

NX15[®] Deep Target System

NX25[®] Small Area System



System Support
Software Updates
Training Videos
User Guides



Featuring

NX CONTROL[™]

App Info and Guide

Quick Start Guide
MN73-383 Rev A

WE'VE GOT YOUR BACK

Our promise to you is to provide comprehensive training, unrivaled customer support and world class expertise. That's why your NX system comes with our industry-leading two-year warranty, complimentary training, and technical support access. For more information, visit us at www.geophysical.com.

WE'RE COMMITTED TO YOUR SUCCESS

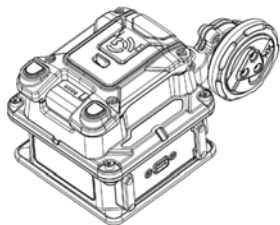
Our team of dedicated technical trainers is ready to work with users of all experience levels. GSSI Academy classes are offered on a revolving schedule throughout the year. Check out the GSSI Academy offerings at www.geophysical.com/gssi-academy.

WE WANT TO HEAR FROM YOU

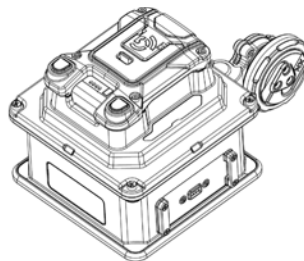
Our sole focus is to create easy-to-use scanning systems that tackle your jobsite challenges in new and innovative ways.

Please let us know your thoughts on any of our products by emailing us at [***productteam@geophysical.com***](mailto:productteam@geophysical.com).

We hope to hear from you soon!



NX25[®] Small Area System

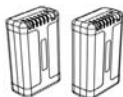


NX15[®] Deep Target System

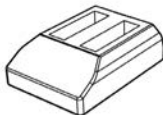
Accessories included with Small Area and Deep Target Systems



Rugged Backpack



Li-Ion Batteries



Battery Charger



Wrist Strap



RAM Adapter



NX Control App



Quick Start Guide



NX Control

NX25 and NX15 requires the **NX Control** app. Download and install NX Control from the Google Play Store or the Apple App Store using the QR codes below. Alternatively, visit the app store and search for ***NX Control***.



NX Control App for iOS

Scan to download from the Apple App Store



NX Control App for Android

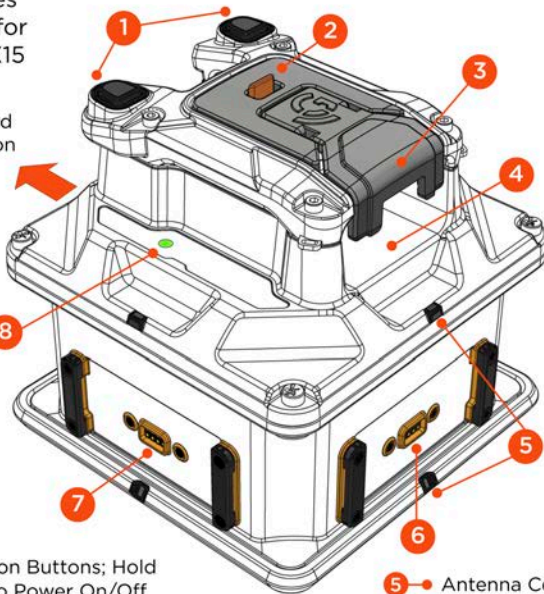
Scan to download from the Google Play Store

NX25 and NX15 require a **hardware license** to use the NX Control app. If you see **License required** on the NX Control Main Dashboard you'll need to download the GSSI-supplied hardware license to your mobile device. If you don't see this, you are all set to start scanning!



