

HARDWARE REFERENCE MANUAL

VERSION: V1.0.0

Precis PR-Series Matrix Switcher

Precis 4K60 HDMI Switcher





AV FOR AN IT WORLD®

IMPORTANT SAFETY INSTRUCTIONS

- 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 dry cloth.
- 7. DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. DO NOT install near any hear sources such as radiators, hear 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 wider 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 a 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 apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
- 16. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
- 17. Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- DO NOT overload wall outlets or extension cords beyond their rated capacity as this can cause electric shock or fire.



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 product.



The lightning flash with arrowhead symbol 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 electrical shock to persons.



ESD Warning: The icon to the left indicates text regarding potential danger associated with the discharge of static



electricity from an outside source (such as human hands) into an integrated circuit, often resulting in damage to the circuit.

WARNING: To reduce the risk of fire or electrical shock, do not expose this apparatus to rain or moisture.
WARNING: No naked flame sources - such as candles - should be placed on the product.
WARNING: Equipment shall be connected to a MAINS socket outlet with a protective earthing connection.
WARNING: To reduce the risk of electric shock, grounding of the center pin of this plug must be maintained.

COPYRIGHT NOTICE

AMX© 2018, all rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of AMX. Copyright protection claimed extends to AMX hardware and software and includes all forms and matters copyrightable material and information now allowed by statutory or judicial law or herein after granted, including without limitation, material generated from the software programs which are displayed on the screen such as icons, screen display looks, etc. Reproduction or disassembly of embodied computer programs or algorithms is expressly prohibited.

LIABILITY NOTICE

No patent liability is assumed with respect to the use of information contained herein. While every precaution has been taken in the preparation of this publication, AMX assumes no responsibility for error or omissions. No liability is assumed for damages resulting from the use of the information contained herein. Further, this publication and features described herein are subject to change without notice.

AMX WARRANTY AND RETURN POLICY

The AMX Warranty and Return Policy and related documents can be viewed/downloaded at www.amx.com.

ESD WARNING

To avoid ESD (Electrostatic Discharge) damage to sensitive components, make sure you are properly grounded
before touching any internal materials.
When working with any equipment manufactured with electronic devices, proper ESD grounding procedures must be followed to make sure people, products, and tools are as free of static charges as possible. Grounding straps, conductive smocks, and conductive work mats are specifically designed for this purpose. These items should not be manufactured locally, since they are generally composed of highly resistive conductive materials to safely drain static discharges, with-out increasing an electrocution risk in the event of an accident.
Anyone performing field maintenance on AMX equipment should use an appropriate ESD field service kit complete with at least a dissipative work mat with a ground cord and a UL listed adjustable wrist strap with another ground cord.





WARNING: Do Not Open! Risk of Electrical Shock. Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all

servicing to qualified service personnel.
Place the equipment near a main power supply outlet and make sure that
you can easily access the power breaker switch.

WARNING: This product is intended to be operated ONLY from the voltages listed on the back panel or the recommended, or included, power supply of the product. Operation from other voltages other than those indicated may cause irreversible damage to the product and void the products warranty. The use of AC Plug Adapters is cautioned because it can allow the product to be plugged into voltages in which the product was not designed to operate. If the product is equipped with a detachable power cord, use only the type provided with your product or by your local distributor and/or retailer. If you are unsure of the correct operational voltage, please contact your local distributor and/or retailer.

FCC AND CANADA EMC COMPLIANCE INFORMATION:

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

Approved under the verification provision of FCC Part 15 as a Class A Digital Device. Caution Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device. CAN

ICES-3 (B)/NMB-3(B)

EU COMPLIANCE INFORMATION:

Eligible to bear the CE mark; Conforms to European Union Low Voltage Directive 2006/95/EC; European Union EMC Directive 2004/108/EC; European Union Restriction of Hazardous Substances Recast (RoHS2) Directive 2011/65/EU; European Union WEEE (recast) Directive 2012/19/EU; European Union Radio and Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC

WEEE NOTICE:

This appliance is labeled in accordance with European Directive 2012/19/EU concerning waste of electrical and
electronic equipment (WEEE). This label indicates that this product should not be disposed of with household
waste. It should be deposited at an appropriate facility to enable recovery and recycling.

Table of Contents

IMPORTANT SAFETY INSTRUCTIONS	2
Overview	8
PR-0808	8
Features	8
Package Contents	8
Specifications	9
PR-0602	12
Features	12
Package Contents	12
Specifications	13
PR-0404	16
Features	16
Package Contents	16
Specifications	17
PR-0402	20
Features	20
Package Contents	20
Specifications	21
Control Description	24
PR-0808	24
PR-0602	25
PR-0404	26
PR-0402	27
Installation and Wiring	28
Brackets Installation for PR-0808/0602/0404	28
Wiring	28
Front Panel Control	34
PR-0808/PR-0602/PR-0404 LCM Menu	35
RS232 Operation	36
WebGUI Control	37
Identify the IP address of the PR-0808/PR-0602/PR-0404	37
Identify the IP address of the PR-0402	37
Access the Web Interface	37
Web Interface Introduction	38
Security	39
Switcher	41
System	44
Firmware Upgrade	46
Before Starting	46
Firmware Upgrade through WebGUI	46

Firmware Upgrade through USB	46
Troubleshooting	47
Appendix: API Command List Instructions	48
System Commands	48
Network Commands	52
Security Commands	55
Configuration Commands-Input	57
Configuration Commands-Output	62
Switching Commands	68

Overview

PR-0808

The AMX PR-0808 provides the ability to connect up to eight 4K UHD+ HDMI sources to up to eight 4K UHD+ HDMI displays and freely switch between them. This unit comes with full support for 18Gbps resolutions up to, and including 4K@60Hz (4:4:4, 8-bit) as well as support for Deep Color, HDR (High Dynamic Range), HD audio and other features defined by the HDMI 2.0 specification. With a comprehensive EDID management feature that includes the ability to select between built in EDIDs, EDIDs copied from connected sink devices, as well as user provided EDIDs, this matrix can solve many interconnectivity problems.

Features

- HDMI Inputs and Outputs support up to 4K@60Hz 4:4:4 8bit
- Fully compliant with HDMI 2.0
- HDCP 2.2 compliant
- Supports 4K HDR
- Supports audio de-embedding for each HDMI output
- Supports IPv4 & IPv6 networks, support HTTPS, SSH
- Supports PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby Atmos, Dolby True HD, DTS, DTS HD MA

Package Contents

- 1 x PR-0808
- 1 x 12V/7.5A DC Power Adapter
- 1 x AC Power Cable with US Pins
- 1 x AC Power Cable with UK Pins
- 1 x AC Power Cable with EU Pins
- 9 x 3-Pin Terminal Blocks
- 2 x Mounting Ears
- 6 x Mounting Screws

Specifications

Technical	
Input	8 x HDMI IN
Input Resolution Supported	VESA
	640x480 @ 60, 72, 75 Hz
	720 x 400 @ 70, 85 Hz
	800 x 600 @ 56, 60, 72, 75, 85 Hz
	848 x 480 @ 60 Hz
	1024 x 768 @ 60, 70, 75, 85 Hz
	1152 x 864 @ 75 Hz
	1280 x 768 @ 60 Hz, 75 Hz
	1280 x 800 @ 60 Hz (Reduce Blanking)
	1280 x 960 @ 60 Hz
	1280 x 1024 @ 60, 85 Hz
	1360 x 768 @ 60, 75, 85 Hz
	1366 x 768 @ 60 Hz (Reduce Blanking)
	1400 x 1050 @ 60 Hz (Reduce Blanking), 75 Hz
	1440 x 900 @ 60 Hz (Reduce Blanking), 75, 85 Hz
	1600 x 900 @ 60 Hz (Reduce Blanking)
	1600 x 1200 @ 60 Hz
	1680 x 1050 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz
	1920 x 1440 @ 60 Hz
	2048 x 1080 @ 50, 60 Hz
	2560 x 1440 @ 60 Hz (Reduce Blanking)
	2560 x 1600 @ 60 Hz (Reduce Blanking)
	3840 x 2160 @ 60 Hz (Reduce Blanking)
	CEA Information Code (VIC) Formats
	720 x 480i @ 59.94, 60 Hz
	720 x 576i @ 50 Hz
	720 x 480p @ 59.94, 60 Hz
	720 x 576p @ 50 Hz
	1280 x 720p @ 50, 59.94, 60 Hz
	1920 x 1080i @ 50, 59.94, 60 Hz
	1920 x 1080p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
	2560 x 1080p @ 50, 60 Hz
	3840 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz

	4096 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
Input Audio Supported	PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby
	Atmos, Dolby True HD, DTS, DTS HD MA
Output	8 x HDMI Out
Technical	
Output Resolution Supported	Same as the Input
Output Signal Types	Unbalanced stereo analog
Analog Audio Output Level(Max)	+1.6 dB, unbalanced; ≥2 kohm load
Analog Audio Output Frequency	< -0.5 dB to +0.2 dB, 30 Hz to 20 kHz or
Response	< -0.8 dB to +0.2 dB, 20 Hz to 20 kHz
Analog Audio Output THD+N	<0.006%, 1 kHz, -10 dB to +2 dB
Analog Audio Output SNR	>102 dB, 20 Hz to 20 kHz Vin = +2 dB
Maximum Data Rate	18Gbps
Control Method	Front panel, IR, RS232 and Web GUI

General	
Operating Temperature	32F (0C) to 104F (40C)
Storage Temperature	-4°F (-20°C) to 140°F (60°C)
Humidity	5% to 90% (RH (non-condensing)
Power Supply	Voltage, DC: 12V/7.5A
Power Consumption (Max)	73.6W
EDS Protection	Human-body Model:
	±10kV(Air-gap discharge)/±5kV(Contact discharge)
Device Dimension (W x H x D)	10.59 x 18.97 x 1.73
Product Weight	Approx. 7.9 lbs
Certification	FCC Part 15 Class B
	EN 55032
	EN 55035
	CB IEC/EN 60950
	CB IEC/EN 62368-1
	UL 62368-1
	RoHS/REACH
	EMC (Australia)
	EMC (Canada)
	EMC (UKCA)
	Prop65

Transmission Distance

Note: Straight-through Ethernet cable of T568B is recommended.

General	Range	Supported Video
HDMI Output	15m/49ft	1080P@60Hz
	10m/33ft	4K@60Hz 4:2:0
	5m/16ft	4K@60Hz 4:4:4

The AMX PR-0602 provides the ability to connect up to six 4K UHD+ HDMI sources to up to two 4K UHD+ HDMI displays and freely switch between them. This unit comes with full support for 18Gbps resolutions up to, and including 4K@60Hz (4:4:4, 8-bit) as well as support for Deep Color, HDR (High Dynamic Range), HD audio and other features defined by the HDMI 2.0 specification. With a comprehensive EDID management feature that includes the ability to select between built in EDIDs, EDIDs copied from connected sink devices, as well as user provided EDIDs, this matrix can solve many interconnectivity problems.

