



Scan Station P16

Set up and Scan

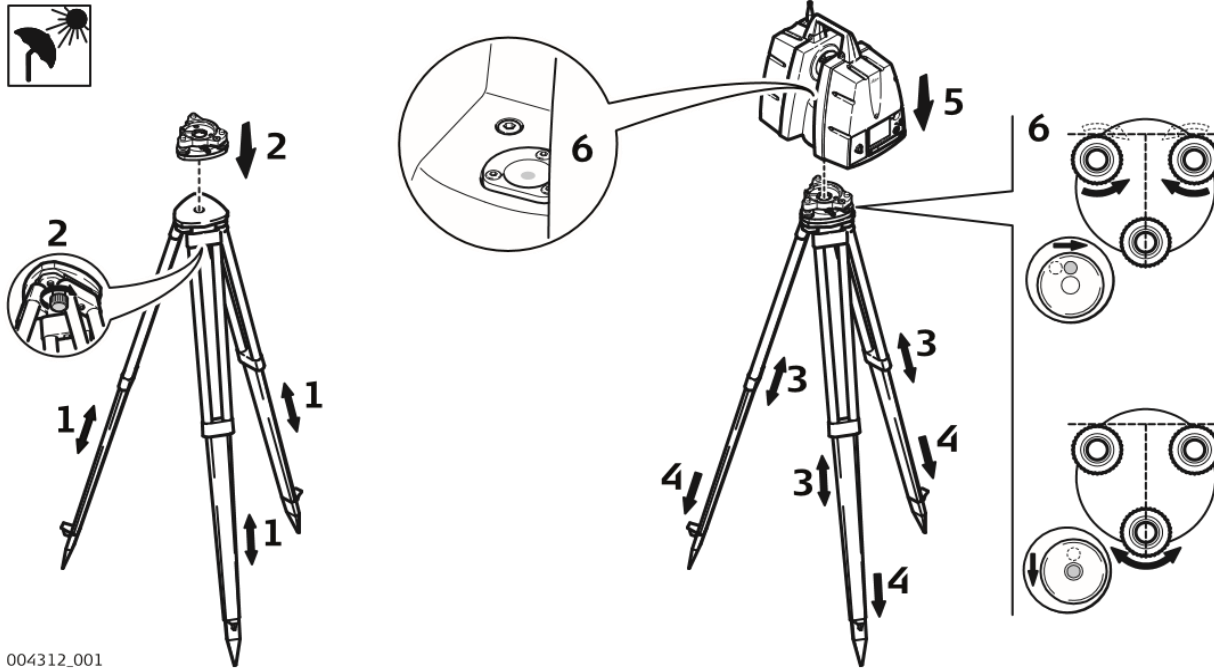
Product by Leica Geosystems

General set up instructions

Simple Set up

1. Tripod Set up:

- First, set tripod to chest level (p1)
- Kick out legs to equal space given your allowable space, the device is top heavy



004312_001

2. Level the Device

- Place the adapter (p2), use it to level the legs.
- Place the bubble on one leg by moving one leg (not the one your trying to move the bubble toward) up or down (P3&4).
- Move the bubble to the center circle using the leg the bubble is currently leveled with.
- Place the scanning unit on the adapter and clamp it down (p5).
- Remember to remove the top handle.

*The top handle is brittle and not to be used to lift the device's full weight.

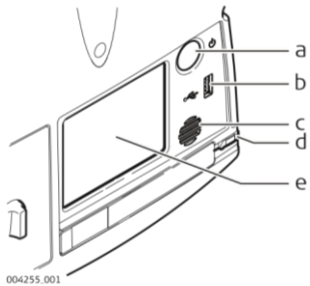


Shield the instrument from direct sunlight and avoid uneven temperatures around the instrument.

