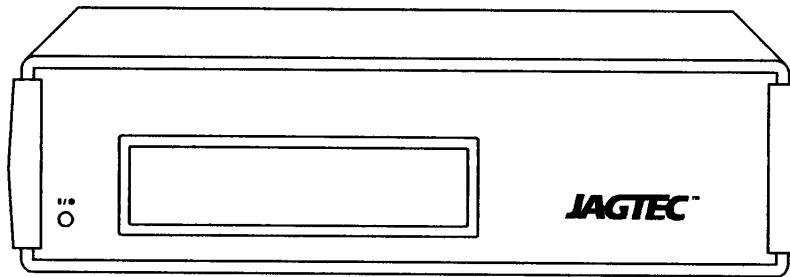


Owner's Manual

Programmable Audio-Video Appliance

PAVA-1™



Thank you for purchasing the PAVA-1, Programmable Audio-Video Appliance. Please read this booklet so you will be able to utilize all the features of your new product. For additional information, please refer to our website at www.jagtec.com.

Important

CAUTION - Connections between peripherals of the computer equipment must be made with low voltage shielded computer data cables.

WARNING - A non-shielded power cord may be used to connect AC power to every component and peripheral of the system.

WARNING - Use only the JAGTEC specified wall adapter for this product. This JAGTEC wall adapter enhances the system performance and increases the product safety features.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance.

Regulatory Agency Information

FCC NOTICE INFORMATION FOR THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and receiver.
- 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4) Consult the dealer of an experienced radio/TV technician for help.

The user may find the following publication prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems" (Stock Number 004-000-00345-4).

Available exclusively from the Superintendent of Documents, Government Printing Office, Washington, DC 20402 (telephone 202-512-1800).

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance to Part 15 of the FCC Rules could void the user's authority to operate the equipment.

**CE NOTICE
INFORMATION FOR THE USER**

This equipment has been tested and found to comply with the limits for a Class B or Class 2 digital device, pursuant to EN 55022 Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

The user may find the following publication prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems" (Stock Number 004-000-00345-4).

Available exclusively from the Superintendent of Documents, Government Printing Office, Washington, DC 20402 (telephone 202-512-1800).

WARNING

Changes or modifications not expressly approved by the party responsible for compliance to EN 55022 Rules could void the user's authority to operate the equipment.

