

## User's Manual



### *ECP 1000* Event Control Panel

68-518-01  
Printed in the USA



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# 1 Chapter One

## **Introduction**

Features

## Introduction

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The Extron ECP 1000 event control panel attaches to as many as three Extron SGS 408 seamless switchers to provide complete control of multiple screens in large staging applications. The ECP 1000 allows you to create simultaneous or synchronous wipes, dissolves, fades, and cuts on any combination of the attached screens.

The ECP 1000 includes pre-programmed effects that are available at the touch of a single button. In addition, the SGS 408 Control Program for Windows allows you to select effects for each screen so you can create your own preset series of effects.

## Features

**Pre-programmed effects** — The effect buttons initiate multi-screen effects. There are 40 user-programmable presets, 30 of which are pre-programmed at the factory. The SGS 408 Control Program for Windows allows you to overwrite all preset button settings.

**Show sequencing** — Using the SGS 408 Control Program for Windows, you can create a series of effects that are initiated sequentially at the touch of a single effect selection button.

**Button label software** — Some buttons are labeled with a pictorial example of their associated effects. You can create labels for unlabeled buttons, or you can replace existing labels to match any changes you have made to button assignments.

**Effect selection buttons** — These buttons allow you to create wipes, dissolves, and title effects.

**Screen selection buttons** — These buttons allow you to choose the screen or screens on which an effect will appear.

**Duration adjustment** — This control allows you to specify the length of time in which each effect occurs.

**T-bar controller** — This control allows you to manually control the speed of a transition.



## ECP 1000 Event Control Panel

# Chapter Two

## Installation

Rear Panel Features

Installation

# Installation

## Rear Panel Features

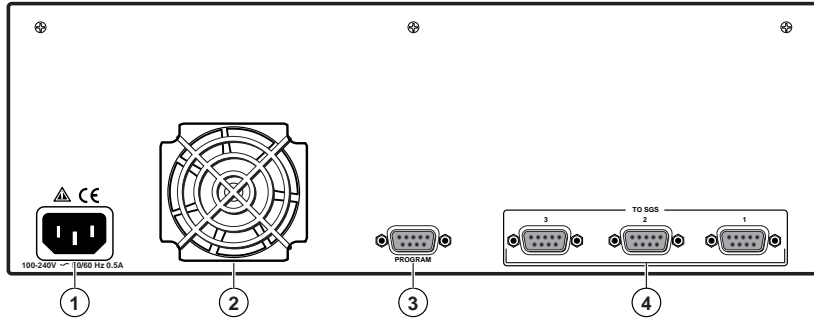


Figure 2-1 — ECP 1000 rear panel

- 1 **AC power connector** — One standard AC power connector attaches the event control panel to any power source from 100VAC to 240VAC, operating at 50 or 60 Hz.
- 2 **Cooling fan** — One fan cools the ECP 1000 unit. The filter can be removed and washed as needed. See page A-2 for instructions.
- 3 **RS-232/program connector** — One 9-pin D female connector allows you to communicate with Extron's SGS 408 Control Program.
- 4 **RS-232/SGS 408 connectors** — Three 9-pin D female connectors allow you to attach an ECP 1000 event control panel to up to three SGS 408 seamless switchers. The connectors correspond to the screen selection buttons on the ECP 1000's top panel.

## Installation

To install and set up the ECP 1000, follow these steps:

- 1 Mount the SGS 408 switcher(s) as described in the *SGS 408 User's Manual* (Extron part number 68-520-01).
- 2 Set the ECP 1000 on a flat surface.
- 3 For each SGS 408 to which the ECP 1000 will be connected, attach an ECP comm cable (provided with the SGS 408) between an SGS connector on the ECP 1000 and the RS-232 connector on the SGS 408. Figure 2-2 shows a typical application.
- 4 If desired, attach a host computer or other control device to the RS-232/program connector.

- 5 Continue the procedure for installing the SGS 408.
- 6 Attach power cords and plug the SGS 408 seamless switcher, ECP 1000 event control panel, input devices, and output devices into a grounded AC source.
- 7 Select an input from the front panel buttons on the SGS 408 switcher or RCP 1000 remote control unit.
- 8 The image should now appear. If not, ensure that all devices are plugged in and receiving power. Check the cabling and make adjustments as needed. Select a different input to check for a display.

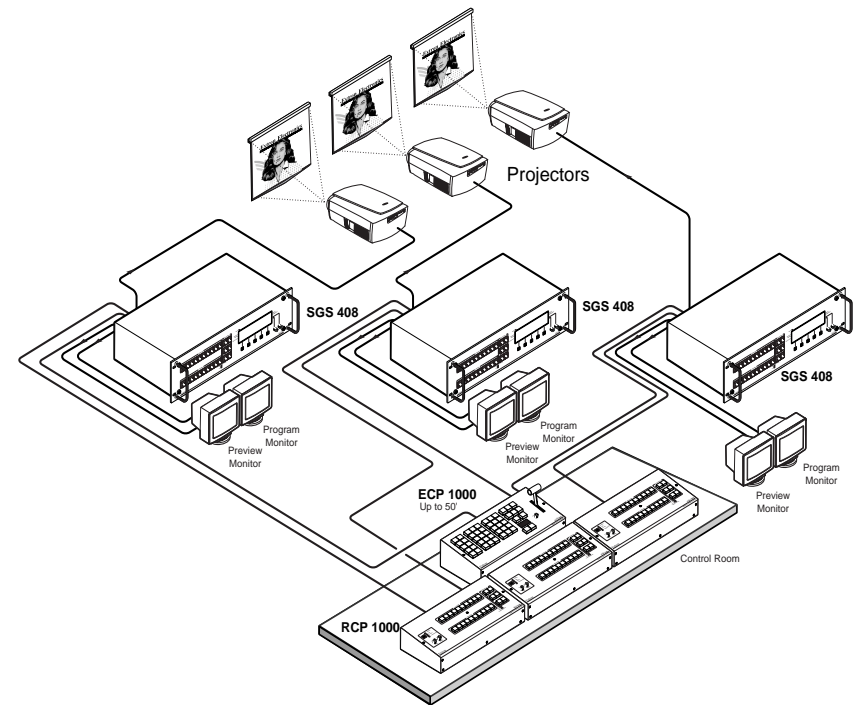


Figure 2-2 — SGS 408 and ECP 1000 application



# 3

## **Chapter Three**

### **Operation**

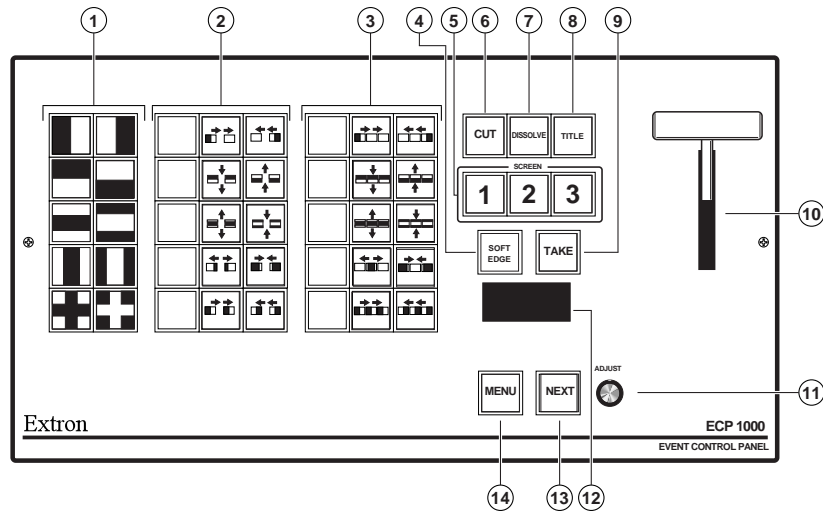
Top Panel Controls

Power-up

Using the Menus

Applying a Switch

## Top Panel Controls



**Figure 3-1 — ECP 1000 top panel**

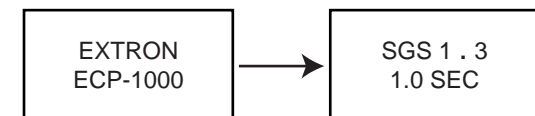
- ① **One-screen effect buttons** — Allow you to specify the effects for one screen. All of the buttons are user-programmable.
  - ② **Two-screen effect buttons** — Allow you to specify the effects for two screens. The buttons in the two right columns are pre-programmed. All of the buttons are user-programmable.
  - ③ **Three-screen effect buttons** — Allow you to specify the effects for three screens. The buttons in the two right columns are pre-programmed. All of the buttons are user-programmable.
- NOTE** *The names “one-screen”, “two-screen”, and “three-screen” are not absolutes. You can program a one-screen effect into a three-screen effect button. The names are used only to identify the particular set of buttons.*
- ④ **Soft edge button** — Allows you to select whether single-dimension wipes will have hard or soft edges.
  - ⑤ **Screen selection buttons** — Allow you to choose the screen on which effects, cuts, dissolves, and titles will take place.
  - ⑥ **Cut button** — Initiates an immediate seamless switch between the program and preview images. See “Applying a cut” on page 3-6 for more information.

