



# Owner's manual

RVE-1060 Video Enhancer





# CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.



This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.

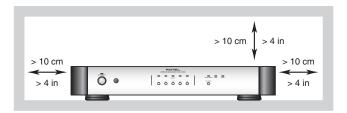
# APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.







Rotel products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). The crossed wheelie bin symbol indicates compliance and that the products must be appropriately recycled or processed in accordance with these directives.



This symbol means that this unit is double insulated. An earth or ground connection is not required.





## **Important Safety Instructions**

**WARNING:** There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

**WARNING:** To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not expose the unit to dripping or splashing. Do not place objects filled with liquids, such as vases, on the unit. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read all the instructions before connecting or operating the component.

Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the enclosure only with a dry cloth or a vacuum cleaner.

Do not use this unit near water.

You must allow a minimum 10 cm or 4 inches of unobstructed clearance around the unit. Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation openings. If the unit is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel. (USA: 120 V/60Hz, EC: 230V/50Hz)

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable. A polarized plug has two blades, with one wider than the other. A grounding plug has two blades plus a third grounding prong. These are provided for your safety. Do not defeat grounding and/or polarization safety provisions. If the supplied plug does not fit your outlet, please consult an electrician for replacement of the obsolete outlet. Do not use extension cords.

The main plug of the power cordset is a disconnect device of the apparatus. In order to completely disconnect the apparatus from the supply mains, the main plug of the power cordset should be unplugged from the mains (AC) outlet. The stand-by LED indicator will not be lit up to show the power cord is unplugged.

Do not route the power cord where it will be crushed, pinched, bent, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where the cord exits the back of the unit.

The power cord should be unplugged from the wall outlet during a lightning storm or if the unit is to be left unused for a long period of time.

Use only accessories specified by the manufacturer.

Use only with a cart, stand, rack, bracket or shelf system recommended by Rotel. Use caution when moving the unit in a stand or rack to avoid injury from a tip-over.

Use Class 2 wiring for speaker connections to ensure proper installation and minimize the risk of electrical shock.

Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- The power supply cord or plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit shows signs of improper operation
- The unit has been dropped or damaged in any way

#### **Notice**

The **COMPUTER I/O connection** should be handled by authorized person only.

#### **FCC Information**

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 instruction, 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:

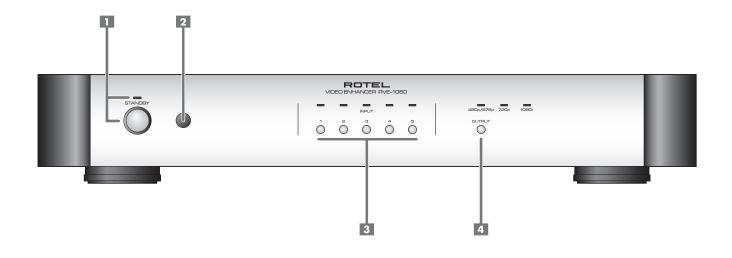
- Reorient or relocate the receiving antenna.(TV, radio, etc.)
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for additional help.

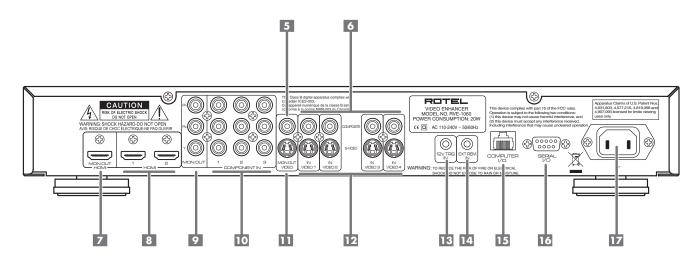
#### **Caution**

This device complies with part 15 of the FCC Rules operation is subject to the following to 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.

