DIGI-P122/P123 Installation and Operation Guide



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Important Safety Instructions

- Please make sure you have read and completely understand all instructions in this manual before operating this equipment.
- > Keep these instructions in a safe, accessible place for future reference.
- Heed all warnings.
- Follow all instructions.
- > Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- > Use only accessories specified or recommended by Intelix.
- Explanation of graphical symbols:
 - Lightning bolt/flash symbol: the lightning bolt/flash and arrowhead within an equilateral triangle symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product enclosure which may be of sufficient magnitude to constitute a risk of shock to a person or persons.
 - Exclamation point symbol: the exclamation point within an equilateral triangle symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.
- ➢ WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.
- > Use the mains plug to disconnect the apparatus from the mains.
- > THE MAINS PLUG OF THE POWER CORD MUST REMAIN READILY ACCESSIBLE.
- Do not defeat the safety purpose 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 is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of your obsolete outlet. Caution! To reduce the risk of electrical shock, grounding of the center pin of this plug must be maintained.
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and the point where they exit from the apparatus.
- > Do not block the air ventilation openings. Only mount the equipment per Intelix's instructions.
- Use only with the cart, stand, table, or rack specified by Intelix or sold with the equipment. When/if a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.
- > Unplug this apparatus during lightning storms or when unused for long periods of time.
- Caution! Shock Hazard. Do not open the unit.
- Refer to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as powersupply 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.





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Overview

The Intelix DIGI-P122/P123 allows the integration of multiple analog and digital devices into a high-definition environment.

The DIGI-P122/P123 allows selection of twelve different sources, and will simultaneously scale the selected video to HDMI, VGA, and HDBaseT outputs. The unit features four HDCP compliant HDMI inputs, four VGA inputs, and four analog video inputs. There are five fixed output resolutions to pick from, and several aspect ratio modes, which will ensure your content is displayed properly. The HDBaseT output will allow you to extend audio, video, and control signals up to 70m away.

The DIGI-P122/P123 offers several unique audio options designed to simplify your installation. All audio inputs are embedded into the HDMI and HDBaseT streams, so you can use your display speakers for audio. Additionally, line level and 80hm speaker outputs can be used for reinforcement. A balanced input is provided (line or microphone level) which is mixed with the source audio to provide voice lift capabilities; while the volumes of the mic and source can be individually controlled.

The DIGI-P122/P123 can be controlled in many different ways. The front panel offers source selection, output resolution, and volume/mute control, as well as an IR window for use with the included remote control. Third party control systems can utilize TCP/IP, RS232 rear panel, RS232 extended (with a compatible HDBaseT receiver), and front panel IR control. Additionally, a web GUI (Graphic User Interface) allows users to control the unit through a browser on their computer.

Package Contents

Please verify the following items are in the shipping box prior to installation of the unit.

- 1 ea DIGI-P123 or DIGI-P122 Presentation Switcher
- 4 ea Rubber Feet
- 1 ea Power Cable (NEMA 5-15P to IEC C13)
- 1 ea RS232 Cable (DE9F to 3-pole Euroblock)
- 1 ea Infrared Remote Control
- 1 ea Installation and Operation Guide
- 1 ea Intelix Pocket Screwdriver



Front Panel



Resolution Selector Button and Indicator – Sets the resolution for the output. All video input signals will be scaled to this resolution.

Power LED/IR Receiver – Power LED will indicate whether the unit is on. Point IR remote at IR receiver for remote control operation. If using a 3rd party IR control, place IR emitter over this window.

Integrated Rack Ears – 19" standard ears for mounting in equipment rack

Input Type Selector Buttons - Selects one of three input types to be displayed

Input Channel Selector Buttons – Selects one of four input channels (contingent upon input type selected). Press the Input Type, then Input Channel to cause the unit to switch inputs.

Mic Volume and Mute Button / Indicators – Changes the level of the audio input connected to the mic/line input. This audio input will mix with the "Line Audio". Resulting mixed audio will be output on HDMI, line level output (VGA), and speaker level output, as well as the HDBaseT output (DIGI-P123).

Line Volume and Mute Button / Indicators – Changes the level of the audio associated with the selected video input. This audio input will mix with the "Mic Audio". Resulting mixed audio will be output on HDMI, line level output (VGA), and speaker level output, as well as the HDBaseT output (DIGI-P123).

Explanation of use for the front panel control is located in the section Front Panel Operation (page 9).





Line Level Output – Always-on stereo line level output (mix of Mic and selected Source audio)

VGA Output – Scaled VGA output. If source is encrypted HDMI, no video will be output from this port.

VGA Inputs - VGA input for PC signals, combined with associated VGA audio input

Video Inputs – Analog AV inputs and associated audio inputs

C-Video 1 – Composite video and audio input. Audio is shared with S-Video 3.

