

# **Integration Note**

Manufacturer:	Honeywell/Ademco
Model Number(s):	VISTA-128BPT, VISTA-250BPT
Core Module Version:	g! Core Module 5.9.26 or newer
Comments:	
Document Revision Date:	8/6/2013

## **OVERVIEW AND SUPPORTED FEATURES**

The **Honeywell/Ademco Vista 128BPT, 250BPT** are security panels that integrate with the **g!** system using an RS-232 serial connection. The panel has an on board serial interface to enable the RS-232 communication between the **g!** system controller and the control panel.

Integration of the security system provides monitoring and control from any touch screen 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.

#### THESE PANELS SUPPORT THE FOLLOWING FEATURES:

**Arm – Disarm:** Arm and disarm from the Viewer interface is supported for all partitions and user codes. Status information is available for all partitions.

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

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

Auto Zone and Partition Detection: The g! system will automatically detect zones and partitions upon connection to the panel.

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

**Zone Bypass:** Zones cannot be bypassed from the **g!** interface, only from the Ademco keypads. In the Ademco panel zones can be configured to automatically bypass if they are faulted when arming the panel. Using this feature works well to overcome this limitation.

Auto Arm: Arming as a System Command from the Event Mapper is not supported with this panel.

**Zone Status:** Zone status information for entry and exit zones is **not communicated** to **g!** during entry and exit delays.

**Entry/Exit Delay:** This panel will not notify **g!** that it is in entry or exit delay, as a result entry/exit delay as a System Trigger or Condition and Announce Security Events is not supported with this panel.

**Relays:** The relays on the panel can **not** be controlled from the **g!** interface or the Event Mapper.

Panic Button: The g! interface cannot send a panic command to the Ademco panel.

#### See Communication Details for warnings about BPT communication experiences.

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

## INSTALLATION OVERVIEW

- 1. Install the security system and program the panel for the RS-232 interface. The BPT has two serial connection options: J9 and TB4, and only one may be used at a time. It is recommended to use the J9 header with the VT-SERCBL adapter for easy integration. Optionally, TB4 may be directly wired to a DB9. See **Wiring Diagram** for full details.
- 2. Run a Cat5 wire from the **g!** system to the security panel and test the cable. Max wire run is 25 feet from the panel to the com port.
- 3. Test the security panel, zone sensors and keypads for standalone functionality.
- 4. Connect the **g!** system to the panel electrically.
- 5. On the security tab in the Configurator add a communication device and security panel and confirm communication between the panel and the **g!** system. See **g! Configuration Details** below.
- 6. All zones should discover automatically with no user interaction if communication is working. Confirm that all zones are visible in the Configurator and properly associated with their partition. Optionally change the names for each zone and partition with the Configurator.
- 7. Test the arming and disarming capability from a computer or touch screen and confirm history function.

## **COMMUNICATION DETAILS**

Honeywell BPT series panels have some performance and integration features that dealers should be aware of:

- Entry/Exit delay: BPT Panels do not communicate Entry/Exit Delays or Entry/Exit zone faults during an Entry/Exit delay. As a result, on Entry, the g! interface will continue to show "Armed" during an Entry/Exit Delay until the panel is either disarmed or the alarm becomes active. Likewise, during an Exit Delay, the g! interface will display "Armed" when the panel is actually still in the Exit Delay state.
- **Communication Speed:** It is normal for zone faults, changes in arm state from panel or a partition entering alarm state to have some delay in communication to the **g!** system. Typically the delay observed was approximately **5 seconds**, though it is possible this will increase somewhat on large systems. Likewise, commands sent from the **g!** system may experience the same delay.
- Communication Collisions: BPT panels do not leverage any serial flow control methods and it is possible for commands from the g! interface to collide with communication from the panel and be missed. This may occur anytime the panel is sending information at the exact instant g! attempts to send a command. A typical example of the user experience when this occurs would include changing arm mode from a g! interface, waiting ~5 seconds and seeing no change occur (for example, disarm attempted, but panel does not disarm after a short delay). If this is encountered the user must manually send the command again.
- **Post-Burglar Alarm Behavior**: Following an Alarm Active state on the panel, disarming will silence the siren. The **g!** Viewer will continue to note a status of Alarm Active (with Disarm highlighted instead of the arm mode) as a notification to the user that the Alarm was tripped (the BPT Keypad will also show an alarm state). This notification state will stay present until the panel is disarmed a second time. Note that zone fault status may not be accurate until the 2<sup>nd</sup> Disarm is performed. Optionally, arming the panel again will also clear the Alarm Active status.

# WIRING DIAGRAM

## **OPTION 1: USE J9 CONNECTOR**



#### BILL OF MATERIALS:

#	Device	M anufacturer	Part Number	Protocol	Connector Type	Notes
1	Alarm Panel	Honeywell-Ademco	128BPT,250BPT	RS-232	Various	
2	Ribbon Cable	Honeywell-Ademco	VT-SERCBL	RS-232	Molex X DB9 Female	
3	DB9M to RJ45 Adapter	Elan	HA-CB-307	RS-232	DB-9 M ale X RJ-45 Female	
4	Cat5 Cable	Installer	N/A	RS-232	RJ-45 Male X RJ-45 Male	Must terminate all 8 conductors
5	g! Controller	Elan	Various (ex. HC-12)	RS-232	RJ-45 Female	

### **OPTION 2: USE TB4 TERMINAL STRIP**



	Pin Out (568B)	
4	Blue	GND
5	White/Blue	ТХ
6	Green	RX

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#	Device	M anufacturer	Part Number	Protocol	Connector Type	Notes
1	Alarm Panel	Honeywell-Ademco	128BPT,250BPT	RS-232	Various	
2	Cat5 Cable	Installer	N/A	RS-232	RJ-45 Male X RJ-45 Male	Must terminate all 8 conductors
3	g! Controller	Elan	Various (ex. HC-12)	RS-232	RJ-45 Female	

# PANEL PROGRAMMING

Before communication can start between the **g!** system and the Ademco panel there are several fields that need to be changed in the panel configuration. You will need the installer access code to enter the programming mode.

To enter programming mode press the installer code and then [8000]. Once in programming mode, changing the value of a field can be accomplished by pressing [\*] + [Field #] + [Value]. The keypad will ding 3 times and advance to the next field after the value had been entered. For example: Programming field 70 to a value of 11111 requires the following key strokes [\*] + [70] + [1

Step	Instructions	Comments	
1	Press [Installer Code] + [8000]	Enter programming mode on page (0)	
2	Press [*] + [05] + [1]	Sets field *05 to 1 and enables System Events Notify	
3	Press [*] + [14] + [1]	Sets field *14 to 1 and enables RS-232 Input	
5	Press [*] + [94]	Changes to the next page(1)	
6	Press [*] + [70] + [1]+[1]+[1]+[1] +[1]	Sets field 1*70 to 11111 and enables Event log types Alarm, Check, Bypass, Open/Close and System	
7	Press [*] + [72] + [0]	Sets field 1*72 to 0 and disables the Event Log Printer On- Line Printer	
8	Press [*] + [78] + [1]	Sets field 1*78 to 1 and enables a Extended Home Control Event Reports	
9	Press [*] + [79] + [1]+[1]+[1]+[1] +[1]	Sets field 1*79 to 11111 and enables Event log types Alarm, Check, Bypass, Open/Close and System	
10	Press [*] + [80] +[1]	Sets field 1*80 to 1 and enables Log Faults and Restores. See Note below	
13	Press [*] + [99]	To change to previous page (1)	
14	Press [*] + [99]	To change to previous page (0)	
	Press [*] + [99]	To exit programming mode	

UL Using the RS232 input for automation is not permitted in UL installations.

# g! CONFIGURATION DETAILS

The following table provides settings used in the **g!** Configurator when connecting to the Ademco panel. Please refer to the Configurator Reference Guide for more details.

- "<Select>" Select the appropriate item from the list (or drop-down) in the Configurator.
- "<User Defined>", etc. Type in the desired name for the item.
- "<Auto Detect>", etc. The system will auto detect this variable.
- "<Defined in Security System>" The security installer must provide the information to you.

Devices	Variable Name	Setting	Comments
Communication Devices	News	d lear Defineds (Defaulti Consumity)	
Communication Devices	Name	<ul> <li>Oser Defined&gt; (Default: Security)</li> </ul>	
	Туре	Serial Port	
	Communication Type	Standard Connection	
	Location	<user defined=""> (Not Required)</user>	
	Com Port	<select></select>	
Security Panels	Name	<user defined=""> (Default: Ademco VISTA-128BPT,250BPT)</user>	
	Device Type	Ademco VISTA-128BPT,250BPT	
	Location	<user defined=""> (Not Required)</user>	
	Comm Device	<select> (Default: Secuirty)</select>	
		Name Show Auto Keys	
	Disarm	Disarm Yes NO 4	
	Mode 1	Stay Yes NO 4	
	Mode 2	Away Yes NO 4	
	Mode 3	Instant Yes NO 4	
	Mode 4	Max Yes NO 4	
Partions	Name	<user defined=""></user>	
	Entry Delay Features	<none></none>	See Note 1
Zones	Name	<user defined=""></user>	
	Enable Bypass	No (See Note 2)	See Note 2
	Exists in Partition	<select> (See Note 3)</select>	See Note 3
Notos			
1 Adamaa daaa natauraant Ent			
1. Ademico does not support Enti	ry/Exit delay communication and E	nity Sound realities are not available.	
2. Auemico does not support byp	assaule zones from external autor	nation systems.	

3. For each zone, add the partitions in which that zone is a part.

## **COMMON MISTAKES**

- 1. Serial connections on both TB4 and J9. Only one of these connectors may be used. J9 with a VT-SERCBL is recommended.
- 2. Incorrect Settings for zone numbering. If duplicate zones/wrong zone numbers are autopopulating in the system, check the Security Panel Settings field. (6.2 and newer builds only)