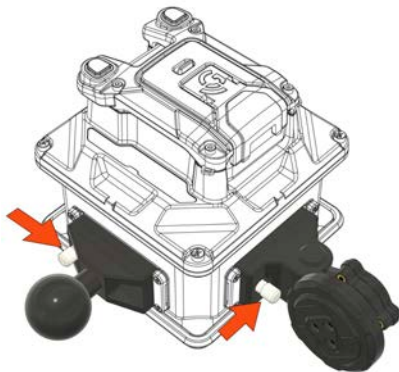
Note: Features are identical for NX25 and NX15

Forward Direction



- 1 Function Buttons; Hold Both to Power On/Off
- 2 Battery Lock
- 3 Battery Latch
- 4 Battery Compartment

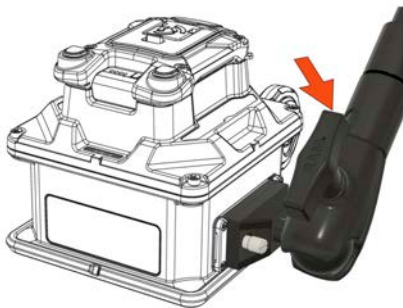
- 5 Antenna Center (All Sides)
- 6 Rear Accessory Port
- 7 Left Accessory Port
- 8 Status LED



The NX25/NX15 **RAM Adapter** and **Survey Wheel** attachment locations (left, rear) are interchangeable.

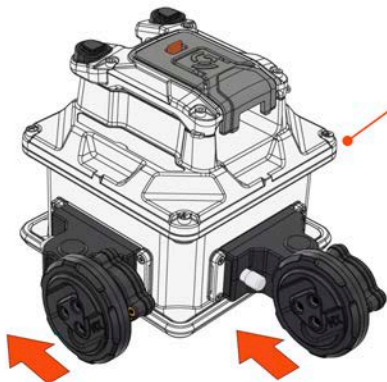
NOTE: Attach accessories only in orientations shown, with the locking pin on the left side.

Slide the locking pin inward and insert the right side, with the locking pin to the left. Next, insert the locking pin side and release the locking pin. To remove, reverse the process.



Attaching the **Telescoping Pole Accessory** (sold separately):

Loosen the knob, then slide the jaws over the RAM adapter ball and tighten the knob.



Normal Polarization

- Left: Encoder Flipped
- Back: Encoder Straight

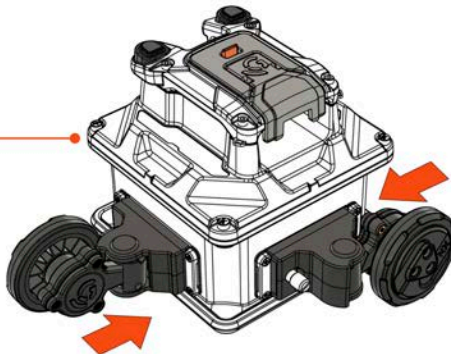
Normal Polarization is best for typical scanning scenarios and target locating.

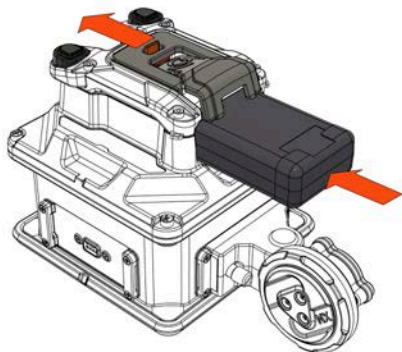
Orange Arrows show direction of antenna travel for each encoder position.

Cross-Polarization

- Left: Encoder Straight
- Back: Encoder Flipped

Cross-polarization provides a different view of scan data and is best for identifying important targets below reinforcement.





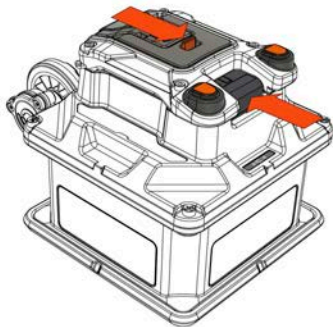
Battery insertion:

Slide battery latch lock toward the front of the antenna. Use battery to push up on the battery latch and insert the battery.

Note: Battery can only be inserted with battery contacts toward NX25/ NX15 and facing downward.

Press both antenna buttons to
Power On.

Press and hold both antenna buttons to
Power Off.