YPbPr 2 – Component video and audio input. Audio is shared with C-Video 4.

S-Video 3 – S-Video and audio input. Audio is shared with C-Video 1.

C-Video 4 – Composite video and audio input. Audio is shared with YPbPr 2.

RS232 Port – Control of the device can be achieved by connecting to this with a PC Com Port or 3rd party control system.

TCP/IP Port – Control of the device can be achieved by connecting to this with a Web Browser or 3rd party control system.

Speaker Outputs – Stereo output for 4/8 Ω speakers. 10w/ch @ 8 Ω or 20w/ch @ 4 Ω

HDBaseT Output – Extender output compatible with HDBaseT receivers. Scaled video outputs with Mix audio are transmitted. *This option is only available on the DIGI-P123.*

HDMI Output – HDMI output. Scaled video output with mixed audio is transmitted.

HDMI Inputs – HDMI AV input

VGA Audio Inputs - Stereo audio inputs associated with VGA Inputs

USB Port – Used for firmware updating

Microphone audio input – Microphone or Line level input intended for use for speech reinforcement. Audio is mixed with source audio and the resulting mix is transmitted on the HDMI, VGA, speaker, and HDBaseT outputs.

110-240VAC Input – AC Power Inlet



IR Remote

The included IR remote performs all of the functions available on the front panel of the DIGI-P122/P123, and also allows acces to the setup menu.





Installation Instructions

Shelf Mounting Instructions

Attach the supplied rubber feet to the bottom of the unit.

Rack Mounting Instructions

The DIGI-P122/123 requires one rack unit (1 RU) of space. At least 2 inches of free air space is required on both sides of the DIGI-P122/123 for proper side ventilation. Avoid mounting the unit near a power amplifier or any other source of significant heat. It is recommended that you leave an empty rack space above and below the DIGI-P122/123 for additional cooling.

Twisted Pair Output (DIGI-P123)

The DIGI-P123 includes an HDBaseT Lite extender output. When used in conjunction with compatible HDBaseT receivers (see Tech Specs), the scaled signal may be transmitted up to 70m (230') away. Additionally, the user may connect via RS232 to the HDBaseT receiver, and control the DIGI-P123. Connection should be made using Cat6 unshielded or shielded cable. Please terminate both ends using EIA/TIA-568B crimp pattern, as shown in this diagram.

Front Panel and IR Remote Operation

Basic Switching

To select an input from the front panel:

- 1. Press the Input Type button for the input you wish to select (HDMI, VGA, VIDEO)
- 2. Press the Input Channel button for input you wish to select (1,2,3,4)

To select an input from the IR remote:

- 1. Point the IR remote at the IR window on the front panel of the DIGI-P122/123
- Press the Source Select button on the remote that corresponds to the input you wish to select. There is a button for each input, regardless of type (HDMI, VGA, VIDEO)





Output Resolution

To change the output resolution from the front panel:

- 1. Press the Output Resolution button to cycle through output resolutions. The selected resolution will be indicated by the LEDs to the right of the button.
- 2. Once you have selected the output resolution, it will take 3-5 seconds for the scaler to perform the function. During this time you may see the picture flash, this is normal.

To change the output resolution from IR remote:

- 1. Point the IR remote at the IR window on the front panel of the DIGI-P122/123.
- 2. Press the Output Resolution button on the remote that corresponds to the resolution you desire. There is a button for each output resolution.
- 3. Once you have selected the output resolution, it will take 3-5 seconds for the scaler to perform the function. During this time you may see the picture flash, this is normal.

Volume and Mute

To change the volume of the MIC or LINE audio from the front panel:

1. Press the arrow up or down to raise or lower the volume, respectively. To make a large change, you can press and hold the button until it reaches an appropriate level.

CAUTION: Increasing volume level too much can cause distortion or feedback, damage speakers, and/or cause hearing loss.

To change the mute status of the MIC or LINE audio from the front panel:

- 1. Press the MUTE button that corresponds to the MIC or LINE audio you wish to mute.
- 2. To cancel the mute, you can press the MUTE button again, or press the arrow UP or DOWN buttons.

To change the volume of the MIC or LINE audio from the IR remote:

- 1. Point the IR remote at the IR window on the front panel of the DIGI-P122/123.
- 2. Press the + or buttons to raise or lower the volume, respectively. To make a large change, you can press and hold the button until it reaches an appropriate level.

CAUTION: Increasing volume level too much can cause distortion or feedback, damage speakers, and/or cause hearing loss.

To change the mute status of the MIC and LINE audio from the IR remote:

- 1. Press the MUTE button this will mute both the MIC and LINE audio.
- 2. To cancel the mute, you can press the MUTE button again, or press the + or buttons for MIC or LINE (only the MIC or LINE will unmute this way, depending on which buttons you press).

