

EQUIPMENT SET-UP

1. Install/plumb expandable tripod over the control point at desired height.
2. Install brass mounting adapter to underside of Zephyr Geodetic antenna dome. Attach right-angle end of yellow coaxial cable to coaxial port on antenna dome. Place antenna dome atop the tripod; use brass retaining screw to hold in place.
3. Attach opposite end of yellow coaxial cable to port on R7 marked "GPS". Attach black Lemo cable to Port 3 on the R7 and to Port 2 on the Trimmark 3.
4. Install second tripod at least 10 feet away from Zephyr Geodetic antenna. Erect radio antenna using other yellow coaxial cable. Connect coaxial end of this cable to "Radio Antenna" port on the Trimmark 3. Connect thick silver power cord to Port 1 of the Trimmark 3; at this time, the alligator clips can be connected to the power source. Check that display on Trimmark 3 reads "Channel 1 --- [400-something] MHz".
5. Install the R8 in desired location. Install small rubber antenna to the "Radio" port of the R8.

CONFIGURING THE R7 AND TRIMMARK 3

1. Power on the R7.
2. Power on the TSC2, and open "Survey Controller" program (if it is not already open). Open existing file or create a new file for your project.
3. From Survey Controller main menu, tap **Configuration / Controller... / Bluetooth**. Select the R7 from the "Connect to GPS Receiver" list. (If the controller asks to configure Bluetooth, tap **Yes**. Tap the empty box next to "Turn on Bluetooth" to place a checkmark. Tap **OK** in the upper right corner of the screen.) Tap **Accept**. Wait for a status indication on the right side of the screen to verify communication with the R7. (You must be within a 30-foot range in order to communicate.)
4. Tap **Survey / R7+R8 RTK / Start Base Receiver**. A message will then instruct you to select base station coordinates, followed by a "Base data started" message; tap **OK**. Check that the Trimmark 3 now has "Tran" blinking on its screen.

CONFIGURING THE R8

1. Power on the R8.
2. From Survey Controller main menu, tap **Configuration / Controller... / Bluetooth**. Select the appropriate R8 unit from the "Connect to GPS Receiver" list. Tap **Accept** in the lower right hand corner of the screen. Wait for a status indication on the right side of the screen to verify communication with the R8. Also, look for status indicators on the R8 that indicates reception of radio signal. (You must be within a 30-foot range in order to communicate.)

BEGINNING / ENDING SURVEY WORK

1. From Survey Controller main menu, tap **Survey / R7+R8 RTK / Start Survey**. After a few seconds, a message will briefly appear informing that "Initialization has been gained".
2. Tap **Survey**, and then choose whatever data collection procedure is required. (You will have to provide a receiver height for the R8 before surveying; the software will prompt you when necessary.)
3. When finished, tap **Survey / End GPS Survey**. Let the software power down the R8.
4. From Survey Controller main menu, tap **Configuration / Controller... / Bluetooth**. Select and accept the R7 from the "Connect to GPS Receiver" list. Wait for a status indication on the right side of the screen to verify communication with the R7. (You must be within a 30-foot range in order to communicate.) Tap **Survey / End GPS Survey**. Let the software power down the R7.
5. Disconnect the alligator clips from the Trimmark 3's power source.