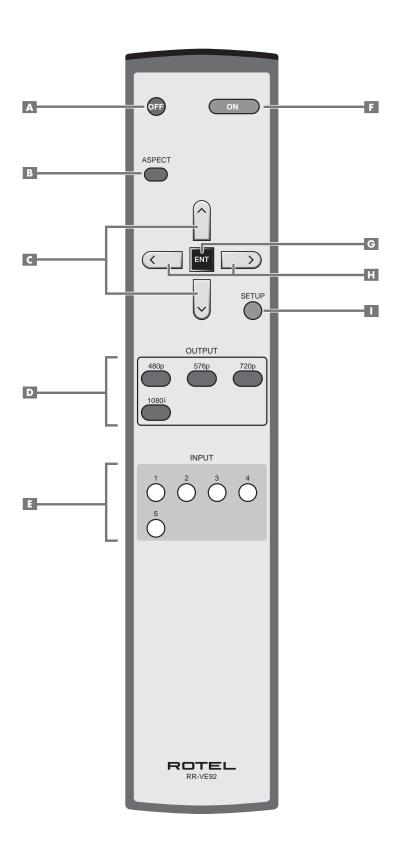
RVE-1060

#### 1: Controls and Connections



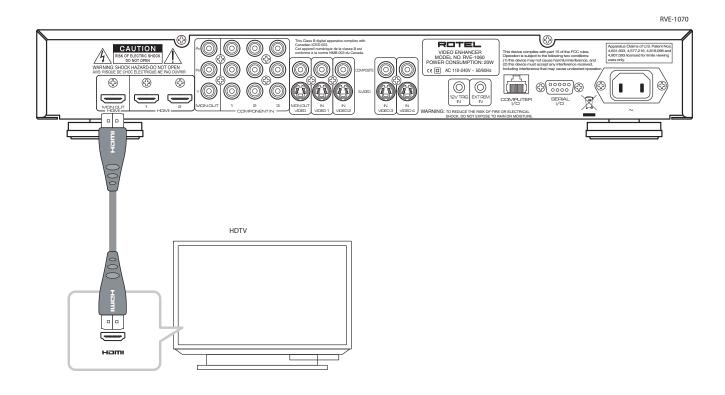


## 2: Remote Control

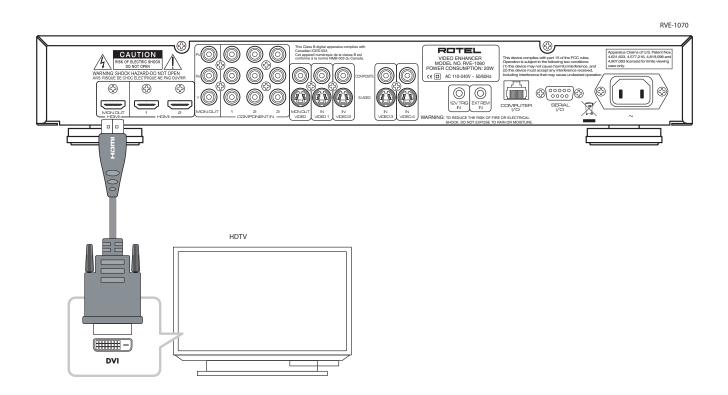


RVE-1060

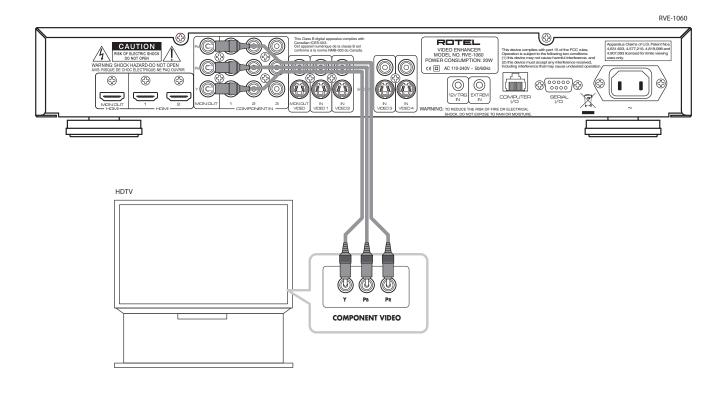
## 3: Digital HDTV connection (HDMI)



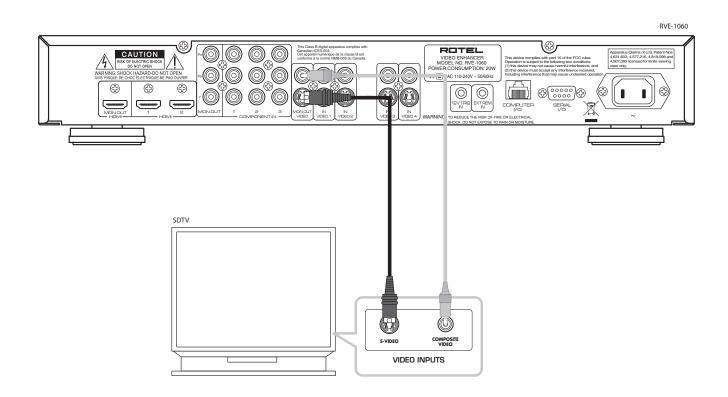
## 4: Digital HDTV connection (DVI)