- ⑦ **Dissolve button** — Allows you to set up a dissolving switch. See “Applying a dissolve” on page 3-7 for more information.
- ⑧ **Title button** — Allows you to set up a title switch. See “Applying a title” on page 3-7 for more information.
- ⑨ **Take button** — Initiates the switch selected by the effect buttons.
- ⑩ **T-bar controller** — Allows you to override the duration of an effect. See step 4 in “Applying a title” on page 3-8 or step 5 in “Applying a wipe” on page 3-10.
- ⑪ **Adjustment knob** — Allows you to make adjustments to the menu selections (see “Using the Menus” on page 3-4) and to change the duration of an effect (see “Applying a Switch” on page 3-6).
- ⑫ **LCD screen** — Displays status information and menu screens.
- ⑬ **Next button** — Steps through LCD screens within a menu. See “Using the Menus” on page 3-4.
- ⑭ **Menu button** — Steps through LCD menus. See “Using the Menus” on page 3-4.

## Power-up

When the ECP 1000 is powered up, the following events occur:

- All lights on the ECP 1000 front panel turn on and then off, in sequence.
- The ECP 1000 detects the number of SGS 408 units that are connected.
- The buttons that are programmed to work with the number of connected SGS 408 units become backlit. For example, if SGS 408 units are attached to SGS ports 1 and 3, all screen effect buttons that are programmed to work with 1 or 2 screens become backlit, as do screen selection buttons 1 and 3.
- The LCD displays the name of the product, and then displays the attached screens (based on the connected ports) and the default effect duration (figure 3-2). This second screen is the default screen.



**Figure 3-2 — Power-up screens**

**NOTE** In the display of attached screens, a dot represents a screen that is not attached.

## Using the Menus

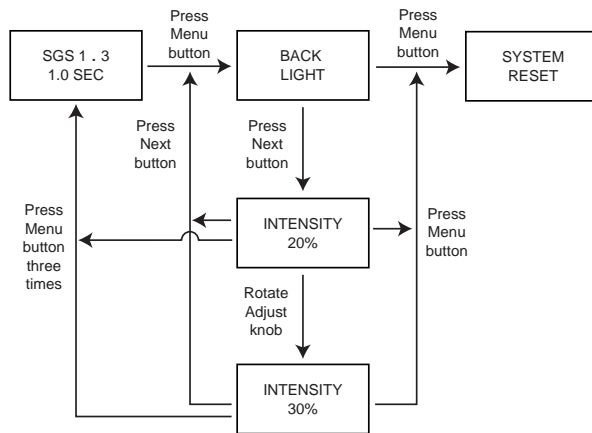
The ECP 1000 menus allow you to do the following:

- Change the backlight intensity (see below).
- Perform a system reset (see page 3-5).
- Program the ECP 1000 (see page 3-5).

## Changing the backlight intensity

The buttons on the top panel of the ECP 1000 are backlit to make them easier to see in rooms with low-level lighting. You can control the amount of light the buttons emit by doing the following:

1. From the default screen, press the Menu button. The Back Light menu appears (figure 3-3).



**Figure 3-3 — Changing the backlight**

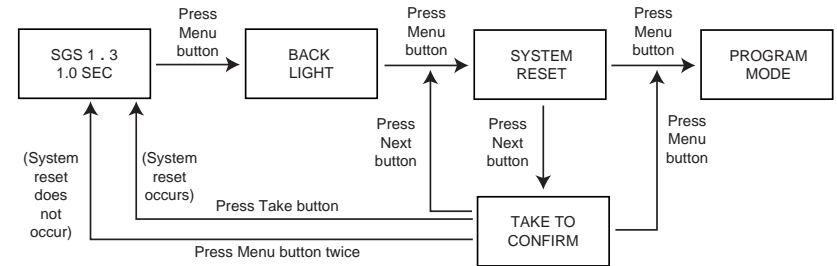
2. Press the Next button. The Intensity screen appears.
3. Rotate the Adjust knob until the backlight is at the desired intensity.
4. Do one of the following:
  - To exit the LCD menu, press the Menu button three times. The default screen appears.
  - To proceed to the System Reset menu, press the Menu button once.
  - To return to the Back Light menu, press the Next button once.

## Performing a system reset

A system reset returns all settings to their factory defaults. It removes all user-programmed effects, and returns pre-programmed effect buttons to their original effects. It also cancels the screen selection button settings.

