



SC21.1 SYSTEM CONTROLLER

APPLICATIONS:

- SLS™ & RS™ Full-range systems
- SBS & VBS Subwoofers
- Fixed installations
- Rental systems

FEATURES:

- Dynamic system equalization
- Dynamic overdrive protection
- IntelliSense™ amplifier output monitoring
- Electronic crossover for subwoofer
- Tamper-proof settings
- Balanced input / outputs
- 1 Rack space

DESCRIPTION

The SC21.1 SYSTEM CONTROLLER is designed specifically for the Community Solutions™ and the RS™/VBS™ loudspeaker systems. The SC21.1 can provide the electronic control for any of these systems including a subwoofer crossover, filtering, equalization and protection functions. It has a balanced/unbalanced XLR-type input and two balanced/unbalanced XLR-type outputs - one for full-range loudspeakers and one for subwoofers.

Set-up controls are located behind a security cover on the rear panel of the SC21.1. Settings are selectable for the specific loudspeaker systems being used. These include filter selection and protection threshold adjustment and a variable 0 dB to +10dB gain control for the subwoofer output. The security cover, attached by captive screws, helps prevent tampering or accidental adjustment of the controls. In addition, the SC21.1 features an internal jumper block that can be programmed to completely disable the external controls and to “hardwire” the settings - a real plus for permanent installations or rental use.

The SC21.1 also features full range and subwoofer sense inputs with IntelliSense(circuitry that actively monitors the output of the associated power amplifiers. The IntelliSense™ circuits condition the audio input to the amplifiers by providing proper equalization for optimum loudspeaker performance as well as compression/limiting to help prevent overdrive and damage to the loudspeakers. The front panel has illuminated indicators to inform the operator about the controller status, including: power on, signal presence for both input and sense signals, and protect mode operation. A sensing circuit detects the absence of signal and reduces the dynamic HF boost during those periods to minimize background noise.

Manufactured in Germany, the SC21.1 uses highest quality, precision tolerance components for stable, long term operation and reliability. An external AC transformer is provided to power the SC21.1's internal, regulated DC supply that is equipped with fuseless over-voltage and over-current protection. There are two versions of the controller: model SC21.1 for 110-120 VAC and the SC21.1E for 220-240 VAC. The controller meets all applicable US and European standards for equipment of this type, including the European CE-Standard.



SPECIFICATIONS

Note: 0 dBu = 0.775V

Inputs:

- 1 XLR-type female
- 40k ohm (electronically balanced)
- +16 dBu maximum level

Sense Inputs:

- Screw terminals
- 300k ohm (electronically balanced, polarity insensitive)

Outputs:

- 2 XLR-type male
- 20 ohm - electronically balanced
- 600 ohm maximum load
- +22 dBm maximum level (+16 dBm unbalanced)

Gain:

- Full-Range: Typically -3dB @ 1 kHz (frequency & level dependent)
- Sub Low: Variable 0 dB to +10 dB

Distortion (THD): Full Range: < 0.05%, Sub Low: < 0.02%

Hum and Noise: < 87 dBu

Dynamic Range: Full Range: > 109 dB, Sub Low: > 119 dB

Input CMRR: > 58 dB @ 1 kHz, > 46 dB @ 20 kHz

Configuration:

- 1 channel x 2-way (Full Range + Sub Low)

Full Range Processing:

- Low cut filter - 34 Hz
- High pass filter - selectable 50/70/90/130 Hz
- Low and high frequency dynamic EQ
- Low and high frequency limiting

Sub Low Processing:

- Low cut filter - 27 Hz
- High pass filter - selectable 38/52 Hz
- Low pass filter - 130 Hz
- Dynamic EQ
- Sub limiting
- Output level - 0 dB to +10 dB

Overall Processing:

- Input compressor/limiter
- Protection threshold - selectable Low, Med, High
- Noise gate turns off dynamic HF EQ with no signal input

Indicators:

- Power
- Input signal presence
- Full Range signal presence/protect
- Sub Low signal presence/protect

Power Supply (External mains transformer):

- SC21: 110-120 VAC 7W, 60 Hz (US)
- SC21E: 220-240 VAC, 6W, 50-60 Hz (Export)

Dimensions:

- Height: 1.75 inches (44 mm)
- Width: 19 inches (483 mm)
- Depth: 3.9 inches (100 mm)

Weight: 3.2 lbs (1.45 kg) (not including transformer)

Shipping Weight: SC21.1 6.2 lbs (2.8 kg), SC21.1E 6.4 (2.9 kg)

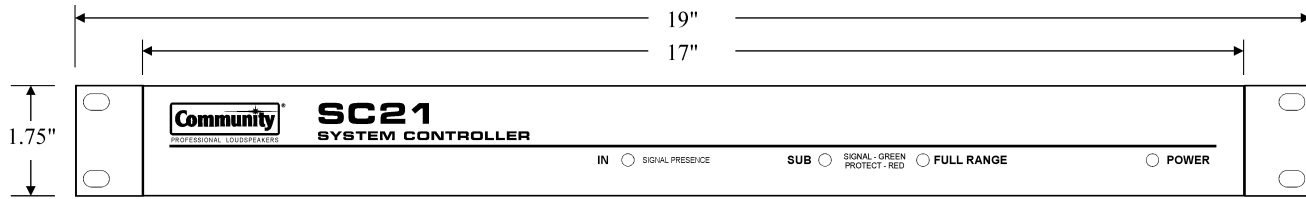
Supplied Accessories:

- External mains transformer, Operating manual



SC21.1 SYSTEM CONTROLLER

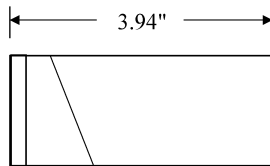
DIMENSIONS



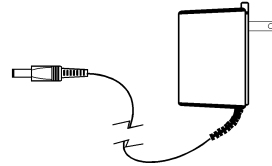
front panel view



rear panel view



side panel view



side view of power supply

ARCHITECTS' AND ENGINEERS' SPECIFICATION

The device shall be an electronic controller for the Community Solutions and RS/VBS Series Loudspeaker Systems manufactured by Community Professional Loudspeakers. It shall provide a two-way electronic crossover, filtering, dynamic equalization and dynamic loudspeaker protection utilizing voltage controlled filters and voltage controlled amplifiers. Control signals for the dynamic circuits shall be derived from sense inputs connected to the output of the associated amplifiers. The subwoofer crossover frequency shall be selectable between 50 Hz, 70 Hz, 90 Hz and 130 Hz. A low cut filter shall be selectable between 38 Hz and 52 Hz. The loudspeaker protection circuit shall provide three threshold levels: minimum, moderate and maximum. Input and output connectors shall be 3-pin XLR-type. The input impedance shall be 40k ohm (300k for the sense inputs) and the output impedance less than 20 ohms. The maximum input level shall be +16 dBu, electronically balanced, with a minimum CMRR of 58 dB at 2 kHz and 46 dB at 20 kHz. The maximum output level shall be +22 dBu, electronically balanced and +16 dBu unbalanced, with a maximum load of 600 ohms. Harmonic distortion, including hum and noise shall be less than 0.05%. Hum and noise shall be below -87 dBu A-weighted, with an overall dynamic range greater than 109 dB. The chassis shall be constructed of steel with a black powder-coat paint finish. Power shall be supplied by an included external transformer with a primary of 110-120 VAC 7W, (220-240VAC, 6W), 50-60 Hz. Dimensions shall be 19 in. (482 mm) W, 1.75 in. (44 mm) H, 3.94 in. (100 mm) D, 1 rack unit and shall weigh 3.2 lbs (1.45 kg) without the external transformer.

LIMITED WARRANTY

The Community SC21.1 Electronic System Controller is warranted in the USA to be free from defects in materials and workmanship for a period of two years. This warranty applies to the product; therefore, the remainder of the warranty period will be automatically transferred to any subsequent owner.

This warranty applies only to failure of a Community SC21.1 caused by defects in materials and workmanship during the stated warranty period. It does not apply to a unit that has been subjected to abuse, accident, modification, improper handling/installation, or repairs made without factory authorization or by anyone other than authorized Community Field Service Stations. This warranty is void if the serial number has been defaced, altered or removed.

Products covered by this warranty will be repaired or replaced at the option of Community, without charge for materials or labor, provided all the terms of this warranty have been met.