## **VOICE ONLY CELLULAR SYSTEM**

The VOICE ONLY Cellular System operates on DoorKing's cellular network that is hosted on the AT&T 4G LTE network where available. This system provides voice communication ONLY (phone line) to specific DoorKing 1800 series telephone entry systems. There is NO programming (data) service with this system. If VOICE and DATA are required, then the VOICE and DATA cellular system should be used (P/N 1800-080 sold separately).

The VOICE ONLY Cellular System is designed to be used with specific DoorKing 1800 series telephone entry systems:

- 1802, 1803, 1808, and 1810 Standard entry systems using circuit board 1862-010.
- 1812 Classic entry system using circuit board 1871-010.
- 1812 Plus entry system using circuit board 1971-010.

The **Voice ONLY** cellular system **MUST** be wired to the entry system's **phone line** (voice).

The Voice Only cellular system will work with TWO 1800 entry systems connected to it. These are designated as System A and System B.

#### **Prior to Installation:**

An existing AT&T operated cellular phone will be needed to test the signal strength of the AT&T cellular network in the desired installation location.

Analog modems **DO NOT** work on a cellular network.

Before the cellular system can be installed, the installation location MUST have good cellular signal strength for reliable communication. This location needs to be tested using an existing active AT&T cellular network phone. Activate the phone near the position where you want the plastic enclosure to be installed. 3-4



bars of signal strength should be indicated on the phone for a reliable signal. If 3-4 bars are not achievable in that specific location, then try moving the phone around and see if at least 3-4 bars can be achieved and maintained in a nearby location. **DO NOT install the enclosure in a** WEAK or NO signal area. Generally, the higher the enclosure is mounted, the better the reception. This also helps protect against vandalism. The enclosure should be located to minimize the wire runs to "SYSTEM A" 1800 telephone entry system. Keep the wire run between the two devices as short as possible, maximum 100 feet. This allows less chance for lightning surges or other electrical interference to disrupt the cellular signal. Keep the enclosure away from any metal. This can also disrupt the signal. After the 3-4 bar signal strength has been confirmed the installation can begin.

### **Installation Steps:**

Page 2: 1. Install and wire cellular system to 1800(s).

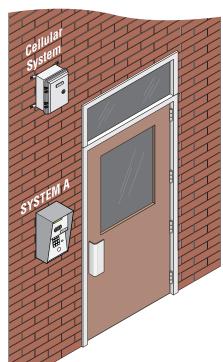
Page 3: 2. Power up cellular system.

Page 3: 3. Register cellular system (and 1800(s)) online, this can be done before or after cellular system has been installed.

Page 3: 4. Test cellular system.

Page 4: 5. Troubleshoot cellular system if necessary.

Note: Installation steps assume that a good cellular signal has been tested at installation location and the 1800 system(s) has already been setup and functioning including the master code and multiple system programming if 2 1800s are being used.





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# Wiring

#### **DKS Cellular Server** hosted by AT&T cellular network with **DKS Online Registration Completed**

### **Choose Terminal Connection** for "SYSTEM A" 1800

Twisted Pair Phone Line MUST be used.

15

16

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16 5VAC 40 VA ONLY

Power wire polarity does not matter.

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0 0

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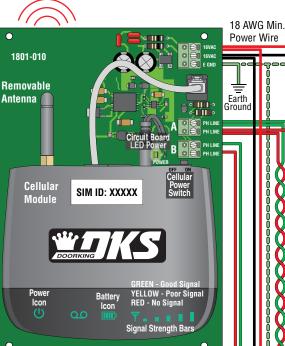
0 0 0

Twisted Pair

Phone Line

MUST be used.

Existing Power



**Voice ONLY Cellular System** 



a proper ground close by (ground rod, cold water pipe in the ground, existing electrical 17 - 16.5 VAC Input Power ground (dashed lines), etc.). 18 - 16.5 VAC Input Power

### **Standard Entry System Terminal** Twisted Pair Phone Line MUST be used. Ground 40 VA ONLY 18 AWG Min. Power Wire Power wire polarity does not matter.

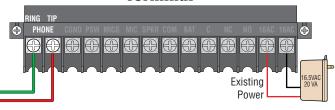
## **Choose Terminal Connection** for "SYSTEM B" 1800 **Ontional**

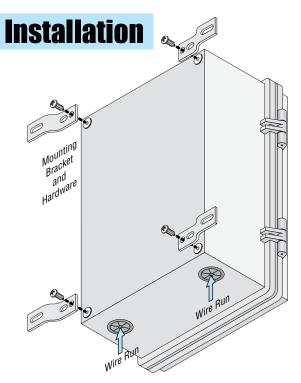
Plus and Classic Removable **Terminal** 

1 - Phone In (Negative-Ring) 2 - Phone In (Positive-Tip)

> TWO Entry Systems - The Voice ONLY cellular system can supply telephone service for TWO 1800s designated as System A and System B. The telephone line is **SHARED** with both 1800s. Each 1800 MUST be programmed for Multiple Systems, see specific 1800 Installation/Owner's instruction manual for more information.

