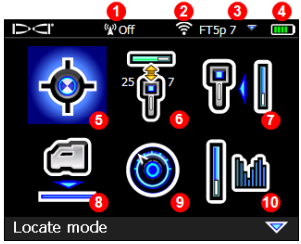
Power On the Locator

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

1. IR port
2. Toggle
3. Trigger

Main Menu



1. Telemetry channel (off)
2. Transmitter (Tx) Power Mode
3. Tx Type and Tx band up/down
4. Locator battery strength
5. Locate Mode
6. Tx Quick Scan Pair
7. Calibration
8. HAG and TrakStand
9. Settings
10. Tx Selection/Frequency Optimization (Tx/FO)

Toggle to menu options and click trigger to select. Toggle down to find Power Off, DataLog, Diagnostics, System Info, and whitelining.

Verify the Tx Type is the model used. To change the Tx type, click **Tx/FO**, and then **Tx Selection**. To learn more, see the **DCI DigiGuide App**.

Steps Required Before Drilling

1. Scan and Pick Optimized Bands

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

Basic Method: Quick Scan Pair

At jobsites with minimum active interference, optimize the two most commonly used bands preset for your region.

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

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

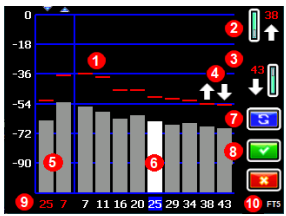
The screen displays the preset bands and power modes and is ready to pair. The presets may not be the best choice for many situations. Use the *Advanced: Scan, Pick, and Pair* instead. To learn more about changing the preset bands and power modes, see the **DCI DigiGuide App**.

Advanced Method: Scan, Pick, and Pair

At jobsites with challenging interference, use Frequency Optimization (FO) to show active interference for nine optimized bands and their highest noise levels.

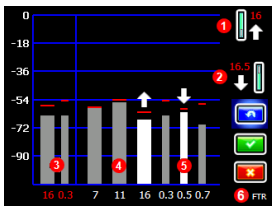
a. With the Tx off, select **Tx/FO** from the Main menu, click **FO**, and then click **Scan**.

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



FO Results - FT2 & FT5 Tx

1. Maximum noise reading
2. Up band (*Quick Select option)
3. Down band (*Quick Select option)
4. Quick Select Up and Down bands
5. Currently paired Up and Down bands
6. Selector
7. Rescan
8. Select/Pair
9. Band numbers
10. Tx Type



FO Results - FTR Sub-k Rebar Tx

1. Up band (*Quick Select option)
2. Down band (* Quick Select option)
3. Currently paired Up and Down bands
4. Interference in bands 7 to 16
5. Interference in bands 0.3 to 0.7
6. Tx Type

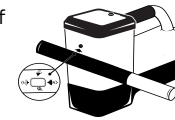
c. It is important to return to the point on the drill path with the highest noise. Rescan to optimize bands to that noise. The lowest noise bands are marked with up and down arrows.

d. You can do one of the following:
   - To continue using the currently paired bands, click **Cancel**.
   - To use both of the Quick Select bands with the lowest noise (marked by arrows), click **Pair**. Up and Down bands are assigned to these bands with one click.
   - To manually select one or both bands, toggle to the band, click to select, and then select the **Up** or **Down Band** icon to assign the band. If needed, repeat to select the other band. Click **Pair** to assign your selected band(s).

For passive interference, such as rebar, select band 7 or 11. To learn more about passive interference, search the **DCI DigiGuide App**.

2. Pair the Locator with the Transmitter (Tx)

a. Install transmitter (Tx) batteries and endcap.
b. Confirm the Up and Down bands that will be paired to the Tx and their power mode level (low, standard, or high). To change the level, click **Tx Power Mode**. For more information on power modes, see the **DCI DigiGuide App**.
c. Position the Tx's infrared (IR) port within two inches of the locator's IR port.



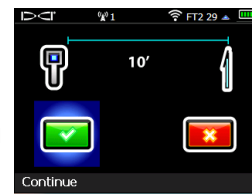
Falcon+ locators set the V2 Tx power mode based on menu selections. This overrides any other selection method.

d. Select **Tx Pairing** and hold the Tx in place until the check mark appears (4 to 5 seconds) and the locator beeps.
e. After a successful pairing, the locator displays the Up and Down bands with their power mode.
f. Click to confirm the bands and power level. The 1 pt calibration menu opens.

3. Calibrate the Up Band

Calibrate in an interference-free environment after any pairing, band change, or Tx Power Mode change. If you change both bands, the locator and Tx calibrates the Up band first.

a. Place the Tx in a housing on level ground and measure 10 feet from the nearest edge of the locator to the center of the drill head.



b. Click **Continue** . Do NOT move the locator while calibrating.
c. Check the default Above Ground Range (AGR) with a tape measure to verify depth readings on each band at least two distances (5 ft and 15 ft). Distance readings should be within ±5%. Click **Exit** .

