

## ISS 506 – Setup Guide

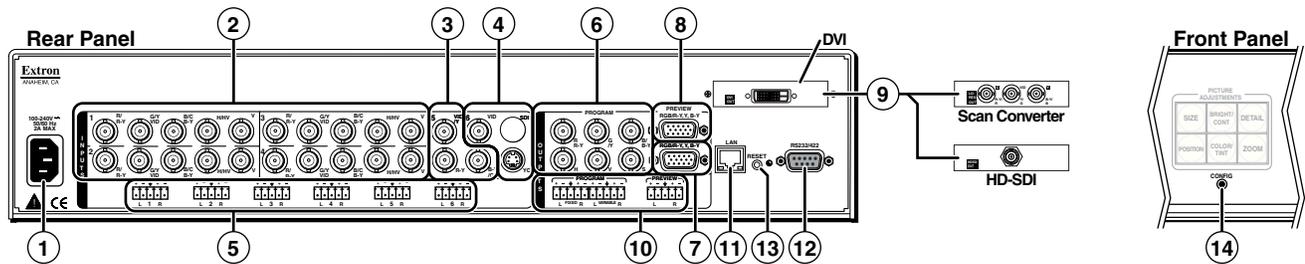
**NOTE** For full installation, configuration, and operation details, refer to the ISS 506 User's Manual, available at [www.extron.com](http://www.extron.com).

This guide provides quick start instructions for an experienced installer to set up and operate the Extron ISS 506 Integration Seamless Switchers.

The Extron ISS 506 is a family of scaling, video and stereo audio seamless switchers.

**IMPORTANT:**  
Refer to [www.extron.com](http://www.extron.com) for the complete user manual and installation instructions before connecting the product to the power source.

### Installation and cabling features



#### Connections

- ① AC power connector
- ② Inputs 1 through 4 configurable BNC connectors (RGB, component, RGBcvs, S-video, or composite)
- ③ Input 5 configurable BNC connectors (component, S-video, composite)
- ④ Input 6 configurable BNC connectors (S-video, composite, SDI\*/HD-SDI, auto SDI)
- ⑤ Input 1 through 6 audio captive screw connectors
- ⑥ Program Output BNC connectors (RGB or component)
- ⑦ Program Output 15-pin HD connector (RGB or component)
  - \* An SDI input is available only when an optional SDI input card is installed (DI/DVI, DI/SC, and DI/HD-SDI models).
  - † The output for ⑨ depends on the optional output card installed (DI/DVI, SC, DI/SC, and DI/HD-SDI models).
- ⑧ Preview Output 15-pin HD connector (RGB or component)
- ⑨ Optional Program Output connector(s) (DVI/scan converted low resolution/HD-SDI†)
- ⑩ Output audio captive screw connectors
- ⑪ LAN (Ethernet) RJ-45 port
- ⑫ RS-232/422 DB-9 port
- ⑬ Reset button
- ⑭ Configuration port (RS-232 only on a 2.5 mm TRS connector)

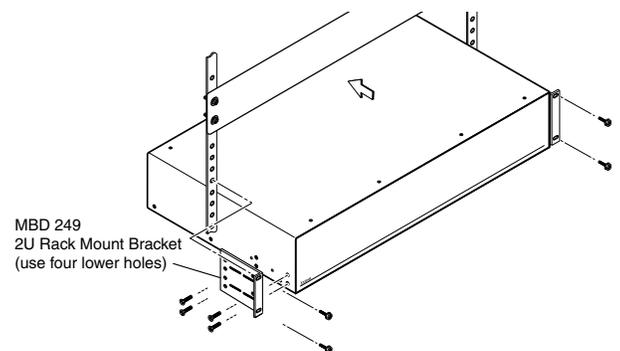
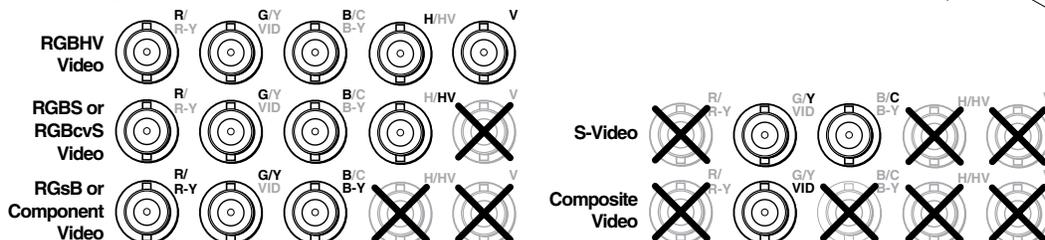
#### Step 1 – Mounting