One-handed battery ejection:

Use thumb to press on battery, and index finger to slide the battery latch lock toward the front of the antenna.

IMPORTANT: Electronic devices may drain a battery when powered off. GSSI recommends removing the battery when NX25 and NX15 are not in use.

Just a few **quick steps** and you'll be scanning!

1. Insert a fully charged **2-cell battery** into NX25 or NX15.
2. Power on the antenna and wait for the LED color to transition to green.
3. Open Wi-Fi settings on your mobile device. Tap on the wireless network name that matches the antenna's model number and serial number (e.g. NX25_00101).
 - If prompted to enter a password, type in **geophysical**
 - Android users may see a "network has no internet access" popup; tap "Yes" and "Don't ask again for this network".
4. Launch the **NX Control** app
 - On first launch, NX Control will prompt you to grant certain **permissions** such as allowing NX Control to access Bluetooth and Location Services. For maximum app performance please accept **all requested permissions**.



NX Control will start at the **Main Dashboard**. From here, you can:

- View the antenna type, serial number, and firmware version
- Start a Quick Scan session (no file saving)
- Create a new project, view all saved projects, or resume a recent project
- View and configure system settings

The screenshot shows the NX Control Main Dashboard. At the top left is the 'NX CONTROL' logo. To its right is a status bar with a battery icon and a settings gear icon (callout 5). Below the logo is a section for 'NX15' showing system details: System Type (NX15), Serial Number (00152), and Software Version (3.042). Below this is an image of the NX15 device. To the right is a 'Recent Projects' list with three entries: 'Project 2026-08-11 14:23' (18h ago), '40 Simon Street Loading Dock' (No captures yet), and 'Garage' (6d ago). Each entry has a '+' button (callout 4). Above the list is a '+' button (callout 1) and a list icon (callout 2). At the bottom left is a large '+' button (callout 6). Callout 3 points to the first project entry.

1 Create new **file saving** Project

2 View list of all saved Projects

3 Open recently used Project

4 Resume recently used Project

5 Open System Settings

6 **Quick Scan:** Start Scanning with no file saving. Perfect for mark-and-go jobs.



Open **System Settings** from the Main Dashboard. Start by selecting your preferred measurement units (m, cm, ft, in) and language. Your choices are saved and will persist between sessions. Please refer to the full NX Control App User Guide for additional Settings information.

Tap **Radar Settings** to customize the data collection screen. Here you can select how scans are acquired, choose how to display horizontal and vertical scales, and experiment with more advanced display options.



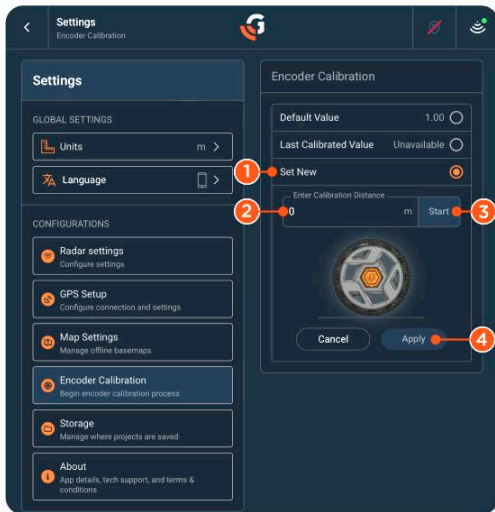
We recommend starting with **these settings** while you learn the system.

1. **Trigger Mode: Survey Wheel.** Uses the antenna's survey wheel to collect Scan Data while moving.
2. **2D Horiz. Scale: Distance.** The data collection screen displays distance traveled.
3. **2D Vertical Scale: Depth.** The data collection screen displays depth below surface.
4. **Auto Gain Mode: Static.** The gain curve does not update dynamically.
5. **Refine Targets: Off.**
5. **Show Device Edges: Off.**

To perform an Encoder Calibration, find a flat surface (such as a parking lot) and extend a tape measure to at least 2m/6ft. Use a longer calibration distance for longer scans. Encoder Calibration requires precision; please do not pace off or estimate the distance.

