



8X8 18G/4K HDMI MATRIX SWITCHER



LBS-88H2 USER MANUAL

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SAFETY INSTRUCTIONS AND COMPLIANCE DECLARATION

PLEASE OBSERVE THE FOLLOWING SAFETY PRECAUTIONS

SURGE PROTECTION DEVICE RECOMMENDED

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection system is highly recommended in order to protect and extend the life of your equipment.

SAFETY INFORMATION

Do not use this device near water/liquids. This device shall not be exposed to dripping and splashing or liquids.

Clean only with dry cloth.

Do not use solvent such as paint thinners and acetone to clean external casing. Such agents will remove any labels on the device.

Do not block any fan ventilation openings.

Do not install near any sources of intense heat such as radiation, boilers, or other equipment that produce heat

Not intended for use/storage in close proximity of critical medical supplies such as those that might come into direct contact with patients or medical staff.

Protect the power cord from being pinched or damaged at receptacles and the point of exit from the device.

Only use attachment /accessories specified by manufacturer. If you have any questions about the compatibility of an accessory, contact your dealer.

In case liquid spillage on device, unplug mains power cord and contact your dealer. Continuous use in this case may result in fire or electric shock.

To reduce the risk of electric shock, do not touch connectors with wet hand.

Only power with the marked voltage on the device. Any other voltage can cause fire or electric shock.

Do not use the device if an abnormality occurs. If any smoke or odor becomes apparent, unplug the power cord and contact your dealer. Do not try to repair the device yourself.

Avoid using physically damaged devices. If your device metal housing is seriously physically damaged, the internal components may function abnormally. Contact your dealer.

Do not install the device in an area heavy with dust or constant high humidity. Operating the device in this case may result in fire or electric shock.

Only use supplied power supply. For a list of other compatible medical grade power supplies, contact your dealer.

Install this device where it cannot be easily pushed or knocked over.

Use of this device is not suitable for use within 6' of a medical patient.

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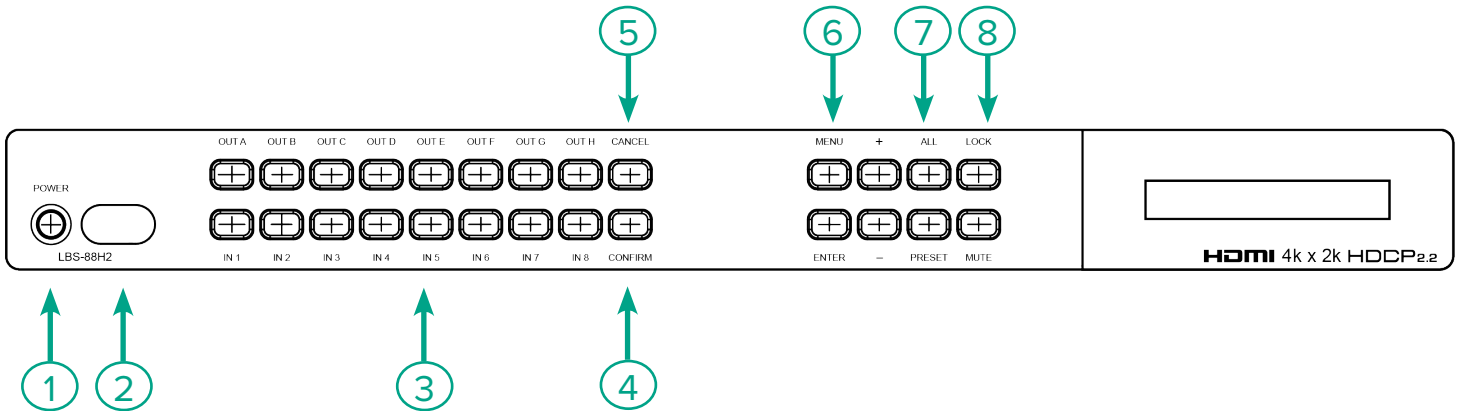
The LBS-88H2 provides the ability to connect up to (8) 18G HDMI sources and up to (8) 18G HDMI displays and freely switch between them. This unit comes with full support for 18G resolutions up to and including 4K at 60Hz (4:4:4, 8-bit) as well as support for 48-bit Deep Color, HDR (High Dynamic Range), HD audio and other features defined by the HDMI 2.0a specification. This unit also features (8) USB ports which supply up to 5V/1A power for use with (LBO-H2) connected optical fiber or (AOC-H2) AOC fiber cable extenders. This unit provides an intuitive set of front panel controls.

Comprehensive EDID management feature that includes the ability to select between built in default EDID, EDID copied from connected sink devices, as well as a configurable EDID, this matrix can solve many interconnectivity problems.

Features include:

- 8-Inputs and 8-Outputs HDMI Matrix Switcher with HDCP 2.2 and DVI compliance
- Supports PC WUXGA and HDTV video resolutions up to 4K2K (3840x2160@24/25/30/50/60 YUV 4:4:4, 4096x2160@24/25/30/50/60Hz _YUV 4:4:4)
- Eight HDMI inputs matrixes to eight HDMI outputs with 18Gbps (600MHz) 4K UHD support
- Supports output rate-following 4K-to-2K down scaling
- Supports 16 bit Deep Color up to 1080p@60Hz
- Offers multiple control interfaces including RS232 and IP control (Telnet & WebGUI)
- Supports six internal EDIDs, eight external EDIDs copied from connected devices, and four user provided EDIDs
- Eight USB ports to supply 5V/1A power
- OSD with user customizable information text
- Supports output rate - following 4K-to-2K down scaling

FRONT PANEL



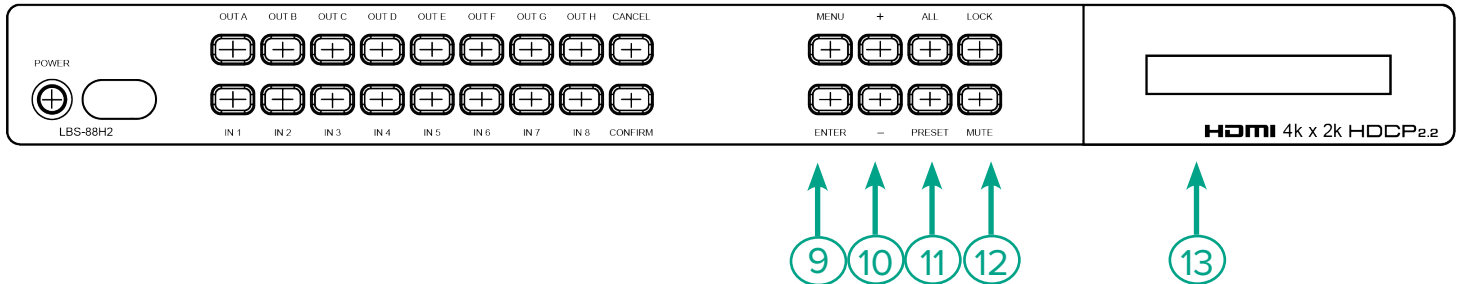
- ① **POWER:** Press this button to power the unit on (Green LED) or place it into stand-by mode (Red LED)
- ② **IR SENSOR:** Receives the infrared signal from the remote control
- ③ **INPUT 1-8:** Press these buttons to configure the video routing. Behavior depends on the selected Keypad Action Mode.

