#### 68-791-50 **Rev. A** 04 10

## Extron Blectronics

### IN1508 – Setup Guide

**NOTE** For full installation, configuration, and operation details, refer to the IN1508 User's Manual, available at www.extron.com.

This guide provides quick start instructions for an experienced installer to set up and operate the Extron IN1508 Scaling Presentation Switcher.

#### Installation and cabling



#### Connections

- (1) AC power connector
- 2 Inputs 1 and 2 composite video BNC connectors
- 3 Inputs 3 and 4 S-video mini-DIN connectors
- (4) Input 5 component video BNC connectors
- 5 Inputs 6 and 7 RGB video 15-pin HD connectors
- 6 Input 8 DVI video connector (DVI-D only)
- Step 1 Mounting

Turn off or disconnect all equipment power sources. For tabletop use, affix the rubber feet. For optional rack mounting, secure the supplied brackets (see image at right) and mount in a rack.

#### Step 2 — Video inputs and output

- a. Inputs 1 and 2 Connect composite video sources to these female BNC connectors.
- b. Inputs 3 and 4 Connect S-video sources to these 4-pin mini DIN connectors.
- c. Input 5 Connect a component video (YUVi, YUVp, HDTV) source to these female BNC connectors.
- d. Inputs 6 and 7 Connect RGB video sources to these 15-pin HD connectors.
- e. **Input 8** Connect a single link of DVI-D video to this DVI-I connector.
- f. **Output** Connect an RGB or component video display to this 15-pin HD output female connector.

#### Step 3 — Audio inputs and outputs

- a. Audio Inputs 1 through 5 RCA connectors Connect stereo or mono audio sources.
- b. Audio Inputs 6 through 8 3.5 mm mini jacks Connect computer audio sources.
- c. **Output A RCA audio connectors** Connect a stereo or mono audio device (receiver, amplifier, or the like).

— OR —

**Output B audio captive screw connector** — Connect a stereo or mono audio device (receiver, amplifier, or the like); wire the connector as shown at right.



**CAUTION** For unbalanced audio output, connect

negative (-) contacts).

*the sleeve(s) to the ground contact.* 

**DO NOT** connect the sleeve(s) to the



(7) Output 15-pin HD connector

(10) Audio Output A RCA connectors

(12) RS-232 9-pin D connector

(8) Audio Inputs 1 through 5 RCA connectors

(11) Audio Output B captive screw connector

(9) Audio Inputs 6 through 8 3.5 mm mini stereo jacks











#### IN1508 — Setup Guide (cont'd)

#### Step 4 — RS-232

a. **RS-232** —Connect a control system or of computer to the rear panel RS-232 port. The *IN1508 User's Manual*, at www.extron.com details Simple Instruction Set (SIS<sup>™</sup>) commands.

#### Step 5 — Power

AC power connector — Plug in a standard IEC power cord from a 100 to 240 VAC, 50-60 Hz power source into this receptacle. Turn on the input and output devices after you power up the switcher.

# 100-240V × 50-60Hz

#### Front Panel and Remote Control Controls and Indicators

Many of the switcher's functions are available via simple controls on the front panel. Front panel LEDs provide indications of some of the basic system functions. For more complex tasks, such as system configuration, the switcher has a menu system that is operated by using the front panel buttons. The menu system reports via an on-screen display on the connected output device.

RS-232

1 Input buttons and LEDs —

Press to select an input to scale and output. The lit Input LED indicates the selected input.

- Extron WEUT OUTFUT RATE PP PCTURE CONTROLS CONT OUT CONT OUTFUT RATE PP PCTURE CONTROLS CONT OUT CONT
- (2) Output Rate button and LEDs Press to cycle through 12 common

resolutions at the 60 Hz refresh rate. The LEDs indicate the selected resolution.

**NOTE** Some rates cannot be selected using this button. Use the menu system for additional rates.

- 3 **PIP On (picture-in-picture) button and LED** Press to toggle the PIP feature on and off. The LED lights when PIP mode is on.
- (4) **PIP Swap button** Press when the PIP feature is on to swap the main and PIP images.
- 5 Picture Control buttons Press to change the centering, size, contrast, brightness, color, or tint.
- 6 Menu control buttons

**Menu button** — Press to activate the on-screen display menu system (shown below) or to back up one level from the currently selected menu or submenu.

