

## National Guard

### Procedure for adding Secondary Antenna (part # ELK-WA007) to ELK-C1M1LTE Communicators

Installation of this secondary antenna has been found to help resolve C1M1LTE cell connectivity issues that are occasionally found in challenging physical locations. The primary C1M1 antenna remains solely responsible for actual cell traffic communications while the secondary antenna acts as a signal stabilizer, helping to avoid signal clash and connection drop outs. It is very important that the C1M1LTE Firmware be updated to the latest approved version concurrently with the addition of a this secondary antenna.

1. Power down the C1M1 and the M1 prior to making any connections.
2. The secondary antenna has a self-adhesive backing and a fixed length braided cable terminated with a IPEX MHF connector. It should be mounted on a clean dry flat surface (never inside any metal enclosure) and spaced not less than 5.5" from the primary antenna connection port. Ideal spacing is between 5.5" and 7.5". NOTE: DO NOT attempt to extend or remote this secondary antenna. Only the primary antenna may be extended. The secondary antenna must always remain close to the radio!
3. If the C1M1 is mounted inside a metal enclosure it will necessary to locate or add an opening sufficiently sized to route the cable IPEX MHF connector into the enclosure so that it may be connected to the C1M1 cellular card.
4. Remove the front cover from the C1M1 unit and locate the secondary antenna connector on the C1M1 cellular card (See Figure 1).
5. Carefully and gently plug the antenna cable connector onto the secondary antenna connector on the board. Ensure that the cellular card does not become unseated from the connector on the C1M1 primary circuit board.
6. Route the cable straight down towards the bottom of the board (See Figure 2).
7. Replace the front cover on the C1M1 Alarm Communicator, ensuring the secondary antenna cable is routed though the opening at the bottom of the housing (See Figure 3).

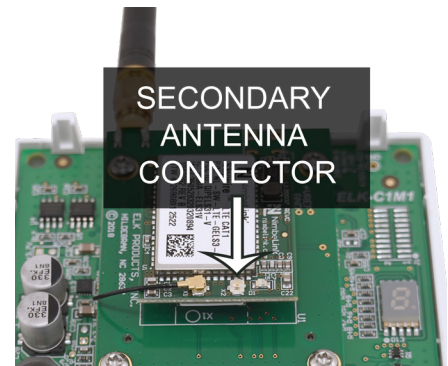


FIGURE 1

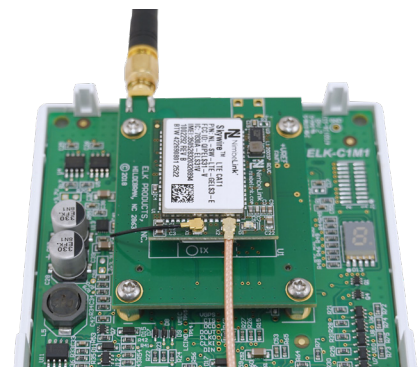
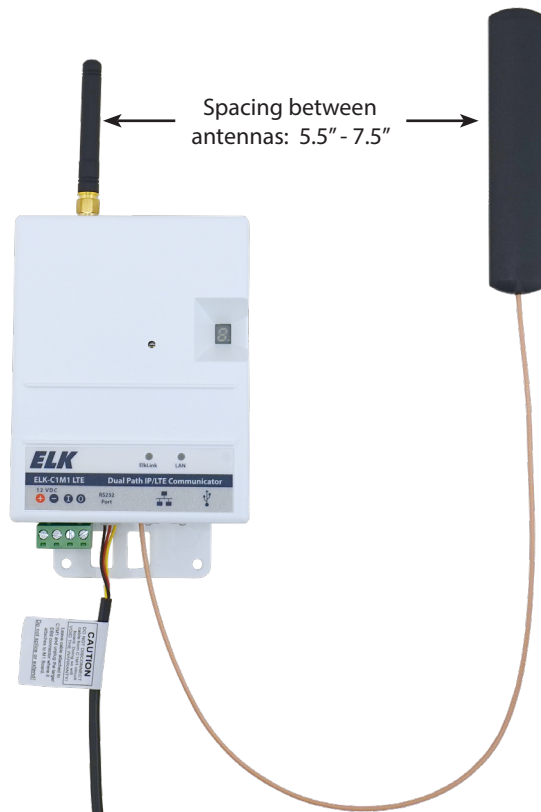


FIGURE 2

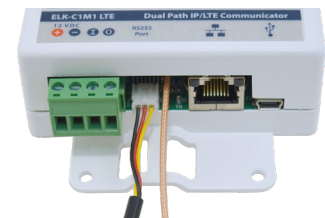


FIGURE 3

8. **NOTE: To avoid damage, care should be taken to limit excessive removal and reconnection of the secondary antenna.**
9. Restore power to the M1 and C1M1 only after verifying that all connections including the screw-on dipole antenna are secure. Observe the C1M1 LEDs and the 7 segment display for activity as it boots up. Wait 5 minutes before performing any test transmissions.