



## DRX Range Extender Kit Installation Guide

**DEFAULT PROFILE SETTINGS:**      **PIN#: 0000 / CHANNEL: 01**

**CUSTOM PROFILE SETTINGS:**      **PIN#: \_\_\_ \_\_\_ \_\_\_ \_\_\_ / CHANNEL: \_\_\_ \_\_\_**  
(Replaces default profile)

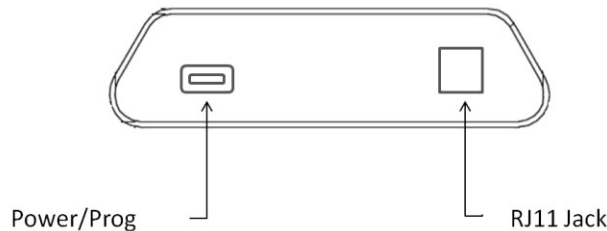
### GETTING STARTED

*The Cane Wireless DRX Range Extender kit is designed for the Motorola DLR™ series digital radio and will provide up to 50% additional coverage of your handheld Motorola DLR™ or DTR™ series radio. Only ONE Talkgroup/Channel is extended by the DRX unit. Each Talkgroup/Channel that require extended coverage will need their own DRX Extender kit. Additional Talkgroups and Private contacts will NOT be extended but can still connect directly from radio to radio.*

This user manual is intended to be used as a supplement to the Motorola DLR™ radio user manual that should be referenced for all radio operational, programming, charging and safety instructions. The DRX Range Extender contain LiION batteries (Motorola P/N: HKNN4013) that need to be charged before use. The batteries power the units and allow for approximately eight hours of operation in the event of a power outage. **If the batteries are depleted they will need to be recharged and the power reset to resume operation.**

#### Charging the battery

Plug the included micro USB power supply into the Power/programming port on the DRX Extender. Plug the A/C connector on the Power Supply to the wall outlet to begin charging the unit. The Battery/Charge Status LED will flash to indicate the battery charge state before turning solid RED to indicate charging or solid GREEN to indicate that the battery is fully charged. The batteries will charge only between the temperatures of 0C to +40C (32F to 104F).



**NOTE: The LiION batteries should be replaced every two years for optimal performance.**

### PROGRAMMING

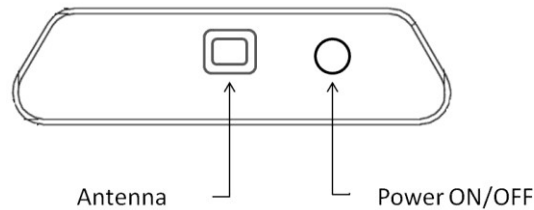
*Note: The DRX Range Extender kits are default programmed to operate on Channel 1 with PROFILE ID PIN# 0000. Simply change the PROFILE ID PIN# on your portable radios to match the DRX Extender PROFILE ID and set your radio to operate on Channel 1.*

To change the default program of the DRX Range Extender you will need to use the Motorola CPS programming cable (P/N: HKKN4027 sold separately) and download the Motorola DLR radio CPS programming software at [www.motorolasolutions.com](http://www.motorolasolutions.com).

The DRX kit can also be programmed to operate with older version Motorola DTR series digital radios (DTR410/550/650) using the CPS programming software. The radio PROFILE ID will need to be set to 0000 and Channel 1 mapped to the DTR 410/550/650 Talkgroup you wish to extend coverage.

**Note:** You will need a Motorola programming cable p/n HKKN4027 to connect the unit to your computer for programming.

**Note:** The following instructions assume you already have a working knowledge of using the Motorola DLR CPS programming tool. To learn more about using the CPS tool please read the help file from the CPS menu or instructions from the Motorola DLR radio user manual.



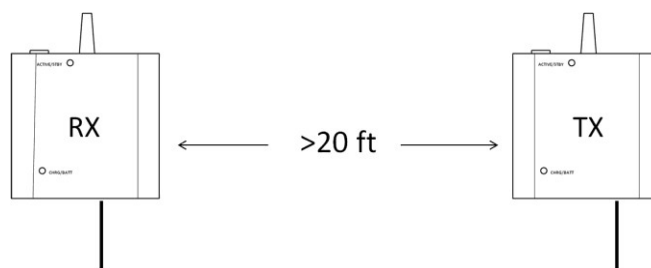
**CAUTION:** Do not clone the portable radio unit profile to the DRX Range Extender kit as this will change the settings and may affect the performance of the DRX Extender.

