DXB-8i Series

DXB-8i-W • DXB-8i-B

1 Gang Decora® 8 Button Wall Plate Controller

DXB-8i-W

DXB-8i-B

SAFETY INSTRUCTIONS

Please review the following safety precautions. If this is the first time using this model, then read this manual before installing or using the product. If the product is not functioning properly, please contact your local dealer or Aurora for further instructions.

The lightning symbol in the triangle is used to alert you to the presence of dangerous voltage inside the product that may be sufficient to constitute a risk of electric shock to anyone opening the case. It is also used to indicate improper installation or handling of the product that could damage the electrical system in the product or in other equipment attached to the product.

The exclamation point in the triangle is used to alert you to important operating and maintenance instructions. Failure to follow these instructions could result in injury to you or damage to the product.

Be careful with electricity:

- **Power outlet**: To prevent electric shock, be sure the electrical plug used on the product power cord matches the electrical outlet used to supply power to the Aurora product. Use only the power adapter and power connection cables designed for this unit.
- **Power cord**: Be sure the power cord is routed so that it will not be stepped on or pinched by heavy items.
- **Lightning**: For protection from lightning or when the product is left unattended for a long period, disconnect it from the power source.

Also follow these precautions:

- **Ventilation**: Do not block the ventilation slots if applicable on the product or place any heavy object on top of it. Blocking the air flow could cause damage. Arrange components so that air can flow freely. Ensure that there is adequate ventilation if the product is placed in a stand or cabinet. Put the product in a properly ventilated area, away from direct sunlight or any source of heat.
- **Overheating**: Avoid stacking the Aurora product on top of a hot component such as a power amplifier.
- **Risk of Fire:** Do not place unit on top of any easily combustible material, such as carpet or fabric.
- **Proper Connections**: Be sure all cables and equipment are connected to the unit as described in this manual.
- **Object Entry**: To avoid electric shock, never stick anything in the slots on the case or remove the cover.
- **Water Exposure**: To reduce the risk of fire or electric shock, do not expose to rain or moisture.
- **Cleaning**: Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- **ESD**: Handle this unit with proper ESD care. Failure to do so can result in failure.

FCC

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.
2) This device must accept any interference received, including interference that may cause undesired operation.

TABLE OF CONTENTS

PACKAGE CONTENTS

Please make sure the following items are included within your package. Contact your dealer if any items are missing or damaged.

- 1 qty DXB-8i
- 1 qty Gang Decora® Paintable White Wall Plate

Optional Accessories:

- 48V DC power supply for stand-alone operation (PS0094-2)
- 48v POE Injector supply (PS0081-1)

Power supplies are sold separately.

Note: Go to www.auroramm.com for latest manual and firmware.

INTRODUCTION

About

The DXB-8i is a low cost 8 button single gang button panel. Designed to work with just about any RS-232 device on the market, the DXB-8i allows any RS-232 string to be assigned to the press and release of each button. Advanced functionality is available like repeat on hold. Toggle, macro (delay between multiple commands), and interlocking buttons for transport controls, power on/off, etc.

The buttons can individually be lit red, green, or blue so in dimly lit areas it can be seen. There are over 60 different laser etched button types available as well as custom laser etching. Available in Decora® white or black, the DXB-8i is designed to match.

Low cost, low power, simplicity, and compatibility with just about any device on the market makes the DXB-8i the simple sweet solution of choice.

Features

- 8 backlit buttons (Red, Green, Blue)
- Fits in standard 1 gang Decora® style outlet
- 1 LAN PoE
- 1 RS-232 port
- 1 IR port
- Buttons individually programmable for RS-232, IR, HTTP Post, TCP & Telnet
- Programmable on Press, Release, Toggle, and Hold
- Macro functions and interlocking buttons
- 9600 – 115k Baud Rate Selectable
- Customizable laser etched buttons
- Low Power
- 48v DC Aux Power
- Low Depth .98” for Floor & Table Boxes

DXB-8i Front

Buttons

These backlit laser etched buttons come as a default with the DXB-8. Other buttons are available (see "Button Cap Selection Chart"). The LED backlighting can be set to light red, green, or blue. The default scheme is to match the DXW-2 wall plate series to remotely select the inputs and to also control the display.

- ON
- OFF
- VGA
- HDMI
- Up Arrow
- Down Arrow
- Mic Mute
- Speaker Mute

DXB-8i Rear

Rear Connections

- RS-232 – Connect RS-232 device up to 115k baud. Note there is a **5V OUTPUT** line for possible aux application.
- LAN – For network and/or POE powering.
- IR – For IR control (via optional IR emitter).

Default Settings:
Baud Rate: 9600
IP Mode: Static @ 192.168.1.100

BUTTON SPECIAL FUNCTIONS

Buttons are referenced 1-8 starting on the upper left to lower left for 1-4 and the upper right to lower right for 5-8.

1 5

2 6

3 7

4 8

Factory Test 2 & 6

Press and hold **Buttons 2** & **6** down for 5 sec to perform a **Factory Test**. The **Factory Test** lights all buttons Red for 2 sec, Blue for 2 sec, and Green for 2 sec. Next it will blink a red LED starting at button 1. When pressed, the next button in order will blink red and the prior button will turn off until all 8 buttons are pressed. After **Button 8** is pressed, the unit will finish with an **RS-232 Loop Test** on **Port 1** and **Port 2** to verify back and forth communications. The LED on **Buttons 1** & **2** will light blue and pressing button **1** will send string from **Port 1** to **Port 2** and pressing **Button 2** will send string from **Port 2** to **Port 1**. During both tests, the operation checks for proper response. Sent string "!test" is to be responded with "~test". A successful check will yield LED on **Button 4** to light Green for success or Red for fail on **Port 1**. Use the LED for **Button 5** as an indicator for the test on **Port 2**. Once **Port 2** test is done, the LED on **Button 8** will become Cyan and when pressed, it will end the **Factory Test Mode** by turning on all 8 LEDs Blue for 1 sec then turn off.

Factory Reset 3 & 7

Press and hold **Buttons 3** & **7** down for 10 sec to perform a **Factory Reset**. **Factory Reset** will set **RS-232 Ports 1** & **2** to **96008N1**, unit **IP Address** to **192.168.1.100**, and assign strings on **Button Push**. The string is "!1B1" for **Button 1** and increments accordingly for all 8 buttons. The **Button Release** will be set to "!1R1" for **Button 1** and increments accordingly for all 8 buttons. **Button Hold** will be null. All LEDs will be defaulted to Blue for **Press** and **Release**.

DXB-8i Button Lockout 4 & 8

Press and hold **Button 4** & **8** to toggle the **Button Lockout** feature. Upon actuating, all buttons will flash RED, and the unit is locked from user input. Upon toggling the feature off, all buttons will flash GREEN briefly, meaning that the unit is now unlocked for normal operation.

BUTTON CAP SELECTION

Button Caps

The DXB-8 buttons are removable and can be replaced with a variety of buttons listed on the chart below in white or black. For caps not listed on the chart custom laser etched button caps are available for a one time processing fee to accommodate any install. Check with sales@auroramm.com for more information.

Button Cap Selection Chart

	A	B	C	D	E	F	G	H	J	K
0	0	1	2	3	4	5	6	7	8	9
1	TV	TV1	TV2	HDMI	HDMI1	HDMI2	DVD	VIDEO	SAT	CBL
2	AUX	AUX1	AUX2	PROJ	PROJ1	PROJ2	DOC	PC	PC1	PC2
3	YPbPr	VCR	VTC	VGA	VGA1	VGA2	SCRN UP	SCRN DN	*	#
4	■	▶	⏸	▶▶	▶|	▲	ENTER	MENU	INPUT	EXIT
5	⏻	ON	OFF	🔉	🔊	🔇	🎤	.	●	●
6	APPLE TV									
BLANK		← Please order DXB-CB-W for white, DXB-CB-B for black.								

