

Power 832 Application Notes – Wireless Zone Expansion

Application: The PC5132 wireless receiver can be used to connect from 1 to 32 wireless detection devices. Each wireless device requires a zone.

Special Notes:

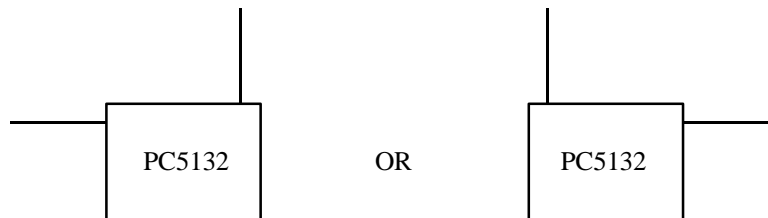
1. The range of the wireless detection devices is 3,000 feet, open air. This range can be reduced by a number of factors, the biggest being metal. Wireless signals cannot penetrate metal, the metal will act as a mirror and reflect wireless signals. Try to mount the receiver as high as possible and be aware that large metal objects could possibly block signals from getting to the receiver.

Program Sections:	Section [202] to [209]	– Partition 1 and 2 Zone Assignments
	Section [001] to [004]	– Zone Definitions
	Section [101] to [132]	– Zone Attributes
	Section [013]	– First System Option Code
	Section [804], [01] to [32]	– Zone Serial Numbers
	Section [804], [82] to [85]	– Zone Device Supervision
	Section [804], [81]	– Supervision

Procedure:

Step 1 - Connect the Antennas to PC5132 Receiver

Connect the antennas in opposing corners, one up and one out:



*Make sure enough insulation is stripped back from each antenna to ensure a good electrical connection with the terminal (about ¼ inch). There are three terminals for each antenna connection. Make sure the antenna is connected to the **middle** terminal, the outside terminals are ground.*

Step 2 - Secure the PC5132 Tamper Input

Connect a normally closed (NC) tamper switch across the tamper terminals (T1 and T2) of the PC5132 receiver. If a tamper switch is not being used, connect a jumper across T1 and T2 to secure the input.

If the tamper is not secured, a Service Required trouble will be present.

Step 3 - Connect the PC5132 to the KEYBUS

With the panel powered down, connect the 4 KEYBUS terminals of the panel to the 4 KEYBUS terminals of the receiver.

If the receiver is not connected to the KEYBUS the panel will not allow you to program wireless data.

Step 4 - Enable Zones – Section [202] to [209]

Before any zone will operate on the system, the zone must be assigned to either Partition 1 or Partition 2. Make sure the toggle options corresponding to all zones present on the system are ON in Sections [202] to [205] for Partition 1 and Sections [206] to [209] for Partition 2.

Step 5 - Define Zones – Section [001] to [004]

Before wireless zones will operate on the system, they must be defined as something other than [00] Null Zone. Define all zones in Sections [001] to [004].

Wireless smoke detectors must be defined as Option [87] or [88] for the zones to be properly supervised.

Step 6 - Enable Wireless by Zone – Section [101] to [132]

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

Step 7 - Check for Hardwire/Wireless Conflict

Any zone from 1 to 8 can be hardwire or wireless. The wireless zone attribute determines if the zone will be hardwire (attribute #8 OFF) or wireless (attribute #8 ON).

The PC5108 hardwire zone expander groups hardwire zones into groups of four. The panel reserves these additional zones in groups of four for hardwire operation. If the PC5108 zone expander is being used, none of the zones in these groups of four can be used for wireless operation.

Hardwire and wireless operation cannot be assigned to the same zone.

For example, if a PC5108 is configured to operate as zones 9 to 12 and zones 13 to 16, none of these zones can be used for wireless.

Step 8 – Program Tamper/Supervisory Trouble Zone Status – Section [013]

The panel can be programmed to display a zone as violated if a tamper trouble or supervisory trouble occurs. If you want the panel to display the zone as violated, turn Section [013], Option [4] OFF. If you do not want the panel to show the zone as violated, turn Section [013], Option [4] ON.

A tamper on an armed zone will always cause an alarm on that zone.

Step 9 - Enroll Wireless Devices – Section [804], Subsection [01] to [32]

Enter the ESN number for each wireless detection device in Section [804].

Step 10 – Disable Supervision of Panic Zones – Section [804], Subsection [82] to [85]

The wireless Panic pendants do not send a supervisory signal. For this reason supervision must be disabled for the zone(s) using Panic pendants. Turn the corresponding Option OFF in Section [804], Subsection [82] to [85] for wireless Panic pendant zones.

Step 10 - Program the Supervisory Window – Section [804], Subsection [81]

All transmitters send a supervisory signal to the receiver every 12 minutes. The Supervisory Window is the number of hours a transmitter must be missing before a supervisory trouble is generated for the problem zone. Program data [03] in Section [804], Subsection [81].

Step 11 - Perform Module Placement Test – Section [904]

Enter Section [904] and perform a Module Placement Test on *every* transmitter. Ensure that 3 GOOD results *in a row* are obtained from each transmitter. After entering the test on the keypad, test each transmitter according to the following:

WLS-904	Create/Restore Tamper by removing the back plate then replacing it
WLS-905	Create/Restore Alarm <i>or</i> Create/Restore Tamper
WLS-906	Hold magnet near groove marked on outer rim of bracket
WLS-907	Create/Restore Alarm <i>or</i> Create/Restore Tamper
WLS-908	Module Placement Test is not available. Test the unit activating the Panic alarm from various points throughout the installation to ensure proper reception.
WLS-909	Module Placement Test is not available. Test the unit by arming and disarming the panel from various points throughout the installation to ensure proper reception.

- *Wait at least 5 seconds between each test*
- *Tamper must be used to test the WLS-904 motion detector because of the built-in high traffic shutdown feature*
- *The button on the WLS-906 smoke detector is a local test only*
- *Do not create both a tamper and alarm during a test on a zone*
- *Sometimes a synchronization problem may occur, causing intermittent test results. If this is the case, simply exit, then re-enter the test for that zone*
- *If the Panic does not operate from all points of the installation, the only option will be to move the PC5132 receiver, usually higher*

Step 12 - Mount PC5132 Receiver and Transmitters

After three GOOD test results have been obtained from each transmitter in its intended location, mount the PC5132 receiver and all devices.

If one transmitter tests BAD, move the transmitter. If several transmitters test BAD, move the PC5132 receiver.