2GIG
a Nice brand

2GIG-TAKE100-345

345S SECURITY SENSOR

Super Switch Wireless Takeover Module

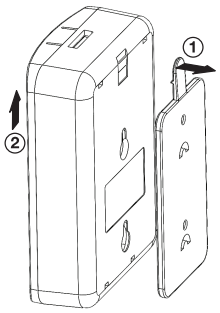
General Information

The 2GIG-TAKE100-345 Super Switch Wireless Takeover Module is a wireless takeover module that converts up to eight (8) hardwired zones into supervised wireless zones. It simplifies retrofits by allowing existing wired sensors to communicate wirelessly with 2GIG panels, and it can be powered by a compatible 12-volt control panel. The Switch has a 9th zone for AC status monitoring.

The device offers flexible signal transmission options, supporting both encrypted and non-encrypted modes, and is compatible with 2GIG wireless alarm systems.

IMPORTANT: If the Control Panel has been removed, then a 12-volt power supply with battery backup is required (not supplied).

Figure 1 Super Switch Takeover Module



Box Contents

Verify that the package includes the following:

- (Qty 1) Takeover Module
- (Qty 1) Mounting plate
- (Qty 2) Phillips head screws

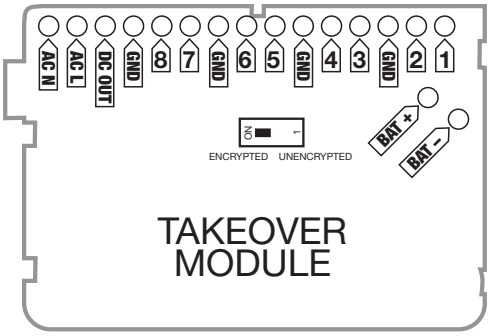
Encrypted/Non-Encrypted Mode

The device is capable of transmitting signals in encrypted mode or non-encrypted mode. The mode is set through a switch inside the sensor (see Figure 3). By default, the factory setting is non-Encrypted mode. To change to Encryption mode:

1. Remove the top plastic housing and remove the battery and external power connections from the board.
2. Locate the dip switch (see Figure 2) and note the switch setting: **ON** indicates encrypted, and **1** is non-encrypted mode.
3. Move the switch position to **ON** for encrypted mode.
4. Wait at least 10 seconds, then reinsert the battery wiring and external power leads and close the top housing.

If the device was previously learned into a panel in a different mode, reset the old zones and re-learn them in. If applicable, enter the relevant sensor equipment code in sensor zone programming.

Figure 2 Takeover Module Features



Installation & Mounting Guidelines

The Super Switch must be mounted in RF range of the 2GIG panel being installed.

1. To release the bracket, pull up on the tab and slide the bracket down.
2. Mount the bracket with two screws (see Fig 1).

NOTE: Signals will not be received if the Super Switch is not within range of the control panel.

NOTE: Recommended for indoor use, wiring methods shall be in accordance with the National Electrical Code, NFPA 70.

To wire the Super Switch:

With an Existing Power Source (see Figure 3)

1. Remove AC power from the existing wired panel.
2. Remove leads from the battery on the existing wired panel.
3. With power removed, wire the zones to the Super Switch. Terminals 1–8 are marked as Zones 1–8 on the Super Switch (see Figure 2) and are where the zones are connected. For example, to wire Zone 1 on the Super Switch, take the positive or HI side of the zone off the existing panel and place it in Terminal 3/Zone 1 on the Super Switch. Leave the negative side or the LO (GND) side of the zone wired to the existing panel.
4. Repeat this procedure for all zones to be connected to the Super Switch.
5. Optional: remove all LO wires from the existing panel, group them together, and connect them to the ground port.

NOTE: This is not for use in UL/ETL listed installations.

Without an Existing Power Source (see Figure 4)

For UL/ETL Listed Installations use the following equipment: Altronix power supply/charger model #AL100UL with an Altronix plug-in transformer, model #TP1620 and a Power Sonic Model PS-1270 12 Volt 7 Amp Hour rechargeable sealed lead acid battery or equivalent.