Notes:
A blank (non-etched) button is also available. Buttons can be reversed 180°, but not 90° or 270°.
- Button 4B is used for Play, Left, and Right
- Button 4D is used for Fast Forward and Rewind
- Button 4E is used for Next and Previous
- Button 4F is used for Up and Down

Part Number Formula:
DXB-C[row][column]-[color]

[row] - Row number, **0-5**
[column] - Column letter, **A-K***
[color] - Button color, **B** (black) or **W** (white)

Example: White PROJ Button PN# = DXB-C2D-W

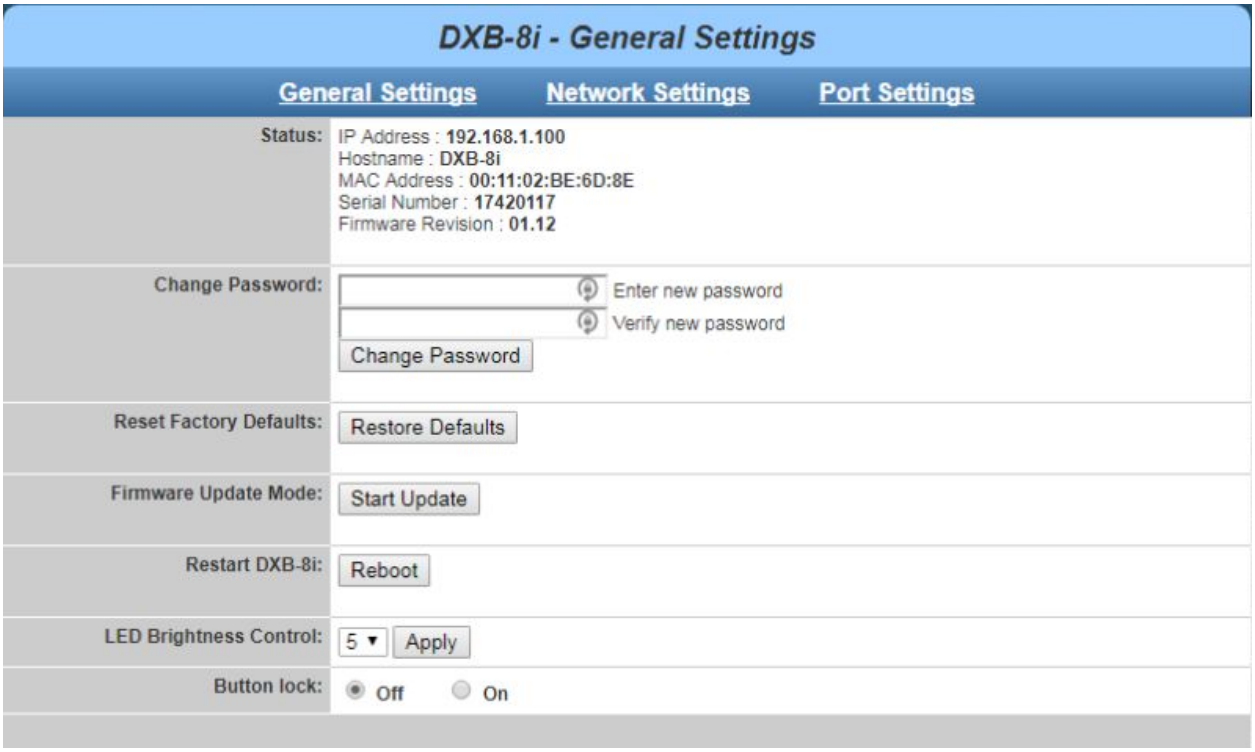
*Column "I" has been intentionally omitted

DXB-8i WEB SETUP PAGES

The DXB-8i Web Setup Pages can be accessed via 192.169.1.100/setup (Default IP).

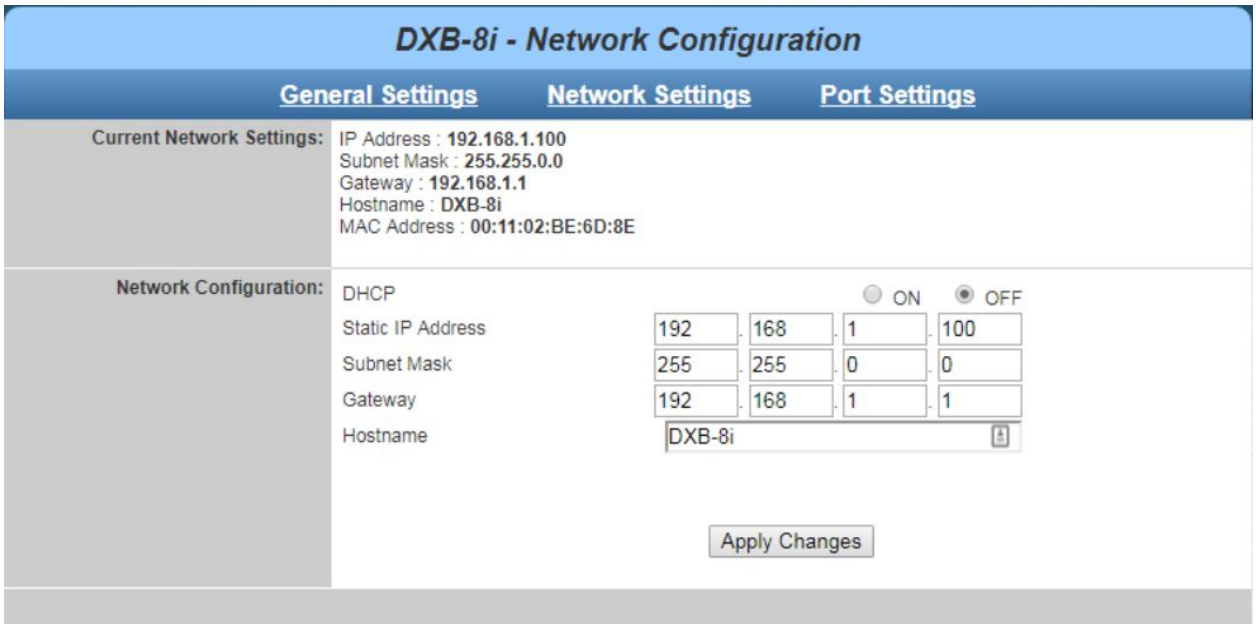
General Settings

The **General Settings** tab allows user to change password, restore factory defaults, set unit into firmware update mode, reboot DXB-8i, set button backlight intensity, or Lock / Unlock button interface.



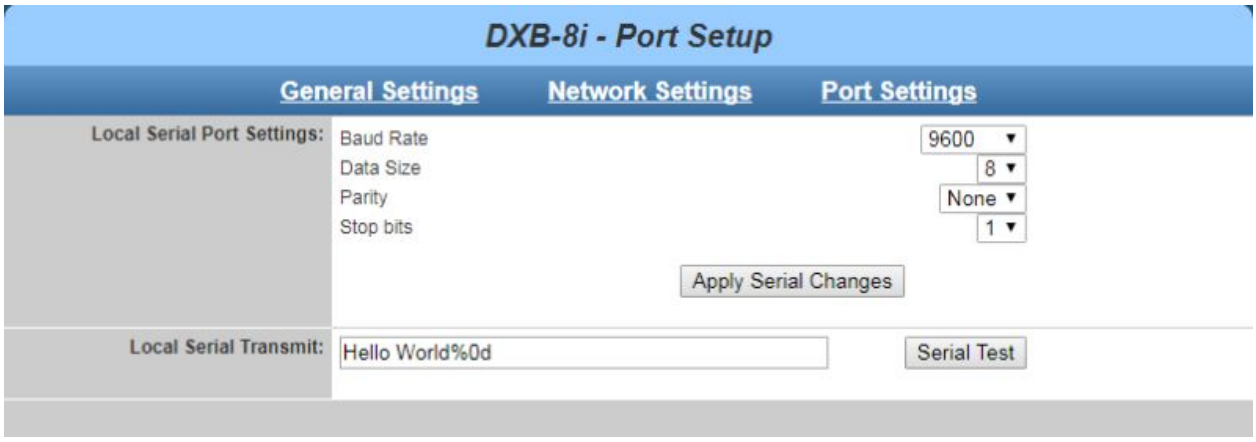
Network Settings

The **Network Settings** tab shows current network configuration, and allows the user to change these settings as needed.



