

RTC Manufacturing Radio Systems

RTC's radio system product line consists of two different gateways and two different nodes. The four products work in three possible pairings. The first step is finding out which pairing you have.

Pairing One: Gateway DX80G9M6S-PB2 and Node DX80N9X6S-PB2



Both the gateway and node in this pairing are small (~2" x 3"), one-button gateways and nodes. This is the most common pairing in Pedestrian Crossing Systems because this gateway can only pair with a maximum of two nodes.

Pairing Two: Gateway DX80G9C-12686 and Node DX80N9X6S-PB2



In this pairing, the gateway is a large (~3.25" x 3.25" x 2.25") two-button enclosure and the node(s) is a small (~2" x 3") one-button node. This pairing is more common in Fire Station Warning systems because the gateway is capable of pairing with up to six nodes.

Pairing Three: Gateway DX80G9C-12686 and Node DX80N9C-11232



This pairing consists of a large (~3.25" x 3.25" x 2.25") two-button gateway and zero-button node(s). This pairing is the least common of the three, found mostly in older systems.



Pairing One Binding Instructions:



*Reminder: This system is used primarily in Pedestrian Crossing or similar systems because **the gateway can only pair with a maximum of two nodes**. If you have this pairing and desire to have more than two nodes, please contact RTC at 800.782.8721.*

Step One: The Radio Network

Binding Nodes to their Gateway ensures the Nodes only exchange data with the Gateway they are bound to. When shipped from RTC, the Gateway rotary dials are set to 0-0 and Node rotary dials are set to 0-1 and 0-2 (when applicable). If you are installing a new radio system, the rotary dials shouldn't need to be changed. If you are replacing a Node, be sure to match the rotary dial number on the new Node with the one you replaced.

Step Two: Binding

** Before binding, verify that Dipswitches #2 & 7 on the circuit board are in the ON/UP position on the Gateway and Node(s). If not, use the tip of a pen to position them ON/UP.*

Both the Gateway and Node have a button at the top of the circuit board in between the two mounting screws. You will use these buttons for the binding process.

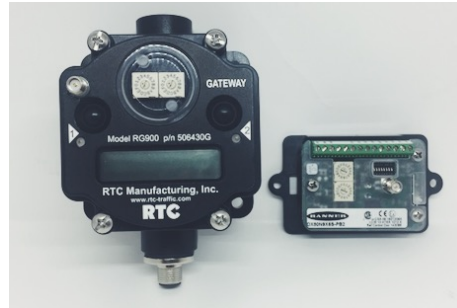
1. Connect the panels to power.
2. On the Gateway, enter binding mode by clicking the button three times. The LED should alternate flashing red and green.
3. On the Node, enter binding mode by clicking the button three times. The LED should alternate flashing red and green. Repeat this step for the second Node, if applicable.
4. Once the nodes have been clicked and are flashing red/green, click the Gateway button once to exit binding mode. The Gateway LED should change to steady green.

Step Three: Verify Communication Network

1. The Gateway's LED should remain steady green.
2. Until the communication network has been established, the Node LED will flash red.
3. Once the communication network has been established, the Node LED will flash green.
4. If the Node LED is flashing green, the communication network has been established and the binding process is complete.

Note: If you have two Nodes in the network and they aren't both flashing green, repeat the process and make sure that the rotary dials are set correctly in Step One.

Pairing Two Binding Instructions:



*Reminder: This system is used primarily in Fire Station Warning Systems because **the gateway can be paired with up to 6 nodes**. If you have this pairing and desire to have more than 6 nodes, you will need additional Gateway equipment. Please contact RTC at 800.782.8721.*

Step One: The Radio Network

Binding Nodes to their Gateway ensures the Nodes only exchange data with the Gateway they are bound to. When shipped from RTC, the Gateway rotary dials are set to 0-0 and Node rotary dials are set to 0-1 and 0-2, 0-3, 0-4, etc. (when applicable). If you are installing a new radio system, the rotary dials shouldn't need to be changed. If you are replacing a Node, be sure to match the rotary dial number on the new Node with the one you replaced.

Step Two: Binding

** Before binding, verify that Dipswitch #1 on the circuit board are in the ON/UP position on the Gateway and Node(s). If not, use the tip of a pen to position them ON/UP.*

The Gateway has two buttons on the faceplate. You will use "Button B" (on the right) to bind. Each Node has a button at the top of the circuit board in between the two mounting screws. You will use these buttons for the binding process.

1. Connect the panels to power.
2. On the Gateway, enter binding mode by clicking the "B" button three times. The two Gateway LEDs should alternate flashing red. The Gateway screen will also confirm that you are in binding mode.
3. On the Node, enter binding mode by clicking the button three times. The LED should alternate flashing red and green. Repeat this step for additional Nodes, if applicable.
4. Once the nodes have been clicked and are flashing red/green, click the Gateway button once to exit binding mode. The Gateway LED A should change to steady green.

Step Three: Verify Communication Network

1. The Gateway's LED will remain steady green. The Node's LED will flash red four times.
2. Until the communication network has been established, the Node LED will flash red.
3. Once the communication network has been established, the Node LED will flash green.
4. If the Node LED is flashing green, the communication network has been established and the binding process is complete.

Note: If all Nodes in the network don't flash green, repeat the process and make sure that the rotary dials are set correctly in Step One.



Pairing Three Binding Instructions:



Note: This pairing is an older pairing and hasn't been sold by RTC in recent years.

Step One: The Radio Network

Binding Nodes to their Gateway ensures the Nodes only exchange data with the Gateway they are bound to. Before you begin the binding process, **make sure the Gateway rotary dials are set to 0-0 and the rotary dials for every Node in the system are set to F-F.**

Step Two: Binding

The Gateway has two buttons on the faceplate. You will use “Button B” (on the right) to bind the Gateway. You will need a small flat-head screwdriver to bind the Node.

1. Connect the panels to power.
2. On the Gateway, enter binding mode by clicking the “B” button three times. The two Gateway LEDs should alternate flashing red. The Gateway screen will also confirm that you are in binding mode.
3. The Nodes should already be in binding mode if the rotary dials are set to F-F. If they aren't, use a flathead screwdriver to put them in the F-F position. The two Node LEDs should alternate flashing red, go to steady red, and then both blink red four times. After the four red blinks, the right LED will blink red, signaling that it is in binding mode
4. Use a flathead screwdriver to change the rotary dials on the Node. The first node should be set to 0-1, the second node to 0-2, and so forth. Each node should have a unique “address”. The right Node LED will continue to blink red.
5. Click the right “B” Gateway button once to exit binding mode. The Gateway LED A should change to steady green.

Step Three: Verify Communication Network

1. The Gateway's LED will remain steady green.
2. Until the communication network has been established, the Node LED will flash red.
3. Once the communication network has been established, the Node LED will flash green.
4. If the Node LED is flashing green, the communication network has been established and the binding process is complete. *Note: If all Nodes in the network don't flash green, repeat the process and make sure that all rotary dials are set correctly.*