Features

- HDMI Inputs and Outputs support up to 4K@60Hz 4:4:4 8bit
- Fully compliant with HDMI 2.0
- HDCP 2.2 compliant
- Supports 4K HDR
- Supports audio de-embedding for each HDMI output
- Supports IPv4 & IPv6 networks, support HTTPS, SSH
- Supports PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby Atmos, Dolby True HD, DTS, DTS HD MA

Package Contents

- 1 x PR-0602
- 1 x 12V/3A DC Power Adapter
- 1 x US Pins
- 1 x UK Pins
- 1 x EU Pins
- 1 x AU Pins
- 3 x 3-Pin Terminal Blocks
- 2 x Mounting Ears
- 6 x Mounting Screws

Specifications

Technical	
Input	6 x HDMI IN
Input Resolution Supported	VESA
	640x480 @ 60, 72, 75, 85 Hz
	720 x 400 @ 70, 85 Hz
	800 x 600 @ 56, 60, 72, 75, 85 Hz
	848 x 480 @ 60 Hz
	1024 x 768 @ 60, 70, 75, 85 Hz
	1152 x 864 @ 75 Hz
	1280 x 768 @ 60 Hz, 75 Hz
	1280 x 800 @ 60 Hz (Reduce Blanking)
	1280 x 960 @ 60 Hz
	1280 x 1024 @ 60, 75, 85 Hz
	1360 x 768 @ 60 Hz
	1366 x 768 @ 60 Hz (Reduce Blanking)
	1400 x 1050 @ 60 Hz (Reduce Blanking), 75 Hz
	1440 x 900 @ 60 Hz (Reduce Blanking), 75, 85 Hz
	1600 x 900 @ 60 Hz (Reduce Blanking)
	1600 x 1200 @ 60 Hz
	1680 x 1050 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz
	1920 x 1440 @ 60 Hz
	2048 x 1080 @ 50, 60 Hz
	2560 x 1440 @ 60 Hz (Reduce Blanking)
	2560 x 1600 @ 60 Hz (Reduce Blanking)
	3840 x 2160 @ 60 Hz (Reduce Blanking)
	CEA Information Code (VIC) Formats
	720 x 480i @ 59.94, 60 Hz
	720 x 576i @ 50 Hz
	720 x 480p @ 59.94, 60 Hz
	720 x 576p @ 50 Hz
	1280 x 720p @ 50, 59.94, 60 Hz
	1920 x 1080i @ 50, 59.94, 60 Hz
	1920 x 1080p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
	2560 x 1080p @ 50, 60 Hz
	3840 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz

	4096 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
Input Audio Supported	PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby
	Atmos, Dolby True HD, DTS, DTS HD MA
Output	2 x HDMI Out
Technical	
Output Resolution Supported	Same as the Input
Output Signal Types	Unbalanced stereo analog
Analog Audio Output Level(Max)	+1.6 dB, unbalanced; ≥2 kohm load
Analog Audio Output Frequency	< -0.5 dB to +0.2 dB, 30 Hz to 20 kHz or
Response	< -0.8 dB to +0.2 dB, 20 Hz to 20 kHz
Analog Audio Output THD+N	<0.008%, 1 kHz, -10 dB to +2 dB
Analog Audio Output SNR	>100 dB, 20 Hz to 20 kHz Vin = +2 dB
Maximum Data Rate	18Gbps
Control Method	Front panel, IR, RS232 and Web GUI

General	
Operating Temperature	32F (0C) to 104F (40C)
Storage Temperature	-4°F (-20°C) to 140°F (60°C)
Humidity	5% to 90% (RH (non-condensing)
Power Supply	Voltage, DC: 12V/3A
Power Consumption (Max)	15.1W
EDS Protection	Human-body Model:
	±10kV(Air-gap discharge)/±5kV(Contact discharge)
Device Dimension (W x H x D)	10.59 x 18.97 x 1.73
Product Weight	Approx. 6.3 lbs
Certification	FCC Part 15 Class B
	EN 55032
	EN 55035
	CB IEC/EN 60950
	CB IEC/EN 62368-1
	UL 62368-1
	RoHS/REACH
	EMC (Australia)
	EMC (Canada)
	EMC (UKCA)
	Prop65

Transmission Distance

Note: Straight-through Ethernet cable of T568B is recommended.

General	Range	Supported Video
HDMI Output	15m/49ft	1080P@60Hz
	10m/33ft	4K@60Hz 4:2:0
	5m/16ft	4K@60Hz 4:4:4

The AMX PR-0404 provides the ability to connect up to four 4K UHD+ HDMI sources to up to four 4K UHD+ HDMI displays and freely switch between them. This unit comes with full support for 18Gbps resolutions up to, and including 4K@60Hz (4:4:4, 8-bit) as well as support for Deep Color, HDR (High Dynamic Range), HD audio and other features defined by the HDMI 2.0 specification. With a comprehensive EDID management feature that includes the ability to select between built in EDIDs, EDIDs copied from connected sink devices, as well as user provided EDIDs, this matrix can solve many interconnectivity problems.

Features

- HDMI Inputs and Outputs support up to 4K@60Hz 4:4:4 8bit
- Fully compliant with HDMI 2.0
- HDCP 2.2 compliant
- Supports 4K HDR
- Supports audio de-embedding for each HDMI output
- Supports IPv4 & IPv6 networks, support HTTPS, SSH
- Supports PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby Atmos, Dolby True HD, DTS, DTS HD MA

Package Contents

- 1 x PR-0404
- 1 x 12V/3A DC Power Adapter
- 1 x US Pins
- 1 x UK Pins
- 1 x EU Pins
- 1 x AU Pins
- 5 x 3-Pin Terminal Blocks
- 2 x Mounting Ears
- 6 x Mounting Screws

Specifications

Technical	
Input	4 x HDMI IN
Input Resolution Supported	VESA
	640x480 @ 60, 72, 75, 85 Hz
	720 x 400 @ 70, 85 Hz
	800 x 600 @ 56, 60, 72, 75, 85 Hz
	848 x 480 @ 60 Hz
	1024 x 768 @ 60, 70, 75, 85 Hz
	1152 x 864 @ 75 Hz
	1280 x 768 @ 60 Hz, 75 Hz
	1280 x 800 @ 60 Hz (Reduce Blanking)
	1280 x 960 @ 60, 85 Hz
	1280 x 1024 @ 60, 75, 85 Hz
	1360 x 768 @ 60 Hz
	1366 x 768 @ 60 Hz (Reduce Blanking)
	1400 x 1050 @ 60 Hz (Reduce Blanking), 75 Hz
	1440 x 900 @ 60 Hz (Reduce Blanking), 75, 85 Hz
	1600 x 900 @ 60 Hz (Reduce Blanking)
	1600 x 1200 @ 60 Hz
	1680 x 1050 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz
	1920 x 1440 @ 60 Hz
	2048 x 1080 @ 50, 60 Hz
	2560 x 1440 @ 60 Hz (Reduce Blanking)
	2560 x 1600 @ 60 Hz (Reduce Blanking)
	3840 x 2160 @ 60 Hz (Reduce Blanking)
	CEA Information Code (VIC) Formats
	720 x 480i @ 59.94, 60 Hz
	720 x 576i @ 50 Hz
	720 x 480p @ 59.94, 60 Hz
	720 x 576p @ 50 Hz
	1280 x 720p @ 50, 59.94, 60 Hz
	1920 x 1080i @ 50, 59.94, 60 Hz
	1920 x 1080p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
	2560 x 1080p @ 50, 60 Hz
	3840 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz

	4096 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
Input Audio Supported	PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby
	Atmos, Dolby True HD, DTS, DTS HD MA
Output	4 x HDMI Out
Technical	
Output Resolution Supported	Same as the Input
Output Signal Types	Unbalanced stereo analog
Analog Audio Output Level(Max)	+1.6 dB, unbalanced; ≥2 kohm load
Analog Audio Output Frequency	< -0.5 dB to +0.2 dB, 30 Hz to 20 kHz or
Response	< -0.8 dB to +0.2 dB, 20 Hz to 20 kHz
Analog Audio Output THD+N	<0.008%, 1 kHz, -10 dB to +2 dB
Analog Audio Output SNR	>105 dB, 20 Hz to 20 kHz Vin = +2 dB
Maximum Data Rate	18Gbps
Control Method	Front panel, IR, RS232 and Web GUI

General	
Operating Temperature	32F (0C) to 104F (40C)
Storage Temperature	-4°F (-20°C) to 140°F (60°C)
Humidity	5% to 90% (RH (non-condensing)
Power Supply	Voltage, DC: 12V/3A
Power Consumption (Max)	34.8W
EDS Protection	Human-body Model:
	±10kV(Air-gap discharge)/±5kV(Contact discharge)
Device Dimension (W x H x D)	10.59 x 18.97 x 1.73
Product Weight	Approx. 6.6 lbs
Certification	FCC Part 15 Class B
	EN 55032
	EN 55035
	CB IEC/EN 60950
	CB IEC/EN 62368-1
	UL 62368-1
	RoHS/REACH
	EMC (Australia)
	EMC (Canada)
	EMC (UKCA)
	Prop65

Transmission Distance

Note: Straight-through Ethernet cable of T568B is recommended.

General	Range	Supported Video
HDMI Output	15m/49ft	1080P@60Hz
	10m/33ft	4K@60Hz 4:2:0
	5m/16ft	4K@60Hz 4:4:4

The AMX PR-0402 provides the ability to connect four 4K UHD+ HDMI sources to two 4K UHD+ HDMI displays, and freely switch between them. This unit comes with full support for 18Gbps resolutions, including 4K@60Hz (4:4:4, 8-bit) as well as support for Deep Color 36bits, HDR (High Dynamic Range), HBR audio and other features defined by the HDMI 2.0 specification. With a comprehensive EDID management feature that includes the ability to select between built in EDIDs, EDIDs copied from connected sink devices, as well as user provided EDIDs. This matrix can solve many interconnectivity problems.