To perform a system reset, do the following:

1. From the default screen, press the Menu button twice. The System Reset menu appears (figure 3-4).



**Figure 3-4 — Performing a system reset**

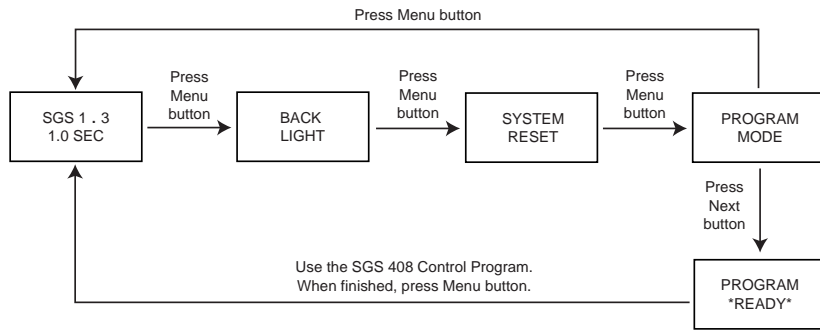
2. Press the Next button. The Take to Confirm menu appears.
3. Do one of the following:
  - To confirm the system reset, press the Take button. The system reset occurs, and the default screen appears.
  - To cancel the system reset and exit the LCD menu, press the Menu button twice. The default screen appears.
  - To proceed to the Program Mode menu, press the Menu button once.

## Programming the ECP 1000

**WARNING** When the ECP 1000 is in program mode, it cannot control effects on the SGS 408.

The SGS 408 Control Program allows you to program the ECP 1000. Before the software can communicate with the ECP 1000, the ECP 1000 must be in program mode. To enter program mode, do the following:

1. From the default screen, press the Menu button three times. The Program Mode menu appears (figure 3-5 on the next page).



**Figure 3-5 — Programming the ECP 1000**

2. Press the Next button. The Program Ready menu appears.
3. Do one of the following:
  - To program the ECP 1000, use the SGS 408 Control Program. See chapter 4 for information. When you are finished using the program, press the Menu button. The default screen appears.
  - To exit the LCD menu without programming the ECP 1000, press the Menu button.

## Applying a Switch

You can switch displays using a variety of techniques. For a description of each technique, see the instructions for the technique in this section.

### Applying a cut

A cut seamlessly replaces the program image with the preview image. No effect is applied to the switch. As soon as the Take button is pressed, the switch occurs.

To switch using a cut, do the following:

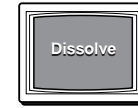
1. Press the Cut button.
2. Press the screen selection buttons that correspond to the screens you want to switch. For example, if you want to apply the cut to screen 2, press screen selection button 2. If you want to apply the cut to screens 1 and 3, press screen selection buttons 1 and 3.

**NOTE** You can select a screen selection only if it is backlit.

3. Press the Take button. The seamless switch takes effect immediately, and the preview image becomes the new program image.

## Applying a dissolve

A dissolve causes the program image to fade out while the preview image fades in (figure 3-6).



**Figure 3-6 — A dissolve effect**

To switch using a dissolve, do the following:

1. Press the Dissolve button.
2. Press the screen selection buttons that correspond to the screens you want to switch. For example, if you want to apply the dissolve to screen 2, press screen selection button 2. If you want to apply the dissolve to screens 1 and 3, press screen selection buttons 1 and 3.

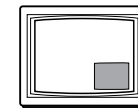
**NOTE** You can select a screen selection only if it is backlit.

3. If you want to use a duration other than the default duration, turn the Adjust knob until the desired duration appears on the LCD menu's default screen.
4. Press the Take button. The dissolving switch begins immediately and is finished in the time specified by the duration, and the preview image becomes the new program image.

## Applying a title

A title can have two effects: window or key. The actual effect is determined by the ECP title setting on the SGS 408 (see chapter 3 of the *SGS 408 User's Manual*).

A title window causes a predefined box in the program image to dissolve to reveal the preview image (figure 3-7). The effect is as if the preview image were located behind the program image, and a window in the program image opens to show the preview image.



**Figure 3-7 — A title window effect example**

A title key causes any portion of the preview image which is over half intensity (.35V) to be displayed with the program image.

When the either title effect ends, the preview image disappears, and the program image is again intact.

To apply a title, do the following:

1. Press the Title button.
2. Press the screen selection buttons that correspond to the screens you want to switch. For example, if you want to apply the title to screen 2, press screen selection button 2. If you want to apply the title to screens 1 and 3, press screen selection buttons 1 and 3.

**NOTE** You can select a screen selection only if it is backlit.

3. If you want to use a duration other than the default duration, turn the Adjust knob until the desired duration appears on the LCD menu's default screen.
4. Do one of the following.
  - Press the Take button. During the time specified by the duration, the selected portion of the program image dissolves away to be replaced by the preview image. The Take button remains lit, and the Title button flashes.

When you want to end the title, press the Take button again.

  - Move the T-bar control. The title appears and remains until you move the T-bar to the opposite end point of the t-bar slot. Or, you could stop moving the T-bar and press the Take button, in which case the title is completed during the remaining duration time.

### Wipes

A wipe causes the preview image to replace the program image in any one of many directions.

