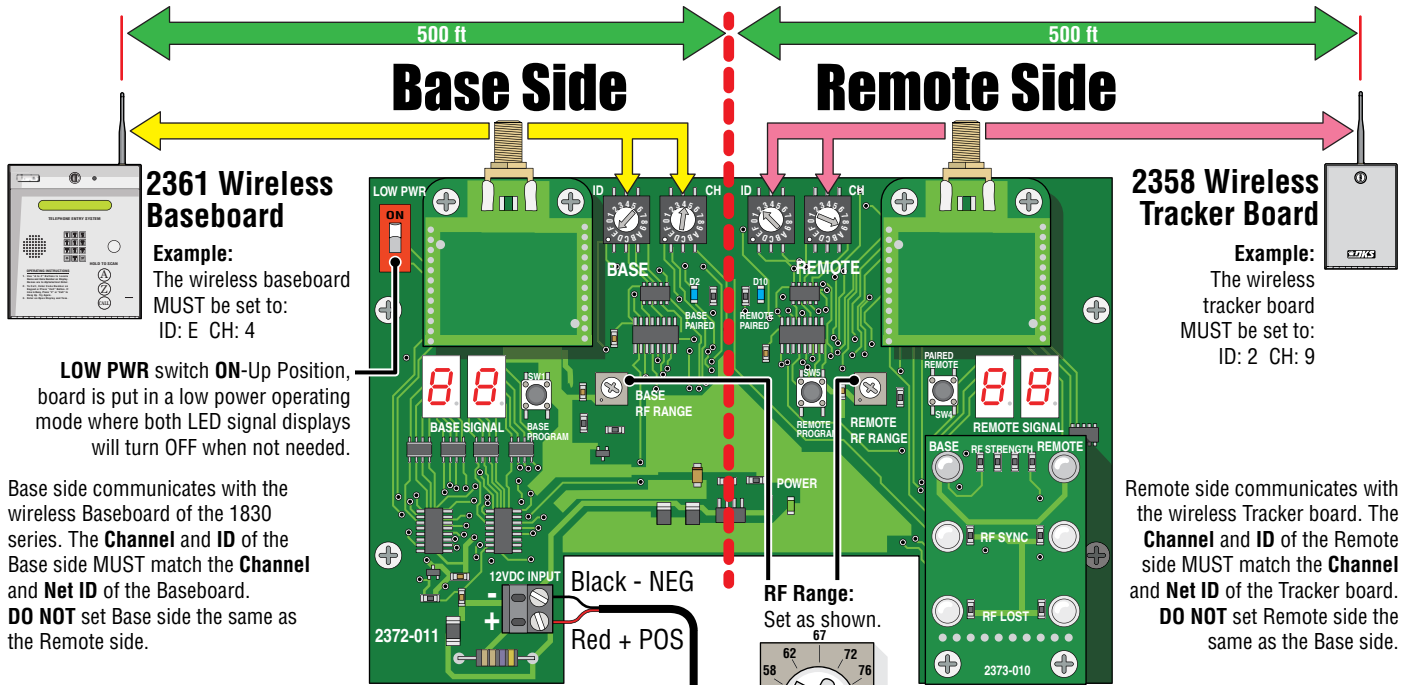


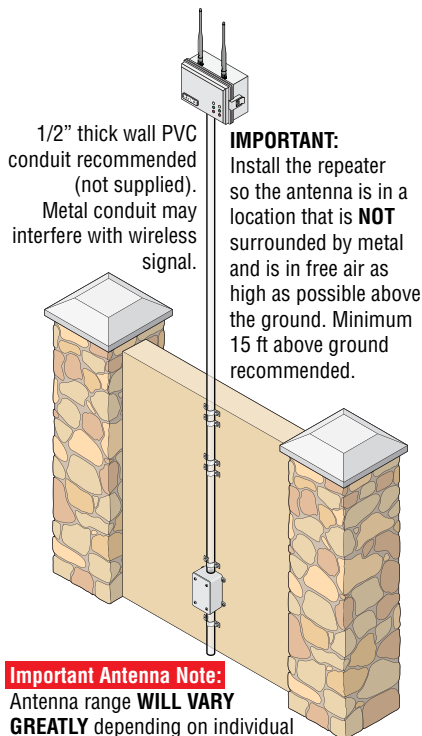
WIRELESS DUAL BAND REPEATER KIT

DoorKing Part Number
2372-080

The wireless dual band repeater kit (DBR) extends and expands the wireless communication range between an access control system and wireless tracker expansion board or "tracker 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. Multiple DBRs can be used in the same communication line of a tracker board. The signal range