Standard Mode: Press the “OUT” buttons (A~H) of the outputs you wish to route a source to (the letters will flash in the LCD to indicate selection). Next, press the “IN” button of the input (1~8) you wish to route to the selected outputs. Finally, press “CONFIRM” to confirm your selection and execute the routing change.

User Mode: Press the “OUT” button (A~H) of an output you wish to route a source to (the letter will flash in the LCD to indicate selection). Next, press the “IN” button of the input (1~8) you wish to route to the selected output. Repeat this process as many times as needed to select all new routes. Finally, press “CONFIRM” to confirm your selections and execute the routing changes.

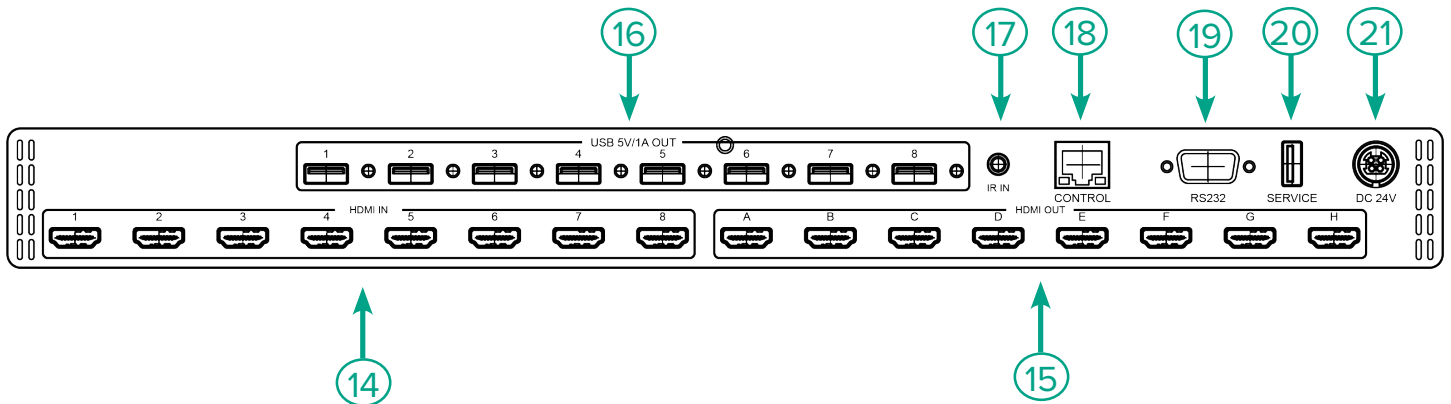
- ④ **CONFIRM:** Press this button to confirm newly made input/output routing selection
- ⑤ **CANCEL:** Press this button to confirm newly made input/output routing selections before they have been confirmed
- ⑥ **MENU:** Press to enter the LCD menu, or to back out from menu items.
- ⑦ **ALL:** Press this button to select all outputs simultaneously for routing. Next, press the “IN” key of the input (1~8) you wish to route to all outputs. Finally, press “CONFIRM” to confirm your selection and execute the routing change.
- ⑧ **LOCK:** Press this button to lock all functions on front panel. Press and hold for 3 seconds to release the lock function

FRONT PANEL (CON'T)



- 9 **ENTER:** Press to confirm a selection within the LCD menu or to go deeper into a menu item.
- 10 **+/-** Scroll Up/Down on menu options
- 11 **PRESET:** Press to enter the preset recall menu in the LCD window. Press the “+/-” buttons followed by the “ENTER” button to select and activate the preferred preset.
- 12 **MUTE:** The “MUTE” button functions as a blank audio/video source. To use it, follow the standard matrix routing instructions, but use the “MUTE” button as the input to blank out the selected outputs. When a “MUTE” input is in use it will show up as “M” within the routing display.
- 13 **LCD DISPLAY:** Displays the unit’s menu, settings and information.

REAR PANEL



- 14 HDMI IN 1-8:** Connect HDMI equipment sources such as PC/laptops, DVD players or set Set-Top Boxes
- 15 HDMI OUTPUT A-H:** Connect the HDMI TV / displays or HD amplifier for output image and audio or audio display.
- 16 Power:** USB Power 1-8 port provides 5V/1A power on each port may be individually enabled/disabled.
- 17 IR IN:** Connects to an IR remote control receiver accessory cable
- 18 CONTROL:** Connect to an active network for Telnet and WebGUI control. (Please refer to Section 3.4 and 3.5)
- 19 RS232:** Connect to a PC or control system with D-Sub 9-pin cable for the transmission of RS232 commands.
- 20 SERVICE:** For manufacture use only.
- 21 DC 24V:** Plug the 24V DC power supply into the unit and connect the adaptor to an AC outlet

Note: If a USB device requiring more than 1A is connected, the port will automatically shut off to prevent an overload and the red LED will turn on.