## 5: Analog HDTV connection (Component Video)

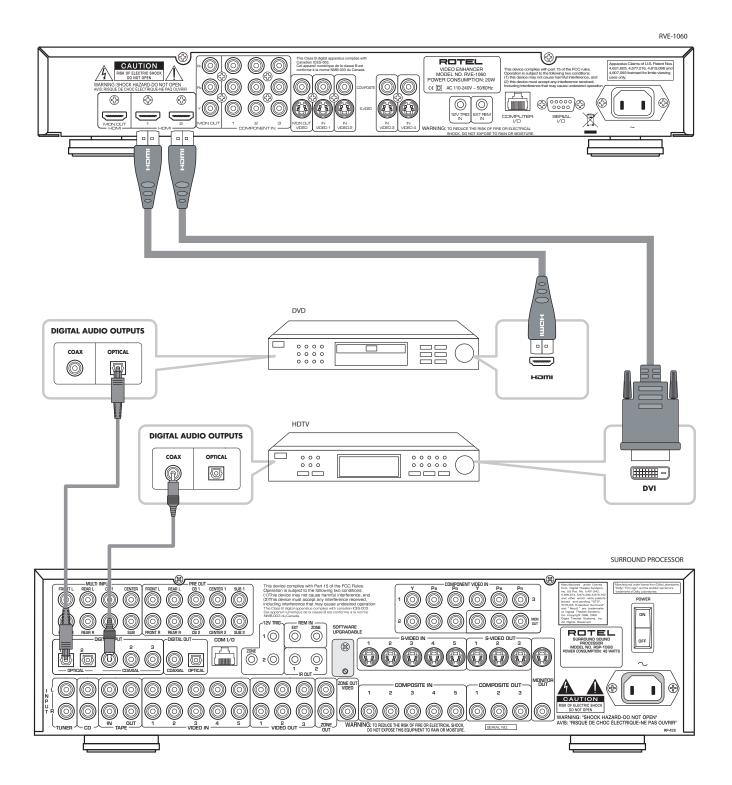


## 6: Analog TV connection (S-Video/Composite Video)

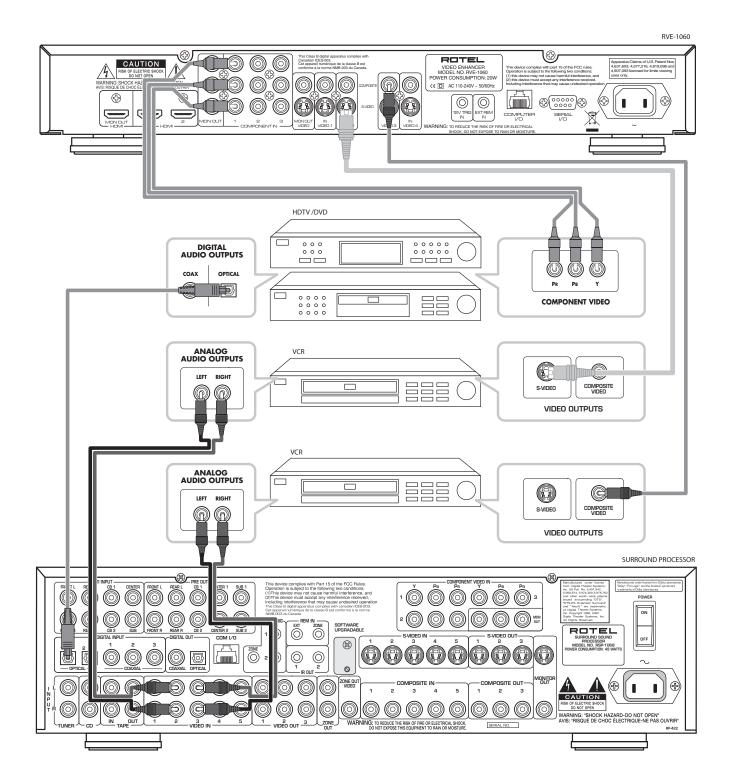


RVE-1060

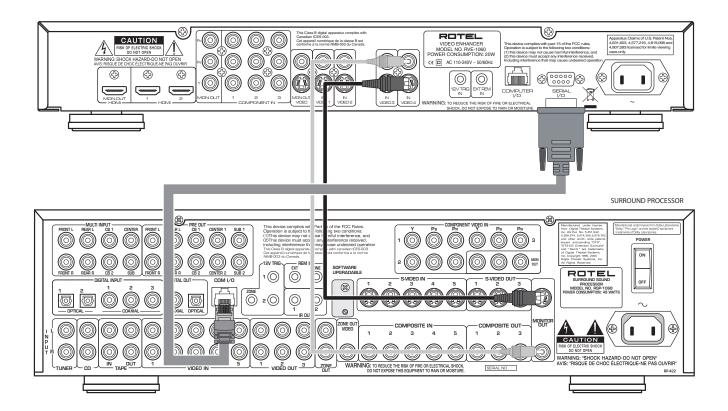
## 7: Digital input connection



## 8: Analog input connections



## 9: Link connections to Rotel surround processor or receiver



## 10: Input/Output formats

	MONITOR OUTPUT				
	HDMI	COMPONENT	S-VIDEO	COMPOSITE	
INPUT					
HDMI 480i	V	V	<b>✓</b>	V	
HDMI 480P	V	V	×	×	
HDMI 720P	V	V	×	×	
HDMI 1080i	V	V	×	×	
COMPONENT 480i	V	V	<b>✓</b>	V	
COMPONENT 480P	V	V	×	×	
COMPONENT 720P	V	V	×	×	
COMPONENT 1080i	V	V	×	×	
S-VIDEO 480i	V	V	<b>✓</b>	V	
COMPOSITE 480i	V	V	V	V	

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Boxed numbers refer to RVE-1060 illustration. Boxed letters refer to RR-VE92 illustration.

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# **About Rotel**

A family whose passionate interest in music led them to manufacture high fidelity components of uncompromising quality founded Rotel 45 years ago. Through the years that passion has remained undiminished and the family goal of providing exceptional value for music lovers and videophiles regardless of their budget, is shared by all Rotel employees.

The engineers work as a close team, listening to, and fine tuning, each new product until it reaches their exacting standards. They are free to choose components from around the world in order to make that product the best they can. You are likely to find capacitors from the United Kingdom and Germany, semi conductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

Rotel's reputation for excellence and innovation has been earned through hundreds of good reviews and awards from the most respected reviewers in the industry, who listen to music every day. Their comments keep the company true to its goal – the pursuit of equipment that is musical, reliable and affordable.

All of us at Rotel, thank you for buying this product and hope it will bring you many years of enjoyment.

# Introduction

Thank you for purchasing the Rotel RVE-1060 Video Enhancer. The RVE-1060 seamlessly integrates analog and digital video sources, outputting a signal in the native resolution of any TV or HDTV monitor. Ideal for use with fixed-resolution digital flat panel TVs. Use as a standalone video switcher, line doubler, and scaler or to upgrade the video capabilities of Rotel surround sound processors.

#### **Key Features**

- 11 analog video inputs, including 3 Component Video, 4 S-Video, and 4 Composite Video
- 2 digital video inputs with HDMI® connectors. HDCP-compliant. Compatible with DVI source components when used with adaptor.
- Digital HDTV output with HDMI® connector. HDCP-compliant. Compatible with DVI TVs.
- Analog HDTV output with Component Video connectors.
- S-Video and Composite Video analog TV outputs.
- Videophile-grade Farodja line-doubling and scaling up to high-definition resolutions.
- Advanced stretch algorithms to convert 4:3 aspect ratio video to 16:9 aspect wide screen video.
- Accepts any type of video input (NTSC 480i, PAL 576i, NTSC 480p, PAL 576p, 720p, 1080i).
- Outputs digital or analog video at any resolution (NTSC 480i, PAL 576i, NTSC 480p, PAL 576p, 720p, 1080i) to match any digital or analog TVs.
- Simultaneous display on HDTV and analog Standard Definition TV.
- Use as a standalone video switcher and scaler.
- Transparent integration with Rotel surround processors using RJ-45 computer interface connection.
- Serial interface or RJ-45 connections for computer control.