See Page 8 for the button layout of the IR remote.



EDID Management

HDMI

An essential part of operation is the EDID table, which is transmitted to the source via HDMI cable from any HDMI input on the switcher. The DIGI-P122/123 units feature a dynamic EDID mode for the HDMI inputs only. The preferred native timing of the EDID will match the output resolution that the DIGI-P122/123 is set to. For example – if the output resolution of the unit is set to 1024x768, then the switcher will request the source to output 1024x768. The benefit of this method is that the video output by the source will not need to undergo a great deal of processing (scaling), which will result in a cleaner image with less scaling artifacts.

VGA

Similar to the HDMI inputs, the VGA inputs must transmit a table of acceptable resolutions to the attached source. The VGA inputs of the DIGI-P122/123 are static, and will always request a resolution of 1360x768 from the source.

HDCP Management

HDMI Inputs

The HDMI inputs are HDCP compliant, which will allow you to use encrypted content like a Blu-Ray player. The DIGI-P122/123 will only consume one HDCP "key", regardless of what is connected on the outputs.

HDMI and HDBaseT Outputs

The HDMI outputs will follow the status of the input. If the source is encrypted, the output will be encrypted; if the source is un-encrypted, the output of the DIGI-P122/123 will be unencrypted.

VGA Output

The VGA video output will be turned off when a HDCP encrypted input is selected (HDMI only). A black screen will replace the video input. This operation is normal, as it is necessary to comply with HDCP regulations. Stereo audio from the PC

For more information about HDCP, please visit www.digital-cp.com



TCP/IP Setup and Control

IP Address Setup via Web Browser

Configuring the TCP/IP port is done via a web browser interface. A crossover cable is required for the initial setup. The default IP address is printed on a sticker on the side of the DIGI-P122/123.

- 1. Configure the computer to use the same network prefix as the IP address assigned to the DIGI-P122/123. For example, the IP address of the DIGI-P122/123 is 192.168.0.178. Set the computer to use a static IP address within the same network range, such as 192.168.0.42.
- 2. Connect the crossover cable to the computer and to the TCP/IP port on the DIGI-P122/123.
- 3. Open up Internet Explorer (Firefox, Chrome, and Safari crop the configuration options).
- 4. Enter the IP address printed on the sticker into the browser URL bar, which will take you to the Login screen.

	Login	
	Password:	
intelix		
DIGITAL & ANALOG DEVICES		

5. The Default password is "888888".



6. Click the "Setup" button to enter the configuration menu.



D	IGI-P123 Setup	Intelix
		Main
	Credentials:	
	password :	
	Front Panel:	
	Unlocked : O	
	Locked : O	
	Save Cancel	

7. Select the "Network" tab

- 8. Enter the new settings provided by your network administrator:
 - a. Enter the new IP address.
 - b. Enter the new Subnet Mask.
 - c. Press the "Save" button.
- 9. Enter the new IP address into your browser URL bar to re-establish communications.





Access the Web Browser with Defined IP Address

- 1. Remove the crossover cable between the computer and the DIGI-P122/123.
- 2. Restore the computer to the previous network settings.
- 3. Connect the computer and the DIGI-P122/123 to the network.
- 4. Using Internet Explorer, enter the IP address for the matrix to access the browser interface.

Additional Options in Web Browser

- 1. Operation Page:
 - a. AV switching: You may select an input channel by pressing the buttons on the left side of the page.
 - b. Volume and Mute Control: You may change the volume and mute status of the MIC and LINE audio. The level is indicated in the indicator bars.
 - c. VGA Auto-Adjust When a VGA input is selected, you can press this button, and the scaler will re-adjust the image.
- 2. Users tab:
 - a. Credentials: You can change the default password for the web browser interface (GUI). Enter the new password and press "Save"
 - Front Panel: You can set the front panel of the DIGI-P122/123 to be locked or unlocked by pressing the associated radio button.



Linera interface	Audiolódeo	Network	
Credentials:			
password :			
Front Panel:			
Unlocked : O			
Locked : O			
	Save	Cancel	



- 3. Interface Tab
 - a. Title Bar Label: You may enter a name in this field. It will appear in the black top bar on the Login and Operation pages.
 - Button Labels: Enter names in these fields to identify the type of input that is connected to the DIGI-P122/123. Examples might be "Bluray", "Wallplate 1", or "AppleTV".
- 4. Audio/Video Tab:

5. Network Tab:

 Output Resolution: You may change the output resolution from this screen by clicking on one of the radio buttons. This performs the same action as the front panel or remote commands.

