

# WARDS SNIPER UPGRADE AND ERROR CODE DEFFINITIONS

## SNIPER MARK III Upgrades

August 19, 2013

- 1) Enhanced communication protocol with extraneous range elimination.
- 2) Completely new radio partnership routine.
- 3) INFO utility in menu for serial numbers and current radio partnership.
- 4) Additional error codes added to current list:
  - a. No communication to display
  - b. Measurement laser not responding
  - c. Measurement laser having range error
  - d. Laser module voltage too low (stops power to measurement laser)
  - e. Display battery too low
- 5) Bigger distance measurement FONT on display screen.
- 6) Boot load utility for firmware upgrades, THIS IS FOR IN THE FIELD FIXES IF NEEDED.

## Upgrade Procedure (IN SHOP)

- 1) Completely disassemble the laser module.
- 2) Connect the base MK 3 to a laptop and determine the firmware version.
- 3) If the firmware is 1.14-48, then it is good to go.
- 4) Install front face onto MK 3.
- 5) Install the new laser PCB on the MK 3.
- 6) Place the new radio on the board and secure in place.
- 7) Install laser pointer again and attach back panel (all rewired).
- 8) Load new laser firmware and set the serial number and write the settings to the radio.
- 9) Install into enclosure and test.
- 10) Open display module and rewire battery and port.
- 11) Replace display PCB with new PCB.
- 12) Load the new display firmware.
- 13) New radio is inserted.
- 14) Display module is put back together.
- 15) Final QA involves cabled operation, pairing and wireless operation for 72 hours.
- 16) Put new serial labels on display and laser module. Also add laser warning sticker to laser module and CE, FCC certifications.