

BZBGEAR 4x4 HDMI Matrix Switcher and Video Wall Controller

Crestron Driver User Guide

V1.0

Introduction

This driver has been designed to provide control of the BZBGEAR 4x4 HDMI Matrix Switcher and Video Wall Controller via RS-232 or TCP/IP.

Installation

You need to copy all the files in the folder to your project directory to support Simpl Windows to recognize the driver module.

➤ **For the RS-232 link use the following settings:**

Baud rate: 9600

Data bits: 8

Parity: None

Stop bits: 1

➤ **For the Tcp/Ip Client link use the following settings:**

Ip: The IP you set for the product, if not set, the factory default IP is **192.168.0.247**

Port: The Port you set for the product, if not set, the factory default Port is **23**

Inputs

The module has the following commands available as input:

Name	Type	Explanation
RX_Buffer	STRING	Product information feedback input.
GetSystemStatus	DIGITAL	Get the status of the system, trigger on rising edge.
GetInxFormatStatus	DIGITAL	Get the status of the hdmi input format, trigger on rising edge.
GetOutxTypeStatus	DIGITAL	Get the status of the hdmi output type, trigger on rising edge.
GetOutxFormatStatus	DIGITAL	Get the status of the hdmi output format, trigger on rising edge.
Preset_Recall[X]	DIGITAL	Recall the saved preset(X range in 1~8).
Preset_Save[X]	DIGITAL	Save the preset(X range in 1~8).
AudioOnlyOpen	DIGITAL	Turn on standalone playback mode.
AudioOnlyClose	DIGITAL	Turn off standalone playback mode.

AudioModeManual	DIGITAL	Set the sound mode: manual setting.
AudioModeAuto	DIGITAL	Set the sound mode: follow the video.
OutxMarginLeft[X]	ANALOG	In splicing mode, adjust the size of the left margin of output port X(range in 1~4): Left -> 0(min)~100(max) Right -> 0(min)~100(max) Top -> 0(min)~100(max) Bottom-> 0(min)~100(max)
OutxMarginRight[X]		
OutxMarginTop[X]		
OutxMarginBottom[X]		
TVWallModeSelect[X]	DIGITAL	Configure video wall mode[X](X range in 1~7): 1 -> 2X1(Row X Colume) 2 -> 1X2 3 -> 1X3 4 -> 3X1 5 -> 4X1 6 -> 1X4 7 -> 2X2
CancelTVWall	DIGITAL	Exit the splice wall.
SetVideoRouting[X]	ANALOG	Output port X(range in 1~4) to select the video input source: 1 -> Input 1 3 -> Input 3 2 -> Input 2 4 -> Input 4
SetAudioRouting[X]	ANALOG	Output port X(range in 1~4) to select the audio input source: 1 -> Input 1 3 -> Input 3 2 -> Input 2 4 -> Input 4
SetInxAudioEmbedded[X]	DIGITAL	Set the output X(range in 1~4) Audio to automatic mode. 0 -> invalid 1 -> open automatic mode
SetInxAudioLR[X]	DIGITAL	Set the output X(range in 1~4) Audio to external mode. 0 -> invalid 1 -> open external mode
SetOutType[X]	ANALOG	Set output X(range in 1~4) video type:

		1 -> UHD-HDMI 2 -> UHD-DVI 3 -> UHD-HDMI-1.4 4 -> UHD-HDMI-2.2
SetOutputFormat[X]	ANALOG	Output port X(range in 1~4) select output format: 01 -> 3840x2160p60 09 -> 1400x1050p60 02 -> 3840x2160p50 10 -> 1366x768p60 03 -> 3840x2160p30 11 -> 1360x768p60 04 -> 3840x2160p25 12 -> 1280x1024p60 05 -> 1920x1200p60 13 -> 1280x768p60 06 -> 1920x1080p60 14 -> 1280x720p50 07 -> 1920x1080p50 15 -> 1280x720p60 08 -> 1600x1200p60 16 -> 1024x768p60

Output

The module has the following commands that can be used as feedback output:

Name	Type	Explanation
TX_Buffer	STRING	Equipment control command issuance
FB_InxFormat[X]	STRING	Input format feedback of input X(range in 1~4) chanel
FB_Preset[X]	DIGITAL	Save a preset or recall the preset X(range in 1~4) feedback .
FB_AudioOnlyOpen	DIGITAL	Independent audio playback mode feedback: 0 -> Invalid 1 -> support independent playback
FB_AudioOnlyClose	DIGITAL	Independent audio playback mode feedback: 0 -> Invalid 1 -> No support independent playback
FB_AudioModeManual	DIGITAL	Audio manual mode setting feedback: 0 -> Invalid 1 -> open manual mode
FB_AudioModeAuto	DIGITAL	Audio auto mode setting feedback: 0 -> Invalid 1 -> open auto mode
FB_TvWall_Mode[X]	DIGITAL	Spliced wall mode X(range in 1~7) feedback: 0-> the preset was recalled or saved successful. 1->the preset was not recalled or saved.
FB_SetVideoRouting[X]	ANALOG	Output port X(range in 1~4) to select the video input source feedback: 1 -> Input 1 2 -> Input 2 3 -> Input 3 4 -> Input 4
FB_SetAudioRouting[X]	ANALOG	Output port X(range in 1~4) to select the audio input source feedback: 1 -> Input 1 2 -> Input 2 3 -> Input 3 4 -> Input 4

FB_SetInxAudioEmbedded[X]	DIGITAL	output X(range in 1~4) Audio automatic mode feedback: 0 -> invalid 1 -> open automatic mode
FB_SetInxAudioLR[X]	DIGITAL	output X(range in 1~4) Audio external mode feedback: 0 -> invalid 1 -> open external mode
FB_OutxType[X]	ANALOG	Set output X(range in 1~4) video type feedback: 1 -> UHD-HDMI 2 -> UHD-DVI 3 -> UHD-HDDMI-1.4 4 -> UHD-HDDMI-2.2
FB_OutxFormat[X]	ANALOG	Output port X(range in 1~4) select output format feedback: 01 -> 3840x2160p60 09 -> 1400x1050p60 02 -> 3840x2160p50 10 -> 1366x768p60 03 -> 3840x2160p30 11 -> 1360x768p60 04 -> 3840x2160p25 12 -> 1280x1024p60 05 -> 1920x1200p60 13 -> 1280x768p60 06 -> 1920x1080p60 14 -> 1280x720p50 07 -> 1920x1080p50 15 -> 1280x720p60 08 -> 1600x1200p60 16 -> 1024x768p60