



Sur-Gard System II

Single Line Network Receiver

Quick Install Guide

The *SG-System II* is a single line network receiver intended for remote monitoring of commercial fire and burglary systems. The system can be configured for desktop stand-alone operation (vertical stacking of up to 4 systems) or rack mounting. The SG System II is capable of communicating with up to 1536 transmitters, including 512 that can be supervised (on two separate account tables).

NOTE: System must be rack mounted for UL/ULC listed installations.

The SG-System II real time clock and calendar stamps receive alarm data which is transmitted to a central station computer via a TCP/IP serial port or a USB port. The data is then transmitted directly to a printer using the parallel or serial printer port. Lastly, it is viewed on the LCD of the front panel. System configuration can be programmed using a PC with SG-Systems Console Software or locally using the scroll buttons and LCD.

The SG-System II receives alarm information from panels over a LAN/WAN or the Internet.

Out of The Box

Verify that you have received the following:

SG-System II

- SG-System II Receiver Qty 1
- SG-System II Console Software CD (includes operating manual) Qty 1
- SG-System II Quick Install Guide..... Qty 1
- Rubber feet Qty 4

SG-System II Rack Mount Kit (UL Installation-Opt; ULC Installation-Req'd)

- Brackets Qty 2
- Rails (mounting) Qty 4
- Screws..... Qty 8
- Quick Install Sheet..... Qty 1

Additional Equipment Required (Not Supplied)

- IEC power line cord..... Qty 1
- CAT-5 ethernet cable for WAN interface support..... Qty 1
- CAT-5 ethernet cable for LAN interface port or USB cable for console communication..... Qty 1
- DB9 terminated RS232 serial cable..... Qty 1
- DB25 terminated parallel printer cable Qty 1



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Specifications

Electrical:

- Input Voltage..... 100-240VAC, 50-60Hz.
- Input Current0.7A (Max)
- Backup Power Supply..... External UPS (not supplied)

Environmental:

- Temperature 32 - 122°F (0-50°C)
- Humidity 93%RH, Non Condensing

Dimensions

- Width.....12in. (305mm)
- Length12.25in. (311mm)
- Height 1.75in. (45mm)
- Weight..... 7.92lbs (3.58 Kg)

Accounts

- Number of Accounts..... 1024 MAX
- Number of Supervised Accounts 512 MAX

Printers (UL/ULC Listed Installations)

- Parallel DMP-SCS-PTR, Seiko DPU-414
- Serial Seiko DPU-414

NOTE: Do NOT use printer cables that have only 1 common ground wire.

Industry Approvals

The SG-System II meets the requirements of the following standards:

- UL 1610 Central Station Burglar Alarm Units
- UL 864 Standard for Control Units and Accessories for Fire Alarm Systems
- CAN/ULC-S304-06 Signal Receiving Centre and Premises Burglar Alarm Control Units
- CAN/ULC-S559-04 Equipment for Fire Signal Receiving Centres and Systems
- EN60950-1:2001 Standard for Information Technology Equipment.
- AS/NZS 60950:2000 Information Technology Equipment - Safety
- CISPR22 Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurements
- EN50130-4 Immunity requirements for components of fire, intruder and social alarm systems.

This equipment shall be installed in accordance with the requirements of NFPA72, NFPA70, and the authority having jurisdiction. For ULC installations the equipment shall be installed in accordance with the requirements of ULC-S561 and ULC-S301 standards and the authority having jurisdiction.

WARNING

To reduce the risk of electrical shock, the SG-System II is equipped with a grounding type power supply IEC receptacle.

- Connect SG-System II using an appropriate IEC cable to a grounded receptacle.
- Connect SG-System II to UPS dry contact connections only.
- Do NOT connect to a receptacle controlled by a switch.

UL864 Programming Requirements

NOTICE

To Users, Installers, Authorities having jurisdiction, and other involved parties: This product incorporates field programmable software. In order for the product to comply with the requirements in the *Standard for Control Units and Accessories for Fire Alarms Systems*, UL 864, the programming features or options must be used as indicated below. All of the following program options are permitted in UL864, as indicated:

Opt#	Program Option	Possible Settings	Settings Permitted (UL 864)
013	Mute Buzzer	DEFAULT/OFF, Frequencies	DEFAULT
020	Mask UPS AC	ON/OFF	OFF
021	Mask UPS BAT	ON/OFF	OFF
029	Mask Parallel Printer	ON/OFF	OFF
02A	Mask Serial Printer	ON/OFF	OFF
039	Mask USB Printer	ON/OFF	OFF
042	Busy Out	00, 01, 04, 05	-00
113	TX Failure Debounce Time	1E-FFH (30-255 Sec)	-05AH (90 Secs)
119	Mask TX Restoral	ON/OFF	OFF
11A	Mask TX Failure	ON/OFF	OFF
11B	Mask TX Swap	ON/OFF	OFF
11C	Mask TX Unencrypted	ON/OFF	OFF
11D	Mask Invalid Report	ON/OFF	OFF

Software Compatibility

The following is a list of compatible Automation Software manufacturers:

MAS	DICE	SIMS II	Genesys	Bold
S.I.S.	IBS	MicroKey	ABM	

NOTE: Automation connections are considered supplementary per UL864 listing. Compatibility with the automation software in a system used at a central station is intended to be handled under a separate UL1981 software and/or site certification evaluation.

For UL / ULC Installations

Mains Supply: 120VAC/60Hz

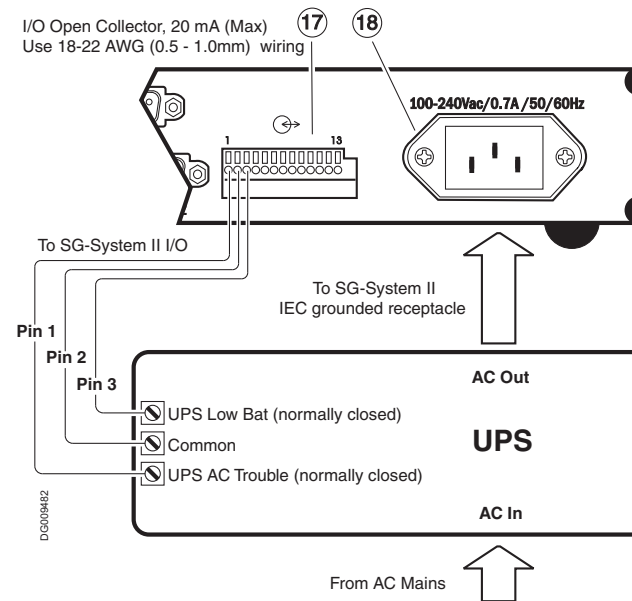
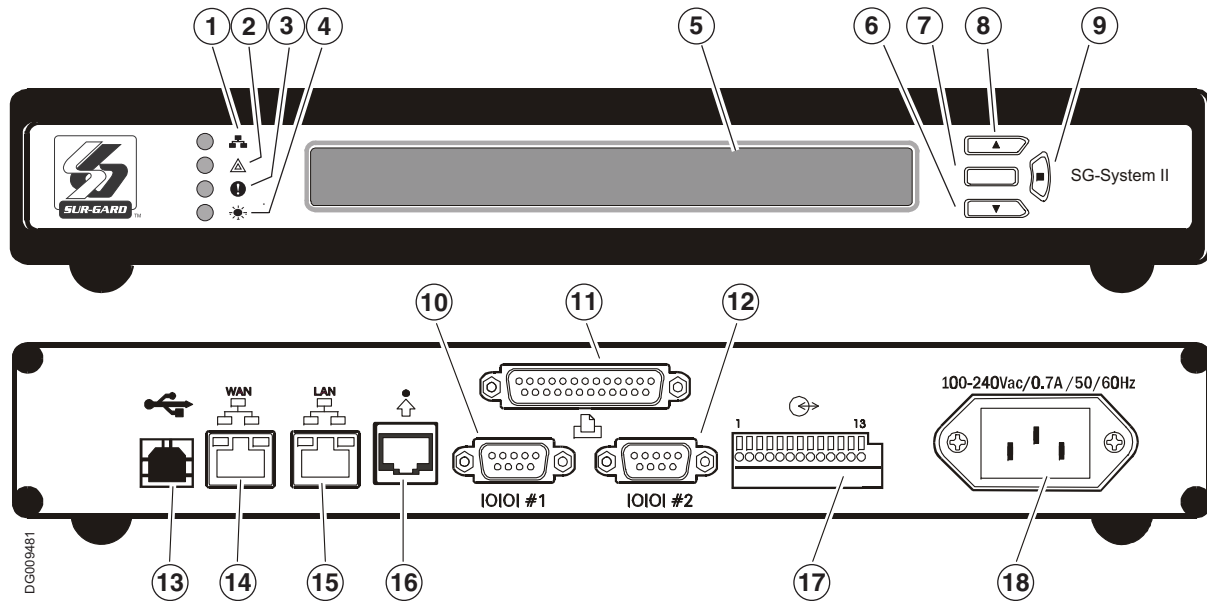
UPS Output Rating: 120VAC/60Hz, 2.5A. Use UL/ULC/CSA listed UPS (uninterrupted power supply) for protective-signalling systems and listed burglar alarm power supply as applicable.

