# Aurora<sup>®</sup> Display Home Screen



- 1. Status bar
- 2. Locator/Telemetry channel
- 3. Telemetry signal strength
- 4. Transmitter (Tx) pitch
- 5. Tx roll
- 6. Tx battery
- 7. Tx temp. and temp. history
- 8. Fluid pressure and FP history
- 9. Current rod
- 10. Home icon (shown active)
- 11. Main Menu icon

Data displays automatically when broadcast from a DigiTrak<sup>®</sup> locator. From any other screen, tap **Home**  $\bigwedge$  to return.

### System Setup

Tap **Main Menu** 😑 to reach Settings.



For primary device settings, tap **Device S**, then the appropriate tab to set:

- date, time, time zone, language, and profiles
- units: temperature, distance, angle, pressure, and force
- screen brightness and speaker volume (volume must be above zero to be adjustable in onboard videos)

For temperature, pressure, and force alarms, tap **Alarms** (4).

To turn pitch history on or off, tap **Pitch History** 🚣.

To set your locator model, telemetry channel, or region, tap **Receiver** —. This guide assumes an F5+ locator.

To set up a cable transmitter or SST<sup>®</sup>, tap **Peripherals** 🖳.

To install software updates or applications from a USB flash drive, tap **Update**  and then tap **USB Refresh** .

On the **Main Menu**, use the **Help** options to access safety warnings A, system 2 information 1, self-tests , a Quick Start Guide 2, or instructional videos .

### **Check Systems**

At the **Main Menu** (a), tap **Power On Self-Tests** (a), for information on tests the Aurora display completed when powering up. This is useful for troubleshooting a particular component that may not be properly connected, powered on, or enabled.

### **Using the Home Screen**

### **Telemetry Signal Strength**

The number of bars in the telemetry signal strength icon indicates the strength of signal reception. A grey icon (((()))) indicates no reception; a steady black icon ((())) indicates Aurora is connected to a locator that is not sending data. A flashing blue icon (()) indicates Aurora is receiving new data from the locator.

#### **Roll Offset**

When roll offset is enabled on the locator for a standard transmitter, it displays on the Home screen automatically. Tap and hold the roll offset clock only for cable transmitter roll offset.

#### Fluid Pressure

Fluid pressure values are only available with a fluid pressure transmitter or TensiTrak<sup>®</sup> system; maximum displayed pressure is 17.2 bar. Pressure over 17.2 bar displays as **+OL**.

#### Temperature

Because the digital thermometer is inside the transmitter, it takes time to detect temperature increases due to external drilling conditions. Use the Transmitter (Tx) temperature and history on the **Home** resolve increases quickly to avoid irreversible transmitter damage.

#### **Menu Shortcuts**

Tap and hold screen elements like pitch, temperature  $\int_{0}^{\infty} c$ , or locator/telemetry channel (**F5/Ch1** on the Aurora display on the previous page) to jump to settings for those elements.

### **Depth Readings**

When the locator takes a depth reading at the locate line, Aurora displays the blue Depth Bar. Data is highlighted blue for 10 seconds and remains for 5 minutes.

# **Predicted Depth**

When the locator takes a depth reading at the front locate point (FLP), Aurora displays the blue Depth *and* Distance Bars. Data is highlighted blue for 10 seconds and remains for 5 minutes.



# Telemetry Setting for Classic F5<sup>®</sup>

The Aurora software includes an enhanced telemetry option called **Tele-B**<sup>™</sup>. It is the default and recommended selection for Falcon systems, classic F2<sup>®</sup>, and most classic F5. However, for classic F5 locators on software versions 1.01–1.03 (see Info > Tele SW ver), select Classic F5 for **standard** telemetry.

# Target Steering<sup>®</sup>

When a target depth is entered on the locator, Aurora automatically enables the Target Steering screen.



- 1. Current roll
- 2. Current depth below locator
- Projected destination on current heading
- 4. Target
- 5. Horizontal distance to target
- 6. Estimated projected depth
- 7. Target steering icon

Steer the yellow steering indicator ball (the projected destination) onto the target. In this case, the drill head is currently estimated at 1.0 m below the plane of the locator and must travel 3.1 m to reach the target point below the locator. The "estimated projected depth" is the depth the drill head is projected to be at below the locator when it reaches the destination if the user maintains the current pitch reading.