1. Make sure both RX and TX units are fully charged before use (see charging instructions).
2. Turn on the DRX unit you wish to program by pressing the power reset button (at top next to the Antenna). The Activity LED should flash continuously indicating the unit is powered ON.
3. Start the Motorola CPS program and connect the CPS programming cable to your computer.
4. Connect the DRX unit to the computer using the CPS programming cable.
5. Select the “Read Radio” tab from the CPS to read the profile of the DRX unit.
6. Edit the radio PROFILE ID and/or Channel to match your portable radios. You can also add a Public or Private group contact for operation with the DTR series radios.
7. Select the “Save” tab to save the DRX unit profile to your computer.
8. Select the “Write” tab to program the new profile to the DRX unit.
9. Disconnect the programming cable from the repeater unit (programming complete!).

**NOTE:** Both RX and TX DRX units must be programmed to the same channel and radio PROFILE ID PIN# for the Extender to function properly with your portable radios.

## INSTALLATION

**Note:** The Rx and TX units should be separated by >20ft for optimal performance. An optional 50ft RJ11 patch cable (p/n: CW-050RJ11) is available if needed.



The DRX Range Extender kits should be installed in a dry location where you can receive reliable coverage from all desired locations (this will not necessarily be the central location on your site). For example, in a 15 floor hotel, if you have coverage only from the lobby to the sixth floor but can communicate from the third floor to the 15<sup>th</sup> floor, the DRX Range Extender kit should be placed on the fourth or fifth floor to cover from the lobby to the 15<sup>th</sup> floor.

***Note: The DRX Extender contain batteries and can be operated without connecting the power supply. This will allow the unit to be repositioned to help determine the best location for permanent installation.***

1. Measure the distance between the two top or bottom keyholes on the back of the unit using a ruler or marking their location on a piece of paper to use as a template to place the mounting screws. ***NOTE: the keyholes are placed such that the unit can be mounted facing up or down on a vertical axis.***
2. With the power supply connected, turn on both the RX and TX DRX units by pressing the power reset button for two seconds ( located next to the antenna). The Activity LED will Flash to indicate the unit is powered ON and in standby mode.
3. Place the mounting screws at the desired location and mount the DLRX unit with the antenna in a vertical position (up or down).
4. Connect the RX and TX units together by inserting each end of the RJ11 patch cable into the RJ11 (telephone type) jack on each of the DLRX units.
5. Use a portable radio to transmit on the desired talk group. The Activity LED on the RX unit should flash rapidly to indicate that it is receiving a signal. The Activity LED on the DLRX TX unit will stay ON if connected to a receiving radio that is out of range of the transmitting radio.

***Note: Multiple DRX Extenders can be used to increase coverage or to extend additional talkgroups. When installing multiple DRX Extender kits make sure that the RX units are at least 20ft from the closest TX unit for optimal performance. “ Daisy-chaining” repeater kits is possible to extend coverage but may degrade the audio quality and increases the audio delay.***

For more information and to order additional accessories visit us at [www.canewireless.com](http://www.canewireless.com)

## TIPS & TROUBLESHOOTING

- ✓ **Make sure the DRX unit is accessible**
    - Do not install behind sealed panels or where inaccessible for maintenance.
    - Batteries will need to be replaced periodically.
    - Unit may need to be reset if there is a power outage for extended periods.
  
  - ✓ **DRX unit will not turn ON**
    - Units will not stay powered ON if the battery is not charged (even when plugged into A/C).
    - The CHRГ/BATT indicator is green when fully charged.
  
  - ✓ **No improvement in coverage**
    - Make sure TX and RX units are both powered ON.
    - Verify that the Portable Radios and the DRX Extender are both set to the same channel and PROFILE ID (See radio user manual for information on how to enter programming mode on radio to verify radio PROFILE ID).
    - Make sure the DRX RX unit is within range of the transmitting radio. If the Activity LED does not flash rapidly when transmitting from the portable radio, the signal is not reaching the extender. You will need to relocate the extender to where it is receiving the signal.
    - Place the DRX unit where you currently have reliable radio to radio coverage from all areas on-site.
    - Verify that the RJ11 Patch cable is not damaged and is connected properly to both TX and RX units.
- Caution: Do NOT replace the RJ11 Cable with a standard phone cable as the unit will not work properly. Use only the cable supplied with the DRX extender. If a replacement or longer cable is needed please contact your radio dealer.***
- ✓ **Still having coverage "Dead Spots"?**
    - Add more DRX extenders set to the same channel and PROFILE ID PIN# and place close to areas where there is limited coverage. Make sure the DRX Extenders are within talk range of each other to maximize coverage area. Multiple units will create a "mesh" type network relaying the signal from one extender to another.

## WARRANTY

Your DLRX extender unit comes with a one year limited warranty against manufacturing defects. Units will be repaired or replaced at manufacturer's sole discretion. Warranty does not cover for abuse and normal wear. Maximum liability is limited to the purchase price of the product. Customer is responsible for all shipping cost to manufacturer.

For more information and to order additional accessories visit us at [www.canewireless.com](http://www.canewireless.com)

Motorola DLR™ series radio is a product of Motorola Solutions Inc. DRX Range Extender kit is a product of Cane Wireless Inc.