Enter button — Press to select a highlighted submenu or selection.

#### Menu system operation

At right is a a flowchart of the submenus in the main menu system. Each submenu leads to a series of submenus or to a "slider" type status indicator for individual settings.

#### Setup

Use the front panel menu controls and the connected display's on-screen display to set up the IN1508 using the following procedures.

**NOTE** If no image can be seen on the display, use the front panel Output Rate button to select 1024x768 or 720p.

You can toggle between an RGBHV and high definition component video output by pressing and **holding** the PIP On button while you cycle the IN1508 power.



#### Set output signal settings

- 1. Navigate to the Output submenu selection boxes.
- 2. Press ▲ and ▼ to select among the Resolution, Refresh Rate, Signal Polarity, and Signal Type selection boxes.
- 3. For each selection box, press  $\blacktriangle$  and  $\checkmark$  to select the settings that match the display's native settings.
- **NOTE** Some resolutions such as 1920x1200 and 1080p Sharp are only available via SIS command; refer to the IN1508 User's Manual, available at www.extron.com, for the associated commands.

#### Set up the display

**NOTE** You may need to first set the display's aspect ratio to 1:1, pixel for pixel, or "true" mode to eliminate overscan.

*Test patterns are available on IN1508 units that shipped after March 2007 and are firmware version 2.30 or higher. Earlier units may show the test pattern submenu, but it is not selectable.* 

- 1. Navigate to Advanced > Test Pattern to access the Test Pattern selection box.
- 2. Press ▲ and ▼ to select the Alt. Pixels test pattern. Press Enter. Adjust the display's clocking and phase as follows:
  - a. Use the display's clocking or coarse sync controls to eliminate vertical banding or "jail bars".
  - b. Use the display's phase or fine sync controls to eliminate horizontal noise.
- 3. Navigate again to Advanced > Test Pattern to access the Test Pattern selection box.
- 4. Press ▲ and ▼ to select the switcher's Crop test pattern. Adjust the display's horizontal and vertical shift controls until all four crop lines are visible.
- 5. Disable the crop pattern. No further adjustments or Auto-Image should be performed at the display.

#### Input 5 setup

Input 5 can accept interlaced, progressive, or HDTV component video. You need to configure the switcher to properly process input 5 as follows:

- 1. Navigate to Input > Input 5 to select Input 5 selection box.
- 2. Press ▲ and ▼ to select the correct setting for the video source connected to input 5. Press Enter.
  - Interlaced NTSC (480i) and PAL (576i)
  - **Progressive** 480p and 576p
  - HDTV 720p, 1080i, and 1080p

#### Aspect ratio setup

Each input has a unique aspect ratio setting, either 4:3 (default) or 16:9. The aspect ratio is applied to all video signals that are applied to that input. If necessary, change the aspect ratio for an input as follows:

- 1. If necessary, press the Input button to select the input to be set.
- 2. Navigate to Input > Aspect Ratio to access the Aspect selection box.
- 3. Press  $\blacktriangle$  and  $\checkmark$  to select the desired aspect ratio. Press Enter.
- 4. Repeat steps 1 through 3 as necessary for the remaining inputs.

#### **Input 8 EDID emulation**

If the desired output resolution is not available from the DVI video source connected to input 8, you can use the switcher's SIS commands to set the EDID emulation for input 8. Connect a PC to the switcher's RS-232 port (<sup>®</sup>) and issue the following command:

#### nn\*y\*41#

where:

<u>nn =</u>	Switcher resolution (EDII	<u>D)</u> :	<u>y = Video refresh rate</u> :		
= 00	Match output resolution (default)		0 = Match output rate (default)		
01 =	640 x 480 (VGA)	12 = 576p	1 = 50  Hz	3 = 75  Hz (24  Hz for  1080  p)	
02 =	800 x 600 (SVGA)	13 = 720p	2 = 60  Hz	4 = 59.94  Hz	
03 =	1024 x 768 (XGA)	14 = 1080i			
04 =	1280 x 1024 (SXGA)	15 = 1080 p			
05 =	1024 x 852	$16 = 1280 \times 768$			
06 =	1024 x 1024	$17 = 1440 \times 900$			
07 =	1366 x 768	$18 = 1680 \times 1050$			
08 =	1365 x 1024	$19 = 1280 \times 800$			
- 09	1400 x 1050	$20 = 852 \times 480$			
10 =	1600 x 1200 (UXGA)	21 = 1080p Sharp			
11 =	480p	$22 = 1920 \times 1200$			

The switcher responds with "DDC $nn^*y \leftarrow$ ", where  $\leftarrow$  is carriage return and line feed characters.