1. **IMPORTANT:** Before connecting power to the Super Switch, wire the zones to the Super Switch. Terminals 3–10 are marked as Zones 1–8 on the Super switch (see Figure 4). For example, to wire Zone 1 on the Super Switch, take the positive or HI side of the zone and place it in Terminal 3/ Zone 1 on the Super Switch.
2. Repeat this procedure for all zones to be connected to the Super Switch.
3. Group all LO/(GND) wires together and connect them to Terminal 1/G (GND port) of the Super Switch.

WARNING: Do not plug the power supply/charger plug-in transformer into an outlet controlled by a switch.

Powering the Super Switch and Other Devices

1. The super Switch comes with two wires attached: Red (+) and Black (-). Connect the red wire to the red terminal and the black wire to the black terminal on the existing control panel's battery.
2. Connect the wires from the existing panel for the battery into the spades lugs on top of the wires from the Super Switch now connected to the battery.
3. If using an existing power source: Wire the existing panels AUX power out to the terminal 2/12V port on the Super Switch. If you are using the Super Switch with PIRs, glass breaks, or other devices that need power, then they must receive power from the AUX power on the existing control panel. Reconnect AC power to the existing panel.

NOTE: Remove all other devices wired to AUX power on the existing control, such as keypads or any other unused devices requiring power.

NOTE: This is not for use in UL/ETL installations.

IMPORTANT

- All the zones on the Super Switch are "Normally Closed" zones.
- The maximum loop resistance cannot exceed 3K ohms. (If the loop resistance exceeds 3K ohms and the existing panel uses end of line resistance, then the end of line resistor may be removed.)
- Different control panels have different terminals for each zone and aux power. Please refer to the wiring diagrams that came with the existing panel. For example, the HI side of Zone 1–Zone 8 on a Vista panel is typically terminals 8, 11, 12, 14, 15, 17, 18 and 20. AUX positive is typically Terminal 5 on a Vista panel.

WARNING: The Super Switch cannot be used to monitor any type of fire or CO detection zones.

NOTE: If there is no existing system, then you must use your own battery and power supply.

IMPORTANT: To ensure that the system's sensors are operating properly, it is important for 2GIG alarm dealers and system owners to ensure sensor batteries and wireless signals are tested at least once a year.

Monitoring the Battery

The Super Switch will operate on the connected battery if there is an AC failure, unless the battery is not capable of supplying enough power. The Super Switch will monitor the battery to make sure it is operational. When the super Switch detects a battery voltage below normal level for a period of time, the Super Switch will report a low battery for each zone.

Status Indications

The status LEDs indicate the Super Switch status as follows:

- Green: Device is powered on.
- Blue: Battery is charging.

Panel Programming

To manually program each zone of the Super Switch, follow the steps below:

1. On the back of the Super Switch is a 7-digit serial number that ends in 1 (xxx-xxx1). This is the serial number for Zone 1. Program this serial number at the appropriate prompt in the control panel.
2. For each additional zone, add a digit to the end of the serial number. For example, Zone 2 will be xxx-xxx2.
3. The 9th zone is a dedicated zone for AC power status monitoring. Add 9 to the end of the serial number, for example, **Zone 9** will be **xxx-xxx9**.

If you do not program each zone manually, see the control panel instructions for learning in sensors. Make sure the control panel is in learn mode and follow the steps below:

1. Open and close the zone being learned in. Repeat for subsequent zones for up to 8 zones.

NOTE: Remove the wire for the zone being learned in and then place the wire back into the terminal on the Super Switch. When using this method, all doors and motion detectors connected to this loop must be closed prior to removing and inserting the wire. Repeat for each zone as necessary. Once all the zones are learned in, the Super switch will be operational.