Port Settings

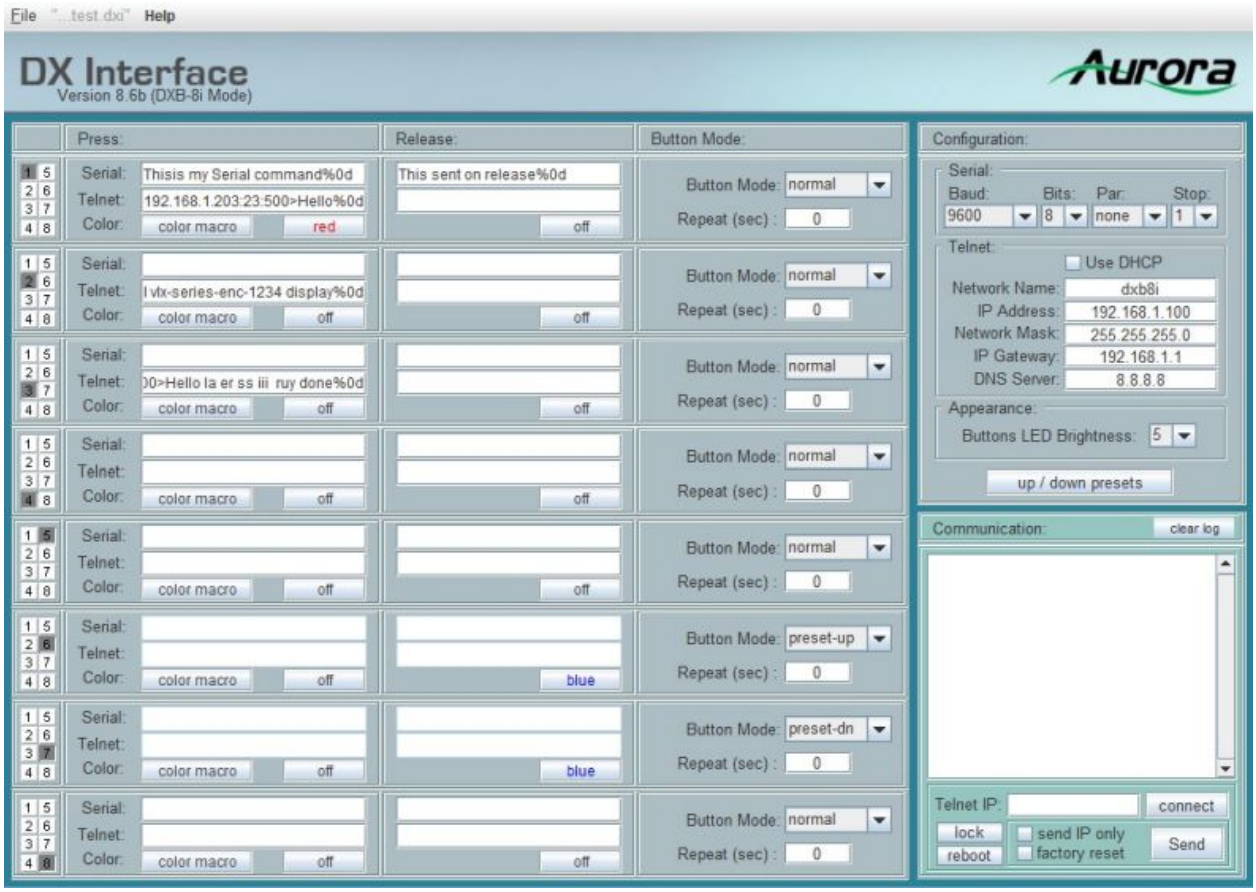
The **Port Settings** tab provides selection for **RS232** baud rate parameters. The Serial Test dialog window is used to send serial commands directly to the **RS232** port.



DXI PROGRAMMING SOFTWARE OVERVIEW

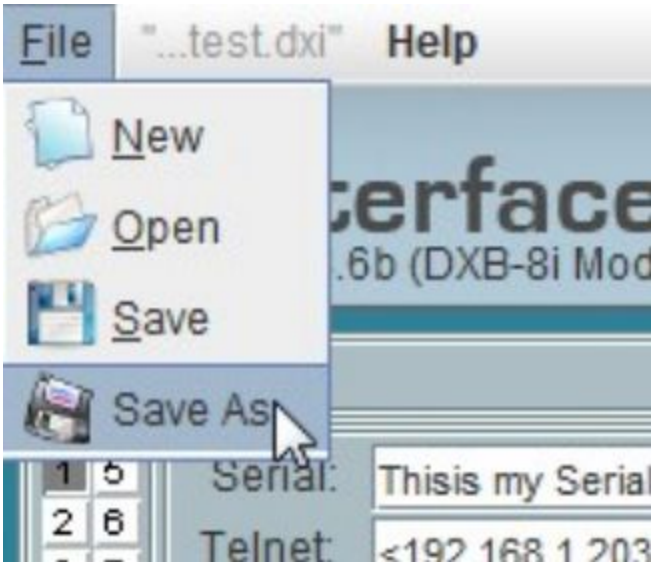
DX Interface

DX Interface is a free utility for programming the buttons with the various functions. It allows a user to assign Telnet, RS-232, IR and LED color selection to the different button states. These assignments can be applied to the push, release, and holding of the buttons. Refer to Appendix 2 for cable connection to a PC. DX Interface is designed to run on a Windows® PC. The latest versions of DX Interface can be downloaded from: http://portal.auroramultimedia.com/login



File Menu

Use the FILE menu to OPEN or SAVE / SAVE AS. Currently CTRL-S is not supported, so be sure to save via FILE menu.

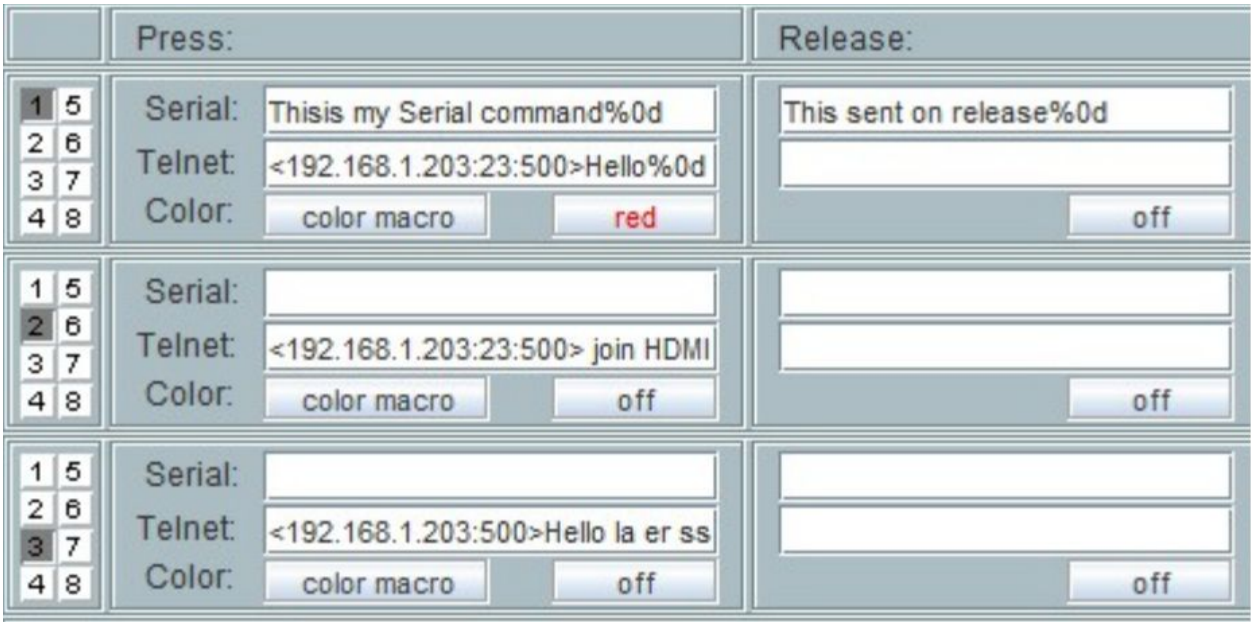


Programming DXI File

Each DXB-8i button is represented by a PRESS / RELEASE & Serial / Telnet parameter.

Note: "%" and "#" are special programming characters. when you need to send these as part of a command, double encode as %% or ##.

