



Video Processor



VP1000 Owner's Manual

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to 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.



AVIS RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.

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


WARNING - TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

To prevent the risk of electric shock, do not remove cover or back. No user-serviceable parts inside.

IMPORTANT SAFETY INSTRUCTIONS!

PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. 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 prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. 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. 
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. 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.
15. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
16. To completely disconnect this equipment from the a.c. mains, disconnect the power supply cord plug from the a.c. receptacle.
17. The mains plug of the power supply cord shall remain readily operable.
18. Do not expose batteries to excessive heat such as sunshine, fire or the like.

Thank You

Your decision to own this McIntosh VP1000 Video Processor ranks you at the very top among discriminating video viewers. You now have “The Best.” The McIntosh dedication to “Quality,” is assurance that you will receive many years of musical enjoyment from this unit.

Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new McIntosh.

Please Take A Moment

The serial number, purchase date and McIntosh Dealer name are important to you for possible insurance claim or future service. The spaces below have been provided for you to record that information:

Serial Number: _____

Purchase Date: _____

Dealer Name: _____

Technical Assistance

If at any time you have questions about your McIntosh product, contact your McIntosh Dealer who is familiar with your McIntosh equipment and any other brands that may be part of your system. If you or your Dealer wish additional help concerning a suspected problem, you can receive technical assistance for all McIntosh products at:

McIntosh Laboratory, Inc.
2 Chambers Street
Binghamton, New York 13903
Phone: 607-723-1545
Fax: 607-724-0549

Customer Service

If it is determined that your McIntosh product is in need of repair, you can return it to your Dealer. You can also return it to the McIntosh Laboratory Service Department. For assistance on factory repair return procedure, contact the McIntosh Service Department at:

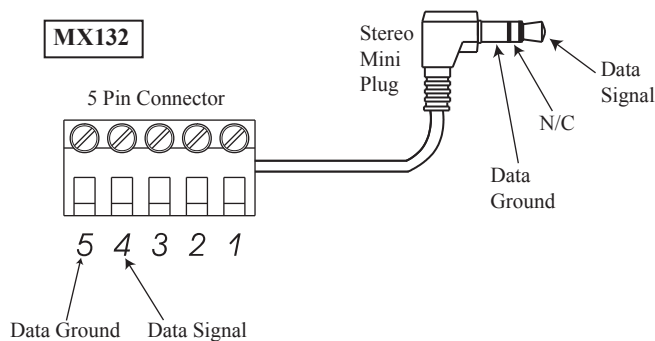
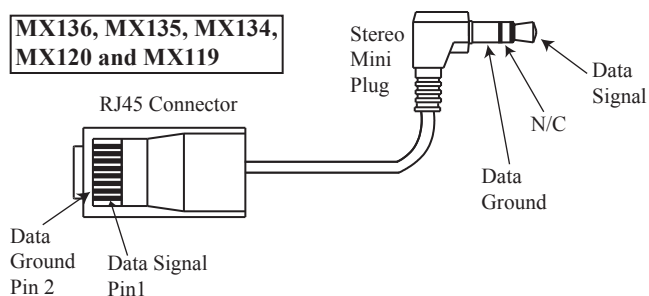
McIntosh Laboratory, Inc.
2 Chambers Street
Binghamton, New York 13903
Phone: 607-723-3515
Fax: 607-723-1917

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General Information

1. The Main AC Power going to the VP1000 and any other McIntosh Component(s) should not be applied until all the system components are connected together. Failure to do so could result in malfunctioning of some or all of the system's normal operations. When the VP1000 and other McIntosh Components are in their Standby Power Off Mode, the Microprocessor's Circuitry inside each component is active and communication is occurring between them.
2. For additional connection information, refer to the owner's manual(s) for any component(s) connected to the VP1000 Video Processor.
3. The McIntosh VP1000 is designed to be used with the McIntosh AP1000 Processor. It also integrates with the McIntosh MX Series A/V Control Centers including the MX136, MX135, MX134, MX132, MX120 or MX119.
4. When the VP1000 (Zone A) is used with one of the McIntosh MX Series A/V Control Centers it is important to connect the SUM A Data Port to the VP1000 DATA A IN Jack.
5. The VP1000 (Zone B) Data B Port may also be connected to one of the McIntosh MX Series A/V Control Centers Zone B Sum Data Stream via the Zone B Keypad connection. The MX132 uses a five pin plug and the rest of the MX Series A/V Control Centers use a RJ-45 Connector Plug. If there are already connections made to the Zone B Keypad Connector a "Y" adapter will also be needed. Refer to the appropriate figure below for adapter pin connections.
6. When the VP1000 is used with a McIntosh MX Series A/V Control Center, the MX A/V Control Center Setup On-Screen Menu can be viewed by connecting the Zone A Composite Video Output to one of the VP1000 Composite Inputs.
7. The IR Inputs (Zone A and Zone B), with 1/8 inch mini phone jacks, are configured for non-McIntosh IR sensors such as a Xantech Model 291-80. To avoid possible interaction, disable the VP1000 Front Panel Sensor with the switch recessed in an opening on the bottom cover near the Front Panel, left side.
8. The VP1000 On-Screen Menu is designed to be viewed primarily on a HD (High Definition) TV/Monitor with a minimum resolution of 720p (1280x720). When viewed on a SD (Standard Definition) TV/Monitor with a resolution of 480i (720x480) the sides of the menu may not be visible. This occurs due to the NTSC Over-scan Standard.
9. The VP1000 is designed to accept video signals with resolutions up to 1920x1080i at 60Hz. It will accept a 1920x1080p input signal for processing and may be selected for either Zone A or Zone B HDMI Monitor Output (but not both simultaneously).
10. The VP1000 is in compliance with industry standards for protection of copyrighted video/audio materials, DRM (Digital Rights Management). The protection is known as HDCP (High-Bandwidth Digital Content Protection). When the VP1000 receives a digital signal containing the HDCP digital flag, via an HDMI Input (HD1-HD4), the signal may only be viewed on a TV/Monitor with HDCP compliant circuitry built-in and is connected to a VP1000 HDMI Output connector. The VP1000 Component Video Outputs, S-Video Outputs and Composite Video Outputs will have no output signal when the source selected contains a HDCP digital flag.
11. The Composite Video and S-Video Monitor A/B Output Jacks are active only when the resolution of the VP1000 is set to 720x480i.
12. The VP1000 Monitor A Output Jacks can provide either a YPbPr or RGB Video Signal selected by the Front Panel RGB/COMP Push-button.
13. Availability of the VP1000 video processing options are dependent on the type of video output and the resolution settings.
14. When the VP1000 Video Processor is first connected to AC Power, it will go through an initialization process and various messages will appear on the Front Panel Information Display. After the word "READY" ap-



General Information, con't

pears, the VP1000 will go into the Standby Mode and is now ready to switch On.

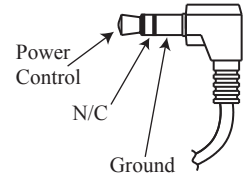
15. When the symbol illustrated here is located on the product or on the packaging, it indicates the product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the McIntosh Dealer where you purchased the product.



Connector and Cable Information

Power Control Connectors

The VP1000 Power Control Output Jacks send and Power Control Input Jacks receive Power On/Off Signals when connected to McIntosh and other Components. A 1/8 inch stereo mini phone plug is used for connection to the Power Control Input and Outputs on the VP1000.



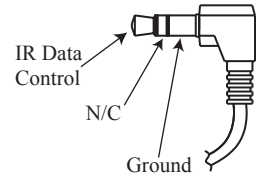
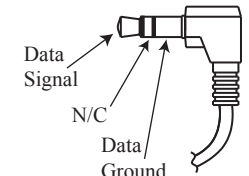
Note: The Data and Power Control Connecting Cable is available from the McIntosh Parts Department:

Data and Power Control Cable Part No. 170-202

Six foot, shielded 2 conductor, with 1/8 inch stereo mini phone plugs on each end.

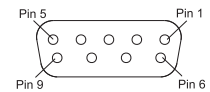
Data Port Connectors

The VP1000 Data In Ports receives Remote Control Signals from McIntosh Components. A 1/8 inch stereo mini phone plug is used for connection. The IR Ports also use a 1/8 inch stereo mini phone plug and allow the connection of other brand IR Receivers to the VP1000.



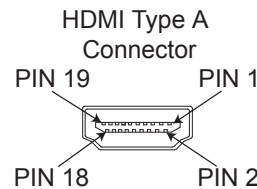
RS232 DB9 Connector Pin Layout

- | | |
|-------------------|--------|
| 1. N/C | 6. N/C |
| 2. Data Out (TXD) | 7. N/C |
| 3. Data In (RXD) | 8. N/C |
| 4. N/C | 9. N/C |
| 5. Gnd. | |



HDMI Type A Connector

- | | | |
|----------------------|-----------------------|----------|
| 1. TMDS Data2+ | 8. TMDS Data0 Shield | 15. SCL |
| 2. TMDS Data2 Shield | 9. TMDS Data0- | 16. SDA |
| 3. TMDS Data2- | 10. TMDS Clock+ | 17. DDC/ |
| 4. TMDS Data1+ | 11. TMDS Clock Shield | CEC |
| 5. TMDS Data1 Shield | 12. TMDS Clock- | Ground |
| 6. TMDS Data1- | 13. CEC | 18. +5V |
| 7. TMDS Data0+ | 14. Reserved | 19. Hot |
| | | Plug |
| | | Detect |





Introduction

The McIntosh VP1000 Video Processor is one of the finest video scalars, video signal enhancers and video switchers ever created. The two zone video processor provides connections for various video input sources and output formats to monitors located in different rooms. The life like images produced by the VP1000 are like being there in person.

Performance Features

• Dual Zone with Multi-Monitor Connectivity

The VP1000 is two complete and independent Digital Video Signal Processors in one component. Up to four monitors may be connected per Zone, with outputs including HDMI, DVI-D¹, Component Video, S-Video and Composite Video. This allows for extreme flexibility in any home environment. Both Zones could even be in the same room, providing a correctly scaled digital signal going to a front projector with a large screen and at the same time another scaled digital signal going to a smaller wall mounted flat screen monitor.

• Spatial Iteration

Input Signals of 480i (interlaced) or 1080i scan lines of video are first converted to 1080p (progressive) scan lines of video, using the latest in scaling algorithms. The 1080p signal is then analyzed using the processing of twelve different points spatially and three points temporally in the visual information. All of this special processing delivers the utmost in video clarity and image resolution.

• Digital Scaling with Dynamic Stretch Enhancement

All incoming Video Signals, both Analog and Digital, are scaled to match the aspect ratio and the native resolution of the display monitors connected to both Zone A and B, with no video processing artifacts. The Dynamic Stretch Enhancement Circuitry completely fills the display monitor screen regardless of the aspect ratio and resolution of the video source. There are user adjustments providing flexibility in determining the best image stretch without the side effects typically produced by the simple stretch processing built-in to most display monitors.

• Digital Picture and Edge Enhancement

An advanced algorithm allows adjustment of the gray scale values in both the light and dark areas of the video signal producing a more realistic image with greater depth. Most consumer products allow only adjustments to gray scale values in the light areas of the image. The unique edge enhancement circuitry provides a sharper image, result-

ing in a viewing experience far superior to conventional sharpness controls. This is accomplished by processing the video signal in both the horizontal and vertical directions. The results are smooth, vibrant, color-saturated images that are truly film-like in quality.

• High Bandwidth Circuitry

The VP1000 is able to deliver the highest-quality video images by utilizing ultra-linear components with an extremely wide bandwidth in excess of 300 MHz, which is over three-times the bandwidth commonly used for HDTV products. The Digital Video Internal Clock Exchange circuitry regenerates the high frequency digital processing clock from the incoming digital video signal thus providing superior performance when converting an incoming 1080i signal to 1080p scan output signal. This regeneration maximizes the video performance for displaying signals in true HDTV 1080p. There are seven individual settings allowing adjustment of the digital processing clock phase with respect to the video signal thus assuring the absolute best picture quality.

• High Definition PIP Modes

The VP1000 is one of the first Video Processors to allow two different video sources, both with High Definition signals, to be viewed in either Picture-In Picture or Picture-By-Picture Modes.