Features

- HDMI Inputs and Outputs support up to 4K@60Hz 4:4:4 8bit
- Fully compliant with HDMI 2.0
- HDCP 2.2 compliant
- Supports 4K HDR
- Supports audio de-embedding for each HDMI output
- Supports IPv4 & IPv6 networks, support HTTPS, SSH
- Supports PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby Atmos, Dolby True HD, DTS, DTS HD MA

Package Contents

- 1 x PR-0402
- 1 x 12V/3A DC Power Adapter
- 1 x US Pins
- 1 x UK Pins
- 1 x EU Pins
- 1 x AU Pins
- 3 x 3-Pin Terminal Blocks
- 4 x Rubber Feet

Specifications

Technical	
Input	4 x HDMI IN
Input Resolution Supported	VESA
	640 x 480 @ 60, 72, 75, 85 Hz
	720 x 400 @ 70, 85 Hz
	800 x 600 @ 56, 60, 72, 75, 85 Hz
	848 x 480 @ 60 Hz
	1024 x 768 @ 60, 70, 75, 85 Hz
	1152 x 864 @ 75 Hz
	1280 x 768 @ 60 Hz, 75 Hz
	1280 x 800 @ 60 Hz (Reduce Blanking)
	1280 x 960 @ 60, 85 Hz
	1280 x 1024 @ 60, 75, 85 Hz
	1360 x 768 @ 60 Hz
	1366 x 768 @ 60 Hz (Reduce Blanking)
	1400 x 1050 @ 60 Hz (Reduce Blanking), 75 Hz
	1440 x 900 @ 60 Hz (Reduce Blanking), 75, 85 Hz
	1600 x 900 @ 60 Hz (Reduce Blanking)
	1600 x 1200 @ 60 Hz
	1680 x 1050 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz (Reduce Blanking)
	1920 x 1200 @ 60 Hz
	1920 x 1440 @ 60 Hz
	2048 x 1080 @ 50, 60 Hz
	2560 x 1440 @ 60 Hz (Reduce Blanking)
	2560 x 1600 @ 60 Hz (Reduce Blanking)
	3840 x 2160 @ 60 Hz (Reduce Blanking)
	CEA Information Code (VIC) Formats
	720 x 480i @ 59.94, 60 Hz
	720 x 576i @ 50 Hz
	720 x 480p @ 59.94, 60 Hz
	720 x 576p @ 50 Hz
	1280 x 720p @ 50, 59.94, 60 Hz
	1920 x 1080i @ 50, 59.94, 60 Hz
	1920 x 1080p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
	2560 x 1080p @ 50, 60 Hz
	3840 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz

	4096 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
Input Audio Supported	PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby
	Atmos, Dolby True HD, DTS, DTS HD MA
Output	2 x HDMI Out
Technical	
Output Resolution Supported	Same as the Input
Output Signal Types	Unbalanced stereo analog
Analog Audio Output Level(Max)	+1.6 dB, unbalanced; ≥2 kohm load
Analog Audio Output Frequency	< -0.5 dB to +0.2 dB, 30 Hz to 20 kHz or
Response	< -0.8 dB to +0.2 dB, 20 Hz to 20 kHz
Analog Audio Output THD+N	<0.008%, 1 kHz, -10 dB to +2 dB
Analog Audio Output SNR	>99 dB, 20 Hz to 20 kHz Vin = +2 dB
Maximum Data Rate	18Gbps
Control Method	Front panel, IR, RS232 and Web GUI

General	
Operating Temperature	32F (0C) to 104F (40C)
Storage Temperature	-4°F (-20°C) to 140°F (60°C)
Humidity	5% to 90% (RH (non-condensing)
Power Supply	Voltage, DC: 12V/3A
Power Consumption (Max)	9.8W
EDS Protection	Human-body Model:
	±10kV(Air-gap discharge)/±5kV(Contact discharge)
Device Dimension (W x H x D)	8.07 x 8.4 x 1.73
Product Weight	Approx. 2.9 lbs (1.3 kg)
Certification	FCC Part 15 Class B
	EN 55032
	EN 55035
	CB IEC/EN 60950
	CB IEC/EN 62368-1
	UL 62368-1
	RoHS/REACH
	EMC (Australia)
	EMC (Canada)
	EMC (UKCA)
	Prop65

Transmission Distance

Note: Straight-through Ethernet cable of T568B is recommended.

General	Range	Supported Video
HDMI Output	15m/49ft	1080P@60Hz
	10m/33ft	4K@60Hz 4:2:0
	5m/16ft	4K@60Hz 4:4:4

PR-0808 Front Panel



No.	Name	Description
1	Digital Indicator	Indicates menu items and input/output selections.
2	Menu Button	Press to enter the main menu, or to back out from menu items.
3	Enter button	Press Enter to go into the main menu and menu items.
4	Select buttons	Press "+" to scroll up and "-" to scroll down.
5	Switching Buttons	Selects the input and output channels.
6	Take & Cancel Buttons	Press Take & Cancel to initiate or cancel switching after selecting the desired
		inputs and outputs



No.	Name	Description
1	VIDEO INPUTS	Connect to HDMI sources.
2	VIDEO INPUTS	Connect to HDMI display devices.
3	AUDIO OUTPUTS	Audio de-embedded outputs: 3 Pins Phoenix port: L/R analog audio output.
4	USB	Connects to USB port for firmware update.
5	LAN 10/100	Connects to network, used for Web GUI and Telnet control.
6	RS232	Connects to control system for RS232 control.
7	RESET	When the PR-0404, PR-0602 or PR-0808 is powered on, use a pointed stylus to
		hold down the RESET button for 3 seconds or more, then release the unit will
		reboot and restore to its factory defaults.
8	AC 12V/7.5A 90W	AC 12V/7.5A 90W power supply input.

PR-0602 Front Panel Description



No.	Name	Description
1	Digital Indicator	Indicates menu items and input/output selections.
2	Menu Button	Press to enter the main menu, or to back out from menu items.
3	Enter button	Press Enter to go into the main menu and menu items.
4	Select buttons	Press "+" to scroll up and "-" to scroll down.
5	Switching Buttons	Selects the input and output channels.
6	Take & Cancel Buttons	Press Take & Cancel to initiate or cancel switching after selecting the desired
		inputs and outputs



110.	Name	Description	
1	VIDEO INPUTS	Connect to HDMI sources.	
2	VIDEO OUTPUTS	Connect to HDMI display devices.	
3	AUDIO OUTPUTS	Audio de-embedded outputs: 3 Pins Phoenix port: L/R analog audio output.	
4	USB	Connects to USB port for firmware update.	
5	LAN 10/100	Connects to network, used for Web GUI and Telnet control.	
6	RS232	Connects to control system for RS232 control.	
7	RESET	When the PR-0404, PR-0602 or PR-0808 is powered on, use a pointed stylus to	
		hold down the RESET button for 3 seconds or more, then release the unit will	
		reboot and restore to its factory defaults.	
8	AC 12V/3A 36W	AC 12V/3A 36W power supply input.	

PR-0404 Front Panel Description



No.	Name	Description	
1	Digital Indicator	Indicates menu items and input/output selections.	
2	Menu Button	Press to enter the main menu, or to back out from menu items.	
3	Enter button	Press Enter to go into the main menu and menu items.	
4	Select buttons	Press "+" to scroll up and "-" to scroll down.	
5	Switching Buttons	Selects the input and output channels.	
6	Take & Cancel Buttons	Press Take & Cancel to initiate or cancel switching after selecting the desired	
		inputs and outputs	



No.	Name	Description
1	VIDEO INPUTS	Connect to HDMI sources.
2	VIDEO OUTPUTS	Connect to HDMI display devices.
3	AUDIO OUTPUTS	Audio de-embedded outputs: 3 Pins Phoenix port: L/R analog audio output.
4	USB	Connects to USB port for firmware update.
5	LAN 10/100	Connects to network, used for Web GUI and Telnet control.
6	RS232	Connects to control system for RS232 control.
7	RESET	When the PR-0404, PR-0602 or PR-0808 is powered on, use a pointed stylus to
		hold down the RESET button for 3 seconds or more, then release the unit will
		reboot and restore to its factory defaults.
8	AC 12V/3A 36W	AC 12V/3A 36W power supply input.

PR-0402 Front Panel Description



No.	Name	Description
1	Power Indicator	Indicates the status of the unit.
2	Auto Button	Press for auto switching.
3	Switching Buttons	Selects the input and output channels.



No.	Name	Description	
1	VIDEO INPUTS	Connect to HDMI sources.	
2	VIDEO OUTPUTS	Connect to HDMI display devices.	
3	AUDIO OUTPUTS	Audio de-embedded outputs: 3 Pins Phoenix port: L/R analog audio output.	
4	USB	Connects to USB port for firmware update.	
5	LAN 10/100	Connects to network, used for Web GUI and Telnet control.	
6	RS232	Connects to control system for RS232 control.	
7	RESET	Use a pointed stylus to hold down the RESET button for 15 seconds or more, then	
		the unit will start the reset default action and reboot.	
8	AC 12V/3A 36W	AC 12V/3A 36W power supply input.	

Installation and Wiring

Brackets Installation for PR-0808/0602/0404

Warning: Before installation, ensure the device is disconnected from the power source.

Steps to install the device in a suitable location:

1. First remove the screws mounted on the side.



- 2. Attach the installation bracket to the enclosure using the longer screws that were provided in the package separately.
- 3. The bracket is attached to the enclosure as shown.
- 4. Repeat steps 1-3 for the other side of the unit.

Wiring

PR-0808/PR-0602/PR-0404

Warning:

Before wiring, disconnect the power from all devices. Connecting or disconnecting cables while powered, may cause damage to circuitry or possible injury. Connect and disconnect the cables with care.

- 1. Using high quality HDMI cable, firmly connect 4K or HD source devices (such as: Blu-Ray, computer, games console, satellite/ cable, music streaming device, CCTV etc.) to the HDMI input ports 1-4 of the processor.
- 2. Securely connect HDMI OUT 1-4 of the processor to HDMI IN of 4K or HD display devices, make sure all sources and displays are compatible and correctly configured.
- 3. Securely connect AUDIO OUT 1-2 of the processor to audio devices such as amplifier.
- 4. Insert the processor DC power cord. The front panel LEDs will lit on to indicate that the processor is ready for operation.
- 5. Warning: Always power off the processor before unplugging any HDMI cables following Last On, First Off protocol.
- 6. Switch between sources and displays using the processor front panel buttons, through serial RS232 or LAN.







Warning:

Before wiring, disconnect the power from all devices. Connecting or disconnecting cables while powered, may cause damage to circuitry or possible injury. Connect and disconnect the cables with care.