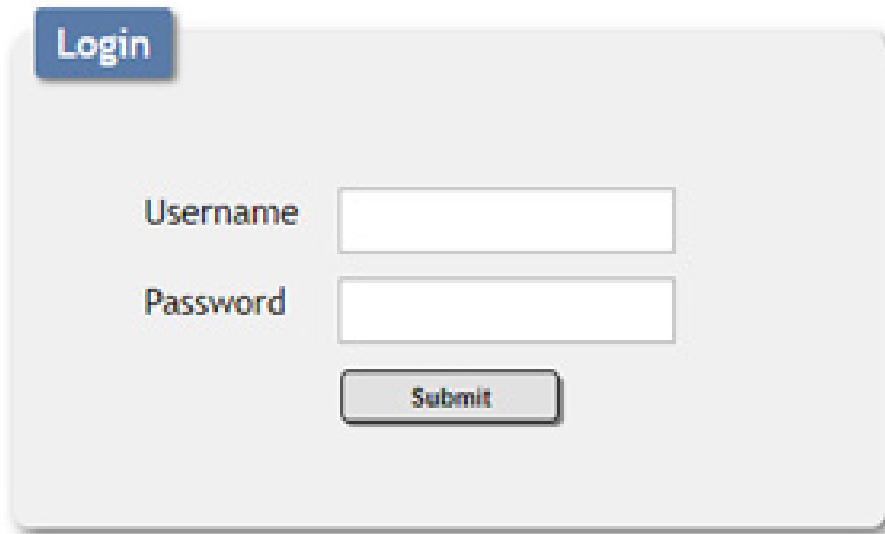
LBS-88H2	
PIN	DEFINITION
1	NC
2	TX
3	RX
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC



REMOTE CONTROLLER	
PIN	DEFINITION
1	NC
2	RX
3	TX
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Default Port Settings
 Baud Rate: 19.200
 Kbaud Data Bits: 8
 Parity Bits: None
 Stop Bits: 1
 Flow Control: None

On a PC/ Laptop that is connected to the same active network as the Switcher, open a web browser and type the devices's IP address in the web address entry bar. The browser will display the Devices Status, Control and User Settings Pages.



The image shows a login form with a blue 'Login' button in the top left corner. Below it are two input fields: 'Username' and 'Password'. At the bottom of the form is a 'Submit' button.

Default Username: admin

Default Password: admin

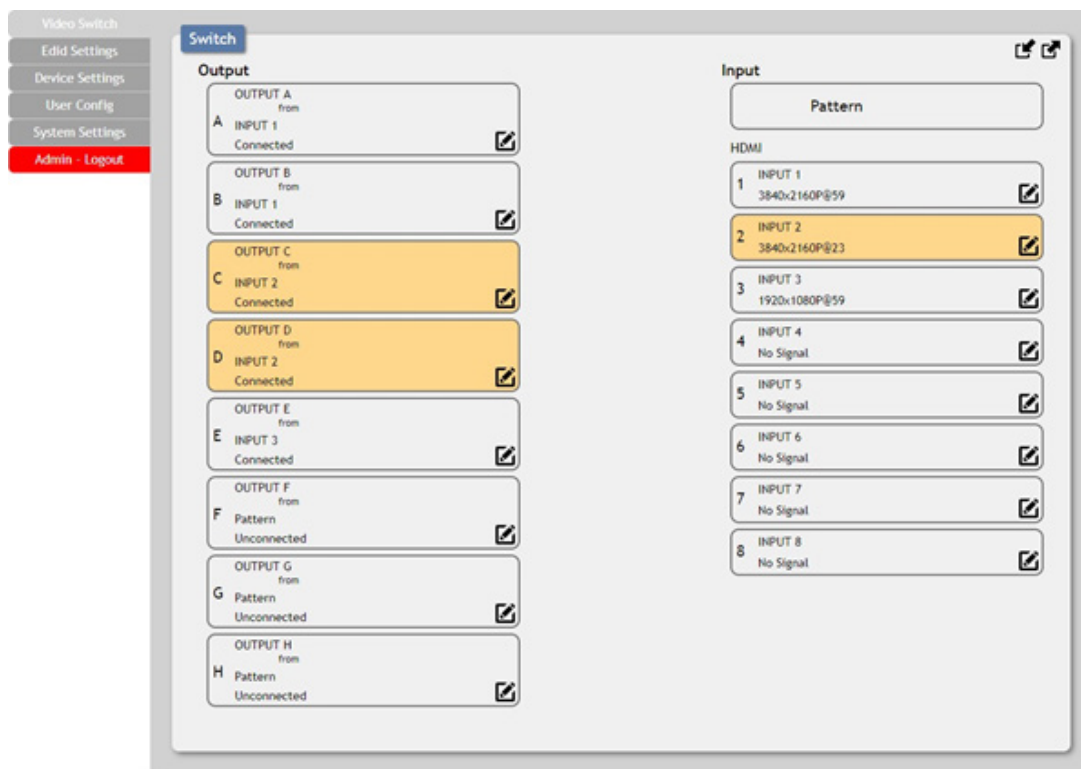
Note: Username & Password can be changed within System Settings.

VIDEO SWITCH

This page provides video I/O routing, preset saving/loading, test pattern and OSD text configuration.

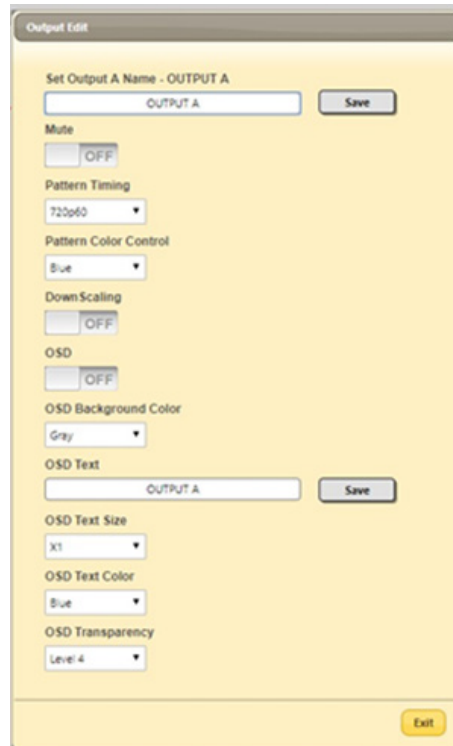
VIDEO ROUTING

Press one or multiple output buttons, then press input to set the input to select output(s)



OUTPUT EDIT

A variety of output settings, including Name, Muting, Pattern Color Control, Downscaling and OSD options can be configured here



