

# PureLink

## Owner's Manual



## PS-6300S

### PureLink Presentation Switcher

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# TABLE OF CONTENTS

## Chapter 1. Product Overview

1.1 Safety Precautions	-----	3
1.2 Declaration of Conformity	-----	4
1.3 What's in the Box	-----	4
1.4 Product Introduction	-----	5
1.5 Front View	-----	6
1.6 Rear View	-----	6
1.7 Installation Guidelines	-----	7

## Chapter 2. Product Features & Specification

2.1 Features	-----	8
2.2 Specification	-----	8

## Chapter 3. Operational guidelines

3.1 Main Menu User Guide	-----	11
--------------------------	-------	----

## Chapter 4. Communication Code Configuration

4.1 Control Programmer's Guide	-----	15
4.2 Overview	-----	15
4.3 Command Code Formats	-----	15
4.4 General Rules for Command Codes	-----	14
4.5 Command Ack Value Response	-----	18
4.6 Example Command Codes	-----	19

## Chapter 5. Firmware updates instruction & Warranty Information

5.1 Firmware Update Instruction	-----	24
---------------------------------	-------	----

## Chapter 6. Additional Information

6.1 Manufacturer's Warranty (3-Year)	-----	25
6.2 Customer Service	-----	25

## Chapter 1. Introduction

### 1.1 Safety Precautions

- All safety instructions should be read and understood before the unit is operated.
- The owner's manual and safety instructions should be retained for future reference.
- Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth only.
- Keep away from wet, magnetic, and flammable surfaces or substances.
- Always use the correct external power supply (indicated on the product label) when operating this unit.
- This unit may be equipped with a 3 wire grounding-type plug - a plug having a third (grounding) pin. This pin will only fit in to a grounding type power outlet. If you are unable to insert the plug in to the outlet, contact your electrician to replace your obsolete outlet.
- Air vents should be kept clean and unobstructed at all times.
- Please refrain from using frayed power cords and damaged wall outlets.
- Do not place any heavy objects or equipment on top of the unit.
- To prevent electrical damage, TURN OFF the power to this unit before inserting or removing INPUT/OUTPUT slot cards.

**If you experience any malfunctioning of product or have any question as to operation of the product, please contact our customer service center.**

**PureLink™**

Tel: 201.488.3232

Email: [support@purelinkav.com](mailto:support@purelinkav.com)

## 1.2 Declaration of Conformity

According to Council Directive 73/23/EEC (February 19, 1973) on the Harmonization of the Laws of Member States relating to Electrical Equipment; Council Directive 89/336/EEC (May 3, 1989) on Electromagnetic Compatibility; Council Directive 93/68/EEC (July 22, 1993)-Amending Directives 89/336/EEC (MC) and 73/23/EEC (Low Voltage Equipment Safety), and/or CPU Boards and Power Supplies used Council Directive 93/68/EEC with Matrix, Dtrovision LLC, 535 E Crescent Ave Ramsey, NJ 07446 201-488-3232, declares under sole responsibility, that the product identifies with 93/66/EEC of the Council Directive Low Voltage Equipment Safety. Each product marketed is identical to the representative unit tested and found to be compliant with the standards.

## 1.3 What's in the Box

- Main Frame: PS-6300S
- Power Adapter – DC12V, 5A, 60W
- RS-232C & LAN cables
- Rack Ears
- 5-pin Phoenix connectors for audio matrix switcher
- 3-pin Phoenix connector for RS232
- Owner's manual

## 1.4 Product Introduction

The new **PS-6300S Presentation Switcher** is a complete, high definition A/V signal-routing solution for simple conferencing environments, including classrooms, boardrooms, and video-conference rooms. This all-in-one presentation switcher combines multi-format inputs, video matrix routing and scaling, audio matrix routing, audio insertion/extraction capabilities, as well as analog to digital (or vice versa) signal conversion, all in a single RU space enclosure. Together with PureLink's industry-renown "Don't blink Seamless Switching Technology", the PS-6300S provides a simple, flexible, and high-performance video-conferencing or presentation solutions.

### Hybrid Matrix Switcher

The PS-6300S delivers high-performance, seamless switching of numerous digital and analog input sources to up to three display devices such as projectors and flat-panel displays. A total of six inputs are available including 4 x HDMI, 2 choices from DVI, VGA, and YPbPr video via DVI-U ports. The built-in balanced/unbalanced audio matrix router may be combined with any of the six video inputs to form a new HDMI signal with embedded audio. Available three independent outputs include 2 x HDMI, 1 x DVI, VGA or YPbPr video via DVI-U port.

### Auto-Scaling with Seamless Switching

The PS-6300S offers as a standard feature, built-in auto-scaling on all the outputs – minimizing latency and providing seamless switching when multiple contrasting display devices are used. With the scaling feature built-in, the PS-6300S eliminates the cost of individual outboard scalers, and ensures the best resolution and picture quality on each display, regardless of which sources are routed.

### Picture-in-picture

The PS-6300S offers PIP function for sharing two information in one screen.

### Flexible Audio-Routing Capability

The PS-6300S adds tremendous audio-routing flexibility to the control environment with the built-in 4x3 balanced/unbalanced audio matrix router. The four balanced/unbalanced audio inputs can be combined with any video source to produce a new HDMI output signal with embedded audio. The audio outputs can be configured among eight audio sources – 4 x HDMI sources and 4 x balanced/unbalanced audio sources. In addition, the audio from an HDMI source can be extracted from the digital stream and converted to an analog signal to feed a third-party processor, mixer, or codec. The return signal feeds back through the analog input, and can be embedded with any video source to produce a new HDMI output.

### DVI-U

By utilizing DVI-U port, PS-6300S can support both digital and analog video signal on both input and output of the switchers. DVI-U supports DVI, VGA, and YPbPr signal type with appropriate cable.

## Auto-EDID (EDID Library & Emulation)

PureLink's legendary EDID/HDCP Management System provides EDID capture and storage, automatically assessing the format and resolution information of connected devices. Auto-EDID ensures consistent handshakes between sources, allowing proper and reliable output of content for display.

## 1.5 Front View

The PS-6300S chassis is mountable on 19" standard rack with brackets. On front panel, there are some function keys, and a status display window placed as shown in Figure 1-1.

<Front Panel>



(Figure 1-1)

**POWER:** Main power switch ON / OFF

**DISPLAY:** View menu and system mode

**MENU:** Navigate menu and control options

**ENTER:** Save/select desired setting

**CANCEL:** Revert to previous setting

**CREATE:** Program input channels

**PREVIEW:** View saved channel

**IN1~6:** Select input channels (1~6)

**OUT1~3:** Select output channels (1~3)

## 1.6 Rear View

<Rear Panel>



(Figure 1-2)

**DC 12V:** Power (DC +12V) port

**LAN:** LAN (TCP/IP) port for control

**RS-232C:** RS-232 serial port for control

**FIRMWARE:** Mini USB port for firmware update

**VIDEO INPUTS :** CH1 – CH4: HDMI

CH5 – CH6: DVI-U (compatible with VGA and YPbPr signal with appropriate cable)

**VIDEO OUTPUTS :** CH1 – CH2: HDMI

CH3: DVI-U (compatible with VGA and YPbPr signal with appropriate cable)

**AUDIO INPUTS:** 4 x Balanced/Un-balanced analog audio (5-pin phoenix connector)

**AUDIO OUTPUTS:** 3 x Balanced/Un-balanced analog audio (5-pin phoenix connector)

## 1.7 Installation Guidelines

The following installation settings are recommended for optimal performance.

- Operational temperature should be 30° C or below
- Operational humidity should be 60% or below
- Operational environment should be dust-free and well ventilated
- Stabilized AC input power (AVR-based power supply) is highly advised

## Chapter 2. Product Features & Specification

### 2.1 Features

PureLink's new PS-6300S Presentation Switcher is a complete, high definition A/V signal-routing solution for simple conferencing environments. Together with PureLink's fast-switching speeds, the PS-6300S provides a simple, flexible, and high-performance solution for integration into conference rooms and corporate meeting rooms.

- 6 multi-format inputs (HDMI x4, DVI-U x2 (compatible with VGA and YPbPr signal with appropriate cable))
- Built-in auto scaling on all the outputs with seamless switching
- DVI-U supports DVI, VGA, and YPbPr signal type with appropriate cable (2 inputs and 1 output)
- 4x3 Balanced/un-balanced audio matrix switching
- Picture-in-picture
- 19" standard rack type case (1U)
- HDCP compliant
- Enhanced quality and color of signals
- 3 channel digital output support (HDMI x2, DVI-U x1)
- Audio insertion, extraction and break-away
- Control through 3 different methods;
  - Control directly with front panel push buttons
  - Control via RS-232C COM port
  - Control via LAN (TCP/IP)
- It has an instantaneous noise protection circuit in input and output ports; therefore it can protect expensive equipment from fault caused by noises (if any).
- Convenient to change firmware through direct update by PC.

