Honeywell

5800C2W/5800C2WCN Convert to Wireless Module – Installation Instructions

GENERAL INFORMATION

The Honeywell 5800C2W Convert to Wireless Module (referred to as the 5800C2W, module, or 5800C2WCN in Canada) provides the option to retrofit existing security systems by; converting their wired sensors to Honeywell's 5800 series wireless technology, and replacing the existing control panel with a LYNX Touch or LYNX Plus series control.

The 5800C2W also works with residential VISTA control panels equipped with a wireless RF receiver and keypad.

IMPORTANT: This product is NOT for use with fire / heat sensors.

SPECIFICATIONS

Dimensions	Length 7.0 in. (178mm) Width 4.5 in. (114mm) Depth 1.5 in. (38mm)
Mounting Hardware	Double stick tape and screws included.
Operating Temperature	+14 to +140°F (– 10 to +60°C)
Humidity	95% RH Max.
Transmission Range	Up to 300ft. (91 meters)
Operating Voltage	Supplied by plug-in transformer 15.5VDC (± 5%) @ 1A P/N: 300-07052, or 300-07102 Canada

Battery Backup	Use 12V, 4Ah battery such as Honeywell 467, Yuasa NP4-12, Casil CA1240 or equivalent. Provides 4 hours of backup. Battery is to be located in the existing control panel. DO NOT use batteries of larger capacity.
Tamper Detection	Activated when the cover is removed.
5800C2W Supervision	• low battery • backup battery power • each enrolled zone transmits a supervisory message every 72 minutes
LED Status Indicators	• input power • wireless transmission • backup power (The input power indicator is viewable through the enclosure cover.)
Input Zones (9 hardwired)	All zones that are used must have an EOL resistor. (Refer to the back page for detailed information.)
Auxiliary Output (12VAUX)	Provides 11.2VDC ±15% @ 100mA to supply PIR motion, or glassbreak sensors.

1   Mount and wire the module

Guidelines:

- Since the existing control panel is being replaced, its security functions will be performed by the new LYNX or VISTA control panel.
- The existing control panel cabinet can remain for the purpose of housing the backup battery. Further, the existing control panel can be powered down and the transformer unplugged; as it is no longer functional.
- The 5800C2W module will charge the battery, as long as the voltage reads 9.5VDC. If the voltage drops below 9.5VDC, the 5800C2W is incapable of charging the battery and must be replaced.
- Up to nine [9] hardwired zones can be handled by each 5800C2W module. **NOTE**: As noted above, the 5800C2W is not for use with Fire, Heat, or Carbon Monoxide Detectors.
- DO NOT mount inside the control panel or other metal enclosure.
- The integral battery cable fuse MUST be positioned inside the control panel enclosure. The fuse is not replaceable.
- Before mounting permanently, conduct the Go/No Go test (see control's instructions) to verify adequate signal strength, relocate if necessary.
- If necessary, affix the SOC label to the inside cover.

Mounting and Wiring:

Note: This product must be installed in accordance with ANSI/NFPA 70, National Electrical Code.

1. At the existing control panel, tag and remove the zone wires to be transferred to the 5800C2W.
2. Refer to the wiring diagram on the back.
3. Select a mounting position for the module. In most installations, the best mounting location is close to the existing control panel.

   Note: If needed, the 5800C2W can be located remotely by extending the existing zone wires.

   If needed, you may cut and splice (observing good workmanship) the battery wires and extend their length up to 3 ft. (0.9 meters) using 22 AWG wire, minimum. Ensure the integral battery cable fuse is positioned inside the control panel enclosure.

4. Mount "Tamper Magnet" to enclosure cover.
5. Attach using the supplied double stick tape (and screws if desired).
6. Ensure the wiring is complete. Use cable ties as necessary to secure wiring. Plug the power transformer into an un-switched outlet and secure with screw. Then attach the backup battery wires.

2   Calibrate the module zones

Calibration: The calibration process enables the 5800C2W to learn what zones will be active and what value EOL resistors are used. Unused zones that are open WILL NOT be recognized and reported.

