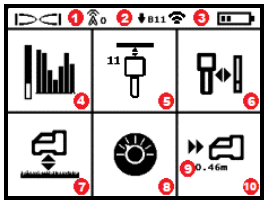
Power On the Locator

1. Install the battery pack and hold the trigger for one second.
2. Click to acknowledge the warning.
3. Click twice to open the Main menu.

1. IR port
2. Trigger

Main Menu



1. Telemetry channel
2. Transmitter (Tx) band down
3. Tx Power Mode (left)
   Locator battery strength (right)
4. Frequency Optimization (FO)
5. Tx Quick Scan Pair (QSP)
6. Calibration
7. HAG and TrakStand
8. Settings
9. Target depth (displays when set)
10. Target Steering

To open the Main menu from the Locate Mode screen, click the trigger. Click to move through the menu and screens. Hold the trigger briefly and release to make a selection. Power Off is on the next screen. After 6 seconds idle, the screen returns to Locate Mode.

Steps Required Before Drilling

1. Optimize and Measure Active Interference

The FO scans 60+ frequencies and selects the quietest frequencies to optimize the signal for band 11.

There are two methods to optimize frequency bands: *Quick Scan Pair* and *Scan, Pick, and Pair*. To decide which method to use, visually inspect entire site for sources of interference, such as traffic loops and other utilities. *Pay attention to the area around the deepest part of the bore for sources of interference.*

Basic Method: Quick Scan Pair (QSP)

At jobsites with minimum active interference, optimize band 11. The locator does not display noise during QSP optimization.

a. With the Tx off, go to the spot on the bore path with highest suspected interference or the deepest part of the bore.

b. Select **Quick Scan Pair** from the Main menu.

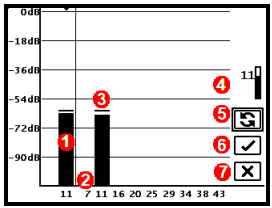
The screen displays the band and preset power modes and is ready to pair. To learn more about interference and changing the preset power modes, see the **DCI DigiGuide App**.

Advanced Method: Scan, Pick, and Pair

At jobsites with challenging interference, use Frequency Optimization (FO) to show the active interference (noise) as you walk the bore path. The FO will show the previously saved and current noise level for band 11.

a. With the Tx off, select **Tx/FO** from the Main menu, select **FO**, and then select **Scan**.

b. Walk and scan the drill path to find areas with the highest noise levels.



FO Results

1. Currently paired Down band
2. Band numbers
3. Maximum noise reading line
4. Down band (*Quick Select option)
5. Rescan
6. Pair
7. Exit/Cancel

c. It is important to return to the point on the bore path with the highest noise. Rescan to optimize band 11.

d. You can do one of the following:

- To pair the newly optimized band, select **Pair**.
- To cancel and return to the Locating Mode screen without optimizing, select **Cancel**.

The lower frequencies in band 11 will be less affected by rebar and passive interference. To learn more, search the **DCI DigiGuide App** for "interference."

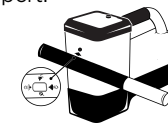
2. Pair the Locator with the Transmitter (Tx)

Tx's have two power levels: *Standard* and *Low*. Standard power operates deeper. Low power has faster data speed and longer battery life.

a. Install transmitter (Tx) batteries and endcap.

b. To change the power level, select **Tx Power Mode**. To learn more, search the **DCI DigiGuide App** for "power modes."

c. Position the Tx's infrared (IR) port near the locator's IR port.

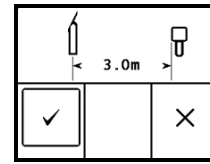


Falcon locators with programmable power mode override any other selection method when used with a V2 Tx.

d. Select **Tx Pairing** and hold the Tx in place until the check mark appears (5 to 10 seconds) and the locator beeps.
e. After a successful pairing, the locator displays the Down band with the power mode.
f. Click to confirm the power level. The 1 pt calibration menu opens.

3. Calibrate

Calibrate in an interference-free environment after any pairing or Tx Power Mode change.



a. Place the Tx in a housing on level ground and measure 3 m from the nearest edge of the locator to the center of the transmitter.
b. Select **Continue** ☑ to calibrate. Do NOT move the locator during calibration. The AGR screen opens.
c. Check the default Above Ground Range (AGR) with a tape measure to verify depth readings on each band at least two depths (1.5 m and 4.6 m). Distance readings should be within ±5%. Select **Exit** ☒.

If the roll indicator on the Locate Mode screen displays a triangle error symbol that band has not been calibrated. Go to the Calibration menu and complete a 1 pt calibration for that band.

Settings Menu

Use the Settings menu to set the depth units, pitch units, roll offset, telemetry channel, Target Steering depth, leveling, LOC security settings, contrast, and Cal history. Set the remote display to match locator settings.