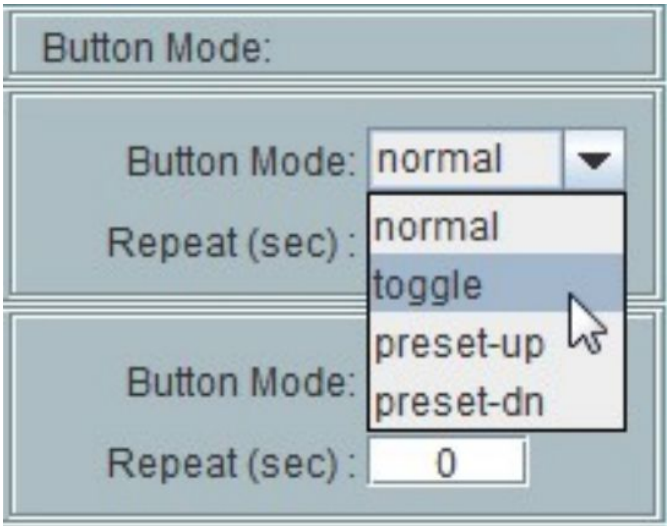
- **SERIAL:** Simply enter the desired command, using %XX to escape hex values as needed.
- **TELNET:** (Note: "< >" are required as shown below)
    - Format: Commands are preceded by <Addr:Port:Timeout:Type> telnet values.
        - Addr = Target IP Address
        - Port = Applicable IP Port
        - Timeout = In milliseconds *(Typical/Recommended is 1000)*
        - Type (Optional) = 0 or 1. This selects Raw TCP, or Telnet mode. (FW 1.16 Req'd)
    - Example: <192.168.1.83:23:1000:0>PON%0d
        - Note: For QX series controller communication, use timeout value of 1000
    - IR Commands: (Via Telnet) Currently, IR commands are called using Telnet, as formatted: <127.0.0.1:6970>send ir Onkyo.wir VOLUP%0d
        - Note: The IR file must be FTP'd onto the DXB-8i controller, in IR folder.



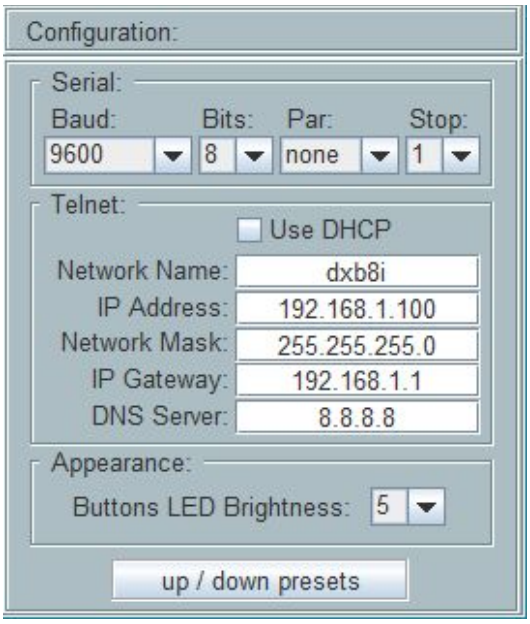
Button Mode

Buttons have 3 modes: “normal”, “toggle”, “preset-up”/”preset-dn”.

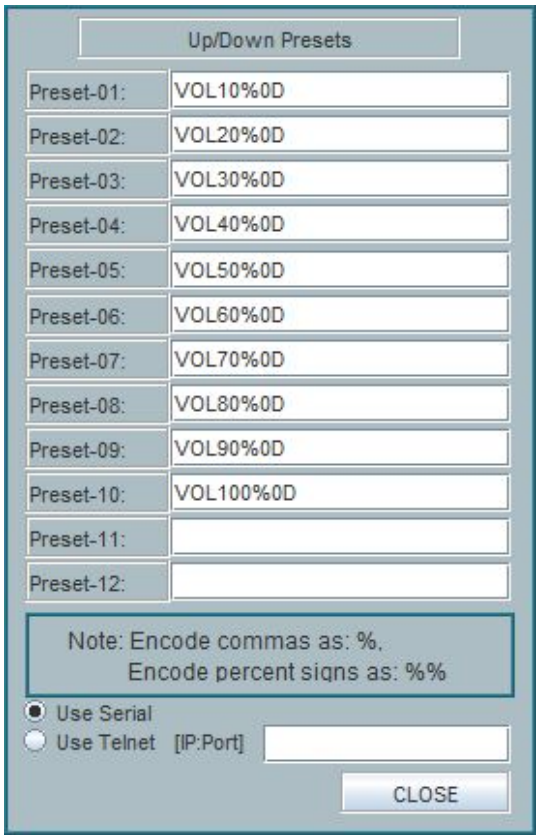
- “normal”: Commands are sent on Press/Release as programmed.
- “Toggle”: Button alternates between Press/Release states, sending and coloring as programmed (used for Mute On/Off or similar applications).
- “preset-up”/”preset-dn”: Used to call a range of absolute commands (see next section).



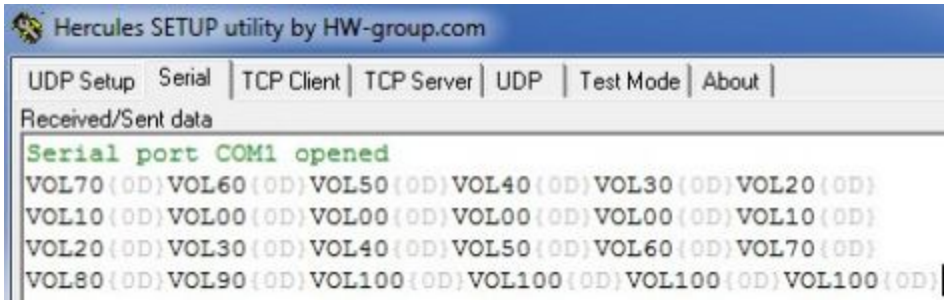
Up / Dn Presets



The dialog box provides 12 positions (Leave unused blank) for commands, Serial or Telnet. A typical application might be volume commands.



Here we've programmed 0-100% in increments of 10. You can see the output in the Hercules Terminal below.



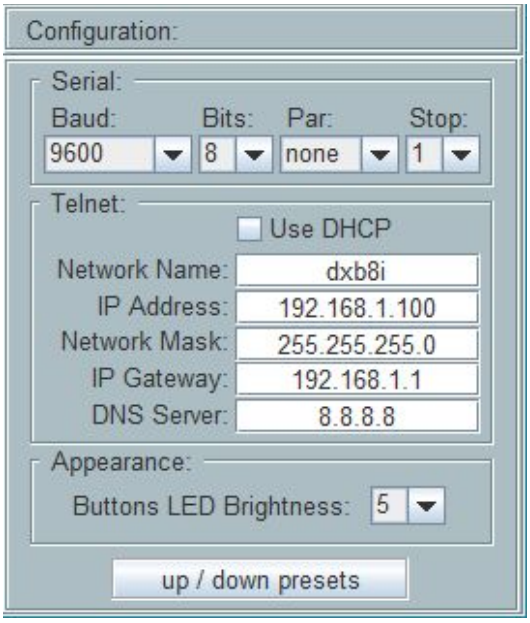
Color Macro

The COLOR MACRO option allows setting the color of one or many buttons simultaneously upon a button press or release.. A Typical application is having the ON button turn green, and the OFF button turn off...and then the OFF button turning red, and ON to off.

The other color option buttons simply set the Press/Release state if Macro function in not desired.

Configuration

The DXB-8i ships default: 192.168.1.100. You can set the desired programmed network parameters in the upper-right configuration window. **NOTE: During programming, the unit will change to the new address, so you may need to adjust your PC Network Card accordingly.**

