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Client: Alarm.com
Model: ADC-600T
Standards: FCC 15.249/IC RSS-210
IDs: YL6-143600T/9111A-143600T
Report #: 2013303

Appendix M: Manual

Please refer to the following pages.

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Impassa Broadband Module
INSTALLATION GUIDE

Introduction

The Alarm.com Broadband Module for DSC Impassa allows the Impassa panel to be connected to Alarm.com via an Ethernet connection for customers in poor cellular reception areas. This module is designed to be easy to install and use, and it offers support for Alarm.com's extensive set of security, monitoring, signaling, and control features.

Contact Information

For additional information and support on Alarm.com products and services, please visit www.alarm.com/dealer or contact Alarm.com technical support at 1-866-834-0470.

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Overview

- The broadband module is **compatible ONLY with the Impassa** panels.
- All of the customer features are identical to the features your customers are used to with their cellular modules with the exception of **two-way voice over GSM.** Two-way voice over GSM is not supported on the broadband module.
- Your customer's cable/DSL internet modem and router **must have power in order for the broadband module to send signals.** Unlike Alarm.com's module, these devices cannot run off the control panel's battery backup. Note that if the router is connected to a backup battery, powersave mode will not go into effect if power is lost.
- The broadband module must be installed behind a router. The customer's router must have **DHCP enabled** and **MAC filtering disabled** for the broadband module to connect to Alarm.com's backend. (Note: These are the default settings on most routers.)

Account Creation

Before installing an Alarm.com Broadband Module in an Impassa system, a new customer account needs to be created with Alarm.com. We recommend creating the account at least 24 hours in advance of installation to ensure that the radio is activated prior to installation.

To activate an account go to www.alarm.com/dealer and login. Under the "Customers" heading at the top left of the page click on "Create New Customer". You will need the following customer information to create the account:

- Customer Address
- Customer Phone Number
- Customer E-mail
- Preferred login name for the customer
- Alarm.com Radio Serial Number

At the end of the account creation process you will be able to print a Welcome Letter for the customer that has their login information and temporary password for the Alarm.com website.

Installation

Follow these guidelines during installation:

- Do not exceed the panel total output power when using panel power for the Broadband Module, hardwired sensors, and /or sirens. Refer to the specific panel installation instructions for details. Only one Alarm.com Broadband Module can be used per Impassa panel.

Tools and supplies needed

You will need the following tools and supplies:

- Small flat-head and Phillips screwdrivers
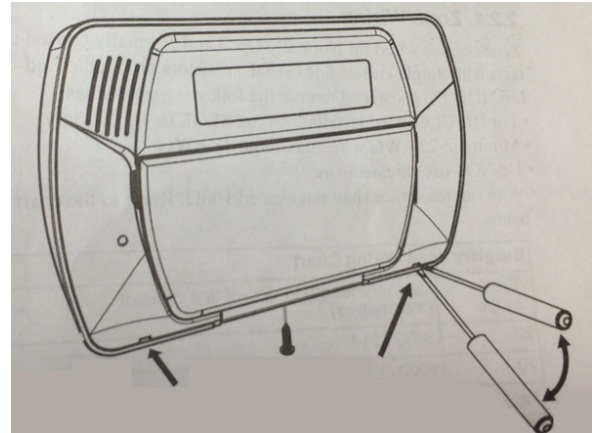- Screws (included)
- 16 pin ribbon cable (included)

Module Insertion and Antenna Installation

Note: Refer to this section only if the panel did not come pre-installed with the module.

Before installing the module, disconnect the battery and AC power from the panel.
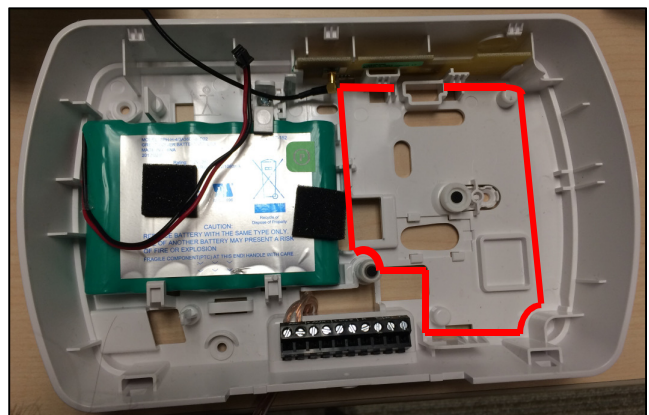
1) Open the panel by removing the cover screw then insterting a small slotted screwdriver between the front and back covers and gently twisting to separate.