Note: The NX25 and NX15 survey wheel accessory was calibrated at GSSI HQ.

Encoder Calibration is not needed for most scanning tasks.



1. Select **Set New**
2. Enter **Calibration Distance**.
 - Align the **center mark** of the antenna with the 0.0 mark.
3. Tap **Start**.
 - Move forward until the **center mark** of the antenna reaches the stopping point.
4. Tap **Apply**. Last Calibrated Value will be selected and will display the new calibration ratio.

The **About** panel is the NX Control app details and technical support information hub.

We are happy to provide technical support and to answer any and all questions. Feel free to visit our website, call our Technical Support or Customer Service teams, or visit the Compass NX Technical Support website.

The image shows a screenshot of the 'About' panel in the NX Control app, divided into two main sections: 'Software Information' and 'Tech Support'.

Software Information:

- App Status:** UP TO DATE (indicated by a green badge)
- Version:** 1.0.0
- Firmware Update:** Opens the device's web interface in your browser to update firmware. (Indicated by a red circle with the number 1 and a blue 'Open' button)
- Release Notes:** (indicated by a downward arrow)
- Terms & Conditions:** (indicated by a downward arrow)
- Licenses:** (indicated by a downward arrow)

Tech Support:

- GSSI Website:** geophysical.com
- Tech Support Phone:** 603-864-0848 (Mon-Fri, 8:30am-5pm EST)
- General Line:** 603-893-1109 (Option 2 for Tech Support)
- Tech Support Website:** support.geophysical.com
- Download System Logs from Antenna:** Opens the device's web interface in your browser. (Indicated by a red circle with the number 2 and a blue 'Open' button)

Callouts:

- 1 • Update Antenna Firmware:** Points to the 'Firmware Update' section in the Software Information panel.
- 2 • Download Antenna's System Logs:** Points to the 'Download System Logs from Antenna' section in the Tech Support panel.



Open the Projects Portal from the Main Dashboard. Here you can open, share or delete a project, as well as create a new Project. Managing and interacting with projects does not require a connection to NX25 or NX15; all files are stored on your mobile device.

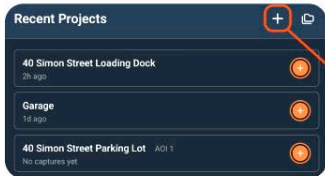
The screenshot shows the 'Projects' portal interface. At the top, there is a back arrow (1), the title 'Projects', a logo, and two icons (a target and a signal). Below the title bar is a '+ New project' button (2). The main area displays four project cards: '40 Simon Street' (3), 'Parking Garage', 'Power Plant', and 'Warehouse'. A hand icon (4) is shown long-pressing the '40 Simon Street' card. To the right of the cards are three action icons: a trash can (5), a download arrow (6), and a share icon (7). Below the interface is a list of instructions corresponding to the numbered callouts.

- 1 Return to Main Dashboard
- 2 Create a new project with file saving
- 3 Tap a project card to open the project
- 4 Long-press for selection boxes
- 5 After long-press: Delete selected project(s)
- 6 After long-press: Download selected project(s) to mobile device
- 7 After long-press: share selected project(s) to apps or external storage

Create a new project to save scan data for later use, such as report creation, post-processing in Geolix, or archiving. Scan Data and Results are stored on your mobile device. Please monitor device storage and remove old projects if needed, but be aware that deleted projects and files cannot be recovered.

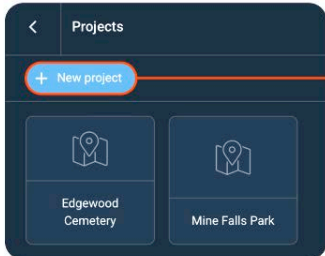
Create a new project from either the **Main Dashboard** or **Projects Portal**.

From the Main Dashboard



Use the default **Project name** or enter a custom name and, if applicable, **client name** and **job code**. Tap Confirm to save the Project and open the **Project Profile**.

