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 an 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 (Optional)
- Section [804], [81]  Wireless Supervisory Window (Optional)
- 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.

<table>
<thead>
<tr>
<th>HEX Digit</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>[<em>][1][</em>]</td>
</tr>
<tr>
<td>B</td>
<td>[<em>][2][</em>]</td>
</tr>
<tr>
<td>C</td>
<td>[<em>][3][</em>]</td>
</tr>
<tr>
<td>D</td>
<td>[<em>][4][</em>]</td>
</tr>
<tr>
<td>E</td>
<td>[<em>][5][</em>]</td>
</tr>
<tr>
<td>F</td>
<td>[<em>][6][</em>]</td>
</tr>
</tbody>
</table>

Step 6 (Optional) – Disabling Supervision of Panic Zones

The wireless Panic Pendent (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 or 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.