- 1. Using high quality HDMI cable, firmly connect 4K or HD source devices (such as: Blu-Ray, computer, games console, satellite/ cable, music streaming device, CCTV etc.) to the HDMI input ports 1-4 of the processor.
- 2. Securely connect HDMI OUT 1-4 of the processor to HDMI IN of 4K or HD display devices, make sure all sources and displays are compatible and correctly configured.
- 3. Securely connect AUDIO OUT 1-2 of the processor to audio devices such as amplifier.
- 4. Insert the processor DC power cord. The front panel LEDs will lit on to indicate that the processor is ready for operation.
- 5. Warning: Always power off the processor before unplugging any HDMI cables following Last On, First Off protocol.
- 6. Switch between sources and displays using the processor front panel buttons, through serial RS232 or LAN.



Front Panel Control

The PR-Series Matrixes are designed with ease of connection and control in mind. Basic switching of input sources to output displays can be achieved by pressing the front panel buttons with the front panel LCM (PR-0808/0602/0404) and LED (PR-0402) indicating the current input and output status of the matrix.

After powered up, the front panel LCM will show the matrix model name indicating the matrix is ready for operation.

PR-0808/PR-0602/PR-0404

Step1. Press IN1~IN8 to start video routing. The selected input port will flash once on the LCM, which

indicates that the selection is taken.



Step2. Press OUT1~OUT8 to set the corresponding output ports. The selected output ports will flash once on the LCM, which indicates that the selection is taken. Press the selected output again to cancel each selection.



Step3. Press "TAKE" to finish routing, and the selected input and output ports will flash once on the LCM.



PR-0402

Step1. Press OUT1~OUT2 to start video routing.

Step2. Press IN1~IN4 to set the corresponding input ports. The corresponding LED lights up when selection is taken.

PR-0808/PR-0602/PR-0404 LCM Menu

LAYER 1	LAYER 2	LAYER 3	LAYER 4	LAYER 5
RECALL PRESET	PRESET 1 ~ 8			
VIDEO SETUP	EDID SETUP	IN 1~8	AUTO	
			4K60	3840x2160p,60Hz
				4096x2160p,60Hz
				1920x1080p,60Hz
			MIRROR OUT 1 ~ 8	
	HDCP SETUP-INPUT	IN 1~8	ENABLE/DISABLE	
	HDCP SETUP-OUTPUT	OUT 1~8	AUTO MODE	
			HDCP1.4 MODE	
			HDCP2.2 MODE	
	BLANK COLOR	OUT 1 ~ 8	BLACK/BLUE	
	CEC CONTORL	OUT 1~8	ON/OFF	
	OSD	ENABLE/DISABLE		
AUDIO SETUP	OUT 1~8	ALL	ON/OFF	
		HDMI		
		ANALOG		
NETWORK STATUS	LINK:			
	MAC:			
	GATE:			
	MASK:			
	IP:			
	MODE:			
SYSTEM SETUP	FIRMWARE	[Info Display]		
	FACTORY RESET	Yes/No		
	FIRMWARE UPDATE	Yes/No		

RS232 Operation

RS232 Control

RS232 Phoenix Connector Pinout

The following figure shows the RS232 Phoenix Connector pinout. Connect with the Phoenix Connectors provided.



RS232 port is used to control the processor through RS232 serial communication.

Advanced users may also choose to control the unit through RS232 serial communication. API commands for RS232 control are available in **Appendix: API Command List Instructions**.

Parameters	Value
Baud Rate	9600
Data Bits	8 bits
Parity	None
Stop Bits	1 bit
Flow Control	None

WebGUI Control

Identify the IP address of the PR-0808/PR-0602/PR-0404

Press the MENU button to enter the main menu, and then use the UP and DOWN buttons to search for the "NETWORK STATUS" page. Press the ENTER button to enter the selected page. The current IP address of the device will be presented on the device's front display.

Identify the IP address of the PR-0402

Press the RESET ID button twice to show the OSD INFO, and then the current IP address will be presented on the displays connected to the HDMI OUT ports.

Access the Web Interface

To access the WebGUI:

- 1. Connect your PC and the LAN port of the PR-Series units to the same local area network.
- 2. Type the IP address of the unit into the address bar of the browser. The following page will pop up. Enter the default password "admin" and click "Login". After logging in, the main screen appears.

PR-0404 HDMI Matrix Switcher

Login	
Password	
	+D Login

Note: Select Launch Web UI Control Page via Default Browser or type the IP address into a web browser. Chrome, Safari, Firefox, Opera and IE10+ browsers are supported. Make sure the web browser is the latest version.

Web Interface Introduction

Network

In the Network Column, users can set up the IPv4 and IPv6 environments with the following IP mode settings:

- **DHCP**: When enabled, the IP address of the PR-Series units will be assigned automatically by the connected DHCP server.
- Static: When the PR-Series units fail to obtain or detect an IP address from the network to which it is connected, select "Static" to set up the IP address manually.
- Accept: Click to initiate the network setting.

4 Address	DNS Address	IPv6 Address
ostname :	Domain :	
404-2269586	amx.com	DHCP Static IP Address
DHCP Static IP Address	DNS IP 1 :	IPv6 Address :
ddress :	8.8.8.8	2001:04b9:0000:0100:0000:0000:019f
168.6.109	DNS IP 2 :	2001,000,000,010,000,000,000,000,0101
et Mask :	8.8.4.4	Subnet Prefix Length :
255.255.0	DNS IP 3 :	80
way :	9.9.9.9	Default Gateway :
68.6.254		fe80:0000:0000:020c:29ff:fe85:66e0

Security

In the Security Column, modification can be made for the Login Password.

Web User Management		
Username	Action	
administrator	Change Password	

- Web User Management: The Login Password default is admin.
 - 1. Click the "Change Password" button and the following window pops up for new password verification.
 - 2. Click the "Save" button to save the changes.

Note: Passwords must be 4 to 16 characters in length (alphanumeric only).

	Change Password	
Veb User Managerr	Username :	
	administrator	ion
	New Password : *	assword
	Confirm Password : *	
SH Account		
ccess :	★ Cancel ◆ Accept	
ON OFF		

• **SSH/Telnet Account**: SSH/Telnet Account is used to configure the user name and password of the account. For SSH Account, the default user name is **admin**, the default password is **password**. For Telnet Account, the default user name and password are null.

SSH Account	Telnet Account
Access :	Access :
ON OFF	ON OFF
Username :	Username :
Password :	Password :
✓ Accept	✓ Accept

Note: Reboot the device for the SSH changes to take effect.

- Certification Management: In the Certification Management column,
 - Private Key: Click on the "Browse" button and locate the Private Key file on your local PC then click "Open" to install the key in the unit.

- Certificate: Click on the "Browse" button and locate the Certificate file on your local PC then click "Open" to install the certificate in the unit.
- Password: Set the password used to encrypt the content stream. After entering the password press the "Accept" button to store the settings

Certification Management
Private Key(.key .pem) :
Choose Private Key file(.key ., Browse
Certificate(.pem) :
Choose Certificate file(.pem). Browse
Password :
✓ Accept

Switching

The Switch manages the connection configurations of displays and sources.

Inputs \ Outputs	Output 1	Output 2	All
Input 1	0	۲	0
Input 2	0	0	0
Input 3	۲	0	0
Input 4	0	0	0
None	0	0	0

The input/output switch allows selection of output port (display) and input port (source) for specific combinations of displays and sources within the matrix. Click the white button, it will become blue, which represents that the input and output are routed.

All: Route all outputs to one input.

None: Route output to none (turn off output). Auto Switching is for PR-0402 only.

On-Screen Display

All functions of the unit can be controlled by using the OSD (On-Screen Display) which is activated by pressing the MENU button on the front of the unit. Enable and disenable OSD information and further define its color and position.

■ OSD Color: Set OSD color as black or blue.

On-Screen Display	
Enable OSD In	formation
OSD Color	
Black	~



Save: Save the selection states in the Switch submenu.

Load: Load the preset which has been saved.

Presets	
Preset 1 Save Load Save Load	Preset 3 Preset 4 Save Load
Preset 5 Save Load Save Load	Preset 7 Save Load Save Load

Configuration

Users can set the Input and Output names by clicking on the headings in the Switching tab, entering the appropriate name and then clicking "Accept" to save the changes.

ch				Windows 1
Auto Switching :	ON OFF			
Inputs \ Outputs	Output 1	Output 2	All	HDCP Settings
Windows 1	0	0	0	HDCP Compliance
Input 2	۲	0	0	
Input 3	Ō	0	0	General
Input 4	0	0	0	General
None		۲		Resolution
				No Signal
Input/Output Sta	tus			EDID Mode
	tus			

HDCP Settings

HDCP support of HDMI Input 1-4 ports can be set.



Set Scaling as "Auto" or "Manual", and the resolutions of output sources from the drop-down menu.

General	
Resolution	
No Signal	
EDID Mode	
Auto EDID	~
Preferred EDID 1920x1080p,60 Save EDID	• Load EDID

System

In the System Column, users can set up following settings:

Firmware Version	
Package Version : 1.20	
ARM Firmware Version : 1.20	
MCU Firmware Version : 1.20	

- **RS-232 Settings**: In the RS-232 Settings column, users can choose to turn "**ON**" or "**OFF**" the RS-232 stream and set the following configuration:
- **Baud Rate**: Set the baud rate. The available range is from 2400 to 115200 baud.
- Parity Bits: Set the connection parity bit. The available options are: none, odd, and even.
- **Data Bits**: Set the number of data bits. The available range is from 7 to 8.
- **Stop Bits**: Set the number of stop bits. The available range is from 1 to 2.

RS-232 Settings	
ON OFF	
Baud Rate :	
9600	~
Parity Bits :	
NONE	~
Data Bits :	
8	~
Stop Bits :	
1	~

Panel Lock: In the Panel Lock column, the front panel lock can be set as "OFF", "Menu" or "ALL".

Panel Lock			
	OFF	~	

• System: In the System column, the unit can be set to "Reboot" and "Factory Default".

System	
🖒 Reboot	C Factory Default

- Save Config: Save current settings as a setting file to be saved to a PC.
- Load Config: Click to load a setting file from PC to Matrix.

Device Configuration	
● Save Config	• Load Config

• **Device Log**: In the Device Log column, log files can be saved to a PC.

Device Log	

• **Standby**: Set ON/OFF of the Standby Mode.



• Firmware Update: In the Firmware Update column, the firmware can be upgraded.

Browse
Update
t automatically. Please wait about 3 minutes, then refresh
/hen updating.
),

Firmware Upgrade

The PR-Series uses KIT files for firmware upgrade.

Before Starting

- Download the latest firmware (KIT) file to your PC. (Place KIT files on a local drive for the fastest throughput.)
 Verify the following:
 - Verify that an Ethernet/RJ-45 cable is connected from the PR-Series to the same network as the control system.
 - Verify that the PR-Series unit is powered ON.
- 3. Launch WebGUI page before you upgrade firmware to know the status of upgrading. More information, please refer to **UPGRADE STATUS** part in **WebGUI Control** section.