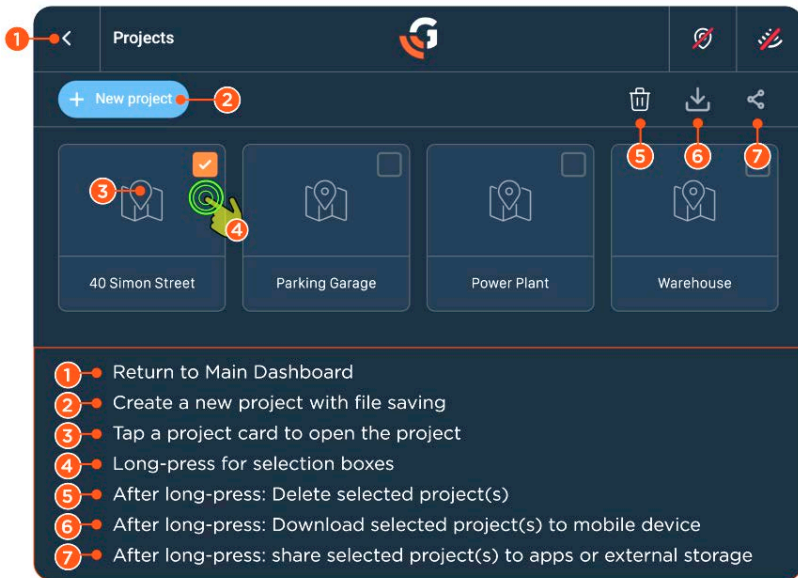
From the Projects Portal



The 'Create New Project' dialog form is shown. It has a title bar with a checkmark icon and the text 'Create New Project'. The form contains three input fields: 'Project Name' (with the value '40 Simon Street'), 'Client Name' (with the value 'GSSI'), and 'Job Code' (with the value 'GSSI-01'). At the bottom are two buttons: 'Cancel' and 'Confirm'.

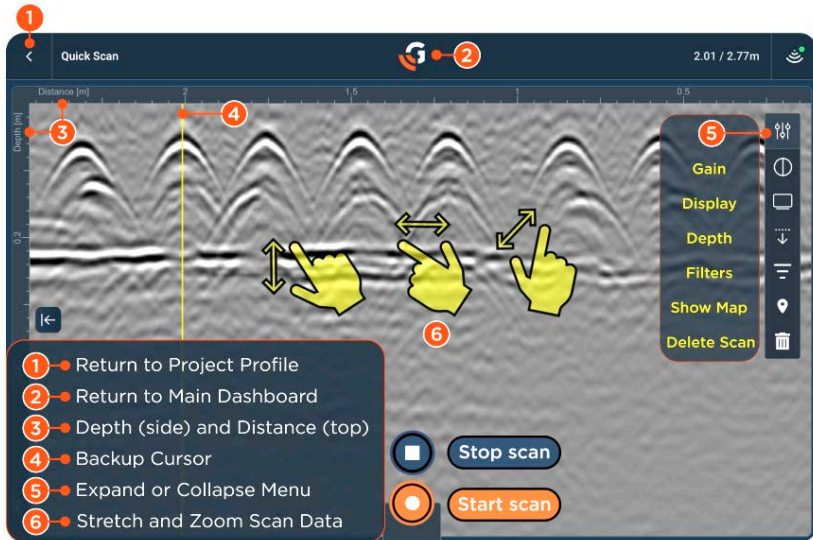


Open the Projects Portal from the Main Dashboard. Here you can open, share or delete a project, as well as create a new Project. Managing and interacting with projects does not require a connection to NX25 or NX15; all files are stored on your mobile device.



The collection screen displays live scans as you collect them, as well as files opened for playback. From here, you can start and stop scans, use gestural controls to zoom or compress scan data, and interact with menus to customize the display of Scan Data.

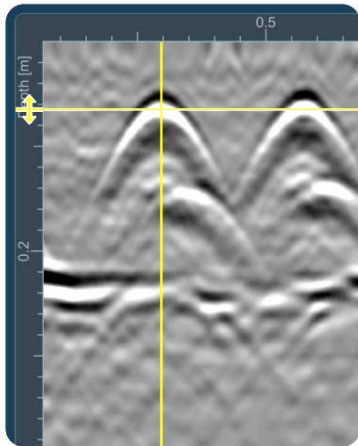
Familiarize yourself with this screen -- you'll spend most of your time here!