4. Change Tx and Locator Bands to Repeat Calibration and AGR

a. To calibrate the Down band, first change the band on the Tx. Use one of the methods described in *Changing Transmitter Frequency Band* section on page 5.
b. At the Locate Mode screen, toggle right and hold to open the Band Selection screen. Select the Down band, and then select **Locate Mode** .
c. When the data appears on the Locate Mode screen, toggle down to the Main menu, and select **Calibration** and then **1 pt calibration** .
d. Repeat Step 3 to calibrate and check AGR. The bands are optimized, the Tx paired, and the locator is ready to use.
e. At the Locate Mode screen, have a coworker hold the transmitter a distance equal to the bore depth and walk the bore path together. If data is lost on both bands, rescan with the Advanced Method.

If the roll indicator on the Locate Mode screen displays a red 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, time zone, telemetry channel, roll offset, pressure units, temperature units, LOC security settings, full scale sensitive pitch, and language. Set the remote display to match locator settings.

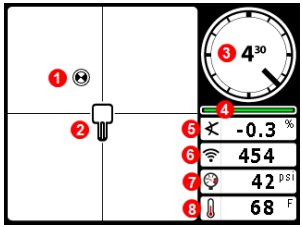
Height-Above-Ground (HAG) Menu

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 that the locator is on the ground unless TrakStand HAG is enabled. For more information, search the **DCI DigiGuide App**.

Locate Mode Screen

Select **Locate Mode** from the Main menu to start locating.



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

Transmitter and locator must be Paired and on the same band before data will display. For DigiTrak remote displays, see the **DCI DigiGuide App**.

Locate Mode Screen Shortcuts

- Toggle down to return to the Main Menu
- Toggle up to set and enter Target Steering.
- Toggle right and hold to switch between Up and Down locator bands.
- Hold the trigger for depth readings.

For more information on these features, see the **DCI DigiGuide App**.

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 next 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. See the **DCI DigiGuide App** for more information.

Changing Transmitter Frequency Band

Switch between Up and Down bands during pre-bore calibration or mid-bore to overcome interference. See page 7 to change bands on the locator.

Above Ground – Power-On Method

Insert transmitter (Tx) batteries and battery cap with the Tx pointing down (battery compartment on top) to power on in the Down band. Insert batteries with the Tx pointing up to power on in the Up band.

Above Ground – Tilt Method (In or out of drill head)

Hold the Tx at the same (±2) general clock position (CP) for this whole procedure. Hold Tx powered on at level (0±10°) for at least five secs. Tilt Tx up at approx. +65° (almost vertical) for 10–18 secs., then return to level for 10–18 secs. When the Tx changes bands, data disappears from the locator.

Below Ground (Mid-Bore) – 10/2/7 Roll Method

Disable Roll Offset (if enabled).

1. Roll clockwise to approx. 10 ± 1 CP. Wait 10-18 seconds.

2. Roll clockwise to approx. 2 ± 1 CP. Wait 10-18 seconds.

3. Roll clockwise to approx. 7 ± 1 CP. Wait 10-18 seconds.

The Tx changes bands within 20 seconds and data disappears from the locator. After changing locator band, re-enable **Roll Offset**, if needed.

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.

Watch our DigiTrak training videos at
www.YouTube.com/DCIKent

DIGITAL CONTROL

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Changing Locator Frequency Band

If you change bands on your Tx, you must also do so on your locator. At the Locate Mode screen, hold the toggle right briefly to open the Band Selection screen. Select the Up or Down band and then click **Locate Mode** . Data will display as transmission resumes in the new band.

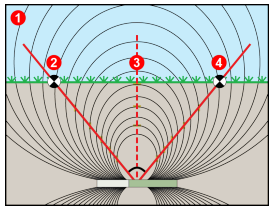
Signal Attenuation

If the signal strength flashes red, 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 8 feet, this is normal and you can ignore the A warning.

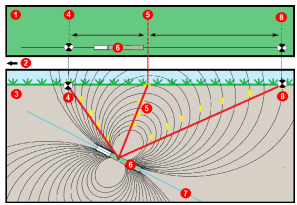
Transmitter Signal Field Geometry

Level Transmitter



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

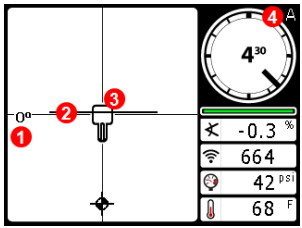
Pitched Transmitter



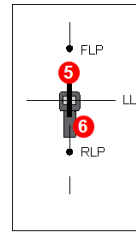
1. Bird's-eye view (top down)
2. Drill rig
3. Side view (underground)
4. RLP: Rear Locate Point
5. LL: Locate Line
6. Transmitter (Tx)
7. Bore path
8. FLP: Front Locate Point

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



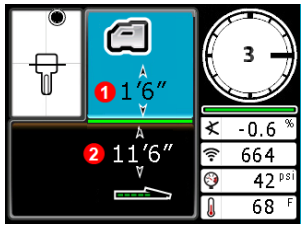
Locate Mode Screen
(Line-in-the-box at LL)



Actual Position of Locator and Transmitter

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

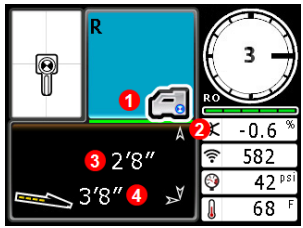
Depth and Predicted Depth Readings



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

Trigger held at LL

1. HAG on
2. Tx depth



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

Trigger held at FLP

1. HAG off
2. Pitch
3. Predicted depth of Tx*
4. Horizontal distance between transmitter 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.