- A standard wipe causes the preview image to appear to unroll over the program image horizontally or vertically. By default, the wipe has hard edges. The preview image can wipe across the program image with the following transitions (figure 3-8):
  - From left to right
  - From right to left
  - From top to bottom
  - From bottom to top



**Figure 3-8 — Standard wipe transitions**

- A curtain wipe causes the preview image to appear to unroll over the program image in two directions simultaneously. The preview image can wipe across the program image with the following transitions (figure 3-9):
  - In from the left and right edges of the screen to the center of the screen
  - Out from the center of the screen to the left and right edges of the screen
  - In from the top and bottom of the screen to the center of the screen
  - Out from the center of the screen to the top and bottom of the screen



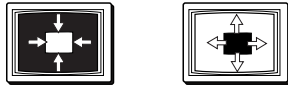
**Figure 3-9 — Curtain wipe effects**

- A plus wipe causes the preview image to appear to unroll over the program image in one of two transitions (figure 3-10):
  - Starting in all four corners of the screen and moving in to the center of the screen
  - Starting in the center of the screen and moving out to the corners of the screen



**Figure 3-10 — Plus wipe effects**

- A square wipe causes the preview image to appear to unroll over the program image in one of two transitions (figure 3-11):
  - Starting at all four edges of the screen and moving in to the center of the screen
  - Starting in the center of the screen and moving out to the edges of the screen



**Figure 3-11 — Square wipe effects**

### Applying a wipe

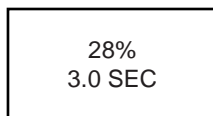
To apply a wipe, do the following:

1. Press the effect button that is programmed to perform the wipe you want.
2. If this is the first time any effect has been selected since the ECP 1000 was first installed or since a system reset was performed, the number of screen selection buttons that light will be based on the type of wipe that was selected. For example, if you press a two-screen effect button, screen selection buttons 1 and 2 light.

If this is not the first time any effect has been selected since the ECP 1000 was first installed or since a system reset was performed, the screen selection buttons that were selected the last time an effect was applied will light.

If you want to deselect a screen that is lit and select a screen that is not lit, press the button for the screen that you want to turn off. For example, if buttons 1 and 2 are lit, and you want to apply the effect to screens 1 and 3 instead, press the 2 button. The 2 button light turns off, and the 3 button light turns on.

3. If you want to use a duration other than the default duration, turn the Adjust knob until the desired duration appears on the LCD menu's default screen.
4. If desired, press the Soft Edge button.
5. Do one of the following.
  - Press the Take button. The wiping switch begins immediately and is finished in the time specified by the duration. During the wipe, the LCD displays a percentage count (1 – 100) as the effect is completed (figure 3-12). The former preview image is now the new program image.



**Figure 3-12 — Wipe percentage count**

- Move the T-bar control. The wiping switch takes place until you move the T-bar to the opposite end point of the t-bar slot. Or, you could stop moving the T-bar and press the Take button, in which case the switch is completed during the remaining duration time. Regardless of the method, the LCD displays the percentage count as described in the previous paragraph.

During a wipe, you can reverse the direction of the wipe (in effect, "unwipe" the program image) by reversing the direction of the T-bar control. This is true until the T-bar reaches the end point of the T-bar slot, in which case the effect is considered completed.



# 4

## **Chapter Four**

### **Control Software for Windows**

Installing the Software

Starting the Software

## Control Software for Windows

The SGS 408 Control Program (Extron part number 29-049-01), which is used to configure the ECP 1000, is compatible with Windows 95/98 and Windows NT. It allows you to do the following:

- Assign an effect to a user-programmable effect button.
- Overwrite the effect assigned to either a pre-programmed effect button or a user-programmable effect button.
- Print new keycap labels for reprogrammed effect buttons.
- Create a series of effects that are initiated sequentially at the touch of a single effect button.

**NOTE** *The SGS 408 Control Program is the only method you can use to program the ECP 1000. RS-232 commands are not available.*

### Installing the Software

The program is contained on a set of 3.5-inch diskettes. To install the program from the floppy disks to the hard drive, run SETUP.EXE from the floppy disk and follow the instructions that appear on the screen. The program occupies approximately 3 MB (megabytes) of hard-drive space.

By default, the Windows installation creates a C:\SGS408 directory, and it will place two icons (SGS 408 Control Pgm and SGS 408 Help) into a group or folder named "Extron Electronics".

### Starting the Software

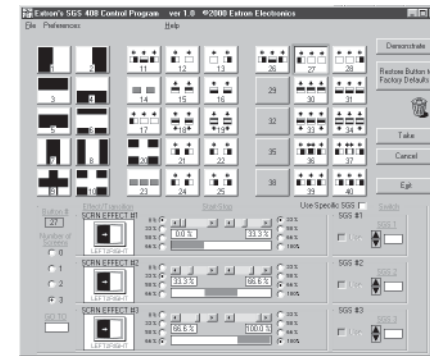
**NOTE** *Before starting the SGS 408 Control Program, you must put the ECP 1000 into program mode. Follow the instructions on page 3-5.*

1. To run the SGS 408 Control Program, double-click on the SGS 408 Control Pgm icon (left) in the Extron Electronics group or folder.



