Honeywell

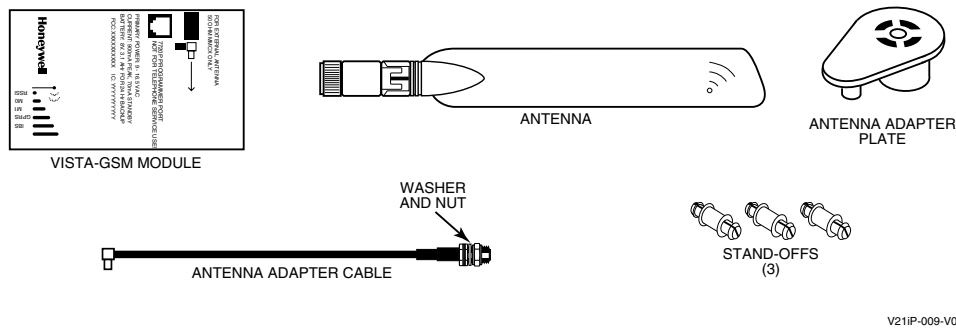# VISTA-GSM
Plug-in GSM Module Kit

Installation Guide

General Information

The VISTA-GSM is an optional communication module intended for use with the VISTA-21iP control, and provides cellular radio communication with the AlarmNet network for **backup delivery** of alarm and other messages to the monitoring central station.

IMPORTANT!

(1) **This device requires activation of its SIM card.** See the SIM Activation Note on page 4 for the procedure.

(2) Use of this module requires an AlarmNet-I account. If an account for the control does not yet exist, please obtain the account information from the central station prior to programming this module.

(3) The control **must** have a hardwire connection to the internet before this module can be used.

This kit contains the following components:

VISTA-GSM MODULE

ANTENNA

ANTENNA ADAPTER PLATE

WASHER AND NUT
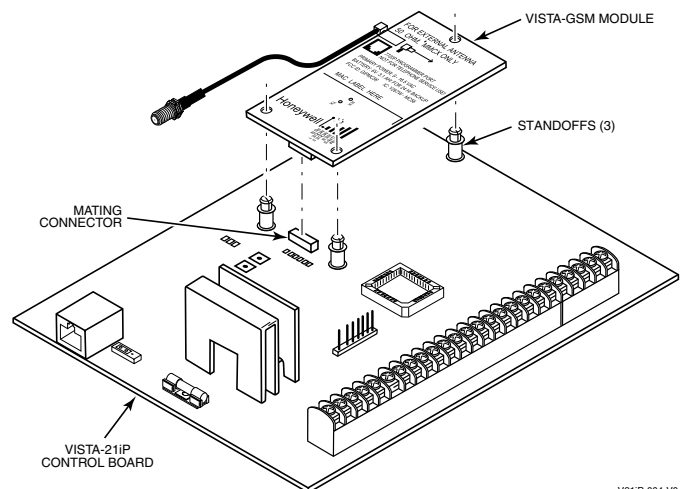
ANTENNA ADAPTER CABLE

STAND-OFFS (3)

V21iP-009-V0

IMPORTANT! Disconnect power from the control, including the battery, BEFORE installing the VISTA-GSM module.
CAUTION: ESD SENSITIVE DEVICE. To discharge any static buildup, briefly touch a chassis ground point before installing this module. Avoid performing this installation while standing on a carpeted floor.

Installing the VISTA-GSM module

1. Mount the VISTA-GSM Board.

a. Snap the antenna adapter cable's plug into the VISTA-GSM board connector.

b. Push the three standoffs into the appropriate holes on the VISTA-21iP control board until they snap into place.

c. Carefully align the VISTA-GSM board over the standoffs and the mating connector, then, **one at a time**, gently push down on the board near each standoff until it snaps into place and the connector is fully seated.