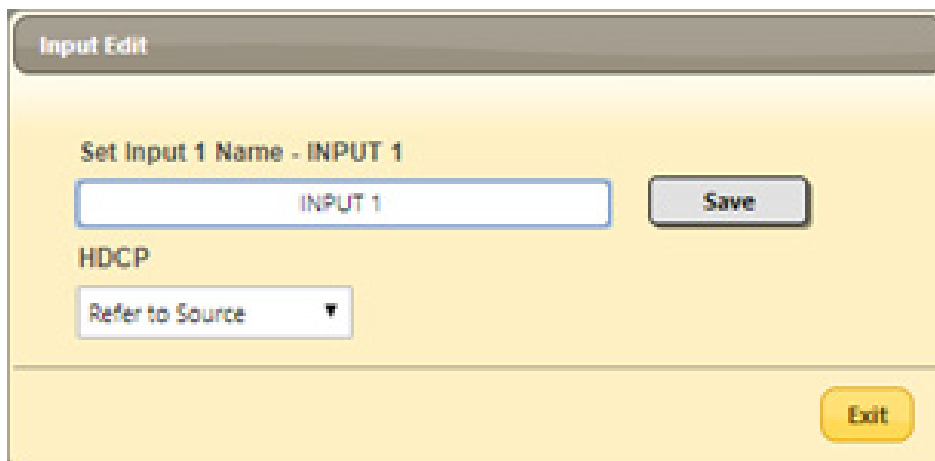
The screenshot shows the 'Output Edit' window with the following settings:

- Set Output A Name - OUTPUT A: Save
- Mute: OFF
- Pattern Timing: 720p60
- Pattern Color Control: Blue
- Down Scaling: OFF
- OSD: OFF
- OSD Background Color: Gray
- OSD Text: Save
- OSD Text Size: X1
- OSD Text Color: Blue
- OSD Transparency: Level 4

Exit button is located at the bottom right.

INPUT EDIT

Each input allows for Individual control over the name of the input and the behavior of HDCP.






The screenshot shows the 'Input Edit' window with the following settings:

- Set Input 1 Name - INPUT 1: Save
- HDCP: Refer to Source

Exit button is located at the bottom right.

NOTE: Blank spaces “_” are not allowed in the Input Name Field

PRESET SETTING **RECALL SETTING**

Store current L/D position	
1 - PRESET 1	
2 - PRESET 2	
3 - PRESET 3	
4 - PRESET 4	
5 - PRESET 5	
6 - PRESET 6	
7 - PRESET 7	
8 - PRESET 8	


Exit

This setting allows you to store up to eight video routing presets. Presets can be utilized to store multiple different routing states in advance for rapid, hassle-free recall.

STORE

Once you have the table set the way you like, you can click the “Preset Store,.” You may also name the Preset at this step by selecting the “Edit” icon.

RECALL

When you wish to load a previously stored Preset, please click the “Preset Recall” Icon  and you will be presented with a choice of the 8 available Presets

EDID SETTINGS

This table provides the option of six standard EDIDs, eight sink sourced EDIDs and eight user uploaded EDIDs that can be assigned to each input port individually. The names of the eight user uploaded EDIDs can change if desired.

Input	EDID Type	Source
FHD 2CH	USER3	Sink C
FHD MCH	USER4	Sink D
UHD 2CH	USER5	Sink E
UHD MCH	USER6	Sink F
UHD+ 2CH	USER7	Sink G
UHD+ MCH	USER8	Sink H
USER1		Sink A
USER2		Sink B

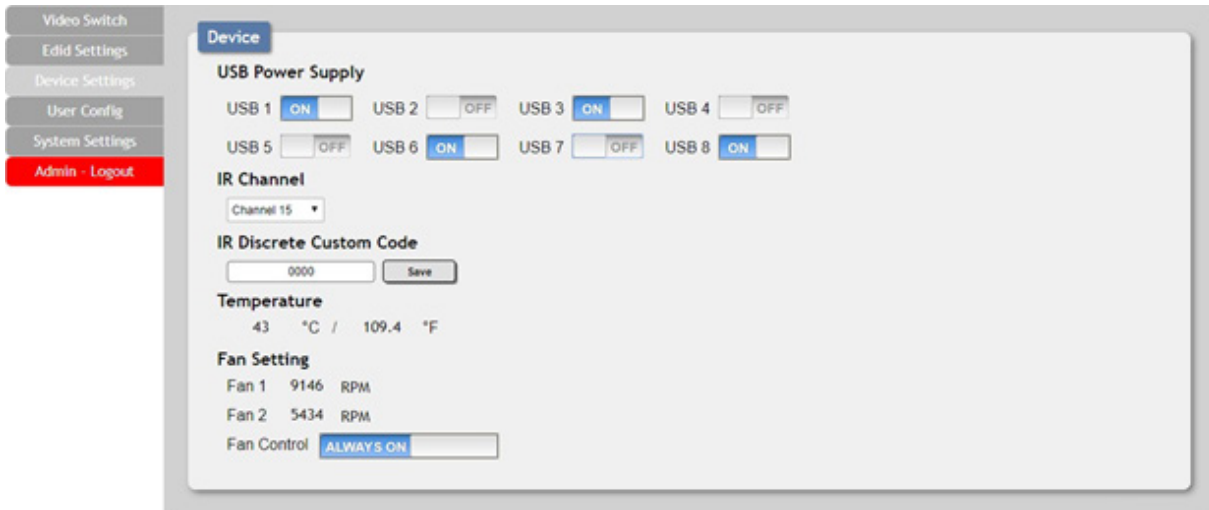
DEFAULT EDIDs

This table provides the following 6 default EDID Settings:

FHD/2CH	1920×1080P@60HZ (148MHZ), 8-BIT COLOR	LPCM 2.0
FHD/MCH	1920×1080P@60HZ (148MHZ), 8-BIT COLOR	LPCM 7.1 &
UHD/2CH	3840×2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 2.0
UHD/MCH	3840×2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &
UHD+/2CH	3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 2.0
UHD+/MCH	3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &

DEVICE SETTINGS

This page provides control over the Switcher’s Hardware related settings and options including USD port power, IR and fan control.



USER CONFIGURATION

This tab provides User Configuration Options including changing the password for the Administrator account, and both the user name and password for the General User Account.



Note: The General User Account has limited access to the WebGUI and can only change Video Routing, Store/Recall Presets and Modify the General User’s Own Account Settings.

SYSTEM SETTINGS

This tab provides system information, power control, Ethernet configuration options, system configuration backup/restore, and firmware update functions.

The screenshot displays the 'System' settings page of a web interface. On the left, a vertical sidebar contains navigation links: 'Video Switch', 'Edid Settings', 'Device Settings', 'User Config', 'System Settings', and 'Admin - Logout' (highlighted in red). The main content area is titled 'System' and includes the following sections:

- Serial Number**: 000000000000
- MAC Address**: FF:FF:FF:FF:FF:FF
- Power**: A toggle switch is currently set to 'ON'.
- Network**:
 - IP Mode**: A dropdown menu is set to 'STATIC IP'.
 - IP**: Input field containing '192.168.1.50'.
 - Netmask**: Input field containing '255.255.255.0'.
 - Gateway**: Input field containing '192.168.1.1'.
 - A 'Save' button is located to the right of the network fields.
- HTTP Port**: 80
- Telnet Port**: 23
- Download Current Configuration**: A 'Download' button.
- Restore Configuration**: A 'Choose File' button (displaying 'No file chosen') and a 'Restore' button.
- Reset to Default**: An 'ALL Reset' button.
- Firmware Upgrade**: A 'Choose File' button (displaying 'No file chosen') and an 'Upgrade' button.