NOTE: When a Hub or Router/Gateway is used with the SG-System II, 24-hr Standby Power is required for these devices (i.e., UL listed UPS, battery backup, or engine driven generator).

For CE Installations

Mains Supply: 240VAC/50Hz

UPS Output Rating (non UL): 240VAC 50Hz



NOTES

Refer to the *Sur-Gard System II Operating Manual PN# 29007174* for Installation and Programming details.

Install external devices connected to item (10)-(17) in the same room as the SG-System II.

Maintain 1/4" (6.5mm) separation between power limited and non-power limited circuits. All circuits are supervised and power limited.

Maximum Cable length is 1.8m (6ft). Longer cables may impair performance. Use at own risk.

Trouble messages are indicated on the Trouble LEDs and on the alphanumeric LCD. If a trouble condition is displayed on the LCD and is NOT indicated on the Trouble LEDs, ensure that the unit is serviced and the defective indicator replaced.

For ULC Installations, the equipment shall be rack mounted and powered by a permanently wired supply in accordance with C22.1, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations, section 32.

CAUTION: Before installing this equipment, it is mandatory to read and fully understand all the electrical safety instructions, as specified within the SG System II Operating Manual part #29007174. This equipment shall be installed by service persons in restricted access, non-hazardous locations only.

Item No.	Indicator/ Control/ Connector	State/Pin	Description
1	NETWORK Green LED	ON OFF	Network present Network absent Follows the network interface that receives T-Link signals.
2	TROUBLE Yellow LED	FLASHING OFF	Number of flashes indicates trouble as described below: FLASHES TROUBLE 2 NO_TIMESET 4 BUFFER_FULL 5 FLASH_BADCHECKSUM Normal operation
3	STATUS Orange LED	ON OFF	Indicates CPM trouble No CPM trouble
4	WATCHDOG Blue LED	FLASHING STEADY	Normal operation SG-System II line card fault
5	LCD Display		40x2 character LCD display Top line displays current operating mode Bottom line displays troubles (or messages in manual mode).
6	DOWN Interface Button		Scrolls down through menu options
7	ACK Interface Button/LED	FLASHING OFF	Indicates unit is in manual mode and waiting for acknowledgement. There are no alarm events Alarm events requiring acknowledgement The ACK button is used to acknowledge an alarm event in manual mode and acts as [Enter] in programming mode
8	UP Interface Button		Scrolls up through menu options
9	ENTER Interface Button		Selects a menu option
10	AUTOMATION Port (COM1)	DB9	Sends automation messages to central station computer (e.g., Heartbeat if no activity)

Item No.	Indicator/ Control/ Connector	State/Pin	Description
11	PARALLEL PRINTER Port	DB25 (Female)	Sends events to local printer (DB25 female)
12	SERIAL PRINTER Port (COM2)	DB9	RS232 serial printer port. Sends events to local printer
13	USB Port	USB Type B	USB type B
14	WAN Interface Port	CAT-5	T-Link v1.2 or higher via CAT5 ethernet cable (1.8m/6ft) NOTE: Longer cables may impair performance. Use at own risk
15	LAN Interface Port	CAT-5	This interface is used for Console, Automation and Local (same subnet) T-Link connections. Connects to LAN via CAT5 ethernet cable (1.8m/6ft) NOTE: Longer cables may impair performance. Use at own risk
16	DEBUG RJ-45	RJ-45	Contact DSC Technical Support for additional information
17	I/O Port (Use AWG 18-22 wire)	1 Input 2 Com 3 Input 4 Input 5 Com 6 Input 7 Output 8 COM 9 Output 10 Output 11 COM 12 Output 13 Earth	UPS AC Failure (toggles from ground to open on failure) Common (ground) UPS DC Failure (battery of the UPS failed) toggles from ground to open on failure Future use Common (ground) Future use Follow Buzzer (toggles to ground following the buzzer) Common (ground) Toggles to ground following the status LED Future use Common (ground) Future use Earth Ground
18	Mains Supply Connector		120/240VAC /0.7A/ 50-60Hz Connection to Interruptible Power Supply (UPS recommended) with minimum 24hr standby capability required. Refer to <i>SG System II Operating Manual part #29007174, Section 2.2. Setup & Testing</i>