

900 MHz WIRELESS DUAL BAND REPEATER

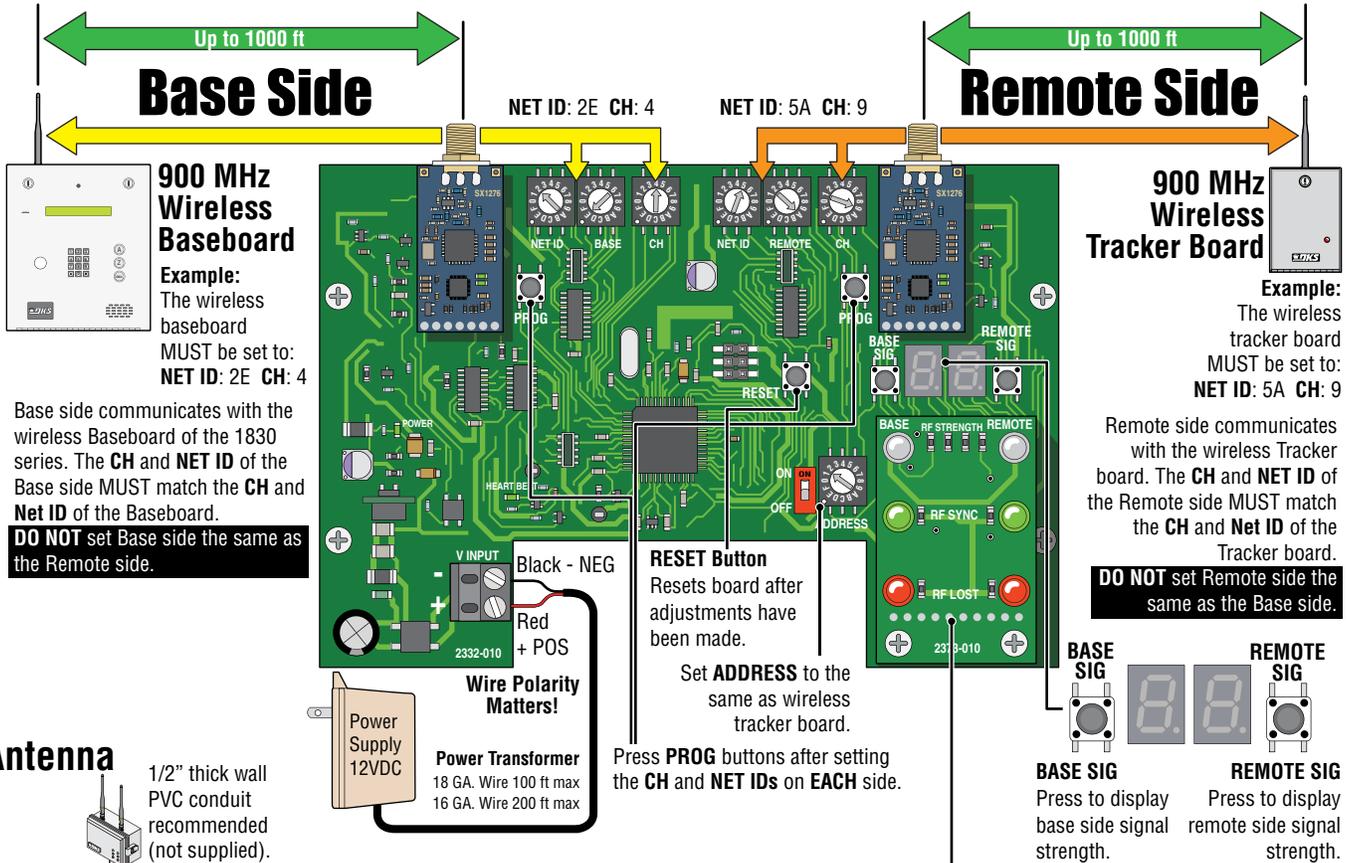
DoorKing Part Number
2332-080

The 900 MHz wireless dual band repeater (DBR) extends the wireless communication range between an access control system (900 MHz wireless baseboard) and 900 MHz wireless tracker expansion board. It gets installed between the wireless devices that are too far or obstructed from each other to reliably communicate with each other. It will receive a signal sent to it and repeat that signal to the next wireless device. Up to 2 DBRs can be used in the same communication line of a tracker expansion board. The signal range of a DBR is **Up to 1000 ft direct-line-of-sight** with no signal interference. See **"900 MHz Wireless Baseboard Manual"** for complete access control system wireless setup information.

Installation

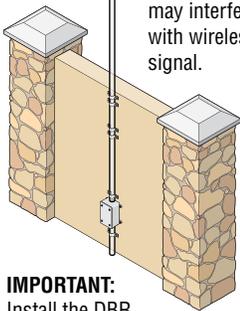
TIP: It is best to keep the CHs at least 3 numbers away from each other if possible for signal separation. This helps eliminate interference between base side and remote side.

Range testing is HIGHLY recommended before FINAL installation.



Antenna

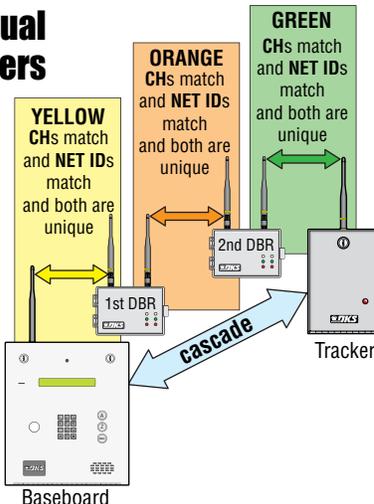
1/2" thick wall PVC conduit recommended (not supplied). Metal conduit may interfere with wireless signal.