GI-P123 Setup	intelix
Users Interface Audio/video Network	
Title Bar I abel:	
Conference Boom #302	
Contentice (Contribute	
Button Labels:	
HDBR: [208] VGA t [204] Videot [204]	
HORE HERE Week	
MDBD2 (#214) Video2 (#214)	
HOSEL TADIAL VOLLE ADIAL Video L	
Bave Cancel	
	intelix
GI-P123 Setup	DIGITAL & ANALOG DEVICES
Users Interface AudioWideo Network	
1924/768 O	
7209	
1280*800 0	
1360768	
1080p O	
Save Cancel	
	intelix
GI-P123 Setup	
Users interface Audio/Video Network	
MAC address: #4556550024	
IP Address:	
Subnet Mask: 200 200 200 0	
turn familie	
Save Castel	



Please see **TCP/IP Setup and Control** on page 12 for more information. The MAC address field is not editable.

RS232 Connection

The RS232 control port requires a standard straightthrough serial cable for operation. This diagram shows the connections for the DIGI-P122/123 as you look at the connector. The default settings for the RS232 port are:

- 9600 baud
- 8 Data Bits
- 1 Stop Bit
- Parity = none





RS232 and TCP/IP Commands

RS232 Settings: 9600 baud, 8 Data bits, 1 Stop bit, Parity = None TCP/IP Settings: User defined IP address, port 4001

<CR> = Carriage return (Hex 0D)

<LF> = Line Feed (Hex OA)

Switching Commands

Description	Command	Response
HDMI 1 input select	0701%	Source: HDMI 1 <cr><lf></lf></cr>
HDMI 2 input select	0702%	Source: HDMI 2 <cr><lf></lf></cr>
HDMI 3 input select	0703%	Source: HDMI 3 <cr><lf></lf></cr>
HDMI 4 input select	0704%	Source: HDMI 4 <cr><lf></lf></cr>
VGA 1 input select	0705%	Source: VGA 1 <cr><lf></lf></cr>
VGA 2 input select	0706%	Source: VGA 2 <cr><lf></lf></cr>
VGA 3 input select	0707%	Source: VGA 3 <cr><lf></lf></cr>
VGA 4 input select	0708%	Source: VGA 4 <cr><lf></lf></cr>
		Source: CVIDEO
Composite video (AV1) input select	0709%	1 <cr><lf></lf></cr>
YPbPr input select	0710%	Source: YPbPr <cr><lf></lf></cr>
S-Video input select	0711%	Source: SVIDEO <cr><lf></lf></cr>
		Source: CVIDEO
Composite video (AV2) input select	0712%	2 <cr><lf></lf></cr>
		Displays one of the above
Get the currently selected input source	0631%	Source: responses

Video Commands

Description	Command	Response
		Resolution: HD
Set the resolution to 1360x768 (HD)	0618%	1360X768 <cr><lf></lf></cr>
		Resolution: XGA
Set the resolution to 1024x768 (XGA)	0626%	1024X768 <cr><lf></lf></cr>
		Resolution: 720P
Set the resolution to 1280x720 (720p)	0627%	1280X720 <cr><lf></lf></cr>
		Resolution: WXGA
Set the resolution to 1280x800 (WXGA)	0628%	1280X800 <cr><lf></lf></cr>
		Resolution: 1080P
Set the resolution to 1920x1080 (1080p)	0629%	1920X1080 <cr><lf></lf></cr>
		Displays one of the above
Get the currently selected output resolution	0632%	Resolution: responses
Aspect Mode – Output Native On	0661%	Native On <cr><lf></lf></cr>
Aspect Mode – Output Native Off	0660%	Native Off <cr><lf></lf></cr>



Description	Command	Response
Aspect Mode – Output 16:9	0662%	Ratio: 16:9 <cr><lf></lf></cr>
Aspect Mode – Output 4:3	0663%	Ratio: 4:3 <cr><lf></lf></cr>
Aspect Mode – Set zoom mode (cycle)	0608%	Aspect Ratio:
		[xxxxxxx] <cr><lf></lf></cr>
		[xxxxxx1 can be:
		4:3
		Full
		Wide Screen
	0655%	Subtitle
Freeze Image – Enable	00224	Freeze: Enable <ck><lf></lf></ck>
Freeze Image – Disable	0656%	Freeze:
		Disable <cr><lf></lf></cr>
VGA Auto-adjust	0606%	Non-VGA:
		Not Support <cr><lf></lf></cr>
		VGA:
Set brightness at [xy] [xy] ranges at 00~99	02[vv19	Prightnoss: [vv]
Set contrast at [vv] [vv] ranges at 00~99	02[xx]%	Contract: [ww]
Set saturation at [xx] [xy] ranges at 00~99	04[
Set sharphose at (w/ (w/ ranges at 00° 33	04[XX]8	Saturation: [xx]
Set sharphess at [xx], [xx] ranges at 00 07	05[XX]%	Color Temp: [xx]
		[xx] can be:
		Normal
Set color temperature	0607%	Warm
Set picture mode (cycle)	06076	0001
Set picture mode (cycle)	0636%	
Get the brightness, [xx] ranges at 00-99	0637%	Brightness: [xx]
Get the contract, [xx] ranges at 00~99	06378	Contrast: [xx]
Get the saturation, [xx] ranges at 00~99	0638%	Saturation: [xx]
Get the sharpness, [xx] ranges at 00~07	0639%	Sharpness: [xx]
Get color temperature	0640%	Color Temp: [xx]
		[vvl can be:
		Normal
		Warm
		Cool
Get picture mode	0633%	Picture Mode : [xx]
		[xx] can be:
		User
		Standard
		Bright
		Soit