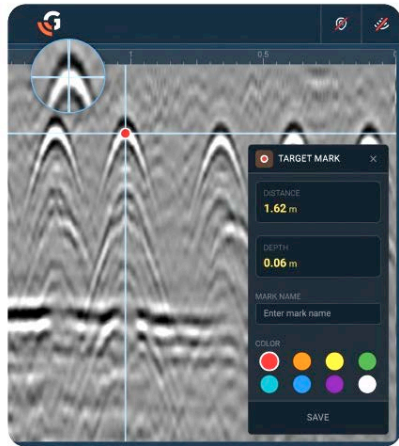
NX Control: Cursors and Target Marks

The **backup cursor** appears when the survey wheel moves in reverse; it is referenced to the center of NX25 and NX15. The Horizontal Cursor acts as a depth reference line. Long-press or double in the scan window to display **crosshairs**, a **magnifying lens** offset from your touch location, and the **Target Mark** controls.

Use the **backup cursor** to accurately relocate a target you already passed. Long-press on the vertical scale to display the **Horizontal Cursor**. Move it using the arrows, and long press on the arrows to hide it.



Place **Target Marks** in the center of a target's first largest color band. The displayed depth is based on current dielectric*. Enter a name, select a color, then tap Save. Tap the Target Mark again to reopen the Target Mark Controls.



*Use the **Depth** menu to further refine depth calibration.

NX Control provides Automatic and Manual Gain options. Gain affects the brightness and contrast of your scan data and is the most important setting to adjust. If Gain is too low, the targets won't "pop"; too high, and targets are lost in the background. You can adjust Gain for live data and in playback.

Auto Gain: Automatically sets the Gain adjustment. **Best for new users.**

Manual Gain: Offers more customization to fine tune Gain adjustments.

The screenshot displays the NX Control software interface. At the top, the location is set to 'Parking Lot 40' and the scan is 'Scan 6'. The distance scale at the top right indicates '2.63m'. The main display area shows a grayscale sonar scan with several targets. On the left, there are two depth graphs: a vertical one on the far left and a larger horizontal one in the center. A red box highlights a section of the horizontal graph, which is then magnified in a larger inset window. This inset shows a yellow waveform with several peaks and valleys, and a green line with arrows indicating adjustments. A 'GAIN' menu is open on the right side of the screen, showing 'AUTO' and 'MANUAL' options. Below these, there is a 'Global gain' slider. Numbered callouts (1-6) point to specific UI elements: 1 points to the 'GAIN' menu icon, 2 points to the 'MANUAL' button, 3 points to the 'AUTO' button, 4 points to the 'Global gain' slider, 5 points to the 'X' button to close the sidebar, and 6 points to the green line in the magnified graph.

1. Open the Gain Menu
2. Manual Gain; opens Gain Sidebar
3. Enable Auto Gain
4. Adjust overall display gain
5. Close the Manual Gain sidebar
6. Adjust individual gain points