of a DBR is **approximately 500 ft direct-line-of-sight** with no signal interference.



Installation

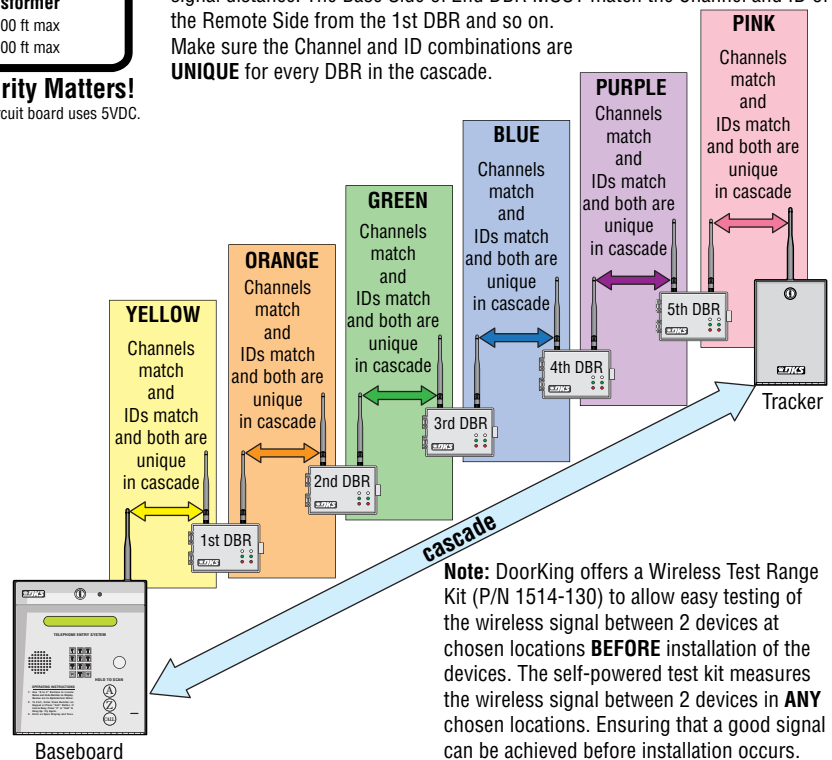


Important Antenna Note: Antenna range **WILL VARY GREATLY** depending on individual setup: Antenna height above the ground, background signal interference, physical obstructions (trees, buildings etc.). Adverse weather (rain) **CAN** also affect antenna range.

Range testing is HIGHLY recommended before FINAL installation.

