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ACCESSORIES
Model SYS-CS1
System 84 Control Interface

ANYWHERE YOU NEED...
- RS-232 Control of System 84
- Serial Control of Audio Matrix
- Control of Eight VCA Modules
- Status Inputs from Eight Sources
- An Interface with Front Panel Indicators
- A Free-Standing or Rack-Mounted Interface

You Need The SYS-CS1!

The SYS-CS1 is a chassis based interface that can be used free-standing or rack-mounted with other RACK-UP products from Radio Design Labs. For rack-mounted installations, the SYS-CS1 uses two RACK-UP mounting bays in an RDL RU-RA3 rack mount frame.

APPLICATION: The SYS-CS1 controls all 32 switching functions of an RDL System 84 audio mixing matrix. It also provides 8 separate **ZERO TO 10 VOLT OUTPUTS** to control external VCAs or other equipment with 0 to 10 VDC control inputs. Eight **STATUS INPUTS** are provided for sensing external switch or transistor closures.

The SYS-CS1 connects to a computer through an RS-232 serial link. Commands may be initiated from a terminal program or from user software that sends and receives commands detailed in the instruction manual.

OUTPUT TERMINAL COMMANDS – A command will either select or deselect each of the eight System84 inputs to any of the four outputs. A separate command deselects all 32 switching functions thereby turning off all inputs to all outputs.

0 TO 10 VOLT OUTPUT COMMANDS – The ramp rate for each output can be preset individually or globally. Output commands then initiate a ramp from the present level to a newly defined level. The output level (one or all) may also be sent directly to a new level without ramping. A separate command will set the SYS-CS1 to report the completion of ramping. If any 0 to 10 VDC output is used to control other equipment that uses 0 to 5 VDC control, the corresponding SYS-CS1 output may be set to output 0 to 5 VDC without any loss of resolution.

STATUS INPUT TERMINAL COMMANDS – The SYS-CS1 may be set to provide an alert any time an individual status input terminal changes state (low to high, high to low). Global commands allow enabling or disabling alerts from all status inputs. The controlling computer can also query the status of an individual terminal or all status terminals. A separate command allows the program to provide an alert when a defined pattern of all eight status terminals occurs.

The SYS-CS1 may be operated solely to control the System 84 without any response codes fed back to the computer. An initialization command sets all parameters to known values at the beginning of the user program. Error codes may be enabled to assist in development of controlling software. A pair of RDL RU-SC2 modules may be used to locate the controlling computer at a location remote from the SYS-CS1.

Front panel LEDs show any active audio outputs, active status inputs, transmit and receive data, errors and power. The SYS-CS1 operates from 24 VDC which may be connected either through the DC power jack or terminal block.
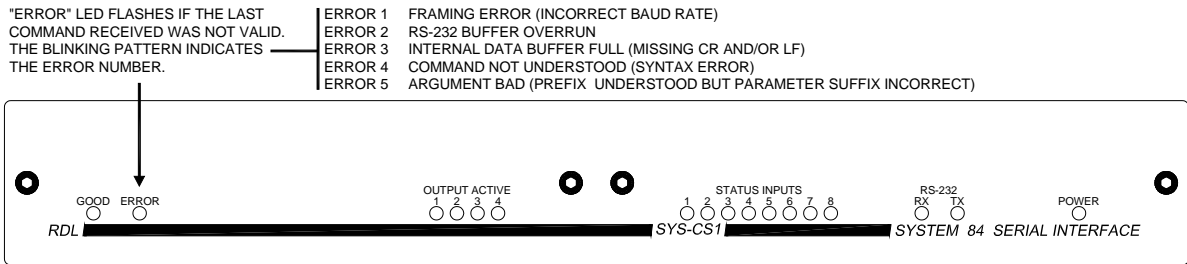
RACK-UP® SERIES

Model SYS-CS1
System 84 Control Interface

Installation/Operation

EN55103-1 E1-E5; EN55103-2 E1-E4
Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.

"ERROR" LED FLASHES IF THE LAST COMMAND RECEIVED WAS NOT VALID. THE BLINKING PATTERN INDICATES THE ERROR NUMBER.

ERROR 1   FRAMING ERROR (INCORRECT BAUD RATE)
ERROR 2   RS-232 BUFFER OVERRUN
ERROR 3   INTERNAL DATA BUFFER FULL (MISSING CR AND/OR LF)
ERROR 4   COMMAND NOT UNDERSTOOD (SYNTAX ERROR)
ERROR 5   ARGUMENT BAD (PREFIX UNDERSTOOD BUT PARAMETER SUFFIX INCORRECT)