Specifications

Wireless Signal Range	350 ft, open air
Code Outputs	For each of 8 serialized zones: Fault; Restore; Low Battery
Transmitter Frequency	345.00 MHz (crystal controlled)
Transmitter Frequency Tolerance	± 15kHz
Transmitter Bandwidth	24kHz
Modulation Type	Amplitude Shift Keying-On/Off Keying (ASK-OOK)
Unique ID Codes	Over one million different code combinations
Supervisory Interval	70 minutes
Peak Field Strength	Typical 50,000 uV/m at 3m
Sensor Dimensions (L x W x H)	3.54 x 2.56 x 1.13 in (9.0 x 6.5 x 2.9 cm)
Weight (including battery)	2.85 oz. (80.8 g)
Housing Material	ABS Plastic
Color	White
Operating Temperature	32°-120° F (0° to 49° C)
Relative Humidity	5-95% Non-Condensing
Input Voltage	11-16VDC or 16.5-20VAC
Barrel Connect Type	Type A: 5.5mm OD, 2.1mm ID
Included Accessories	Mounting plate, 2 Phillips head screws, 2 plastic drywall anchors
Equipment Code	2873 (Encrypted); 0873 (Non-encrypted)
Panel Programming Sensor Loop	Loop 1

Regulatory Information

We, Nice North America LLC of 5919 Sea Otter Place STE 100, Carlsbad, CA 92010, declare under our sole responsibility that the device, 2GIG-TAKE100-345 complies with Part 15 of the FCC rules.

FCC & IC Notice

This device complies with Part 15 of the FCC Rules and Industry Canada license exempt standard(s). Operation is subject to the following two conditions:

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

This Class B digital apparatus complies with Canadian ICES-003

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 to help.

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FCC

Federal Communication Commission (FCC) Radiation Exposure Statement:
When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.

IC

Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

WARNING: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

* For more warranty and compliance information, visit out website (www.2gig.com)

Limited Warranty

This Nice North America LLC product is warranted against defects in material and workmanship for two (2) years. This warranty extends only to wholesale customers who buy direct from Nice North America LLC or through Nice North America LLC's normal distribution channels. Nice North America LLC does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any.

There are no obligations or liabilities on the part of Nice North America LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation. All implied warranties for functionality, are valid only until the warranty expires. This Nice North America LLC Warranty is in lieu of all other warranties expressed or implied.

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Email: 2GIG.Linear@niceforyou.com
Visit Niceforyou.com for technical support hours of operation.

For technical support outside of the USA and Canada:
Contact your regional distributor.
Visit www.2gig.com/dealers for a list of distributors in your region.