• Automatic Synchronization Regeneration

The VP1000 automatically corrects for the unstable synchronization signals that are part of an analog video signal from sources such as VCR and Laser Disc players. The circuitry performing this correction is known as a Time Base Corrector (TBC) and is normally only found in professional broadcast equipment. By first processing the analog signal with the TBC, the best possible results are achieved with the Digital Scaling and the other Video Enhancement Circuitry.

• Enhanced HDMI Connectivity

The VP1000 HDMI (High-Definition Multimedia Interface) Circuitry goes beyond the typical HDMI implementation found in other products. Source components connected to the VP1000 using the HDMI connections are requested to provide the Highest Resolution Digital Video and Audio Signals independent of the capability of components connected to the VP1000 HDMI Outputs.

¹ Using optional HDMI to DVI-D adapter available from your dealer

The HDMI Output Circuitry analyzes any possible signal delays caused by the interconnect cable and will automatically compensate up to the maximum recommended cable length.

• **Information Displays**

The Multifunction Front Panel Display indicates various information including Source Selection and Output Resolution. The Menu Options and Adjustments are also displayed On-Screen including Aspect Ratio and various video settings. The Front Panel Display intensity is also adjustable.

• **Precision Technology**

The VP1000 uses the latest in design technology including impedance matched multilayer surface mount circuitry providing wideband, low-noise video processing.

• **Remote Control and External Sensor Inputs**

The Remote Control together with provisions to connect external sensors, provides control of the VP1000 operating functions.

• **Total Component Integration**

The VP1000 is designed to work seamless with the McIntosh AP1000 Audio Processor and the McIntosh MDLP1 Digital Video Projector. It also integrates with the McIntosh MX Series A/V Control Centers including the MX136, MX135, MX134, MX132, MX120 or MX119.

• **Data Ports and RS232**

There are Data Input Ports to allow communication between the VP1000 and other McIntosh components. An RS232 Port also permits two way communication with other components.

• **Power Control Outputs**

Power Control connections for convenient Turn-On of McIntosh Components and Accessories is included.

• **Special Power Supply**

Fully regulated Power Supplies ensure stable noise free operation even though the power line varies.

• **Extruded Side Panels**

The sides of the VP1000 are extruded aluminum panels with a bead blast textured surface and a black anodized finish.

• **Fiber Optic Solid State Front Panel Illumination**

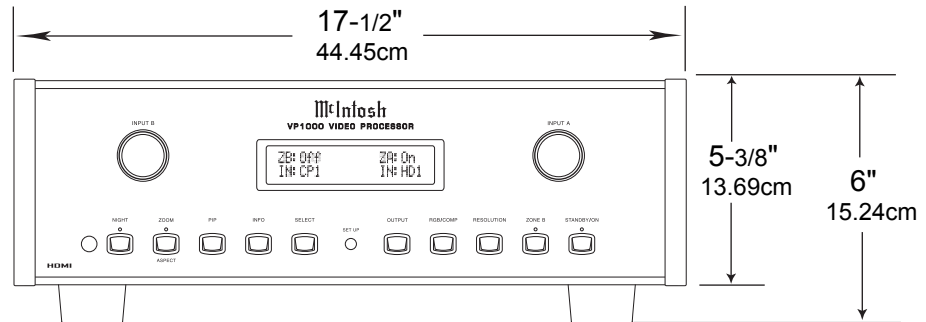
The even Illumination of the Front Panel is accomplished by the combination of custom designed Fiber Optic Light Diffusers and extra long life Light Emitting Diodes (LEDs). The glass Front Panel ensures the pristine beauty of the VP1000 will be retained for many years.



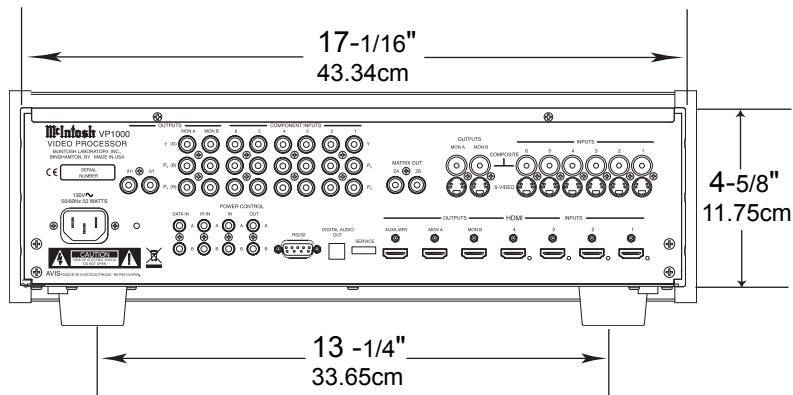
Dimensions

The following dimensions can assist in determining the best location for your VP1000. There is additional information on the next page pertaining to installing the VP1000 into cabinets.

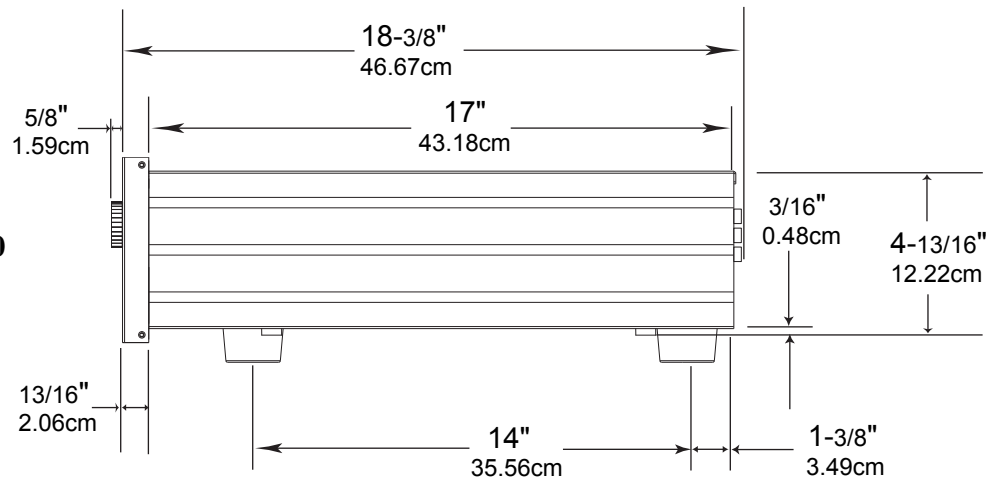
Front View of the VP1000



Rear View of the VP1000



Side View of the VP1000



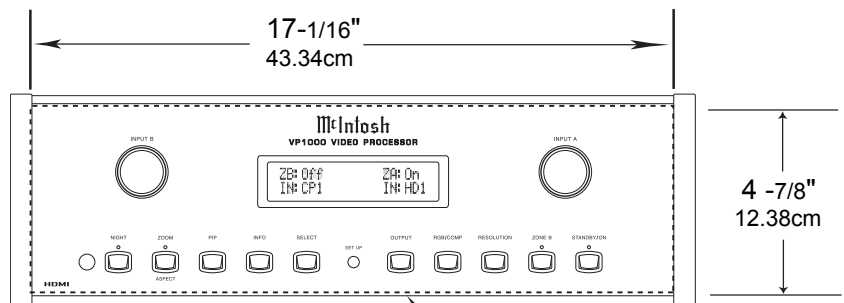
Installation

The VP1000 can be placed upright on a table or shelf, standing on its four feet. It also can be custom installed in a piece of furniture or cabinet of your choice. The four feet may be removed from the bottom of the VP1000 when it is custom installed as outlined below. The four feet together with the mounting screws should be retained for possible future use if the VP1000 is removed from the custom installation and used free standing. The required panel cutout, ventilation cutout and unit dimensions are shown. Always provide adequate ventilation for your VP1000. Cool operation ensures the longest possible operating life for any electronic instrument.

Do not install the VP1000 directly above a heat generating component such as a high powered amplifier. If all the components are installed in a single cabinet, a quiet running ventilation fan can be a definite asset in maintaining all the system components at the coolest possible operating temperature. A custom cabinet installation should provide the following minimum spacing dimensions for cool operation.

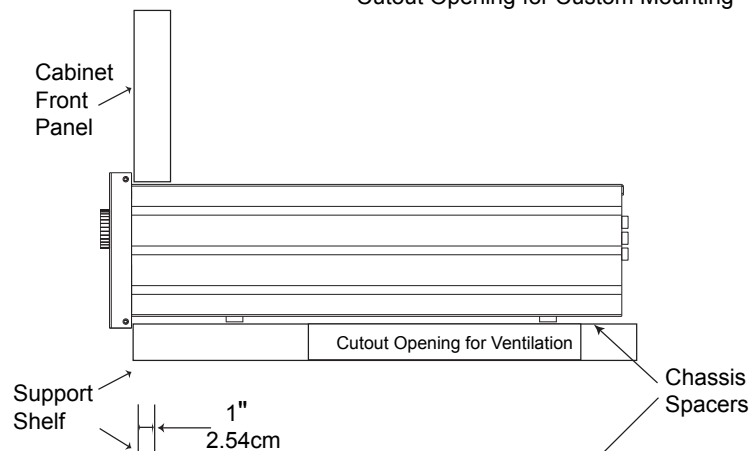
Allow at least 2 inches (5.08cm) above the top, 2 inches (5.08cm) below the bottom and 1 inch (2.54cm) on each side of the Video Processor, so that airflow is not obstructed. Allow 19-1/2 inches (49.53cm) depth behind the front panel. Allow 1-1/8 inch (2.9cm) in front of the mounting panel for knob clearance. Be sure to cut out a ventilation hole in the mounting shelf according to the dimensions in the drawing.

VP1000 Front Panel Custom Cabinet Cutout

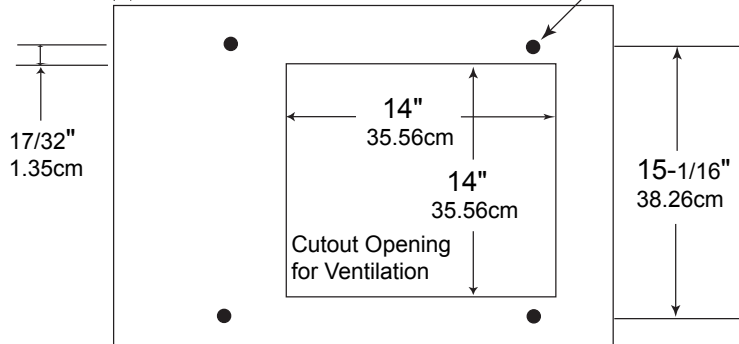


Cutout Opening for Custom Mounting

VP1000 Side View in Custom Cabinet



VP1000 Bottom View in Custom Cabinet

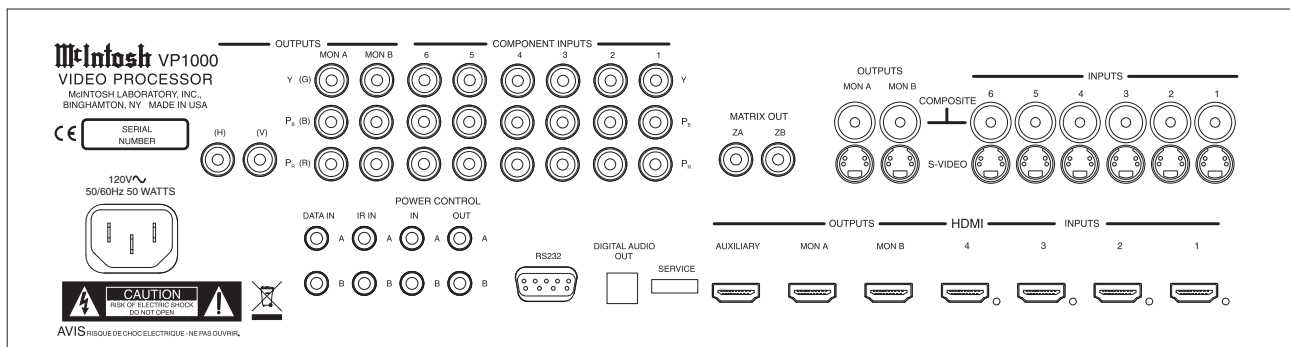




Rear Panel Connections

The identification of Rear Panel Connections for the VP1000 Video Processor is located on a separate folded sheet contained in the Owner's Manual Packet. Refer to separate sheet "Mc1A" for the Rear Panel Connections

VP1000 Video Processor Rear Panel



How to Connect the VP1000

The VP1000 has the ability to automatically switch power On/Off to McIntosh Components via the Power Control connections. The Data Port Connections allow for the remote operation of the VP1000 from other McIntosh Components. With an external sensor connected to the VP1000, remote control operation is possible from another room and/or when the VP1000 is located in a cabinet with the doors closed.