Audio Commands

Description	Command	d Response
Mute LINE	0600%	LINE Mute On <cr><lf></lf></cr>
Unmute LINE	0601%	LINE Mute Off <cr><lf></lf></cr>
LINE volume up, [xx] ranges at 00~100	0602%	LINE Volume: [xx] <cr><lf></lf></cr>
LINE volume down, [xx] ranges at 00~100	0603%	LINE Volume: [xx] <cr><lf></lf></cr>
Set LINE Volume to [xx], [xx] ranges at		
00~100	01[xx]%	LINE Volume: [xx] <cr><lf></lf></cr>
Mute MIC	0722%	MIC Mute On <cr><lf></lf></cr>
Unmute MIC	0723%	MIC Mute Off <cr><lf></lf></cr>
MIC volume up, [yy] ranges at 00~60	0724%	MIC Volume: [yy] <cr><lf></lf></cr>
MIC volume down, [yy] ranges at 00~60	0725%	MIC Volume: [yy] <cr><lf></lf></cr>
Set MIC Volume to [yy], [yy] ranges at 00~60	08[yy]%	MIC Volume: [yy] <cr><lf></lf></cr>
Mute ALL	0720%	Mute On <cr><lf></lf></cr>
Unmute ALL	0721%	Mute Off <cr><lf></lf></cr>
Get the current volume level, ranges at		LINE Volume: [xx] <cr><lf></lf></cr>
00~100	0630%	MIC Volume: [yy] <cr><lf></lf></cr>
		Digital Sound Output:
Digital audio (HDMI) output enable	0648%	Enable <cr><lf></lf></cr>
District and a (UDNAL) successful and here	0.5.4.0.0	Digital Sound Output:
Digital audio (HDIVII) output disable	0649%	Disable <cr><lf></lf></cr>
		Digital Sound Output:
		Enable <ck><lf></lf></ck>
		OR
		Digital Sound Output:
Get digital audio output status	0652%	Disable <cr><lf></lf></cr>

Menu/System Commands

Description	Comma	Response
	nd	
Lock the front panel	0604%	Panel Locked <cr><lf></lf></cr>
Unlock the front panel	0605%	Panel UnLocked <cr><lf></lf></cr>
Reset to factory defaults	0617%	Factory reset <cr><lf></lf></cr>
System Menu	0616%	MENU <cr><lf></lf></cr>
Enter/OK	0609%	OK <cr><lf></lf></cr>
Menu Left	0610%	Left <cr><lf></lf></cr>
Menu Right	0611%	Right <cr><lf></lf></cr>
Menu Up	0612%	Up <cr><lf></lf></cr>
Menu Down	0613%	Down <cr><lf></lf></cr>
		DIGI-P12X V[xxxxxxx] <cr><lf></lf></cr>
Get firmware version (Video Processor)	06008	[xxxxxxx] can be:
	00996	1.2.0.19
Factory Reset	06178	Factory reset <cr><lf></lf></cr>
Update Firmware	0698%	SEE INSTRUCTIONS on Page 21



Description	Comma	nd Response
Volume Bar display enable	0646%	Volume Bar: Display <cr><lf></lf></cr>
Volume Bar display disable	0647%	Volume Bar: No Display <cr><lf></lf></cr>
		Volume Bar: Display <cr><lf></lf></cr>
		OR
Get Volume Bar display status	0651%	Volume Bar: No Display <cr><lf></lf></cr>
Display on-screen source - Enable	0644%	OSD Source: Display <cr><lf></lf></cr>
Display on-screen source - Disable	0645%	OSD Source: No Display <cr><lf></lf></cr>
		OSD Source: Display <cr><lf></lf></cr>
		OR
On-screen source display status	0650%	OSD Source: No Display <cr><lf></lf></cr>
Enable on-screen icon for Line Mute/Unmute	0761%	ICON LINE Mute: ENABLED <cr><lf></lf></cr>
Disable on-screen icon for Line Mute/Unmute	0762%	ICON LINE Mute: DISABLED <cr><lf></lf></cr>
Enable on-screen icon of Mic Mute/Unmute	0763%	ICON MIC Mute: ENABLED <cr><lf></lf></cr>
Disable on-screen icon for Mic Mute/Unmute	0764%	ICON MIC Mute: DISABLED <cr><lf></lf></cr>
Enable on-screen icon for Freeze Output	0765%	ICON Freeze: ENABLED <cr><lf></lf></cr>
Disable on-screen icon for Freeze Output	0766%	ICON Freeze: DISABLED <cr><lf></lf></cr>