SWITCHER

Input	Eight (8) 18G 4K HDMI ports
Output	Eight (8) 18G 4K HDMI ports
Control	LAN (1), RJ45; RS-232 (1), DB-9; IR (1) Input
Service	USB, for firmware upgrade
USB Powering	Eight (8) USB ports with 5V 1A

PHYSICAL

Dimensions Standalone	17.25”(W) x 10.6”(D) x 1.9”(H)
Power	24 VDC @ 6.25 Amp
Operating Temperature	0 to 40°C
Humidity	0 to 90% RH, Non-Condensing

CERTIFICATIONS

CE, FCC

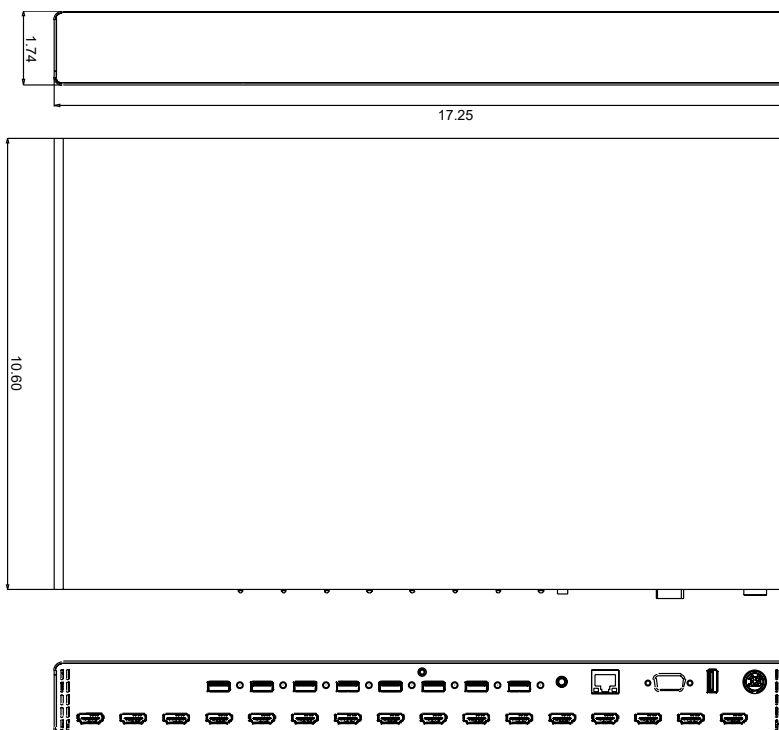
GREEN COMPLIANCE

RoHS

ORDER INFORMATION

LBS-88H2 8x8 18G HDMI Switcher

PANEL DRAWING



5.1 Replacement Policy

Standard products found defective on arrival (DOA) will be replaced, based on availability, within 24 to 48 hours anywhere in the U.S. Please call Customer Service at 800-214-0222 for information.

5.2 Return/Repair Service

The LBS-88H2 HDMI Matrix Switcher contains no user serviceable components. If you have a problem with your unit, please contact the Customer Service Department. To facilitate our return/ repair processing please contact Broadata Communications, Inc. to obtain a Return Material Authorization (RMA). Please include the following information:

- Product Model Number
- Serial Number
- Complete Description of Problem
- Hardware Installation Description

Broadata Communications, Inc.
2545 West 237th Street, Suite K
Torrance, CA 90505
1-800-214-0222
(310) 530-1416
(310) 530-5958 (Facsimile)
e-mail: CustomerService@Broadatacom.com

Website: www.broadatacom.com

6.0 LIMITED WARRANTY

Broaddata Communications, Inc. (BCI) warrants, for a period of one year from date of shipment, each product sold shall be free from defects in material and workmanship. BCI will correct, either by repair, or at BCI's election, by replacement, any said products that in our sole discretion prove to be defective and are returned to the manufacturing location within 30 days after such defect is ascertained. All warranties are limited to defects arising under normal use and do not include malfunctions or failure resulting from misuse, abuse, neglect, alterations, electrical power problems, usage not in accordance with product instructions, improper installation, or damage determined by BCI to have been caused by the Buyer or repair made by a third party. Limited warranties granted on products are to the initial customer end-user and are not transferable. OUR LIABILITY UNDER THIS WARRANTY SHALL IN ANY CASE BE LIMITED TO THE INVOICE VALUE OF THE PRODUCT SOLD AND BCI SHALL NOT BE LIABLE TO ANYONE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE USE OF ITS PRODUCTS OR THE SALE THEREOF. We make NO WARRANTY AS TO THE MERCHANTABILITY OF ANY GOODS, OR THAT THEY ARE FIT FOR ANY PARTICULAR PURPOSE OR END APPLICATION NOR DO WE MAKE ANY WARRANTY, EXPRESSED OR IMPLIED OTHER THAN AS STATED ABOVE.