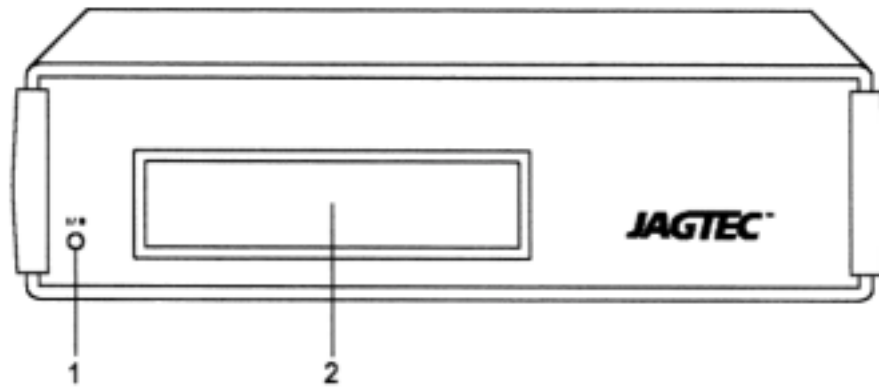
ICAN Class B Digital Equipment

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

FEATURES

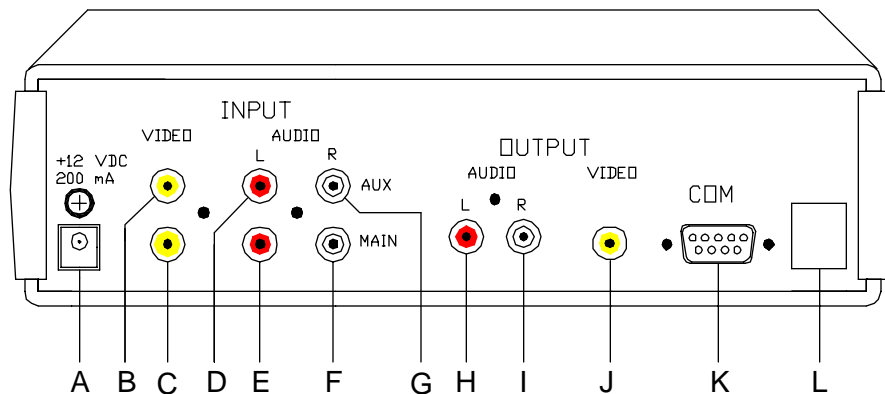
Front Panel



Front Panel

- 1 Activity Light
- 2 Status Indicator Light

Back Panel



Back Panel

- A Power Jack - +12 VDC / 200 mA
- B Auxiliary Video Input
- C Main Video Input
- D Auxiliary Audio Input – Left (Use this connection if you have a single audio signal.)
- E Main Audio Input – Left (Use this connection if you have a single audio signal.)
- F Main Audio Input – Right (Use for stereo audio signals.)
- G Auxiliary Audio Input – Right (Use for stereo audio signals.)
- H Audio Output – Left (Use this connection if you have a single audio signal.)
- I Audio Output – Right (Use for stereo audio signals.)
- J Video Output
- K Serial Communication Port (Use for PC Interface)
- L Programming Jack – NO USER ACCESS

Additional Features

The Audio-Video Mute (AVM)

The PAVA-1 includes a brand new home television feature, the Audio-Video Mute (AVM). Our AVM blacks out the center 80% of the viewing screen in addition to muting the audio. The video effect is similar to pasting a big black rectangle over the center of the TV screen.

Record TV Shows Without the Commercials

In addition to eliminating commercials from live TV shows, the PAVA-1 eliminates commercials from TV show recordings. With as few as six remote control key presses, program the PAVA-1 to turn off the recording during the commercial breaks.

Automatically Change Channels During Commercials

Although it is not a primary function, the PAVA-1 can be programmed to automatically switch between channels during commercials.

Worldwide Appeal

The PAVA-1 is designed for a worldwide audience. NTSC (North American, Japan, etc.) and PAL (Europe, Australia, China, etc.) standards are supported through standard RCA jacks.

High Power Remote Control

The PAVA-1 transmitter is twice as powerful as a conventional remote control. By bouncing, safe, but high power signals off the floor, walls, and ceiling, the PAVA-1 communicates with every remote-controlled device in the room.

Connectivity and Flexibility

Although it is not used under normal operating conditions, the PAVA-1 can be connected to a personal computer or other RS-232 communication device through the PC serial communications port. Windows programs to expand the PAVA-1 functionality are available at www.jagtec.com.

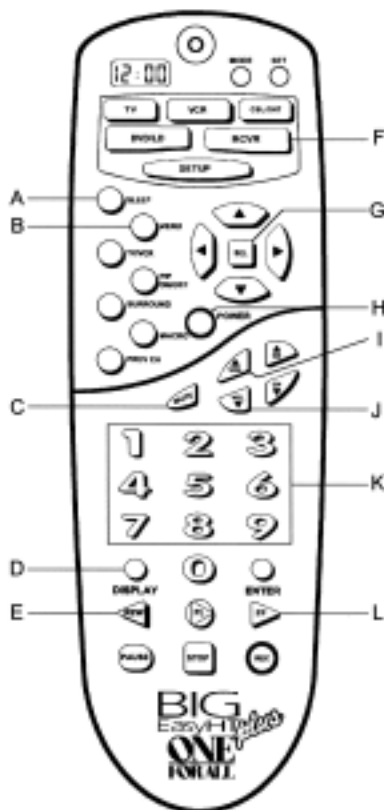
Upgradeable

The user, through the PC serial communications port, can modify the PAVA-1 firmware. Firmware updates and programming support programs are available at www.jagtec.com.

REMOTE CONTROL

The PAVA-1 comes equipped with a fully functioning Universal Remote Control. The PAVA-1 functions have simply been programmed into the **RCVR** key (Phillips Receiver Code 0189). If the PAVA-1 does not appear to be responding, try pressing the **RCVR** key to make sure the remote control is transmitting the proper signals.

Please feel free to use this remote and the included original manufacturer's instructions to control all your home automation equipment.