2. Click on the comm port that is connected to the RS-232 port of the ECP 1000.

The SGS 408 Control Program window appears (see figure 4-1 example). It displays the current settings of the ECP 1000.



**Figure 4-1 — SGS 408 Control Program window example (when an ECP 1000 is connected)**

For information about program features, you can access the help program in any of the following ways:

- From the Extron Electronics program folder or group, double-click on the SGS 408 Help icon (shown at the left).



SGS 408  
Help

- From within the SGS 408 Control Program, click on the Help menu on the main screen.
- From within the SGS 408 Control Program, press the F1 key.

After you have made changes to the user-programmable or pre-programmed effect buttons, you can print a page of new labels for the effect buttons. From the File menu, choose *Print ECP keycap labels*. The labels are printed to the default printer.

See "Replacing keycap labels" on page A-5 for information on inserting the new labels into the keycaps.



# A

## **Appendix**

### **Reference Information**

Maintenance and Upgrades

Specifications

Part Numbers

## Maintenance and Upgrades

You can perform the following maintenance operations and upgrades to the ECP 1000:

- Cleaning the fan filter
- Installing a firmware update


You can also replace the existing button labels if you have reprogrammed any of the effect buttons.

### Cleaning the fan filter

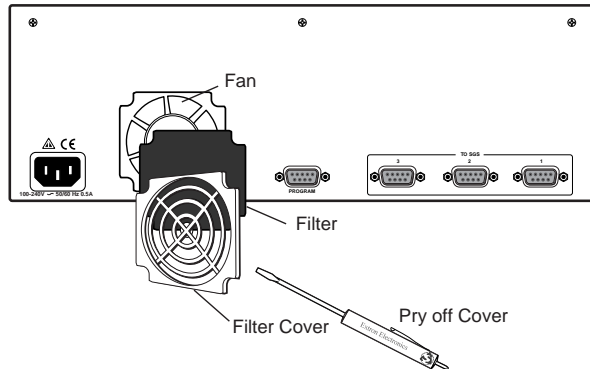
The fan filter should be cleaned periodically. The frequency with which you need to clean the filter depends on the operating environment.

To clean the fan filter, do the following:

1. Remove the power cable from the ECP 1000 and from the power source.

 Do not open the fan cover without first unplugging the power cord.

2. Using a small flat-blade screwdriver, pry the fan cover off of the rear panel of the ECP 1000 (figure A-1).



**Figure A-1 — Removing the fan filter**


3. Lift the filter out of the fan filter enclosure.
4. Rinse the filter with water, and allow it to dry.
5. Replace the filter in the fan filter enclosure.
6. Press the fan filter cover back onto the rear panel of the ECP 1000. Make sure the left and right edges snap behind the shallow tabs on the sides of the fan filter enclosure.

7. Attach the power cable to the ECP 1000 and to the power source. Make sure the ECP 1000 is working correctly.

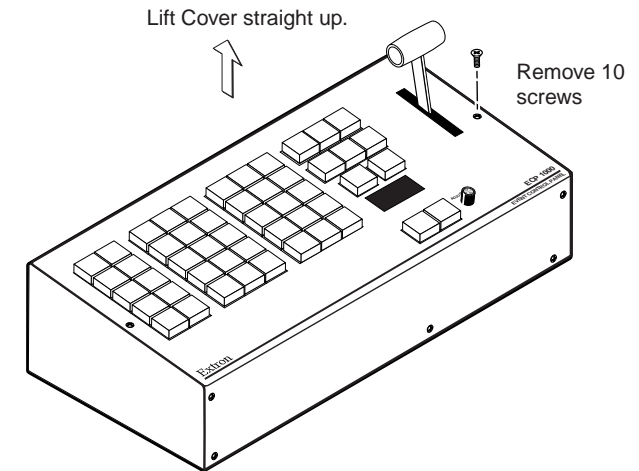
### Installing a firmware update

**NOTE** To install a firmware update, you may need to replace IC (integrated circuit) U9 or U11, or both. Replacing these ICs may result in loss of presets and other settings.

1. Remove the power cable from the ECP 1000 and from the power source.

 Do not open the cover of the ECP 1000 without unplugging the power cord.