Figure 1: Front View of Impassa Panel

2) The module compartment can be found behind the front panel that swings down, to the right of the battery compartment as seen in Fig. 2 below.

Figure 2: Module Compartment for Impassa Panel

3) Insert the module by angling the end of the module downwards, making

sure that the edge of the module sits below the plastic tabs located at the top of the panel. Push the other end of the module downwards, until it sits below the plastic tab located at the bottom of the panel.

4) Connect the module to the panel via the 16 pin ribbon cable. The ribbon connector is located at the top of the module. On the panel the ribbon connector is located directly across from the connector on the module.

5) Connect the Broadband-enabled Alarm.com system to the Internet using a standard Ethernet (RJ-45) cable. The cable should be connected at one end to the local Internet access point (network router), and at the other end to the RJ-45 jack on the Alarm.com module.

Power Up

Reconnect panel battery and AC power. When a broadband module is connected to a powered control panel, the LEDs at the bottom of the module will become active (see Table 1 on page 4). It may take a few moments after power up for the LEDs to become active. If the LEDs do not light up at all, ensure that the module has been fully connected to the panel via the ribbon cable then perform a full power cycle by following these steps:

1. Disconnect the battery leads and unplug the panel power transformer from AC power.
2. Verify that the module is inserted securely.
3. Connect battery leads to the battery. Make sure to observe polarity (red to + and black to –) and to keep the wires outside of the tab holding them in place.
4. Plug the panel power transformer into the AC outlet.

It is important to plug the battery in before plugging in the transformer, otherwise the panel will issue a "System Low Battery" message regardless of the battery voltage level.

Note that power cycling will clear existing banners.

Comm Test (Module Registration)

To initiate module communication with Alarm.com the first time, perform a "Comm test".

To perform the comm test on an Impassa press [*][6] followed by the master code and [4].

The Impassa panel will let you know when the comm test has completed by activating the siren output on medium volume for 2 seconds followed by full volume alarm for 2 seconds. All display lights and LCD pixels turn on. This indicates that Alarm.com has received and acknowledged the signal. This does not guarantee that the signal went through to a central station; it confirms that the Alarm.com Operations Center received the signal. The central station should be contacted directly to verify that the signal was received on the correct account and that the Central Station routing settings have been set up correctly. The signal may not go through to the central station if (a) the Central Station Account settings were entered incorrectly on the Alarm.com Dealer Site or (b) if Alarm.com was unable to send the signal successfully to the Central Station receivers.

Panel Settings

Night Arming

The Impassa panel has the ability to night arm, which arms the perimeter and restricts movement to designated interior areas. Night arming via the panel should be restricted to one of the five function keys. For more information on Night Arming and how to program the function keys see the installation guide provided with the panel.

Panel Settings Automatically Change

Some panel settings are changed automatically when the broadband module is connected to the control panel. These settings should not be altered. They are:

Clock: The broadband module sets the panel clock when it connects to Alarm.com and then updates it every 18 hours. It is important to select the correct panel time zone on the Alarm.com website, or the panel time will not be accurate. If a system is powered up before the customer account has been created, the time zone will default to Eastern Time

Specifications

Compatibility	Impassa panels
Power requirements	3.9V
Standby current	3.9mA
Peak current	325mA
Operating temperature	14 to 131°F (-10 to 55°C)
Storage temperature	-30 to 140°F (-34 to 60°C)
Max. relative humidity	90% non-condensing
Network	Broadband
Dimensions	(H x W) 3.25 x 4.25 in. (8.23 x 10.80 cm.)

Regulatory Information

Changes or modifications not expressly approved by Alarm.com can void the user's authority to operate the 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment in to an outlet on a circuit different from that which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with the 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 between the radiator and your body.
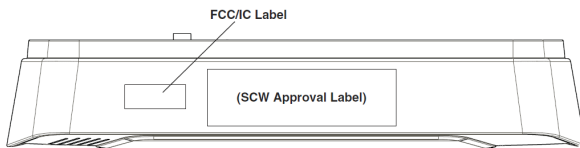
Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres

utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This device complies with Industry Canada licence-exempt RSS standard(s). 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. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This modular transmitter is labeled with its own FCC ID and IC number. When the module is installed inside the host device and the FCC ID/IC of the module is not visible the host device shall display the provided label referring to the FCC ID and IC of the enclosed module. This label is shipped together with the module and it is the responsibility of the integrator to apply it to the exterior of the enclosure as indicated below.

FCC/IC Label

(SCW Approval Label)

FCC ID: YL6-143600T, IC: 9111A-143600T