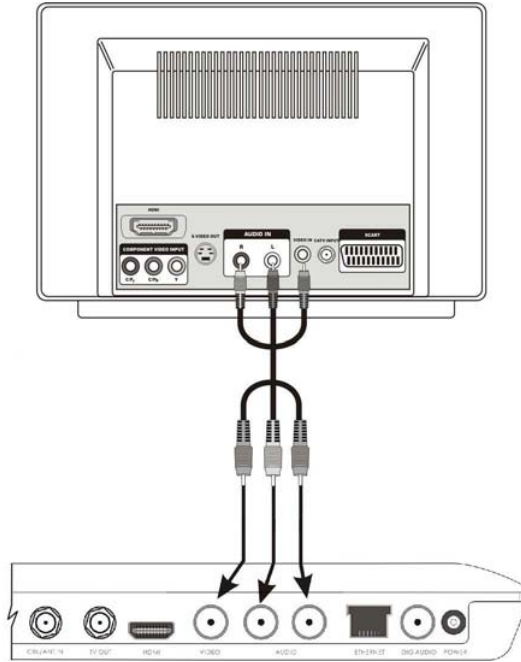


Figure 4-2 Connecting TV using RCA Composite Video/Audio



**CONNECTING TO THE TV USING HDMI CABLE (CABLE NOT PROVIDED)**

1. Acquire the required cable. HDMI cable is not packaged with the Kamai.
2. Connect the HDMI cable from the HDMI port of the Kamai to the TV's HDMI port.
3. Some TV has multiple HDMI inputs, select the correct HDMI input that was connected to the Kamai on your TV. Refer to your TV owner's manual for more details.

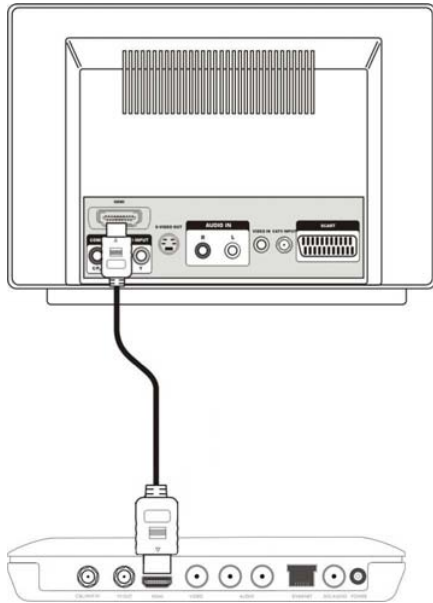


Figure 4-3 Connecting TV using HDMI

**NOTE:**

- HDMI cable is not supplied with the Kamai and has to be purchased separately.
- When the HDMI connection cannot be verified by your TV, disconnect the HDMI cable and then connect it again, or turn off the TV and then turn it on again.
- Analog DVI is not supported. If your TV supports digital DVI but not HDMI, you can use an HDMI to DVI convertor cable or adaptor to connect from the Kamai HDMI port to the TV DVI port. In this case, you need to connect the audio cable separately.

# Chapter 5

## 5 Connecting Kamai to External Digital Audio System

The Kamai supports AC-3 (Dolby Digital 5.1 channel). To enjoy Dolby Digital multi-channel surround sound, the content source must have audio tracks that carry multi-channel AC-3 signal. Please contact your service provider for availability of TV programs with AC-3 audio.

Simply connect the Kamai to an amplifier compatible with Dolby Digital through its "DIG AUDIO" port with a digital audio cable (to be purchased separately).