2. Remove 10 screws from the back, top, and front of the cover (figure A-2).



**Figure A-2 — Removing the cover**

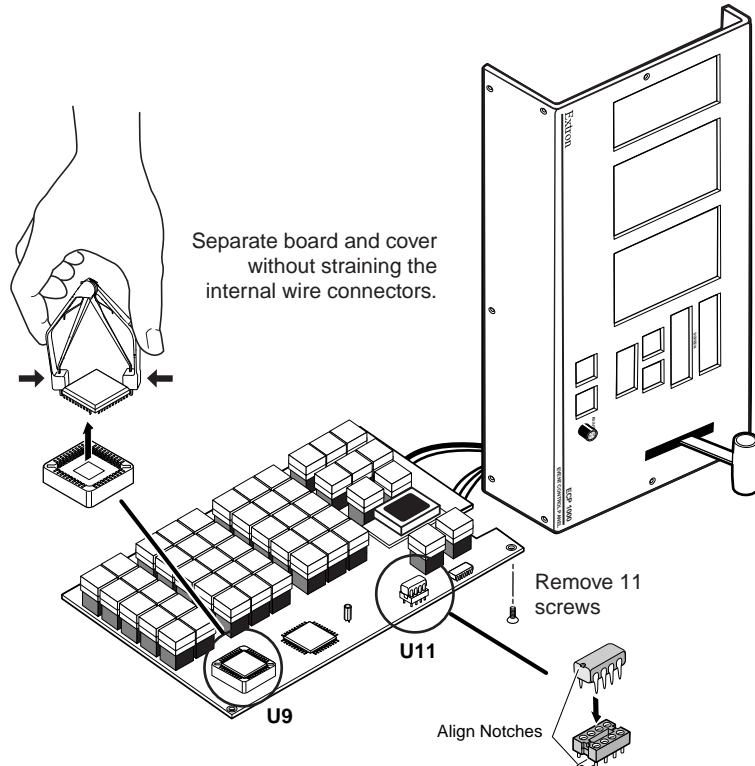
3. Lift the cover from the ECP 1000 unit, and place it next to the unit.

**WARNING** Make sure you are electrically grounded before touching IC chips. Electrostatic discharge (ESD) can damage IC chips, even if you cannot sense the discharge.

4. Remove the 12 screws that attach the control board to the bottom of the ECP 1000 (figure A-3).

## Reference Information, cont'd

5. Locate the ICs to be replaced (figure A-3). The update kit will list the specific ICs.



**Figure A-3 — Locating and replacing ICs**

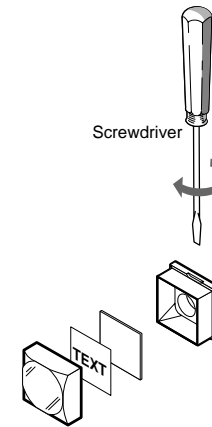
6. Remove the existing chip and set it aside.  
To remove IC U9, use the PLCC (plastic leadless chip carrier) IC puller to remove the old IC. Align the hooks on the puller with the slots provided in opposite corners of chip socket U9. Insert the hooks, squeeze gently, and pull the IC straight out of the socket.  
To remove IC U11, use a standard IC removal tool.
7. Install the new chip.  
To install IC U9, locate the angled corner of the new chip. Orient the corner to match the angled corner of the socket, and press the IC into place.  
To install IC U11, locate a notch or a printed dot on top of the IC. Align the notch or dot with the notch on the socket or circuit board. Align the IC pins with the holes in the

socket, and gently press the IC into the socket.

8. Reinstall the cover of the ECP 1000.
9. Attach the power cord to the ECP 1000 and to the AC power source. Make sure the ECP 1000 is working correctly.

## Replacing keycap labels

You can remove each effect button to reveal a legend plate (figure A-4). Remove the cap and insert a button label to identify the button's new assignment. You can print labels from the SGS 408 Control Program (see page 4-3).



**Figure A-4 — Removing a keycap**

## Specifications

### General

Power .....	100VAC to 240VAC, 50/60 Hz, 60 watts, internal, auto-switchable
Temperature/humidity .....	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount .....	No
Enclosure type .....	Metal

## Reference Information, cont'd

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Enclosure dimensions .....	4.6" H x 13.1" W x 7.0" D 11.7 cm H x 33.3 cm W x 17.8 cm D (T-bar control adds up to 1.8" ((4.6 cm)) to height.)
Product weight .....	4.4 lbs (2.0 kg)
Shipping weight .....	10 lbs (4.5 kg)
Vibration .....	ISTA/NSTA 1A in carton (International Safe Transit Association)
Listings .....	UL, CUL
Compliances .....	CE, FCC Class A
MTBF .....	30,000 hours
Warranty .....	3 years parts and labor

**NOTE** Specifications are subject to change without notice.

(7.31-110701-D1)

## Part Numbers

<b>Extron Part</b>	<b>Part Number</b>
ECP 1000	60-344-01
SGS 408	60-341-01
RCP 1000	60-343-01
ECP comm cable – 25' (7.6 m)	26-434-06
ECP comm cable – 50' (15.2 m)	26-434-08
RCP comm cable – 25' (7.6 m)	26-519-01
RCP comm cable – 50' (15.2 m)	26-519-02
RCP comm cable – 100' (30.5 m)	26-519-03
RCP comm cable – 300' (91.4 m)	26-519-04
SGS 408 Control Program	29-049-01
ECP 1000 User's Manual	68-518-01
SGS 408 User's Manual	68-520-01
RCP 1000 User's Manual	68-519-01

# Precautions

## Safety Instructions • English



This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.