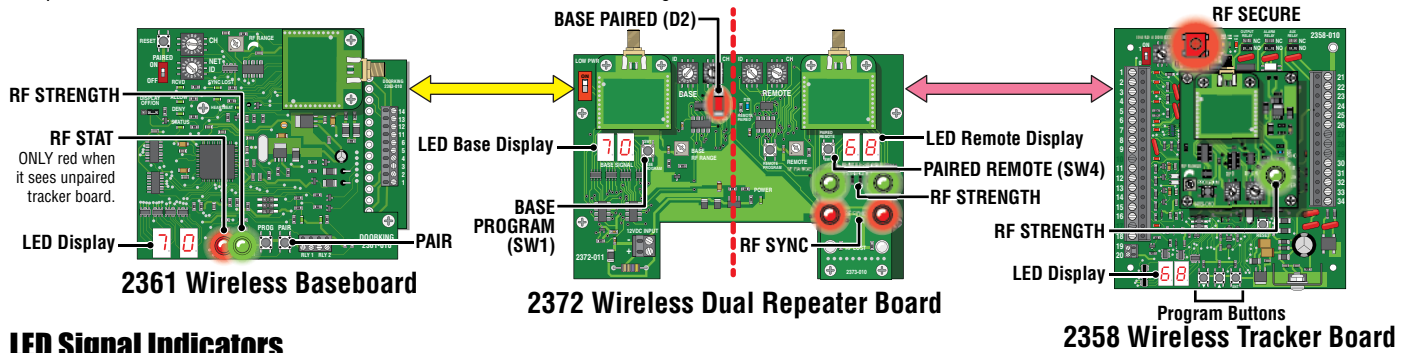
Cascading Dual Band Repeaters

Up to 5 Dual Band Repeaters (DBR) can be used in a cascade format to extend signal distance. The Base Side of 2nd DBR MUST match the Channel and ID of the Remote Side from the 1st DBR and so on. Make sure the Channel and ID combinations are **UNIQUE** for every DBR in the cascade.



Automatic UNpaired Communication

Powering up boards will automatically establish communication between them and the baseboard. **RF STAT/BASE & REMOTE PAIRED/RF SECURE** LEDs will remain **RED** on the boards which indicates the boards are communicating with each other, but **UNPAIRED**. This means that card codes/entry codes/remote codes will be accepted from **ANY** tracker board that is set to the same channel and ID setting. See below to **PAIR** boards if desired.



LED Signal Indicators

70 LED displays on boards will indicate the signal loss between the boards. A smaller number is a stronger signal. **75 or lower** is recommended.

RF STRENGTH LED should be GREEN on each board. YELLOW is marginal strength, RED is poor strength.

2361 Baseboard: LED Display shows the RF Range setting of the baseboard for 2 sec then shows signal loss that the board is actually receiving from 2372 Base side.

2372 Dual Repeater Board: Has LED displays for EACH side of the repeater which shows signal loss for Base and Remote sides.

2358 Tracker Board: To Display RF Signal Loss

- Use **UP** and **Down Arrow Buttons** to select programming **Step 21** shown on LED display. **21**
- Press **ENT Button** to show Signal Loss number on LED display. **75** **75 or lower** is recommended.

Pairing Boards Together

When boards are PAIRED: Only card codes/entry codes/remote codes from paired tracker boards will be accepted.

Base Side of 2372: To pair the 2372 Base side with a 2361 Baseboard, the 2372 base side **MUST** be in an **UNPAIRED** mode:

Depress the **BASE PROGRAM** button (SW1) on the 2372 base side for few seconds until the **RF LOST LED** blinks rapidly and then turns steady RED. Then press the **PAIR** button on the 2361 baseboard for few seconds to **PAIR with the 2372 BASE side ONLY**. Once the 2372 Base side receives a pairing command from the 2361 baseboard, the middle green LED (RF SYNC) and the bottom red LED (RF LOST) blink rapidly; this indicates it has successfully been paired with the 2361 Baseboard. The **BASE PAIRED** LED turns green (D2) and will stay lit on 2372 Base side.



Remote Side of 2372: To pair the 2372 Remote side with the wireless tracker board, unpaired communication must have already been established between the 2.

The **RF SECURE LED** will remain ON steady red on top of 2358 tracker board. Press the 2372 Remote side **PAIRED REMOTE** button (SW4) for 3 seconds or until the 2372 **REMOTE PAIRED** Blue LED (D10) blinks rapidly. Once 2358 tracker board has been successfully paired to Remote side of 2372, the **RF SECURE LED** will turn green and remain lit on 2358 tracker board.

DoorKing Technical Support: **1-800-826-7493**

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.