Start Up

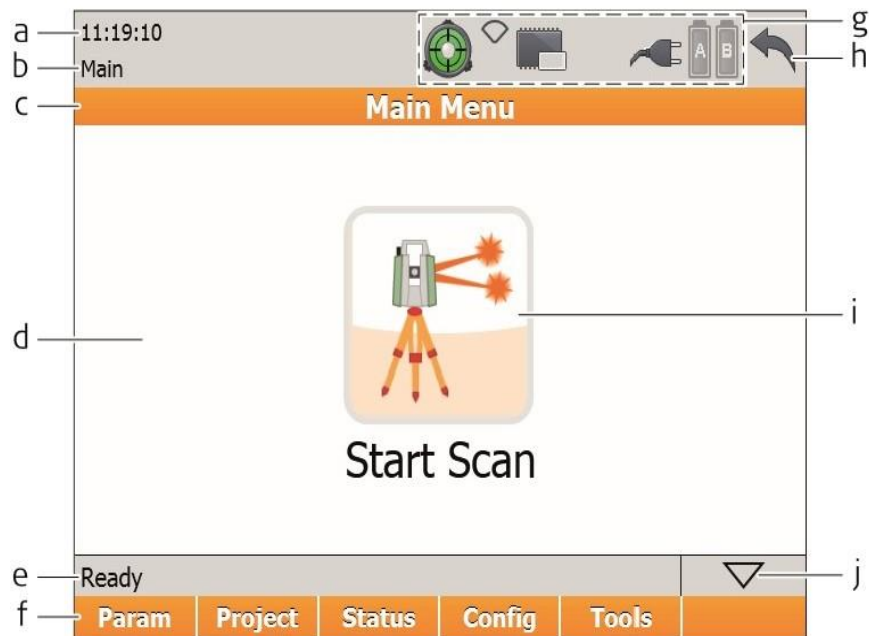
The standard screen and buttons are shown here.

Remember to place the 2 batteries in their respective housing units



- a) ON/OFF button
- b) USB socket
- c) Loudspeaker
- d) Stylus
- e) Touch screen user interface

After it starts up, you will see this main menu screen



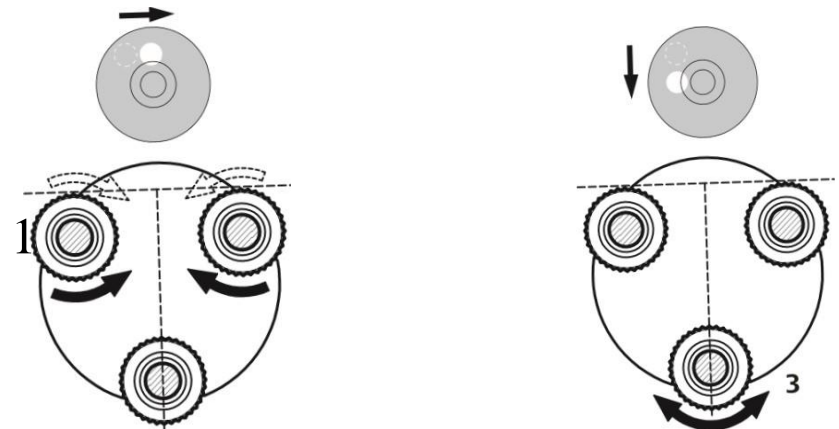
- A. Time
- B. Caption
- C. Title Bar
- D. Screen area
- E. Message bar
- F. Soft keys: The main menu options for settings
- G. Status Bar: Includes Battery status and Level Status. Leveling should be done first
- H. Escape button
- I. Menu Icon: To start your scan once everything is set up.
- J. Shift Button

Leveling, Again



The inner computer has a Compensator, you want to get this into the correct “range” for the compensator, or your scans will not be accurate. Sometimes shifts on the ground (earthquake, disturbance to the ground the legs are on) can bring this out of range mid-scan and you will have to rescan or pick a better surface area.

Use the Adapter under the scanner to bring the bubble as close to center as possible. You want the exterior Ring to be black like this photo. All other settings should not be changed, refer to manual if you do.



Configuring the Scans 1

On the Main Screen, click on Parameters (Param)

12:25:58
Param

Scan Parameters

Field of View Resolution Image Ctrl Filters Detail Scan

Field of View: Target All ▼

90.000 +90°

Hz / V Area [°] 199.304 199.304

-55.000 -55°

Scan Mode: Scan only ▼

Est Time: 20 s

Ready

Store Camera Page

The image to the left is the first Screen. Field of View. Leave everything as is except for the Scan Mode

You can choose:

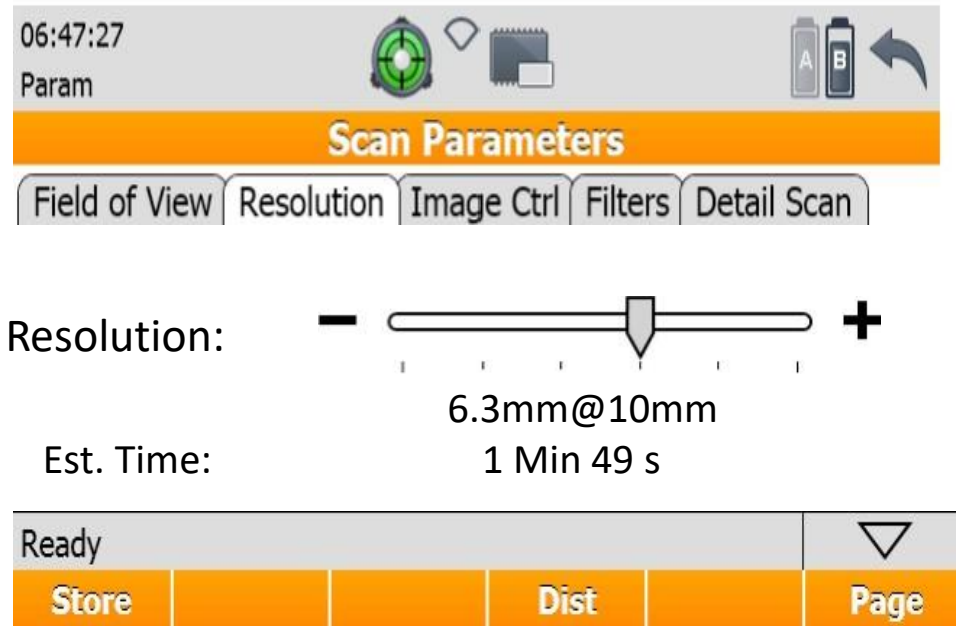
Scan Only for just measurements

Images Only for only photos

Scans and Images for both. We will always do both.

Est. Time is the estimated time (give or take a minute) for the type of scans chosen to be completed. This is the overall estimation.

Configuring the Scans 2



Resolution of Scans:







This determines how much space between laser points at certain distances. The closer the laser points, the more measurements taken and more detailed image you have.

Essentially, this is pixilation for the image.

The time estimate is only for the laser scans.

Configuration 3

06:52:06
Param

Scan Parameters

Field of View Resolution Image Ctrl **Filters** Detail Scan

Exposure: Automatic ▼

Time: 0 ms

White Balance: Sunny ▼

Image Resolution: 960 x 960 ▼

HDR Imaging: No ▼

Est Time: 5 min 53 s

Ready

Store WhitBal ChkExp Page

Photo Filter Setting

This is only for photos.

The settings should be automatic, but the only setting to change is White Balance depending on your scene.

Sunny: for sunny outdoor.

Cloudy: Overcast weather

Cold Light: Indoor with light source

Warm Light: Indoor with warm light source

Configuration 4

07:01:07
Param

Scan Parameters

Field of View Resolution Image Ctrl Filters Detail Scan

Used Camera:

Exposure: Automatic

Time: 645 ms

Ready

Store	WhitBal	ChkExp	Page
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12:02:22
Param

Scan Parameters

Field of View Resolution Image Ctrl Filters Detail Scan

Min Range: 5.000 m

Max Range: 0.000 m

Ready

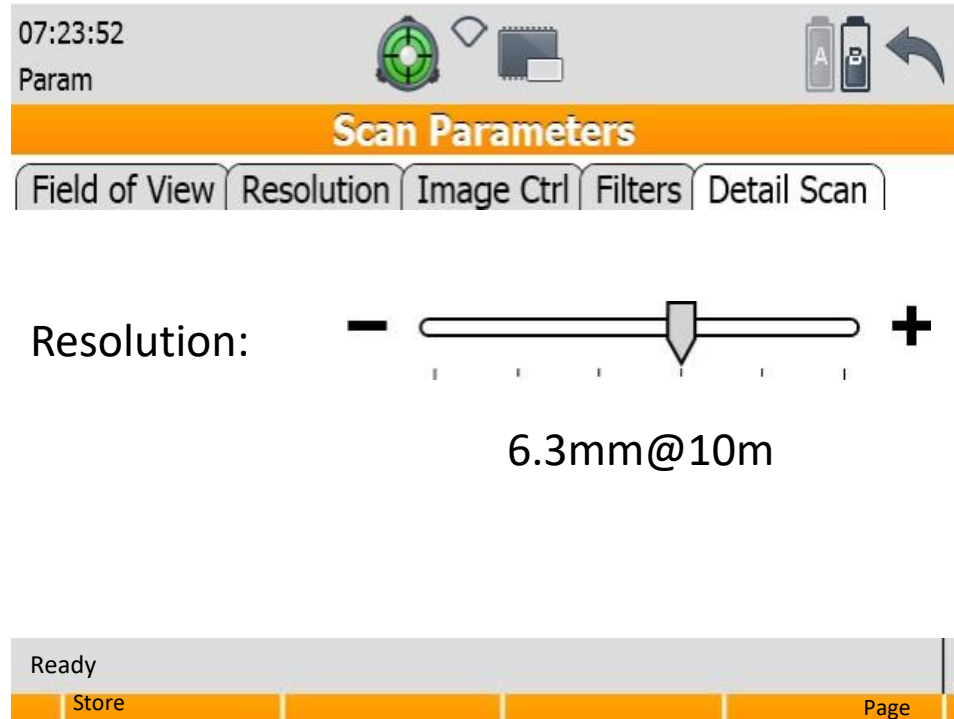
Store	MinDist	MaxDist	Page
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Image Ctrl and Filters

These settings are automatic and do not require changes.