Firmware Upgrade through WebGUI

The system will be non-operational during the upgrade procedure below.

- 1. In the **Switcher Configuration** menu, enter the "System" page and then click "Browse" in the **Firmware Update** Column to open the file selection window.
- 2. Select the appropriate KIT file from the target directory.
- 3. Click "Update" to start firmware upgrading. The "Power" LED turns RED and keeps flashing.
- 4. Once the "Power" LED turns GREEN and stop flashing, the unit finishes upgrading and auto reboots to active.

Firmware Upgrade through USB

The system will be non-operational during the upgrade procedure below.

- 1. Copy firmware file to folder in USB original disk
- 2. Insert USB Disk to USB Type A program port
- 3. Press ID button on the rear panel 5 times in a row, and the unit starts upgrading when the "Power" LED turns RED and keeps flashing.
- 4. Once the "Power" LED turns GREEN and stop flashing, the unit finishes upgrading and auto reboots to active.

Troubleshooting

- 1. Power: Ensure all devices are powered on (sources, transmitter, receiver and display).
- 2. Indicator: Please make sure all LED indicators of the receiver is normal according to the user manual.
- 3. Devices: Ensure picture can be shown normally when directly connecting a source to a display device.
- 4. Cable: Plug in and out HDMI cable or try another HDMI cable.
- 5. Ensure the cable length being used is within available transmission range according to the Specification Section.
- 6. Compatibility: Test other source and display devices to determine correct compatibility.

Appendix: API Command List Instructions

System Commands

No.	Command	Description	Variables	Example
1.	? Or help	Display the		Command sent:
		commands listed in		>?
		the table		Response:
				Help
				System Commands
				? Or help This list
				ping ping to specified IP address
				fwversion Request the firmware version of the
				device
2.	<pre>?<command/></pre>	Show details about		Command sent:
		the specified		>?set vidin hdcp
		command function		Response:
				Description: Set the HDCP mode for the specified
				input
				Example:
				Command send: set vidin hdcp:1,off
				response: set HDCP compliance off for input port 1
3.	ping	Ping to specified IP		Command sent:
		address		>ping 192.168.1.2
				Response:
				ping 192.168.1.2 is alive.
4.	fwversion	Request the		Command sent:
		firmware version of		>fwversion
		the device		Response:
				Package: 1.38
		NOTE: Command		ARM: 1.15
		response shall list		MCU: 1.11
		all upgradable		
		<u>components</u>		
		firmware version		
5.	fwupdatestatus	Report device's		Command sent:
		firmware update		>fwupdatestatus
		status with node		Response:

		number	device firmware update status -100%
			Firmware update status: copying file from web
			finish
			device firmware update status -99%
			Firmware update status: Updating MCU
			device firmware update status -97%
			device firmware update status -94%
			device firmware update status -90%
			device firmware update status -70%
			Firmware update status: Updating APP
			device firmware update status -60%
			device firmware update status -19%
			device firmware update status -0%
			Firmware update status: Update complete
			Firmware update status: Please wait system reboot,
			do not power off device
6.	standby <on off=""></on>	Set device to	Command sent:
		standby on or off	>standby on
			Response:
			Notice: device cannot receive signal when standby
			on, it need send standby off command to enter
			normal working mode
			Would you like to set device standby on? Y/N ->y
			The device is standby on
			 >set device standby on
7.	reboot	Reboot the device	Command sent:
			>reboot
			Response:
			Rebooting
8.	reset factory	Force the unit to a	Command sent:
		factory state (except	Preset factory
		for IP Settings)	Response:
			Resetting device to factory default parameters.
			De NOT newer off
0	fa atom fusimo a a	Destava davias ta	Command sont:
9.	ractoryrwimage	Restore device to	>factoryfwimage
			Response:
		ппаде	Are you sure you wish to reset factory parameters.
			and load the factory firmware image of Version
			<pre><factory fw="" image="" version=""> (Y/N) ->y</factory></pre>

			Notice:it will take some time, please keep device
			power on
			Start restore to factory firmware image
10.	get sn	Get device serial	Command sent:
		number	>get sn
			Response:
			Serial Number:123456789
11.	set serial <on off=""></on>	Set serial port on or	Command sent:
		off	>set serial on
			Response:
			Serial port is on
12.	get baud	Get serial port	Command sent:
		current	>get baud
		communicate	Response:
		parameters	Current serial setting
			baud rate:115200
			data bit:8
			parity:even
			stop bit:1
13.	set baud	Set serial port	Command sent:
		communicate	>set baud
		parameters	Response:
			Serial port setting
			Enter baud
			rate(115200,57600,38400,19200,9600,4800,2400) -
			>115200
			Enter data bit(8 or 7) ->8
			Enter parity (E for Even, O for Odd, N for none) ->O
			Enter stop bit (1 or 2) ->1
			Would you like to save the new settings? Y/N ->Y
			New settings were saved
			>Current serial port baud rate: 115200
			>Current serial port data bit: 8
			>Current serial port parity: odd
			>Current serial port stop bit: 1
14.	get key lock	Get front panel key	Command sent:
		lock state	>get key lock
			Response:
			 Current key lock level state:all
15.	set key lock	Set front panel key	Command sent:
		lock level, all for lock	>set key lock
			Response:

		all front panel key	Front panel key lock level Setting
		button, menu for	Enter key lock level (All for all key button, Menu for
		only lock menu key	only menu button, Off for no key button) ->menu
		button	Key lock is set to menu
			>Current key lock level state:menu
16.	exit	Close telnet/ssh	Command sent:
		window session	>exit
		NOTE: The	
		<u>command sent by</u>	
		Serial port is not	
		<u>supported</u>	

Network Commands

No.	Command	Description	Variables	Example
1.	get friendly	Get device's		Command sent:
		hostname		>get friendly
				Response:
				Current device friendly name:PR-0602-3456789
2.	set friendly	Set device's		Command sent:
		hostname		>set friendly
				Response:
				Please input friendly name:
				Old friendlyname: PR-0602-3456789
				New friendlyname: PR-0602
				Would you like to save this setting(Y/N)y
				Setting is ok , you should reboot that make it
				effective
				>Current device friendly name:PR-0602
3.	get ip	Show the IP		Command sent:
		configuration of this		>get ip
		device		Response:
				IP Settings
				HostName: PR-0602
				Type: dhcp
				IP Address: 192.168.1.2
				Subnet Mask: 255.255.0.0
				Gateway IP: 192.168.1.1
				MAC Address: f8:22:85:78:87:86
4.	set ip	Setup the IP		Command sent:
		configuration of this		>set ip
		device		Response:
				Enter Host Name: PR-0602
				Enter IP type. Type D for DHCP, or S for Static IP and
				then Enter:S
				Enter IP Address: 192.168.1.2->192.168.1.2
				Enter Subnet Mask: 255.255.0.0->255.255.255.0
				Enter Gateway IP: 192.168.1.1->192.168.1.1
				You have entered:
				Host Name PR-0602
				Type Static IP
				IP Address 192.168.1.2
				Subnet Mask 255.255.255.0
				Gateway IP 192.168.1.1

			Is this correct? Type Y or N and Enter ->y
			Settings written. Device must be rebooted to enable
			new settings.
			>Current device friendly name:PR-0602
			>Current IP mode: static
			>Current IP Address: 192.168.1.2
			>Current Subnet Mask: 255.255.255.0
			>Current Gateway IP: 192.168.1.1
5.	get dns	Get device's DNS	Command sent:
		address	>get dns
			Response:
			DNS Servers
			Domain suffix: amx.com
			Entry 1: 8.8.8.8
			Entry 2: 8.8.4.4
			Entry 3: 9.9.9.9
6.	set dns	Set device's DNS	Command sent:
		address	>set dns
			Response:
			Enter Domain Suffix: amx.com
			Enter DNS Entry 1 : 192.168.20.5
			Enter DNS Entry 2 : 12.18.110.8
			Enter DNS Entry 3 : 12.18.110.7
			You have entered:
			Domain Name: amx.com
			DNS Entry 1: 192.168.20.5
			DNS Entry 2: 12.18.110.8
			DNS Entry 3: 12.18.110.7
			Is this correct? Type Y or N and Enter ->y
			Settings written. Device must be rebooted to enable
			new settings.
			>Current Domain Name: amx.com
			>Current DNS Entry 1: 192.168.20.5
			>Current DNS Entry 2: 12.18.110.8
			>Current DNS Entry 3: 12.18.110.7
7.	get ethernet mode	Get ethernet mode	Command sent:
			>get ethernet mode
			Response:
			Current ethernet mode : 10 half
8.	set ethernet mode	Set ethernet mode	Command sent:

		to auto, 100full or	>set ethernet mode
		10 half	Response:
			Current ethernet mode : 10 half
			Enter new ethernet mode(Auto, 100 full or 10 half) -
			>Auto
			Would you like to set the ethernet mode (y/n):y
			New ethernet mode set, reboot the device for the
			change to take effect.
			>Current ethernet mode : auto
9.	renew dhcp	Renew the DHCP	Command sent:
		lease (may cause	>renew dhcp
		telnet	Response:
		disconnection)	You may need to re-establish the telnet session since
			the device will re-acquire an IP address lease.
			>Current IP Address: 0.0.0.0
			>Current Subnet Mask: 0.0.0.0
			>Current Gateway IP: 0.0.0.0
			>Current IP Address: 192.168.5.149
			>Current Subnet Mask: 255.255.255.0
			>Current Gateway IP: 192.168.5.254

Security Commands

No.	Command	Description	Variables	Example
1.	set telnet port	Set the device's IP		Command sent:
		port listened to for		>set telnet port
		Telnet connections		Response:
				Current telnet port number = 23
		NOTE: This		Enter new telnet port number(0 = disable telnet) ->23
		command requires		Setting telnet port number to 0
		a reboot to enable		New telnet port number set, reboot the device for the
		new settings		change to take effect.
				>Current telnet port: 23
		IMPORTANT: If you		
		set the Telnet port		
		<u>to "0" to disable it,</u>		
		you will need to		
		<u>reset it in WebGUI</u>		
2.	set telnet username	Set the Username		Command sent:
		for a secure Telnet		>set telnet username
		session		Response:
		Default = blank (no		Enter Telnet new username ->123
		username required)		Would you like to set this username (y/n) ->y
				(please set telnet password)
				Changed && Saved
3.	set telnet password	Set the Username		Command sent:
		for a secure Telnet		>set telnet password
		session		Response:
		Default = blank (no		Enter Telnet new password ->123
		username required)		Would you like to set this password (y/n) ->y
				Changed && Saved
4.	set ssh port	Set the device's IP		Command sent:
		port listened to for		>set ssh port
		SSH connections		Response:
				Current SSH port number = 22
		NOTE: This		Enter new SSH port number(0 = disable ssh) ->22
		command requires		Setting SSH port number to 22
		a reboot to enable		New SSH port number set, reboot the device for the
		new settings		change to take effect.
				>Current SSH port: 22
		IMPORTANT: If you		
		set the SSH port to		
		<u>"0" to disable it,</u>		