### 2.2 Specification

<b>PS-6300S Frame General Specification</b>	
Power	External Power Supply DC12V, 5A
Operational Temperature	32° ~ 117° F (0° to 47° C)
Storage Temperature	- 40° ~ 158° F (-40° to 70° C)
Humidity	0 ~ 90% non-condensing
MTBF	50,000 hours
Dimensions (W x D x H)	15.7" x 7.08" x 1.85" (400 x 180 x 47mm)
Shipping Dimensions (with cover box)	21.7" x 14.6" x 4.9" (550 x 370 x 125mm)
Rack mounting	Yes, 19" standard rack, 1RU
Weight	4.8 lbs (2.18 kg)

Shipping Weight (with accessories and cover box)	8.4 lbs (3.8 kg)
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## Functional Specification

<b>Communication</b>	
HDMI	HDMI, HDCP, EDID
USB	USB service port for firmware update
RS-232	2-way device control and monitoring up to 115.2k baud rate with hardware and software handshaking
LAN	TCP/IP

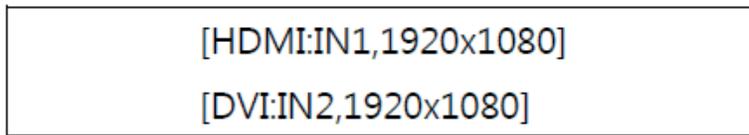
<b>Video</b>	
Switcher	Multi-format digital/analog source inputs, 6x3 matrix switcher
Input Signal Types	HDMI, DVI, VGA, YPbPr
Output Signal Types	HDMI, DVI, VGA, YPbPr
Formats	HDMI v1.3, DVI 1.0, HDCP content protection support, HD up to 1080i/1080p, computer up to UXGA/WUXGA, RGBHV, RGBS, RGSB, YPbPr, Y/C, NTSC, PAL
Input Resolutions, HDMI, Progressive	640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock
Input Resolutions, HDMI, Interlaced	720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock
Input Resolutions, VGA	640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@60Hz (1080p60), 1920x1200@60Hz
Input Resolutions, YPbPr	480i, 576i, 480p, 576p, 720p50, 720p60, 1080i25 (1125 lines), 1080i30, 1080p50 (1125 lines), 1080p60
Output Resolutions	Auto, 720x480p60, 720x576p50, 1280x720p50, 1280x720p59, 1280x720p60,

	1920x1080i50, 1920x1080i59, 1920x1080i60, 1920x1080p50, 1920x1080p59, 1920x1080p60, 800x600@60Hz, 1024x768@60Hz, 1280x1024@60Hz, 1600x1200@60Hz, 1360@768@60Hz, 1366x768@60Hz, 1400x900@60Hz, 1920x1200@60Hz
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<b>Audio</b>	
Switcher	4x3 stereo-channel source switcher
Input Signal Types	HDMI, analog 2 -channel
Formats, Analog	Stereo 2-channel
Formats, HDMI	Dolby Digital <sup>®</sup> , Dolby Digital EX, DTS <sup>®</sup> , DTS-ES, DTS 96/24, up to 8ch PCM
Analog to Digital Conversion	24-bit 48kHz
<b>* Typical of 3 analog output channels;</b>	
Output Signal Type and Format	Stereo 2-channel
Digital to Analog Conversion	24-bit 48kHz
Differential	±4.0 V
<b>* Typical of 2 HDMI output channels;</b>	
Output Signal Types	HDMI
Formats	Dolby Digital <sup>®</sup> , Dolby Digital EX, DTS <sup>®</sup> , DTS-ES, DTS 96/24, up to 8ch PCM

## Chapter 3. Operational guidelines

### 3.1 Main Menu



On the main menu, by pressing input or output # buttons, you can check each channel's connection status and video signal information for the channel. Press cancel button to return to the main menu

### 3.2 Create Menu

This is to create an input – output switching connection and the process is;

Press Create button

Press input button

Press output button where you want to switch selected input signal to

Press Enter button to save

Press cancel button to reverse a selection and return to the previous menu

### 3.2 Menu button

Press a menu button to view the sub-menu and available sub-menu list follows;

1. Output scaling timing setting
2. DVI-U input port signal selection (DVI, VGA, YPbPr)
3. DVI-U output port signal selection (DVI, VGA, YPbPr)
4. PIP mode setting (Output #3)
5. HDMI output audio selection
6. Analog audio output audio selection
7. EDID
8. RS232 communication setting
9. LAN communication setting
10. Product ID setting
11. VGA input (for input 5, 6) delay setting
12. Firmware version check
13. Factory reset