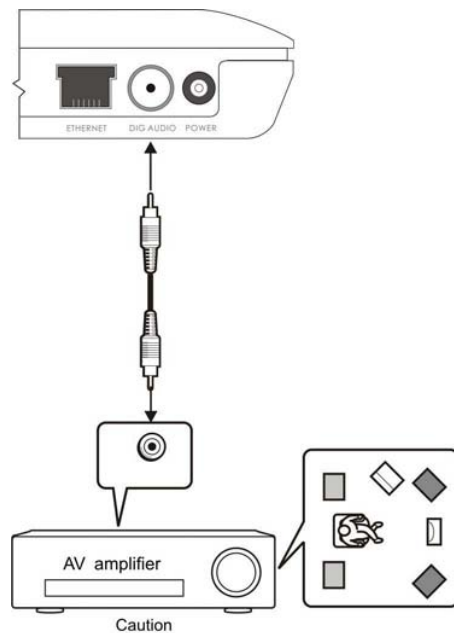


Figure 5-1 Connecting Kamai to external digital audio system

Consult your AV amplifier's user guide for exact directions on digital audio input connection. Take necessary precautions when working with electric equipment. Remove the devices from wall power and be sure to use caution when moving equipment to avoid injury.

Enabling or disabling AC-3 is done through the middleware application and exact steps may vary. For details of enabling and disabling AC-3, please refer to set top box usage instructions provided by your service provider.

# Chapter 6

## 6 Using Vertical Stand

A vertical stand comes packaged with Kamai so that it can be used to hold Kamai vertically.

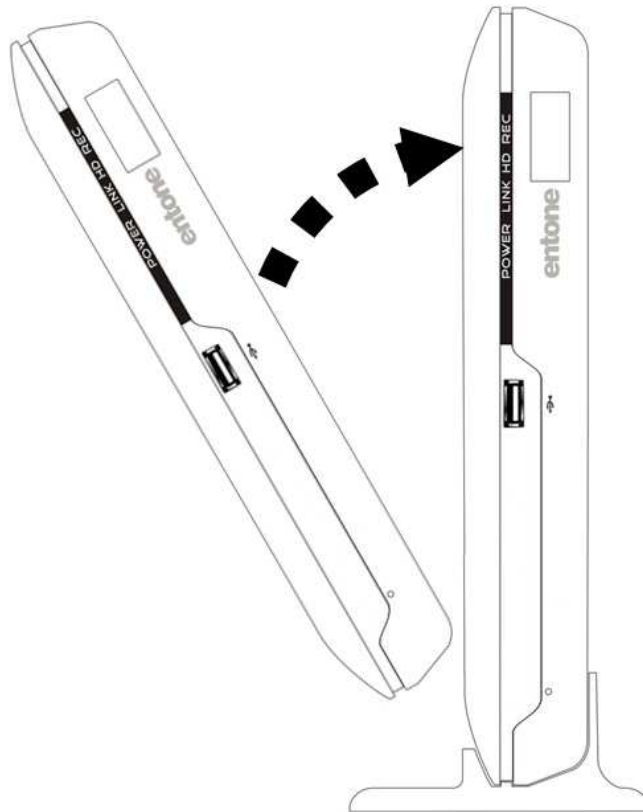


Figure 6-1 Using Vertical Stand

# Chapter 7

## 7 Powering-Up Kamai

Follow these steps to power up the Kamai:

1. Follow your TV/Network service provider's instruction to connect the Kamai to your network modem or network access unit using the Ethernet cable or built-in Wi-Fi module (optional).