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

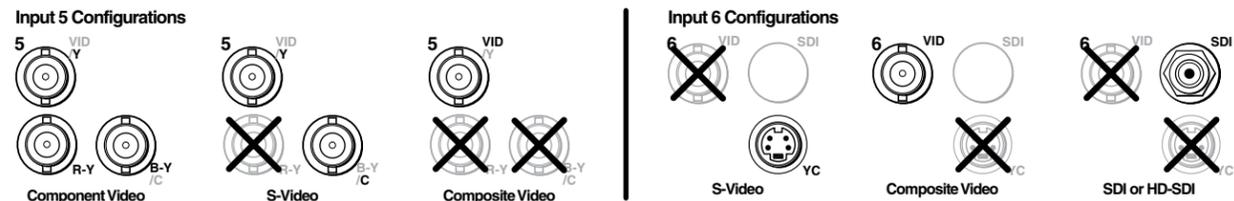
- a. **Inputs 1 through 4** — Connect RGB video, component video, S-video, or composite video to these female BNC connectors.

##### Input 1 through 4 Configurations



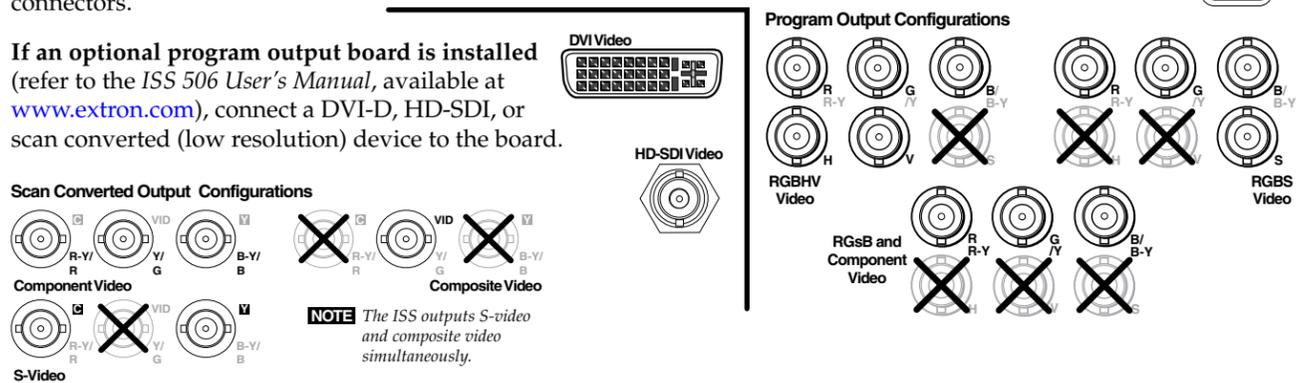
- b. **Input 5** — Connect NTSC or PAL component video, S-video, or composite video to these female BNC connectors as shown below.
- c. **Input 6** — Connect S-video or composite video to this female 4-pin mini-DIN or BNC connector as shown below.

**NOTE** SDI or HD-SDI video is available only if the optional SDI input board is installed.



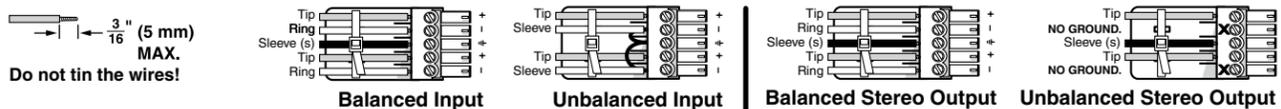
**Step 3 — Video outputs**

- a. **Program outputs** — Connect video devices to this 15-pin HD output female connector and to the BNC connectors.
- b. **If an optional program output board is installed** (refer to the *ISS 506 User's Manual*, available at [www.extron.com](http://www.extron.com)), connect a DVI-D, HD-SDI, or scan converted (low resolution) device to the board.
- c. **Preview output** — Connect a video device to the 15-pin HD connector.



**Step 4 — Audio**

- a. Connect up to six stereo or mono audio inputs to the 5-pole captive screw input connectors.
- b. Connect balanced or unbalanced stereo audio or mono audio devices to one or both program and the preview 5-pole captive screw output connectors.



