

# Integration Note

Manufacturer:	DSC		
Model Number(s):	Power Series / 5401		
Core Module Version:	4.0 (all builds)		
Comments:			
Document Revision Date:	1/30/2013		

### **OVERVIEW AND SUPPORTED FEATURES**

The **DSC Power Series** panels integrate with the **g!** system using an RS-232 serial connection. The panel requires the PC5401 Data Interface Module to provide the RS-232 connection to the panel.

Integration of the security system provides monitoring and control from any touch screen, telephone or computer both locally and remotely. Additionally, events occurring in the security system can trigger system commands in other sub-systems in the home. For example, a burglar alarm can turn all the lights on and send out email alerts. The security system can also receive commands as a result of events within other sub-systems. For example, changing the house mode from Home to Vacation can trigger a security command to arm the system.

#### **IMPORTANT NOTE - THERMOSTATS:**

The DSC Power Series panels can include thermostats that tie into the security panel. The g! software does not currently support this feature, so thermostats connected to the Power series panels cannot be controlled from a g! system.

### THESE PANELS SUPPORT THE FOLLOWING FEATURES:

**Arm – Disarm:** Arm and disarm from the Viewer interface is supported. Status information is available for all partitions. Arming in Away mode can only be performed if Auto Arm Away is enabled in the Configurator- see below.

**Auto Arm:** Arming as a System Command from the Event Mapper is supported. By default, automatic arming is disabled in the Configurator.

**Instant Alarm in Stay Mode:** The panel can be armed in **Stay** mode from the **g!** interface so that a zone fault causes an instant alarm (in other words, there is no entry delay).

**Zone Status:** Zone status information is available for all zones (in any partition), and is properly shown in the Viewer.

**History View:** The history view is properly supported on any Viewer.

**Auto Zone and Partition Detection**: After a zone has been faulted the **g!** system will automatically detect the zone number and partition number, but it will not detect the zone name.

#### THESE PANELS DO NOT SUPPORT THE FOLLOWING FEATURES:

**Thermostats:** Thermostats connected to the panel cannot be controlled from the **g!** system.

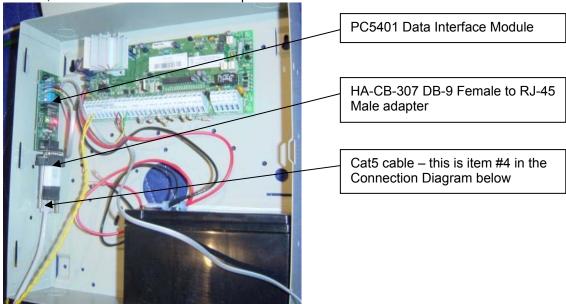
**Zone Bypass:** Zones cannot be bypassed from the g! interface.

Auto Name Detection: Zone names cannot be read from the panel.

Any feature not specifically noted as supported should be assumed to be unsupported.

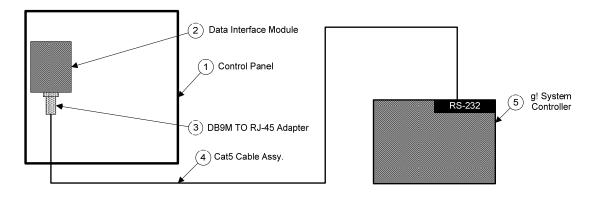
#### **INSTALLATION OVERVIEW**

1. If you are using the wall mount box, then be sure to mount the PC5401 so that the RS-232 connection can be easily made. The image below shows one suitable location, on the left side of the box, with room for the cable and adapter.