OSD (On Screen Display) Commands



Firmware Update

The DIGI-P122/P123 supports firmware updating in the field by USB thumb drive. The operation is as follows:

- 1. Connect the DIGI-P122/123 output to a display with a HDMI or VGA cable.
- 2. Apply power to the DIGI-P122/123.
- 3. Copy the file "MT23ATV.bin" to a USB flash disk. (The "MT23ATV.bin" file is provided/authorized by Intelix engineering department)
- 4. Insert the USB thumb drive into the USB port on the DIGI-P122/123
- 5. Press the HDMI button on the front panel of the DIGI-P122/123 for 6 seconds *OR* send the RS232 command 0698%
- 6. Press the "OK" button on the IR remote *OR* send the RS232 command 0609% to confirm the update procedure.
- 7. Wait for the update to finish (a progress bar will appear on the screen).
- 8. Power cycle the DIGI-P122/123 (unplug the power cable, wait three seconds, and plug it back in)
- 9. Send the RS232 command 0617% to reset the unit to factory settings.
- 10. Power cycle the DIGI-P122/123 (unplug the power cable, wait three seconds, and plug it back in)

Notice: The name of the firmware file must be MT23ATV.bin.



Troubleshooting

Unit does not power on

Verify power outlet is active. Verify continuity in power cable.

Unit does not respond to front panel buttons

Front panel is locked – send RS232 command 0605%

No video from VGA output

Check VGA cable. HDMI source may be encrypted (Bluray player, etc.) This is normal, encrypted sources cannot be converted to HD analog. Switcher output may be an incompatible video format – change output resolution.

Audio distorted

Turn volume down. If using a line level source, be sure that it is connected to the line level input of the MIC.

No microphone audio

Be sure the microphone is connected to the mic level input of the MIC. Check the microphone – if it is a condenser (electrostatic), it may require phantom power. The DIGI-P122/123 does not supply phantom power.



Stereo input sounds strange (no vocals, etc.)

The line level connector of the MIC input is balanced. If you are trying to input a stereo source, both the Left (+) and Right (+) must be connected to the (+) terminal on the DIGI-P122/123, while the ground should be connected to the (-) and the ground. Better still – use a summing adapter (RDL TX-J2 comes to mind).

No video from HDBaseT output

Verify the green link LED on the HDBaseT card is lit solid.





Technical Specifications

DIGI-P122

Technical Specifications		
Input Connections		
HDMI Inputs	Four (4) HDMI type A	
VGA Inputs	Four (4) HD15-F, Four (4) 3.5mm TRS-F	
Composite Video 1	One (1) RCA-F (video), Two (2) RCA-F (stereo audio shared with S-Video 3)	
YPbPr 2 (Component Video)	Three (3) RCA-F (video), Two (2) RCA-F (stereo audio shared with Composite	
C Video 2	VILLEO 4)	
5-VIGEO 3	Video 1)	
Composite Video 4	One (1) RCA-F (video), Two (2) RCA-F (stereo audio shared with YPbPr 2)	
Microphone Input (Line Level)	One (1) 3-Pole/3.5mm Euroblock (audio summed with Mic Level input)	
Microphone Input (Mic Level)	One (1) 3-Pole/3.5mm Euroblock Connector (audio summed with Line Level input)	
Control (Front Panel)	Push Button, IR	
Control (Rear Panel)	RS232 via 3-Pole/3.5mm Euroblock, TCP/IP via 8P8C	
Power Input	One (1) IEC-C14 Power Inlet	
Firmware Upgrade	USB Type A Female	
Output Connections		
HDMI Output	One (1) HDMI type A	
VGA Output	One (1) HD15-F	
Stereo Analog Audio	Two (2) RCA (stereo audio)	
Speaker Output	One (1) 4-Pole/5.08mm Euroblock	
Video Performance		
HDMI Input Bandwidth	4.95Gbps (1.65Gbps per color)	
HDMI Input Resolutions	640x480: 60/72/75/85 Hz, 800x600: 56/60/72/75/85 Hz, 1024x768:	
	60/70/75/85 Hz, 1280x768: 60 Hz, 1280x1024: 60/75Hz, 1360x768: 60 Hz,	
	720x480i/p (4:3 and 16:9), 720x576i/p (4:3 and 16:9), 1280x720p: 50/60	
	Hz, 1920x1080i: 25/30 Hz, 1920x1080p: 50/60 Hz	
HDMI Input Compatibility	HDMI 1.3, DVI-D	
HDMI Input Compliance	HDCP Compliant**	
VGA Input Bandwidth	375MHz	
VGA Input Resolutions	640x480: 60/72 Hz, 720x400: 60 Hz, 800×600: 60/72/75 Hz, 1024×768:	
	60/70/75 Hz, 1280x720: 60 Hz, 1280×768: 60Hz, 1280x960: 60 Hz,	
	1280×1024: 60/75Hz, 1360×768: 60Hz, 1440x900: 60 Hz, 1600x1200: 60 Hz,	
	1680x1050: 60 Hz, 1920×1080: 60 Hz	
VGA Input Compatibility		
Composite, S-Video Input Bandwidth		
Composite, S-Video Input Compatibility	NTSC 3.58, NTSC 4,42, PAL, SECAM	
	1/UMHZ	
Output Posolutions	4801, 4804, 5701, 5704, 7204, 10801, 10804 1020/1080, 1260/768, 1280/720, 1280/800, 1024/768	
Video Impedanco	1320x1000, 1300x700, 1200x720, 1200x000, 1024x700	
Maximum Pixel Clock	1/5MH7	
Video Gain		
Signai Level	υ.ον 2.υνμ-μ	