# **Quick Start**

This section provides an overview of the steps required to setup and configure the RVE-1060.

#### Unpacking

Remove the unit carefully from its packing. Find the remote control and other accessories:

- Remote Control Unit (1)
- RO3(LRO3)/AAA batteries (3)
- Instruction manual (1)
- AC Power cord (1)
- S-Video cable (1)
- Computer I/O cable (1)
- 12V Trigger cable (1)

Save the box as it will protect the RVE-1060 if you move or need to return it for maintenance.

#### **Placement**

Place the RVE-1060 on a solid, level surface away from sunlight, heat, moisture, or vibration. Make sure that the shelf can support the weight of the unit.

Place the RVE-1060 close to the other components in your system and, if possible, on its own shelf. This will make initial hookup, and subsequent system changes easier.

The RVE-1060 can generate heat during normal operation. Do not block ventilation openings. Allow a minimum of 10 cm or 4 inches of unobstructed space around the unit. If installed in a cabinet, make sure that there is adequate ventilation.

Don't stack other components or objects on top of the RVE-1060. Don't let any liquid fall into the unit.

#### **Connecting the TV monitor**

Connect the RVE-1060 to your HDTV and/or TV monitor using HDMI, Component video, S-Video, or Composite video outputs. Refer to Figures 3, 4, 5, or 6 and the detailed instructions in the CONNECTIONS section of this manual

### **Connecting video inputs**

Connect your video components to the RVE-1060 using HDMI, Component Video, S-Video, or Composite Video connections. Refer to Figures 7 or 8 and the detailed instructions in the CONNECTIONS section of this manual.

#### **Power**

Plug the supplied AC cable into the back of the RVE-1060 and into the AC wall outlet. Turn the unit on by pressing the STANDBY button on the front panel.

#### **Configure the RVE-1060**

Use the menus described in the Setup section of the manual to assign each of the source components you have connected to one of the five available inputs. Configure the output of the RVE-1060 to match the native resolution of your TV set.

## **Operating the RVE-1060**

Press one of the input buttons on the front panel or remote to select a video input for display on the TV. Press the OUTPUT button on the front panel or one of the OUTPUT buttons on the remote to change the video resolution of the output signal to the TV.

NOTE: The RVE-1060 can up-rez video signals to a higher resolution, but cannot down-rez video (for example, scaling 720p down to 480i). Therefore, make sure that the output resolution is equal to or higher than the resolution of all input sources.

**NOTE:** The RVE-1060 can only output standard definition video signals (480i or 576i) from standard definition input sources.

**NOTE:** The RVE-1060 automatically outputs either NTSC or PAL standard video to match the video standard of the input source.

# CONNECTIONS

Connecting the RVE-1060 to your system is straightforward. Each of the source components in the system is connected to the RVE-1060 video inputs with a digital or analog video cable. In most systems, each of these source components will also be connected to a surround sound processor or A/V receiver with a digital or analog audio cable.

The video output of the RVE-1060 is then connected to an HDTV monitor and/or an standard definition television, again using a digital or analog video cable.

In addition, the RVE-1060 has serial and RJ-45 computer I/O connections for integration with Rotel surround sound processors and/or other system controllers. Finally, remote IR sensor inputs are used for transferring infrared remote control commands to the RVE-1060 and 12V trigger connections for remote turn-on of the RVE-1060 by other Rotel components.

**NOTE:** Do **not** plug any system component into an AC source until all connections have been properly made.

#### **Cable Selection**

Video connections to the RVE-1060 can be made with digital or analog video cables:

#### **Digital**

The digital video connections to the RVE-1060 are made using HDMI cables. These multi-pin connectors are capable of carrying broadband digital video signals plus digital audio signals such as Dolby Digital 5.1®.

The HDMI connection standard is fully compatible with DVI connectors on source components and HDTV monitors. Connecting a DVI-equiped component to the RVE-1060's inputs or outputs requires the use of a DVI to HDMI adaptor or cable.

#### **Analog**

Analog video components can be connected to the RVE-1060 with a choice of three types of analog video connections: composite video or S-Video for standard definition TVs and source components or Component Video for high-definition TVs and components.

Video cables should have a 75 ohm impedance. Do NOT substitute conventional audio interconnect cables for digital or video signals. Standard audio interconnects will pass these signals, but their limited bandwidth reduce performance.

# Connecting an HDTV Monitor

A key feature of the RVE-1060 is that it can send a video signal to any HDTV monitor in exactly the format that best matches the native mode and resolution of the TV.

Digital HDTVs, such as LCD and plasma flatscreens, display digital signals directly. These TVs should be connected to the RVE-1060 using the HDMI digital outputs.

Analog HDTVs, such as CRT and rear-projection sets, display analog signals. Although these can be connected with an HDMI cable, these TVs should generally be connected with analog Component Video cables to avoid an unnecessary digital-to-analog conversion in the TV.

## **HDMI** digital connection **Z**

See Figure 3

Connect one end of an HDMI cable to the VIDEO OUT HDMI connector on the back of the RVE-1060. Connect the other end of the cable to the HDMI input connector on the back of the HDTV.

### DVI digital connection **Z**

See Figure 4

Connect one end of an HDMI to DVI cable to the VIDEO OUT HDMI connector on the back of the RVE-1060. Connect the other end of the cable to the DVI input connector on the back of the HDTV.