1. Ensure all zones are connected and in the non-activated state.
2. On the 5800C2W, click the top left button (SW2). Indicator LED #1 will flash Red for 1/2 second; then turn steady Green.
3. DONE. The 5800C2W is calibrated and ready to enroll in the control panel.

Notes:

- If the 5800C2W loses both AC and battery backup power, the zone calibration data is retained.
- If the zone does NOT already have a resistor installed, one must be added. The unit comes with nine (9) 2.2K resistors for zones with no resistors for this purpose. If a resistor does exist, it must have a value between 1K and 10K.

3   Enroll the module in the control panel

Enrollment: As a wireless device, each 5800C2W has a unique 7-digit serial number to enable the control panel to recognize it. Further, since the 5800C2W has nine zones each zone is automatically assigned the next sequential serial number. All zones are Loop 1.

Remember, unused zones are not reported or transmitted to the control panel. For example, below all zones except #6 are used:

Item	Serial #	Item	Serial #
zone 1	xxx-xxx1	zone 6 (if not used)	none
zone 2	xxx-xxx2	zone 7	xxx-xxx7
zone 3	xxx-xxx3	zone 8	xxx-xxx8
zone 4	xxx-xxx4	zone 9	xxx-xxx9
zone 5	xxx-xxx5		

Tamper/Low Battery Reporting – The 5800C2W reports this condition to the control panel via of the lowest numbered zone used on the 5800C2W.

To program a 2nd zone on the control panel that only reports tamper, low battery and supervision reports:

- Add a zone on the control panel to be the 5800C2W module zone (refer to the programming guide).
- Program that zone with the lowest serial number used by the 5800C2W and loop 4.
- Program the zone descriptor and response type (for example; descriptor = 5800C2W module, response type = trouble).

Enrolling the 5800C2W into the control panel is similar to any 5800 series wireless device. There are two methods that can be used.

Method 1:

1. Refer to the control panel's guide and set it to "Zone Programming" mode.
2. Enroll the first zone as an "RF" type (supervised RF) device in the control panel.
3. Trip the zone (LED #4 flashes Green to indicate the information has been sent) and wait for the keypad to beep (about 2 seconds), **then trip zone again**. Confirm the correct serial number has been enrolled. Repeat for each zone used.
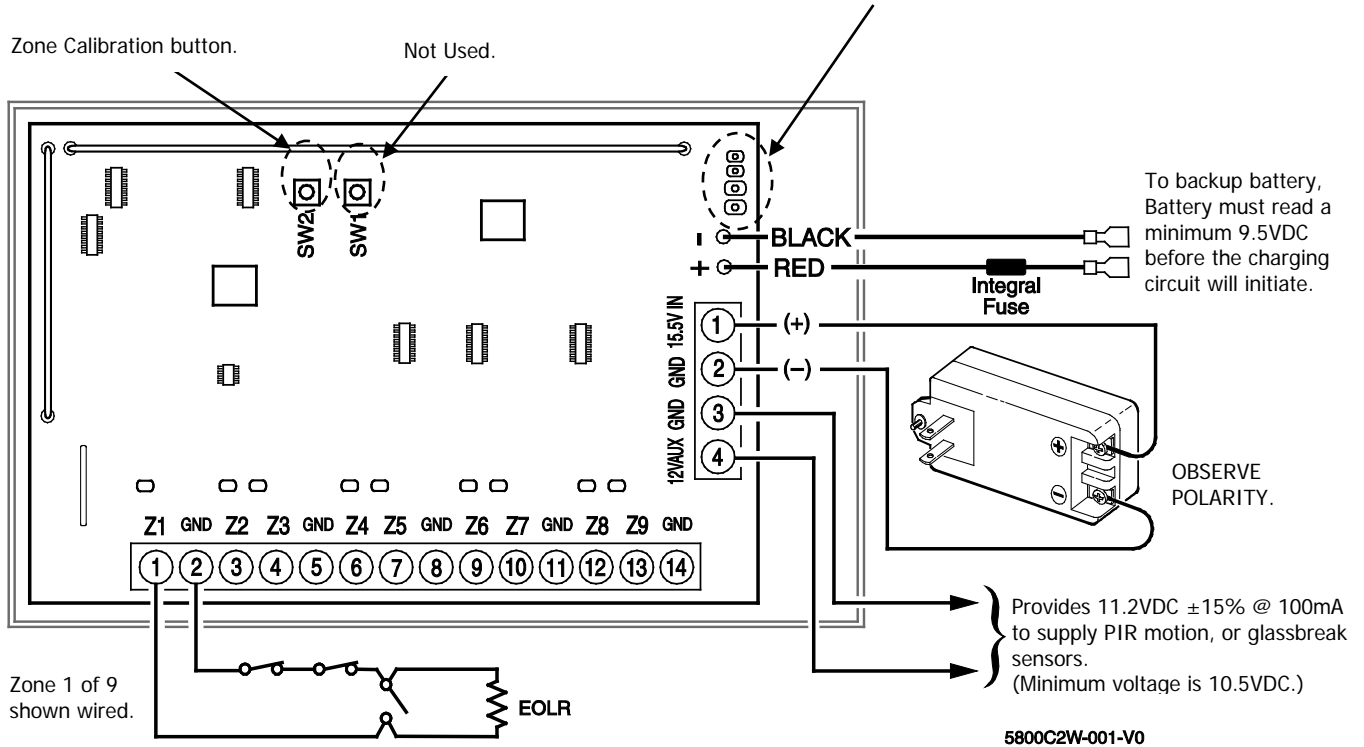
Method 2:

1. Locate the unique 7-digit serial number for the 5800C2W module. This is located on the carton and on the module's circuit board.
2. For each zone used, increment (in order) the 7-digit serial number to determine the serial number for each zone. Refer to the example table to the left.

   Note: The next step can also be done using Honeywell's Compass software.

3. Refer to the control panel's programming guide and manually program the 5800C2W module, followed by each of its zones.

Maximum Distance Between Power Supply and 5800C2W	
Wire Gauge	Wire Length
#18	350' (106.7m)
#20	200' (60.9m)
#22	125' (38.1m)

LED	Function Note: LEDs are shown as they appear on the circuit board.
#1	Red (blinking) – Module needs calibrating. Green – Module is calibrated.
#2	Green – DC power (15.5VDC, ± 5%) from the plug-in transformer is present. Red – DC power is NOT present. (Viewable through the enclosure cover.)
#3	Yellow – Low battery or No battery. When the battery voltage drops to 11.2VDC, a low battery message is sent to the control panel and LED 3 turns yellow. When the battery voltage drops to 9.5VDC, the battery is disconnected. The battery will not connect again until AC is restored.
#4	Green (blinking) – RF signal transmission.

Zone Calibration button.

Not Used.

To backup battery, Battery must read a minimum 9.5VDC before the charging circuit will initiate.

BLACK

RED

Integral Fuse

OBSERVE POLARITY.

Zone 1 of 9 shown wired.

EOLR

Provides 11.2VDC ±15% @ 100mA to supply PIR motion, or glassbreak sensors.
(Minimum voltage is 10.5VDC.)

5800C2W-001-V0

NOTES:

- All zones that are used MUST have an EOL resistor.
- EOL resistor values must be from 1k to 10k ohms. (Nine 2.2k ohm resistors are included for those panels not using any resistors.)
- If the existing installation zones have EOL resistors (from 1k to 10k ohms) they may remain.

- For a NC loop without an EOL resistor, you must add one in series with the loop. Preferably it should be located at the end of the loop furthest away from the control panel for proper supervision.
- For a NO loop without an EOL resistor, you must add one in parallel (across) the loop. Preferably it should be located at the end of the loop furthest away from the control panel for proper supervision.

IMPORTANT: The first battery test occurs 1 hour after power up. To quickly verify a good backup battery, unplug and then plug back in the power supply; the system will perform a battery test within 1 minute.

Honeywell

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