Functions

- A** **SLEEP** – Toggle Manual or Automatic Response (Power Up Default: Automatic)
- B** **MENU** – Enter Program Mode
- C** **MUTE** – Mute
- D** **DISPLAY** – Change Muting Mode: (1) AVM Only, (2) Remote Control Play Back Only, and (3) Both.
- E** **REW** – Use Sports Mode
- F** **RCVR** – Use PAVA-1 commands
- G** **SEL** – Toggle Audio-Video Mute (or switch to Auxiliary Input if connected)
- H** **POWER** – Active or Inactive
- I** **VOL** – Used to start recording of remote control signals to be played back when the show returns
- J** **VOL** – Short Mute. In Program Mode, used to start recording of remote control signals to be played back when the ads start,
- K** **1 through 9** – Change to Timer Mode. Select the expected number of commercials
- L** **FF** – Use Full Featured Mode (Default Mode)

Quick Guide


Getting Started


Press  to select PAVA-1 commands.




Press  to activate.

Muting

Press  to mute and un-mute the show.



Press  to toggle the audio-video mute.

Press  to mute the show for approximately thirty seconds.



Press  then  through  to mute the show for the selected number of thirty-second commercials.

Recording Remote Control Commands


Record Commands For Playback at the **Beginning** of the Commercial Break

Press  then . Hold any remote control to the front of the PAVA-1 and press the desired buttons.

Record Commands For Playback at the **End** of the Commercial Break

Press  then . Hold any remote control to the front of the PAVA-1 and press the desired buttons.

Changing Muting Features

Press  to toggle between three choices

Activity Light Flashes – 1: Audio-Video Mute Only

Activity Light Flashes – 2: Remote Control Playback Only


Activity Light Flashes – 3: Both Audio-Video Mute and Remote Control Playback

Changing Programming

Press  to switch to Full Featured Mode. This is the power-up default.

Press  through  to switch to Timer Mode and selected the expected number of thirty-second commercials.

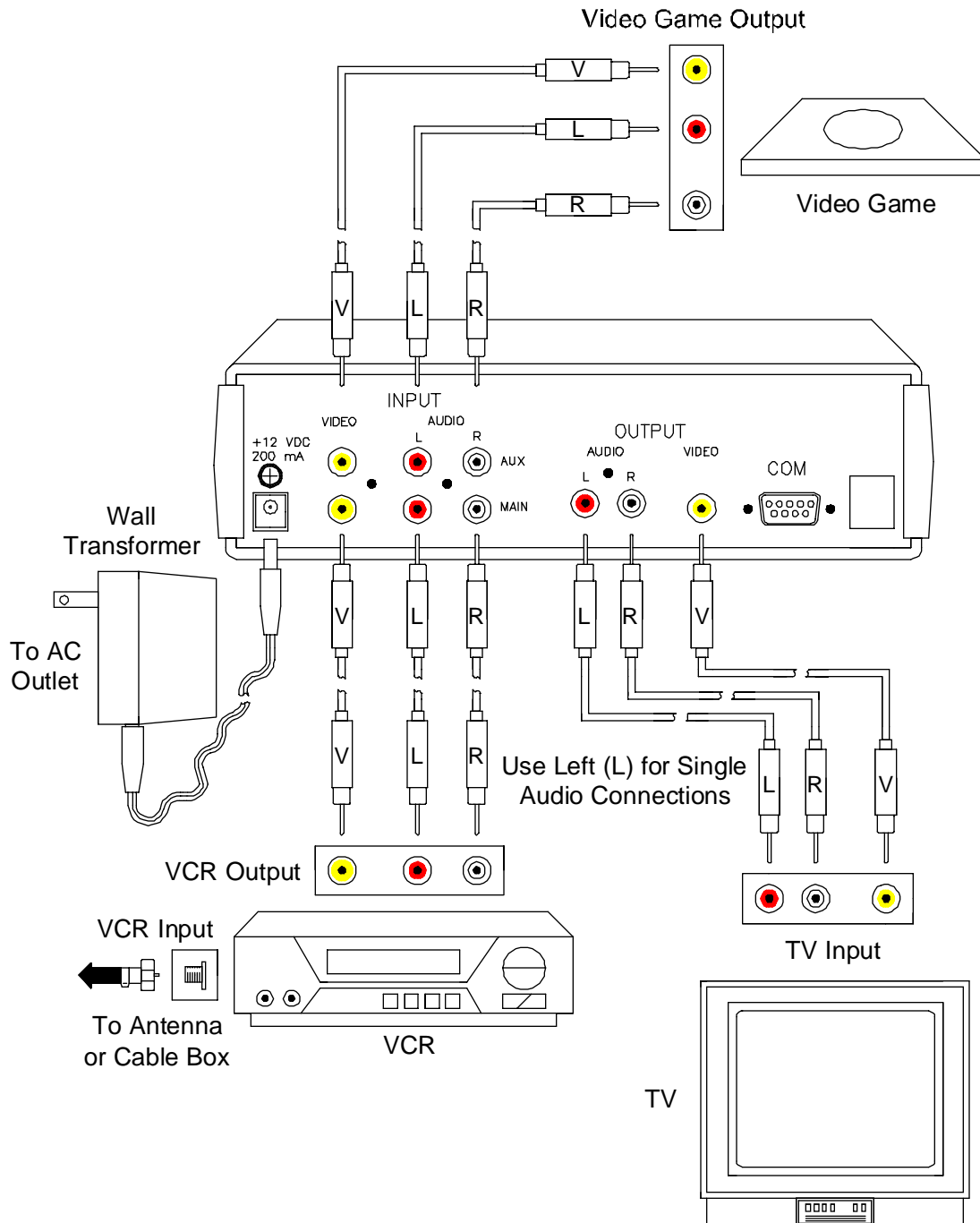
Press  to switch to Sports Mode.