The further the drill head is from the locator, the less accurate the estimated projected depth can be. This should therefore only be used as an **estimate**.

The red marker 🦰 inside the steering indicator shows the

current roll position of the drill head. When the marker points toward the target, the drill head is correctly positioned to drill doser to the intended bore path. As the drill head moves forward, the steering indicator will also move. Monitor the steering indicator closely, make small steering adjustments promptly, and watch and wait for the results.

The flashing target steering icon  $\bigoplus$  in the Status bar indicates target steering data is being received. If target steering data is lost, the app remains loaded so once data resumes, it will continue processing without interrupting your current task.

Tap (20) at any time to use the classic target steering view from previous versions of DigiTrak remote displays.

# Log While Drilling

You can configure and manage Log While Drilling (LWD™) Jobs in the **Configure** app on the Aurora Display.

- 1. Open the **Configure** App 🔂 on the Aurora display.
- 2. Tap **Create New LWD Job** and rename the job, and comment as needed.
- 3. Confirm the rod length and first rod length.
- 4. With the locator on, confirm the first Rod pitch (same as Rod 0 in LWD). A live pitch is required.
- 5. Go to the LWD Live App on the Aurora display, and tap Start.

### **Bore Planning**

You can create and transfer a bore plan to an Aurora display (Version 2.5 or later) with the TeraTrak<sup>®</sup> R1<sup>™</sup> app (Version 2.3 or later) and an R1 Bluetooth® adapter. If you do not have an R1 Bluetooth adapter for your Aurora display, contact your local dealer or DCI Customer Support. See the DCI DigiGuide™ App for instructions how to find the software version of the R1 App and the Aurora display.

#### Transfer from the TeraTrak R1 App

- 1. In the TeraTrak R1 App, on the **Jobs** page, select a bore plan, tap **Share**, and then tap **Send to Aurora**.
- Follow the progress of the transfer on both the Aurora display and the R1 app. For more information on creating a TeraTrak R1 bore plan, see the TeraTrak R1 manual in the DigiGuide App.

#### Create a Job with the bore plan on the Aurora Display

- 1. Open the **Configure** App 🔁 on the Aurora display.
- 2. On the Plans tab, select the plan and then tap Create New LWD Live Job.
  - a. Confirm the job and confirm the Rod length and First Rod Length.
  - b. With the locator on, confirm the first Rod pitch (same as Rod 0 in LWD). A live pitch is required.
  - c. On the LWD Live tab, tap Start. Log as usual.



- 1. Distance to the nearest waypoint
- 2. Distance to the nearest utility
- 3. Estimated projected depth (3 rods out in this example)
- 4. Terrain
- 5. R1 Bore plan (solid gray line)
- 6. Drilled path (solid blue line)
- 7. Projected path (broken blue line)
- 8. Scaling the chart slider
- 9. LWD Tab
- 10. Rod number
- 11. Pitch
- 12. Depth
- 13. Distance
- 14. Time per rod
- 15. Live data

As you log your data, the Logging control displays the depth and pitch of the drill head (green blocks) beside the planned depth and pitch. Verify that the current depth and pitch closely match the plan.



- 1. Current depth and pitch
- 2. Planned depth and pitch

#### Update a Bore Plan

If needed, you can go back to the R1 App to update the bore plan, and transfer the updated plan to the Aurora and continue the job.

- 1. Keep the LWD job open. You do not have to close or pause it before updating it.
- In the R1 App, transfer the updated bore plan. For steps, see the "Transfer R1 App Bore Plans to the Aurora Display" article in the "User Terrain Data" chapter of the TeraTrak R1 manual in the DCI DigiGuide app.

- You can track the progress of the transfer in the R1 App or on the Configure App on the Aurora display. When the transfer is complete, the LWD Live App on the Aurora display will flash and the bore plan will be updated.
- Confirm that you are on the same rod as you were before the update, and then you can continue drilling.

For more information on using any of the features used by DigiTrak Digital Suite for full bore planning, see the TeraTrak R1, DigiTrak LWD, and Aurora manuals in the DCI DigiGuide App.

For detailed information including safety warnings, scan the QR Code to open the Aurora DigiGuide Manual or install the DCI DigiGuide App on your smart device. If you have questions, contact your regional DCI office or U.S. Customer Service at 1.425.251.0559.



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

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