900 MHz WIRELESS RF REMOTE MODULE

DoorKing Part Number
1470-080

This 900 MHz wireless RF remote module provides wireless communication for a 2358-010 tracker expansion board to a 900 MHz wireless baseboard in a access control system. Use this 900 MHz wireless boards **ONLY** with DoorKing: 1833, 1835, 1837 and 1838 multi-door access controller access control systems. **DO NOT** use with 1838 Access Plus model.

Antenna Options

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.

Cabinet Mounted
900 MHz Antenna Kit
P/N 1514-019

Range is Up to **1000 ft** direct-line-of-sight.

Externally Mounted
900 MHz Antenna Kit
P/N 1514-079

Range is Up to **1000 ft** direct-line-of-sight.

13 ft of cable out of **bottom** of cabinet

900 MHZ Wireless
Dual Band Repeater
P/N 2332-080

Range is Up to **1000 ft** direct-line-of-sight. See instruction sheet for more information.

900 MHz
Short Range
Cabinet Mounted
Antenna (Supplied)

Range is Up to **200 ft** direct-line-of-sight.

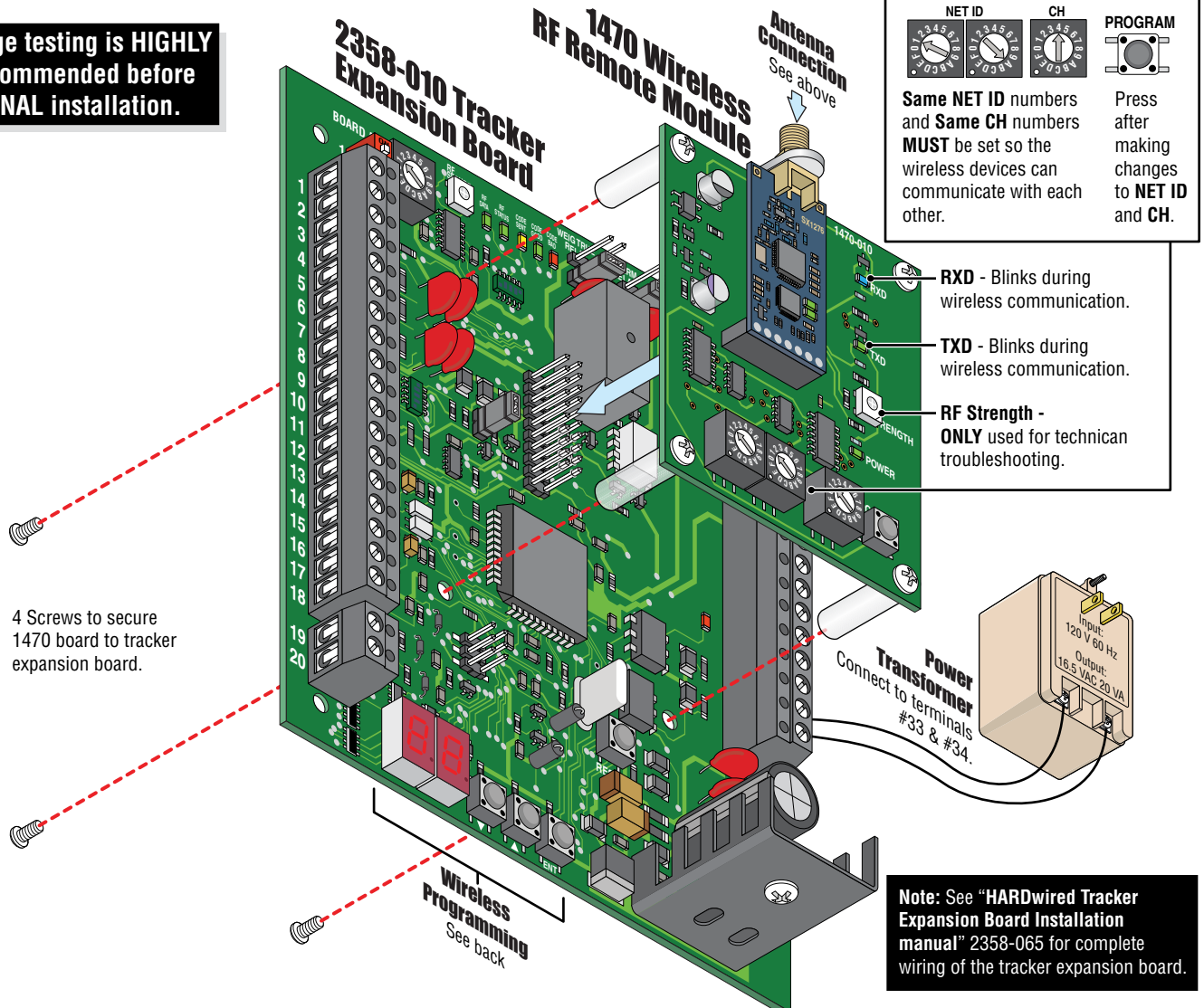### 900 MHz Wireless Enclosure Options

Antenna Mount

Single Board Enclosure
P/N 2351-080

Antenna Mount

Single Board Enclosure with Built-In Card Reader and Lighting
DK Prox Reader - P/N 1815-333
HID Reader - P/N 1815-392
AWID Reader - P/N 1815-292

Installation

Plug the 1470 wireless RF remote module into the **wireless connector** and secure boards with 4 screws to the 2358 tracker expansion board. See the **HARDwired tracker expansion board manual** 2358-065 to connect desired options to tracker board terminals #1- #34 to manage a remote access point. **DO NOT CONNECT ANY WIRES TO TERMINALS #10, #17, #27, #28 or #29 (Used for HARDwire communication line ONLY).** Power transformer must connect to tracker expansion board #33 and #34 **(REQUIRED)**. Antenna is **REQUIRED**.