		<u>you will need to</u> <u>reset it in WebGUI</u>		
		<u>NOTE: This</u>		
		<u>command is</u>		
		supported by SSH		
		only, not supported		
		<u>by telnet</u>		
5.	set ssh username	Set the Username	Command sent:	
		for a secure SSH	>set ssh username	
		session	Response:	
			Enter SSH new username ->123	
		NOTE: This	Would you like to set this username	(y/n) ->y
		command is	(please set SSH password)	
		supported by SSH	Changed && Saved	
		only, not supported		
		<u>by telnet</u>		
6.	set ssh password	Set the Username	Command sent:	
		for a secure SSH	>set ssh password	
		session	Response:	
			Enter SSH new password ->123	
		NOTE: This	Would you like to set this password	(y/n) ->y
		<u>command is</u>	Changed && Saved	
		supported by SSH		
		only, not supported		
		<u>by telnet</u>		

Configuration Commands-Input

No.	Command	Description	Variables	Example
1.	get vidin	Get the name of the	<input channel=""/> =	Command sent:
	portname:< <i>input</i>	specified input	1~8	>get vidin portname:1
	channel>			Response:
				get input port 1 named as Input 1
2.	set vidin	Set the name of the	<input channel=""/> =	Command sent:
	portname:< <i>input</i>	specified input	1~8	>set vidin portname:1,blueray
	channel>, <name></name>		<name> = name</name>	Response:
			string	set input port 1 named as blueray
3.	get vidin	Get the HDCP mode	<input channel=""/> =	Command sent:
	hdcp: <i><input< i=""></input<></i>	for the specified	1~8	>get vidin hdcp:1
	channel>	input		Response:
				get HDCP compliance on for input port 1
4.	set vidin	Set the HDCP mode	<input channel=""/> =	Command sent:
	hdcp: <i><input< i=""></input<></i>	for the specified	1~8	>set vidin hdcp:1,Off
	channel>, <hdcp_co< td=""><td>input</td><td><hdcp_compliance></hdcp_compliance></td><td>Response:</td></hdcp_co<>	input	<hdcp_compliance></hdcp_compliance>	Response:
	mpliance>		= on/off	set HDCP compliance on for input port 1
5.	get vidin res: <input< td=""><td>Get input video</td><td><input channel=""/> =</td><td>Command sent:</td></input<>	Get input video	<input channel=""/> =	Command sent:
	channel>	resolution for the	1~8	>get vidin res:1
		specified input	<resolution> =</resolution>	Possible responses:
			<h>x<v><i p="">,<rat< td=""><td> get 1920x1080p,60 video input 1 </td></rat<></i></v></h>	 get 1920x1080p,60 video input 1
			e> <specific info=""></specific>	 get no video input 1
6.	get vidin	Get edid mode for	<input channel=""/> =	Command sent:
	edidmode:< <i>input</i>	the specified input	1~8	>get vidin edidmode:1
	channel>			Response:
				get input 1 edid mode set to all hd resolutions
7.	set vidin	Set edid mode for	<input channel=""/> =	Command sent:
	edidmode:< <i>input</i>	the specified input	1~8	>set vidin edidmode:1,4k
	channel>, <edid_m< td=""><td></td><td><edid_mode> =</edid_mode></td><td>Response:</td></edid_m<>		<edid_mode> =</edid_mode>	Response:
	ode>		{	set input 1 to 4k edid mode
			Auto	>set preferred edid to 3840x2160p,30 for input 1
			All HD	
			RESOLUTIONS	
			HD WIDE SCREEN	
			HD FULL SCREEN	
			4К	
			4K60	
			Custom	
			}	
8.	get vidin	Get preferred	<input channel=""/> =	Command sent:

	prefedid: <input< th=""><th>resolution in the</th><th>1~8</th><th>>get vidin prefedid:1</th></input<>	resolution in the	1~8	>get vidin prefedid:1
	channel>	current edid used	<resolution> =</resolution>	Response:
		for the specified	<h>x<v><i p="">,<rat< td=""><td>get preferred edid set to 3840x2160p,30 for input 1</td></rat<></i></v></h>	get preferred edid set to 3840x2160p,30 for input 1
		input, no matter it is	e> <specific info=""></specific>	
		under which EDID		
		mode		
9.	set vidin	Set preferred edid	<input channel=""/> =	Command sent:
	prefedid:< <i>input</i>	for the specified	1~8	>set vidin prefedid:1,1920x1200p,60
	channel>, <edid></edid>	input	<edid>=</edid>	Response:
			<h>x<v><i p="">,<rat< td=""><td>set preferred edid to 1920x1080p,60 for input 1</td></rat<></i></v></h>	set preferred edid to 1920x1080p,60 for input 1
			e> <specific info=""></specific>	
			{	
			(refer to AMX EDID	
			Library)	
			640x400,85	
			640x480,60	
			640x480,72	
			640x480,75	
			640x480,85	
			720x400,85	
			720x480p,60	
			720x480p,120	
			720x480p,240	
			720x576p,50	
			720x576p,100	
			720x576p,200	
			800x600,56	
			800x600,60	
			800x600,72	
			800x600,75	
			800x600,85	
			848x480,60	
			848x480,75	
			848x480,85	
			1024x640,60	
			1024x768,60	
			1024x768,70	
			1024x768,75	
			1024x768,85	
			1152x864,75	

	1280x720,50	
	1280x720,60	
	1280x720p,60	
	1280x720p,100	
	1280x720p,120	
	1280x768,59	
	1280x768,60	
	1280x768,74	
	1280x768,75	
	1280x768,85	
	1280x800,60	
	1280x960,60	
	1280x960,85	
	1280x1024,60	
	1280x1024,75	
	1280x1024,85	
	1360x764,60	
	1360x768,60	
	1440x900,60	
	1440x900,75	
	1440x900,85	
	1400x1050,60	
	1400x1050,75	
	1600x1200,60	
	1680x1050,60	
	1920x1080i,50	
	1920x1080i,60	
	1920x1080p,24	
	1920x1080p,25	
	1920x1080p,30	
	1920x1080p,50	
	1920x1080,60	
	1920x1080p,60	
	1920x1200,59	
	1920x1200,60	
	3840x2160p,24	
	3840x2160p,25	
	3840x2160p,30	
	4096x2160p,24	
	4096x2160p,25	
	4096x2160p,30	

			3840x2160p,50	
			3840x2160,50	
			3840x2160p,60	
			3840x2160p,60CVR	
			4096x2160p,50	
			4096x2160p,60	
			}	
10.	get vidin	Get the current edid	<input channel=""/> =	Command sent:
	ediddata:< <i>input</i>	data used for the	1~8	>get vidin ediddata:1
	channel>	specified input port		Response:
				>get vidin ediddata:1
				get ediddata for input 1 is: 00 FF FF FF FF FF FF 00 05
				B8 00 18 02 00 00 00 20 1E 01 03 80 00 00 78 0E EE 95
				A3 54 4C 99 26 0F 50 54 FF FF 80 D1 00 B3 00 A9 40 81
				00 81 C0 81 80 8B C0 95 00 02 3A 80 18 71 38 2D 40
				58 2C 45 00 40 84 63 00 00 1E 02 3A 80 18 71 38 2D
				40 58 2C 45 00 40 84 63 00 00 1E 00 00 00 FD 00 17 78
				0F 87 3C 00 0A 20 20 20 20 20 20 00 00 00 FC 00 41
				4D 58 5F 48 44 4D 49 31 30 76 32 0A 01 92 02 03 3A
				70 6E 03 0C 00 11 00 80 3C 20 00 80 01 02 03 04 67
				D8 5D C4 01 78 80 00 57 61 60 5F 5E 5D 64 62 63 10
				20 22 1F 21 05 14 04 03 13 07 12 16 27 01 E2 0F 03 23
				09 07 07 D1 3D 80 80 72 B0 26 40 78 C8 36 00 40 E8
				63 00 00 1C 28 3C 80 A0 70 B0 23 40 30 20 36 00 40
				E8 63 00 00 1A 00 00 00 00 00 00 00 00 00 00 00 00 00
				00 00 00 00 00 00 00 00 00 00 00 00 00
				00 00 7A
11.	set vidin	Set edid data for the	<input channel=""/> =	Command sent:
	ediddata:< <i>input</i>	specified input	1~8	>set vidin ediddata:1,256byte EDID Data
	channel>, <edid_da< th=""><th>channel as custom</th><th><edid_data> =</edid_data></th><th>Response:</th></edid_da<>	channel as custom	<edid_data> =</edid_data>	Response:
	ta>	edid	256byte EDID Data	set input 1 to custom edid mode and custom edid data
				to be: 0E 0D DA 10 00 00 01 00 00 00 7C 00 00 00 00
		NOTE: EDID mode		00 00 00 77 00 00 00 30 11 B6 7E DC 97 EE 76 20 7C
		will be set to		EE 76 00 90 EE 76 00 00 00 00 00 02 00 00 50 71 D4 01
		<u>Custom</u>		E8 74 D4 01 70 00 00 00 50 71 D4 01 E8 74 D4 01 FF FF
		automatically when		FF FF F0 AF D4 01 02 00 00 00 84 60 07 00 02 5E 05 00
		uploading edid by		08 00 00 00 18 57 02 00 F3 D8 0F 60 60 11 B6 7E F3 D8
		the command		OF 60 BE 66 07 00 06 00 00 00 26 00 00 26 00 00 00
				06 00 00 00 26 00 00 00 15 00 00 00 D4 7C 02 00 07
				5E 05 00 26 00 00 00 18 D0 01 00 00 00 00 00 44 2C
				20 20 2C 20 44 2C 20 61 2C 20 74 2C 20 61 2C 20 00