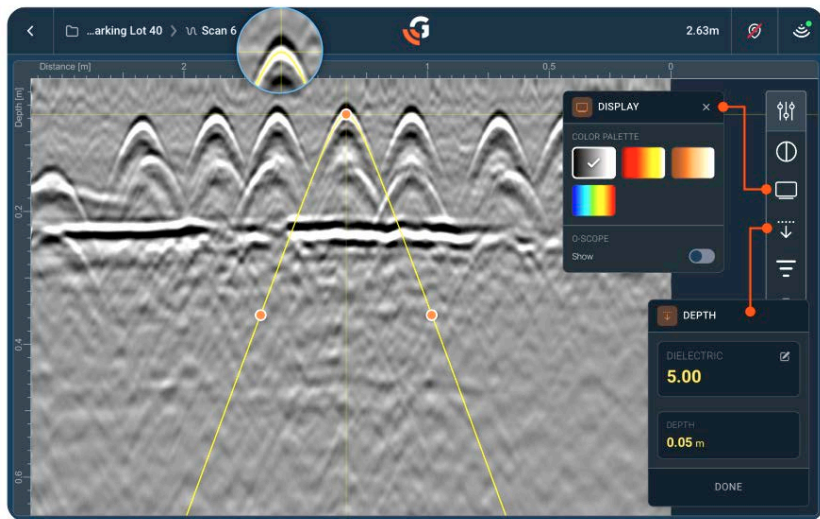
NX Control: Display and Depth Menus



Use the **Display menu** to customize the scan data's color scale and to toggle the O-Scope window.

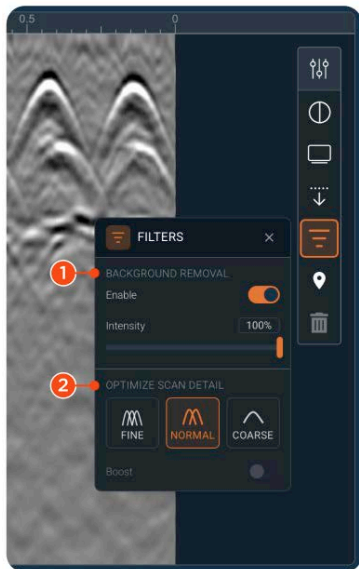


The **Depth menu** displays a Target Matching curve for depth scale calibration. Move the curve over the top of a target, use the magnifier to position the curve, then use the grab points to adjust the angle and match the target's tails.





Use the **Filters menu** to perform on-the-fly data adjustments. These include toggling Scan Detail options to reduce clutter or hone in on the specifics, as well as horizontal noise band suppression using Background Removal.



1 Background Removal removes flat, horizontal bands that are generated by external noise (such as radio station broadcasts). Only use this filter when noise bands become a problem.

- **Intensity Slider:** Use this slider when noise bands are present but you need to find flat-lying features too.

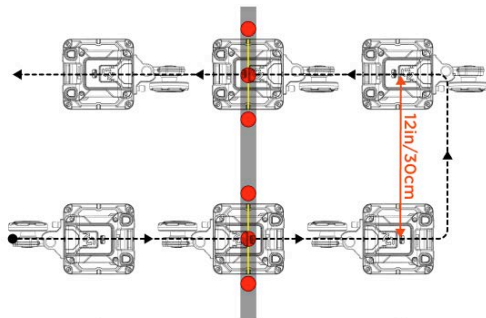
2 Scan Detail provides three easy choices for fine tuning your scan data. Quickly toggle through the options to see what you are missing!

- **Normal:** See the full range of depth and detail. Start here for most jobs.
- **Fine:** Focus on the fine details to see small and closely-spaced targets. **Boost** it to reveal even more fine detail.
- **Coarse:** Use this option to reduce clutter and focus on the big targets. **Boost** it to remove even more clutter.

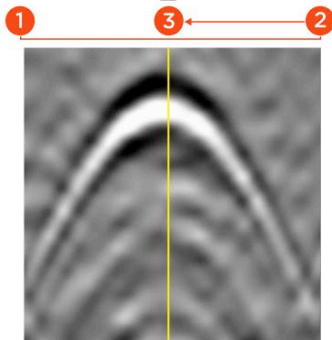
A Simple Method For Marking Targets

A simple looping search pattern is highly effective for marking out concrete targets. When a target appears on the screen, the antenna reverse and pinpoint the target with the backup cursor.

Place marks on the concrete, then continue forward and loop back 12in/30cm away from the first marker. If the target is not there, try looping around to the other side of your marks.



- 1 As you approach a target you'll start to see the target's tail.
- 2 Keep moving forward and cross the target's center; keep going until you can see both target tails.
- 3 Move in reverse until the backup cursor is in the center of the target. Mark both sides of the antenna, then mark the antenna center by moving the system backwards and placing a third mark between the first two.



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Regulatory Information: <https://www.geophysical.com/regulatoryinformation>

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