Audio Performance		
RCA/3.5mm Input Signal Level	-10dBv Nominal	
RCA/3.5mm Input Impedance	>10k ohm	
MIC Input Signal Level	-48dB Nominal (Mic input), +4dBu Nominal (Line Input)	
MIC Input Impedance	600 ohm (Mic input), >10k ohm (Line input)	
ADC Format	24bit, 48kHz, 2ch LPCM	
Line Level Output Impedance	50 ohm	
Speaker Output	2x10W @ 8ohm / 2x20W @ 4ohm	
Frequency Response	20Hz-20kHz	
Stereo Channel Separation	>80dB @ 1kHz	
Common Mode Rejection	>90dB @ 20Hz-20kHz	
Control Parameters		
RS232	9600 baud	
Ethernet	100BaseT	
Chassis and Environmental		
Enclosure	Painted Aluminum	
Dimensions	483mm x 235mm x 44mm (19 in x 9.25 in x 1.73 in) – 1RU	
Shipping Weight	3.74 kg (8.25 lbs.)	
Operating Temperature	0° to +48° C (+32° to +120° F)	
Operating Humidity	10% to 90%, Non-condensing	
Storage Temperature	-20° to +70° C (+14° to +158° F)	
Storage Humidity	10% to 85%, Non-condensing	
Power and Regulatory		
Maximum Power Consumption	65 watts	
Power Supply	100vAC~240vAC, 50/60Hz	
Regulatory	CE, RoHS	
Other		
Warranty	2 years	
Included Accessories	IR Remote, Power Cable, Four (4) Rubber Feet, Serial Cable (DE9-F to	
	Euroblock), Operation Guide	

**VGA Output will turn off when encrypted content is selected.

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.