VISTA-GSM MODULE

STANDOFFS (3)

MATING CONNECTOR

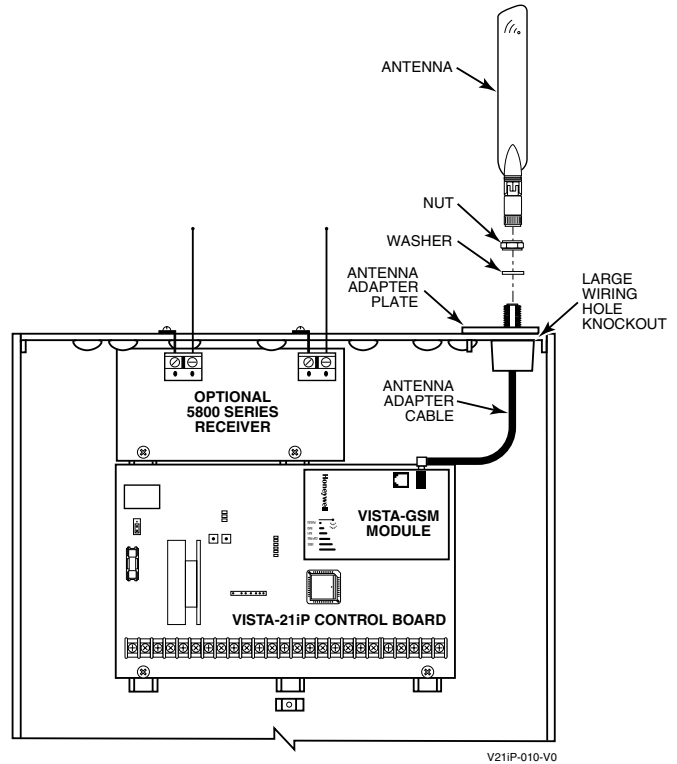VISTA-21iP CONTROL BOARD

V21iP-004-V0

2. Install the Antenna Adapter Plate.

a. Punch out the large wiring hole knockout and the adjacent smaller knockout from the cabinet's upper-right topside.

b. Position the antenna adapter plate over the large knockout, aligning the plate's pin with the smaller knockout and push until the adapter snaps into place.

c. Remove the nut and washer from the antenna adapter cable, then secure the cable's SMA connector to the adapter plate with the washer and nut as shown.

3. Install the Antenna.
The antenna mounts directly onto the antenna adapter cable at the antenna adapter plate.

Carefully align the antenna's connector over the SMA connector protruding from the adapter plate, then screw it down (clockwise) until it is finger tight. Do not over tighten.

ANTENNA

NUT

WASHER

ANTENNA ADAPTER PLATE

LARGE WIRING HOLE KNOCKOUT

OPTIONAL 5800 SERIES RECEIVER

ANTENNA ADAPTER CABLE

VISTA-GSM MODULE

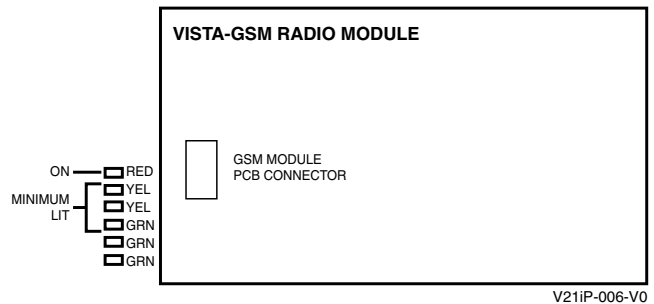VISTA-21iP CONTROL BOARD

V21iP-010-V0

Signal Strength (RSSI)

Signal strength is a measure of how well the VISTA-GSM is receiving the cell tower. After SIM activation (see note on page 4), signal strength can viewed at the RSSI LEDs on the control board (should be minimum of three RSSI LEDs lit) or can be viewed as a dBm measurement on the touchpad display by using the diagnostic *shift-E* command (D key followed by the 5 key) while in ∗29 Menu mode-Diagnostic mode. An acceptable dBm level is -89dBm (see dBm note at right).

The following are tips for maximizing signal strength:
- The best RSSI can usually be found on an exterior wall at the highest point in the building. Avoid the basement.
- Maintain at least 12 inches clearance between antenna and steel I-beams, HVAC ducts, metal studs, steel roofs, exterior walls with metalized insulation or aluminum siding and other large metal objects.