The connection instructions below, together with the AP1000/MDLP1/VP1000 Input and Control Connection Diagrams located on the separate folded sheet “Mc2A and B”, is an example of a typical audio/video system. Your system may vary from this, however the actual components would be connected in a similar manner.

For additional information refer to “Connector and Cable Information” on page 6.

Note: With the addition of a McIntosh Power Controller connected to the VP1000, any McIntosh Classic Video Components and/or non McIntosh Video Components connected to the VP1000 can be operated more conveniently. Contact your McIntosh Dealer for additional information.

Power Control Connections:

1. Connect a Control Cable from the VP1000 POWER CONTROL OUT A Jack to the Power Control In Jack on the McIntosh MDLP1 Video Projector.

If the VP1000 is connected to a McIntosh Audio/Video Control Center MX136, MX135, MX134, MX132, MX120 or MX119 (MX Series) add the following connection:

2. Connect a Control Cable from the VP1000 POWER CONTROL IN A Jack to the McIntosh MX Series Power Control Zone A Out Jack.

Data Control Connections:

When the VP1000 is connected to the McIntosh AP1000 Audio Processor via the RS232 Data Port no addition Data Port connections are necessary. If the VP1000 is connected to a McIntosh MX Series Audio/Video Control Center MX136, MX135, MX134, MX132, MX120 or MX119 add the following connection:

3. Connect a Control Cable from the VP1000 DATA A IN Jack to the McIntosh MX Series SUM A Data Port Jack.
4. Optionally connect an adapter cable from the VP1000 DATA B IN Jack to the McIntosh MX Series Zone B Keypad Connector. Refer to page 4 items 3, 4 and 5.

Video Connections:

When the VP1000 is connected to the McIntosh AP1000 Audio Processor add the following connections. If there is no AP1000 proceed to step 8.

5. Connect a Video Cable from the VP1000 MATRIX

ZA OUT Jack to the McIntosh AP1000 Audio Processor ZA IN Jack.

6. Connect a Video Cable from the VP1000 MATRIX ZB OUT Jack to the McIntosh AP1000 Audio Processor ZB IN Jack.
7. Connect a Video Cable from the VP1000 COMPOSITE 1 Jack to the McIntosh DVD Audio/Video Player Video Out Jack.
8. Connect a Video Cable from the VP1000 COMPOSITE 2 Jack to the McIntosh Music Server Video Out C Jack.
9. Connect a Video Cable from the VP1000 COMPOSITE INPUT 6 Jack to the McIntosh AP1000 Audio Processor Video (EXT) Out Jack.

Note: When connecting to a McIntosh MX Series Audio/Video Control Center use the MON A Composite Output Jack.

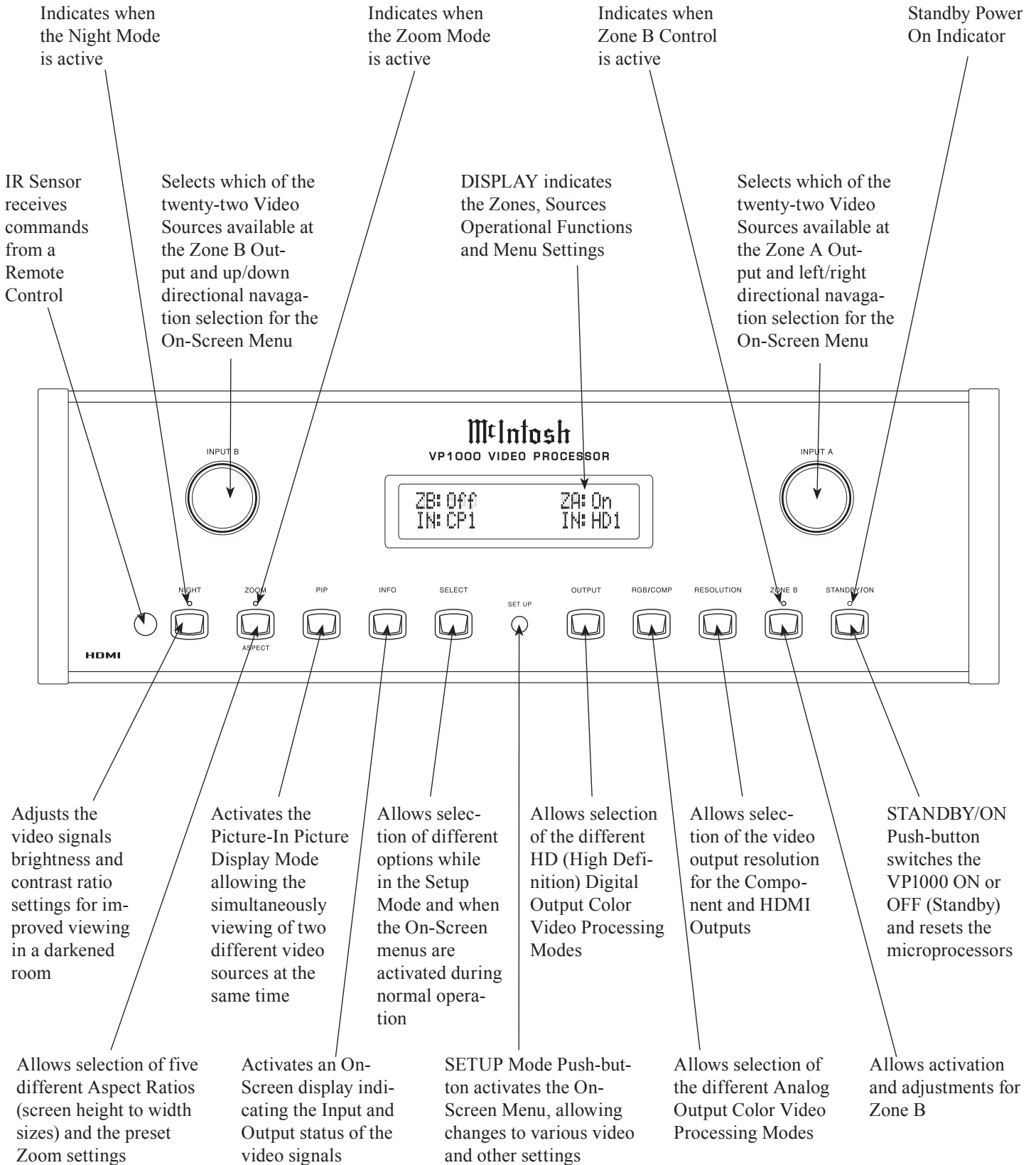
10. Connect a Video Cable from the VP1000 S-VIDEO INPUT 4 Jack to the VCR S-Video Out Jack.
11. Connect a Video Cable from the VP1000 MONITOR A S-VIDEO OUTPUT Jack to the VCR S-Video In Jack.
12. Connect Video Cables from the VP1000 COMPONENT INPUT 2 Jacks to the Satellite Receiver Component Video Output Jacks.
13. Connect Video Cables from the VP1000 COMPONENT INPUT 3 Jacks to the TV Tuner Component Video Output Jacks.
14. Connect Video Cables from the VP1000 COMPONENT INPUT 4 Jacks to the McIntosh Music Server Component Video Output Jacks.
15. Connect Video Cables from the VP1000 COMPONENT INPUT 5 Jacks to the Digital Video Recorder (DVR) Component Video Output Jacks.
16. Connect Video Cables from the VP1000 COMPONENT MON B OUTPUT Jacks to the Digital Video Recorder (DVR) Component Video Input Jacks.
17. Connect a HDMI Cable from the VP1000 HDMI INPUT 1 Connector to the McIntosh DVD Audio/Video Player HDMI Output Connector.
18. Connect a HDMI Cable from the VP1000 HDMI MON A OUTPUT Connector to the McIntosh Video Projector HDMI Input 1 Connector.
19. Connect a HDMI Cable from the VP1000 HDMI AUXILIARY OUTPUT Connector to the McIntosh AP1000 Audio Processor HDMI Input 1 Connector.
20. Connect any additional Video Components in a similar manner, as outlined in steps 4 thru 13.

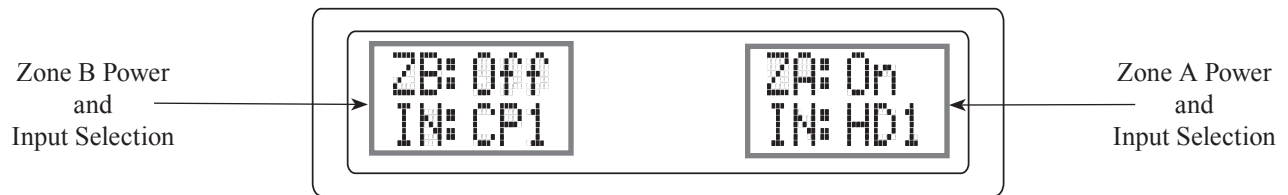
AC Power Cords Connections:

21. Connect the VP1000 AC Power Cord to a live AC outlet and connect the remaining components' AC Power Cords.



Front Panel Indicators, Controls and Push-buttons





Display Indication	Description
ZB:Off	Zone B is Off
ZB:On	Zone B Is On
ZA:Off	Zone A is Off
ZA:On	Zone A is On
ZB:On IN:CP1	Zone B is On and the Input selected is Component Video 1
ZA:On IN:HD1	Zone A is On and the Input selected is HDMI 1
ZA OSD ACTIVE	Zone A On-Screen Menu is Active
ZB OSD ACTIVE	Zone B On-Screen Menu is Active
NIGHT:Off	Preset Settings for Day Time Viewing are active
NIGHT:On	Preset Settings for Night Time Viewing are active
ASPT:ANAM	Picture Aspect Ratio is set to Anamorphic Full Screen
ASPT:PANO	Picture Aspect Ratio is set to Panoramic Full Screen
ASPT:LETR	Picture Aspect Ratio is set to Letter/Pillar Box
ASPT:VSTR	Picture Aspect Ratio is set to V-Stretch
ASPT:ZOOM	Picture Aspect Ratio is set to Zoom
ASPT:THRU	Picture Aspect Ratio is set to Through
PIP:Off	Picture in Picture Mode is Off
PIP:P-IN-P	Picture In Picture Display Mode is active
PIP:P-BY-P	Picture By Picture Display Mode is active

Display Indication	Description
HD:Auto	The HD Video Output Signal Color Signal format is Automatic
HD:RGB	The HD Digital Video Output Signal Color Signal format is RGB
HD:YCbCr	The HD Digital Video Output Signal Color Signal format is YCbCr
ANA:YPbPr	The Analog Video Output Signal Color Signal format is YPbPr
ANA:RGBHV	The Analog Video Output Signal Color Signal format is RGB(with sync signals)
OUT:1920x1080F	Video Output Resolution is set to 1920x1080p
OUT:1920x1080i	Video Output Resolution is set to 1920x1080i
OUT:1920x540F	Video Output Resolution is set to 1920x540p
OUT:1360x768F	Video Output Resolution is set to 1360x768p
OUT:1280x768F	Video Output Resolution is set to 1280x768p
OUT:1280x720F	Video Output Resolution is set to 1280x720p
OUT:1024x768F	Video Output Resolution is set to 1024x768p
OUT:720x480F	Video Output Resolution is set to 720x480p
OUT:720x480i	Video Output Resolution is set to 720x480i



Remote Control Push-Buttons

LED illuminates during the time a remote command is sent

Selects which component, either the VP1000 Processor or the McIntosh MDLP Series Projector, the remote control commands are sent to

Used together with the PROCessor INPUT Push-buttons to select Video Inputs; also used for other numbered operations

Press to select the preset settings for daytime or nighttime viewing

Press to select and adjust various functions

Press to recall various on-screen information

Press to change the output Aspect Ratio of the video image

Activates the PIP Mode

Press to Power the VP1000 ON or OFF

Press to Power ON or Power OFF to the VP1000

Selects Composite Video, S-Video, Component Video or Digital Video (HDMI) Inputs on the VP1000