**NOTE:** The RVE-1060 video output settings should be configured to match the native resolution of the HDTV.

# Component Video Analog connection 2

See Figure 5

A set of three Component Video cables with RCA plugs is required to make Component Video Connections between the RVE-1060 and the HDTV monitor:

- Connect one cable from the VIDEO OUT connector labeled Y on the RVE-1060 to the Y input on the TV.
- Connect a second cable from the VID-EO OUT connector labeled PB on the RVE-1060 to the PB input on the TV.
- Connect a third cable from the VIDEO OUT connector labeled PR on the RVE-1060 to the PR input on the TV.

**NOTE:** The RVE-1060 video output settings should be configured to match the resolution of the HDTV.

# Connecting a SDTV Monitor

The RVE-1060 can output standard definition video signals (either Composite Video or S-Video) when the input video source is a standard resolution (480i or 576i) video signal. When connecting a standard definition TV, the best picture quality will be achieved using S-Video cables. If the standard definition TV does not have S-Video connectors, use a Composite Video connection.

#### S-Video Analog connection

See Figure 6

Connect one end of an S-Video cable to the VIDEO OUT S-VIDEO output on the back of the RVE-1060. Connect the other end of the cable to the S-VIDEO input on the TV.

# Composite Video Analog connection 5

See Figure 6

Connect one end of an RCA video cable to the VIDEO OUT Composite Video output on the back of the RVE-1060. Connect the other end of the cable to the Composite Video input on the TV.

# Connecting Source Components

The RVE-1060 can switch among up to five video sources. These sources can be connected with any type of digital (HDMI or DVI) or analog (Component Video, S-Video, or Composite Video) connection. The RVE-1060 has built-in Farodja progressive scan line-doubling and sophisticated up conversion so that all of these sources can be displayed in the native resolution of an HDTV monitor.

The following sections provide specific instructions for connection each type of source component to the RVE-1060.

#### **Configuring Inputs**

After connecting the source components, you must go to the setup menu to assign each source component to one of the five selectable inputs. Each input can also be labeled to match the component (DVD, VCR, etc.). See the Setup section at the end of the manual.

The default input assignments are:

Input 1: HDMI 1 connection

Input 2: HDMI 2 connection

Input 3: COMPONENT 1 connection

Input 4: S-VIDEO 1 connection

Input 5: COMPOSITE 1 connection

#### HDMI digital connection 8

See Figure 7

The RVE-1060 can accept up to two HDMI or DVI source components.

Connect one end of an HDMI cable to the VIDEO OUT connector on the source component. Connect the other end of the cable to the HDMI 1 or HDMI 2 input connector on the back of the RVE-1060.

## **DVI digital connection 8**

See Figure 7

The RVE-1060 can accept up to two HDMI or DVI source components.

Connect the DVI end of a DVI to HDMI cable (or adapter) to the DVI OUTPUT connector on the source component. Connect the HDMI end of the cable to the HDMI 1 or HDMI 2 input connector on the back of the RVE-1060.

## 

See Figure 8

The RVE-1060 can accept up to three Component Video source components.

A set of three Component Video cables with RCA plugs is required to make Component Video Connections between a source connection and the RVF-1060:

- Connect one cable from the VIDEO OUT connector labeled Y on the source component to the Y input of the COMPONENT 1, 2, or 3 connectors on the RVE-1060.
- Connect one cable from the VIDEO OUT connector labeled PB or CB on the source component to the PB input of the COM-PONENT 1, 2, or 3 connectors on the RVE-1060.
- Connect one cable from the VIDEO OUT connector labeled PR or CR on the source component to the PR input of the COM-PONENT 1, 2, or 3 connectors on the RVE-1060.

## S-Video Analog connection 12

See Figure 8

The RVE-1060 can accept up to four S-Video source components.

Connect one end of an S-Video cable to the VIDEO OUT S-VIDEO output on the back of the source component. Connect the other end of the cable to the S-VIDEO connector of the IN VIDEO 1, 2, 3, or 4 input on the RVE-1060.

# Composite Video Analog connection 6

See Figure 8

The RVE-1060 can accept up to four Composite Video source components.

Connect one end of a Composite Video cable to the VIDEO OUT Composite Video output on the back of the source component. Connect the other end of the cable to the Composite Video connector of the IN VIDEO 1, 2, 3, or 4 input on the RVE-1060.

# **Audio Connections**

The RVE-1060 performs the video switching for the A/V system. However, audio signals from each of your source components are switched by your A/V receiver or surround sound processor. Selected Rotel receivers or processors can be fully integrated with the RVE-1060 so that switching audio inputs to different source component on one unit automatically switches to the corresponding video signal on the RVE-1060.

**NOTE:** To integrate the RVE-1060 with Rotel receivers or surround processors (RSP-1098, RSP-1068, RSX-1067, RSX-1056, and RSX-1057), you must make a link connection between the two units and an EXT OSD connection from the surround processor to the RVE-1060 to display the surround processor's On-Screen Display. See the Link Connections section of the manual for instructions.

For non-Rotel surround processors, you can accomplish simultaneous switching by using a remote control that uses macro sequences to send multiple commands with a single button press: one command to switch audio inputs on the surround processor and a second command to switch video inputs on the RVE-1060.

Once you have made video connections from each source component to the RVE-1060, you will then need to make an audio connection from each source to your surround processor. These audio connections can be digital audio connections using a coax cable or an optical cable. Alternatively, these connections can be analog audio connections using a pair of standard RCA audio cables.

The various audio connections to a Rotel surround sound processor are shown in Figures 7 and 8. See the Owners' Manual for your surround processor or A/V receiver for detailed instructions on making these connections.

