

Configuring the F40-TT transmitter in Dataquest A.R.T.

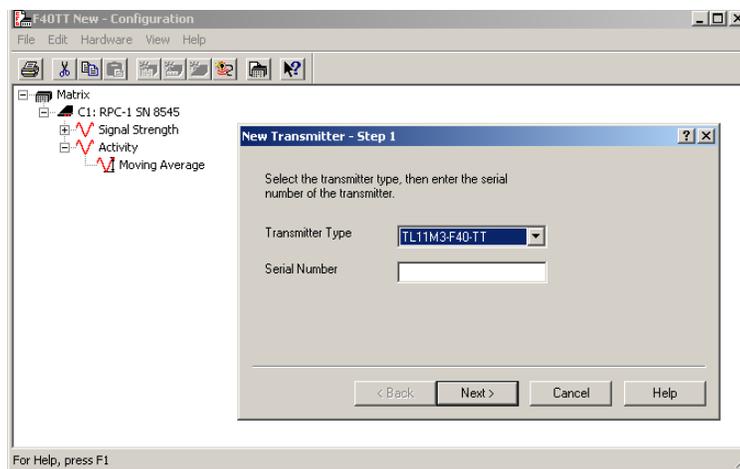
The F40-TT was formally added as a transmitter model in Dataquest A.R.T. v4.1; however, Dataquest A.R.T. v4.0 and earlier versions can be used with a custom configuration. Additionally, as of June 2008, the F40-TT is being calibrated over an extended temperature range (22-41°C) to provide accurate measurements of tail temperature. This document outlines the steps used to configure the F40-TT transmitter including the adjustments in the software that are required to accommodate the extended temperature range.

Important! The following steps are required in A.R.T. version 4.1 and earlier to ensure the accuracy of temperature measurements even if the F40-TT device is not being used over the extended temperature range. This document is a supplement to the configuration information found in the Dataquest A.R.T. user manual.

No changes in the software configuration are required for A.R.T. v4.2.

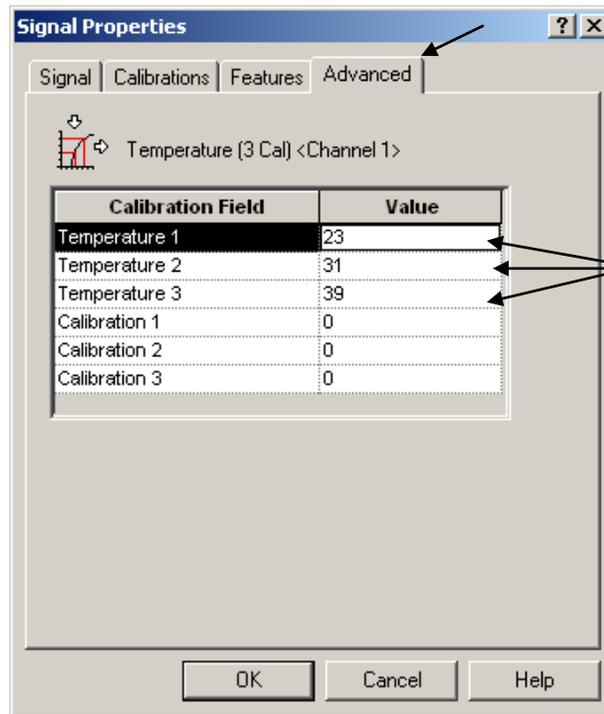
Dataquest ART version 4.1

1. In Dataquest A.R.T. Acquisition, go to **Hardware|Configuration**
2. Highlight the receiver in which the F40-TT will be used, right-click and choose “**New Transmitter**”.
3. Select the model name ‘**TL11M3-F40-TT**’ from the list of transmitters and enter the device’s unique serial number and select Next>