NO.	COMMAND	PARAMETERS	DESCRIPTION
1	HELP <X>	<X> = EMPTY STRING: <X> NOT SPECIFIED <X> = COMMAND NAME (SHOWS DETAILED	SHOWS A LIST OF AVAILABLE COMMANDS AND DETAILED INFORMATION ABOUT SYNTAX
2	?	NONE	SHOWS A LIST OF AVAILABLE COMMANDS
3	SET FACTORY DEFAULT	NONE	SETS WHOLE UNIT TO FACTORY DEFAULT
4	SET FACTORY IPCONFIG DEFAULT	NONE	SETS UNIT TO DEFAULT IP SETTINGS IP: 192.168.1.50 NETMASK: 255.255.255.0 GATEWAY: 192.168.1.254
5	SET FACTORY OUT ROUTE DEFAULT	NONE	SETS ROUTING TO FACTORY DEFAULT SETTING
6	SET POWER <X>	<X> = ON, STANDBY	TURNS THE UNIT ON OR STANDBY WHEN THE UNIT IS STANDBY, IT IS IN "STANDBY" OPERATION
7	GET POWER	NONE	SHOWS THE CURRENT POWER STATE
8	SET UART 1 BAUDRATE <X>	<X> = 19200 DEFAULT 115200	SETS THE BAUD RATE OF RS-232 INTERFACE
9	GET UART 1 BAUDRATE		SHOWS THE CURRENT BAUD RATE OF RS-232 INTERFACE
10	SET IR IN CHANNEL <X>	<X> = 0 - 15	SETS THE IR REMOTE CHANNEL
11	GET IR IN CHANNEL		SHOWS THE CURRENT IR REMOTE CHANNEL
12	SET IR IN CUSTOM CODE <X>	<X> = 0000 - 7FFF IN HEX	SETS THE IR CUSTOM CODE
13	GET IR IN CUSTOM CODE		SHOWS THE CURRENT IR CUSTOM CODE
14	SET FAN CONTROL MODE <X>	<X> = 0 (ALWAYS ON), 1 (AUTO)	SETS THE INTERNAL FAN MODE
15	GET FAN CONTROL MODE		SHOWS THE CURRENT FAN MODE
16	GET FAN <X> SPEED	<X> = 1, 2 (FAN NUMBER)	SHOWS THE CURRENT RPM SPEED OF FAN <X>
17	GET DEVICE TEMPERATURE		SHOWS CURRENT INTERNAL TEMPERATURE
18	SET USB <X> POWER SUPPLY <Y>	<X> = 1 - 8 (8 USB PORT OUTPUTS) <Y> = ON, OFF	SETS THE POWER STATE OF USB PORT <X>
19	GET USB <X> POWER SUPPLY	<X> = 1 - 8 (8 USB PORT OUTPUTS)	SHOWS THE POWER STAT OF USB PORT <X>
20	GET FW VER		RETURNS FIRMWARE VERSION
21	SET OUT <X> ROUTE <Y>	<X> = A - H (OUTPUT PORTS) <Y> = 1 - 8 (INPUT PORTS)	ROUTES INPUT <Y> TO OUTPUT <X>
22	GET OUT <X> ROUTE	<X> = A - H (OUTPUT PORTS)	SHOWS THE CURRENT INPUT ROUTE TO OUTPUT <X>
23	SET OUT ROUTE <X>,<Y>,<Z>...	<X> = [A-H][1-8],[A-H][1-8]... (PAIRS OF [OUTPUT][INPUT] SEPARATED BY COMMAS) EXAMPLE: SET OUT ROUTE B4,C7,A2	SETS ONE OR MORE INPUT/OUTPUT ROUTING PAIRS
24	SET ALL OUT ROUTE <X>	<X> = 1 - 8 (INPUT)	SETS ALL OUTPUTS TO DISPLAY INPUT <X>
25	GET ALL OUT ROUTE		SHOWS THE CURRENT ROUTING FOR
26	SET CURRENT ROUTE TO PRESET <X>	<X> = 1 - 8 (PRESET NUMBER)	SAVES CURRENT ROUTING TO PRESET <X>
27	SET ROUTE PRESET <X>		ACTIVATES PRESET NUMBER <X>
28	SET ROUTE PRESET <X> NAME <Y>	<X> = 1 - 8 (PRESET NUMBER) <Y> = PRESET NAME STRING, 32 ASCII	SETS THE NAME OF ROUTING PRESET <X> TO <Y>
29	GET ROUTE PRESET <X> NAME	<X> = 1 - 8 (PRESET NUMBER)	SHOWS THE CURRENT NAME OF PRESET <X>
30	PRESET <X> LIST	> = 1 - 8 (PRESET NUMBER)	
31	SET OUT <X> MASK <Y>	<X> = A - H (OUTPUT PORT) <Y> = ON AV MUTE IS ON OFF AV MUTE IS OFF	ENABLES/DISABLES AV MUTE OF OUTPUT <X>

NO.	COMMAND	PARAMETERS	DESCRIPTION																		
32	GET OUT <X> MASK	<X> = A - H (OUTPUT PORT)	SHOWS THE CURRENT AV MUTE STATE OF OUTPUT <X>																		
33	SET IN <X> NAME <Y>	<X> = 1 - 8 (INPUT PORT) <Y> = INPUT NAME STRING, 32 ASCII CHARACTERS MAXIMUM	SETS THE NAME OF INPUT <X> TO <Y>																		
34	GET IN <X> NAME	<X> = 1 - 8 (INPUT PORT)	SHOWS THE CURRENT NAME OF INPUT <X>																		
35	SET OUT <X> NAME <Y>		SETS THE NAME OF OUTPUT <X> TO <Y>																		
36	GET OUT <X> NAME	<X> = A - H (OUTPUT PORT)	SHOWS THE CURRENT NAME FOR OUTPUT PORT <X>																		
37	GET IN NAME LIST	NONE	SHOWS LIST OF ALL INPUT PORT NAMES																		
38	GET OUT NAME LIST	NONE	SHOWS LIST OF ALL OUTPUT PORT NAMES																		
39	SET OUT <X> 4K2K DOWNSCALE MODE <Y>																				
40	GET OUT <X> 4K2K DOWNSCALE MODE																				
41	SET ALL IN EDID MODE <X>	<X> = ON, OFF	ENABLES/DISABLES "ALL INPUT" EDID MODE																		
42	GET ALL IN EDID MODE	NONE	SHOWS CURRENT "ALL INPUT" EDID MODE STATE																		
43	SET ALL IN EDID <X>	<X> = NUMBER BETWEEN 1 - 22 1 [INTERNAL 1] 2 [INTERNAL 2] 3 [INTERNAL 3] 4 [INTERNAL 4] 5 [INTERNAL 5] 6 [INTERNAL 6] 7 [USER 1] 8 [USER 2] 9 [USER 3] 10 [USER 4] 11 [USER 5] 12 [USER 6] 13 [USER 7] 14 [USER 8] 15 [SINK A] 16 [SINK B] 17 [SINK C] 18 [SINK D] 19 [SINK E] 20 [SINK F] 21 [SINK G] 22 [SINK H]	INTERNAL EDID 1-6 <table border="1" data-bbox="1029 982 1502 1392"> <tr> <td>FHD/2CH</td> <td>1920x1080P@60HZ (148MHZ), 8-BIT COLOR</td> <td>LPCM 2.0</td> </tr> <tr> <td>FHD/MCH</td> <td>1920x1080P@60HZ (148MHZ), 8-BIT COLOR</td> <td>LPCM 7.1 &</td> </tr> <tr> <td>UHD/2CH</td> <td>3840x2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 2.0</td> </tr> <tr> <td>UHD/MCH</td> <td>3840x2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 7.1 &</td> </tr> <tr> <td>UHD+/2CH</td> <td>3840x2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 2.0</td> </tr> <tr> <td>UHD+/MCH</td> <td>3840x2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 7.1 &</td> </tr> </table> Sets the EDID to use in ALL INPUTS. "All input" EDID mode must be set to ON (see "SET ALL IN EDID MODE")	FHD/2CH	1920x1080P@60HZ (148MHZ), 8-BIT COLOR	LPCM 2.0	FHD/MCH	1920x1080P@60HZ (148MHZ), 8-BIT COLOR	LPCM 7.1 &	UHD/2CH	3840x2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 2.0	UHD/MCH	3840x2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &	UHD+/2CH	3840x2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 2.0	UHD+/MCH	3840x2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &
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44	GET ALL IN EDID	NONE	SHOWS THE EDID SELECTED FOR USE																		