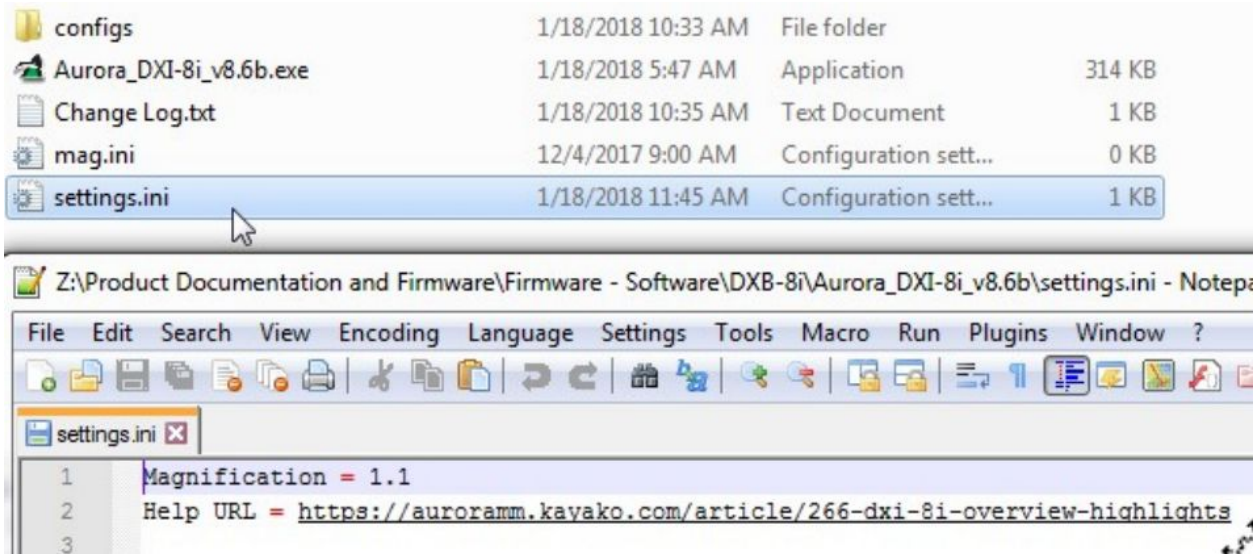


Sending Program

The Communications (Lower-right) window is to be set to the current IP address of the DXB-8i (Default 192.168.1.100). You can then press CONNECT and then SEND to program the DXB-8i. **NOTE: During programming, the unit will take the address as set in the configuration section, so you may need to adjust your PC network card accordingly.**

GUI Size

You can locate the “settings.ini” file where the “Aurora_DXI-8i_v[x].exe” is located, and open with a text editor. Adjust the “Magnification” parameter from 1.0 to 5.0 for scaling. The default setting is 1.1, which is suitable for a 1080HD display.



PROTOCOL GUIDE

RPC Protocol

Send to IP of unit, followed by RPC directory (e.g. 192.168.1.100/rpc).

Command	Description	Example Usage
GetFirmwareVersion	Returns the Firmware Version	method=GetFirmwareVersion
GetSerialNumber	Returns the Serial Number of Device	method=GetSerialNumber
Net_GetIPAddress	Returns the IP address of unit	method=Net_GetIPAddress
Net_GetSubnetMask	Returns the Subnet Mask	method=Net_GetSubnetMask
Net_GetMac	Returns Mac Address	method=Net_GetMac
Serial_GetSettings	Returns Serial configuration	method=Serial_GetSettings
Serial_ConfigSettings	Set the serial configuration, baud rate and format.	method=Serial_ConfigSettings&Param1=115200,8,NO NE,1
SetDefaultConfig	Set the device to default configuration	method=SetDefaultConfig
SetSerialString	Set the string to send via serial on button press/release/hold Param1 - button no. Param2 - delay Param3 - press/release Param4- string Delay Delimiter - # is used with a single digit after for delays between commands in a string to create a “Macro”. A 0-F (0 - 15) will follow the #. Each number is a multiple of 100ms delay so #8 is 800ms, #D is 1300ms. If # character is required to be sent for none delay purpose then a ## must be used. Delay can only be specified in between telnet commands separated by commas.	method=SetSerialString&Param1=1&Param2=0&Para m3=1&Param4=

SetTelnetString	Sets the string to send via telnet on button press/release/hold Param1 - button no. Param2 - delay Param3 - press/release Param4 - string (should contain IP, port, and timeout separated by colon enclosed in angle brackets; the given IP should be in the same domain, timeout is an optional parameter). To send multiple telnet commands to different devices use comma as separator. Delay Delimiter - # is used with a single digit after for delays between commands in a string to create a "Macro". A 0-F (0 - 15) will follow the #. Each number is a multiple of 100ms delay so #8 is 800ms, #D is 1300ms. If # character is required to be sent for none delay purpose then a ## must be used. Delay can only be specified in between telnet commands separated by commas.	method=SetTelnetString&Param1=2&Param2=0&Par am3=1&Param4= Example usage - method=SetTelnetString&Param1=2&Param2=0&Par am3=1&Param4=<192.168.1.99:6970>Aurora Multimedia For sending multiple telnet commands and adding delay parameter - method=SetTelnetString&Param1=2&Param2=0&Par am3=1&Param4=<192.168.1.99:6970>Aurora Multimedia,#5,<192.168.1.101:6970>Aurora Multimedia For adding a timeout between sending telnet command and closing connection - method=SetTelnetString&Param1=2&Param2=0&Par am3=1&Param4=<192.168.1.99:6970:500>Aurora Multimedia For keeping a persistent connection to a device - method=SetTelnetString&Param1=2&Param2=0&Par am3=1&Param4=<192.168.1.99:6970:1000>Aurora Multimedia
GetSerialString	Returns the string on press/release Param1 - button no. Param2 - press/release	method=GetSerialString&Param1=4&Param2=1
GetTelnetString	Returns the string on press/release Param1 - button no. Param2 - press/release	method=GetTelnetString&Param1=4&Param2=1
SetLedColor	Sets the LED color on Press/Release of a single button Param1 - button no Param2 - press color Param3 - release color Param4 - enable/disable toggle (R - Red, G - Green, B - Blue, C – Cyan, Y -yellow, M – Magenta, W – White, N- none)	method=SetLedColor&Param1=1&Param2=R&Param 3=G&Param4=0
SetLedColorAll	Sets the LED color of all the buttons Param1 – Press color, release colour separated by commas for 8 buttons	method=SetLedColorAll&Param1=B,B,B,B,B,B,B,B,B,B,B,B,B,B,B,B

GetLedColor	Returns the LED color of the queried button on press/release Param1 - button no.	method=GetLedColor&Param1=1
GetLedColorAll	Gets the LED color of all the buttons on the device	method=GetLedColorAll
SetBtnCommand	Sets the command to send on button press Param1 - button no. Param2 - (any of the RPC commands) (R - Red, G - Green, B - Blue, C – Cyan, Y -yellow, M – Magenta, W – White, N- none)	method=SetBtnCommand&Param1=1&Param2= method=SetLedColorAll&Param1=B,B,B,B,B,B,B,B,B,B,B,B,B,B,B,B (here any RPC command can be given as the value of Param2)
SetHostname	Sets the hostname of device Param1=Hostname string	method=SetHostname&Param1=
GetHostname	Returns the hostname of device	method=GetHostname
SetPresetBtn	Set two buttons as preset buttons Param1 =Button no.1 Param2 = Button no. 2 Param3 = Enable / Disable Preset Param4 = Delay Param5 = port (via Serial/Telnet) Button 1 and Button 2 values should be distinct values	Serial -method=SetPresetBtn&Param1=5&Param2=6&Para m3=1&Param4=10&Param5=1 Telnet - method=SetPresetBtn&Param1=5&Param2=6&Param 3=1&Param4=10&Param5=2
SetPresetCommand	Set the commands to be send on pressing preset button Param1 = Preset String (all preset commands should be included in the string separated by comma). Maximum number of preset commands - 12. Param2 = <IP:Port> This is an optional parameter ie used only when preset butoons are configured to output via telnet port.	Serial - method=SetPresetCommand&Param1=volume1,volu me2,volume3,volume4 Telnet - method=SetPresetCommand&Param1=volume1,volume2,volume3,volume4&Param2=192.168.1.130:23
SetLedBrightness	Set the brightness of the LED(valid values are from 1-5) Param1 - Brightness value	method=SetLedBrightness&Param1=1
SendIR	Send IR signal for the specified command in group via the IR port	method=SendIR&Param1=TEST8_IR&Param2=VOLD WN
IR_ListAllGroups	Returns all IR groups ie present in the device	method=IR_ListAllGroups
IR_ListAllCommandsI	Returns all the IR commands in the	method=IR_ListAllCommandsInGroup&Par

nGroup	specified group	am1=WN_ LG.WIR
SetButtonLock	Toggle button lock ON and OFF	method=SetButtonLock&Param1=ON
ButtonState	RPC command to simulate button press Param1=button no Param2=state(PRESSED/RELEASED)	method=ButtonState&Param1=1&Param2=PRESSED
GetPresetBtnPort	Returns the port in which preset buttons are set to output (1 – Serial, 2 - telnet).	method=GetPresetBtnPort
GetPresetBtn	Returns the tags (1 - 8) of button's configured in preset state.	method=GetPresetBtn
GetPresetCommandIP	Returns the IP and port ie assigned for preset commands when configured in telnet mode (valid command only in telnet mode).	method=GetPresetCommandIP
GetPresetCommand	Returns set of preset commands, separated by comma(Maximum number of commands is 12).	method=GetPresetCommand
GetLedBrightness	Returns led backlight brightness(Range 1 - 5).	method=GetLedBrightness
GetBtnCommand	Returns the local command configured for the button. Param1 - button no.	method=GetBtnCommand&Param1=5