GOOD   ERROR   OUTPUT ACTIVE   STATUS INPUTS   RS-232
                             1 2 3 4   1 2 3 4 5 6 7 8   RX   TX   POWER
RDL   *SYS-CS1*   *SYSTEM 84 SERIAL INTERFACE*
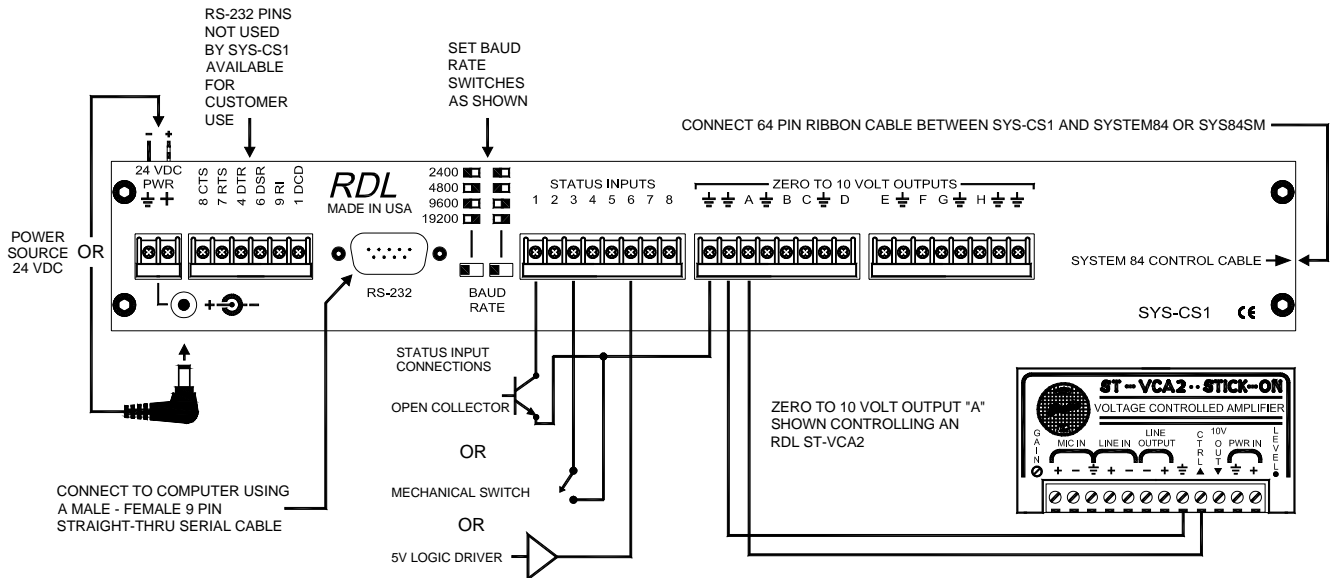
"GOOD" LED IS ILLUMINATED IF THE LAST COMMAND RECEIVED WAS VALID.

OUTPUT LED ILLUMINATES IF ANY INPUT IS FEEDING THE INDICATED OUTPUT

STATUS LED ILLUMINATES IF THE INPUT IS ACTIVE (PULLED LOW)

LED INDICATES RECEIVE OR TRANSMIT DATA ON RS-232 CABLE

LED INDICATES POWER IS APPLIED TO THE POWER INPUT JACK

RS-232 PINS NOT USED BY SYS-CS1 AVAILABLE FOR CUSTOMER USE

SET BAUD RATE SWITCHES AS SHOWN

CONNECT 64 PIN RIBBON CABLE BETWEEN SYS-CS1 AND SYSTEM84 OR SYS84SM

24 VDC PWR
8 CTS 7 RTS 4 DTR 6 DSR 9 RI 1 DCD

RDL MADE IN USA

2400 4800 9600 19200

STATUS INPUTS
1 2 3 4 5 6 7 8

ZERO TO 10 VOLT OUTPUTS
A B C D   E F G H

POWER SOURCE OR 24 VDC

RS-232

BAUD RATE

SYSTEM 84 CONTROL CABLE

SYS-CS1 CE

CONNECT TO COMPUTER USING A MALE - FEMALE 9 PIN STRAIGHT-THRU SERIAL CABLE

STATUS INPUT CONNECTIONS

OPEN COLLECTOR

OR

MECHANICAL SWITCH

OR

5V LOGIC DRIVER

ZERO TO 10 VOLT OUTPUT "A" SHOWN CONTROLLING AN RDL ST-VCA2

ST-VCA2··STICK-ON
VOLTAGE CONTROLLED AMPLIFIER
GAIN   MIC IN   LINE IN   LINE OUTPUT   CTRL   10V   PWR IN   LEVEL

TYPICAL PERFORMANCE

Control Input / Output:	RS-232 (DB-9 female jack)
Control Outputs (32):	Open-collector on 64-pin header
Status Inputs (8):	Low = active (internally pulled high to 5 VDC); MAX input 24 VDC
0 to 10 VDC Outputs (8):	22 Ω ground-referenced, 20 mA, 256 steps
Ramp Rate for 0 to 10 V Outputs:	0.5 to 120 seconds (for 10 V change), individually programmable
Power Requirement:	24 to 33 Vdc @ 150 mA, Ground-referenced