**NOTE** For more information and a complete list of SIS commands, refer to the IN1508 User's Manual, at *www.extron.com*.

#### Inputs 6 and 7 setup

RGB inputs 6 and 7 may need minor horizontal and vertical start, active pixels (horizontal), active lines (vertical), total pixels, and phase adjustments for best image quality.

- 1. Press the Input button to select the input to be optimized.
- 2. Execute the Auto-Image<sup>™</sup> function by pressing and holding the Input 6 or Input 7 button for approximately 4 seconds. Release the button. Evaluate the resulting image. If it is satisfactory, this portion of the setup is complete. If the image is not satisfactory, additional adjustment is necessary; perform steps 3 through 5.
- 3. Navigate to Input > Advanced to access the Advanced submenu selection boxes.
- For soft text , vertical banding, or both, adjust the Total Pixels. For fine horizontal noise, adjust the Phase. For centering, adjust the Horizontal Start and Vertical Start. For sizing, adjust the Horizontal Active and Vertical Active.
- 5. Press  $\triangleleft$  and  $\triangleright$  to adjust the highlighted setting.

#### **Operations (PIP mode)**

Each of the eight inputs is assigned to one of two operational groups:

- Low resolution Inputs 1 through 4 (and input 5 if it is configured as interlaced in the menu system)
- **High resolution** Inputs 6 through 8 (and input 5 if it is configured as progressive or HDTV in the menu system)

#### Input selection operation

Input selection acts differently, depending on whether PIP mode is on or off:

- **PIP mode off** If the PIP mode is off (the PIP On LED is off), the input button selects a new input for the main window.
- PIP mode on Pushing the input button selects a new input for either the main window or the PIP window, depending on the group (high resolution or low resolution) the input is in. The selected input replaces the previously selected input from the same group in whichever window the replaced input had been displayed.
  - In the figure at right, input 3 replaces input 1 in the PIP window (①).
  - In the figure at right, input 8 replaces input 6 in the main window (②).



The two images displayed when the PIP feature is on (the PIP On LED is lit) **must** come from different input groups (one high resolution and one low resolution) and you cannot toggle (swap) between two inputs in the same group.

- If the primary input (the main window) is high-resolution, the secondary input (the PIP window) **must** be low-resolution.
- If the primary input is low-resolution, the secondary input must be high-resolution.

#### Picture-in-picture swap

The PIP swap function swaps the main and PIP inputs. In the figure above right, when you push the Swap button:

- Input 3 replaces input 8 in the main window (③).
- Input 8 replaces input 3 in the PIP window (③).

If PIP mode is off (the PIP Mode On LED is off), the PIP swap function toggles between the most recently selected low-resolution and high-resolution inputs. Unlike when PIP mode is on, however, the input remains full screen.



#### PIP Mode

Navigate to Advanced > PIP Mode and press ◀ and ▶ buttons to select among the image size and position modes shown at right.

**NOTE** If either side-by-side option is selected, the PIP size adjustment does not work.

Extron USA - West	Extron USA - East	Extron Europe	Extron Asia	Extron Japan	Extron China	Extron Middle East			
Headquarters	+800.633.9876	+800.3987.6673	+800.7339.8766	+81.3.3511.7655	+400.883.1568	+971.4.2991800			
+800.633.9876	Inside USA / Canada Only	Inside Europe Only	Inside Asia Only	+81.3.3511.7656 FAX	Inside China Only	+971.4.2991880 FAX			
Inside USA / Canada Only	1 010 962 1704	. 21 22 452 4040	. 65 6292 4400		. 00 01 0700 1500				
+1.714.491.1500	+1.919.863.1797 FAX	+31.33.453.4050 FAX	+65.6383.4664 FAX		+86.21.3760.1566 FAX				
+1.714.491.1517 FAX	4491.1517 FAX								
© 2010 Extitit Electronics. An ingrits reserved. WWW.extitut.com									





it is in the high resolution group.