ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Extron SC210* at our website: *Click HERE*

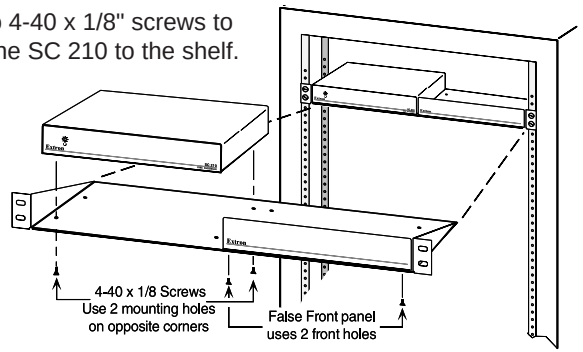
Shipping weight	5 lbs (2.3 kg)
Vibration	ISTA/NSTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class A
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE *Specifications are subject to change without notice.*

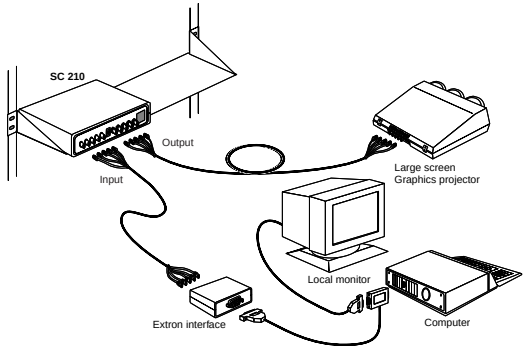
Mounting the SC 210 on a 1U Rack Shelf

A 1U Rack Shelf will accommodate two units the size of an SC 210. These devices have two threaded holes in their base plates for this purpose.

1. If the SC 210 has feet, remove them.
2. Align the SC 210 over the shelf so that its two threaded holes line up with two holes in the 1U shelf.
3. Use two 4-40 x 1/8" screws to mount the SC 210 to the shelf.



4. If the shelf is not already mounted in the rack, use the supplied hardware and follow the instructions that came with the 1U Shelf (part # 60-190-01).
5. When mounted, continue the installation by connecting the input, output and power cables.



www.extron.com

Extron Electronics, USA
1230 South Lewis Street
Anaheim, CA 92805
USA
714.491.1500
Fax 714.491.1517

Extron Electronics, Europe
Beeldschermweg 6C
3821 AH Amersfoort
The Netherlands
+31.33.453.4040
Fax +31.33.453.4050

Extron Electronics, Asia
135 Joo Seng Road, #04-01
PM Industrial Building
Singapore 368363
+65.6383.4400
Fax +65.6383.4664

Extron Electronics, Japan
Daisan DMJ Building 6F
3-9-1 Kudan Minami
Chiyoda-ku, Tokyo 102-0074 Japan
+81.3.3511.7655
Fax +81.3.3511.7656

68-201-01 **Rev. B**
05 02
Printed in the USA

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION

User's Manual



SC 210

Sync Combiner

Features

The **SC 210** is a 250 MHz sync processing device. Any type of RGB signal can be converted to any other type. This is determined by cable connections and DIP switch settings. For example:

Input	Output
RGsB	RGBS, RGsB, or RGBHV
RGBS	RGsB, RGBS, or RGBHV
RGBHV	RGsB, RGBHV, or RGBS
RsGsBs	RGsB, RGBS or RGBHV

The SC 210 can also be used as a sync stabilizer to eliminate jitter. The SC 210 automatically strips incoming sync from the red, green & blue video channels.

Operation

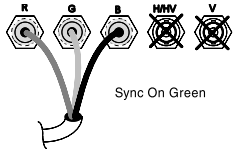
Power LED: Indicates if the SC 210 is receiving power.

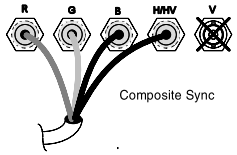


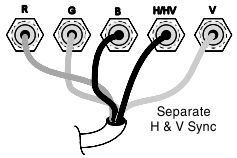
Automatic Sync Output Detection

Sync can be output in three ways, depending on the impedance detected through the output cables:
Impedance = 75 ohms on R, G, and B, or up to 1 kohms on Sync lines.

- *Impedance on only R, G & B channels, output = Sync On Green.*
- *Impedance on only R, G, B, & H/HV channels, output = Composite Sync.*
- *Impedance on R, G, B, H/HV & V channels output = Separate H & V Sync.*

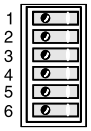






DIP Switch Settings

As stated above, the SC 210 outputs sync according to the impedance detected on the output cables. However, the DIP switch settings take priority. If a switch is set, it forces a condition, regardless of what is detected.



The DIP switch settings are shown below. In the default positions (all switches OFF), sync output is determined by the impedance detected through the output cables.

Sw#	Position	Function
1	ON	Does not allow Sync on Green
	OFF-normal	Automatic Sync Output Detection
2	ON	Always Separate H and V Sync
	OFF-normal	Automatic Sync output Detection
3	ON	Always Negative Sync
	OFF-normal	Sync output polarity follows input polarity
4	ON	Remove serration pulses (if Sw 6 = Off)
	OFF-normal	Serration pulses pass through
5	ON	Vertical Sync Width = 500 µs (if Sw 6 = Off)
	OFF-normal	Vertical Sync Width = 150 µs
6	ON	LCD Sync Processing (disables Sw 4 & 5)
	OFF-normal	Sync Processing

NOTE *Turning a DIP switch ON will override Automatic Sync Detection.*

Video

Gain	Unity
Bandwidth	250 MHz (-3dB)

Video input

Number/signal type	1 analog RGBHV, RGBS, RGsB, RsGsBs
Connectors	5 BNC female
Minimum/maximum levels	Analog ..... 0.3V to 1.5V p-p with no offset at unity gain
Impedance	75 ohms
Horizontal frequency	15 kHz to 150 kHz
Vertical frequency	40 Hz to 140 Hz
Return loss	-37dB @ 5 MHz
Maximum DC offset	2V

Video output

Number/signal type	1 analog RGBHV, RGBS, RGsB
Connectors	5 BNC female
Minimum/maximum levels	Analog ..... 0.3V to 1.5V p-p
Impedance	75 ohms
Return loss	-20dB @ 5 MHz
DC offset	±10mV maximum with input at 0 offset

Sync

Input type	RGBHV, RGBS, RGsB, RsGsBs
Output type	RGBHV, RGBS, RGsB
Input level	RGBHV, RGBS ..... TTL/analog .. 5V p-p RGsB, RsGsBs ..... analog 0.3V
Output level	TTL ..... 4V to 5V p-p
Input impedance	510 ohms
Output impedance	75 ohms
Max input voltage	5V p-p
Input sensitivity	0.6V to 5V p-p
Max. propagation delay	130 nS
Max. rise/fall time	4 nS
Polarity	RGBHV, RGBS ..... positive or negative (follows input) RGsB, RsGsBs ..... negative

General

Power	100VAC to 240VAC, 50/60 Hz, 10 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	Yes, with optional shelf, #60-190-01
Enclosure type	Metal
Enclosure dimensions	1.75" H x 8.75" W x 9.4" D (1U high, half rack width) 4.4 cm H x 22.2 cm W x 23.9 cm D
Product weight	3.0 lbs (1.4 kg)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP