Job: ELAN Manual
Size: 150 x 150 mm folded

12/23/2013 -> final print pdf

ELAN

Quick Install Guide – **gSC10**

6 pages each - Format: 150 x 300 mm **(Metric !!)**

Final Version
English & Chinese

Two manuals are separate, but distributed togehter (see drawing)

& **only** have one part number per set.

12/23/2013 – PRINT PDF_3

P/N 9901335 Rev. A 12/2013

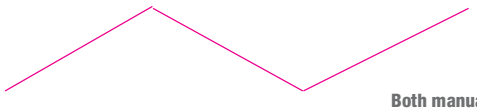
Questions?
Juergen 707 - 778- 5826

Folding-Method:

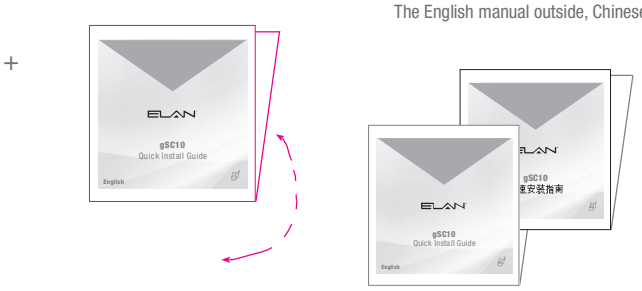
Folded size:
150 x 150 mm

Open:
450 mm wide x 300 mm high

No bleed

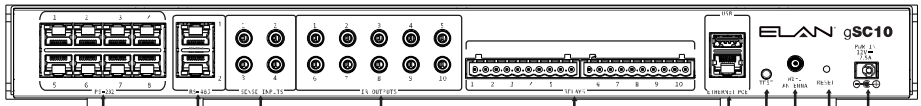


Both manuals
English & Chinese are tucked togehter.
The English manual outside, Chinese manual inside.



gSC10
Rear Panel Connections

Dimension: 17"W x 2.25" H x 14" D (431.8mm W x 57.2mm H x 355.6mm D)



Serial Connections
8 bi-directional RS-232 Ports

Serial Connections
2 bi-directional RS-485 Ports

Sense Input Connections
4 ELAN Sensor input Ports

Relay Connections
10 Normally Open Relays
12VDC 24VAC @ 1 AMP
Compatibility

WIFI Antenna
802.11 b/g/n

DC Power Connection

Factory use ONLY

IR Outputs
10 discrete IR channels.
Compatible with Xantech single and dual emitters.

USB Modem Connections
USB - See Integration Notes for compatible equipment

Ethernet Connection
Ethernet - 10/100 Mbps
PoE IEEE 802.3at Type 2

Reset
Reset's the unit's IP address to factory default (DHCP).
Press and hold for factory reset.

ELAN

gSC10
Quick Install Guide

English

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Unplug this apparatus during lightning storms or when unused for long periods of time.
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

FCC and IC Information:
This equipment complies with Part 15 of FCC RF Rules. Operation is subject to the following two conditions:

1. This device may not cause interference and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This Device complies with RSS-210 of the IC Rules. Operation is subject to the following two conditions:

1. This device may not cause interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC and IC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the exemption from the routineevaluation limits in section 2.5 of RSS 102.

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters from user and bystanders.

Warning: The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102, and users can obtain Canadian information on RF exposure and compliance from the Canadian Representative Product Solutions Group at Tel: (519) 763-4538.

Notice: Use only the antenna provided with the product:
R-SMA Antenna, Aristotle Enterprises Inc.
p/n RFA-02-L2M2-M10-N, gain of 2.0 dBi.

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To protect your equipment from power surges and momentary power interruptions we strongly suggest you utilize a battery-backed power supply (UPS) with this equipment.

ELAN recommends Panamax UPS and power conditioning products for use with your new gSC10.

Unpack the gSC10. Verify that you have all packaging contents.

You should have received:

- **a.** gSC10
- **b.** 12VDC 2.5A Power Supply
- **c.** Rack Mount Brackets
- **d.** 7ea RJ-45 to serial DB9 male adaptors
- **e.** 2ea RJ-45 to serial DB9 female null modem adaptors
- **f.** 1ea RJ-45 to serial DB9 female adaptor
- **g.** Relay wiring connector
- **h.** WiFi antenna
- **i.** Safety Sheet
- **j.** Quick Install Guide (this document)

The g! Training Guide contains valuable hardware and software reference documentation and is considered an important supplement to this document. You would have received the training guide while attending g!School, however the g! Training Guide is updated regularly.

Make sure you have the latest version by visiting the ELAN Dealer website at www.elanhomesystems.com and following the "dealer" link.

Note: The gSC10 does not have a ViaNET connection. If your installation has devices that require ViaNET communication you will need to connect an ELAN SC1 to one of the serial RS-232 ports.

www.elanhomesystems.com

1 Mount the gSC10 in the desired location

The gSC10 is designed to mount on a shelf, hang in a cabinet or rack, or mount in a structured wiring enclosure.

Shelf Mounting:
The gSC10 has rubber feet to protect finished surfaces. Set the gSC10 in a location that will allow you to properly manage connected wiring so that tension is not placed on the connections. The gSC10 is relatively small and wire tension will cause the unit to move and may cause wires to become disconnected.

Dimension: 17" W x 2.25" H x 14" D
(431.8mm W x 57.2mm H x 355.6mm D)

Rack Mounting:
The Rack Mount Brackets included with the gSC10 secure to the chassis using the included screws.

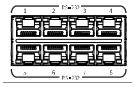
Do not use longer screws to attach the brackets as this may permanently damage the gSC10.

Remove the feet from the gSC10 before rack mounting the unit. When mounting in very warm locations (i.e. enclosed rack or cabinet) leave a rack space above and/or below the gSC10 for ventilation.

Dimensions without feet: 1U or 19" W x 1.75" H
(482.6mm W x 44.45mm H)

2 RS-232 Serial Connections

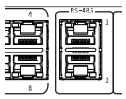
Connect up to 8 RS-232 serial controlled devices using the included DB9 to RJ-45 adaptors. Please note that each RS-232 port on the gSC10 supports hardware hand-shaking, which is required by some 3rd party devices. See the Integration Notes for the devices you are connecting to determine which DB9 to RJ-45 adaptor should be used and programming specifics. The chart below shows the wiring pin outs for T-568A and T-568B standards



RS-232 wiring pin-outs are as follows:

RS-232 Port Pin #	568A Color Code	568B Color Code	Function
1	White/Green	White/Orange	N/C
2	Green	Orange	DCD
3	White/Orange	White/Green	DTR
4	Blue	Blue	GND
5	White/Blue	White/Blue	RXD
6	Orange	Green	TXD
7	White/Brown	White/Brown	CTS
8	Brown	Brown	RTS

RS-485 Serial Connections
The two RS-485 ports allow connection to Full Duplex (Aprilaire for thermostats, for example) and Half Duplex (Pentair Pool and Spa controllers, for example) RS-485 controlled devices without using adapters. The table below shows the T-568A and T-568B color codes and the function of each conductor of the RS-485 ports. Please refer to the Integration Notes for the device you are integrating for wiring and programming specifics.

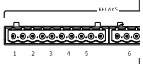


RS-485 wiring pin-outs are as follows:

RS-485 Port Pin #	568A Color Code	568B Color Code	Naming Conventions:		
1	White/Green	White/Orange	RxD +	RD (B)	B+
2	Green	Orange	RxD -	RD (A)	B-
3	White/Orange	White/Green	TxD +	TD (B)	A+
4	Blue	Blue	N/C		
5	White/Blue	White/Blue	N/C		
6	Orange	Green	TxD -	TD (A)	A-
7	White/Brown	White/Brown	GND	GND	GND
8	Brown	Brown	N/C		

3 Relay Connections

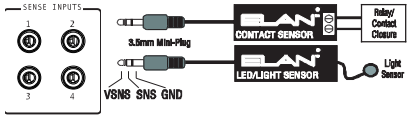
Ten normally open relays are available for controlling third party devices. The included removable connector will accept up to 16ga bare copper leads. Be careful to verify that no portion of one wire touches the other wire. Prior to connection verify that the connected load does not exceed 24volts AC/DC or 1amp. If either parameter is exceeded, add a higher capacity relay to control the load and use the gSC10 output to control that relay.



4 Sense Input Connections

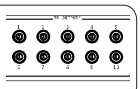
ELAN sensors can be used to input a status from 3rd party devices. The status can either be ON or OFF. This can be used to trigger an event map or as a condition of an event map. Connect ONLY ELAN sensors to these ports.

Available ELAN sensors include:
AUDIO, VIDEO, CONTACT CLOSURE, VOLTAGE, LED/LIGHT, and CURRENT/ MAGNETIC FIELD sensors.



5 IR Output Connections

Ten discrete IR outputs are supplied to control third party devices. The outputs may be configured in g! programming to utilize a carrier or not. Each output is compatible with Xantech single and dual emitters.



6 USB connection

Some accessories may be connected to the gSC10's USB connector. Refer to the ELAN Integration Note for the device prior to connection.

7 Ethernet Connection

Connect the Ethernet connection to an available 10/100 Mbps port on the network. This is the preferred connection.
The gSC10 may be powered over Ethernet (PoE).
PoE connection must meet IEEE 802.3at Type 2 requirements of up to 25W (@50VDC 600mA max).

8 WiFi Antenna

The gSC10 includes a WiFi radio for installations where a hardwired Ethernet connection is not available. This flexibility allows the gSC10 to be used as both an primary controller and to act as an extender when necessary. Ethernet connection is preferred, and should always be used when available. The WiFi radio should be used sparingly and only in Extender Mode. The antenna connector is a standard R SMA type connector. Use only antennas provided with the equipment or as listed on page 2 of this document. Configuring the WiFi radio may only be accomplished while the gSC10 is connected to an Ethernet connection and is covered in the g! Configurator reference guide.

9 RESET Switch

When pressed momentarily the RESET switch will clear the static IP setup and return the gSC10 to DHCP as well as reset the Wifi configuration to factory default. When pressed and held for more than 15 seconds the gSC10 will be reset to its factory default programming.

WARNING! THIS CANNOT BE UNDONE!!!

10 TEST

The TEST connection is for factory and repair access only. Do not plug anything into the TEST port. Plugging anything into the TEST port will void the warranty and release the magic smoke.

11 Power Connection

Once all other connections have been completed, connect the supplied 12VDC power supply and engage the power switch on the front of the gSC10.

12 Connecting to the gSC10 on your network

The gSC10 is set from the factory for DHCP networking, which means it receives its IP address from the network router. Use gTools to find the address and connect to the gSC10.

13 Software upgrade

Prior to configuring the product, upgrade the gSC10 software to the latest version of g! Core Module. Core Module can be found on the ELAN dealer website. The gSC10 is not compatible with g! Core Module releases prior to g!7.0.

14 User Registration:

All installations utilizing g!7.0 or later require end user registration to enable remote access. At your earliest opportunity please have your customer complete the registration process by accessing the User Setup screen from the g! Main Menu on any g! viewer.

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the IC RF Exposure limits under mobile exposure conditions. (antennas are greater than 20cm from a person's body).

This device has been certified for use in Canada. Status of the listing in the Industry

Canada's REL (Radio Equipment List) can be found at the following web address: http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng

Additional Canadian information on RF exposure also can be found at the following web address: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (les antennes se situent à moins de 20 cm du corps d'une personne).

Ce périphérique est homologué pour l'utilisation au Canada. Pour consulter l'entrée correspondant à l'appareil dans la liste d'équipement radio (REL - Radio Equipment List) d'Industry Canada rendez-vous sur:

http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng

Pour des informations supplémentaires concernant l'exposition aux RF au Canada rendez-vous sur : http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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:

-Reorient or relocate 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/ TV technician for help.

CAUTION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna Type	Peak Gain
Dipole Antenna	2.09dBi