Press  to toggle between automatic and manual response to commercial breaks. Automatic response is the power up default.

INSTALLATION

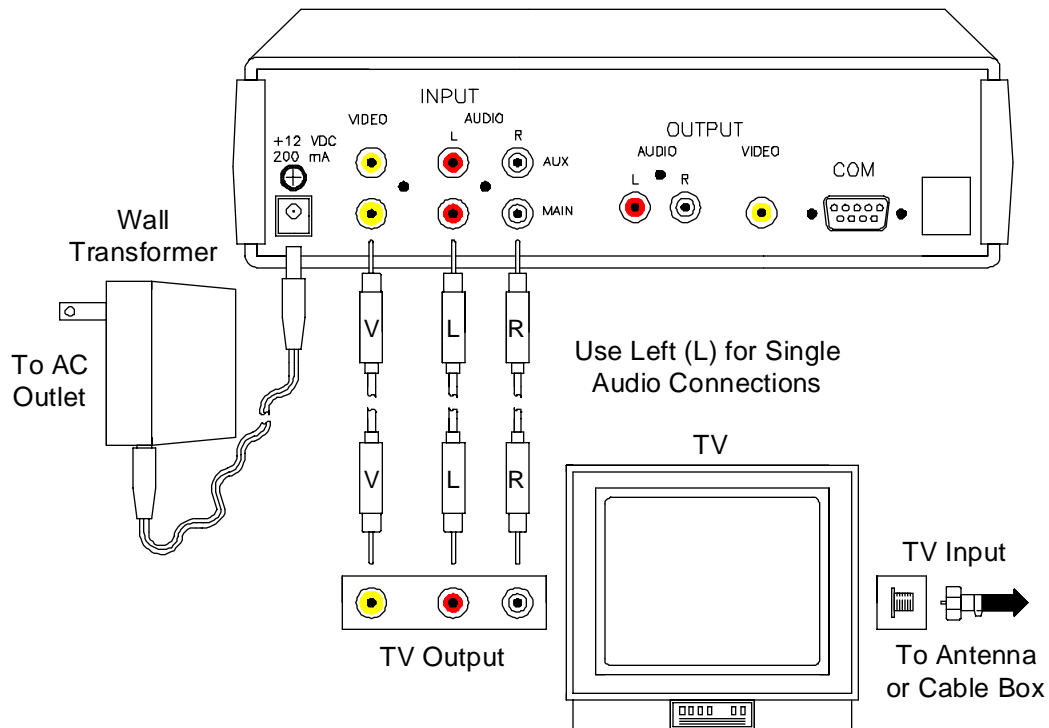
Recommended Installation

Connect the output from your VCR to the input of the PAVA-1. The PAVA-1 output should then be connected to the TV input. Make sure to connect all equipment before supplying power to the PAVA-1.



Minimum Installation


Because the PAVA-1 uses remote control commands to operate other electronic components, only one cable connection is required. Simply connect the PAVA-1 input to a TV output. The PAVA-1 output connection is optional, but necessary for the audio-video mute to function.



Playing Video Games During Commercials

The PAVA-1 can be programmed to automatically switch to a video game during commercials.

To install this feature, connect the output from the video game to the PAVA-1 Auxiliary Jacks. For this feature to function, the PAVA-1 output must be connected to the television input, either directly or through additional equipment.