If a consistent RSSI of three bars cannot be found, the control cabinet may have to be moved to an area of better reception.

VISTA-GSM RADIO MODULE

ON — RED
YEL
MINIMUM LIT — YEL
GRN
GRN
GRN

GSM MODULE PCB CONNECTOR

V21iP-006-V0

dBm NOTE: dBm is displayed as a negative value on the touchpad display (diagnostic command shift-E); a smaller negative number is better. i.e., -60 dBm is a better RSSI than -100 dBm.
Three RSSI LEDs lit = about -89dBm

GSM Status LEDs

There are three GSM Status LEDs used to indicate message and device status:

• STATUS, green
• MESSAGE, yellow
• FAULT, red

Each LED can have four different states - ON, OFF, FAST BLINK and SLOW BLINK.

Signal Strength (RSSI) and Status LEDs

The Signal Strength (RSSI) Mode and Status LEDs normally display the module's signal strength (after SIM activation). LED 1 (top red LED) will be lit to indicate that the display is in RSSI mode, and the other LEDs indicate signal strength (lowest to highest, from top to bottom) between the module and the receiving tower.

Signal strength should be within 3-5 RSSI LEDs lit.

Status Indicator Switch

Press and hold the Status LED Indicator Switch to change the LED functions to view the network carrier status. When the switch is held down, LED 1 (top red LED) will be off, and the other LEDs have the following meanings (see diagram for specific functions):

GSM Status LED Meanings

COLOR/LED	DESCRIPTION
Green Status	On – module NOT registered Off – module is registered Fast Blink – Download session with Compass in progress Slow Blink – In unison with yellow LED – Registration in progress.
Yellow Message	On – Message transmission pending. Quick Periodic Blink – Normal. Fast Blink – Message waiting for network ACK. Slow Blink – In unison with green LED – Registration in progress.
Red Fault	On – No contact with network. Off– Normal. Slow Blink – Loss of contact with panel (ECP fault). Fast Blink – No network contact AND loss of contact with the panel.
All	Fast Blink – In unison with the RSSI Bar Graph LEDs – Hardware Error. Call the AlarmNet Technical Assistance Center.

Signal Strength and Status LED Meanings

Color	Label	Indication
Red	RSSI	on = signal strength (RSSI) display off = status display
Yel (2)	mode	off = module operating in ECPmode
Green	Web	web connection status
Green	GPRS	GPRS service availability
Green	GSM	network carrier registration status
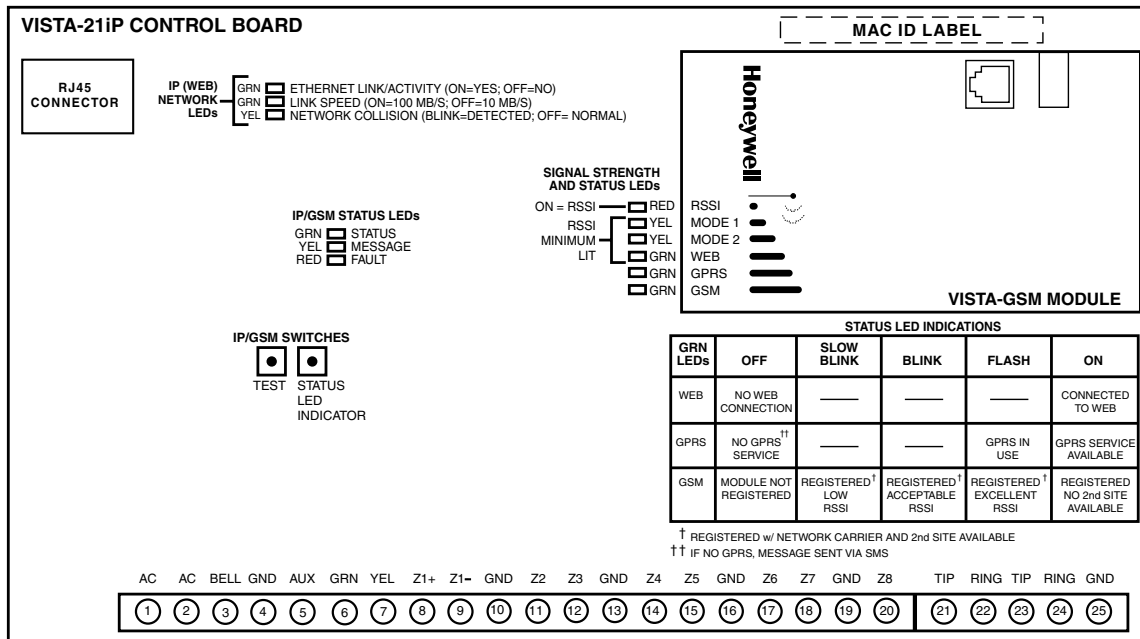
Signal Strength and Status LED locations – Status LED Functions Table