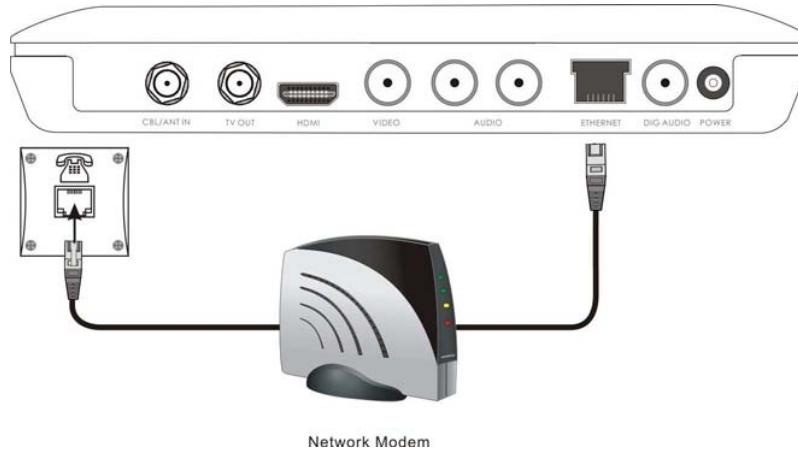


Figure 7-1 Connecting Kamai via Ethernet connection

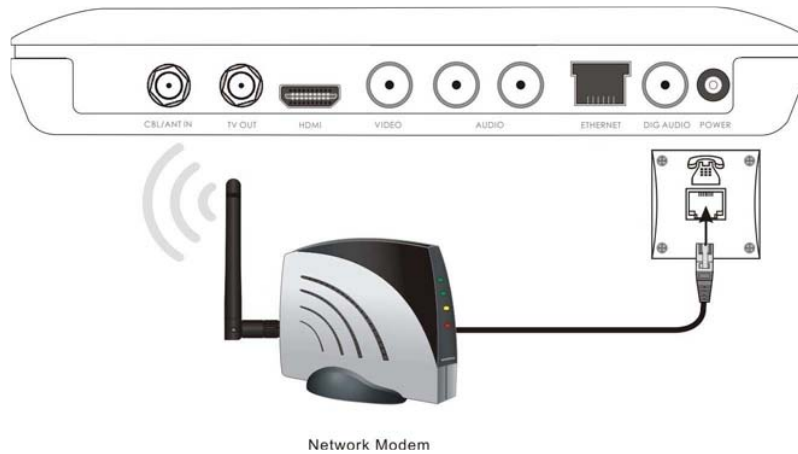


Figure 7-2 Connecting Kamai via Wi-Fi connection

**NOTE:** Kamai can be ordered with built-in WiFi option that has internal Wi-Fi antenna.

2. Plug the socket end of the AC/DC adapter into the wall socket and the DC jack into the power connector on the Kamai.

3. The Kamai front panel power indicator will turn blue.
4. The "LINK" LED indicator will turn green.



Figure 7-3 Kamai Starting

5. Within 60 seconds, a splash screen will appear on the TV.



Figure 7-4 Kamai Boot-up Splash Screen

6. The total boot-up time may vary depending on your service provider's network condition.

# Chapter 8

## 8 Remote Controls

### LOADING BATTERIES

The remote control comes with AA-size batteries, which needs 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 remote control:

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.

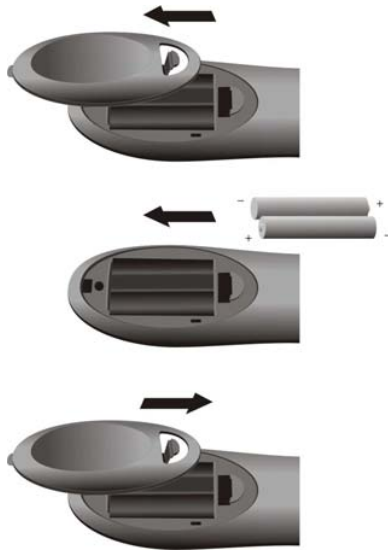


Figure 8-1 Loading Batteries to Remote Control

## CONTROLLING THE KAMAI USING IR

Kamai uses infrared (IR) to receive remote control signals. IR signals travel only short distances (40 feet or less), and cannot go through walls or other solid objects. You must point the remote control directly at the Kamai unit, with no objects blocking the line of sight to the front panel of the Kamai unit.