If detected, the PAVA-1 substitutes the Auxiliary Input signals for the standard AVM video effect. For example, if the video game is powered and properly connected, the PAVA-1  key switches between the video game and the show instead of turning on and off a black rectangle in the middle of the TV screen.

The standard AVM video effect is re-activated without unplugging the video game from the PAVA-1. Simply turn off the video game.

OPERATION

The PAVA-1 responds automatically to the start of a commercial break. It turns the show back on when it thinks the commercials are over or waits a fixed length of time.

The PAVA-1 responds in any number of ways to a commercial. It playbacks up to fifteen remote control key presses and/or toggles the Audio-Video Mute (AVM).


Getting Started

Press  on the included remote control. The PAVA-1 should respond by turning on the red Activity Light.


The difference between a commercial and the show is not always clear to a human or machine. The PAVA-1 lets you know what it thinks through the Status Light. Green for Show. Red for Commercials.

Because the PAVA-1 is not perfect, three methods exist for fine-tuning its operation.






Full Featured Mode

Press  on the PAVA-1 remote control and the PAVA-1 uses its sensors to determine when the commercial break is over. This is the default setting for the PAVA-1.

Sports Mode

If you are watching sports programming or other shows with very irregular commercial breaks, better commercial break identification may be achieved by switching to Sports Mode. Press  on the PAVA-1 remote control to switch to Sports Mode.

Timer Mode


Buttons  through  program the PAVA-1 to turn the show back on after the specified number of commercials. Each commercial is assumed to be approximately 30 seconds long so pressing  sets the PAVA-1 to turn the show back on after 30 seconds. Pressing  sets the PAVA-1 to turn the show back on after 1 minute. This pattern continues up to , a four and ½ minute timer.

Button Pressed	Approximate Length of Mute
1	30 seconds
2	1 minute
3	1 minute, 30 seconds
4	2 minutes
5	2 minutes, 30 seconds
6	3 minutes
7	3 minutes, 30 seconds
8	4 minutes
9	4 minutes, 30 seconds

Automatically Change Channels During Commercials



If you have programmed the PAVA-1 to change channels during a commercial break, use Timer Mode only.




Respond to Commercials With The Button

 Mutes and un-mutes the show. The PAVA-1 responds by playing back the remote control signals recorded for the beginning or end of the commercial breaks and/or by toggling the audio-video mute.


The PAVA-1 Status Light indicates the current state. If the light is green, the PAVA-1 indicates that the show is on, if red, the show has been muted.

The Audio-Video Mute (AVM)

The AVM feature is toggled on and off by pressing the  key on the PAVA-1 remote control. If an Auxiliary Input is connected and supplying a signal, pressing the  key on the PAVA-1 remote control toggles the PAVA-1 output between the Main and Auxiliary Input signals.

In addition, the AVM can be turned on and off when the  key is pressed. Whether or not the AVM responds to the  key is controlled through the  button and the presence of an Auxiliary Input signal.


Changing Muting Features


The  button allows the user to toggle between three Muting Modes. The PAVA-1 Activity light flashes to indicate the current mode.

Activity Light Flashes – 1: AVM Only



Activity Light Flashes – 2: Remote Control Playback Only

Activity Light Flashes – 3: Both AVM and Remote Control Playback


The default setting is only the AVM turns on and off when the PAVA-1  button is pressed. If remote control signals are recorded for playback, the Muting Mode automatically changes to Remote Control Playback Only. If

 is subsequently pressed, the PAVA-1 Activity Light flashes three times and the PAVA-1 is set to the third Muting Mode in which both remote control playback and AVM toggling are used.

Manual or Automatic Response

The PAVA-1 is designed to respond automatically to commercial breaks. Automatic response, though, can be toggled on and off with the  button. In Manual Mode, the PAVA-1 mutes and un-mutes the commercials only in response to the  button. Power Up Default: Automatic Response.

Short Mute Feature

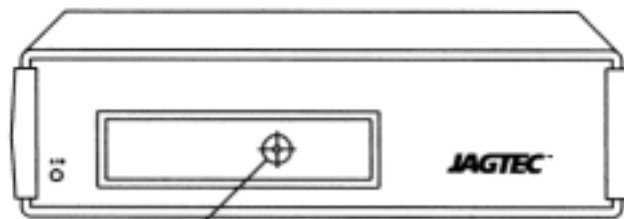
Press  to turn the PAVA-1 mute on for approximately thirty seconds.