#### 1. Output scaling timing setting

- 1) On this menu, user can set output resolution from the list below;

Auto	480p	576p	1280x720p@50	1280x720p@59	1280x720p@60	1920x1080i@50
------	------	------	--------------	--------------	--------------	---------------

1920x1080i@59	1920x1080i @60	1920x1080p@50	1920x1080p @59	1920x1080p @60	800x600 @60	1024x768 @60
1280x1024 @60	1360x768 @60	1366x768 @60	1400x1050 @60	1600x1200 @60	1440x900 @60	1920x1200 @60

- Select Output # using CREATE (Up) and PREVIEW (Down) buttons then Press ENTER button
- Select Resolution using CREATE (Up) and PREVIEW (Down) buttons
- Press ENTER button to save

## 2. DVI-U input port signal selection (DVI, VGA, YPbPr)

PS-6300S has two DVI-U Input ports and user can select among three different signal types depending on the needs (DVI, VGA, or YPbPr)

- Select Input # using CREATE (Up) and PREVIEW (Down) buttons then press ENTER button
- Select signal type (DVI, VGA or YPbPr) using CREATE (Up) and PREVIEW (Down) buttons
- Press ENTER button to save

## 3. DVI-U output port signal selection (DVI, VGA, YPbPr)

PS-6300S has one DVI-U Output port and user can select among three different signal types depending on the needs (DVI, VGA, or YPbPr)

- - Select signal type (DVI, VGA or YPbPr) using CREATE (Up) and PREVIEW (Down) buttons
- Press ENTER button to save

## 4. PIP mode setting

PS-6300S offers PIP function for sharing two information at the same time.

PIP feature is available on output #3.

- Enable/disable PIP mode using CREATE (Up) and PREVIEW (Down) buttons then press ENTER
- Select PIP input using CREATE (Up) and PREVIEW (Down) and INPUT buttons
- Press ENTER button to save

## 5. HDMI output audio selection

PS-6300S has total eight (8) available audio inputs; four (4) HDMI embedded audio and four (4) balanced/unbalanced audio Inputs and user can select audio inputs or mute the audio.

- Select Output # using CREATE (Up) and PREVIEW (Down) buttons then press ENTER
- Select input audio
- Press ENTER button to save

## 6. Analog audio output audio selection

PS-6300S has three (3) balanced/unbalanced audio outputs and S/PDIF Audio output

User can select either HDMI embedded, balanced/unbalanced audio or mute to each audio output

- Select Output #(output 1~3, and S/PDIF) using CREATE (Up) and PREVIEW (Down) buttons then press ENTER
- Select input audio
- Press ENTER button to save

## 7. EDID

### i) Int EDID Burn

- On this menu, select an EDID from the library and save it on to the Input EEPROM. PA-6300S has 14 selectable most widely used EDID data pre-programmed and 6 empty slots that can be used to upload and save EDID data from any external display device.
  - Select Internal EDID using UP (Create) and Down (Preview) buttons
  - Select Input# where selected EDID data will be saved on to. Multiple Inputs can be selected at once.
  - Press enter button to save
- \* "P" will display on the LCD when EDID is successfully saved, "F" will display on the LCD when EDID is NOT successfully saved.

### ii) Ext EDID Burn

- This menu is to emulate EDID data from any display devices that are connected to the Matrix Router's Output via copper cables and save it on to Matrix Router's Input EEPROM.
  - Select Output #
  - Selected Output's display device's EDID information will be displayed
  - Select Input# where selected EDID data will be saved on to. Multiple Input can be selected at once.
  - Push enter button to save.
- \* "P" will display on the LCD when EDID is successfully saved, "F" will display on the

LCD when EDID is NOT successfully saved.

### 8. RS232 communication setting

- There are four values those need to be set for serial communication; baud rate, data bits, stop bits, and parity. Click and select each value using touch screen and push enter button to save.

Factory default (recommended) settings for serial communication are:

- Baud rate - 19200
- Data bits - 8
- Parity - none
- Stop bits - 1
- Flow control – none

and supported settings are:

Supported Baud Rate: 4800 Bps, 9600 Bps, 14400 Bps, 19200 Bps, 38400 Bps,  
57600Bps, 76800 Bps, 115200 Bps

Supported Data bit: 5 bit, 6 bit, 7 bit, 8 bit

Supported Parity: Non, Even, Odd

Supported Stop bit: 1 bit, 2 bit

### 9. LAN communication setting

- PS-6300S can be controlled through the 10/100 base Ethernet port using a command line interface.

There are four values that need to be set for LAN communication; IP address, Gateway address, Subnet mask, and Mac address. Please use below button indication to configure LAN settings;

\* Output #1 : To move cursor

\* Create button: Numbers going up

\* Preview button: Numbers going down

\* Please use Enter button to save the setting

**Note) Please contact your Network Administrator for network information to avoid any IP conflict.**

Factory default settings for LAN communication are:

IP Address: 192.168.000.002

Gateway Address: 192.168.000.001

Subnet Mask: 255.255.255.000

Mac Address: Matrix switcher has its own MAC address and that MAC address allows user to communicate with PC network solutions without any communication conflict.

\*\*How to change the LAN IP address setting using the front panel key of the matrix switcher for PS-6300S:

1. Go to front of the switcher.
  2. Press the 'Menu' button
  3. Use the 'Create' and 'Preview' buttons to shift up and down
  4. Choose '5. Lan' and press Enter button
  5. Choose '1. IP Address' and press Enter button
  6. Now you have the IP Address shown on the screen
  7. The cursor will be located on the first set of numbers of the default IP Address
  8. Use the 'Create' and 'Preview' button to change numbers
  9. a. To go from left and right, use 'Out1' and 'Out2' buttons
    - b. To change numbers up and down, use 'Create' and 'Preview' buttons
    - c. To move to the second set of numbers on the ip address, Press 'In2' button
    - d. To the third set of numbers on the IP address, Press 'In3' button
    - f. To the fourth set of numbers on the IP address, Press 'In4' button to move
- (Note: Data will not go higher than 255 for any of the column or it will show error screen if you go higher)
10. After configuring to the correct IP Address, press Enter button

\*\*Use same method to change Gateway, Subnet Mask IP Address.

## Chapter 4. Communication Code Configuration

### 4.1 Control Programmer's Guide (Code Structure and Examples)

This section is designed for programmers who wish to create their own control programs using the command code. All PureLink digital matrix routers provide a simple character stream control used by external control devices attached to a PureLink device. Command codes are used primarily for control, during system installation and setup, and for diagnostic purposes.

### 4.2 Overview

Command code is a set of alphanumeric characters that combine to form control commands. Command code strings are entered into a terminal emulation program (such as windows HyperTerminal) running on an external control device. The control device (PC, third-party controller) sends the commands to the system. Control devices must be able to send and receive ASCII or HEXA code via an RS-232 or Ethernet port.

### 4.3 Command Code Formats

A command code is a series of command characters and numbers used to send commands to the system. Commands include basic formulas for creating and disconnecting switches, as well as for verifying the status of switches.

In a command code, each character is either general command (e.g., C for connect) or an identifier that indicates what the following number designates (e.g., "O" and the number following it designate an "output number"). The command code \*01CI01O01! Can be interested as follows: (\*) Starting the command code (01) Router ID is 01 (C) Create connection on (I01) Input 01 to (O01) Output 01 (!) take the command. For a complete list of command characters and their functions, see pages 17.

Ack value (Acknowledge value: Response from Pure Link device) will be echoed back to the terminal screen as the unit accepts them. When a command is successfully executed, all of the characters appear containing the character "s" which stands for status. For example,

Ex 1) Command (Connect Input 1 to Output 1)

```
*01CI01O01! ↵
```

Ack value

```
*01sC I01O01!
```

Ex 2) Command (Check Input connection status on Output 2)

```
*01?O02! ↵
```

Ack Value

```
*01s? I03O02!
```

#### 4.4 General Rules for Command Codes

The commands are coded in ASCII and HEXA. Please refer to Table 3.1 on pg. 17 for detailed descriptions of keys and functions. A basic command code setup is shown below;

Ex) \*01CI01O01! ↵

Start (\*) + Router ID (01) + Command (C) + Input number (I01) + Output number (O01) + End (!) + Enter (↵)

- ▶ A command line allows execution of only one command. Multiple commands require execution of multiple strings; one command per string.
- ▶ All s begin with \* (Start) byte.
- ▶ All s end with ! (End) byte.
- ▶ All s will be executed when ↵ (Enter) is entered.
- ▶ The correct Router ID must be entered in a command code. Systems will not react to the command if a wrong Router ID is entered. The Factory Default Router ID is set to 01 and the universal Router ID is 99. Systems will react to the command whenever universal Router ID is entered in command code.
- ▶ Command codes typically are not case-sensitive.
- ▶ To specify multiple inputs and outputs, enter a “,” (Comma) between numbers.  
(Ex., \*01CI01O01,02,03! ↵: Connects Input 01 to Output 01, 02, and 03)
- ▶ Use - (Hyphen) for range connection.  
(EX., \*01CI01O01-04! ↵: Connects Input 01 to Output 01,02,03, and 04)

**Table 4.1 Command Codes Characters Table**

The table below shows command code characters (keys), which are used to generate control commands, their functions, and short function descriptions.

