

# Geospatial Modeling & Visualization

A Method Store for Advanced Survey and Modeling Technologies

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## Z+F Laser Scanner: Starting your Scan

This workflow will show you how to start a scan using the Z+F Laser Scanner.

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

### POSITIONING AND POWERING UP THE SCANNER

1. Position the scanner in the center of the target field

*Ensure that the angle of incidence of the laser on the target is larger than 45 degrees*

#### **Recommended distance between the Z+F scanner and targets**

RESOLUTION	RECOMMENDED DISTANCE WITH AN ANGLE OF 90 deg.
Middle	1 m to 15 m
High	1 m to 20 m
Super High	1 m to 25 m
Ultra High	1 m to 30 m

*With smaller a smaller angle of incidence the target distance is reduced*

*Power the scanner on by pressing the power button for 0.3 seconds*

*The power-up process takes approx. 20 seconds in which time it will rotate while the mirror spins*

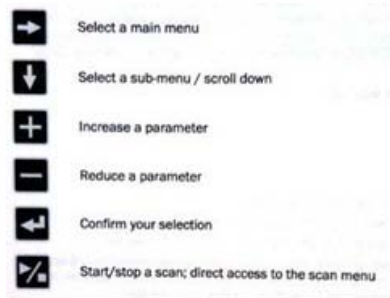
### MENUS AND CONTROLS

*Menus and Controls*

System Menu shown in the display. Main menu order:

- Info
- Status
- Tilt Sensor
- Scanning
- Data Management

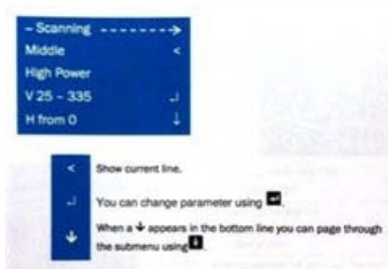
**Control buttons:**



## SCAN MENU SYMBOLS

### Scan Menu Symbols

The top line indicates the menu currently in use



See **User Manual** for full descriptions of all menus

Check the Tilt Sensor Menu

If the inclination in the Y-direction is greater than or less than 2 degrees, an arrow will appear and the inclination should be corrected

## THE SCANNING MENU


### In the Scanning Menu

#### RESOLUTION:

Select the preferred resolution level (**Middle** or **High** is usually preferred)


**Super High, High** and **Middle** resolutions have a **low noise** option that reduces noise by the factor of 1.4, but scanning time is doubled


#### VERTICAL SCAN RANGE:

You can select predefined vertical scan ranges using the + / - buttons or further refine each predefined range by pressing the  button and increasing or decreasing the values by 5 deg. with the + / - buttons. Predefined ranges include:

- V 0-360
- V 25-160 and 200-335
- V25-180
- V 180-260
- V 45-135

#### HORIZONTAL SCAN RANGE:


The horizontal scan range can be set in increments of 5 deg. for both the start and end position using the + / - buttons and pressing the  button to confirm the position

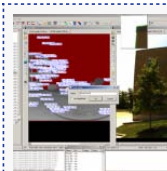
Alternatively the scanner start position can be manually set by rotating the scanner to any position greater than 0.0. Press the  button to confirm the position. Set the horizontal range end position next in the same manner

#### START THE SCAN

##### Start the Scan



Press the  button to start the scanning process. The process can also be stopped using this button and all data collected prior to interruption will be stored.



You are reading the series: [Z+F Laser Scanner Workflow](#)  
[Z+F Laser Scanner Workflow: Setting up the Scanner](#)  
Z+F Laser Scanner: Starting your Scan

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