NO.	COMMAND	PARAMETERS	DESCRIPTION																		
45	SET IN <X> EDID <Y>	<X> = 1 - 8 (INPUT PORT) <Y> = NUMBER BETWEEN 1 AND 8 1 [INTERNAL 1] 2 [INTERNAL 2] 3 [INTERNAL 3] 4 [INTERNAL 4] 5 [INTERNAL 5] 6 [INTERNAL 6] 7 [USER 1] 8 [USER 2] 9 [USER 3] 10 [USER 4] 11 [USER 5] 12 [USER 6] 13 [USER 7] 14 [USER 8] 15 [SINK A] 16 [SINK B] 17 [SINK C] 18 [SINK D] 19 [SINK E] 20 [SINK F] 21 [SINK G] 22 [SINK H]	INTERNAL EDID 1-6 <table border="1"> <tr> <td>FHD/2CH</td> <td>1920×1080P@60HZ (148MHZ), 8-BIT COLOR</td> <td>LPCM 2.0</td> </tr> <tr> <td>FHD/MCH</td> <td>1920×1080P@60HZ (148MHZ), 8-BIT COLOR</td> <td>LPCM 7.1 &</td> </tr> <tr> <td>UHD/2CH</td> <td>3840×2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 2.0</td> </tr> <tr> <td>UHD/MCH</td> <td>3840×2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 7.1 &</td> </tr> <tr> <td>UHD+/2CH</td> <td>3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 2.0</td> </tr> <tr> <td>UHD+/MCH</td> <td>3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)</td> <td>LPCM 7.1 &</td> </tr> </table> <p>Assigns EDID <Y> to input <X></p> <p>Note: To function, “All in” EDID mode must be set OFF (see “SET ALL IN EDID MODE”)</p>	FHD/2CH	1920×1080P@60HZ (148MHZ), 8-BIT COLOR	LPCM 2.0	FHD/MCH	1920×1080P@60HZ (148MHZ), 8-BIT COLOR	LPCM 7.1 &	UHD/2CH	3840×2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 2.0	UHD/MCH	3840×2160P@30HZ (297MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &	UHD+/2CH	3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 2.0	UHD+/MCH	3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &
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UHD+/MCH	3840×2160P@60HZ (594MHZ), DEEP COLOR (8/10/12-BIT)	LPCM 7.1 &																			
46	GET IN <X> EDID	<X> = 1 - 8 (INPUT PORT)	SHOWS THE EDID ASSIGNED TO INPUT <X>																		
47	GET ALL IN EDID LIST	NONE	SHOWS THE CURRENT EDID ASSIGNMENTS FOR ALL INPUTS																		
48	GET IN EDID LIST	NONE	SHOWS THE LIST OF AVAILABLE EDID FILES																		
49	SET EDID <X> NAME <Y>	<X> = 7 - 14 (USER EDID) <Y> = EDID NAME STRING, 32 ASCII	SETS A CUSTOM NAME FOR USER EDID <X>																		
50	GET EDID <X> NAME	<X> = 1 - 22 (EDID NUMBER)	SHOWS THE NAME OF EDID NUMBER <X>																		
51	GET INTERNAL <X> EDID DATA	<X> = 1 - 6 (INTERNAL EDID)	SHOWS THE CONTENTS OF INTERNAL EDID <X> IN HEX																		
52	SET USER <X> EDID DATA <Y>	<X> = 1 - 8 (USER EDID) <Y> = EDID DATA, 256 HEX PAIRS	UPLOADS EDID DATA IN HEX FORMAT TO USER EDID <X>																		
53	GET USER <X> EDID DATA	<X> = 1 - 8 (USER EDID)	SHOWS USER EDID <X> DATA																		
54	GET SINK <X> EDID DATA	<X> = A - H (OUTPUT PORT)	SHOWS SINK'S EDID DATA FROM OUTPUT PORT <X>																		
55	GET IN <X> EDID DATA	<X> = 1 - 8 (INPUT PORT)	SHOWS THE EDID DATA USED ON INPUT <X>																		
56	SET IN <X> HDCP MODE <Y>	<X> = 1 - 8 (INPUT PORT) <Y> = 0 (HDCP DISABLED) 1 (HDCP FOLLOW SOURCE) 2 (HDCP FOLLOW OUPUT)	SETS THE HDCP MODE FOR INPUT <X>																		
57	GET IN <X> HDCP MODE	<X> = 1 - 8 (INPUT PORT)	SHOWS THE HDCP MODE FOR INPUT <X>																		
58	GET IN <X> HDCP STATUS	<X> = 1 - 8 (INPUT PORT) FEEDBACK CODES: 0 (HDCP OFF) 1 (HDCP 1.4) 2 (HDCP 2.2)	SHOWS THE CURRENT HDCP STATUS OF THE INPUT PORT <X>																		