Key		Function	Description and Example	Byte
HEX	ASCII			
0x2A	*	Start the command	Header Code	1
0x21	!	End the command	Tail Code	1
	↵	Execute the command	Execute the command	
0x43 0x63	C C	Connect (Video and Audio)	Initiates a Connect (switch) command for both Video and Audio; this must precede input and output specification	1
0x3F	?	Status	Status command; this must precede input and output specification	1
0x44 0x64	D D	Disconnect	Disconnect command for both Video and Audio; this must precede input and output specification	1
	,	Space	Separates the numbers within entries that contain multiple numbers	1
	-	Range	Specifies a range of numbers in entries containing multiple numbers	1
0x49 0x69	I I	Router ID check	Router ID check command; check router's current ID number	1
	OT	Output Resolution Setting 00: AUTO 01: 720x480p 60Hz 02: 720x576p 50Hz 03: 1280x720p 50Hz 04: 1280x720p 60Hz 05: 1920x1080i 50Hz 06: 1920x1080i 60Hz 07: 1920x1080p 50Hz 08: 1920x1080p 60Hz 09: 800x600 60Hz 10: 1024x768 60Hz 11: 1280x1024 60Hz 12: 1600x1200 60Hz 13: 1360x768 60Hz 14: 1366x768 60Hz 15: 1400x1050 60Hz		

		16: 1920x1200 60Hz		
	?version	Firmware version check	Firmware version check command; *01?version! ↵	
0x4E 0x6E	N N	Networking setting	Network configuration setting command: - IP Setting *01NIP125.135.199.004! ↵ - Subnet Mask Setting *01NSM255.255.255.000! ↵ - Gate Way Setting *01NGW192.168.000.001! ↵ - MAC Address Setting *01NMA00.50.C2.B0.20.05! ↵ - Port Number Setting *01NPN3000! ↵ - Network Information *01NNI000! ↵	1
0x48 0x68	H H	Connection check	Router communication connection check command: *255H000! ↵	1

#### 4.5 Command Ack (Acknowledge) Value Response

When command codes are entered into a terminal emulation program (such as HyperTerminal) and are accepted by the system, they respond back to the terminal screen one at a time, as noted below in the table. The complete command has executed successfully when all of the entered characters including “s” which stands for status, appear. If a command character is not accepted, a different character than the one entered appears and all or part of the command has not been executed.

##### Ack (Acknowledge) Value Response Table

The following table shows ack value response characters along with their descriptions and meanings, which may appear instead of the initially entered character or number. If these characters appear, all or part of the command has not been executed.

**Table 3.2 Descriptions of Acknowledge (ACK) Signals**

Ack value	Description
Input 1 is not connected	No information in each channel.
Command Code Error	Indicates that system has rejected all or part of the command
Router ID Error	Indicates that the wrong ID number was entered

##### Command Code Ack Value Examples

Command Code Entered	Ack Value as appears in the control program	Explanation of Result
*01CI01O01! ↵	*01sC I01O01 !	The command was successfully executed
*01CO01! ↵	Command Code Error	The command was not executed because the input number was not included
*01CI01O01 ↵	Command Code Error	The command was not executed because “!” (End) was not included
*300CI01O01! ↵	Router ID Error	The command was not executed because the actual Router ID and entered Router ID did not match

#### 4.6 Example Command Codes

A switch is an active connection between an input (source) signal and one or more output (display) devices. The signals connected in a switch command are either individual signals or groups of signals coming through the connectors on the rear of the unit.

The “C” key initiates a Connect command for routing a switch. The characters and numbers that follow the “C” command tell the system, which inputs and outputs to connect. The last character “!” is found at the end of a command code which tells the system to execute the command.

For example, the command code \*255CI01O01! ↵

can be interpreted as follows: (\*) Starting the command code (255) Router ID is 255 (C) Create connection on (I01) Input 01 to (O01) Output 01 (!) take the command. For a complete list of command characters and their functions, see examples below.