## **Link Connections**

See Figure 9

The RVE-1060 is designed to fully integrate with Rotel surround sound processors and surround receivers (RSP-1098, RSP-1068, RSX-1067, RSX-1056, and RSX-1057). The two units communicate by connecting them with the supplied Computer I/O cable. In addition, a video connection (S-Video or Composite Video) must be made from the surround processor to INPUT 4 on the RVE-1060 so that the surround processor's On-Screen Display can be passed to the TV monitor.

#### Serial I/O 16

The SERIAL I/O connector on the back of the RVE-1060 provides the necessary control connections for linking. Connect one end of the supplied Computer I/O cable to the 8-pin modular jack on the Rotel surround processor or receiver.

Connect the other end of the supplied cable to the SERIAL I/O connector on the RVE-1060.

# Video Connection for Linking 6 12

The video from the On-Screen Display of the surround processor or receiver must be sent to the RVE-1060 for display on the TV monitor. This video connection can be made with the supplied S-Video cable. Connect one end of the cable to the S-VIDEO MONITOR OUTPUT connection on the surround processor or receiver. Connect the other end to the IN VIDEO 4 S-Video connector on the RVE-1060.

Alternatively, you can make this video link connection with a Composite Video cable, connecting the Composite Video Monitor Output of the surround processor to the IN VIDEO 4 Composite input on the RVE-1060.

**NOTE:** You must specify S-VIDEO or COMPOS-ITE for the video linking in the Setup menus. See the Setup section of the manual.

# **Other Connections**

## Computer I/O II

The RVE-1060 can be operated from a computer with audio system control software from third-party developers. This control is accomplished by sending operating codes from the computer via a hard-wired RS-232 serial connection.

The COMPUTER I/O input provides the necessary network connections on the back panel, using the supplied Computer I/O cable. Plug the 8-pin modular plug end of the cable into the COMPUTER I/O connector. Plug the other end into a DB-9 serial port on the computer.

For additional information on the connections, software, and operating codes for computer control of the RVE-1060, contact your authorized Rotel dealer.

**NOTE:** This connection can also be used for installing future updates to the RVE-1060 operating software. For upgrading, the UP-GRADE option must be enabled in the Setup menus. See the Setup section of the manual for instructions.

#### AC Power 17

Your RVE-1060 will automatically configure itself for the proper AC line voltage ranging from 110 volts to 240 volts at 50/60Hz. No setting is required to match the unit to your local voltage.

Plug the supplied cord into the AC INPUT receptacle on the back of the unit. After all connections have been made, plug the cord into an appropriate AC wall outlet.

**NOTE:** If you are away for an extended period of time, it is a sensible precaution to unplug your audio/video components.

#### EXT REM IN Jack 14

This 3.5mm jack receives command codes from industry-standard infrared receivers via hard-wired connections. This feature could prove useful when the unit is installed in a cabinet and the front panel sensor is blocked. Connect this input to the EXT REM OUT jack of the main Rotel component with a mono 3.5 mm to mono 3.5 mm cable.

## 12V TRIGGER Input 13

The RVE-1060 can be activated by a 12 volt trigger signal from another Rotel component, such as a surround processor. The 12V IN connection provides an input to receive the 12 volt trigger signal.

The trigger input accepts any control signal (AC or DC) ranging from 3 volts to 30 volts. When the supplied cable is connected to the input and a trigger signal is present, the RVE-1060 is activated. When the trigger signal is interrupted, the unit goes into standby mode. The front panel indicator light remains lit, but the display goes dark and the unit will not operate.

Connect one end of the supplied cable to the 12V TRIGGER INPUT on the RVE-1060. Plug the other end into the 12V TRIG output of the Rotel surround processor, receiver, or preamp.

# OPERATING THE RVE-1060

Once you have connected the RVE-1060 and performed the simple setup steps described in the Configuration section at the end of this manual, operating the unit is simple. This section of the manual describes the few buttons and controls and how to use them

Throughout this manual, numbers in gray boxes refer to the RVE-1060 illustration at the front of this manual. Letters refer to the remote control illustration. When both appear, the function is found on both the RVE-1060 and the remote. When only one appears, that function is found only on the RVE-1060 or the remote.

# STANDBY Button II ON/OFF Buttons A F

Press the front panel STANDBY button to activate the unit. The LED above the POWER button lights when the RVE-1060 is activated. Press the button again to put the unit in standby mode.

The power ON and OFF buttons on the remote provide discrete ON and OFF commands to activate the unit or put it in standby mode.

#### Remote Sensor 2

This sensor receives IR signals from the remote control. Do not block this sensor.

## Select a Video Input 3 D

You can select any of five source inputs for display on the TV monitor. When you make a selection, the ON-SCREEN DISPLAY shows the name source selection. The labels for VIDEO sources can be customized to match your components. LEDs above the INPUT buttons on the front panel show the currently selected source.

Press one of the five INPUT buttons on the remote or the front panel to select a source.

All of the five available source inputs can be customized using the Setup menus to accept either analog signals or digital signals from the back panel connectors. By default, the source input buttons are factory configured to select the following inputs:

Input 1: HDMI 1 connection Input 2: HDMI 2 connection

Input 3: COMPONENT 1 connection
Input 4: S-VIDEO 1 connection
Input 5: COMPOSITE 1 connection

See the Setup section for instructions.

## Select an output mode 4 D

The RVE-1060 upconverts any source input to match the native resolution of an HDTV monitor connected to the HDMI or Component Video outputs of the RVE-1060:

- 480p/576p
- 720p
- 1080i

Check the specifications of the TV to determine its native resolution. In general, enhance definition (EDTV) flat-panel displays have a native resolution of 480p (NTSC standard) or 576p (PAL standard). High definition flat panel displays typically have a native resolution of 720p. Analog HDTV monitors such as direct view and CRT-based projection sets most often have a native resolution of 1080i.

