## FAST Survey with the GPS receiver in the MobileMapper CE

MobileMapper CE – FAST Survey – NMEA GPS receiver



With FAST Survey installed on the MobileMapper CE it will connect with the Z-Max or with the internal GPS receiver.

Using FAST Survey with the internal GPS receiver provides the look and feel of survey data collection with a hand held GPS receiver suitable for recon and rough mapping.

Data collection and stake out using a familiar user interface makes it comfortable to use with the MobileMapper CE for data collection where survey grade measurements are not required.

A new job that will make use of the internal GPS receiver is just a few steps away.



With FAST Survey running it is time to Select a New Job.

These instructions will presume that you are familiar with the FAST Survey Reference Manual and that you already know how to create a new job.

These instructions will illustrate just a few shots of the choices made to create the job file for this project.

Create the job on the SD card to save memory on the MobileMapper CE for operation of the FAST Survey software.



SCLARA01 is the job name assigned to this new project.

The FAST Survey keypad makes data entry quick, accurate, and easy.

With the file name typed in the blank field a click on OK will provide an opportunity to choose job settings.



On the Units tab in the Job Settings menu the choice is

US Feet

Make choices for all of the Units settings that are appropriate for the project.

The FAST Survey Reference Manual has detailed information about the available choices in FAST Survey. Find the section in the manual named

File Menu

for details about the choices available.



The Add Predefined button permits the choice of NAD83 state plane coordinates in California Zone 3.

Click on the Close button to go back to the job settings.



The Geoid Separation File that works with the RTK projects also works with the internal GPS receiver to help approximate NAVD88 elevations.

Notice that the GSF file is in a special folder on the SD card that makes it easy to use.

Create a GSF that can be selected for whatever projects require it. If more than one geoid separation file is needed to cover the work area they can all be kept in the GSF folder on the SD card.



Back on the job settings menu a review of the choices made confirms that it is time to set up for the measurements.

Click on OK to proceed.



On the Equip tab click on Instrument



Choose NMEA GPS receiver from the list of Instruments



When the Comm Setup menu appears choose

## COM2

for the port

and

57600

for the Baud Rate.

Click on OK to return to the Equip menu.



Click on

Configure Rover

to choose some settings appropriate for the internal GPS receiver.



The Rod Height is the height of the GPS antenna above the ground.

Put a check mark on Allow Zero RMS Values to avoid an error message about zero RMS values.

Click OK when the settings are correct.



Back on the Equip tab it is time to see if it works.

The Monitor Skyplot option will reveal whether GPS data is making it to FAST Survey.

Will there be success?

Monitor Lat/Lon   Northing: 1953926.9663   Easting: 6142100.9566   Elevation: 75.9067   HRMS: 0.000   VRMS: 0.000
PDOP: 2.50 HDOP: 1.10 TDOP: 0.00
itatus: DGPS ATS: 6
💱 🎯 FAS 🦻 🗐 🕨 11:43 AM 💆

The Monitor screen confirms that DGPS data is available to FAST Survey.

It is time for some measurements.

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