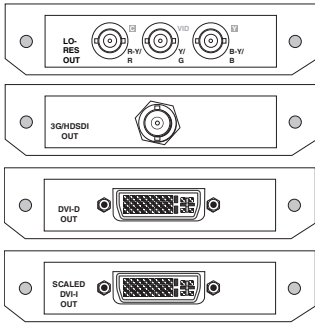# Annotator and USP 507
# Optional Output Boards • Installation Guide



**IMPORTANT:** Refer to www.extron.com for the complete user guide and installation instructions before connecting the product to the power source.

The Extron Annotator and USP 507 have a series of optional output boards. These boards are:
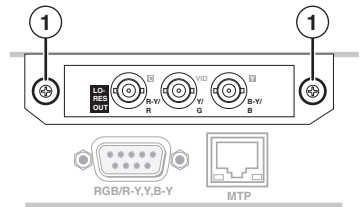
• Scan converter board • 3G/HD-SDI board • DVI-D board • Scaler board (with DVI-I). Any one of these boards mounts in the optional output slot, above the RGB and MTP ports, at the rear of the Annotator or USP 507.

For full device operating details, refer to either the *Annotator User Guide* or the *USP 507 User Guide*, both available at **www.extron.com.**

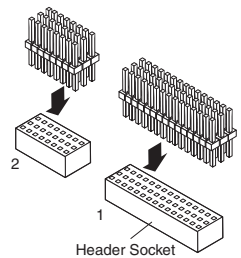## Installing a Board in the Annotator or USP 507

1. Turn off the unit, and remove the power cord. Repeat for all connected devices.

2. Remove eight cover-securing screws from the top and three from each side. Slide the top cover off. Retain the 14 screws.

3. At the rear optional output slot either:

   **a.** Remove the two securing screws ① from either side of the blank plate and lift the plate away. Retain the screws.

   > **NOTE:** Re-use the screws to secure the new output board in place. Retain the blank plate.

   

   Or,

   **b.** If a board is already installed in the output slot, remove any cables and the two screws ①. Then remove the retaining screw that secures it to the post on the device motherboard. Carefully lift the board away from the socket. Retain all the screws.

4. Remove the new board from its box and anti-ESD bag, holding the board by the front frame or board edge.

5. Turn the board over so the header sockets face up. Insert the supplied connector pins into all sockets on the board. Depending on the option card being installed, the second header may not be present.

   
   Header Socket

6. Turn the board over again so the connector pins are now facing down. Carefully align the pins with the appropriate sockets on the unit motherboard, and push the board firmly down into the sockets.

7. Secure the board to the frame with the two retaining screws ① and to the post on the motherboard using either the original or the supplied screw.

8. Replace the cover, securing it with the fourteen screws removed in step 2.

9. Reconnect any input and output devices and connect to the new board.

10. Connect any control devices.

11. Power on the Annotator or USP 507, and all the connected devices.

There are four ways to configure the boards: via front panel menus, a software program (SPPCP), Simple Instruction Set (SIS™) commands, or internal web pages.

## Configuring the Boards Using the Front Panel Menu System

To configure the 3G/HD-SDI and DVI-D boards using the front panel menu system, refer to the relevant device user guide, available at **www.extron.com**.
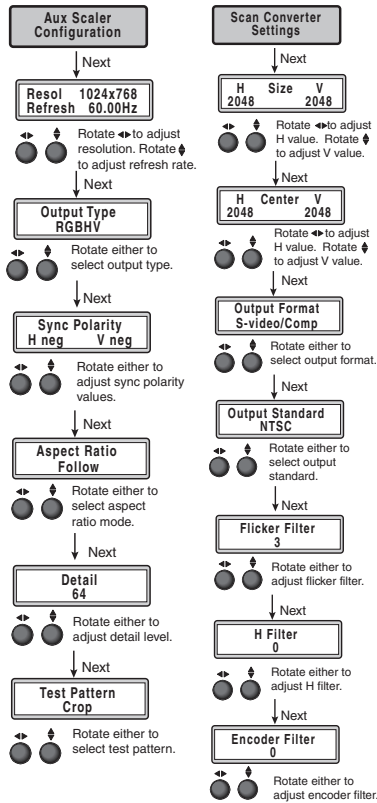
The Annotator and the USP 507 have separate front panel menus for configuring either the scan converter board or the DVI-I scaler board. This menu is accessible only after the board has been installed.

### Scan Converter Board and Scaler DVI-I Board Configuration Menus

1. Press the Menu button repeatedly until either the relevant Scan Converter Settings menu or Aux Scaler Configuration menu appears.

2. Press the Next button to reach each submenu as desired (see the images at right) and use the front panel adjustment knobs (◄► ♦) to change the settings.

## Configuring the Boards Using the Signal Processing Products Control Program

1. Open the Signal Processing Products Control Program (SPPCP) on the PC that is connected to the Annotator or USP 507 via a LAN or an RS-232 port.

2. Connect to the device. A new board relevant tab (**Scan Converter** or **AUX Scaler**) is now available. Click on the desired tab to configure the settings.

Aux Scaler Configuration

Resol 1024x768 Refresh 60.00Hz — Rotate ◄► to adjust resolution. Rotate ♦ to adjust refresh rate.

Output Type RGBHV — Rotate either to select output type.

Sync Polarity H neg V neg — Rotate either to adjust sync polarity values.

Aspect Ratio Follow — Rotate either to select aspect ratio mode.

Detail 64 — Rotate either to adjust detail level.

Test Pattern Crop — Rotate either to select test pattern.

Scan Converter Settings

H Size V 2048 2048 — Rotate ◄► to adjust H value. Rotate ♦ to adjust V value.

H Center V 2048 2048 — Rotate ◄► to adjust H value. Rotate ♦ to adjust V value.

Output Format S-video/Comp — Rotate either to select output format.

Output Standard NTSC — Rotate either to select output standard.

Flicker Filter 3 — Rotate either to adjust flicker filter.

H Filter 0 — Rotate either to adjust H filter.

Encoder Filter 0 — Rotate either to adjust encoder filter.

> **NOTE:** 3G/HD-SDI and DVI-D output boards are buffered, so resolution and refresh rates match all other outputs. The output rate must be set to 720p, 1080i, or 1080p to activate the 3G/HD-SDI output.

Refer to the SPPCP Help File for details.

## Configuring the Boards Using Internal Web Pages

1. Using a LAN connection, open an Internet browser, enter the IP address of the unit in the browser address bar, and connect to the unit.

2. Click on the **Configuration** tab and configure the settings as needed.

## Configuring the Boards Using SIS Commands

The boards can also be configured with specific SIS commands. Refer to the Annotator or USP 507 User Guide at **www.extron.com** for SIS command listings.