To connect a switch:

1. Enter the Connect command below. Replace the “#”s with the input and output number(s).

\*255CI#O#! ↵

Examples (Connect) :

Command Codes	Action
*255CI01O01! ↵	Connect Input 1 to Output 1
*255CI01O03,I06O02! ↵	Connect Input 1 to Output 3 and Input 6 to Output 2
*255CI01O01,I02O02,I03O03! ↵	Connect Input 1 to Output 1, Input 2 to Output 2, and Input 3 to Output 3
*255CI01O01,02,03! ↵	Connect Input 1 to Output 1, 2, and 3
*255CI01O01-03! ↵	Connect Input 1 to Output 1, 2, and 3

#### Disconnecting Switches

The characters and numbers in a Disconnect command tell the system which input or output to disconnect. The “D” key initiates a Disconnect command for routing a switch. The characters and numbers that follow the “D” command tell the system that inputs and outputs to disconnect. The last character “!” is found at the end of the Command code, which tells the system to execute the command.

For example, the command code

\*255DI01O00! ↵

It can be interpreted as follows: (\*) Starting the command code (255) Router ID is 255 (D) Disconnect on (I01) Input 01 to (O00) Output 00 (!) take the command. For a complete list of command characters and their functions, see the command list below

1. Enter the Disconnect command below. Replace the “#”s with the input and output number(s).

\*255DI#O#! ↵

Examples (Disconnect) :

Command Codes	Action
*255DI01O00! ↵	Disconnect Input 1 to no Output (00)
*255DI00O01,02,03! ↵	Disconnects Outputs 1, 2, and 3
*255DI00O01-03! ↵	Disconnects output 1,2, and 3
*255DALLIO! ↵	Disconnects all inputs and outputs

### HDMI Output Audio Select Command

- SA : HDMI source audio
- B1: Balanced IN1 , B2: Balanced IN2 , B3: Balanced IN3 , B4: Balanced IN4
- S0 or B0 or MU : Not connected (Mute)

Command Codes	Action
*255HAALLSA! ↵	ALL HDMI output connect embedded audio
*255HAO01SA,O02B1! ↵	Connect audio hdmi Output 1 from HDMI Source Audio and balanced input 1 to output 2
*255HAO01SA,O02SA,O03B4! ↵	Connect audio hdmi output 1 from HDMI Source Audio,hdmi output 2 from HDMI Source Audio, and balanced input 4 to output 3
*255HAO01-04B3! ↵	Connect audio balanced input 3 to output 1, 2, 3, and 4
*255HAO01B0!	Mute audio to output 1

### Analog Audio Matrix Switcher’s Output Audio Select Command

Examples (Connect **Balanced Audio out**):

- S1-S6 : HDMI input
- B1: Balanced IN1 , B2: Balanced IN2 , B3: Balanced IN3 , B4: Balanced IN4
- S0 or B0 or MU: Not connected (Mute)

Command Codes	Action
*255BAALLS1! ↵	Connect audio input 1 to ALL output
*255BAO01S2,O02B1! ↵	Connect audio hdmi input 2 to output 1 and balanced input 1 to output 2
*255BAO01S1,O02S2,O03B4! ↵	Connect audio hdmi input 1 to output 1,hdmi input 2 to output 2, and balanced input 4 to output 3
*255BAO01-04B3! ↵	Connect audio balanced input 3 to output 1, 2, 3, and 4
*255BAO01S0!	Mute audio to output 1

### SPDIF Audio Output Audio Select Command

Examples (Connect **SPDIF Audio out**):

- S1-S6 : HDMI input
- S0 or MU : Not connected (Mute)

Command Codes	Action
*255SAS1! ↵	Connect All of HDMI Source audio from HDMI input 1
*255SAMU! ↵	Mute audio to HDMI Source audio

### PIP setting command

Start (\*) + Router ID (001) + Command (M) + PIP ON/OFF(S1/S0) Input number (I01) + End (!) + Enter (↵)

- MS0 : PIP ON
- MS1 : PIP OFF
- I01 : Input select (I01 ~ I06)

Example:

Command Codes	Action
*999MS1I01! ↵	PIP ON INPUT 1
*999MS1I03! ↵	PIP ON INPUT 3
*999MS0I01! ↵	PIP OFF

### Connection Status Check

A connection status can be checked to confirm that the switch has been correctly executed or to confirm correct routing to multiple outputs. The characters and numbers in a status command tell the system which input or output to check.