NO.	COMMAND	PARAMETERS	DESCRIPTION
59	GET OUT <X> HDCP STATUS	SDAS <X> = 1 - 8 (INPUT PORT) FEEDBACK CODES: 0 (NO HDCP) 1 (HDCP 1.4) 2 (HDCP 2.2) 3 (HDCP 1.4+2.2)	SHOWS THE CURRENT HDCP STATUS OF OUTPUT <X>
60	GET IN <X> HDCP ABILITY	<X> = 1 - 8 (INPUT PORT) FEEDBACK CODES: 0 (NO HDCP) 1 (HDCP 1.4) 2 (HDCP 2.2) 3 (HDCP 1.4+2.2)	SHOW THE HDCP CAPABILITY SUPPORTED BY INPUT <X>
61	GET OUT <X> HDCP ABILITY	<X> = A - H (OUTPUT PORT) FEEDBACK CODES: 0 (NO HDCP) 1 (HDCP 1.4) 2 (HDCP 2.2)	SHOW THE HDCP CAPABILITY SUPPORTED BY OUTPUT <X>
62	SET IP MODE <X>	<X> = 0 (STATIC IP MODE) 1 (DHCP IP MODE)	SETS THE IP CONFIGURATION MODE
63	GET IP MODE	NONE	SHOWS THE CURRENT IP CONFIGURATION MODE
64	GET IPCONFIG	NONE	SHOWS THE CURRENT COMPLETE IP
65	SET IPADDR <X>	<X> = Y.Y.Y.Y WHERE Y = 0 - 255	SETS THE STATIC IP ADDRESS
66	GET IPADDR	NONE	SHOWS THE CURRENT IP ADDRESS
67	SET NETMASK <X>	<X> = Y.Y.Y.Y WHERE Y = 0 - 255	SETS THE NETMASK ADDRESS
68	GET NETMASK	NONE	SHOWS THE NETMASK ADDRESS
69	SET GATEWAY <X>	<X> = Y.Y.Y.Y WHERE Y = 0 - 255	SETS THE GATEWAY ADDRESS
70	GET GATEWAY	NONE	SHOWS THE GATEWAY ADDRESS
71	GET MAC ADDR	NONE	SHOWS THE MAC ADDRESS
72	SET TELNET PORT <X>	<X> = 0 - 65535 (PORT NUMBER)	SETS THE TELNET PORT NUMBER
73	GET TELNET PORT	NONE	SHOWS THE TELNET PORT NUMBER
74	GET HOSTNAME	NONE	SHOWS THE CURRENT HOSTNAME
75	SET WEBGUI USERNAME <X>	<X> = USERNAME, 16 CHARACTERS MAXIMUM	SETS THE USER LOGIN NAME FOR THE WEB INTERFACE
76	GET WEBGUI USERNAME	NONE	SHOWS THE WEB INTERFACE USER LOGIN NAME
77	SET WEBGUI PASSWORD <X>	<X> = USER PASSWORD, 16 CHARACTERS MAX	SETS THE USER LOGGING PASSWORD
78	GET WEBGUI PASSWORD	NONE	SHOWS THE WEB INTERFACE PASSWORD
79	GET COMMAND VER	NONE	SHOWS THE VERSION OF API COMMAND
80	GET MODEL NAME	NONE	SHOWS THE MODEL NAME TO THE SCREEN
81	GET TELNET MAXIMUM USER	NONE	SHOWS THE MAXIMUM TELNET USERS AVAILABLE TO LOG-IN
82	GET OUT <X> SYNC STATUS	<X> = A - H (OUTPUT PORT)	SHOWS THE OUTPUT LINK STATUS FOR OUTPUT <X>
83	GET OUT PORT NUMBER	NONE	SHOWS THE NUMBER OF OUTPUTS
84	GET IN PORT NUMBER	NONE	SHOWS THE NUMBER OF INPUTS
85	GET OUT TYPE LIST	NONE	
86	GET IN TYPE LIST	NONE	
87	GET OUT OSD BACKGROUND COLOR LIST	NONE	
88	GET OUT <X> OSD TRANSPARENCY LEVEL	<X> = A - H (OUTPUT PORT)	SHOWS THE TRANSPARENCY LEVEL

NO.	COMMAND	PARAMETERS	DESCRIPTION
89	SET OUT <X> OSD TRANSPARENCY LEVEL <Y>	<X> = A - H (OUTPUT PORT) <Y> =	SETS THE TRANSPARENCY LEVEL OF THE OSD FOR OUTPUT <X>
90	GET OUT <X> OSD BACKGROUND COLOR	<X> = A - H (OUTPUT PORT)	SHOWS THE BACKGROUND COLOR SETTING
91	SET OUT <X> OSD BACKGROUND COLOR <Y>	<X> = A - H (OUTPUT PORT) <Y> =	SETS THE BACKGROUND COLOR SETTING OF THE OSD FOR OUTPUT <X>
92	GET OUT BANNER FONT COLOR LIST	<X> = A - H (OUTPUT PORT)	SHOWS THE COLORS AVAILABLE FOR
93	GET OUT <X> BANNER FONT COLOR	<X> = A - H (OUTPUT PORT)	SHOWS THE BANNER FONT COLOR
94	SET OUT <X> BANNER FONT COLOR <Y>	<X> = A - H (OUTPUT PORT) <Y> = BLACK, WHITE, RED, GREEN, BLUE, MAGENTA, YELLOW, CYAN, GRAY	SETS THE BANNER FONT COLOR TO <Y> ON OUTPUT <X>
95	GET OUT <X> BANNER FONT SIZE	<X> = A - H (OUTPUT PORT)	SHOWS THE BANNER FONT SIZE FOR OUTPUT <X>
96	SET OUT <X> BANNER FONT SIZE <Y>	<X> = A - H (OUTPUT PORT) <Y> = 1 (SMALL) 2 (MEDIUM) 3 (LARGE)	SETS THE BANNER FONT SIZE ON OUTPUT <X> TO SIZE <Y>
97	GET OUT <X> BANNER TEXT	<X> = A - H (OUTPUT PORT)	SHOWS THE LABEL FOR OUTPUT <X>
98	SET OUT <X> BANNER TEXT <Y>	<X> = A - H (OUTPUT PORT) <Y> =	SETS THE LABEL <Y> FOR OUTPUT <X> ON THE OSD
99	GET OUT <X> OSD	<X> = A - H (OUTPUT PORT)	SHOWS THE OSD MENU ON/OFF STATUS FOR OUTPUT <X>
100	SET OUT <X> OSD <Y>	<X> = A - H (OUTPUT PORT) <Y> = ON, OFF	SETS THE OSD MENU ON/OFF STATUS FOR OUTPUT <X>
101	GET OUT <X> TIMING GROUP	<X> = A - H (OUTPUT PORT)	SHOWS THE TIMING GROUP OF THE HD FOR 4K30 AND BELOW RESOLUTIONS UHD FOR 4K60
102	GET IN <X> TIMING GROUP	<X> = 1 - 8 (INPUT PORT)	SHOWS THE TIMING GROUP OF THE VIDEO INPUT PORT <X> HD FOR 4K30 AND BELOW RESOLUTIONS UHD FOR 4K60



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