Telnet Protocol

Command	Description	Example Usage
set push_string <btn> <port> <string>	Configure the string that is to be sent through the serial port (port 0) or telnet(port 1) when a button is pressed. For sending data to telnet port, specify IP port and timeout separated by a colon enclosed in angle brackets along with the string parameter. To send multiple telnet commands to different devices use comma as separator. Delay Delimiter - # is used with a single digit after for delays between commands in a string to create a “Macro”. A 0-F (0 - 15) will follow the #. Each number is a multiple of 100ms delay so #8 is 800ms, #D is 1300ms. If # character is required to be sent for none delay purpose then a ## must be used. Delay can only be specified in between telnet commands separated by commas.	Serial - set push_string 1 1 dxb Telnet - set push_string 1 2 <192.168.1.102:6970>Aurora Multimedia For sending multiple telnet commands and adding delay parameter – set push_string 1 2 <192.168.1.99:6970>Aurora Multimedia,#5,<192.168.1.101:6970>Aurora Multimedia For adding a timeout between sending telnet command and closing connection – set push_string 1 2 <192.168.1.99:6970:500>Aurora Multimedia For keeping a persistent connection to a device – set push_string 1 2 <192.168.1.99:6970:1000>Aurora Multimedia
set release_string <btn> <port> <string>	Configure the string that is to be sent through the serial port (port 0) or telnet(port 1) when a button is released. For sending data to telnet port, specify IP, port and timeout separated by a colon enclosed in angle brackets along with the string parameter. To send multiple telnet commands to different devices use comma as separator Delay Delimiter - # is used with a single digit after for delays between commands in a string to create a “Macro”. A 0-F (0 - 15) will follow the #. Each number is a multiple of 100ms delay so #8 is 800ms, #D is 1300ms. If # character is required to be sent for none delay purpose then a ## must be used. Delay can only be specified in between telnet commands separated by commas.	Serial - set release_string 1 1 dxb Telnet - set release_string 1 2 <192.168.1.102:6970>Aurora Multimedia For sending multiple telnet commands and adding delay parameter - set release_string 1 2 <192.168.1.99:6970>Aurora Multimedia,#5,<192.168.1.101:6970>Aurora Multimedia For adding a timeout between sending telnet command and closing connection - set release_string 1 2 <192.168.1.99:6970:500>Aurora Multimedia For keeping a persistent connection to a device - set release_string 1 2 <192.168.1.99:6970:1000>Aurora Multimedia

set hold_string	Configure the string that is to be sent through the serial port or telnet when a button is held. Repeat time ÷ 10 will be the delay in seconds.	set hold_string 1 1 10 dxb
set local_cmd	Configure the local command, i.e. executed when a button is pressed, e.g. to generate an LED pattern when a button is pressed by mimicking set led all telnet command.	set local_cmd 5 set led_all B,B,G,G,G,G,G,G,G,G,G,G,G,G,G,G
set preset_btn <btn1> <btn2> <ENABLE/DISABLE> <delay> <port>	Configure buttons as preset up and down buttons. Repeat time is the time interval in which multiple button presses are registered during long press of the button. Preset commands can be send via both serial and telnet port. The last parameter in this command defines the port through which the preset commands should be send (1 – serial, 2- telnet).	Serial - set preset_btn 5 6 ENABLE 10 1 Telnet - set preset_btn 5 6 ENABLE 10 2
Set preset_cmd <string> <ip:port>	Configure strings of each discrete volume level. Max no of levels is 12. Parameter should contain cmds for each discrete separated by comma. Last parameter (ip and port) for this command is optional and is used only when the preset buttons are configured as telnet.	Serial - set preset_cmd v1,v2,v3,v4,v5,v6,v7,v8 Telnet - set preset_cmd v1,v2,v3,v4,v5,v6,v7,v8 192.168.1.100:23
set baudrate <baud,parity>	Configure the baud rate and parity of serial port.	set baudrate 115200,8N1
set ip <mode> <ip> <subnet> <gateway>	Configure network parameters of the device. Mode is STATIC or DHCP. DHCP does not require subnet or gateway parameters.	set ip STATIC 192.168.1.100 255.255.0.0 192.168.1.1 set ip DHCP
Set hostname <hostname>	Set/change the hostname of the device.	set hostname DXB-8i
set led <btn> <led_press_color> <led_release_color> <TOGGLE_ENABLE/TOGGLE_DISABLE>	Configure button backlight color individually (R - Red, G - Green, B - Blue, C – Cyan, Y -yellow, M – Magenta, W – White, N- none). Last parameter is used to change button mode to toggle	set led 1 B B TOGGLE_ENABLE

Set led_all <all button colors separated by comma>	Configure Button backlight color of all buttons.	set led_all B,B,G,G,G,G,G,G,G,G,G,G,G,G,G
get version	Returns the firmware version.	get version
get push_string <btn> <port>	Returns the string stored for push of the button (Port 1 for serial string and Port 2 for telnet string).	get push_string 1 2
get release_string	Returns the String stored for the Release functionality of the button. (Port 1 for serial string and Port 2 for Telnet String).	get release_string 1 2
get led_all	Returns color of all LEDS.	get led_all
Get led <btn>	Returns the Back Light colour of the LED.	get led 1
get baudrate	Returns the baud rate of the serial port.	get baudrate
get ip	Returns network parameters of the device.	get ip
get hostname	Returns the hostname of the device	get hostname
factory_reset	Resets the DXB - 8i settings to factory default.	factory_reset
reboot	Reboots the device.	reboot
send ir	Send IR signal for the specified command in group via the IR port.	send ir TEST8_IR VOLUP
get ir_groups	Returns all IR groups ie present in the device.	get ir_groups
get ir_commands	Returns all the IR commands in the specified group.	get ir_commands WN_LG.WIR
set button_lock <ON/OFF>	Toggle button lock on device.	set button_lock ON
bootloader_update	Device will go into bootloader update mode. Bootloader update file can be send via TFTP.	bootloader_update

set button_state <button> <PRESSED/RELEASED>	Telnet command to simulate button press.	set button_state 1 PRESSED
set led_brightness	Command to set backlight brightness. Brightness level value range 1-5.	set led_brightness 3
get led_brightness	Returns led backlight brightness.	get led_brightness
get preset_cmd	Returns set of preset commands, separated by comma(Maximum number of commands is 12).	get preset_cmd
get preset_cmd_ip	Returns the IP and port ie assigned for preset commands when configured in telnet mode (valid command only in telnet mode).	get preset_cmd_ip
get preset_btn	Returns the tags (1 - 8) of buttons configured in preset state. Example o\p - Status:Success,Response:6,7 button 6 - preset up state, button 7 preset down state.	get preset_btn
get preset_btn_port	Returns the port in which preset buttons are set to output (1 – Serial, 2 - telnet).	get preset_btn_port
get local_cmd	Returns the local command configured for the button.	get local_cmd 5
get serial_number	Returns the serial number of the device.	get serial_number

Note: Minimum firmware version : 1.10

DXB-8i is listening for telnet commands in 6970.

<btn> value range from 1- 8

<port> - 1 for serial out and 2 for telnet.

<string> - for push_string, release_string, hold_string and local_cmd command spaces can also be included in . String is in ASCII and can have non-printable as ASCII characters as well. To send non-printable ASCII (Hexadecimal) use a % in front of the 2 ASCII digits. To send “%” then use %%. Example: Line Feed = 0x0A Hex will be %0A.

For telnet messages IP and port should be provided (separated by colon enclosed in angle brackets along with string. For sending telnet message both client(DXB-8i) and server(device listening for telnet messages) should be in the same domain.

Note: White color backlight for buttons seem to have a slight pink hue on device.