DIGI-P123

Т	echnical Specifications
Input Connections	
HDMI Inputs	Four (4) HDMI type A
VGA Inputs	Four (4) HD15-F, Four (4) 3.5mm TRS-F
Composite Video 1	One (1) RCA-F (video), Two (2) RCA-F (stereo audio shared with S-Video 3)
YPbPr 2 (Component Video)	Three (3) RCA-F (video), Two (2) RCA-F (stereo audio shared with Composite
	Video 4)
S-Video 3	One (1) 4PMD-F (video), Two (2) RCA-F (stereo audio shared with Composite
	Video 1)
Composite Video 4	One (1) RCA-F (video), Two (2) RCA-F (stereo audio shared with YPbPr 2)
Microphone Input (Line Level)	One (1) 3-Pole/3.5mm Euroblock (audio summed with Mic Level input)
Microphone Input (Mic Level)	One (1) 3-Pole/3.5mm Euroblock Connector (audio summed with Line Level
	input)
Control (Front Panel)	Push Button, IR
Control (Rear Panel)	RS232 via 3-Pole/3.5mm Euroblock, TCP/IP via 8P8C, RS232 via HDBaseT
	Output (8P8C-F)*
Power Input	One (1) IEC-C14 Power Inlet
Firmware Upgrade	USB Type A Female
Output Connections	
HDMI Output	One (1) HDMI type A
VGA Output	One (1) HD15-F
Stereo Analog Audio	Two (2) RCA (stereo audio)
HDBaseT Output	One (1) 8P8C-F
Speaker Output	One (1) 4-Pole/5.08mm Euroblock
Video Performance	
HDMI Input Bandwidth	4.95Gbps (1.65Gbps per color)
HDMI Input Resolutions	640x480: 60/72/75/85 Hz, 800x600: 56/60/72/75/85 Hz, 1024x768:
	60/70/75/85 Hz, 1280x768: 60 Hz, 1280x1024: 60/75Hz, 1360x768: 60 Hz,
	720x480i/p (4:3 and 16:9), 720x576i/p (4:3 and 16:9), 1280x720p: 50/60
	Hz, 1920x1080i: 25/30 Hz, 1920x1080p: 50/60 Hz
HDMI input Compatibility	
HDMI Input Compliance	
VGA Input Resolutions	640X480: 60/72 HZ, 720X400: 60 HZ, 800×600: 60/72/75 HZ, 1024×768:
	00/70/75 HZ, 1280X720, 00 HZ, 1280×708, 00HZ, 1280X500, 00 HZ, 1280×1034, 60/75 HZ, 1260×768, 60HZ, 1440×000, 60 HZ, 1600×1200, 60 HZ
	1280×1024. 00/73Hz, 1500×708. 00Hz, 1440x900. 00Hz, 1000x1200. 00Hz, 1680×1050·60Hz, 1020×1080·60Hz
VGA Input Compatibility	RCBH// RCBc RCcB RCcBc
Composite S-Video Input Bandwidth	150MHz
Composite S-Video Input Compatibility	NTSC 3 58 NTSC 4 42 PAL SECAM
Component Video Input Bandwidth	170MHz
Component Video Input Besolutions	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
Output Resolutions	1920x1080 1360x768 1280x720 1280x800 1024x768
Video Impedance	75ohm
Maximum Pixel Clock	145MHz
Video Gain	OdB
Signal Level	0.5V~2.0Vp-p
5.5.101 20101	



Audio Performance		
RCA/3.5mm Input Signal Level	-10dBv Nominal	
RCA/3.5mm Input Impedance	>10k ohm	
MIC Input Signal Level	-48dB Nominal (Mic input), +4dBu Nominal (Line Input)	
MIC Input Impedance	600 ohm (Mic input), >10k ohm (Line input)	
ADC Format	24bit, 48kHz, 2ch LPCM	
Line Level Output Impedance	50 ohm	
Speaker Output	2x10W @ 8ohm / 2x20W @ 4ohm	
Frequency Response	20Hz-20kHz	
Stereo Channel Separation	>80dB @ 1kHz	
Common Mode Rejection	>90dB @ 20Hz-20kHz	
Control Parameters		
RS232	9600 baud	
Ethernet	100BaseT	
HDBaseT Signal Characteristics		
Maximum Distance	70m (230 ft)	
Cable Requirements	Solid core shielded Category 5e, Category 6 or greater with TIA/EIA-568B	
	crimp pattern	
Bandwidth	10.2 Gbps	
Gain	0 dB – 10 dB at 100 MHz	
Signal to Noise Ratio (SNR)	> 70 dB at 100 MHz over 100 m	
Return Loss	< -30 dB at 5 KHz	
Total Harmonic Distortion (THD)	< 0.005% at 1 KHz	
Min-Max Signal Level	< 0.3 V – 1.45 Vp-p	
Differential Phase Error	±10° at 135 MHz over 100 m	
Chassis and Environmental		
Enclosure	Painted Aluminum	
Dimensions	483 mm x 235 mm x 44 mm (19 in x 9.25 in x 1.73 in) – 1RU	
Shipping Weight	3.74 kg (8.25 lbs.)	
Operating Temperature	0° to +48° C (+32° to +120° F)	
Operating Humidity	10% to 90%, Non-condensing	
Storage Temperature	-20° to +70° C (+14° to +158° F)	
Storage Humidity	10% to 85%, Non-condensing	
Power and Regulatory		
Maximum Power Consumption	65 watts	
Power Supply	100vAC~240vAC, 50/60Hz	
Regulatory	CE, RoHS	
Other		
Warranty	2 years	
Included Accessories	IR Remote, Power Cable, Four (4) Rubber Feet, Serial Cable (DE9-F to	
	Euroblock), Operation Guide	
Compatible Receivers (A/V Only)	DIGI-HD70-R	
Compatible Receivers (A/V and RS232)	DIGI-HDE-R, DIGI-HD60C-R, FLX-BI4	

*Requires Compatible HDBaseT Receiver

**VGA Output will turn off when encrypted content is selected.

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.



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Thank you for your purchase.

Please contact us with your questions and comments.

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