**WIRELESS TEST RANGE KIT**

The DoorKing Wireless Test Range Kit allows easy testing of a wireless signal between a DKS telephone entry system (Models 1833, 1835, 1837 and 1838) and DKS access control devices such as card readers, keypads, etc.

The test kit can be used to measure the wireless signal loss between a telephone entry system and access control device in desired positions **BEFORE** they are installed, making sure the 2 systems have a good signal between them to communicate successfully in their desired positions.

The test kit can also be used to measure the wireless signal between a new access control device to be installed with an existing telephone entry system that has already been installed.

**Test Units Adjustments and Switches**

1. Turn Power ON at both units. Note: Keep power turned OFF when units are not in use to conserve battery life.
2. Choose antenna switch setting - dome antenna or long range antenna. Note: Long range antenna can be mounted away from test unit.
3. IMPORTANT: Set RF ID to same setting on both units.
4. IMPORTANT: Set RF Channel to same setting on both units.
5. Set RF Range to MAX (full clockwise) on both units.
6. Press program button on both units. LEDs will light (see LED descriptions below).

**Test Units LED Descriptions**

**RF Strength LED (Green LED is the goal):**
- **GREEN LED:** reliable signal. LED display reads 75db or less. Good signal for reliable communication.
- **YELLOW LED:** marginal signal. LED display reads 75db - 79db (not recommended), should find a better signal for reliable communication.
- **RED LED:** unacceptable signal. LED display reads 80db or more, **MUST** find a better signal for reliable communication.

**RF Lost LED:**
- Will remain **OFF** when signal is detected. Will turn **ON** when no signal is detected.

**RF Sync LED:**
- Will intermittently blink **BLUE** when test units are communicating. Will remain **OFF** when no signal is detected.

**New Installation Option (NO Entry Systems have been Installed yet)**

Place test units where telephone entry system (**BASE unit**) and access control device (**REMOTE unit**) will be installed. Test signal, move test units around if necessary to **achieve LED display of less than 75**.

**Existing Installation Option (Telephone Entry System has been Installed)**

Use existing wireless baseboard already installed in telephone entry system (Do not use BASE unit for this signal testing). Place **REMOTE unit** where new access control device will be installed. Test signal, move **REMOTE unit** around if necessary to **achieve LED display of less than 75**.

**Long Range Antenna Note:** Locate antennas 12-15ft above ground to prevent vehicles (trucks, buses etc.) from interfering with wireless signal.

**If Installing a Repeater**

**Step 1:** Test signal from access control device location (**REMOTE unit**) to repeater location (**BASE unit**).
- RF Channel and RF ID **MUST** be set the same during this test.

**Step 2:** Test signal from repeater location (**REMOTE unit**) to telephone entry system location (**BASE unit**).
- RF Channel and RF ID **MUST** be set differently from step 1 during this test.
Test Signal Loss Between Telephone Entry System and Each Access Control Device Location

Test each wireless signal between the telephone entry system location and each access control device locations. **Turn OFF power to any devices not being tested or signal interference could occur.** Up to 24 access control devices can be directly wirelessly connected to the telephone entry system. See Wireless System Layout and Start-Up guide for **COMPLETE** information. Your system layout can vary from this example.

**When a Repeater is Needed**

If the signal loss reads 75-85db between the test units, then a repeater can be used between the 2 devices to make the signal loss read less than 75db. Repeater can also help route wireless signal around buildings and obstructions. See Wireless System Layout/Start-Up guide and DBR instruction sheet for **COMPLETE** information. Your system layout can vary from these examples.