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10034957 Rev-A

Figure 3 Wiring **with** an Existing Power Source

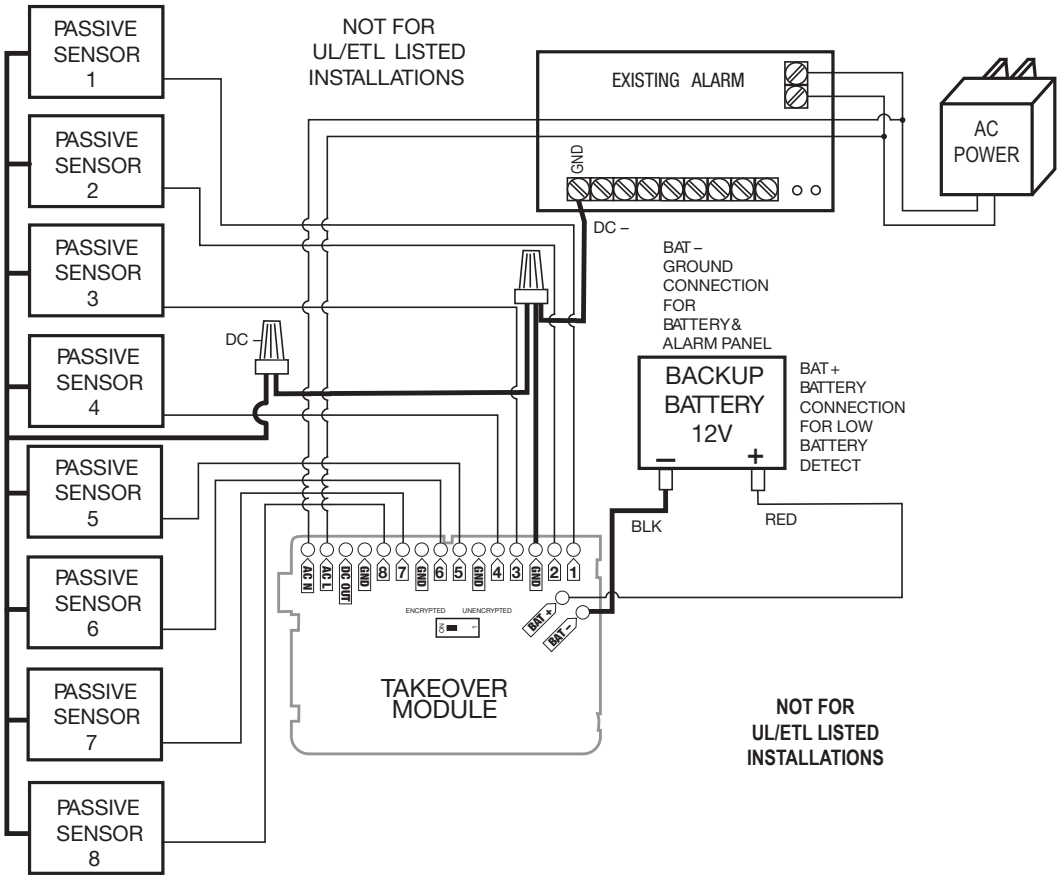
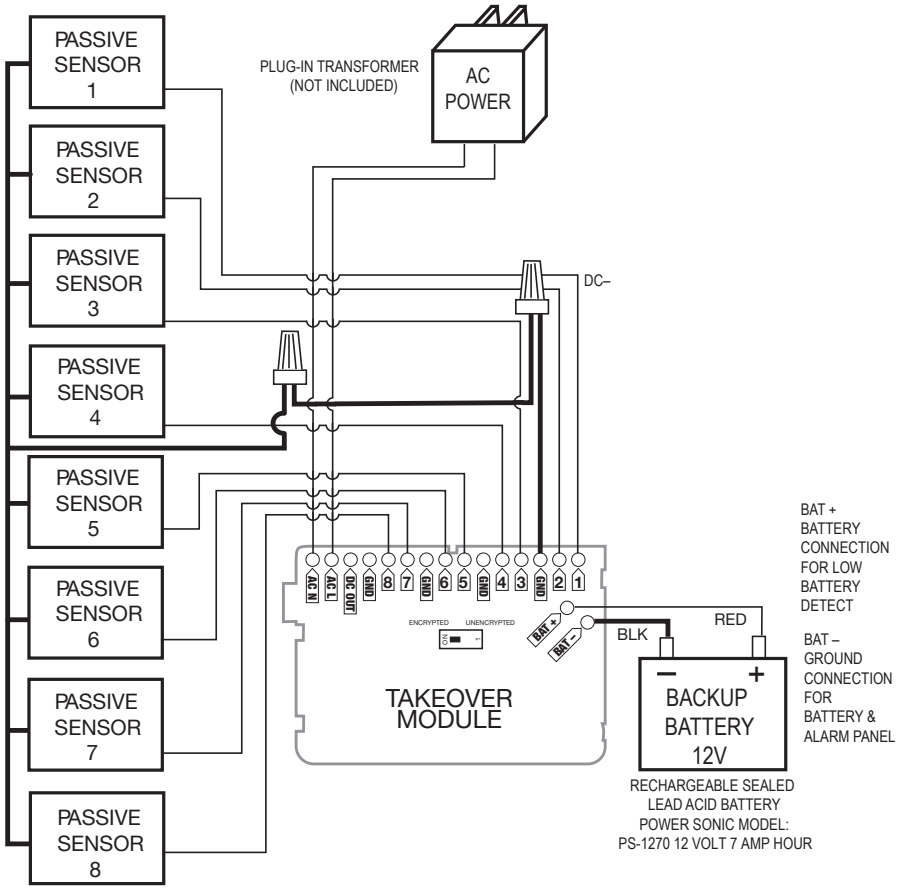


Figure 4 Wiring **without** an Existing Power Source



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Existing System Wiring