



From Tyco Security Products



system five



SG-System 5 Installation Guide

For the full Installation Manual visit www.dsc.com

NOTE: This manual contains information regarding product use and function, in addition to manufacturer liability and restrictions pertaining to it. The entire manual should be read carefully.

SG-System 5 Overview

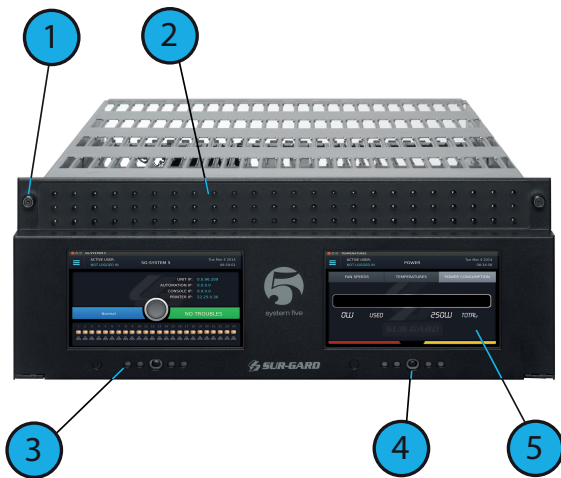
The SG-System 5 is a multi-platform receiver intended for remote monitoring of commercial fire and burglary systems. The SG-System 5 can monitor up to 24 communication line cards (SG-DRL5-IP or SG-DRL5/DRL5E/DRL5-2L) to receive and process alarm data in up to 64 pre-programmed profiles per line card. The SG-System 5's real-time clock date stamps all received alarm signals which are then transmitted to a central station computer via TCP/IP or RS-232 port; transmitted directly to a printer using the serial printer port and/or TCP/IP; and viewed on the LCD of the front panel while the receiver is in the manual state. Options can be programmed using a PC with SG-System 5 Console or locally using the touchscreen LCD. Use this guide in conjunction with the SG-System 5 v1.1 Operating Manual, which you can access from the dsc.com web site.

CPM redundancy

The SG-System 5 can be used in a redundant configuration using two SG-CPM5s, where the primary SG-CPM5 backs up to the secondary SG-CPM5 and vice versa. Under normal conditions, the primary SG-CPM5 is active and outputs all signals to the printer and automation, while the secondary SG-CPM5 is in standby. If the primary fails, the secondary SG-CPM5 automatically switches to active within 30 seconds and starts outputting signals to the printer and automation. During the switchover from standby to active, signal reception is not affected since the line cards are still able to receive signals. The output to printer and automation is delayed by the length of time required to switch from standby to active.

Diagrams

FIGURE 1-1: SG-System 5 front with door closed



1. Thumb screws to hold faceplate closed
2. Line card status indicators (top LED is watchdog, middle LED is status and bottom LED is network)
3. SG-CPM5 Status LEDs (from left to right: Console, Trouble, Network, Watchdog, Automation)
4. Quick HOME button
5. 7-inch resistive touch LCD screen

FIGURE 1-2: SG-System 5 front with door open

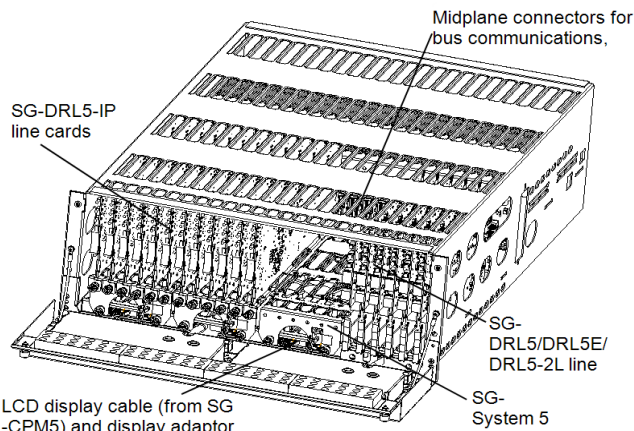
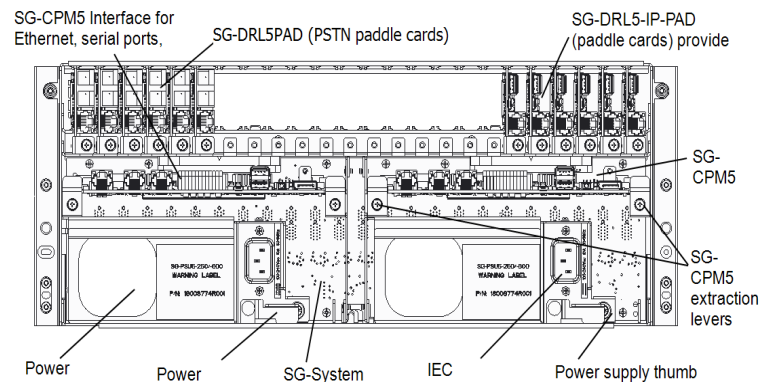


FIGURE 1-3: SG-System 5 back



NOTE: Use only 26 AWG wires for the Telco connections.

Description

The basic configuration consists of one 19-inch rack mounted chassis comprising the following:

- SG-MLRF5 - Metal rack of the SG-System 5 with SG-MP5
- SG-PSU5-600 - 600W power supply unit provides power to all system modules
- SG-PSU5-250 - 250W power supply unit provides power to all system modules
- SG-CPM5 - Central processing module controls all communication to and from receiver modules and printers
- SG-UIB5 - Touch screen user interface
- SG-DRL5-IP - Internet protocol line card
- SG-DRL5-IP PAD - Paddle card for SG-DRL5-IP provides network connection
- SG-MLRF5-RM - Rack mount rails
- SG-S5LFANTR - Line card fan tray
- SG-S5CFANTR - SG-CPM5 fan tray
- SG-S5SERCAB - Y cable for serial connection to the SG-CPM5 for automation/printer
- SG-SYS5MEM4 - Removable EMMC memory
- SG-SYS5DDR31 - DDR3 RAM 1GB
- SG-CPM5BATT - SG-CPM5 real time clock battery
- SG-DRL5 - Single line PSTN card
- SG-DRL5E - Single line PSTN card with backup channel and 2-way audio bridge
- SG-DRL5-2L - Dual line PSTN card
- SG-DRL5PAD - Paddle card for SG-DRL5/DRL5E/DRL5-2L PSTN cards
- SG-ADPT5 - Adapter card for SG-DRL5/DRL5E/DRL5-2L PSTN cards

Specifications

Dimensions

Depth:	27.5 in.	(69.85 cm)
Width:	19 in.	(48.26 cm)
Height:	7 in.	(17.78 cm)
Required rack space:	4U	

SG-System 5 UL Electrical:

Input voltage:	100-240 VAC, 50/60Hz.
Input current 600W:	8A max (RMS) @ 100VAC
Input current 250W:	3A max (RMS) @ 100VAC
Backup power supply:	External UPS (not supplied)

In a two SG-CPM5 configuration, a redundant SG-PSU5 can be inserted in the second slot. In the event of a SG-PSU5 failure, the redundant SG-PSU5 automatically assumes operation. These modules are hot swappable (can be removed and replaced while the system is in operation) if a working, redundant SG-PSU5 is installed. Both PSU units used in the system must have the same power rating.

Environmental:

Temperature:	0-49°C (32 - 120°F)
Humidity:	93% RH, non-condensing

Accounts:

ULC Line Security Levels: A1-A4 (active channels) or P1-P3 (passive channels)

Printers (UL/ULC Listed Installations):

Serial:	Seiko DPU-414
DACT Compatible communication formats (ULC Passive channels):	SIA, CID
Encryption:	AES 128 bit

Approvals

Industry approvals

- UL 1610 Central Station Burglar Alarm Units
- UL 864 10th Edition Standard for Control Units and Accessories for Fire Alarm Systems
- CAN/ULC-S304-2016-REV1 Control Units, Accessories and Receiving Equipment for Intrusion Alarm Systems
- CAN/ULC-S559-13 Equipment for Fire Signal Receiving Centres and Systems
- EN60950-1:2006 Standard for Information Technology Equipment.
- AS/NZS 60950.1:2003 Information Technology Equipment - Safety
- CISPR22 Class B Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurements
- EN50130-4 Immunity requirements for components of fire, intruder and social alarm systems
- NIST validation certificate number 2913 for AES 128 bit encryption.

For UL listed installations, the equipment must be installed in accordance with the requirements of NFPA72, NFPA70, UL827 and the authority having jurisdiction.

SG-System 5 with SG-DRL5-IP Line Card is ULC listed for active communication channel security level A1 - A4 when used in conjunction with T-Link TL250 and T-Link TL300(CF), TL260(R), TL280LE(R), LE2080(R), TL280(R)E, TL880LT, TL880LE, LE9080, 3G9080, HS3128/032/248, LE4010(CF), LE4020(CF), and 3G4010(CF) Internet/Intranet and/or GSM-GPRS alarm communicators. For this type of application the supervision and encryption features have to be enabled. The receiver can be used also in conjunction with ULC listed passive communication systems based on the configuration of the systems at the protected premises.

For ULC Installations the equipment must be installed in accordance with the requirements of ULC-S561 and ULC-S301 Standards and the authority having jurisdiction. SG-System 5 with SG-DRL5/DRL5E/DRL5-2L PSTN line cards is ULC listed for passive communication channel security levels P1-P3 when used in conjunction with compatible alarm systems using Industry Open SIA standard communication formats Contact ID or SIA.

This product has been approved by the California State Fire Marshal (CSFM) pursuant to section 13144.1 of the California Health and Safety Code. See CSFM Listing No. 7300-1273:0157 for allowable values and/or conditions for use concerning material presented in this document. The approval is subject to reexamination, revision and possible cancellation.

For ULC-S304 applications, the heartbeat timer (option [411]) shall be set to 30 seconds.

For UL864 Commercial Fire applications the following compatible communicators can be used with receiver model SG-System 5 SW Ver. 1.1x:

LE4010/LE4010CF SW Ver. 5.x

LE4020/LE4020CF SW Ver. 4.x

3G2010CF SW Ver. 4.x

TL300/TL300CF SW Ver. 1.5

The transmitter supervision (option [221] in SG-DLR5-IP line card) shall be set to 60 min for single path and to 6 h for multiple path performance based technologies.

UL864 programming requirements

NOTE: 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, certain programming features or options must be limited to specific values or not used at all as indicated below.

SG-CPM5 - UL864 programming requirements				
Opt #	Program option	Permitted in UL864? (Y/N)	Possible settings	Settings permitted (UL 864)
202	Buzzer	N	Enabled/Disabled	Enabled
411	Heartbeat Timer	Y	00-FF	Not Allowed 00
601	CPM5 1 Fan Trouble	N	Enabled/Disabled	Enabled
602	CPM5 2 Fan Trouble	N	Enabled/Disabled	Enabled
603	PSU 1 Trouble	N	Enabled/Disabled	Enabled
604	PSU 2 Trouble	N	Enabled/Disabled	Enabled
609	UPS AC 1 Trouble	N	Enabled/Disabled	Enabled
610	UPS AC 2 Trouble	N	Enabled/Disabled	Enabled
611	UPS Battery 1 Trouble	N	Enabled/Disabled	Enabled
612	UPS Battery 2 Trouble	N	Enabled/Disabled	Enabled
615	SG-Serial Automation Sec 1 Trouble	N	Enabled/Disabled	Enabled
617	Serial CPM 1 Printer 1 Trouble	N	Enabled/Disabled	Enabled
618	Serial CPM 2 Printer 1 Trouble	N	Enabled/Disabled	Enabled
619	Serial CPM 1 Printer 2 Trouble	N	Enabled/Disabled	Enabled
620	Serial CPM 2 Printer 2 Trouble	N	Enabled/Disabled	Enabled
621	SG-TCP Automation Pri - Trouble	N	Enabled/Disabled	Enabled
631	SG-TCP Automation Sec - 1 Trouble	N	Enabled/Disabled	Enabled
665	TCP Printer Pri - 1 Trouble	N	Enabled/Disabled	Enabled
675	TCP Printer Sec - 1 Trouble	N	Enabled/Disabled	Enabled

SG-DRL5-IP				
Opt #	Program option	Permitted in UL 864 (Y/N)	Possible settings	Settings permitted (UL 864)
221	Transmitter Absent Debounce Time	Y	5-65535	3600 sec (1 h)/ 21600 sec (6 h)
222	Transmitter Restoral Debounce Time	Y	5-65535	200
301	Transmitter Unencrypted Trouble	N	Enabled/Disabled	Enabled
302	Unknown Account Trouble	N	Enabled/Disabled	Enabled
303	Supervised Accounts Exceeded Trouble	N	Enabled/Disabled	Enabled

SG-DRL5-2L/DRL5E/DRL5				
Opt #	Program option	Permitted in UL 864? (Y/N)	Possible settings	Settings permitted (UL 864)
104/204	2-Way Activation Time	N	00-FF	00
12F/22F	4- and 5-digit Account Codes to Activate 2-Way Audio	N	00-FF	00
17B/27B	3-Digit Account Codes to Activate 2-Way Audio	N	00-FF	00
17C/27C	Alarm Codes to Activate 2-Way Audio	N	00-FF	00
17D/27D	Supervised Accounts Exceeded Trouble	N	00-FF	00

NOTE: For Commercial Fire applications a DACT shall automatically initiate and complete a test signal transmission sequence to its associated receiver (SG-DLR5/SG-DLR5E/SG-DLR5-2L line cards) at least once every 6 hours. The Automation Software connected to the receiver at the supervising station will indicate the absence of the test transmission (change settings from 24 h to 6 h).

Printers

Serial printer

For UL and ULC Listed applications, the following UL/ULC Listed printer can be used with the SG-System 5:

- Seiko DPU-414

TCP/IP printer

For UL Listed applications, the UL Listed SG-System 5 Console software can be used with the SG-System 5.

NOTE: For ULC Listed applications, the Console Printer application is considered supplemental and is only allowed to be used in conjunction with a compatible ULC Listed printer.

SG-System 5 Console software system requirements

Compatible operating systems:

- Microsoft Windows 2008 Server (32 and 64 bit)
- Microsoft Windows 7 (32 and 64 bit)
- Microsoft Windows 8 (32 and 64 bit)
- Microsoft Windows 8.1 (32 and 64 bit)
- Microsoft Windows 10 (32 and 64 bit)

NOTE: Requires .NET Framework 3.51.

Hardware requirements:

- Intel Atom CPM @ 1.6GHz and 1 GB of RAM

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

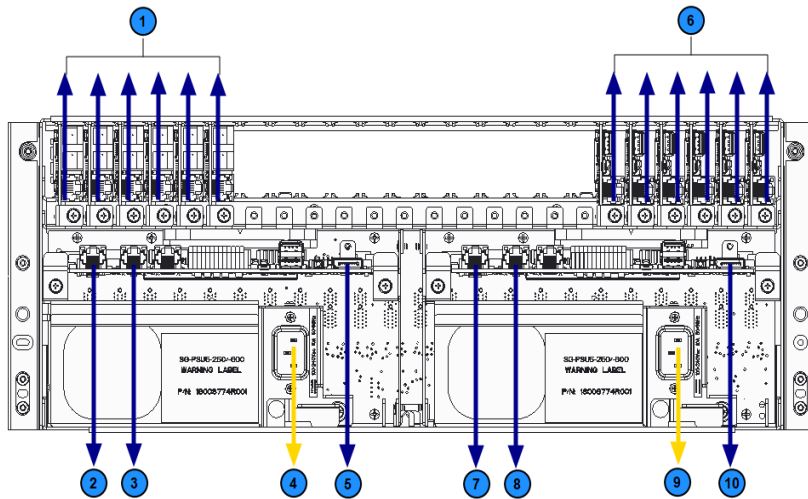
UL manual mode

For UL Manual mode, each event activates the internal buzzer to be acknowledged manually. Each event is sent automatically to the connected printer.

NOTE: A user must be logged in before acknowledging signals. A logged in user remains logged in until a new user enters a valid user name and password or if the SG-CPM5 resets or reboots.

SG-System 5 power limited circuit separation

FIGURE 1-4: SG-System 5 power limited circuit separation from non-power limited circuit diagram



1. Secondary line card phone connections
2. Secondary SG-CPM5 Ethernet connection
3. Secondary SG-CPM5 automation and printer port
4. Secondary SG-PSU5 AC power connection (see note)
5. Secondary SG-CPM5 display connection
6. Primary line card Ethernet connections
7. Primary SG-CPM5 Ethernet connection
8. Primary SG-CPM5 automation and printer port
9. Primary SG-PSU5 AC power connection (see note)
10. Primary SG-CPM5 display connection

NOTE: Employ only 26 AWG wires for the Telco connections.

NOTE: The power cord must be routed ¼ inch away from all other cables coming from or which are part of the SG-System 5.

SG-System 5 PSTN loading capacity of hunt groups					
	Number of lines in hunt group				
System loading at the supervising station	1	2	3	4	5-8
Number of initiating circuits	NA	5000	10000	20000	20000
Number of DACTs	NA	500	1500	3000	3000
	With DACR lines processed serially				
Number of initiating circuits	NA	3000	5000	6000	6000
Number of DACTs	NA	300	800	1000	1000

FCC Compliance Statement

Changes or modifications not expressly approved by Digital Security Controls could void your authority to use this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Re-orient the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/television technician for help.

The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

Important Information

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by the ACTA. On the side of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the Telephone Company.

SG-DRL5/DRL5E/DRL5-2L Line Cards

Product Identifier: US: F53AL01ADRL5

USOC Jack: RJ-21X; REN = 0.1A

Telephone Connection Requirements

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

Ringer Equivalence Number (REN)

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local Telephone Company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format. US: AA AEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Incidence of Harm

If this equipment SG-SYSTEM 5 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the Telephone Company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

Changes in Telephone Company Equipment or Facilities

The Telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the Telephone Company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

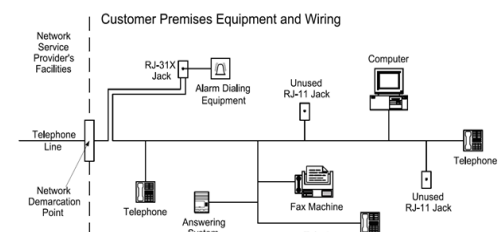
Equipment Maintenance Facility

If trouble is experienced with this SG-SYSTEM 5 equipment, for repair or warranty information, please contact the facility indicated below. If the equipment is causing harm to the telephone network, the Telephone Company may request that you disconnect the equipment until the problem is solved. This type of equipment is not intended to be repaired by the end user.

Tyco Atlanta Distribution Center, 2600 West Pointe Dr., Lithia Springs, GA, 30122 U.S.A.

Additional Information

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information. Alarm dialing equipment must be able to seize the telephone line and place a call in an emergency situation. It must be able to do this even if other equipment (telephone, answering system, computer modem, etc.) already has the telephone line in use. To do so, alarm dialing equipment must be connected to a properly installed RJ31X jack that is electrically in series with and ahead of all other equipment attached to the same telephone line. Proper installation is depicted in the figure below. If you have any questions concerning these instructions, you should consult your telephone company or a qualified installer about installing the RJ31X jack and alarm dialing equipment for you.



Innovation, Science and Economic Development Canada

SG-System 5 IC: CAN ICES-3 (B)/NMB-3(B); SG-DRL5/DRL5E/DRL5-2L IC: 160A-DRL5

NOTICE: This equipment meets the applicable Innovation, Science and Economic Development Canada (ISED) Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a

Declaration of Conformity indicating that ISED technical specifications were met. It does not imply that ISED approved the equipment.

NOTICE: The Ringer Equivalence Number (REN) for this terminal is 0.1 when using line card Model SG-DRL5-2L, SG-DRL5E or SG-DRL5. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

Safety instructions

The SG-SYSTEM 5 equipment is a **class 1, rack-mounted, (fixed-stationary) equipment, pluggable type A using a detachable power supply cord, designed to be installed, operated and maintained by service persons only** [a person having appropriate technical training and experience necessary to be aware of hazards to which that person may be exposed in performing a task and of measures to minimize the risks to that person or other persons].

The equipment SG-SYSTEM 5 is designed to be installed in **restricted access locations** within an environment that provides the Pollution Degree max 2 and **overvoltages category II - nonhazardous locations, indoor only**.

The **power supply** cord serves as a means of disconnection from the **mains**. The **outlet** used to power the equipment shall be installed near the equipment and shall be easily accessible. The equipment must be connected to a socket-outlet with a protective earthing connection! The **installation** of the SG-SYSTEM 5 equipment must provide a reliable earth connection and it shall respect the local electrical wiring regulations. **IMPORTANT: It is the installer's responsibility to ensure that the SG-SYSTEM 5 is properly mounted within a metallic fire enclosure with a minimum thickness of 1.5 mm and the final assembly is compliant with all applicable requirements from the point of view of the accessibility to the energized parts (hazardous voltages, TNV circuits, etc.) as these characteristics are defined within EN60950-1: 2006 standard.**

The external enclosure shall meet all of the applicable requirements from the point of view of physical requirements, e.g., steady force 250N, impact and stability. The equipment must be secured to the building structure before operation; all wiring and installation shall be in accordance with electrical codes acceptable to the authorities that have jurisdiction where the equipment is installed, serviced and operated. The rack must be **fixed** in place; the sub-assemblies shall **not be extended away** from the rack for installation and/or any other purpose.

Internal wiring shall be routed in a manner that prevents:

- excessive strain on wire and on terminal connections;
- loosening of terminal connections;
- damage of conductor insulation.

The wireways within the enclosure shall be smooth and free from sharp edges. Wires shall be protected and routed so that they do not come in contact with burrs, cooling fan or heat sinks which could cause damage to the insulation of conductors. Holes in metal shall have smooth well-rounded surfaces or shall be protected with bushings.

The external enclosure shall be connected to the **protective earth ground**. The external cabinet (rack) must be secured to the building structure before operation in a such a way to fully meet the stability requirements as per EN60950-1: 2006 conditions.

An adequate marking, visible on the front of the door (cover), **next to the access door** (or cover) of the rack, with instructions for protection once the **door** (or covers) is (are) removed, stating that the "telephone cord is to be disconnected prior to opening the door" (or other acceptable marking), shall be provided by the installer.

An acceptable power supply cord (detachable) shall be used in accordance with the local outlets and voltages. **It is the installer's responsibility to provide an appropriate acceptable power supply cord.**

CAUTION: This product uses lithium batteries. Improper handling of lithium batteries may result in heat generation, explosion or fire, which may lead to personal injuries. Please ensure that the above precautions are strictly observed by the related divisions including but not limited to sales, service, customers and (or) outside contractors. The equipment SG-SYSTEM 5 is equipped with

lithium non replaceable battery. Do not attempt to replace the battery.

CONNECTION TO THE MAINS

1. Connect first the **detachable power supply cord** to the IEC320 connector located on SG-SYSTEM 5 equipment.
2. Connect all the telecommunications cord-sets to the appropriate connectors.
3. Ensure that the enclosure of the equipment SG-SYSTEM 5 is fully installed (covers, doors, etc.) in a such a way that **hazardous voltages** will not be **accessible** when the equipment is connected to the **mains** and/or **telecommunication network**.

Warning: The internal power supplies are not swappable. Disconnect power before attempting to change a power supply.

In order to change the **internal** Power Supply, first **disconnect** the **detachable power supply cord** from the socket outlet used to provide power, and then, from the IEC320 connector which is mounted on the SG-SYSTEM 5 equipment.

Do not touch the **heatsinks** within the equipment: these are **live parts** and/or may present a hazard related to high temperatures. In order to swap the boards **use the provided plastic handles (inserters, extractors)**.

No repairs in the field are allowed. The SG-System 5 equipment must be returned to the manufacturer for repairs.

Limited Warranty

Digital Security Controls warrants the original purchaser that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use. During the warranty period, Digital Security Controls shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original purchaser must promptly notify Digital Security Controls in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period. There is absolutely no warranty on software and all software products are sold as a user license under the terms of the software license agreement included with the product. The Customer assumes all responsibility for the proper selection, installation, operation and maintenance of any products purchased from DSC. Custom products are only warranted to the extent that they do not function upon delivery. In such cases, DSC can replace or credit at its option.

International Warranty

The warranty for international customers is the same as for any customer within Canada and the United States, with the exception that Digital Security Controls shall not be responsible for any customs fees, taxes, or VAT that may be due.

Warranty Procedure

To obtain service under this warranty, please return the item(s) in question to the point of purchase. All authorized distributors and dealers have a warranty program. Anyone returning goods to Digital Security Controls must first obtain an authorization number. Digital Security Controls will not accept any shipment whatsoever for which prior authorization has not been obtained.

Conditions to Void Warranty

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- damage incurred in shipping or handling;
- damage caused by disaster such as fire, flood, wind, earthquake or lightning;
- damage due to causes beyond the control of Digital Security Controls such as excessive voltage, mechanical shock or water damage;
- damage caused by unauthorized attachment, alterations, modifications or foreign objects;
- damage caused by peripherals (unless such peripherals were supplied by Digital Security Controls);
- defects caused by failure to provide a suitable installation environment for the products;
- damage caused by use of the products for purposes other than those for which it was designed;
- damage from improper maintenance;
- damage arising out of any other abuse, mishandling or improper application of the products.

Items Not Covered by Warranty

In addition to the items which void the Warranty, the following items shall not be covered by Warranty:

(i) freight cost to the repair centre; (ii) products which are not identified with DSC's product label and lot number or serial number; (iii) products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection or testing to verify any warranty claim. Access cards or tags returned for replacement under warranty will be credited or replaced at DSC's option. Products not covered by this warranty, or otherwise out of warranty due to age, misuse, or damage shall be evaluated, and a repair estimate shall be provided. No repair work will be performed until a valid purchase order is received from the Customer and a Return Merchandise Authorisation number (RMA) is issued by DSC's Customer Service.

Digital Security Controls's liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty. Under no circumstances shall Digital Security Controls be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property. The laws of some jurisdictions limit or do not allow the disclaimer of consequential damages. If the laws of such a jurisdiction apply to any claim by or against DSC, the limitations and disclaimers contained here shall be to the greatest extent permitted by law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above may not apply to you.

Disclaimer of Warranties

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose) And of all other obligations or liabilities on the part of Digital Security Controls Digital Security Controls neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

This disclaimer of warranties and limited warranty are governed by the laws of the province of Ontario, Canada.

WARNING: Digital Security Controls recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Installer's Lockout

Any products returned to DSC which have the Installer's Lockout option enabled and exhibit no other problems will be subject to a service charge.

Out of Warranty Repairs

Digital Security Controls will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls must first obtain an authorization number. Digital Security Controls will not accept any shipment whatsoever for which prior authorization has not been obtained.

Products which Digital Security Controls determines to be repairable will be repaired and returned. A set fee which Digital Security Controls has predetermined and which may be revised from time to time, will be charged for each unit repaired.

Products which Digital Security Controls determines not to be repairable will be replaced by the nearest equivalent product available at that time. The current market price of the replacement product will be charged for each replacement unit.

END-USER LICENSE AGREEMENT

IMPORTANT - READ CAREFULLY: DSC Software purchased with or without Products and Components is copyrighted and is purchased under the following license terms:

- This End-User License Agreement (“EULA”) is a legal agreement between You (the company, individual or entity who acquired the Software and any related Hardware) and Digital Security Controls, a division of Tyco Safety Products Canada (“DSC”), the manufacturer of the integrated security systems and the developer of the software and any related products or components (“HARDWARE”) which You acquired.
- If the DSC software product (“SOFTWARE PRODUCT” or “SOFTWARE”) is intended to be accompanied by HARDWARE, and is NOT accompanied by new HARDWARE, You may not use, copy or install the SOFTWARE PRODUCT. The SOFTWARE PRODUCT includes computer software, and may include associated media, printed materials, and “online” or electronic documentation.
- Any software provided along with the SOFTWARE PRODUCT that is associated with a separate end-user license agreement is licensed to You under the terms of that license agreement.
- By installing, copying, downloading, storing, accessing or otherwise using the SOFTWARE PRODUCT, You agree unconditionally to be bound by the terms of this EULA, even if this EULA is deemed to be a modification of any previous arrangement or contract. If You do not agree to the terms of this EULA, DSC is unwilling to license the SOFTWARE PRODUCT to You, and You have no right to use it.

SOFTWARE PRODUCT LICENSE

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.

1. GRANT OF LICENSE This EULA grants You the following rights:
 - a. **Software Installation and Use** - For each license You acquire, You may have only one copy of the SOFTWARE PRODUCT installed.
 - b. **Storage/Network Use** - The SOFTWARE PRODUCT may not be installed, accessed, displayed, run, shared or used concurrently on or from different computers, including a workstation, terminal or other digital electronic device (“Device”). In other words, if You have several workstations, You will have to acquire a license for each workstation where the SOFTWARE will be used.
 - c. **Backup Copy** - You may make back-up copies of the SOFTWARE PRODUCT, but You may only have one copy per license installed at any given time. You may use the back-up copy solely for archival purposes. Except as expressly provided in this EULA, You may not otherwise make copies of the SOFTWARE PRODUCT, including the printed materials accompanying the SOFTWARE.
2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS
 - a. **Limitations on Reverse Engineering, Decompilation and Disassembly** - You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation. You may not make any changes or modifications to the Software, without the written permission of an officer of DSC. You may not remove any proprietary notices, marks or labels from the Software Product. You shall institute reasonable measures to ensure compliance with the terms and conditions of this EULA.
 - b. **Separation of Components** - The SOFTWARE PRODUCT is licensed as a single product. Its component parts may not be separated for use on more than one HARDWARE unit.
 - c. **Single INTEGRATED PRODUCT** - If You acquired this SOFTWARE with HARDWARE, then the SOFTWARE PRODUCT is licensed with the HARDWARE as a single integrated product. In this case, the SOFTWARE PRODUCT may only be used with the HARDWARE as set forth in this EULA.
 - d. **Rental** - You may not rent, lease or lend the SOFTWARE PRODUCT. You may not make it available to others or post it on a server or web site.
 - e. **Software Product Transfer** - You may transfer all of Your rights under this EULA only as part of a permanent sale or transfer of the HARDWARE, provided You retain no copies, You transfer all of the SOFTWARE PRODUCT (including all component parts, the media and printed materials, any upgrades and this EULA), and provided the recipient agrees to the terms of this EULA. If the SOFTWARE PRODUCT is an upgrade, any transfer must also include all prior versions of the SOFTWARE PRODUCT.
 - f. **Termination** - Without prejudice to any other rights, DSC may terminate this EULA if You fail to comply with the terms and conditions of this EULA. In such event, You must destroy all copies of the SOFTWARE PRODUCT and all of its component parts.
 - g. **Trademarks** - This EULA does not grant You any rights in connection with any trademarks or service marks of DSC or its suppliers.
3. COPYRIGHT - All title and intellectual property rights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, and text incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT, are owned by DSC or its suppliers. You may not copy the printed materials accompanying the SOFTWARE PRODUCT. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE PRODUCT are the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants You no rights to use such content. All rights not expressly granted under this EULA are reserved by DSC and its suppliers.
4. EXPORT RESTRICTIONS - You agree that You will not export or re-export the SOFTWARE PRODUCT to any country, person, or entity subject to Canadian export restrictions.
5. CHOICE OF LAW - This Software License Agreement is governed by the laws of the Province of Ontario, Canada.
6. ARBITRATION - All disputes arising in connection with this Agreement shall be determined by final and binding arbitration in accordance with the Arbitration Act, and the parties agree to be bound by the arbitrator’s decision. The place of arbitration shall be Toronto, Canada, and the language of the arbitration shall be English.
7. LIMITED WARRANTY

- a. **NO WARRANTY** - DSC PROVIDES THE SOFTWARE “AS IS” WITHOUT WARRANTY. DSC DOES NOT WARRANT THAT THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR THAT OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE.
- b. **CHANGES IN OPERATING ENVIRONMENT** - DSC shall not be responsible for problems caused by changes in the operating characteristics of the HARDWARE, or for problems in the interaction of the SOFTWARE PRODUCT with non-DSC-SOFTWARE or HARDWARE PRODUCTS.
- c. **LIMITATION OF LIABILITY; WARRANTY REFLECTS ALLOCATION OF RISK** - IN ANY EVENT, IF ANY STATUTE IMPLIES WARRANTIES OR CONDITIONS NOT STATED IN THIS LICENSE AGREEMENT, DSC’S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS LICENSE AGREEMENT SHALL BE LIMITED TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU TO LICENSE THE SOFTWARE PRODUCT AND FIVE CANADIAN DOLLARS (CAD\$5.00). BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.
- d. **DISCLAIMER OF WARRANTIES** - THIS WARRANTY CONTAINS THE ENTIRE WARRANTY AND SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED (INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF DSC. DSC MAKES NO OTHER WARRANTIES. DSC NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON PURPORTING TO ACT ON ITS BEHALF TO MODIFY OR TO CHANGE THIS WARRANTY, NOR TO ASSUME FOR IT ANY OTHER WARRANTY OR LIABILITY CONCERNING THIS SOFTWARE PRODUCT.
- e. **EXCLUSIVE REMEDY AND LIMITATION OF WARRANTY** - UNDER NO CIRCUMSTANCES SHALL DSC BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY. SUCH DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFITS, LOSS OF THE SOFTWARE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE OR REPLACEMENT EQUIPMENT, FACILITIES OR SERVICES, DOWN TIME, PURCHASERS TIME, THE CLAIMS OF THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY.

WARNING: DSC recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this SOFTWARE PRODUCT to fail to perform as expected.

The trademarks, logos, and service marks displayed on this document are registered in the United States [or other countries]. Any misuse of the trademarks is strictly prohibited and Tyco will aggressively enforce its intellectual property rights to the fullest extent of the law, including pursuit of criminal prosecution wherever necessary. All trademarks not owned by Tyco are the property of their respective owners, and are used with permission or allowed under applicable laws. Product offerings and specifications are subject to change without notice. Actual products may vary from photos. Not all products include all features. Availability varies by region; contact your sales representative.



© 2020 Tyco Security Products. All rights reserved.
Johnson Controls, Tyco and DSC are trademarks of Johnson Controls.
Sales: 1-888-888-7838 Tech. Support (Canada & USA): 1-800-503-5869
www.dsc.com