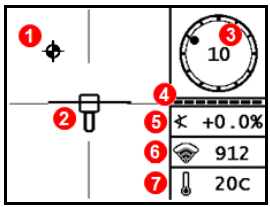
Height-Above-Ground (HAG) Menu

Height-Above-Ground (HAG) is the distance from the ground to the bottom of the locator while it is held or on a TrakStand. Enabling HAG on the Main menu lets you take accurate below-ground depth measurements without having to place the locator on the ground.

Target Steering assumes the locator is on the ground unless TrakStand HAG is enabled. For more information, search the **DCI DigiGuide App** for "Target Steering" and "TrakStand."

Locate Mode Screen

The Locate Mode screen appears if any menu is idle for more than 6 to 7 seconds, or immediately after a selection. To return to the Locate Mode screen from any other screen, select **Cancel** or **Exit** [X].



1. Locate point (ball)
2. Locator (box) with LL centered
3. Roll indicator and value
4. Roll/pitch update meter
5. Tx pitch
6. Tx Power Mode and signal strength
7. Tx temperature

Transmitter and locator must be Paired and on the same band before data will display. To learn more, search the **DCI DigiGuide App** for "remote displays."

Basic Locating

1. Find the Front Locate Point (FLP) and Rear Locate Point (RLP) by centering the target ball in the box. Mark the positions.
2. At the FLP, hold trigger for predicted depth reading. The Reference indicator **R** icon will appear. The Locate Line (LL) may not appear if this step is skipped.
3. Find the LL by centering the line in the box between the FLP and RLP. See Locate Mode screen on previous page.
4. View depth by holding the trigger at the LL on the line between the FLP and RLP.
5. To improve depth/data readings, hold the trigger five or more seconds to enable Max Mode. For more information, search the **DCI DigiGuide App** for "Max Mode."

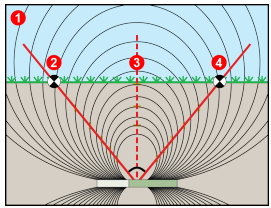
Signal Attenuation

If the signal strength flashes, this indicates extreme interference. Depth and locate points may be comprised and the locator will not calibrate.

If the signal strength is not flashing but an **A** icon appears in the roll indicator at depths shallower than 2.4 m, this is normal, and you can ignore the **A** warning.

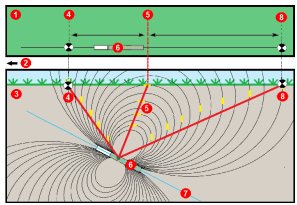
Transmitter Signal Field Geometry

Level Transmitter



1. Side view
2. RLP: Rear Locate Point
3. LL: Locate Line
4. FLP: Front Locate Point

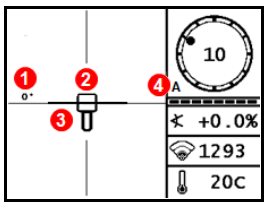
Pitched Transmitter



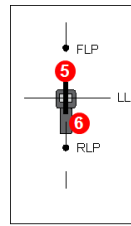
1. Bird's-eye view (top down)
2. Drill rig
3. Side view (underground)
4. RLP: Rear Locate Point
5. LL: Locate Line
6. Transmitter (Tx)
7. Bore path
8. FLP: Front Locate Point

FLP and RLP are not equidistant from the LL when the transmitter is pitched. For more information, search the **DCI DigiGuide App** for "Steep and Deep."

Bird's-Eye View on Locate Mode Screen



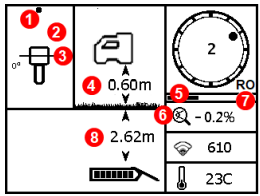
Locate Mode Screen
(Line-in-the-Box at LL)



Actual Position of
Locator and
Transmitter

1. Locate Line Yaw
2. Locator (box)
3. Locate Line (LL)
4. Attenuation
5. Tx
6. Locator

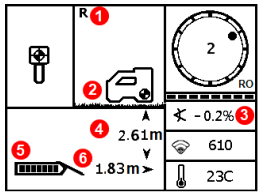
Depth and Predicted Depth Readings



Depth Screen (Line-in-the-Box at LL)

Trigger held at LL

1. Locate Point (FLP or RLP)
2. Bird's-eye view
3. Line-in-the-Box at LL
4. HAG on
5. Max Mode timer
6. Max Mode icon
7. Roll Offset
8. Tx depth



Predicted Depth Screen (*Ball-in-the-Box* at FLP only)

Trigger held at FLP

1. Reference Lock indicator
2. HAG off
3. Pitch
4. Predicted depth of Tx*
5. Tx battery strength
6. Horizontal distance between Tx and FLP*

* Only valid at FLP. Invalid at RLP.

The predicted depth is the depth the transmitter is calculated to be when it reaches the Front Locate Point (FLP) if it continues on the current path and pitch.

For detailed information, install the **DCI DigiGuide App** from your smart device's App store or download the Operator's Manuals from digital-control.com. Printed manuals are available upon request.
If you have questions, contact your regional DCI office or Customer Service at 1.425.251.0559 or 1.800.288.3610 US/CA.

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