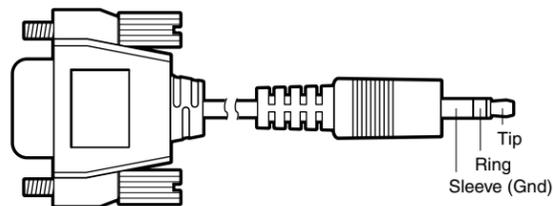
**NOTE** The Variable Program audio output is adjustable using the front panel Volume control. The other audio outputs are not adjustable.

**CAUTION** For unbalanced audio output, connect the sleeve(s) to the ground contact. DO NOT connect the sleeve(s) to the negative (-) contacts.

**Step 5 — Serial ports**

- a. **If desired**, connect a control system or computer to the rear panel RS-232/RS-422 port.
- b. **If desired**, connect a control system or computer to the front panel Configuration (RS-232) port. The optional 9-pin D to 2.5 mm mini jack TRS RS-232 cable, part #70-335-01, can be used for this connection.

Pin	RS-232	Function	RS-422	Function
2	TX	Transmit	TX-	Transmit (-)
3	RX	Receive	RX-	Receive (-)
5	Gnd	Signal ground	Gnd	Signal ground
7	—	Not used	RX+	Receive (+)
8	—	Not used	TX+	Transmit (+)



**Step 6 — LAN (Ethernet) port**

If desired, connect a network WAN or LAN hub, a control system, or computer to the Ethernet RJ-45 port. Refer to the *ISS 506 User's Manual*, available at [www.extron.com](http://www.extron.com).

- **Network connection** — Wire as a patch cable.
- **Computer or control system connection** — Wire the interface cable as a crossover cable.

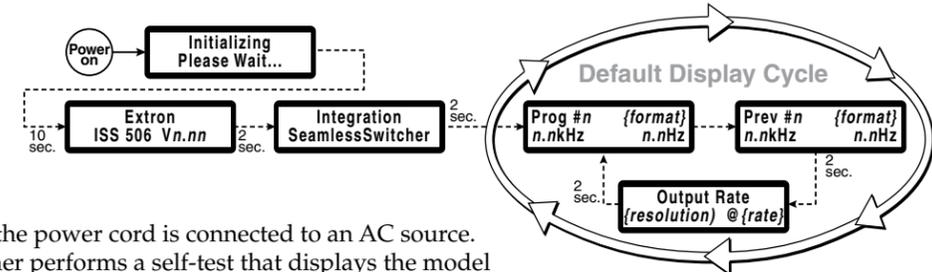
**NOTE** Defaults: • RS-232 • 9600 baud  
 • IP: 192.168.254.254 • Subnet: 255.255.0.0  
 • Gateway: 0.0.0.0 • DHCP off  
 See "Configure Ethernet and RS-232/RS-422 ports", on the next page, to change the settings.

Pins: 12345678	Crossover Cable		Straight-through Cable	
	End 1 Wire color	End 2 Wire color	End 1 Wire color	End 2 Wire color
1	White-green	White-orange	1	White-orange
2	Green	Orange	2	Orange
3	White-orange	White-green	3	White-green
4	Blue	Blue	4	Blue
5	White-blue	White-blue	5	White-blue
6	Orange	Green	6	Green
7	White-brown	White-brown	7	White-brown
8	Brown	Brown	8	Brown

**NOTE** A cable that is wired as T568A at one end and T568B at the other (Tx and Rx pairs reversed) is a "crossover" cable. A cable wired the same at both ends is called a "straight-through" cable, because no pin/pair assignments are swapped.

**Step 7 — 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.



**Powering Up**

Power is automatically applied when the power cord is connected to an AC source. When AC power is applied, the switcher performs a self-test that displays the model name and the firmware version in the LCD screen. After approximately 2 seconds, the LCD screen reverts to its default display cycle, alternating between three displays: two showing the selected program and preview inputs and their rates, and the third showing the selected output rate.

**Front Panel Operations**

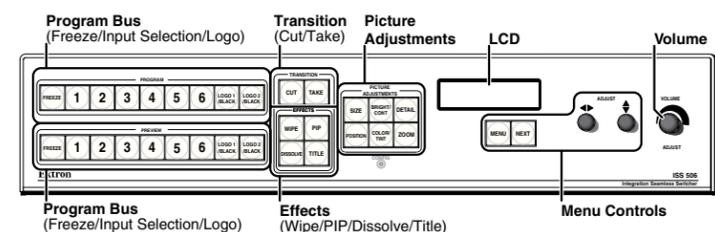
**Select an input**

Press and release the desired Program or Preview input selection button. The button lights and the selected input displays on the program or preview monitor.