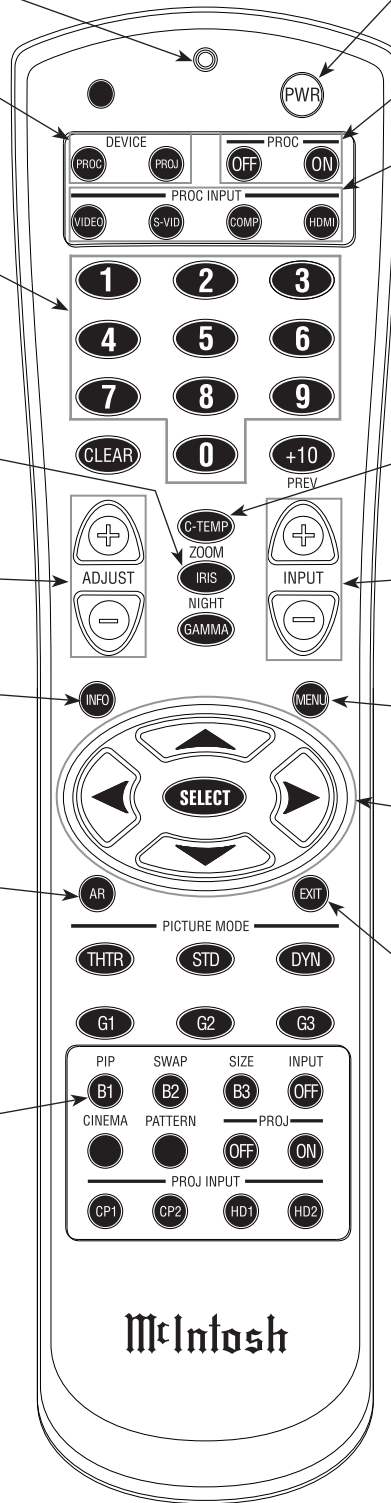
Press to activate the Zoom Mode

Allows selection from the available video sources

Activates the various On-Screen Menus

Use to navigate up, down, to the left and to the right through the various menus. Also used to select the desired function or option

Press to exit from the On-Screen Menu



Note: Push-buttons whose function is not identified above are for use with the McIntosh Components

How to use the Remote Control

The supplied Remote Control is capable of directly controlling the functions of the McIntosh VP1000 Video Processor and the McIntosh MDLP Series Projector. For additional information on the various video adjustments and their purpose, please refer to the “How to Operate the VP1000” section of this manual starting on page 20.

Input Source Selection

Press the PROCcessor INPUT Push-button followed by pressing the Number Push-button corresponding to the desired Input. Example, to select the Component Video Input 2 first press the COMPONENT Push-button followed by pressing the NUMBER 2 Push-button.



Default Settings

The Default Settings Charts are for Zone A and Zone B. For additional information on any given default setting

refer to the page numbered in the far right column in the chart.

MENU	SOURCE/FUNCTION	ADJUSTMENT/SELECTION	SETTING	PAGE
Zones	✓Zone A		Default	25
	Zone B		-	25
Input				
	Composite		-	18
	SVideo		-	18
	Component		-	18
	HDMI		1	18
	Matrix(Composite)		1	18
Ouput				
	PIP		✓Off	23
	Background		Black	27
	Aperture	Horizontal Size	100	27
		Vertical Size	100	27
		Horizontal Position	050	27
		Vertical Position	050	27
	Resolution	✓1280x720P	Default	24
Aspect				
	✓Anamorphic Full Screen		Default	21
	Panoramic Full Screen		-	21
	Letter/Pillar Box		-	21
	V-Stretch		-	22
	Zoom	Extract Size	100	28
		Horizontal Position	050	28
		Vertical Position	050	28
	Through	Horizontal Size	100	28
		Vertical Size	100	28
		Horizontal Position	050	28
		Vertical Position	050	28
Video				
	Image	Contrast	050	25
		Brightness	050	25
	Detail Enhancement	Detail Enhancement	000	28
		Noise Threshold	000	28
	Noise Reduction	Noise Reduction	000	28
	Motion Threshold	Motion Threshold	004	28
	HDMI Color Space	HDMI Output	✓Auto	29
		HDMI Input	✓Auto	29
	Analog Output	✓YP _b P _r	Default	29

MENU	SOURCE/FUNCTION	ADJUSTMENT/SELECTION	SETTING	PAGE
Assign	Tuner	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	Aux	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	CD1	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	CD2	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	Tape 1 (REC 1)	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	Tape 2 (REC 2)	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	SAT (SAT 1)	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	TV	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	LV (SERV)	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	VCR1 (DVR)	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	VCR2 (SAT2)	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	DVD	Composite (1-6), SVideo (1-6), Component (1-6), or HDMI (1-4)	-	18
	Matrix			
	Tuner	Composite (1-6)	-	19
	Aux	Composite (1-6)	-	19
	CD1	Composite (1-6)	-	19
	CD2	Composite (1-6)	-	19
	Tape 1 (REC 1)	Composite (1-6)	-	19
	Tape 2 (REC 2)	Composite (1-6)	-	19
	SAT (SAT 1)	Composite (1-6)	-	19
	TV	Composite (1-6)	-	19
	LV (SERV)	Composite (1-6)	-	19
	VCR1 (DVR)	Composite (1-6)	-	19
	VCR2 (SAT2)	Composite (1-6)	-	19
	DVD	Composite (1-6)	-	19

FRONT PANEL PUSH-BUTTON	SELECTION	SETTING	PAGE
Output	HD:Auto	Default	21
	HD:RGB	-	21
	HD:Y _b C _r	-	21
RGB/COMP	ANA:Y _b P _r	Default	21
	ANA:RGBHV	-	21
Resolution	1920x1080p	-	20
	1920x1080i	-	20
	1920x540p	-	20
	1400x1050p	-	20
	1360x768p	-	20
	1280x768p	-	20
	1280x720p	Default	20
	1024x768p	-	20
	720x480p	-	20
720x480i	-	20	



How to Setup the VP1000

Your McIntosh VP1000 Video Processor has default settings allowing for immediate enjoyment of superb video when connected to an HD TV/Monitor. The VP1000 is designed to be used with the McIntosh AP1000 Audio Processor. It also integrates with the McIntosh MX Series A/V Control Centers including the MX136, MX135, MX134, MX132, MX120 or MX119.

When the VP1000 is connected to the above Audio Processor or one of the MX Series A/V Control Centers, both components can function as if they were one component. The VP1000 Input Selection, for both Zones A and B, will track the selection made on the AP1000 Audio Processor. It will also track the selection by using the Remote Control supplied with the MX Series A/V Control Center. For this unified functioning to occur, the Input(s) on the VP1000 must be assigned to match the desired Input(s) on the Audio Processor or MX Series A/V Control Center. Perform the following steps:

1. Press the STANDBY/ON Push-button to switch On the VP1000. Refer to figure 1.

Note: The Red LED above the STANDBY/ON Push-button lights to indicate the VP1000 is connected to a live AC Outlet.

2. Press the VP1000 Front Panel SETUP Push-button. The Front Panel Information Display will indicate ZA OSD ACTIVE. Refer to figure 2. The On-Screen Menu will also appear on the TV/Monitor. Refer to figure 3.

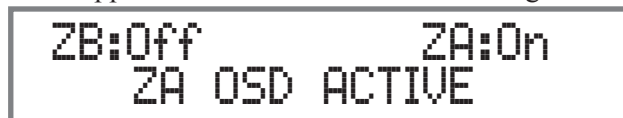


Figure 1

Note: If the Menu does not appear On-Screen, it may be necessary to change the output resolution from the default 1280x720p setting to the native resolution of the TV/Monitor. Refer to page 20 for additional information.

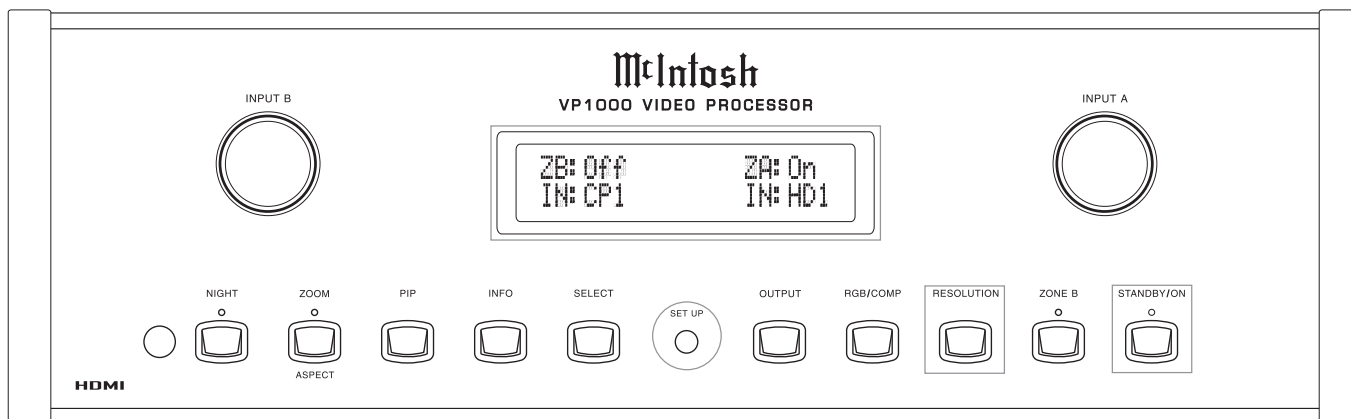


Figure 2

3. Press the ►RIGHT push-button using the supplied Remote Control to select the ASSIGN Icon. Refer to figures 4 and 12.

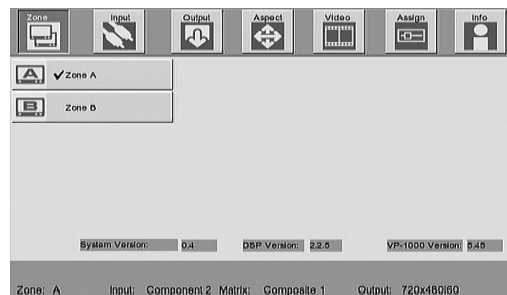


Figure 3

4. Using the ▼DOWN Push-button select DVD. Refer to figure 5.

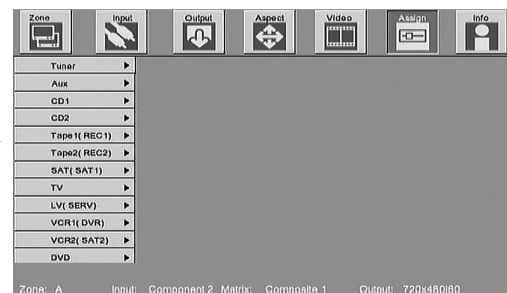


Figure 4

5. Press the ►RIGHT push-button once to select the type of video signal connection (HDMI, Component, S-Video or Composite). Then, using the ►RIGHT and ▼DOWN push-buttons select COMPONENT 1 (the Input Number of the Rear Panel Connector the DVD Player Component Video Output is connected to). Refer to figures 6 and 7.

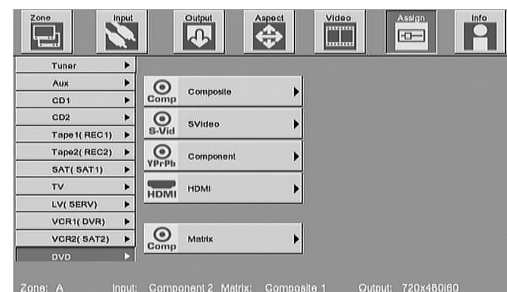


Figure 5

- Press the SELECT Push-button and a ✓ check mark will appear to the left of the title name to indicate the selection is entered into memory. Refer to figure 8.

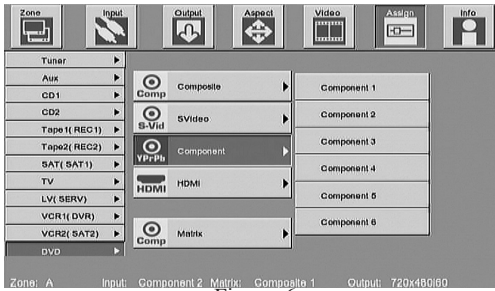


Figure 6

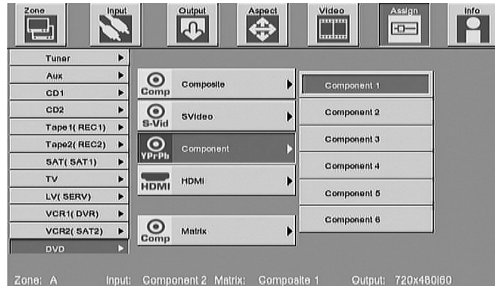


Figure 7

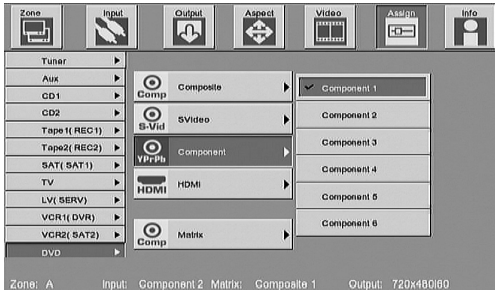


Figure 8

Note: If the VP1000 is not connected to the McIntosh AP1000 or to an additional system TV/Monitor then omit steps 7 thru 9.