1. Enter the Connection status check command below. Replace the “#”s with the input and output number(s).

\*255?I#!↵ or \*255?O#! ↵

Examples:

Command Codes	Action
*255?I01! ↵	Check Output connection status on Input 1
*255?O03! ↵	Check Input connection status on Output 3
*255?ALLIO! ↵	Check all Input and Output connection status

### **Router ID Check**

User can confirm the router's Current ID setting: Universal Router ID is 999

Example:

Command Codes	Action
*999I000! ↵	Check Router's ID

### **Firmware Version Check**

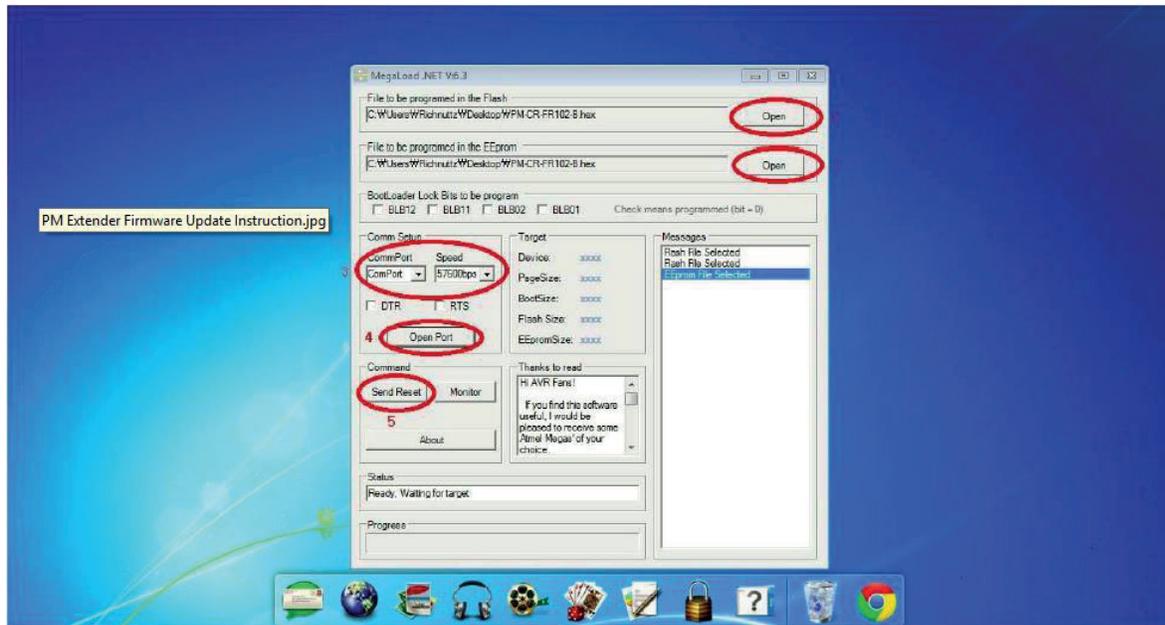
User can confirm router's current firmware version.

Example:

Command Codes	Action
*999?version! ↵	Check Router's Firmware version

## Chapter 5. Firmware Update Instruction and Warranty Information

### 5.1 Firmware Update Instruction



- A. Please install Megaload firmware update program to your PC
  - B. Plug firmware update USB cable between the unit and your PC
    - \*Make sure the unit is powered on
  - C. Run Megaload program
- Firmware update procedure follows;
- 1 & 2 . Load firmware file on both Flash and EEprom.
  3. Setup comport # and speed.
    - \*Baudrate speed must be matched with baud rate speed on PS-6300S unit
  4. Open the port
  5. Click send reset button
- It may take few minutes to update the firmware

## Chapter 6. Additional Information

### 6.1 Manufacturer's Warranty (3-Year)

PureLink warrants this PS-6300S presentation switcher to be free from defects in workmanship and materials, under normal use and service, for a period of three (3) year from the date of purchase from PureLink or its authorized resellers.

If the product does not operate as warranted during the applicable warranty period, PureLink shall, at its option and expense, execute one of the following as necessary:

1. Repair the defective product or part
2. Deliver to customer and equivalent product or part to replace the defective item
3. Refund to customer the purchase price paid for the defective product

All products that are replaced become the property of PureLink. Replacement products may be new or reconditioned. Repaired or replacement products or parts come with a 90-day warranty or the remainder of the warranty period. PureLink shall not be responsible for any software, firmware, information, or memory data loss of contained in, stored on, or integrated with any products returned to PureLink for repair under warranty.

### 6.2 Customer Service

Any customer service inquiries can be submitted electronically through the Q&A form on our website ([www.purelinkav.com](http://www.purelinkav.com)).

For immediate assistance please contact us at (201) 488-3232 to reach our customer care or tech support team.