**NOTE:** The RVE-1060 will output either NTSC or PAL standard video depending on the standard used by the selected source component.

A TV set connected to the S-Video or Composite video output can only display standard definition signals (480i/576i), regardless of the output mode selection.

NOTE: The RVE-1060 cannot down-rez video signals. Therefore, 480p/576p, 720p, or 1080i input signals cannot be displayed on a standard definition TV. See Figure 9 at the front of the manual for a chart of available up-rez options for each type of TV monitor.

# To select an output mode from the remote:

Press one of the four OUTPUT buttons on the remote.

**NOTE:** Either the 480p or 575p option will be available, depending on whether the source input is NTSC or PAL standard. Use the 480p button on the remote with an NTSC source; use the 576p button with a PAL source.

# To select an output mode from the front panel:

Press the OUTPUT button to step through the available options.

The current selection is shown on the SYSTEM STATUS screen of the ON-SCREEN DISPLAY and by LEDs above the OUTPUT button on the front panel.

### Select an Aspect Ratio B

The RVE-1060 can use advanced stretch mode algorithms to stretch a 4:3 aspect ratio video signal to fill a 16:9 widescreen TV.

Press the ASPECT button on the remote to toggle between the 4:3 aspect ratio and 16:9 aspect widescreen display.

**NOTE:** The RVE-1060 cannot convert widescreen aspect video to 4:3 aspect ratio.

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Press the SETUP button on the remote to access the SETUP menus. See the following section of the manual.

#### Cursor Buttons C G H

The CURSOR buttons and the ENT button on the remote are used to navigate the SETUP menus. See the following section of the manual for details.

## **SETUP**

The RVE-1060 features two types of information displays to help operate the system. The first consists of simple status displays that appear on the TV screen are changed. These status displays are self-explanatory.

A more comprehensive ON-SCREEN DISPLAY (OSD) menu system is available at any time by pressing the SETUP button on the remote. These OSD menus guide you through the configuration of the RVE-1060. In general, the settings made in the configuration process are memorized as default settings and need not be made again for normal operation of the unit.

# Configuring Menus for NTSC or PAL Monitors 11 4

The OSD menu system is configured at the factory for display on NTSC TV monitors. To use the RVE-1060 with PAL TV monitors, you must change the menu configuration:

# To reconfigure from NTSC mode to PAL mode:

- Press and hold the OUTPUT button on the front panel for several seconds. The OUTPUT LEDS above the button will begin flashing rapidly, indicating PAL mode.
- 2. Press the STANDBY button on the front panel to store the new setting.

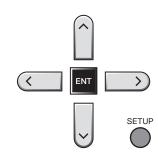
# To reconfigure from PAL mode to NTSC mode:

- Press and hold the OUTPUT button on the front panel for several seconds. The OUTPUT LEDS above the button will begin flashing slowly, indicating NTSC mode.
- 2. Press the STANDBY button on the front panel to store the new setting.

## Menu Basics

## Navigation Buttons C G H

The following remote control buttons are used to navigate the OSD menu system:



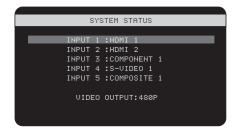
**SETUP button:** Press to display the SYSTEM STATUS screen. From the SYSTEM STATUS screen, press the ENT button to display the MAIN MENU screen which has links to all other menus. If a menu is already visible, push this button to cancel the display.

**DOWN/UP Buttons:** Press to move up and down in the lists of menu items that appear on the OSD screens.

**LEFT/RIGHT Buttons:** Press to change the current settings for a selected menu item on OSD screens.

**ENT Button:** From the SYSTEM STATUS screen, press ENT to display the MAIN MENU screen. From any other OSD screen, press ENT to confirm a setting and return to the MAIN menu or to EXIT the menu system.

#### **System Status**



The SYSTEM STATUS menu provides a snapshot of the current system settings and a starting point for reaching all other screens and menus. This screen appears when you press the remote SETUP button and displays the following information:

**INPUT 1:** the input source associated with the INPUT 1 buttons.

**INPUT 2:** the input source associated with the INPUT 2 buttons.

**INPUT 3:** the input source associated with the INPUT 3 buttons.

**INPUT 4:** the input source associated with the INPUT 4 buttons.

**INPUT 5:** the input source associated with the INPUT 5 buttons.

**VIDEO OUTPUT:** the currently selected output mode for the highlighted source.

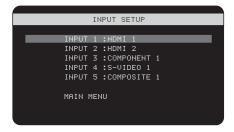
No changes can be made using this screen; it only provides information. To go to the rest of the menus, press the ENT button to go to the MAIN menu. Press the SETUP button on the remote to cancel the display and return to normal operation.

#### Main Menu



The MAIN MENU provides access to OSD screens for various configuration options. MAIN MENU is reached by pressing the ENT button from the SYSTEM STATUS menu described above or from most other menus. To go to the desired menu, move the highlight using the UP/DOWN buttons on the remote and press the ENT button. Press the SETUP button on the remote to cancel the display and return to normal operation.

#### **Input Setup**



The INPUT SETUP menu configures the source inputs and is reached from the MAIN menu. The menu lists the five INPUTS and the sources currently associated with each one.

**To modify an INPUT,** place the highlight on the desired line using the UP/DOWN buttons and press the ENT button. This takes you to an INPUT menu where changes can be made. See the next section.