- Press the ◀LEFT push-button, then the ▼DOWN Push-button to select MATRIX. Refer to figure 9.
- Press the ▶RIGHT push-button to select COMPOSITE 1 (the Input Number of the Rear Panel Connector the DVD Player Composite Video Output is connected to). Refer to figure 10.
- Press the SELECT Push-button and a ✓ check mark will appear to the left of the title name to indicate the selection is entered into memory. Refer to figure 11.

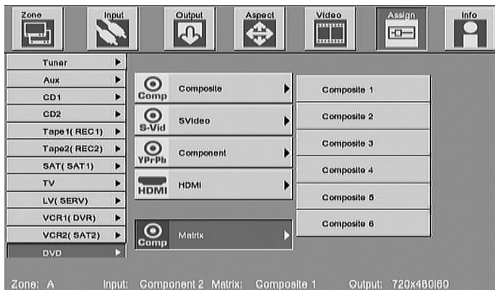


Figure 9

- In a similar manner, assign any additional video sources connected to the VP1000.

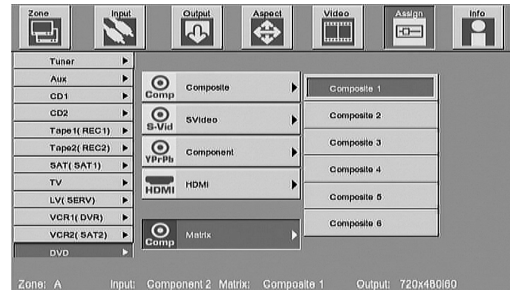


Figure 10

- Press the MENU Push-button on the Remote Control.

- Verify the VP1000 switches to the correct Video Input(s) when the matching Input(s) on the McIntosh AP1000 is selected.

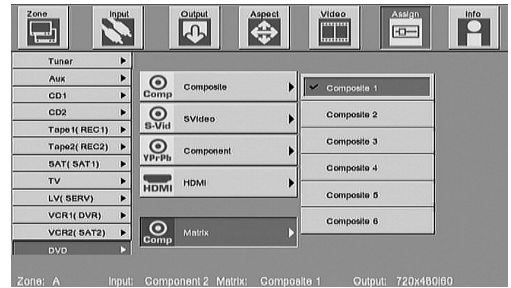


Figure 11

- Proceed to “How to Operate the VP1000” on page 20.

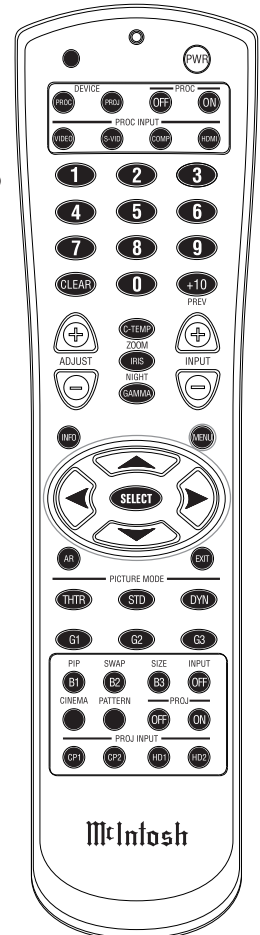


Figure 12



How to Operate the VP1000

Before operating the McIntosh VP1000 Video Processor it is very important to perform Setup on pages 18 and 19, the Input Assign Procedure. After assignment has been performed the VP1000 together with the McIntosh AP1000, will function as one component. The Assign Process will also integrate the VP1000 with the McIntosh MX Series A/V Control Centers including the MX136, MX135, MX134, MX132, MX120 or MX119.

The VP1000 is a two Zone (A and B) Video Processor. Each Zone is operated independently including video source selection, video processing of the selected source and the switching of power (On and Off) to the respective Zone (A and B). To Switch power On to Zone A perform the following:

1. Press the STANDBY/ON Push-button on the Front Panel to switch On the VP1000 or press the PWR Push-button on the Remote Control. Refer to figures 13 and 22.

Note: The Red LED above the STANDBY/ON Push-button lights to indicate the VP1000 is connected to a live AC Outlet.

2. Press the VP1000 Front Panel SETUP Push-button. The Front Panel Information Display will indicate ZA OSD ACTIVE. The On-Screen Menu will also appear on the TV/Monitor. Refer to figures 13, 14 and 15.

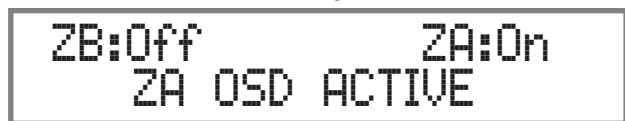


Figure 14

If the Menu does not appear On-Screen, it may be necessary to change the output resolution from the default 1280x720p setting to the native resolution of the TV/Monitor.

Resolution

The default output resolution may be changed to match

the requirements of the TV/Monitor connected to one of the Zone A Monitor Outputs by performing the following:

1. Press the Front Panel RESOLUTION Push-button once. The Front Panel Information Display will indicate the current setting on the second line. Refer to figure 16.

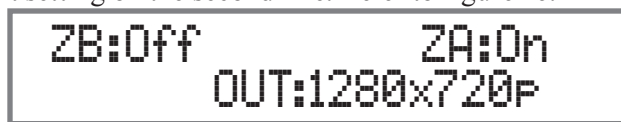


Figure 16

2. By repeated pressing of the RESOLUTION Push-button the VP1000 will step through in a continuous loop, all of the available resolution choices. When the desired resolution appears on the display, stop pressing the push-button. Within a few seconds the VP1000 will switch to the new setting and the Front Panel Information Display will return to the default display. Refer to figures 17 and 18.



Figure 17



Figure 18

3. Press the SETUP Push-button or the MENU Push-button on the Remote Control to exit the Menu.

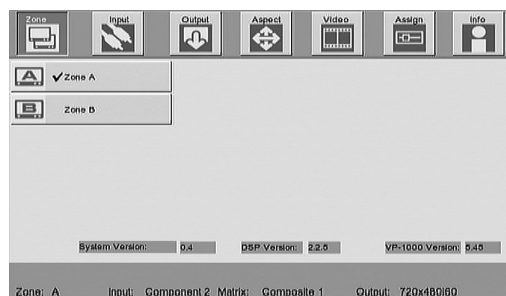


Figure 15

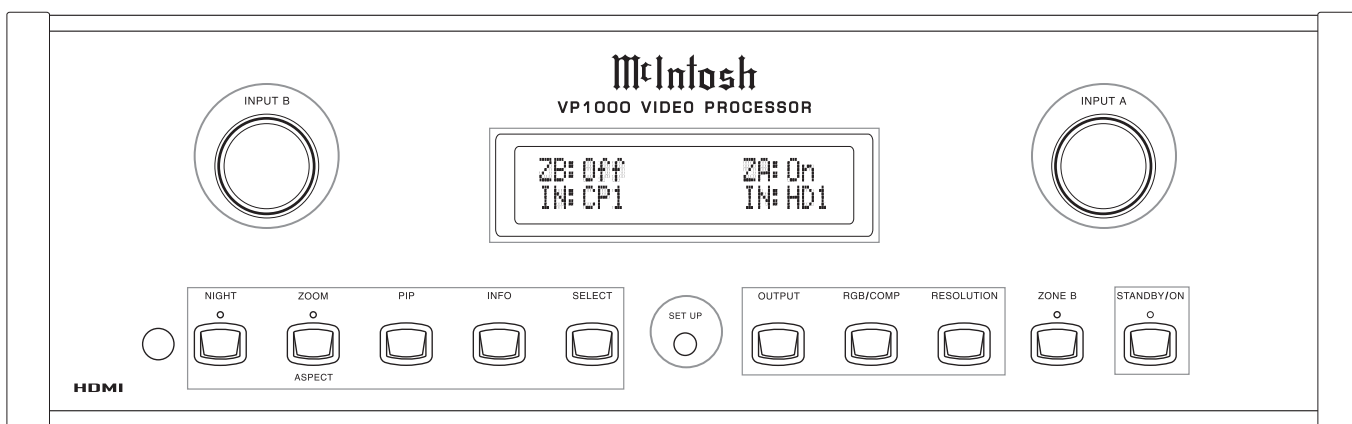


Figure 13

Info

At any time, the VP1000 INFO On-Screen Display (upper right corner on the TV/Monitor) can be activated to provide the current status including the Zone, Input Resolution, Input Selection, Matrix Output Selection and Output Resolution. For the Information Display to appear perform the following:

1. Press the INFO push-button on the Front Panel or Remote Control. Refer to figures 13, 22 and 19.



Figure 19

Output

The Color Processing Format for HDMI Outputs for Zone A can be changed from the default setting of AUTO to either RGB or YCbCr as required by the TV/Monitor connected to the HDMI Outputs. Perform the following to change from the default setting:

1. Press the Front Panel OUTPUT Push-button once. The Front Panel Information Display will indicate the current setting on the second line. Refer to figure 20.



Figure 20

2. By repeated pressing of the OUTPUT Push-button the VP1000 will step through in a continuous loop, all of the three choices. When the desired processing mode appears on the display, stop pressing the push-button. Within a few seconds the VP1000 will switch to the new setting. Refer to figure 21.



Figure 21

RGB/Comp

The Color Processing Format for Component Video Outputs for Zone A can be changed from the default setting of YPbPr to RGBHV as required by the TV/Monitor connected to the Component Video Outputs. Perform the following to change from the default setting:

1. Press the Front Panel RGB/COMP Push-button once. The Front Panel Information Display will indicate the current setting on the second line. Refer to figure 23.
2. By repeated pressing of the RGB/COMP Push-button, the VP1000 will switch between the two choices. When the desired processing mode appears on the display, stop pressing the push-button. Within a few seconds the VP1000 will switch to the new setting. Refer to figure 24.



Figure 23



Figure 24

Zoom/Aspect

The Front Panel Zoom/Aspect Push-button allows for changing the Aspect Ratio (image size height to width) to compensate for the different image sizes from various sources materials such as film and TV video. The VP1000 circuitry scales the Input Video Signal to match the selected output resolution and provides five different aspect ratios and one zoom mode. The settings include Anamorphic Full Screen, Panoramic Full Screen, Letter/Pillar Box,

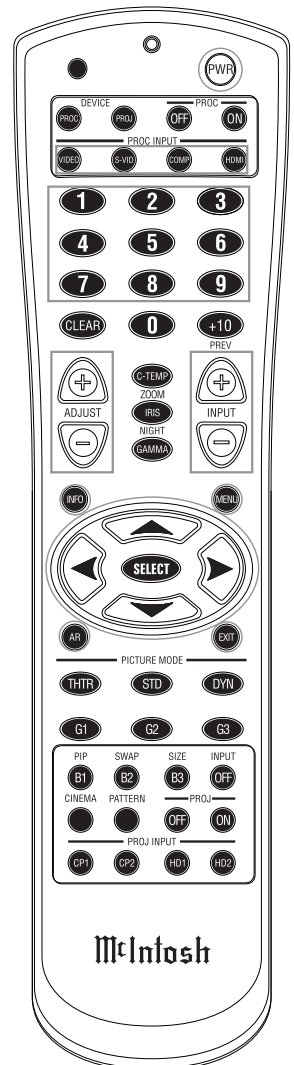


Figure 22



How to Operate the VP1000, con't

V-Stretch (Vertical Stretch), Zoom and Through. Perform the following to change from the default setting:

1. Press the Front Panel ZOOM/ASPECT Push-button or the ASPECT Push-button on the Remote Control once. The Front Panel Information Display will indicate the current setting on the second line. Refer to figures 25, 31 and 39.



