

**This page is a guide for acquiring external control for close range photogrammetry using Trimble survey grade GPS.**

*Hint: You can click on any image to see a larger version.*

## Prepare for Survey

1. Begin metadata process
  1. Choose a method for documenting the project (e.g. notebook, laptop)
  2. Fill in known metadata items (e.g. project name, date of survey, site location, etc.)
  3. Create a sketch map of the area (by hand or available GIS/maps)
2. Choose and prepare equipment
  1. Decide what equipment will best suite the project
  2. Test equipment for proper functioning and charge/replace batteries

## Equipment Setup

1. Base station
  1. Setup and level the fixed height tripod over the point of your choice
  2. Attach the yellow cable to the Zephyr antenna
  3. Place the Zephyr antenna on top using the brass fixture and tighten screw
  4. Attach the yellow cable to the 5700 receiver
  5. Attach the external battery to the 5700 receiver (if using)
  6. Attach the data cable to the TSCe Controller and turn the controller on
  7. Create a new file and begin the survey
  8. Disconnect TSCe Controller



2. Rover
  1. Put two batteries in the 5800
  2. Attach the 5800 to the bipod
  3. Attach TSCe Controller to bipod using controller mount

4. Connect data cable to 5800 and TSCe Controller
5. Turn on the 5800 and controller
6. Create a new project file (to be used all day)

## Collecting Points

1. Have documentation materials ready
  1. As you collect points, follow ADS standards
2. Base station
  1. Once started, the base station will continually collect positions until stopped
  2. When you're ready to stop it, connect the TSCe controller to the receiver and end the survey
3. Rover
  1. When you arrive at a point you want to record, set the bipod up and level it over the point
  2. Using the controller, create a new point and name it
  3. Start collecting positions for the point and let it continue for the appropriate amount of time
  4. Stop collection when time is reached and move to next position

## Data Processing

1. Have documentation materials ready
  1. As you process the data, follow ADS standards
2. Transfer data
  1. Use Trimble Geomatics Office (TGO) to transfer data files from the TSCe Controller and the 5700 receiver to the computer
3. Calculate baselines
  1. Use TGO to calculate baselines between base station and rover points
  2. Apply adjustment and export points

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