**To return to the MAIN menu,** highlight MAIN MENU and press ENT.

When you select an input for changes, the following screen appears.



To change the source associated with the INPUT, highlight the SOURCE line and use the LEFT/RIGHT buttons to step through the options until the desired source appears.

**INPUT LABEL:** The twelve character label for the input can be customized. Place the highlight on this line to begin labelling. The first character in the label will be flashing.

- Press the LEFT/RIGHT buttons on the remote to change the first letter, scrolling through the list of available characters.
- 2. Press the ENT button on the remote to confirm that letter and move to the next position.
- 3. Repeat steps 1 and 2 until all twelve characters (including blank spaces) have been completed. The final press of the ENT button saves the new label.

**To return to the INPUT SETUP menu,** highlight INPUT SETUP MENU and press ENT.

## **Monitor Setup**



The MONITOR SETUP menu configures the monitor output settings and is reached from the MAIN menu.

**MONITOR INTER:** Select the type of connection made to the HDTV monitor. The choices are HDMI/DVI or ANALOG.

**HDMI AUDIO OUT:** HDMI cables can carry audio signals to the TV in addition to video. If you wish to send audio using the HDMI cables, select YES. If not, select NO. When the MONITOR INTER setting is ANALOG or not set to HDMI, this item is automatically set to NO.

**To return to the MAIN menu,** highlight MAIN MENU and press ENT.

### **Other Options**



This OTHER OPTIONS menu, accessed from the MAIN menu, provides access to several miscellaneous settings as follows:

**SETUP OSD:** This setting determines how long the SETUP menus appear on screen if there are no button presses. The default is CONTINUE which displays the menus until they are cancelled by pressing the SETUP button. Other options are 20, 30, 40, or 50 seconds.

**OSD:** This setting determines how long the status displays appear on screen when a setting is changed during normal operation. The default is 10 seconds. Other options are OFF (which prevents the display entirely) and 2, 4, 6, or 8 seconds.

**EXT OSD:** Specifies the type of video connection from a Rotel surround processor to display the processor's ON-SCREEN DISPLAY menus. The options are COMPOSITE and S-VIDEO.

**UPGRADE:** This option enables the COM-PUTER I/O port for upgrading the RVE-1060 software from a computer. The default is NO. To upgrade the RVE-1060, change this setting to YES. The baud rate is automatically set to 38,400 bps.

**VERSION:** Displays the current software version.

**To return to the MAIN menu,** highlight MAIN MENU and press ENT.

## **Default Setup**



The DEFAULT SETUP restores all features and settings to the original FACTORY DEFAULT settings.

# To restore the FACTORY DEFAULT settings:

 Place the highlight on the FACTORY DE-FAULT line using the UP/DOWN buttons and use the LEFT/RIGHT buttons to change the setting from NO to YES. A confirmation screen appears.



 Place the highlight on the ARE YOU SURE? line using the UP/DOWN buttons and use the LEFT/RIGHT buttons to change the setting from NO to YES. Press the ENTER button to proceed with resetting the FACTORY DEFAULT settings. The unit will power off and then to standby mode, with the factory settings restored.

**NOTE:** Resetting to factory default settings will erase all stored settings. Be certain that you wish to do so before resetting the factory defaults.

# **Specifications**

#### **Input Selector:**

5 selectable inputs, assignable from 13 video inputs

#### **Input Connections:**

HDMI (2) Component Video (3) S-Video (4)

Composite Video (4)

#### **Input Resolutions:**

480i, 576i, 480p, 576p, 720p, 1080i

#### **Output Connections:**

HDMI, Component Video, S-Video, Composite Video

#### **Output Resolutions:**

480p, 576p, 720p, 1080i

#### **Output formats:**

NTSC or PAL, autoswitching based on format of input signal

#### **Power Consumption:**

1.5 watts (standby) 20 watts (max)

#### Power Requirements (AC):

110 to 240 volts, 50 to 60 Hz

#### Weight:

4.2 Kg/9.3 lb.

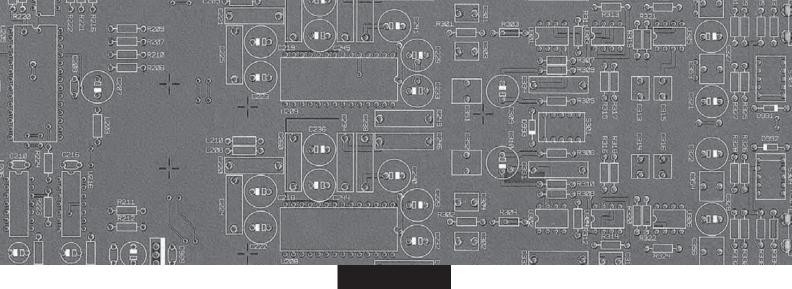
#### Dimensions (W x H x D):

432 x 72 x 336 mm 17.01" x 2.84" x 13.23"

All specifications are accurate at the time of printing.

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# ROTEL

#### The Rotel Co. Ltd.

10-10 Shinsen-Cho Shibuya-Ku Tokyo 150-0045 Japan Phone: +81 3-5458-5325

Phone: +81 3-5458-5325 Fax: +81 3-5458-5310

#### **Rotel of America**

54 Concord Street North Reading, MA 01864-2699 USA Phone: +1 978-664-3820

Fax: +1 978-664-4109

## **Rotel Europe**

Dale Road Worthing, West Sussex BN11 2BH England Phone: + 44 (0)1903 221 761 Fax: +44 (0)1903 221525

#### **Rotel Deutschland**

Kleine Heide 12 D-33790 Halle/Westf. Germany

Phone: +49 05201-87170 Fax: +49 05201-73370

www.rotel.com