Leave as is.

Configuration 5



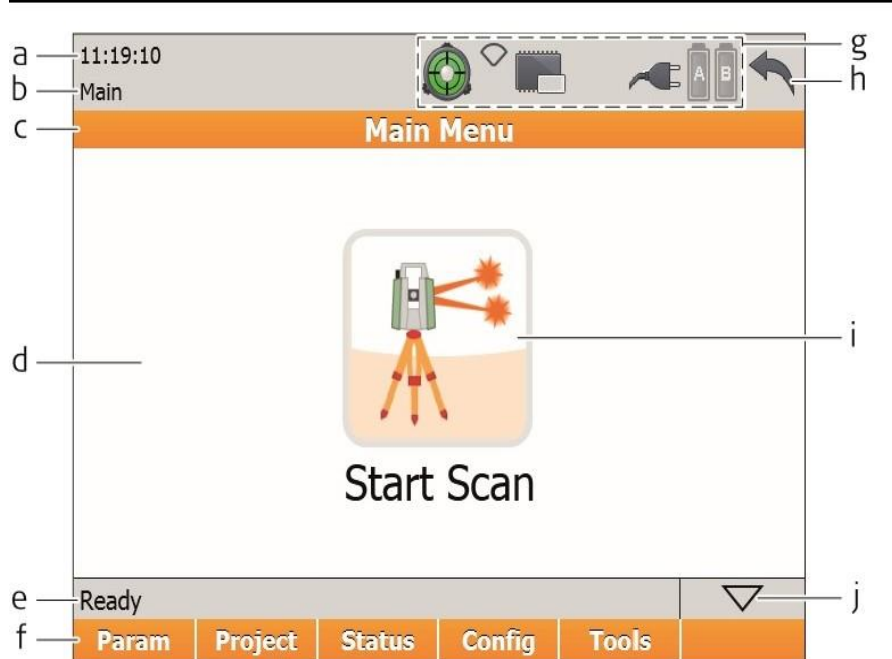
Detailed Scan

This setting is for the close detailed scans after the initial scan is complete.

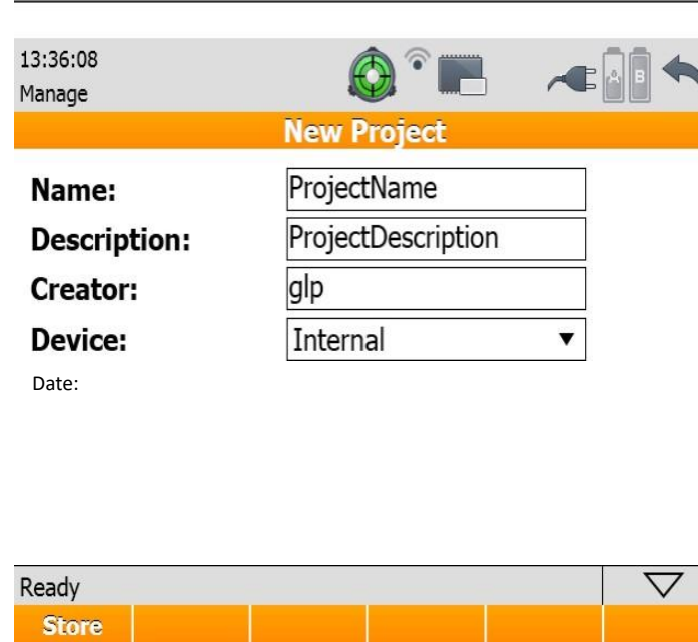
This is preset and only slide it to a more detailed setting depending on the need of the scan and what is being accomplished.

The more detailed the setting (to the right + sign) the better.

Name the Project



Go main screen, select Project.



Name the Project the Case Number

Description is the address or crime type

Creator is the scan operator with badge number

Device: Where the scans are saved, keep Internal.

Once stored, project scans will be in this folder name

on device.