		2C 20 00 2C 20 62 2C 20 79 2C 20 74 2C B0 11 B6 7E
		01 00 00 00 54 54 01 00 00 00 00 00 C8 55 01 00 BC 11
		B6 7E 34 32 39 34 39 36 37 32 39 35 00 00 01 00 00 00
		6C 51 01 00 F3 D8 0F 60 31 11 B6 7E F3 D8 0F 60 8F 64
		07 00 00 00 00 00 00 00 00 00
		>set input 1 to custom edid mode
		>get ediddata for input 1 is: 25 0B 0E 0D DA 10 00 00
		01 00 00 00 7C 00 00 00 00 00 00 00 77 00 00 00 30 11
		B6 7E DC 97 EE 76 20 7C EE 76 00 90 EE 76 00 00 00 00
		00 02 00 00 50 71 D4 01 E8 74 D4 01 70 00 00 00 50
		71 D4 01 E8 74 D4 01 FF FF FF FF F0 AF D4 01 02 00 00
		00 84 60 07 00 02 5E 05 00 08 00 00 00 18 57 02 00 F3
		D8 0F 60 60 11 B6 7E F3 D8 0F 60 BE 66 07 00 06 00
		00 00 26 00 00 00 26 00 00 00 06 00 00 00

Configuration Commands-Output

No	Command	Description	Variables	Evample
1	command	Cot the name of the		Command sent:
1.	get vidout	Get the name of the		set vidout nortname 1
	portname:< <i>output</i>	specified output	1~8	Response:
	channel>	port		output 1 is named as meeting room 1
2	satvidaut	Sat the name of the	<pre>coutput channel> =</pre>	Command sent:
Ζ.	set vidout	Set the name of the	<output channel=""> =</output>	Set vidout northame: 1 Meeting Room 2
	portname: <output< td=""><td>specified output</td><td>1~8</td><td>Personal</td></output<>	specified output	1~8	Personal
	channel>, <name></name>	port	<name> = name</name>	kesponse:
			string	output 1 is named as meeting room 2
3.	get vidout	Get HDCP mode for	<output channel=""> =</output>	Command sent:
	hdcp: <i><output< i=""></output<></i>	the specified output	1~8	>get vidout hdcp:1
	channel>			Response:
				output 1 is set to AUTO HDCP mode
4.	set vidout	Set HDCP mode for	<output channel=""> =</output>	Command sent:
	hdcp: <i><output< i=""></output<></i>	the specified output	1~8	>set vidout hdcp:1,hdcp2.2
	channel>, <hdcp_m< td=""><td></td><td><hdcp_mode> =</hdcp_mode></td><td>Response:</td></hdcp_m<>		<hdcp_mode> =</hdcp_mode>	Response:
	ode>		{	output 1 is set to HDCP2.2 mode
			Αυτο	
			NO-HDCP	
			}	
5.	get vidout	Get video resolution	<output channel=""> =</output>	Command sent:
	res: <output< td=""><td>for the specified</td><td>1~8</td><td>>get vidout res:</td></output<>	for the specified	1~8	>get vidout res:
	channel>	output	<resolution> =</resolution>	Possible response message include:
			<h>x<v><i p="">,<rat< td=""><td> output 1 resolution is 4096x2160p,60 </td></rat<></i></v></h>	 output 1 resolution is 4096x2160p,60
			e> <specific info=""></specific>	 output 1 resolution is no signal
6.	get vidout osd	Get osd enable		Command sent:
		state for video		>get vidout osd
		output		Response:
				get osd on for video output
7.	set vidout	Set osd enable state	<state>= on/off</state>	Command sent:
	osd:< <i>state></i>	for video output		>set vidout osd:off
				Response:
				set osd off for video output
8.	get vidout osd	Get osd color		Command sent:
	color	setting for video		>get vidout osd color
		output		Response:
				get osd color set to black
9.	set vidout osd	Set osd color setting	<color>= black/blue</color>	Command sent:
	color: <i><color></color></i>	for video output		>set vidout osd color:blue

				Response:
				set osd color to blue
10.	get vidout osd pos	Get osd position for		Command sent:
		video output		>get vidout osd pos
				Response:
				get osd pos set to top left
11.	set vidout osd	Set osd position for	<position>=</position>	Command sent:
	pos: <position></position>	video output	{	>set vidout osd pos:tr
			TR (Top Right)	Response:
			TL (Top Left)	set osd pos to top right
			BR (Bottom Right)	
			BL (Bottom Left)	
			C (Center)	
			}	
12.	get vidout cec	Get current power		Command sent:
	power: <output< td=""><td>status from the sink</td><td></td><td>>get vidout cec power:1</td></output<>	status from the sink		>get vidout cec power:1
	channel>	via CEC		Possible responses:
				 get cec on for sink on output 1
				 get cec fail for sink on output 1
				No attached sink
13.	set vidout cec	Set power status	<output channel="">=</output>	Command sent:
	power: <i><output< i=""></output<></i>	on/off for the sink	1~8	>set vidout cec power:1,on
	channel>, <state></state>	device via CEC	<state>=on/off</state>	Possible responses:
				 set cec on for sink on output 1
				No attached sink
14.	set vidout cec	Set power standby	<output channel="">=</output>	Command sent:
	standby:< <i>output</i>	for the sink device	1~8	>set vidout cec standby:1
	channel>	via CEC on specified		Possible responses:
		output port		set power standby for sink on output 1
				No attached sink
15.	set vidout cec	Make active for the	<output channel="">=</output>	Command sent:
	makeactive: <outpu< td=""><td>sink device via CEC</td><td>1~8</td><td>>set vidout cec makeactive:1</td></outpu<>	sink device via CEC	1~8	>set vidout cec makeactive:1
	t channel>	on specified output		Possible responses:
		port		make active for sink on output 1
				No attached sink
16.	get vidout cec disp	Get cec display auto	<output channel="">=</output>	Command sent:
	auto:< <i>output</i>	on/off state for	1~8	>get vidout cec disp auto:2
	channel>	specified output		kesponse:
				get cec display auto on for output 2
17.	set vidout cec disp	Set cec display auto	<output channel="">=</output>	Lommand sent:
	auto:< <i>output</i>	on/off state for	1~8	Pornonco:
	channel>, <state></state>	specified output	<state>= on/off</state>	nesponse:

				set cec display auto off for output 2
18.	get vidout cec	Get cec display auto	<output channel="">=</output>	Command sent:
	sleep	on/off delay time	1~8	>get vidout cec sleep timeout:2
	timeout: <output< th=""><th>for specified output</th><th></th><th>Response:</th></output<>	for specified output		Response:
	channel>			get cec sleep timeout set to 2mins for output 2
19.	set vidout cec	Set cec display auto	<output channel="">=</output>	Command sent:
	sleep	on/off delay time	1~8	>set vidout cec sleep timeout:2,5
	timeout: <output< th=""><th>for specified output</th><th><time>= 1~30</time></th><th>Response:</th></output<>	for specified output	<time>= 1~30</time>	Response:
	channel>, <time></time>		minutes	set cec sleep timeout set to 5mins for output 2
20.	get vidout	Get video mute	<output channel="">=</output>	Command sent:
	mute: <output< th=""><th>state for specified</th><th>1~8, only for PR-</th><th>>get vidout mute:1</th></output<>	state for specified	1~8, only for PR-	>get vidout mute:1
	channel>	output	0402/0404/0602/08	Response:
			08	get video mute off for output 1
21.	set vidout	Set video mute for	<output channel="">=</output>	Command sent:
	mute: <output< th=""><th>specified output</th><th>1~8, only for PR-</th><th>>set vidout mute:1,on</th></output<>	specified output	1~8, only for PR-	>set vidout mute:1,on
	channel>, <state></state>		0402/0404/0602/08	Response:
			08	set video mute on for output 1
			<state>= on/off</state>	
22.	get vidout	<mark>g</mark> et video blank	<output channel="">=</output>	Command sent:
	blank:< <i>output</i>	setting for specified	1~8, only for PR-	>get vidout blank:1
	channel>	output	0402/0404/0602/08	Response:
			08	get video blank set to black for output 1
23.	set vidout	<mark>s</mark> et vidout blank	<output channel="">=</output>	Command sent:
	blank:< <i>output</i>	setting for specified	1~8, only for PR-	>set vidout blank:1,red
	channel>, <pattern< th=""><th>output</th><th>0402/0404/0602/08</th><th>Response:</th></pattern<>	output	0402/0404/0602/08	Response:
	>		08	set video blank to red for output 1
		NOTE: When select	<pattern>=</pattern>	
		to LOGO, the LOGO	{	
		<u>is fix in center</u>	black (no blank	
			color)	
			red	
			green	
			blue	
			}	
24.	get vidout	Get vidout tmds	<output channel="">=</output>	Command sent:
	sleep:< <i>output</i>	sleep on/off setting	1~8	>get vidout sleep:1
	channel>	for specified output		Response:
				get video sleep on for output 1
25.	set vidout	Set vidout tmds	<output channel="">=</output>	Command sent:
	sleep:< <i>output</i>	sleep on/off setting	1~8	>set vidout sleep:1,off
	channel>, <state></state>	for specified output	<state>= on/off</state>	Response:

				set video sleep off for output 1
26.	get vidout sleep	Get vidout tmds	<output channel="">=</output>	Command sent:
	delay: <output< td=""><td>sleep on/off delay</td><td>1~8</td><td>>get vidout sleep delay:1</td></output<>	sleep on/off delay	1~8	>get vidout sleep delay:1
	channel>	time setting for		Response:
		specified output		get video sleep off delay time set to 1800 seconds for
				output 1
27.	set vidout sleep	Set vidout tmds	<output channel="">=</output>	Command sent:
	delay: <output< td=""><td>sleep on/off delay</td><td>1~8</td><td>>set vidout sleep delay:1,0</td></output<>	sleep on/off delay	1~8	>set vidout sleep delay:1,0
	channel>, <time></time>	time setting for	<time>= 0~1800</time>	Response:
		specified output	seconds	set video sleep off delay time to 0 seconds for output
				1
28.	get audout	Get audio mute	<output channel="">=</output>	Command sent:
	mute: <output< td=""><td>state for the</td><td>1~8</td><td>>get audout mute:1</td></output<>	state for the	1~8	>get audout mute:1
	channel>	specified output		Response:
				get audio mute set to on for output 1
29.	set audout	Set audio mute for	<output channel="">=</output>	Command sent:
	mute: <output< td=""><td>the specified output</td><td>1~8</td><td>Personal</td></output<>	the specified output	1~8	Personal
	channel>, <state></state>		<state>= on/off</state>	Response:
		Enable or disable		set audio mute to on for output 1
		audio muting on		
		the ports specified		
		by		
		AUDOUT_FORMAT,		
		The mute state		
		works as follows:		
		Setting:		
		AUDOUT_MUTE =		
		ENABLE		
		AUDOUT_FORMAT -		
		HDMI (HDMI audio		
		muted, AUDIO OUT		
		audio off)		
		AUDOUT_FORMAT -		
		ANALOG (HDMI		
		audio off, AUDIO		
		OUT audio muted)		
		AUDOUT_FORMAT -		
		ALL (HDMI audio		
		muted, AUDIO OUT		
		audio muted)		

