

# Application Notes

## 1.29 Wireless Zones (PC1616/1832/1864 V4.2)

### Receivers:

RF5108-433, RF5132-433, RFK55XX

### Panels:

POWER SERIES (PC1616/1832/1864 V4.2)

### Overview:

The wireless receiver can be used to connect up to 32 wireless detection devices. Each wireless device requires a zone.

Programming wireless zones is eight-step process:

- Connect the wireless receiver to the KEYBUS
- Programming the zone definitions
- Programming the zone attributes
- Programming the zone assignments
- Programming the Zone Serial Numbers
- Disabling the Supervision of Panic Zones (*Optional*)
- Programming the Wireless Supervisory Window (*Optional*)
- Performing a Module Placement Test

### Program Sections:

Section [001] – [002]	Zone Definitions
Section [101] – [132]	Zone Attributes
Section [202] – [261]	Partition Zone Assignment
Section [804], [01] – [32]	Zone Serial Number
Section [804], [82] – [85]	Zone Device Supervision ( <i>Optional</i> )
Section [804], [81]	Wireless Supervisory Window ( <i>Optional</i> )
Section [904], [01] – [32]	Module Placement Test

### Step 1 – Connect the wireless receiver to the KEYBUS

Connect the four KEYBUS terminals of the wireless receiver to the four KEYBUS terminals of the main control panel.

**Note:** If the receiver is not connected to the KEYBUS the wireless data cannot be programmed.

### Step 2 – Program the Zone Definitions

Before wireless zones will operate on the system, they must be defined.

[001]	Zones 1 to 16 Definitions
[002]	Zones 17 to 32 Definitions

**Note:** Only the first 32 zones can be programmed as wireless.

**Note:** Do not define wireless zones as [07], [08], [09], [29], or [30]. If using wireless smoke detectors, program zone definitions [87] or [88].

### Step 3 – Program the Zone Attributes

The panel must be told which zones are wireless. Turn Option [8] ON for all wireless zones in Sections [101] to [132].

### Step 4 – Partition Zone Assignment

Before any zone will operate on the system, the zone must be assigned to a partition. Turn ON the correct toggle option in the appropriate Section for all zones preset on the system.

Section [202] – Section [205]	Partition 1 Zone Assignments – Zones 1 to 32
Section [210] – Section [213]	Partition 2 Zone Assignments – Zones 1 to 32
Section [218] – Section [221]	Partition 3 Zone Assignments – Zones 1 to 32
Section [226] – Section [229]	Partition 4 Zone Assignments – Zones 1 to 32
Section [234] – Section [237]	Partition 5 Zone Assignments – Zones 1 to 32
Section [242] – Section [245]	Partition 6 Zone Assignments – Zones 1 to 32
Section [250] – Section [253]	Partition 7 Zone Assignments – Zones 1 to 32
Section [258] – Section [261]	Partition 8 Zone Assignments – Zones 1 to 32

### Step 5 – Enroll Wireless Devices

Enter the ESN number for each wireless detection device in Section [804], subsection [01] to [32].

**Note:** HEX digits may be present in the ESN number. Use the following table to program the HEX digits.

HEX [A]	enter [*][1][*]
HEX [B]	enter [*][2][*]
HEX [C]	enter [*][3][*]
HEX [D]	enter [*][4][*]
HEX [E]	enter [*][5][*]
HEX [F]	enter [*][6][*]

### Step 6 (Optional) – Disabling Supervision of Panic Zones

The wireless Panic Pendant (WS4938-433) does not send a supervisory signal. Supervision must be disabled for these zones to prevent the panel from generating a zone fault trouble condition. Turn the corresponding Option OFF in Section [804], subsection [82] to [85] for all wireless panic pendants zones.

### Step 7 (Optional) – Wireless Supervisory Window

Wireless transmitters check in with the wireless receiver every 64 minutes. The wireless supervisory window is programmed in 15-minute increments. For example, data [32] = 8 hours, data [96] = 24 hours. Program the desired supervisory window in Section [804], subsection [81]. If a signal is not received from the transmitter, a zone fault trouble will be generated.

## Step 8 – Perform a Module Placement Test

All wireless transmitters must be tested. To test a wireless transmitter, enter Section [904], subsection [01] to [32] (the zone to be tested). Activate the device as indicated below:

WLS904-433	Create/restore a tamper by removing the back plate then replacing it
WLS907(T)-433	Create/restore a tamper by removing the cover then reattaching it
WS4916-433	Hold down the test button until the WS4916 chips then squawks
WLS906-433	Hold a magnet near groove marked on outer rim of bracket
WLS912-433	Create/restore tamper by pressing the Tamper Tab for five seconds
WLS914-433	Create/restore a tamper by removing the back plate then replacing it
WLS918-433	Module Placement Test is not available. Test the unit by activating the Panic alarm from various points throughout the installation to ensure proper reception
WLS925-433	Create/restore an alarm <i>or</i> create/restore a tamper
WS4938-433	Module Placement Test is not available. Test the unit by activating the Panic alarm from various points throughout the installation to ensure proper reception
WS4939-433	Module Placement Test is not available. Test the unit by activating the Arm/Disarm from various points throughout the installation to ensure proper reception.
WS4945-433	Create/restore zone violations by removing for five seconds then securing for five seconds the magnet to the reed switch.
WS4955-433	Create/restore zone violations by removing for five seconds then securing for five seconds the magnet to the reed switch.
WS4965-433	Create/restore zone violations by removing for five seconds then securing for five seconds the magnet to the reed switch.
EV-DW4917	Create/restore zone violations by removing for five seconds then securing for five seconds the magnet to the reed switch.
EV-DW4975	Create/restore zone violations by removing for five seconds then securing for five seconds the magnet to the reed switch.

Wait at least 5 seconds between each test.

The panel will indicate the test result on the keypad:

LED keypads:

- LED 1 indicates GOOD placement
- LED 3 indicates BAD placement

LCD Keypads:

- 'Placement is GOOD' indicates GOOD placement
- 'Placement is BAD' indicates BAD placement

Siren:

- 1 squawk of the siren indicates GOOD placement
- 3 squawks of the siren indicates BAD placement

**Note:** *The button on the WLS906 smoke detector is a local test only.*

**Note:** *If one transmitter tests BAD, move the transmitter. If several transmitters test BAD, move the RF5108, RF5132 or RFK55XX receiver.*

**Technical Tips:**

1. When using zone expanders or addressable devices, make sure the wireless detectors are not assigned a zone already used on a PC5108 or as addressable.
2. The RF5132-433 will generate a Module Tamper if an RF Jam condition is detected. To disable RF Jam, turn ON option [7] in Section [804], subsection [90].
3. If good placement tests cannot be received from a transmitter, try moving the transmitter. If there is a problem with multiple detectors, try moving the receiver.
4. If the keypad gives a long error tone when a wireless subsection is entered, it indicates the receiver is not connected to the KEYBUS.

**Quick Test:**

Violate all wireless detectors and verify all are displayed on the keypad.