This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

## Caution

**Read Instructions** • Read and understand all safety and operating instructions before using the equipment.

**Retain Instructions** • The safety instructions should be kept for future reference.

**Follow Warnings** • Follow all warnings and instructions marked on the equipment or in the user information.

**Avoid Attachments** • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

## Consignes de Sécurité • Français



Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).



Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

## Attention

**Lire les instructions** • Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.

**Conservser les instructions** • Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.

**Respecter les avertissements** • Observer tous les avertissements et consignes marqués sur le matériel ou présentés dans la documentation utilisateur.

**Eviter les pièces de fixation** • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

## Sicherheitsanleitungen • Deutsch



Dieses Symbol soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.



Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

## Achtung

**Lesen der Anleitungen** • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits- und Bedienungsanleitungen genau durchlesen und verstehen.

**Aufbewahren der Anleitungen** • Die Hinweise zur elektrischen Sicherheit des Produktes sollten Sie aufbewahren, damit Sie im Bedarfsfall darauf zurückgreifen können.

**Befolgen der Warnhinweise** • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.

**Keine Zusatzgeräte** • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

## Instrucciones de seguridad • Español



Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.



Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

## Precaución

**Leer las instrucciones** • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.

**Conservar las instrucciones** • Conservar las instrucciones de seguridad para futura consulta.

**Obedecer las advertencias** • Todas las advertencias e instrucciones marcadas en el equipo o en la documentación del usuario, deben ser obedecidas.

**Evitar el uso de accesorios** • No usar herramientas o accesorios que no sean específicamente recomendados por el fabricante, ya que podrían implicar riesgos.

## Warning

**Power sources** • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

**Power disconnection** • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

**Power cord protection** • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

**Servicing** • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

**Slots and openings** • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

**Lithium battery** • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

## Avertissement

**Alimentations** • Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité: n'essayez pas de le contourner ni de la désactiver.

**Déconnexion de l'alimentation** • Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.

**Protection du cordon d'alimentation** • Acheminer les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas écrasés ou pincés par des objets.

**Réparation-maintenance** • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à des opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et autres dangers.

**Fentes et orifices** • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.

**Lithium Batterie** • Il a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au reut les batteries usagées conformément aux instructions du fabricant.

## Vorsicht

**Stromquellen** • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Kontakt ist für einen Erdschluss, und stellt eine Sicherheitsfunktion dar. Diese sollte nicht umgangen oder außer Betrieb gesetzt werden.

**Stromunterbrechung** • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabel aus der Rückseite des Gerätes, aus der externen Stromversorgung (falls dies möglich ist) oder aus der Wandsteckdose ziehen.

**Schutz des Netzkabels** • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegestellt werden können.

**Wartung** • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Die internen Komponenten des Gerätes sind wartungsfrei. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst öffnen, da beim Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags und/oder andere Gefahren bestehen.

**Schlitze und Öffnungen** • Wenn das Gerät Schlitze oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.

**Litium-Batterie** • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie verbrauchte Batterien nur durch den gleichen oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgen Sie verbrauchte Batterien bitte gemäß den Herstelleranweisungen.

## Advertencia

**Alimentación eléctrica** • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearia ni eliminarla.

**Desconexión de alimentación eléctrica** • Para desconectar con seguridad la acometida de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.

**Protección del cables de alimentación** • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.

**Reparaciones/mantenimiento** • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario deba acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.

**Ranuras y aberturas** • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalentamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.

**Batería de litio** • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

# FCC Class A Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

# Extron's Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

**USA, Canada, South America, and Central America:**

Extron Electronics  
1230 South Lewis Street  
Anaheim, CA 92805, USA

**Asia:**

Extron Electronics, Asia  
135 Joo Seng Road, #04-01  
PM Industrial Bldg.  
Singapore 368363

**Europe, Africa, and the Middle East:**

Extron Electronics, Europe  
Beeldschermweg 6C  
3821 AH Amersfoort  
The Netherlands

**Japan:**

Extron Electronics, Japan  
Daisan DMJ Bldg. 6F,  
3-9-1 Kudan Minami  
Chiyoda-ku, Tokyo 102-0074  
Japan

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions or non-Extron authorized modification to the product.

*If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), or 65.6383.4400 (Asia) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.*

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.