Figure 25

2. By repeated pressing of the ZOOM/ASPECT Push-button the VP1000 will switch between the choices. When the desired image height/width appears on the TV/Monitor, stop pressing the push-button. Refer to figures 26 thru 30.

Notes: When the Zoom Mode is selected, the LED above the ZOOM/ASPECT Push-button will illuminate. The default setting for Zoom is for no change in the image. Refer to the Zoom Adjustments in the On-Screen Menu on page 28.

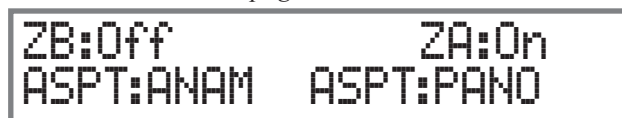


Figure 26



Figure 27



Figure 28



Figure 29



Figure 30

Night

The NIGHT Push-button allows for changing between the Daytime and Nighttime Brightness/Contrast settings of which compensates for the differences in ambient room lighting when viewing. Perform the following to change the setting:

1. Press the NIGHT Push-button on the Front Panel or on the Remote Control once. The Front Panel Information Display will indicate the current setting on the second line. Refer to figures 32 and 39.



Figure 32

2. By repeated pressing of the NIGHT Push-button again the VP1000 will switch between the choices. Select the desired setting. Refer to figure 33.

Notes: The intensity of the Front Panel Information Display will dim when the Zone A Night Mode is selected. Refer to the Brightness/Contrast Adjustments in the On-Screen Video/Image Menu on page 25 to make changes to the default settings.



Figure 33

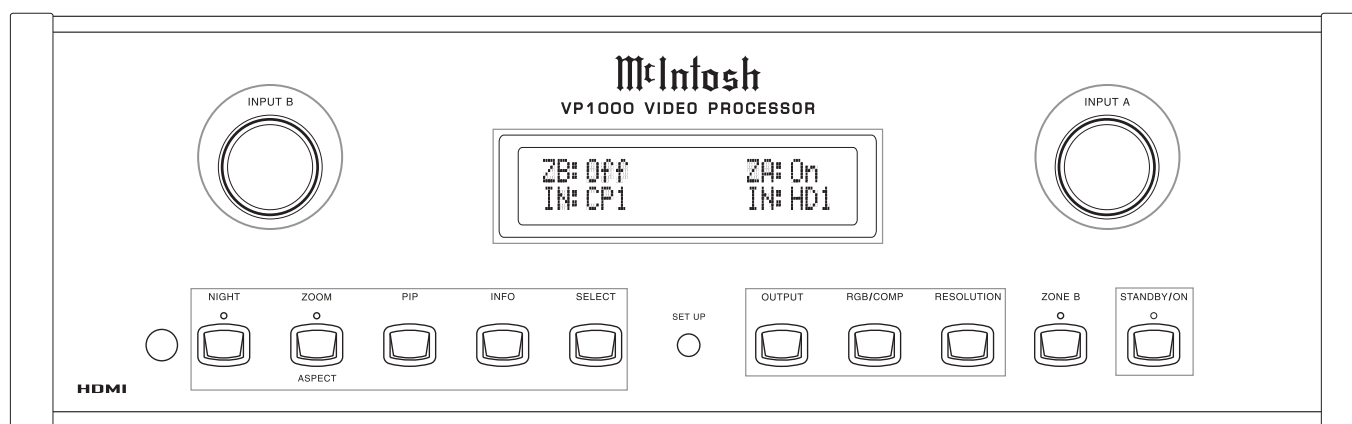


Figure 31

Picture-In-Picture

The VP1000 has two PIP Modes, Picture-In-Picture and Picture-By-Picture. This feature allows for viewing two different video sources simultaneously. To activate the PIP Mode perform the following:

1. Press the PIP Push-button on the Front Panel or Remote Control once. The Information Display will indicate the current status of the PIP Mode. Refer to figures 31, 39 and 34.



Figure 34

2. By repeated pressing of the PIP Push-button the VP1000 will switch between the PIP Modes. Select the desired PIP Mode. Refer to figures 35, 36, 37 and 38.



Figure 35



Figure 36



Figure 37



Figure 38

3. The video source for the main image is controlled by the Front Panel INPUT A Control and the secondary image is selected by using the Front Panel INPUT B Control. Refer to figure 31.

Select

The VP1000 Front Panel SELECT Push-button may be used instead of the Remote Control SELECT Push-button to accept choices when working with the On-Screen Menu.

Input A

The VP1000 Front Panel INPUT A Control is used to select a video source for Zone A. It may be used instead of the Remote Control ◀LEFT / ▶RIGHT Push-buttons to navigate thru the On-Screen Menu.

Input B

The VP1000 Front Panel INPUT B Control is used to select a video source for the PIP Modes of operation and Zone B operation. It may be used instead of using the Remote Control ▲UP or ▼DOWN Push-buttons to navigate thru the On-Screen Menu.

Note: For more information on Zone B operation, refer to "How to Operate Zone B" starting on the next page.

Front Panel Display Intensity

The VP1000 Front Panel Information Display Intensity may be adjusted from the default setting by performing the following:

1. Press and hold in the Front Panel INFO Push-button and at the same time rotate the INPUT A Control to the desired brightness level. Refer to figure 31.
2. Release the INFO Push-button to set the new daytime Front Panel Display Intensity.

Note: When the NIGHT Mode is active the Front Panel Display brightness is the same as the minimum variable setting.

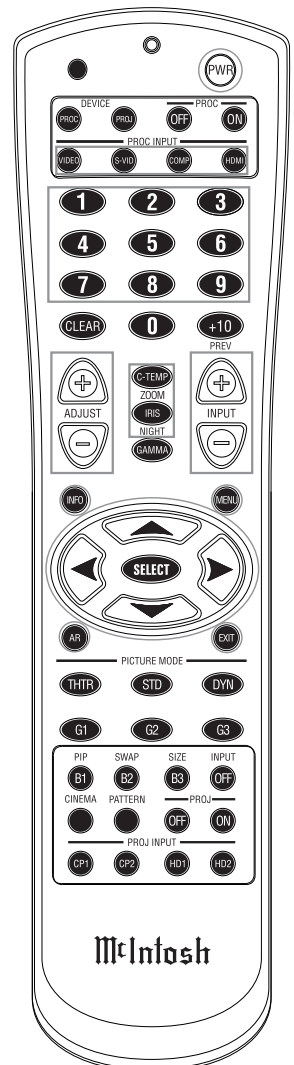


Figure 39



How to Operate Zone B

Each Zone of the VP1000 is operated independently including video source selection, video processing of the selected source and the switching of power On/Off. To switch Power On to Zone B perform the following:

1. Press the ZONE B Push-button on the VP1000 Front Panel. Then press the STANDBY/ON Push-button on the Front Panel to switch Power On to Zone B. Refer to figure 40.

Notes: A. The Red LED (above the ZONE B Push-button) will illuminate for a 10 second duration after the ZONE B Push-button is depressed. During the time the LED is illuminated the VP1000 will accept commands for Zone B.

B. Zone B may be operated by Remote Control when an external IR Sensor is connected to the Zone B IR Input jack.

2. Press the ZONE B Push-button and then the VP1000 Front Panel SETUP Push-button. The Front Panel Information Display will indicate ZB OSD ACTIVE. The On-Screen Menu will appear on the Zone B TV/Monitor. Refer to figures 40, 41 and 42.



Figure 41

If the Menu does not appear On-Screen, it may be necessary to change the output resolution from the default 1280x720p setting to the native resolution of the TV/Monitor.

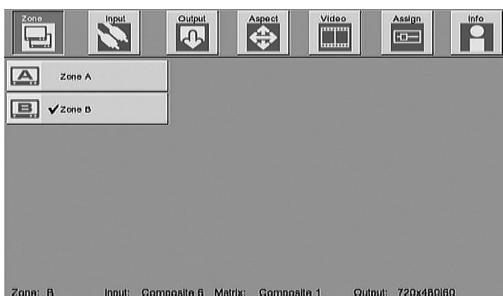


Figure 42

Resolution

The default output resolution may be changed by performing the following:

1. Press the ZONE B Push-button and then the Front Panel RESOLUTION Push-button once. The Front Panel Information Display will indicate the current setting on the second line. Refer to figure 43.



Figure 43

2. Press the ZONE B Push-button and then press the RESOLUTION Push-button multiple times until the desired resolution appears on the display. The VP1000 will switch to the new setting and the Front Panel Information display will return to the default display. Refer to figures 44 and 45.

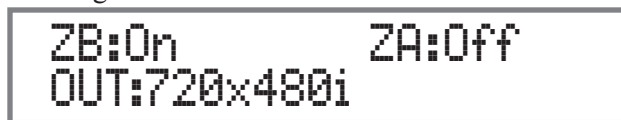


Figure 44



Figure 45

3. Press the ZONE B Push-button and then press the Front Panel SETUP Push-button to exit the Menu. The remaining functions of Zone B are identical to Zone A; the only difference being the necessity of pressing the ZONE B Push-button before pressing another Front Panel Push-button.

When PIP Mode is active the primary on screen image is the selected Zone B source and the secondary image is the Zone A source.

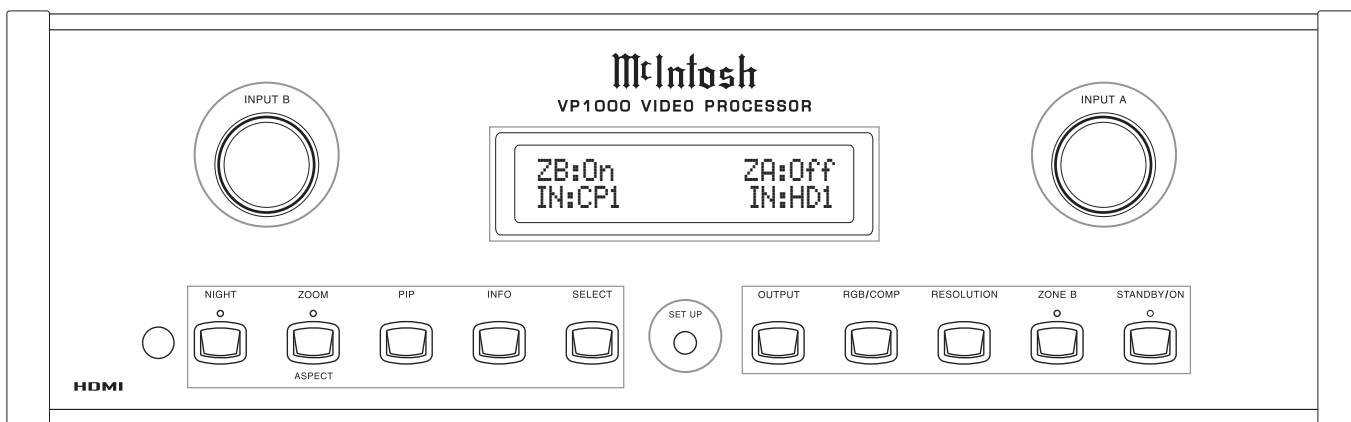


Figure 40

How to Operate the Menu

The VP1000 On-Screen Menu allows adjustments to be made to a wide variety of video settings for both Zone A and B. The Remote Control is used to navigate through the menu and the available settings.

Most of the image adjustments and processing settings are performed by using the On-Screen Menuing. The On-Screen Menuing is interactive and the ability to change a given setting is dependent on the Input selected, and the presence of a video signal for that input. When a menu item is “grayed out” it can not be changed until either another Input is selected or a signal is present.

The selection of a menu item and the available choices/adjustments are performed by using the Navigation (◀LEFT, ▶RIGHT, ▲UP or ▼DOWN) Push-buttons along with the ENTER/SELECT Push-buttons located on the Remote Control. Refer to figure 50.

The Front Panel INPUT A Control (◀LEFT / ▶RIGHT) and INPUT B Control (▲UP or ▼DOWN) together with the SELECT Push-button may be used instead of the Remote Control. Refer to figure 40.

The following examples will illustrate how to use the On-Screen Menu by activating Zone B Menu Control, also how to adjust the Brightness and Contrast for daytime/nighttime viewing in Zone A. All of the remaining menu options are performed in a similar manner.