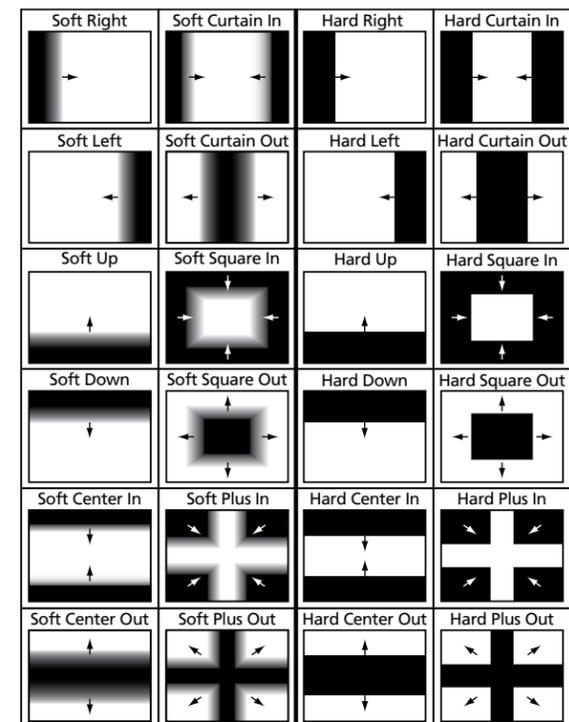
**Switch the preview output to the program output**

**NOTE** Sub-effect and duration are selected using the Effects Configuration menu.

- If you want an effect to accompany the switch, press one of the Effects buttons.
  - Wipe** — The image in the preview output "unrolls" over the top of the program output using a user-defined duration and sub-effect.
  - Dissolve** — The previous program output fades out and the image from the preview output fades into the program output using a user-defined duration.
  - PIP** — The image in the preview output appears in the program output as a picture-in-picture window using a user-defined duration and sub-effect.
  - Title** — The image in the preview output appears on top of the program output as a title.
- Press either the Cut or the Take button.
  - Cut** — **If Wipe or Dissolve is selected**, the preview output switches to the program output with no effect. **If PIP or Title is selected**, the preview output appears on top of the program output as a PIP window or title, with no effect.
  - Take** — **If Wipe or Dissolve is selected**, the preview output switches to the program output with the effect, sub-effect, and duration selected in step 1. **If PIP is selected**, the preview output appears on top of the program output as a PIP window, with a user-selected sub-effect and duration. **If Title is selected**, the preview output appears on top of the program output as a title, with no effect.



**Wipe and PIP sub-effects**



## Recall and key a saved bitmapped image

**NOTE** Bitmapped images must first be captured using the Logo Capture submenu or uploaded via the LAN port.

1. Press and hold the Next button. Press and release the desired logo button. Release the Next button.
2. Rotate either Adjust knob to select black screen or a saved logo. Press the Next button.
3. Rotate the two Adjust knobs to position the logo as desired on the screen. Press the Next button.
4. Rotate either Adjust knob to select (< >) the desired method (RGB or level) for keying out (removing) the unwanted logo material.
5. If you selected RGB as the keying method, rotate the Adjust ◀ knob to select the color plane to key.
6. Rotate the Adjust ▲ knob to key out the unwanted material.

## Adjust the Variable Audio output

Rotate the Volume knob to increase or decrease the loudness or the Variable Audio output.

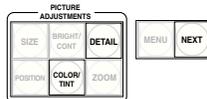
## Recall user presets

**NOTE** You must have saved user presets using the menu system (refer to the ISS 506 User's Manual, available at [www.extron.com](http://www.extron.com)) before you can recall them.

Repeatedly press and release the input button to cycle through the saved user presets (up to three) for that input.

## Configure Ethernet and RS-232/RS-422 ports

1. Press and hold Next while you simultaneously press Color/Tint, and Detail to access the Edit Comm Settings submenu.
2. Press Next to page through the submenu.