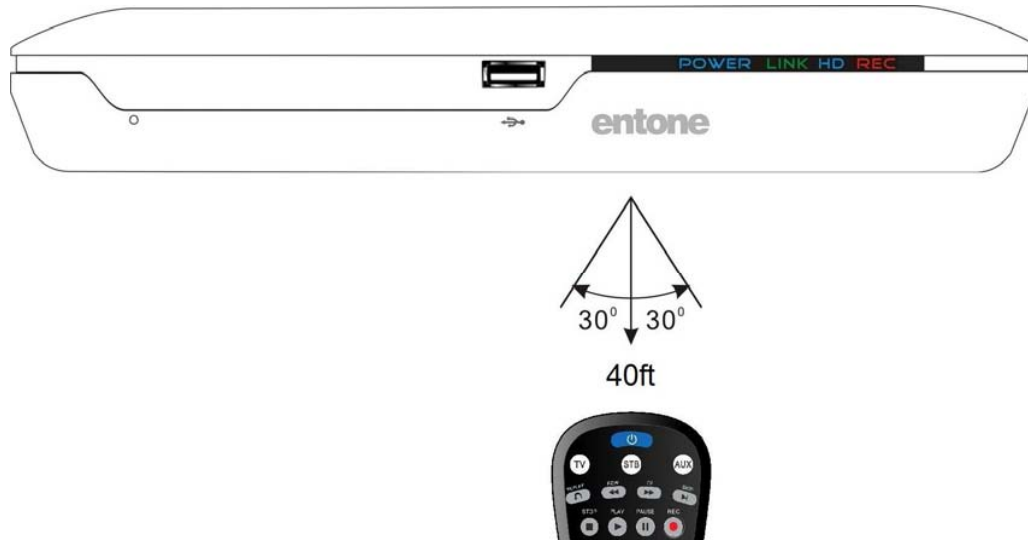


Figure 8-2 IR Reception Range

## CONTROLLING YOUR TELEVISION AND OTHER A/V DEVICES

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

For details of how to program the Universal remote controls and the supported devices, please refer to the Kamai Quick Reference Guide or URC 4 User's Guide.

# Chapter 9

## 9 Specifications

<b>Main components</b>	
Decoder	Single decoder
Main CPU	MIPS 4380 class with FPU
Memory	256MB, 128MB NAND Flash
Software	Real-time, multi-threaded embedded OS, Java Virtual Machine with MHP APIs, HTML 4.01 compliant browser with JavaScript 1.5
Remote Control	IR carrier frequency is 36KHz using RC6 protocol
<b>Graphics</b>	
Color	True-color OSD support (up to 1920x1080 pixels) Programmable OSD scaler, flicker filter Alpha blending over video Picture in graphics with scaling 2-D graphic accelerator
<b>Audio and video</b>	
Video Input Formats	High profile up to level 4.1 H.264/AVC streams High or main profile level 3.1 H.264/AVC streams VC-1 SP/MP and AP @ level 3 HD MPEG-2 4:2:0 SD MPEG-2 4:2:0 Still picture decode MPEG4 P2 SP/ASP L5 SD Progressive/Interlaced DivX 3.11, 4.1, 5.x progressive and interlaced AVS1-P2 Jizhun profile level 6.0
Video Output Formats	NTSC-M, NTSC-J 480i/480p/720p/1080i/1080p output formats Macrovision 7.1 HDMI with HDCP 1.2 Composite
Audio Input Formats	AAC LC, AAC LC+SBR Level 2, AAC+ Level 2, AAC+ Level 4 Dolby Digital, Dolby Digital Plus MPEG I Layer 1, 2, 3 (MP3) Windows Media Audio (WMA) WMA pro AAC HE 5.1 decode plus DTS 5.1 encode SPDIF output AAC HE 5.1 decode plus AC3 5.1 encode SPDIF output
Audio Output Formats	S/PIDF output supports Dolby Digital, AAC, MPEG and DTS pass-through, 24-bit PCM Dolby Digital, AAC down mixed to 2 channel PCM analog stereo MPEG (ISO/IEC-11172-3) down mixed to 2 channel PCM analog stereo
Closed Captioning	EIA-608 Captioning format – ATSC, SCTE