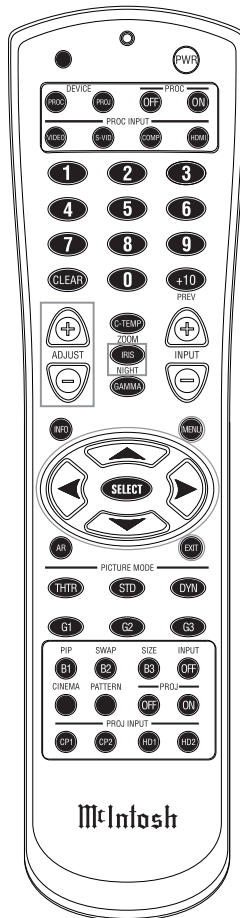


Figure 50

Zone B Menu Control:

1. Press the MENU Push-button on the Remote Control. Refer to figures 50 and 51.
2. Using the ▼DOWN Push-button highlight the ZONE B Icon. Refer to figure 52.

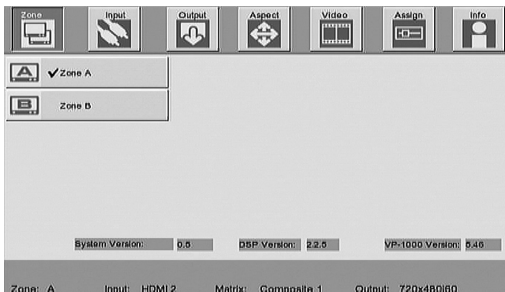


Figure 51

3. Press the SELECT Push-button and a ✓ check mark will appear to the left of the ZONE B Title

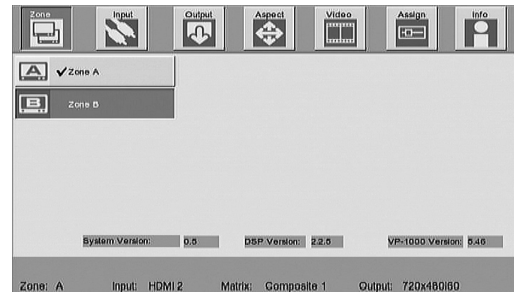


Figure 52

4. To return menu control back to Zone A press the ▲UP and then press the SELECT push-button. A ✓ check mark will appear to the left of the ZONE A Title Name indicating any changes made in the Menus will affect only Zone B. Refer to figure 53.

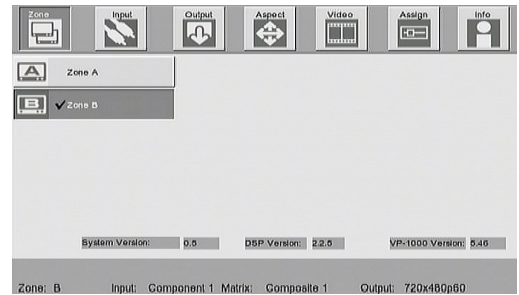


Figure 53

5. Press the ◀LEFT Push-button to return to the ZONE B Icon at the top of the menu.

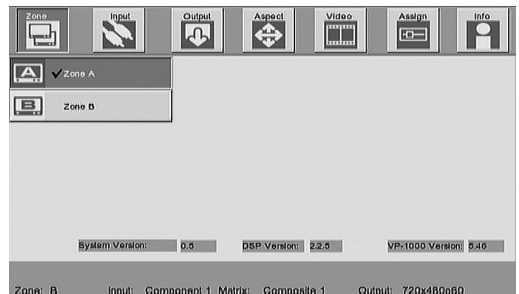


Figure 54

Brightness and Contrast Adjustment:

1. Use the ▶RIGHT Push-button to select the Video Icon at the top of the menu. Refer to figure 55.

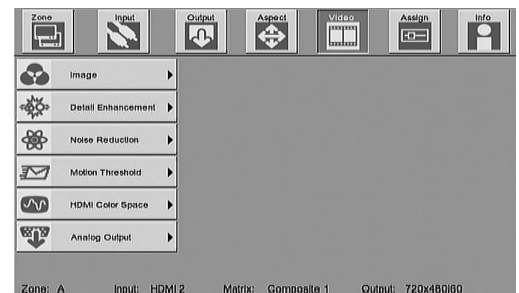


Figure 55

2. Press the ▼DOWN Push-button to highlight the Image Icon. Refer to figure 56 on the next page.

How to Operate the Menu, con't

3. Press the **▶RIGHT** Push-button to highlight the Contrast Icon. Refer to figure 57.

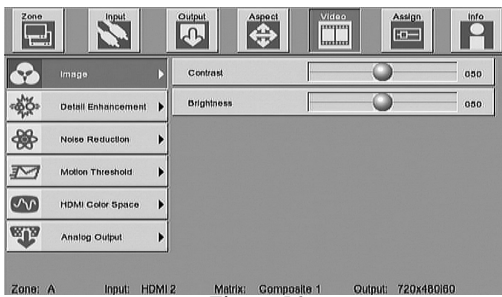


Figure 56

4. Press the **SELECT** Push-button. The Main Menu Screen will be replaced by the Contrast horizontal adjustment bar. Refer to figure 58.

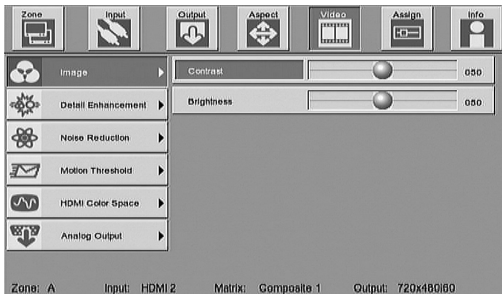


Figure 57

5. Press the **ADJUST + (plus)** Push-button to increase the contrast of the image or **ADJUST - (minus)** push-button to decrease the contrast of the image. Refer to figures 59 and 60.



Figure 58



Figure 59



Figure 60

Note: The (◀LEFT / ▶RIGHT) Push-buttons may also be used.

6. Press the **▲UP** or **▼DOWN** Push-button to change from adjusting the Contrast to changing the Brightness setting. Refer to figure 61.



Figure 61

7. Press the **ADJUST + (plus)** Push-button to increase the brightness of the image or **ADJUST - (minus)** Push-button to decrease the brightness of the image. Refer to figures 62 and 63.



Figure 62

8. To leave the Menu press the **EXIT** Push-button.



Figure 63

Adjust the brightness and contrast settings for the desired preference. This establishes daytime brightness and contrast settings. To adjust the nighttime brightness and contrast settings for Zone A perform the following:

1. Using the **NIGHT** Push-button to select the nighttime operating mode for Zone A. Refer to figure 64.

```
ZB:Off      ZA:On
NIGHT:Off   NIGHT:On
```

Figure 64

2. Press the MENU Push-button on the Remote Control (or the SETUP Push-button on the VP1000 Front Panel) to activate the On-Screen Menu.
3. Perform steps 1 thru 6 of “Brightness and Contrast”.
4. Press the EXIT Push-button to leave the menu.

The adjustment of the daytime and nighttime Brightness and Contrast for Zone B is performed in the same manner, however Zone B needs to be set active before making adjustments.

PIP Modes

There are two different PIP Modes, Picture-In-Picture and Picture-By-Picture. Perform the following to activate either PIP Mode:

1. Activate the On-Screen Menu.
2. Select the OUTPUT Icon, then select the PIP Icon.

Refer to figure 65.

3. Choose either PIP Mode.
4. Choose the Primary Image Source

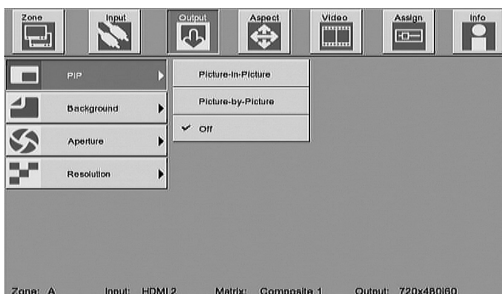


Figure 65

using the Front Panel INPUT A Control. Use the INPUT B Control to select the secondary Image Source.

Note: When viewing the Zone B TV/Monitor, the selection of the primary and secondary image is reversed.

For additional information refer to page 23.

Background

When a given video program source doesn't fill up the TV/Monitor Screen, bars may appear either on the sides or on the top/bottom of the image. The default setting of Black Bars may be changed by performing the following:

1. Activate the On-Screen Menu.
2. Select the OUTPUT Icon, then select the BACKGROUND Icon.

3. Choose the desired Resolution.

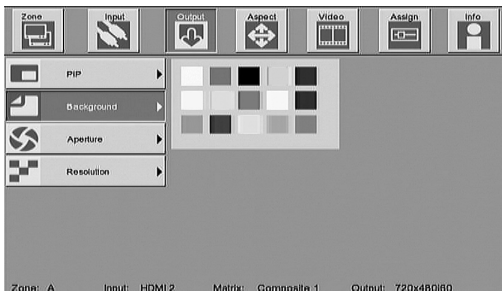


Figure 66

3. Select the desired color with the navigation push-buttons and then press the SELECT Push-button to enter the change.
4. Press the EXIT Push-button.

Aperture

The VP1000 allows for adjustment of the image size and position to compensate for the characteristics of the TV/Monitor. Perform the following to make adjustments:

1. Activate the On-Screen Menu.
2. Select the OUTPUT Icon, then select the APERTURE Icon.

Refer to figure 67.

3. Choose the appropriate size and/or position icon to make adjustments.

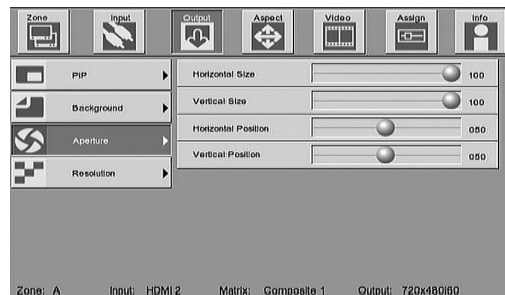


Figure 67

Note: To make adjustments for the Zone B TV/Monitor first select the Zone B Icon and make it active. Then perform the above steps.

Resolution

The Output Resolution for both Zone A and Zone B may be changed from the Front Panel of the VP1000 (Resolution Push-button). It also can be changed using the On-Screen Menu together with the Remote Control. Perform the following to make a change:

1. Activate the On-Screen Menu.
2. Select the OUTPUT Icon, then select the RESOLUTION Icon.

Refer to figure 68.

3. Choose the desired Resolution.

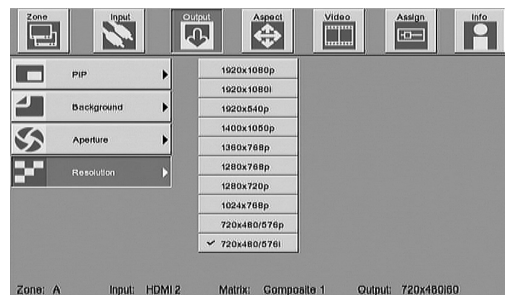


Figure 68

Note: To change the Resolution for the Zone B TV/Monitor first select the Zone B Icon and make it active. Then perform the above steps.

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Aspect/Zoom

The Aspect Ratio (image size height to width) may be changed from the Front Panel of the VP1000 (Zoom/Aspect) Push-button. It also can be changed using the On-Screen Menu together with the Remote Control. Refer to page 21 for additional information. Perform the following to make a change:

1. Activate the On-Screen Menu.
2. Select the ASPECT Icon, then select the desired Aspect Ratio. Refer to figure 69.

3. When the Zoom Icon is chosen with the SELECT Push-button, the “grayed-out” Zoom Adjustments become active.

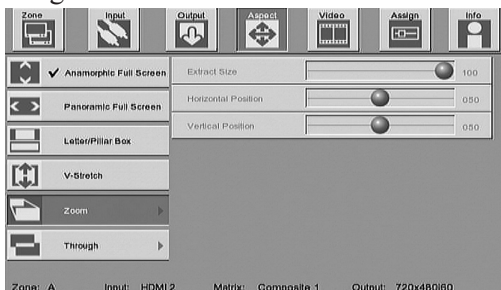


Figure 69

The EXTRACT Icon allows zooming in on the center of the image, with a maximum zoom-in setting of 33. Once the zooming in process has started, the Horizontal and Vertical Position Controls become active and allows the zoom-in center point to change.

Aspect/Through

The Aspect Ratio setting of Through maintains the same size of the image as the input signal. Size and Positioning may be changed by performing the following:

1. Activate the On-Screen Menu.
2. Select the ASPECT Icon, then select the THROUGH Icon. The “grayed-out” Through Adjustments will become active. Once the Horizontal or Vertical Size adjustment has started, the Horizontal and Vertical Position Controls will become active.

