Falcon transmitters with SnooZe™

With DCI's limited-edition Falcon transmitter (Tx) with SnooZe (Z-mode) the Tx signal can be turned off down-hole and turned back on as needed. This can extend battery life up to 65+ days for wireline projects that require walkover capability on demand.

Look for the SnooZe logo etched on the Tx.

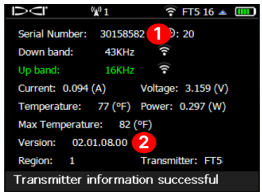
Activate Z-mode

After the initial Tx setup and calibration, activate Z-mode by executing a Repeating Roll Sequence four times (RRS4) either manually or assisted by the Aurora® Display's XR® App. On the first RRS4, Z-mode is activated with no signal. Every RRS4 you execute after the first one switches the Tx between signal or no signal. For RRS4 instructions, see page 3.

When the Tx has no signal, you cannot use the standard roll sequences (10-2-7 and RRS3) to change bands. To change bands above ground, use the Power On or Tilt Methods. Search the **DCI DigiGuide™ App** for steps.

Verify Tx Z-mode and software version

Use the Tx serial number (SN) on the Tx Info Request screen to confirm the status of the Tx before it goes into the housing and down hole. For steps, search the **DCI DigiGuide App**.



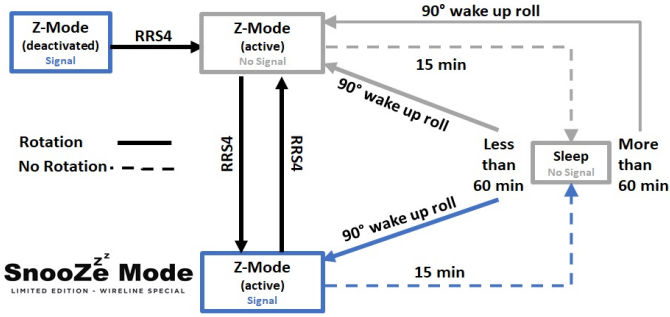
1. Tx serial number (SN)
   First number is a 3 – Standard Tx mode
   First number is a 4 – Z-mode with signal
   First number is a 5 – Z-mode no signal
2. The software version

The battery chart in this Quick Start Guide is for SnooZe transmitters with software version 2.1.8.0. If you have an earlier software version, please refer to an earlier version of this guide.

Enhanced Sleep mode

If the Tx does not rotate (less than 5°) for more than 15 minutes, the Tx will go into Sleep mode with no signal to save battery life. To wake-up a Tx from Sleep mode, slowly rotate the drill head for 10-15 seconds, and then stop at a new clock position (1/4 rotation/90°).

If the Tx is in Sleep mode for more than 60 minutes, a Wake-Up roll will only go to Z-mode with no signal. This is a safety measure. To switch to Z-mode with signal, execute a Wake-Up roll followed by an RRS4.



Estimated battery life

15-in (FT5p) Z-mode - Standard Power Setting

	Triple Shift	Double Shift	Single Shift
Active - hours per bore	4	4	4
SnooZe - hours per day*	24	16	8
Sleep - hours per day*	0	8	16

Battery Type	Number of Days**		
Alkaline (not recommended)	9.5	11.8	15.5
LiR21700 5k mAh (rechargeable)	12.3	15.3	20.2
DCI SUPERCELL™	40..4	50.1	65.9

*8 hour shifts/24-hour days/7 days per week

** 4 hours of Z-mode with locating signal and remainder of time either in Z-mode with no signal or sleep mode.

DCI does not recommend using alkaline batteries for mission critical applications. Battery life estimates are not guaranteed. Actual battery life will vary due to battery quality, Tx housings, tooling, interference, frequencies, hours active, environment, and other factors.

The numbers in the table are best-case theoretical values. They do not account for any degradation of the battery capacity due to shock or temperature. At very cold temperatures, the SUPERCELL can lose over 10% of its capacity. The SUPERCELL battery performs best in warmer temperatures.

Deactivate SnooZe mode

An RRS4 does not deactivate Z-mode. To deactivate Z-mode, do one of the following:

- Power on the Tx while holding it vertically (±25°). The Tx is set to either Up or Down band.
  - OR -
- Pair the Tx with a locator after changing frequencies, bands, power level, or FSSP mode.

If you deactivate Z-mode, the Tx functions as a normal Tx with standard Sleep mode. The signal will only turn off if the Tx does not rotate for 15 minutes and will turn back on with a Wake Up roll no matter how long the Tx is in Sleep mode.

To change batteries without changing the Tx settings (last band, FSSP mode, power mode, and Z-mode), power on the Tx while holding it horizontally.

Execute a Z-mode repeated roll sequence (RRS4)

1. Execute a Wake-Up roll to verify that the Tx is not in Sleep mode.
   A. Make a reference mark on the drill string at the current clock position (CP).
   B. Slowly rotate the drill head for 10-15 seconds, and then stop at a new CP (1/4 rotation/ 90°).
2. Start the RRS4 roll sequence.
   A. Hold the Tx stationary for at least 40 seconds. Make a reference mark at the new CP.
   B. Complete one full clockwise rotation (±2 CP) of the reference mark within 30 seconds, then hold CP for 15 seconds (± 5 seconds).
   C. Repeat Step 2B three more times, for a total of four rotations (RRS4).
3. After the fourth rotation, hold CP for 60 seconds.

Count rotations carefully. If there is a signal, three rotations will cause a band change. To confirm the mode change was successful, on the locator check both the Up and Down band. For more information, search the **DCI DigiGuide App**.

Warranty

A Falcon Tx with Z-mode has the standard DCI 500 hours/3-year warranty. An extended warranty is available. During active drilling, runtime is being recorded except when the Tx is in Sleep mode and not rotating.

For detailed information, scan the QR code to install the **DCI DigiGuide App** from your smart device's App store. 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

Printed: 3/21/2024