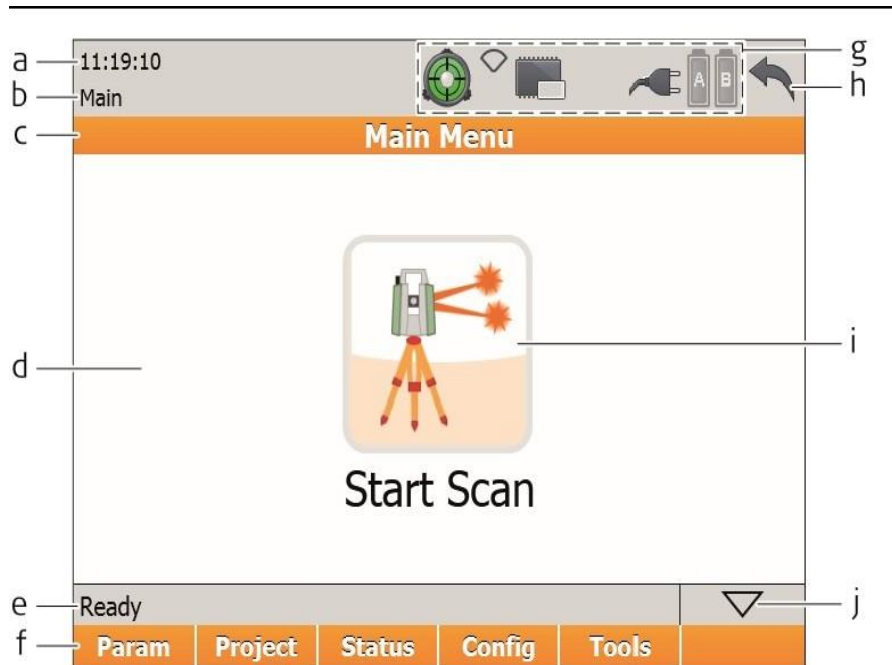
Scan!!!

From main menu, press Start Scan

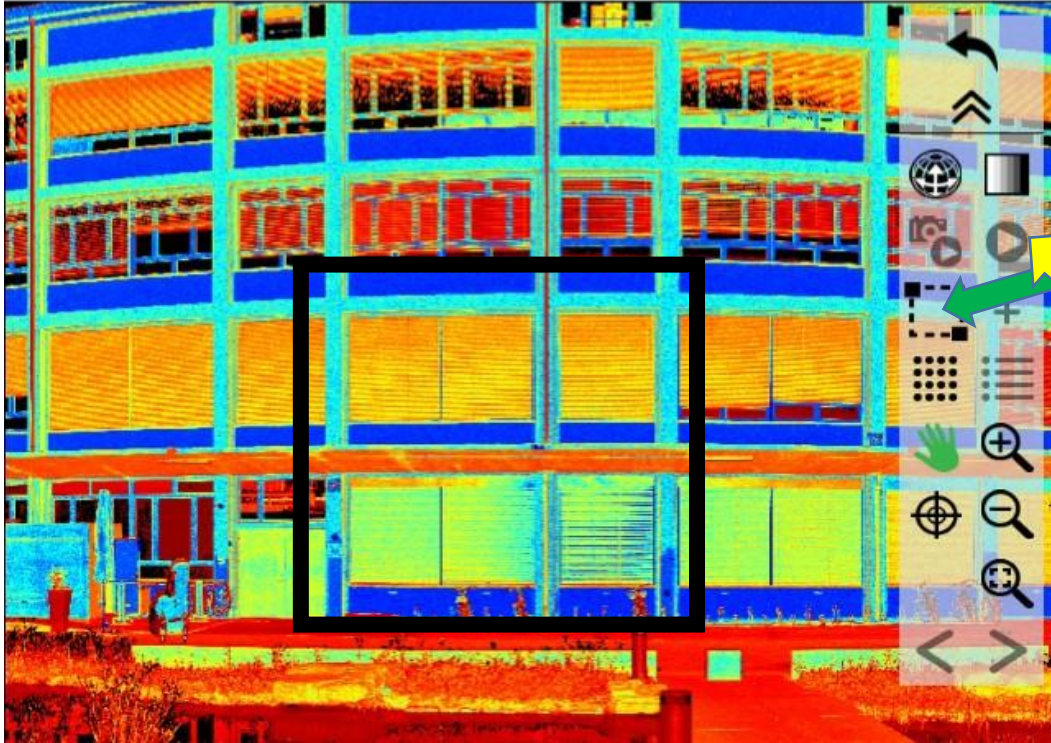
The machine should do 2 total revolutions. First laser, second scans

When the scan is done, you will see the screen below. The monitor will also reset to the same position it was when you started the scan.

The more scans, the more detail and less blank spaces



Detailed Scan



1. Click on the dotted square icon

2. Use the stylus to Encompass the area you want to detail scan

3. Press the play button

4. Scanner should automatically go to the location and scan. Hit return button when done with scans.