Refer to figure 70.

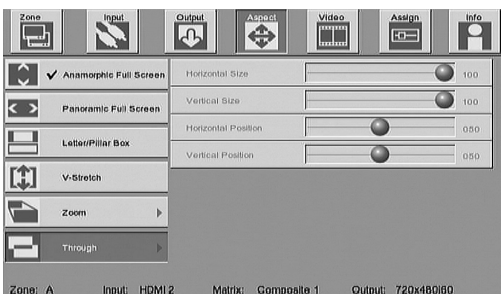


Figure 70

Detail Enhancement

The VP1000 allows for added additional detail in the image by performing the following:

1. Activate the On-Screen Menu.
2. Select the VIDEO Icon, then select the DETAIL ENHANCEMENT Icon. Refer to figure 71.

3. Adjust the Detail Enhancement and Noise Threshold for the best image.

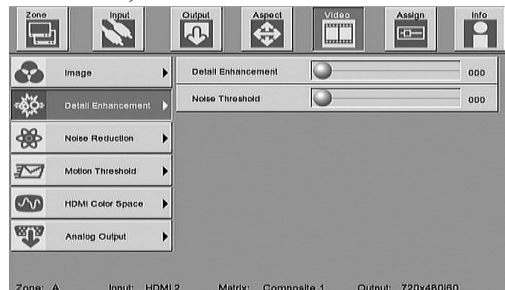


Figure 71

Noise Reduction

To reduce the visual noise in the image perform the following:

1. Activate the On-Screen Menu.
2. Select the VIDEO Icon, then select the NOISE REDUCTION Icon. Refer to figure 72.

3. Adjust the Noise Reduction for the best image.

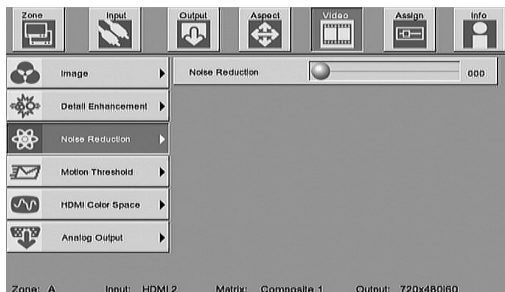


Figure 72

Motion Threshold

When an interlaced video signal, containing a fast action scene is converted to a progressive scan, an image artifact may occur. To reduce those artifacts in the image perform the following:

1. Activate the On-Screen Menu.
2. Select the VIDEO Icon, then select the MOTION THRESHOLD Icon. Refer to figure 73.

3. Adjust for the best image.

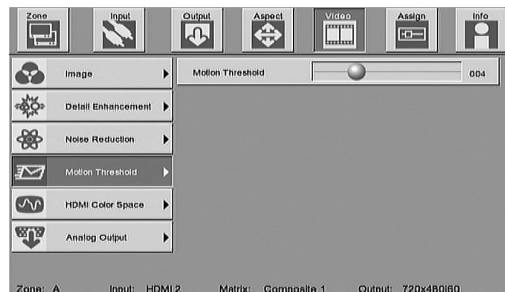


Figure 73

HDMI Color Space

The Color Processing Format of the HDMI Output may be changed from the default setting of Auto using the Front Panel of the VP1000 (Output Push-button). The HDMI Input Signal Color Processing Format may also be changed from the default setting of Auto. To change the Input and/or Output Color Processing Format using the On-Screen Menu and the Remote Control perform the following:

1. Activate the On-Screen Menu.
2. Select the VIDEO Icon, then select the HDMI Color Space Icon. Refer to figure 74.
3. Choose either the HDMI Input or Output Icon. Refer to figures 75 and 76.
4. Change the setting.

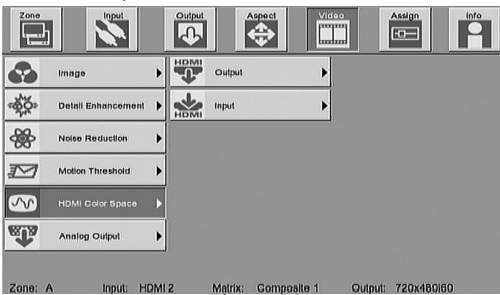


Figure 74

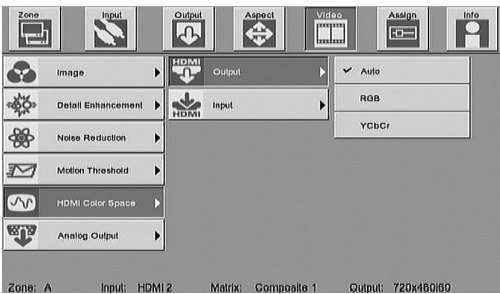


Figure 75

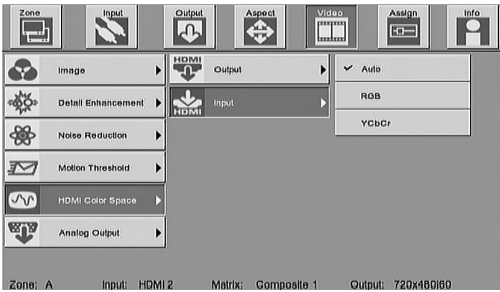


Figure 76

Note: To change the HDMI Input or Output Color Space for the Zone B TV/Monitor first select the Zone B Icon and make it active. Then perform the above steps.

Analog Color Space

The Color Processing Format of the Component Video Output may be changed from the default setting by using the Front Panel of the VP1000 (RGB/COMP Push-button). It also may be changed by using the On-Screen Menu and the Remote Control. Perform the following to change the setting:

1. Activate the On-Screen Menu.
2. Select the VIDEO Icon, then select the Analog Output Icon. Refer to figure 77.
3. Change the setting.

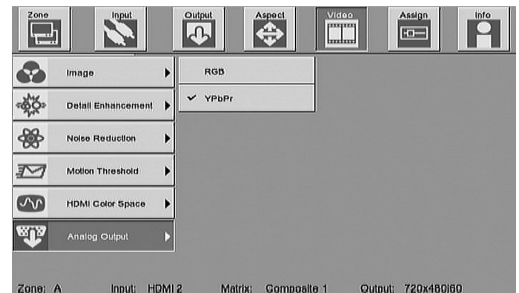


Figure 77



Analog Video Specifications

Signal System

NTSC

Component Video Input/Output Level

Y - 1.0Vp-p (75 OHM)

P_B - 0.648Vp-p (75 OHM)

P_R - 0.7Vp-p (75 OHM)

Component Video Input/Output Resolution

720x480i thru 1920x1080i

Component Video Input Color Processing Mode

Y_PP_BP_R

Component Video Output Color Processing Mode

Y_PP_BP_R or RGBHV

S-Video Input/Output Level

Y - 1Vp-p (75 OHM)

C - 0.286Vp-p (75 OHM)

S-Video Input/Output Resolution

720x480i

Composite Video Input/Output Level

1Vp-p (75 OHM)

Composite Video Input/Output Resolution

720x480i

Digital Video Specifications

Signal System and Version

HDMI 1.1

HDMI Input/Output Color Processing Mode

Y_CC_B or RGB

HDMI Input Resolution

720x480i thru 1920x1080i*

HDMI Output Resolution

720x480i thru 1920x1080p

*The VP1000 will accept a 1920x1080p input signal for processing and may be selected for either Zone A or Zone B HDMI Monitor Output (but not both simultaneously).

Digital Audio Specifications

Digital Output

Optical: -15dbm to -21dbm

General Specifications

Power Requirements

100 Volts, 50/60Hz at 50 watts

110 Volts, 50/60Hz at 50 watts

120 Volts, 50/60Hz at 50 watts

220 Volts, 50/60Hz at 50 watts

230 Volts, 50/60Hz at 50 watts

240 Volts, 50/60Hz at 50 watts

Note: Refer to the rear panel of the VP1000 for the correct voltage.

Overall Dimensions

Width is 17-1/2 inches (44.45cm)

Height is 6 inches (15.24cm) including feet

Depth is 21 inches (45.72cm) including the Front Panel, Knobs and Cables

Weight

21.1 pounds (9.59 kg) net, 37.5 pounds (17.05 kg) in shipping carton

Shipping Carton Dimensions

Width is 26-1/2 inches (67.3cm)

Depth is 24-1/4 inches (62.2cm)

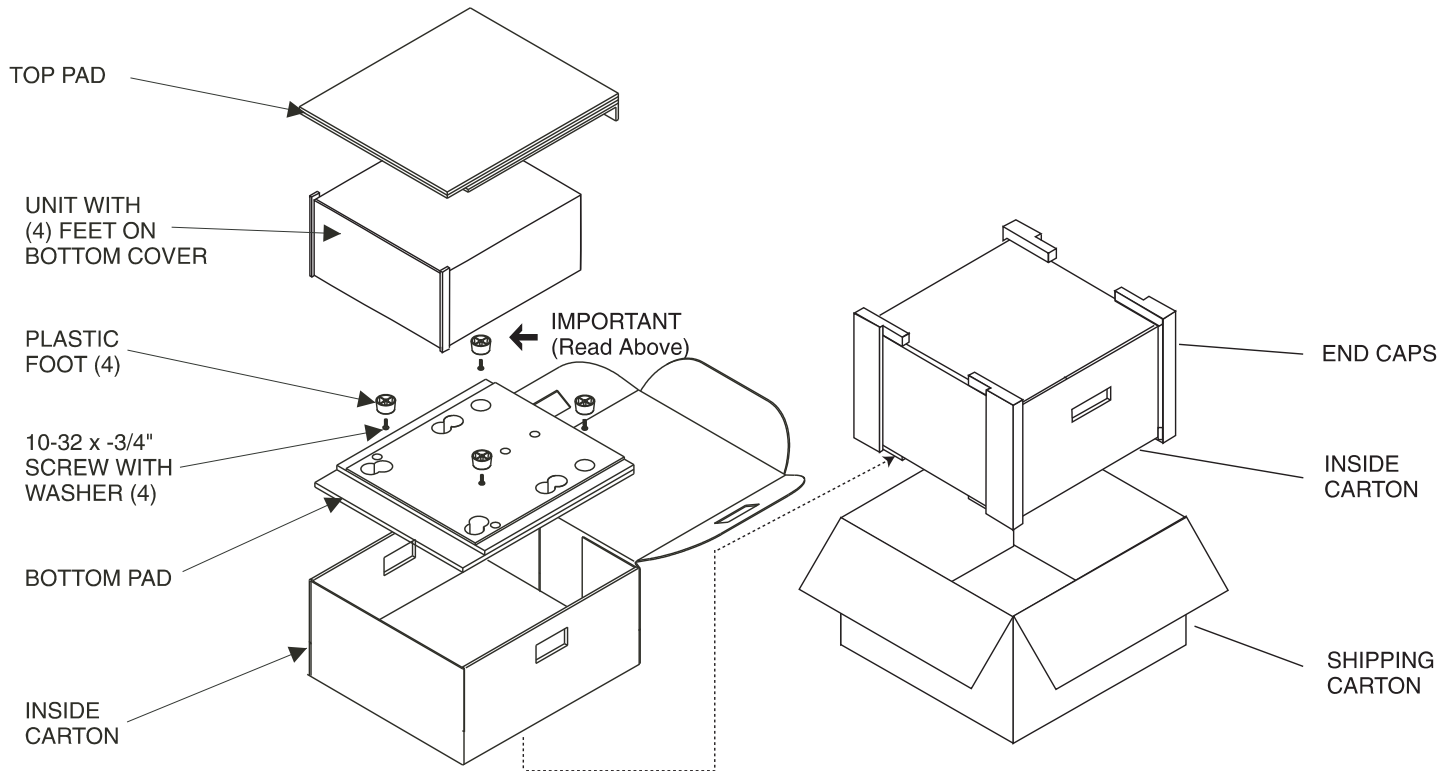
Height is 11-3/4 inches (29.9cm)

Packing Instructions

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below. It is very important that the four plastic feet are attached to the bottom of the equipment. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.

Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of McIntosh Laboratory. Refer to page 4. Please see the Part List for the correct part numbers.

Quantity	Part Number	Description
1	033838	Shipping carton only
4	033837	End cap
1	033836	Inside carton only
1	033725	Top pad
1	034301	Bottom pad
4	017937	Plastic foot
4	400159	#10-32 x 3/4" screw
4	404080	#10-7/16" Flat washer





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