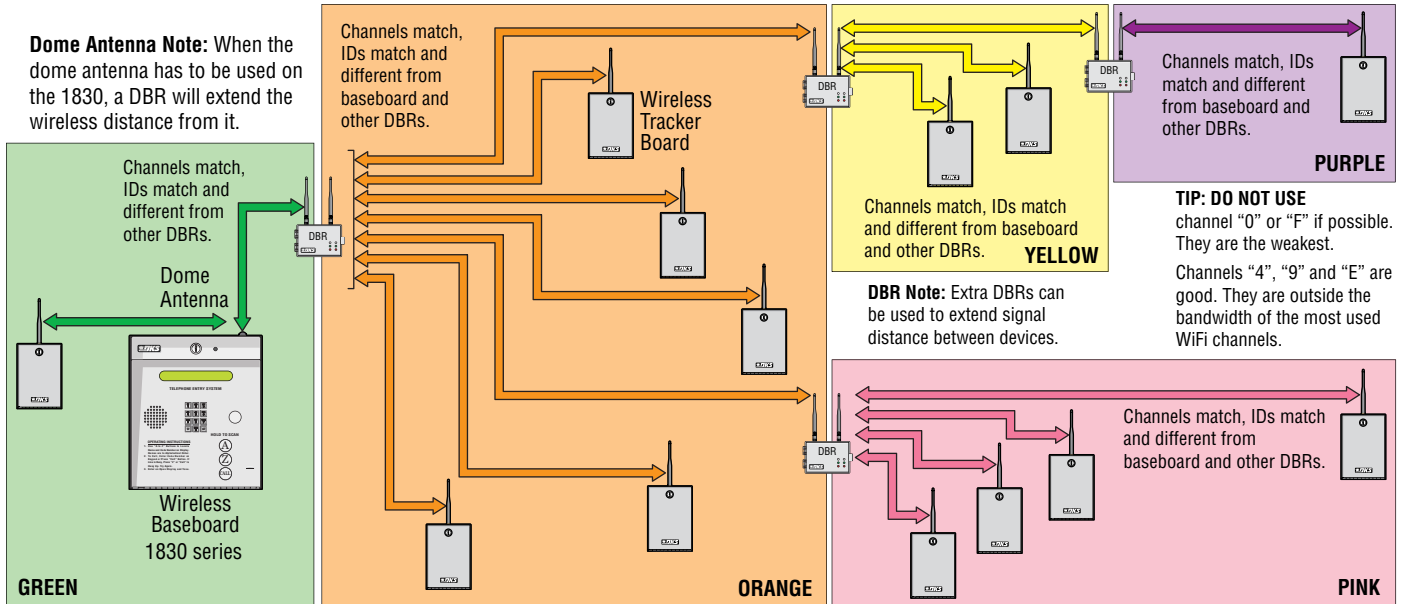
Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. DoorKing wireless products may be used at this time.

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.

Examples using Dual Band Repeaters - DBR

Up to 24 Tracker Boards Communicate Wirelessly, NO HARDwiring Trackers to 1830

There are 16 individual board addresses available for the tracker 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 8 tracker 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 24 trackers to be used. Wireless tracker boards can also connect directly to the 1830 when in range. This diagram assumes that **NO** tracker boards will be HARDwired to the 1830. See below for wireless and hardwired tracker boards.



Up to 12 Tracker Boards Communicate Wirelessly and HARDwiring Trackers to 1830

Relay 1/Wiegand 1 input terminal is available on the 1830 baseboard to HARDwire tracker boards if desired. When any trackers are HARDwired to the baseboard, only the Relay 2/Wiegand 2 input is available for wireless communication. 8 board addresses 3-10 (8 tracker boards) and an additional 4 tracker 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 12 trackers to be used for the Relay 2/Wiegand 2 input. Wireless tracker boards can also connect directly to the 1830 Relay 2/Wiegand 2 input when in range.