Programming the VISTA-GSM Module

The VISTA-GSM module's parameters are programmed using the control's *29 Menu mode. The programming procedure can be found in the control's Programming Guide.

> **To program the module,** press *29 while in Programming mode, then follow the prompts.

Registering the Control with AlarmNet

Normally, registration with AlarmNet is done at the time the control is installed. If the VISTA-GSM module is being installed as an add-on, the control must be re-registered.

Follow the registration procedure in the control's Installation and Setup Guide. A summary of registration steps follows.

Register the control by using one of these methods:

By phone
1. Call 1-800-222-6525
   You will need the following information:
   - MAC ID and MAC CRC number (found on the label on control's PC board).
   - Subscriber information (provided by the central station), including a city code, CSID, and a subscriber ID.
2. When instructed to do so, triple-click the Test switch to complete the registration.

Alpha Keypad using *29 Menu mode
1. Enter *29 Menu mode, select Diagnostic mode, then use the [↑] *shift-B* command (D key followed by the B key). The registration message is sent ("Registering" displayed) and the control waits for the acknowledgment.
2. "Registration SUCCESS" displayed, indicating successful registration.

Test Switch on control's PCB (triple-click)
1. Click the switch three times.
2. Watch the GSM Status LEDs: The Message (yellow) LED and the Status (green) LED will blink slowly in unison while registration is in progress.
3. When registration is complete, the Status (green) LED goes out.

AlarmNet Direct website
See paragraph at right.

SIM ACTIVATION NOTE: This device is not activated as shipped from the factory (indicated by unlit RSSI LEDs), and must be activated before it can be used. To activate the unit, the control **must** be connected to the Internet via its Ethernet connection. After the module is installed and the control is powered up, use any of the registration methods to register the control. Upon successful registration, the SIM is automatically activated (RSSI LEDs now light based on signal strength).

Registering through AlarmNet Direct Website
To register via AlarmNet Direct Website, please go to: https://services.alarmnet.com/AlarmNetDirect/userlogin.aspx.

Log in and follow the on-screen prompts.

Please have the following information available:
- Primary City ID (two-digit number provided by central station)
- Primary Central Station ID (two-digit hexadecimal number provided by central station)
- Primary Subscriber ID (four-digit number provided by central station)
- MAC ID and MAC CRC number (located on outside of box and on label on control's PC board).

If you are not signed up for this service, click on "Dealer Signup" from the login screen to gain access to the Honeywell web-based programming.

Dealer Sign-Up Direct Link: https://services.alarmnet.com/AlarmNetDirectP_Sign-Up.

You will be instructed how to proceed upon completing the sign-up form. Only one sign-up per dealer is required. Once an initial user is established, additional logins may be created by that user.

Once the control is registered, you may log out of the AlarmNet Direct website.

ANTENNA SPECIFICATIONS

Type:	Dual band, dipole, PCB	VSWR:	<2:1
Bands:	824-896 MHz 1850-1990 MHz	Impedance:	50 Ohms
Polarization:	Vertical	Dimensions:	185 x 26 mm
Gain (Peak):	0 - 4 dBi	Connector Type:	SMA male

Honeywell

K14733 8/07 Rev A