Range testing is HIGHLY recommended before FINAL installation.

2358-010 Tracker Expansion Board

1470 Wireless RF Remote Module

Antenna Connection
See above

NET ID   CH   PROGRAM

Same NET ID numbers and **Same CH** numbers **MUST** be set so the wireless devices can communicate with each other.

Press after making changes to **NET ID** and **CH**.

RXD - Blinks during wireless communication.

TXD - Blinks during wireless communication.

RF Strength - ONLY used for technican troubleshooting.

4 Screws to secure 1470 board to tracker expansion board.

Power Transformer
Connect to terminals #33 & #34.

Input: 120 V 60 Hz
Output: 16.5 VAC 20 VA

Wireless Programming
See back

Note: See "HARDwired Tracker Expansion Board Installation manual" 2358-065 for complete wiring of the tracker expansion board.

Wireless RF Remote Module Tracker Expansion Board Programming ONLY

DoorKing Part Number
1470-080

1. Press a button to activate LED display.
2. Press **ENT** button and then use ▼▲ scroll buttons to display desired "**Program Step**" number from list below.
3. Press **ENT** button to enter selected program step number.
4. Select desired data while in program step using ▼▲ buttons.
5. Press **ENT** button to **enter** selected data.
6. Press **ENT** button **AGAIN** to **EXIT** programming **OR** after 10 seconds, board will **automatically EXIT** programming.

Program Step	Description	Options	Selection Number	Function	Factory Default
17	1835 Checkin Time (Factory Set)	1 - 5		**Preset at Factory. Do Not Change. Contact DoorKing tech support.**	5 Minutes
			5	Period Tracker board checks in with 1835 for schedule hold open (minutes).	
18	Low Byte MAC	1 - 99		**Preset at Factory. Do Not Change. Contact DoorKing tech support.**	5
			5	Low Byte Value MAC address used only for 900MHz. Assigned during manufacturing.	
19	Reset to Factory Defaults	5		**Sets all parameters to Factory Default**	
20	View RF POT Setting	Adjustable		**Sets maximum amount of allowable signal strength loss**	
21	View RF Signal Strength	LED Display		**Displays current signal strength between Baseboard and Tracker.** • 80 or lower - **GOOD**. • 80-85 - Unreliable signal strength. • 86-99 - **NO signal**.	
22	Card Code Forwarding (Factory Set)	0 or 1		**Sets Wireless Tracker to act as Repeater** **Do Not Change. Contact DoorKing tech support.**	0: Off
			0	Repeater Mode OFF	
			1	Repeater Mode ON	
23	Same Zone Address Relay Delay	0 - 20		**Adding relay control delay to Trackers using the same Zone Addresses** If more than one tracker board is set to the same address (zone addresses), then change this value to a unique number. Only program this for tracker boards with the same addresses. Start out with a value of 1 then increase the next board to 2, then the 3rd board to 3 etc... This will prioritize the relay access order of the same zone address boards.	0
24	Lost Wireless Communication Options (Factory Set)	0 - 5		**When wireless communication is lost with the base for "X" number of minutes defined in step 17, this step will instruct the tracker board what action to take.**	1: counts the number of lost com trans.
			0	Does nothing	
			1	Counts the number of lost communication transactions	
			2	Reboot the RF module only	
			3	Set RF module with net ID and channel selected	
			4	Initialize RF module then reboot RF remote module	
			5	Restore programming value, sets RF remote module net ID and CH, then reboots RF module address boards.	
25	View the Number of Lost Wireless Communications	0 - 99		**View the number of lost communication transactions with the base.** Use the ▼▲ arrows buttons to change the value.	0
26	Air Busy Wait Time (Factory Set)	0 - 20		**Preset at Factory. Do Not Change. Contact DoorKing tech support.**	2
			2	This value is set to 2. No need to adjust.	

Error codes on LED Displays for Baseboard and Tracker Board

E1 - Relay connected to 4-pin terminal pins 1 & 2 is on for more than 5 seconds. Relay 1 in 1830 should be set for 00 seconds (0.25 second strike time)
E2 - Relay connected to 4-pin terminal pins 3 & 4 is on for more than 5 seconds. Relay 2 in 1830 should be set for 00 seconds (0.25 second strike time)
A1 - Board address is invalid for Tracker. Board address is improperly set as 0, 1, 2 or 19.
A2 - Dual Mode - Bad Address, 18 or 19 not allowed.

See the **900 MHz Wireless Baseboard manual** 2333-065
and **Tracker Expansion Board manual** 2358-065
for **ALL** tracker expansion board programming and wiring.

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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