### **Standard Entry System Terminal**





The plastic enclosure comes with mounting brackets and hardware to mount on enclosure. Mount enclosure on surface using appropriate hardware (not included). IT IS NOT RECOMMENDED DRILLING HOLES IN THE PLASTIC ENCLOSURE! If holes must be drilled, remove the circuit board before drilling and be sure that mounting bolts/screws do not touch the back of the circuit board. Holes must be sealed to prevent water intrusion.

# **Cellular System Information**

Powering Up Cellular System - The Voice ONLY cellular system will NOT function until online registration has been successfully completed on DoorKing's Cellular website. Within 1 minute of powering up the cellular module, the module lights should turn on. If they don't, check that the cellular power switch is turned ON. Signal strength Bars should be lit GREEN indicating good cell reception. YELLOW bars indicates poor reception but may still work. RED bars indicates no reception. The cellular module's lithium battery needs time to charge. Allow at least ½ hour of charging time before using system. Program the assigned phone number (from DKS cellular registration) into the 1800 entry system to make a test call.

**Adjusting 1800 Entry System -** When making a test call from the 1800 telephone entry system, adjust the microphone, speaker and feedback on the entry system, See specific 1800 Installation/Owner's instruction manual for more information.

**Using Two 1800 Entry Systems** - Each 1800 must be programmed for **MULTIPLE SYSTEMS**. see specific 1800 Installation/Owner's instruction manual for information to program each 1800.

TWO 1800 Entry Systems Master Codes - Each 1800 entry system's Master Code must be **DIFFERENT**. The DKS cellular server identifies each 1800 by its unique master code. This allows separate programming for each 1800.

Battery Back-Up - The cellular module contains a lithium battery which will **ONLY** power the cellular "Voice" system during a power outage for approximately two hour depending on usage. The 1800 and the cellular system's "1801-010 Circuit Board" **MUST** also have a back-up battery installed to operate during a power outage. DoorKing recommends using a DKS Model 1000 power inverter for full system backup.

**Battery Replacement for the Cellular Module** - The lithium battery is located inside the cellular module. The circuit board must be removed and the cellular module from the board to gain access to the battery door on back of the module.

# **Online Registration MUST be Completed**

DKS Cellular requires a **SEPARATE** registration from the DKS IM Server. If a customer already has an IM Server account and wants to add a DKS Cellular system, this will require a **SEPARATE** User ID and Registration.

- DKS IM Server includes: IM Server Modem and IM Server Client.
- DKS Cellular includes: Cellular Phone and Data Transfer.

Before registering a cellular system on DoorKing's Cellular Server you will need:

- SIM ID number located on the cellular module (number is unique for each cellular module).
- Master Code of System A.
- Master Code of System B if connected, MUST be a different master code than System A.

OPTION 1. Go to DKS cellular website: https://dksdb.dksoftware.com/NewUserRegChoice.aspx to register, follow instructions on website.

**OPTION 2.** Online registration is directly offered when installing the DoorKing Remote Management Software version 6.3.g or later on YOUR internet connected PC. Create an account and select the **Voice ONLY** account from the options.

- Voice Only (Only service available for Voice ONLY cellular system)
- Voice and Data (not applicable)
- Data Only (not applicable)

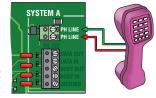
Enter the SIM ID number to identify the Cellular System to the account created. After the SIM ID number is entered along with the local billing address, a local cellular phone number will be assigned to that cellular device.

Register the 1800 systems (Master Codes) to the account. The **FIRST 1800 master code** entered will be identified as **System A**. If a second 1800 master code is entered, it will be identified as **System B**.

## **Testing**

Final Testing after the Cellular System has been Registered - All systems should be tested and final adjustments done. Connect a telephone butt set to the cellular system circuit board **Phone Line** and make sure the line is active and that phone calls may be made and received.

If the phone line is not active, something went wrong during the registration which must be corrected. If still having problems, call DoorKing tech support. Attach a label to the inside of the cellular enclosure listing the local phone number that was assigned during registration.



**Voice Testing** - Program a phone number into the memory of the 1800 using the 1800 keypad. Then call that programmed number on the 1800. Have the call recipient press "9" on their phone to open the door. Verify the 9 tone is detected (door will open). Adjust the feedback on 1800 as necessary. See specific 1800 Installation/Owner's instruction manual for programming and adjustment information.

Note: Factory set Tone Open numbers: 9 tone activates Relay 1. 0 tone activates Relay 0. 5 tone activates Relay 2. For cellular, the preferred tone for Relay 2 is the 8 tone.

# **Troubleshooting**

#### **System Not working:**

Are the lights on the cellular module ON? If not, make sure cellular power switch on cellular module is ON.

Is the circuit board power LED ON? If not, check the 16.5VAC power transformer wires.

Poor cellular reception. Look for cellular module "Signal Strength Bars" to be GREEN. If bars are YELLOW or RED, poor or no reception is occurring.

Registration is not complete OR DATA ONLY has been selected. Service suspended because of past due bill. Contact DoorKing for support.