- 2. If you are using a hub enclosure, be sure to leave room for the cable and DB-9 to RJ-45 adapter to connect easily to the PC5401.
- 3. Install the security system including the PC5401 RS-232 Data Interface Module.
- 4. Run a Cat5 wire from the **g!** system to the security panel and test the cable.
- 5. Test the security panel, zone sensors and keypads for functionality.
- 6. Connect the **g!** system to the panel electrically.
- 7. Configure the **g!** system controller communication device and security panel and confirm communication between the panel and the **g!** system controller.
- 8. Fault all the zones in the system. Faulting the zone sends a message to the **g!** system which then automatically adds the zone in the Configurator. Zones that can't be easily faulted must be added by hand. Confirm that all zones are visible in the Configurator, and then provide names for each zone and partition with the Configurator.
- Test the arming and disarming capability from a computer or touch screen and confirm history function.

### **CONNECTION DIAGRAM**



### **BILL OF MATERIALS**

#	Device	M anufacturer	Part Number	Protocol	Connector Type	Notes
1	Control Panel	DSC	Power Series	RS-232	Vario us	
2	Data Interface Module	DSC	PC5401	RS-232	DB-9 Female x Terminal Strip	
3	DB9M to RJ45 Adapter	ELAN	HA-CB-307	RS-232	DB-9 Male X RJ-45 Female	
4	Cat5 Cable	Installer	N/A	RS-232	RJ-45 M ale X RJ-45 M ale	M ust terminate all 8 conductors
5	g! System Controller	ELAN	Various (HC12)	RS-232	RJ-45	

### PANEL PROGRAMING

No special steps are needed to program the DSC Power series panels for g! integration.

## g! Configuration Details

The following table provides settings used in the **g!** Configurator. Refer to the *Configurator Reference Guide* for more details.

o "<Select>"

Select the appropriate item from the list (or drop-down) in the Configurator.

o "<User Defined>", etc.

Type in the desired name for the item.

Devices	Variable Name	Setting	Comments
Communication Devices	Name	<pre><user defined=""> (Default: Security)</user></pre>	
Communication Devices	Туре	Serial Port	
	System Controller Name	N/A	
	Communication Type	Standard Connection	
	Location	<ul> <li>Standard Connection</li> <li>Standard Connection</li> <li>User Defined&gt; (Not Required)</li> </ul>	
	Com Port	<select></select>	
	Comport	- Gelectiv	
Security Panels	Name	<pre><user defined=""> (Default: DSC Power Series)</user></pre>	
	Device Type	DSC Power Series	
	Location	<user defined=""> (Not Required)</user>	
	Comm Device	<select> (Default: Secuirty)</select>	
		Name Chau Auta Kara	
	Birmin	Name Show Auto Keys	
	Disarm	Disarm Yes NO 4	
	Mode 1	Away Yes NO 4	
	Mode 2	Stay Yes NO 4	
	Mode 3	Instant Yes NO 4	
Partions	Name	<user defined=""></user>	
	User Number	0	
	Show Partition	Yes	
	Areas in Partition	<user defined=""> (Not Required)</user>	
Zones	Name	<user defined=""></user>	
	Enable Bypass	No (See Note 1)	
	7.		
Notes:			
	not cupport bypassable zeros	from external automation systems.	

### **COMMON MISTAKES**

- 1. Failing to test the Cat5 cable assembly. It is easy to make a mistake when terminating the Cat5 cable with the RJ-45 connectors. Always use a LAN tester to check for continuity and shorts.
- Using a Cat5 patch cable without all 8 conductors. Some Ethernet patch cables only have the 4 conductors (1,2,3,6) needed for Ethernet communications. These cables will not work as patch cables for RS-232 communications. Visually inspect the clear plastic connectors to determine if all 8 wires are present.
- 3. Using a null modem to connect the RS-232 port. The DCS Power series panel connection does not require a null modem when connecting to a g! system controller.
- 4. Failing to plug the Cat5 cable assembly into the correct port. Make sure the RJ-45 connector is plugged into the same port (COM1, 2, 3 or 4) that is specified in the Configurator.
- 5. Incorrect driver selection. If you have the 5401 integration board, ensure you are using the DSC Power Series /5401 driver—do *not* use the IT100 driver.