IMPORTANT: Install the DBR so the antenna is in a location that is **NOT** surrounded by metal and is in free air as high as possible above the ground. Minimum 15 ft above ground recommended.

Cascading Dual Band Repeaters

Up to 2 Dual Band Repeaters (DBR) can be used in a cascade format to extend signal distance. The Base Side of 2nd DBR MUST match the **CH** and **NET ID** of the Remote Side from the 1st DBR and so on. Make sure the **CH** and **NET ID** combinations are **UNIQUE** for every DBR in the cascade.



RF STRENGTH LEDs (Base/Remote)

Off in normal operation. When signal is displayed (press base/remote SIG button) it is either green-good, yellow-weak or red-NO. When signal is displayed, LED blinks until signal is received, once received, it stays lit.

Note: Signal display is terminated if either Base or Remote **PROGRAM** button is pressed or the number of minutes is reached as selected by the SIG button.

RF SYNC LEDs (Base/Remote)

Off in normal operation. Blinks green everytime data is received over the air.

RF LOST LEDs (Base/Remote)

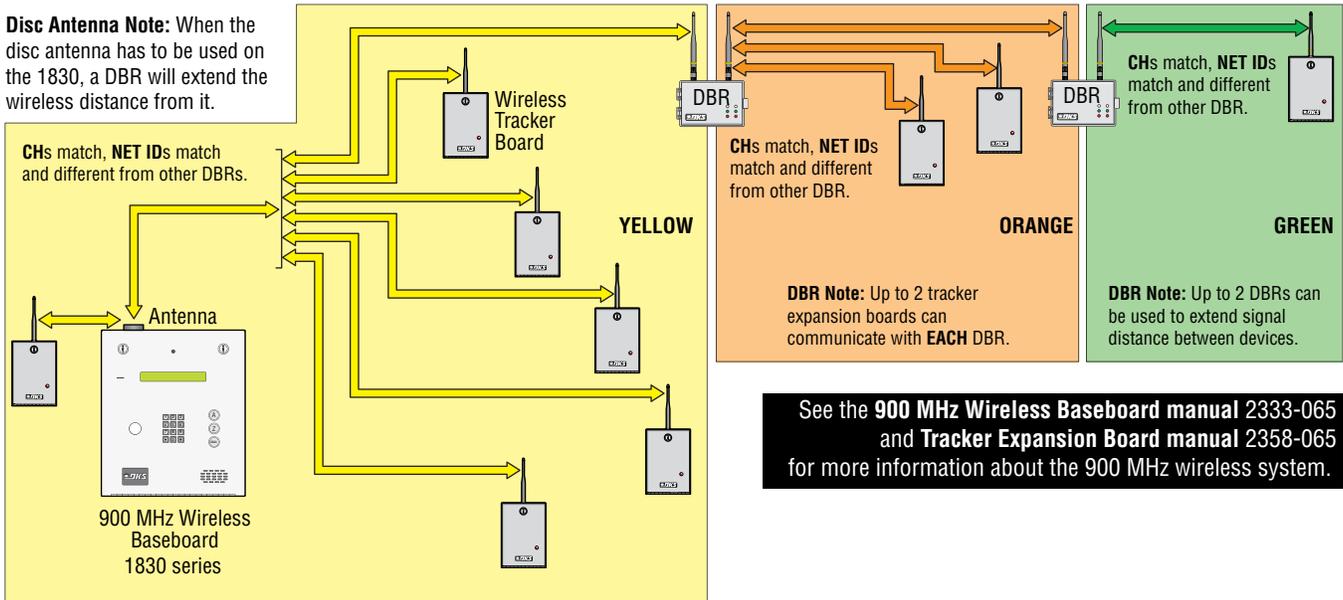
Off in normal operation. Blinks when no air data is detected after six minutes and stays lit after NO air data is received for 10 minutes.

Example of Dual Band Repeater Layout

Up to 48 Tracker Boards Communicate Wirelessly when NO HARDwiring Trackers to 1830

There are 16 individual board addresses available for the tracker expansion boards (16 tracker boards). Board addresses 3-10 for Relay 2/Wiegand 2 input and 11-18 for Relay 1/Wiegand 1 input. An additional 32 tracker expansion boards can be used with zone addressing. There are many combinations of wireless configurations and DBRs will extend the signal distance between devices to allow up to 48 trackers expansion to be used. Wireless tracker expansion boards can also connect directly to the 1830 when in range. This diagram shows **NO** tracker expansion boards **HARDwired** to the 1830.

Disc Antenna Note: When the disc antenna has to be used on the 1830, a DBR will extend the wireless distance from it.



See the **900 MHz Wireless Baseboard manual 2333-065** and **Tracker Expansion Board manual 2358-065** for more information about the 900 MHz wireless system.

Important Notice

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices are used in a normal manner with a well-constructed network, DoorKing wireless products should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. DoorKing, Inc. accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using DoorKing wireless products, or for failure of DoorKing wireless products to transmit or receive such data.

Safety and Hazards

Do not operate DoorKing wireless products in areas where cellular modems are not advised without proper device certifications. These areas include environments where cellular radio can interfere such as explosive atmospheres, medical equipment, or any other equipment which may be susceptible to any form of radio interference. DoorKing wireless products can transmit signals that could interfere with this equipment. Do not operate DoorKing wireless products in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, DoorKing wireless products **MUST BE POWERED OFF**. When operating, DoorKing wireless products can transmit signals that could interfere with various onboard systems.

The driver or operator of any vehicle should not operate DoorKing wireless products while in control of a moving vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.



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