		Setting:		
		AUDOUT_MUTE =		
		DISABLE		
		AUDOUT_FORMAT -		
		HDMI (HDMI audio		
		plays, AUDIO OUT		
		audio off)		
		AUDOUT_FORMAT -		
		ANALOG (HDMI		
		audio off, AUDIO		
		OUT audio plays)		
		AUDOUT_FORMAT -		
		ALL (HDMI audio		
		plays, AUDIO OUT		
		audio plays)		
30.	get audout	Get audio output	<output channel="">=</output>	Command sent:
	format: <output< td=""><td>format for the</td><td>1~8</td><td>>get audout format:1</td></output<>	format for the	1~8	>get audout format:1
	channel>	specified output		Response:
				get audio format set to all for output 1
31.	set audout	Set audio output	<output channel="">=</output>	Command sent:
	format:< <i>output</i>	format for the	1~8	>set audout format:1,hdmi
	channel>, <format></format>	specified output	<format>=</format>	Response:
			{	set audio format to hdmi for output 1
		Audio format	all	
		option	hdmi	
		ALL - There are both	analog	
		Digital Audio	}	
		embedded in HDMI		
		OUT port and		
		Analog Audio in		
		AUDIO OUT port		
		HDMI - Set Digital		
		Audio embedded in		
		HDMI OUT port is		
		ON, Analog Audio in		
		ANALOG OUT port		
		is OFF		
		ANALOG - Set		
		Digital Audio		
		embedded in HDMI		
		OUT port is OFF,		

		Analog Audio in		
		IS UN		
		NOTE: When HDMI		
		embedded audio is		
		not PCM audio		
		<u>(such as</u>		
		<u>compressed</u>		
		<u>Dolby/DTS audio),</u>		
		auto MUTE Analog		
		line out, even ALL		
		and ANALOG		
		format is selected		
32.	get vidout	Get edid data for	<output channel="">=</output>	Command sent:
	ediddata: <output< th=""><th>the sink on</th><th>1~8</th><th>>get vidout ediddata:1</th></output<>	the sink on	1~8	>get vidout ediddata:1
	channel>	specified output		Response:
				get edid data from output 1: 00 FF FF FF FF FF FF 00
				05 B8 00 11 04 00 00 00 1C 19 01 03 80 00 00 78 0E
				EE 95 A3 54 4C 99 26 0F 50 54 FF FF 80 D1 00 B3 00
				A9 40 81 00 81 C0 81 80 8B C0 95 00 02 3A 80 18 71
				38 2D 40 58 2C 45 00 40 84 63 00 00 1E 00 00 00 FC
				00 41 4D 58 5F 48 44 4D 49 31 76 34 0A 20 00 00 00
				FD 00 17 78 0F 66 11 00 0A 20 20 20 20 20 20 00 00
				00 FA 00 D1 C0 A9 C0 90 40 81 40 01 01 01 01 0A 01
				5F 02 03 30 70 67 03 0C 00 11 00 80 22 5F 10 20 22
				1F 21 05 14 04 03 13 02 0E 0F 11 06 07 12 15 16 1D
				1E 27 29 2A 2B 2C 2D 2F 30 31 01 23 09 07 07 1A 36
				80 A0 70 38 1F 40 30 20 35 00 40 84 63 00 00 1A 46
				37 80 70 72 38 22 40 70 C8 35 00 40 84 63 00 00 1C
				D1 3D 80 80 72 B0 26 40 78 C8 36 00 40 E8 63 00 00
				1C 28 3C 80 A0 70 B0 23 40 30 20 36 00 40 E8 63 00
				00 1A 00 00 00 00 00 00 00 45

Switching Commands

No.	Command	Description	Variables	Example
1.	load preset: <preset< td=""><td>Load the specified</td><td><preset mode="">=</preset></td><td>Command sent:</td></preset<>	Load the specified	<preset mode="">=</preset>	Command sent:
	mode>	preset mode for	1~8	>load preset:1
		switcher setting		Response:
				loaded preset 1
				>set switch video from input 2 for output 1
2.	save preset: <preset< td=""><td>Save current</td><td><preset mode="">=</preset></td><td>Command sent:</td></preset<>	Save current	<preset mode="">=</preset>	Command sent:
	mode>	switcher setting as	1~8	>save preset:2
		the specified preset		Response:
		mode		saved current switcher as preset mode 2
3.	get preset	Get preset name	<preset mode="">=</preset>	Command sent:
	name: <preset< td=""><td>for the specified</td><td>1~8</td><td>>get preset name:2</td></preset<>	for the specified	1~8	>get preset name:2
	mode>	preset mode		Response:
				get Preset 2 as name for preset mode 2
4.	set preset	Set preset name for	<preset mode="">=</preset>	Command sent:
	name: <preset< td=""><td>the specified preset</td><td>1~8</td><td>>set preset name:2,1toALL</td></preset<>	the specified preset	1~8	>set preset name:2,1toALL
	mode>, <name></name>	mode	<name>= name</name>	Response:
			string	set 1toALL as name for preset mode 2
5.	get auto switch	Get on or off auto	<state> = on/off</state>	Command sent:
		switch input source		>get auto switch
		for video output		Response:
				get auto switch on
		NOTE: This		
		command is only		
		for PR-0402		
6.	set auto	Set on or off auto	<state> = on/off</state>	Command sent:
	switch:< <i>state></i>	switch input source		>set auto switch:off
		for video output		Response:
				set auto switch off
		NOTE: This		
		command is only		
		for PR-0402		
7.	get switch VI <input< td=""><td>Get which video</td><td><input channel=""/>=</td><td>Command sent:</td></input<>	Get which video	<input channel=""/> =	Command sent:
	channel>	outputs is switched	{	>get switch VI1
		to specified input	1~4 for PR-0402	Possible responses:
			and PR-0404,	•get switch video input 1 for all output
			1~6 for PR-0602,	•get switch video input 1 for no output
			1~8 for PR-0808	•get switch video input 1 for output 1,2,3
			}	•get switch video input 1 for window 1
				• invalid

8.	get switch	Get which video	<channel>=</channel>	Command sent:
	- VO <channel></channel>	input is switched to	{	>get switch VO2
		specified output	1~2 for PR-0402	Possible responses:
			and PR-0602	•get switch video input 1 for output 2
			Output Channel,	•get switch no video input for output 2
			1~4 for PR-0404	•get switch video input 1 for window 2
			Output Channel,	•get switch no video input for window 2
			1~8 for PR-0808	• invalid
			Output Channel	
			}	
9.	set switch VI <input< td=""><td>Set switch video for</td><td><input channel=""/>=</td><td>Possible command sent:</td></input<>	Set switch video for	<input channel=""/> =	Possible command sent:
	channel>O <channel></channel>	input port to the	{	• set switch VI1OALL
		output port	0 for Selection of	• set switch VI0O1
			No input channel,	• set switch VI0O1,2,8
			1~4 for PR-0402	• set switch VI2O1,2,3
			and PR-0404,	• set switch VI2O0
			1~6 for PR-0602	Possible responses:
			1~8 for PR-0808	set switch video from input 1 for all output
			}	set switch video from no input for output 1
			<channel>=</channel>	set switch video from no input for window 1
			{	set switch video from no input for output 1, 2, 8
			0 for Selection of	set switch video from input 2 for output 1,2,3
			No channel,	set switch video from input 2 for window 1,2,3
			1~2 for PR-0402	set switch video from input 2 for no output
			and PR-0602	 invalid switch
			Output Channel,	
			1~4 for PR-0404	
			Output Channel,	
			1~8 for PR-0808	
			Output Channel,	
			all for Selection of	
			ALL channel	
			}	
10.	get switch CI <input< td=""><td>Get audio/video in</td><td><input channel=""/>=</td><td>Command sent:</td></input<>	Get audio/video in	<input channel=""/> =	Command sent:
	channel>	specified input are	{	>get switch Cl1
		switched to which	1~4 for PR-0402	Possible response message include:
		outputs	and PR-0404,	•get switch audio and video from input 1 for all output
			1~6 for PR-0602,	eget switch audio and video from input 1 for output 2
			1~8 for PR-0808	•get switch audio and video from input 1 for no
			}	output

11.	get switch	Get audio/video in	<channel>=</channel>	Command sent:
	CO <channel></channel>	specified output are	{	>get switch CO2
		switched from	1~2 for PR-0402	Possible responses:
		which inputs	and PR-0602	•get switch audio and video from input 1 for output 2
			Output Channel,	•get switch audio and video from no input for output
			1~4 for PR-0404	2
			Output Channel,	
			1~8 for PR-0808	
			Output Channel	
			}	
12.	set switch Cl <input< td=""><td>Set switch both the</td><td><input channel=""/>=</td><td>Possible command sent:</td></input<>	Set switch both the	<input channel=""/> =	Possible command sent:
	channel>O <channel></channel>	audio and video	{	■set switch CI1OALL
		input to the output	0 for Selection of	■set switch Cl0O1
		port.	No input channel,	■set switch Cl0O1,2,8
			1~4 for PR-0402	■set switch Cl2O1,2,3
			and PR-0404,	■set switch CI2O0
			1~6 for PR-0602,	Possible response message include:
			1~8 for PR-0808	•set switch audio and video from input 1 for all output
			}	set switch audio and video from no input for output
			<channel>=</channel>	1
			{	set switch audio and video from no input for window
			0 for Selection of	1
			No channel,	set switch audio and video from no input for output
			1~2 for PR-0402	1,2,8
			and PR-0602	 set switch audio and video from input 2 for output
			Output Channel,	1,2,3
			1~4 for PR-0404	 set switch audio and video from input 2 for window
			Output Channel,	1,2,3
			1~8 for PR-0808	set switch audio and video from input 2 for no
			Output Channel,	output
			all for Selection of	•invalid switch
			ALL channel	
			}	



© 2021 Harman. All rights reserved. SmartScale, NetLinx, Enova, AMX, AV FOR AN IT WORLD, and HARMAN, and their respective logos are registered trademarks of HARMAN. Any other company or brand name referenced may be trademarks/registered trademarks of their respective companies. AMX does not assume responsibility for errors or omissions. AMX also reserves the right to alter specifications without prior notice at any time. The AMX Warranty and Return Policy and related documents can be viewed/downloaded at <u>www.amx.com</u>. **3000 RESEARCH DRIVE, RICHARDSON, TX 75082**

AMX.com | 800.222.0193 | 469.624.8000 | +1.469.624.7400 | fax 469.624.7153

Last Revised:

2021-10-01