Connectors	1 x RF TV OUT F Type connector for 1 modulated channel 1 x RCA COMPOSITE composite video output 1 x RCA COMPOSITE composite audio output 1 x HDMI (HDMI 1.3) 1 x S/PDIF digital audio output 1 x USB (USB 2.0) connector
Tuner	Optional ATSC tuner
<b>Network interfaces</b>	
Ethernet	Ethernet (10/100Base-T auto-sensing)
Home networking	Optional 802.11n wireless
<b>Physical and mechanical</b>	
Dimensions	210mm x 150mm x 35mm (W x L x H)
Weight	0.5 kg
Operating voltage	100-240V AC RMS
Operating current	2.5A
Operating frequency	50/60Hz
Output voltage, current	12V DC, 2.5A
Operating temperature	10° to 35°C (50° to 95°F)
Relative	Humidity non-condensing
Regulatory compliance	CE
<b>Security controls</b>	
Anti-Taping	Macrovision (optional)
Parental Controls	Provided through middleware partner integration
<b>External Adapter</b>	
Model	FBP045-120S250J2
INPUT	100-240 V ~ 50/60 Hz, 1.1 A max
OUTPUT	12V – 2.5A

**NOTE:** Above specification for reference only.

# Chapter 10

## 10 Troubleshooting the Kamai

This section describes some of the most common problems that might be encountered when installing Kamai, and the solutions to those problems.

Symptom	Remedy	Reference
Remote controls do not work	<ul style="list-style-type: none"> <li>• Check batteries are correctly loaded.</li> <li>• Check that new Kamai remote control is used.</li> </ul>	<i>Section 8 – Remote Controls</i>
Remote controls cannot control the programmed devices	<ul style="list-style-type: none"> <li>• Device manufacturers may change their device codes or no device code can be found in the Universal Remote Control User's Guide. Try searching the device code according to the procedures listed in the Universal Remote Control User's Guide.</li> </ul>	<i>Kamai Quick Reference Guide URC 4 User's Guide</i>
Power indicator at the front panel not lit	<p>The power supply to the box is probably not working:</p> <ul style="list-style-type: none"> <li>• Check that the AC/DC adapter is connected properly to the DC INPUT connector.</li> <li>• Check that there is power from the power source.</li> <li>• Make sure you have pressed the Power button and that the Power indicator light is green.</li> </ul>	<i>Section 7 – Powering-Up Kamai</i>
Stays on boot-up splash screen on the TV for more than 60 seconds	<ul style="list-style-type: none"> <li>• Check that the ADSL cable is properly connected between the ADSL connector and the ADSL modem. The ADSL Link indicator should be orange and steady.</li> <li>• Check that the ADSL modem is properly connected to the telephone socket.</li> </ul>	<i>Section 7 – Powering-Up Kamai</i>
Power indicator turns blue; no picture on the TV	<ul style="list-style-type: none"> <li>• Check that the video output connector of the Kamai is properly connected to the input connector of the primary TV.</li> <li>• "TV OUT" (coaxial connection): the TV set should be set to channel 3.</li> <li>• Composite, Component or HDMI connection: the TV set should be set to the correct input mode for the signal.</li> <li>• Component or HDMI connection: the resolution selected in Kamai is supported by your TV.</li> </ul>	<i>Section 4 – Connecting Kamai to the TV</i>

<p>No sound</p>	<ul style="list-style-type: none"> <li>• Check that the audio cable is connected to the correct input in your device.</li> <li>• Is the volume of the device turned down to the minimum level?</li> <li>• If HDMI or component is used, try disabling AC-3.</li> <li>• If HDMI is used, check the resolution and try to use the composite audio output.</li> </ul>	<p><i>Section 5 – Connecting Kamai to External Digital Audio System</i></p>
<p>Multi-channel sound not working</p>	<ul style="list-style-type: none"> <li>• Check with service provider that programs contain multi-channel AC-3 signal.</li> <li>• Check that AC-3 is enabled in the Kamai.</li> <li>• Check your TV or A/V equipment for AC-3 multi-channel setup.</li> </ul>	<p><i>Section 5 – Connecting Kamai to External Digital Audio System</i></p>
<p>No sound, poor sound or popping noise on HDMI</p>	<ul style="list-style-type: none"> <li>• HDMI is an evolving technology, so it is possible that some TVs may not operate properly with Kamai. In case of problem, use component video output and composite audio output to connect your primary TV.</li> </ul>	<p><i>Section 4 – Connecting Kamai to the TV</i></p>