If a mute longer than thirty seconds is desired, Press  then  through  to extend the break for the selected number of thirty-second commercials.

PC Connectivity and Programming Upgrade



A serial port connection is provided to allow the PAVA-1 to communicate with a personal computer. Programming upgrades and additional functionality are possible through this connection. Windows programs and instructions can be found at www.jagtec.com.

RECORDING REMOTE CONTROL KEY PRESSES





For optimal remote control signal recording performance, place remote control directly in front of this location.



Example: Program the PAVA-1 to turn a video on during a commercial break.

- Make sure the PAVA-1 has been installed properly. Please refer to the Installation instructions for assistance.
- Press  on the PAVA-1 remote control. (Start Program Mode.)
- Press  on the PAVA-1 remote control. (Begin Recording For Playback at the Start of a Commercial Break.)
- Pick up your VCR remote and bring it into close contact with the front panel as shown in the above diagram.
- Press the VCR "PLAY" button on your remote while holding it next to the PAVA-1 as described above.
- While the Status Light is flashing red, up to fourteen additional key presses from just about any remote control can be added for play back at the start of the commercial breaks.
- After approximately eight seconds without a user response, Program Mode terminates.

Record the remote control commands to be played back at the end of the commercial break.

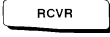

- Press  on the PAVA-1 remote control. (Start Program Mode.)
- Press  on the PAVA-1 remote control. (Begin Recording For Playback at the End of a Commercial Break.)
- Pick up your VCR remote and bring it into close contact with the front panel as shown in the above diagram.
- Press the VCR "STOP" button on your remote while holding it next to the PAVA-1 as described above.
- While the Status Light is flashing red, up to fourteen additional key presses from just about any remote control can be added for play back at the end of the commercial breaks.
- After approximately eight seconds without a user response, Program Mode terminates.

The following steps confirm that the PAVA-1 has recorded the correct remote control key presses.

- Confirm that the VCR is on. Press the VCR "STOP" button. Place a tape in the VCR.
- Press the PAVA-1  button once. The VCR should begin playing. Press  again and the VCR should stop.
- Please repeat the above programming steps if your equipment does not function as expected.

TROUBLESHOOTING

Before contacting JAGTEC for assistance, please take a few moments to confirm that the PAVA-1 is truly not functioning properly. First try resetting the PAVA-1 by unplugging the unit. If the problem persists, try the following.

Symptoms	Possible Cause	Remedy
The Activity Light does not turn on.	<ul style="list-style-type: none"> No power. 	<ul style="list-style-type: none"> Confirm that the transformer is plugged into the PAVA-1 and outlet.
Video, but no sound.	<ul style="list-style-type: none"> Wrong connection. 	<ul style="list-style-type: none"> If you have one audio signal (i.e. mono) it must be connected to the left jack. Please check the back panel and Installation Instructions.
The PAVA-1 does not appear to be receiving remote control signals.	<ul style="list-style-type: none"> Remote control is not sending the proper signals. 	<ul style="list-style-type: none"> Check the remote control batteries. Press  before pressing a PAVA-1 command. Remote control is not programmed correctly. Refer to the remote control operating instructions and use Phillips Receiver Code 0189.
The PAVA-1 does not appear to be communicating with my other remote controlled equipment.	<ul style="list-style-type: none"> Remote control signals were not properly recorded for the beginning <u>and</u> end of a commercial break. All required devices are not on. The Muting Mode does not include remote control playback. Remote control signals are blocked. 	<ul style="list-style-type: none"> Please refer to the Recording Remote Control Key Presses Section of this manual. Confirm power connections. Press . Playback should occur if the Activity Light flashes more than once. Move any obstruction that might be keeping the device from receiving signals. Move the PAVA-1 slightly to better take advantage of the surroundings.
The PAVA-1 turns the show back on while commercials are still running.	<ul style="list-style-type: none"> The Programming Mode is not effective with this particular show. 	<ul style="list-style-type: none"> Try a different mode (Full Featured, Sports, or Timer). Wait. The PAVA-1 is programmed to improve with viewing.
The PAVA-1 turns the show back on after the program has been running for a while.	<ul style="list-style-type: none"> The Programming Mode is not effective with this particular show. 	<ul style="list-style-type: none"> Try a different mode (Full Featured, Sports, or Timer). Wait. The PAVA-1 is programmed to improve with viewing.

JAGTEC INC.

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JAGTEC™