Permissible Values (RPC / Telnet)

- Button no - 1–8
- Delay - 1–99 (1 represents 0.1 seconds)
- Brightness value - 1–5 (1 is the lowest brightness and 5 is the highest brightness)
- Hostname string length = 15
- Press/Release color - R,G,B,N,C,M,Y,W or r,g,b,n,c,m,y,w for Red, Green, Blue, None, Cyan, Magenta, Yellow and White.
- Press/ Release - 1 & 2
- Enable/Disable Toggle - 0 (disable toggle), 1(Enable Toggle)
- Enable/Disable Preset - 0 (Disable preset), 1(Enable Preset)
- Baudrate - 115200,57600,38400,19200,14400,9600, 4800, 2400.
- Data_size - 8,7
- Parity - NONE, EVEN, ODD
- Stop bit - 1, 2
- Serial Config Format - baudrate,data_size,parity,stopbit Eg: 9600,8,NONE,1

APPENDIX 1

Troubleshooting

It is advisable to make certain all units are using the latest firmware before troubleshooting.

LED is not lit on any buttons

- Check power supply is plugged in (48vdc or POE).
- Check to see if Wall supply is plugged into wall outlet.
- Make certain wall outlet has power.
- Make certain RS-232 command for LED state is not set to none for the buttons.

RS-232 does not work

- Check connection on RS-232 port. Make certain TX goes to RX and RX goes to TX of the device to be connected. Don't forget about ground.
- Check baud rate.
- Verify commands being sent are correct protocol.
- Each unit must have a unique address.

APPENDIX 2

Firmware Update

For the latest firmware updates please go www.auroramm.com

You must be signed up to the Customer Portal in order to download firmware with instructions on how to update.

You will need TFTPD, found at the following link: http://tftpd32.jounin.net/tftpd32_download.html

To update firmware, web into the controller. Example: 192.168.1.100/setup

Note: User & Password default is admin / admin

If IP or password is unknown, factory reset unit by pressing and holding buttons 3 & 7 for greater than 10 sec, which will revert unit back to default IP 192.168.1.100. See button order below:

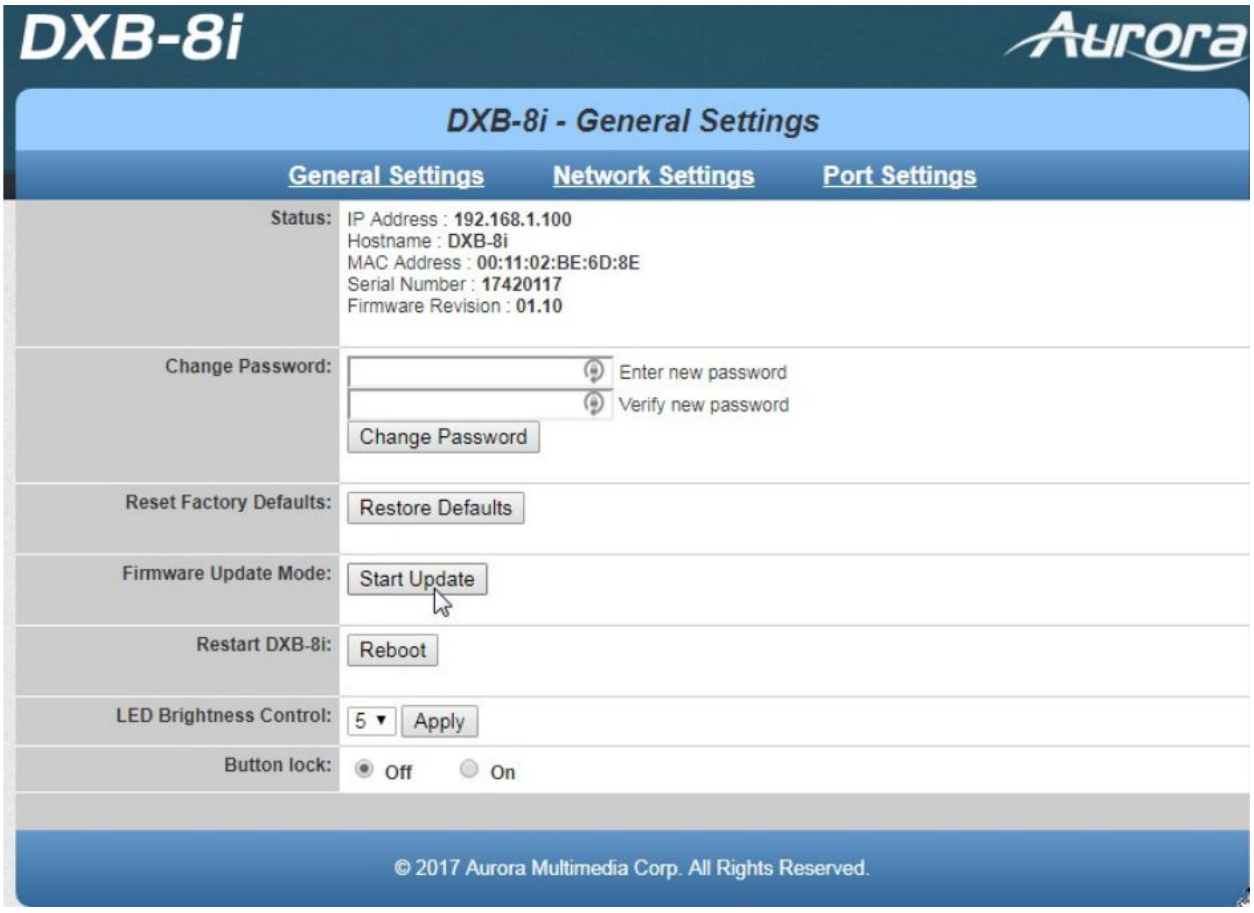
1 5

2 6

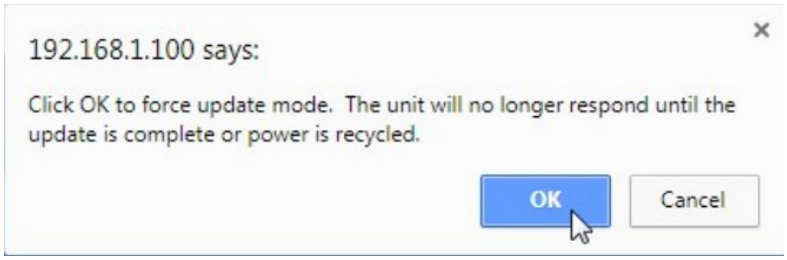
3 7

4 8

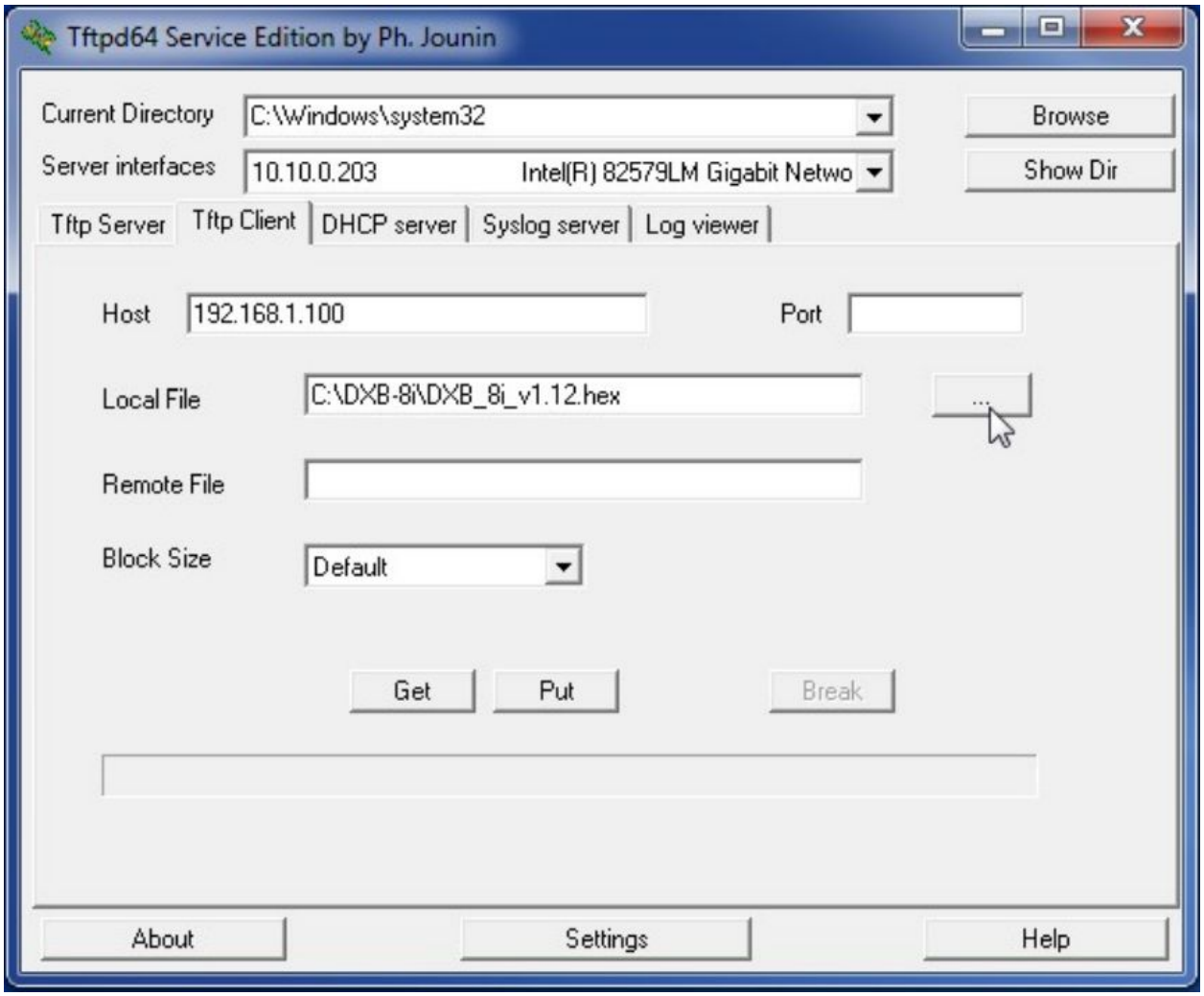
Once logged in, select START UPDATE:



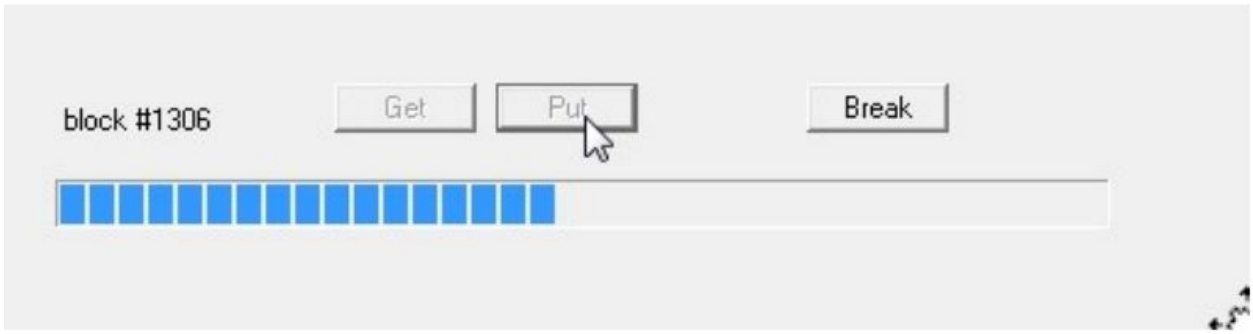
Press OK to enter update mode:



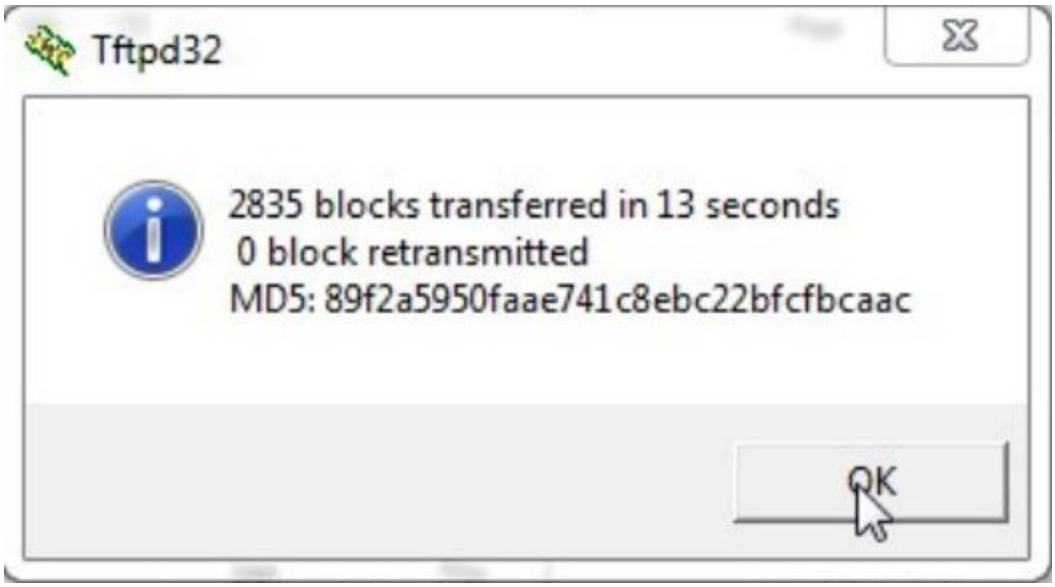
Launch TFTPD program, enter IP Address, and browse the DXB-8i Firmware file:



Press the PUT button to upload new FW:



Once complete, press OK, and your unit is now ready to go.



APPENDIX 3

Technical Specifications

Model Name	DXB-8
Technical	**DXB-8**
RS-232 Baud Rate	Max 115kbps (Factory default is 9600)
Front Selections	8 Backlit Buttons (Red, Green, Blue)
RS-232 Connector Port	4 pin 3.81mm Euro
IR Port	2 pin 3.81mm Euro
Mechanical	**DXB-8**
Housing	Plastic front with aluminum rear enclosure
Dimensions [L x W x D]	1.44"x4.331"x.76" Note: Wall box portion depth .48"
Weight	.38lbs
Mounting	Wall-mounting Decora® 1 Gang
Power supply	POE or 48vdc
Power consumption	1 Watts [max]
Operation temperature	0~40°C [32~104°F]
Storage temperature	-20~60°C [-4~140°F]
Relative humidity	20~90% RH [no condensation]
Package Contents	1x DXB-8 1x Paintable White Wall Plate 1x User Manual
Options	48v DC power Supply for stand-alone operation (PS0081-1)

Specifications subject to change without notice.

APPENDIX 4

Warranty

Limited 5 Year Warranty

Aurora Multimedia Corp. (“Manufacturer”) warrants that this product is free of defects in both materials and workmanship for a period of 5 years as defined herein for parts and labor from the date of purchase. This Limited Warranty covers products purchased on, or after January 1st, 2019[1].

Motorized mechanical parts (Hard Drives, DVD, etc.), mechanical parts (buttons, doors, etc.), remotes and cables are covered for a period of 1 year. Touch screen displays are covered for 1 year; touch screen overlay components are covered for 90 days. Supplied batteries are not covered by this warranty. During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with same or similar model) at our option without charge for parts or labor for the specified product lifetime warranty period.

This warranty shall not apply if any of the following:

A. The product has been damaged by negligence, accident, lightning, water, act-of-God or mishandling; or,
B. The product has not been operated in accordance with procedures specified in operating instructions; or,
C. The product has been repaired and/or altered by anyone other than the Manufacturer or authorized service center; or,
D. The product's original serial number has been modified or removed; or,
E. External equipment other than supplied by Manufacturer, in determination of Manufacturer, shall have affected the performance, safety or reliability of the product; or,
F. Part(s) are no longer available for product.

In the event that the product needs repair or replacement during the specified warranty period, product should be shipped back to Manufacturer at Purchaser's expense. Repaired or replaced product shall be returned to Purchaser by standard shipping methods at Manufacturer's discretion. Express shipping will be at the expense of the Purchaser. If Purchaser resides outside the contiguous US, return shipping shall be at Purchaser's expense.

No other warranties, express or implied other than Manufacturer's shall apply.

Manufacturer does not assume any responsibility for consequential damages, expenses or loss of revenue or property, inconvenience or interruption in operation experienced by the customer due to a malfunction of the purchased equipment. No warranty service performed on any product shall extend the applicable warranty period. This warranty does not cover damage to the equipment during shipping and Manufacturer assumes no responsibility for such damage. This product warranty extends to the original purchaser only and will be null and void upon any assignment or transfer.

[1]Aurora products purchased prior to January 1st, 2019 have a warranty of 3 years, with the same conditions as above.

DXB-8i-W

DXB-8i-B

Aurora Multimedia Corp.

205 Commercial Court | Morganville, NJ 07751
Phone: 732-591-5800 | Fax: 732-591-6801