**Serial Port Mode:** Rotate the Adjust ◀ knob to select the baud rate and the Adjust ▲ knob to select the protocol.

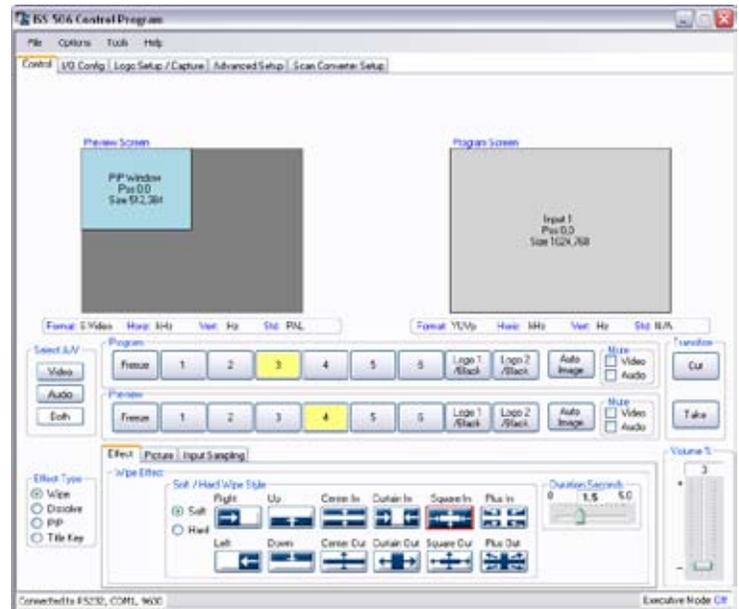
**DHCP:** Rotate either knob to select (< >) On or Off.

**IP Address, Subnet Mask, and Gateway Address:** Rotate the Adjust ◀ knob to select (blinking) an octet and the Adjust ▲ knob to change the selected octet.

## Windows®-based ISS 506 Control Program

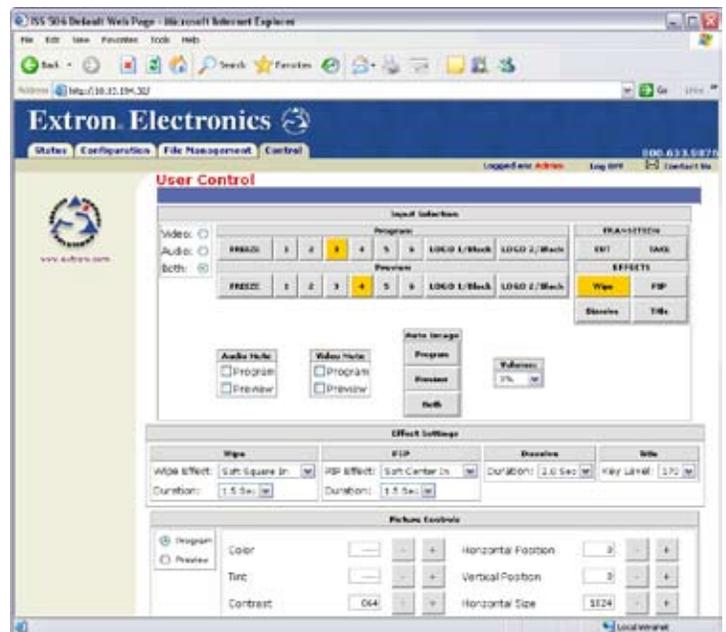
The control program is on the Extron Software Products CD-ROM. Run the program on a PC connected to either of the switcher's serial ports or the LAN port (12, 14, or 11, on page 1). The program must be installed and cannot be run from the CD.

**NOTE** For details on installing and operating the program, refer to the ISS 506 User's Manual, available at [www.extron.com](http://www.extron.com).



## HTML Pages

The HTML pages are built into the switcher and can be accessed using a Web browser such as Microsoft® Internet Explorer. Enter the unit's IP address in the browser's Address field (192.168.254.254 is the default value).



**Extron USA - West**  
Headquarters  
+800.633.9876  
Inside USA / Canada Only  
+1.714.491.1500  
+1.714.491.1517 FAX

**Extron USA - East**  
+800.633.9876  
Inside USA / Canada Only  
+1.919.863.1794  
+1.919.863.1797 FAX

**Extron Europe**  
+800.3987.6673  
Inside Europe Only  
+31.33.453.4040  
+31.33.453.4050 FAX

**Extron Asia**  
+800.7339.8766  
Inside Asia Only  
+65.6383.4400  
+65.6383.4664 FAX

**Extron Japan**  
+81.3.3511.7655  
+81.3.3511.7656 FAX

**Extron China**  
+400.883.1568  
Inside China Only  
+86.21.3760.1568  
+86.21.3760.1566 FAX

**Extron Middle East**  
+971.4.2991800  
+971.4.2991880 FAX