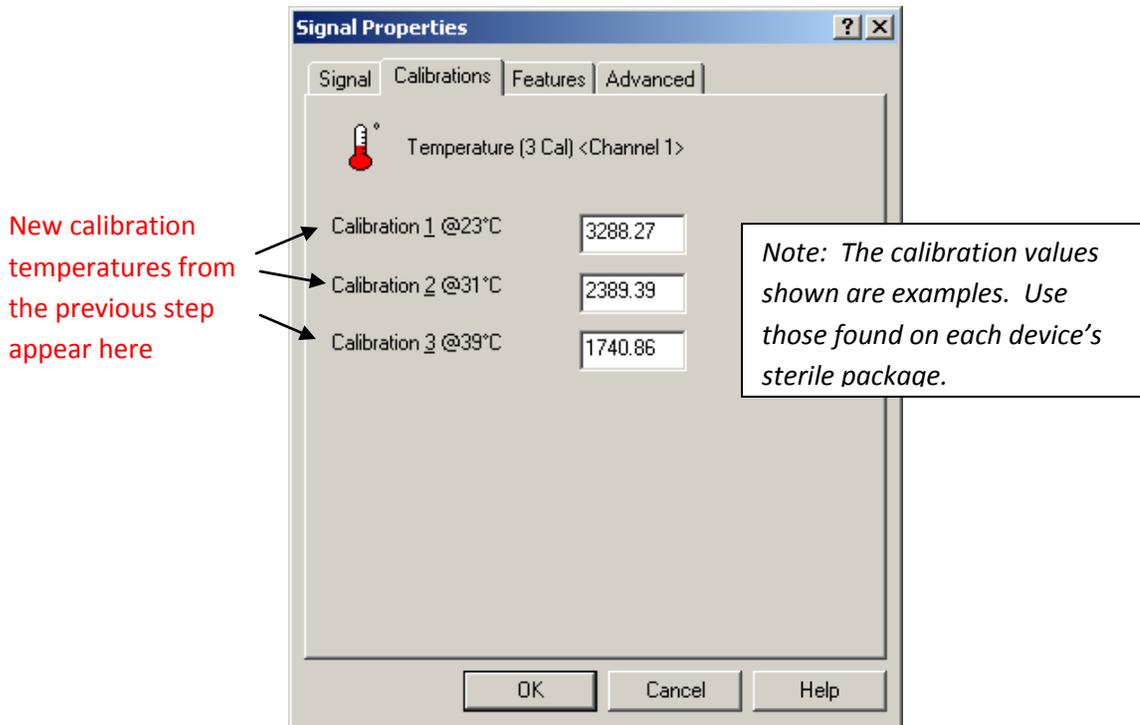


4. Select the species and create a unique Animal ID name, select Finish>

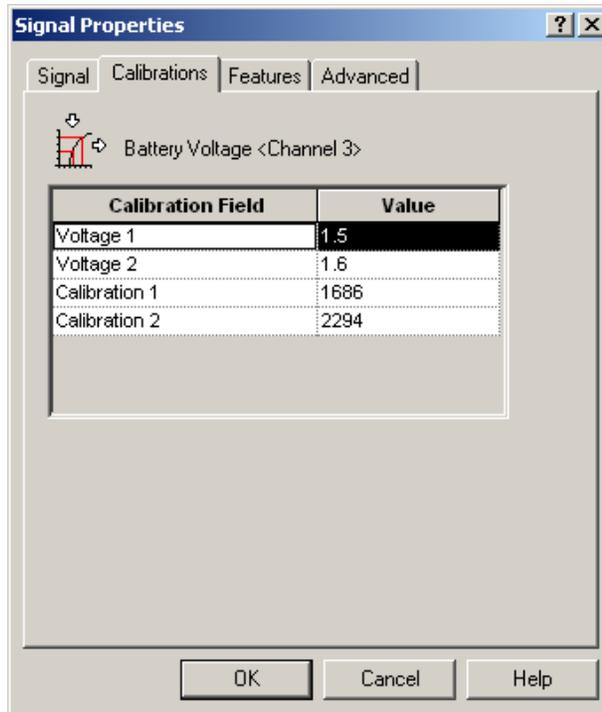
- The next window prompts for the calibration values to be entered. Before doing so, go to the **Advanced** Tab and adjust the temperature values to 23, 31, 39 as shown:



- Optionally, the calibration values can be entered here or you may revert back to the **Calibrations** tab.
- Enter the calibration values found on the sterile package and select **OK**.



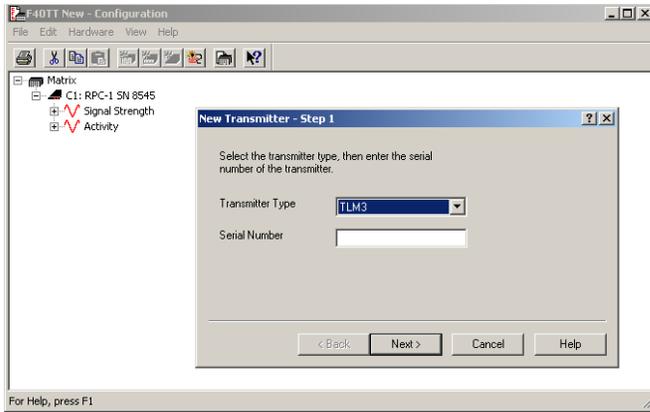
8. Repeat steps 5-7 for channel 2.
9. Enter the battery voltage levels and calibrations found on the sterile package and select **OK**.



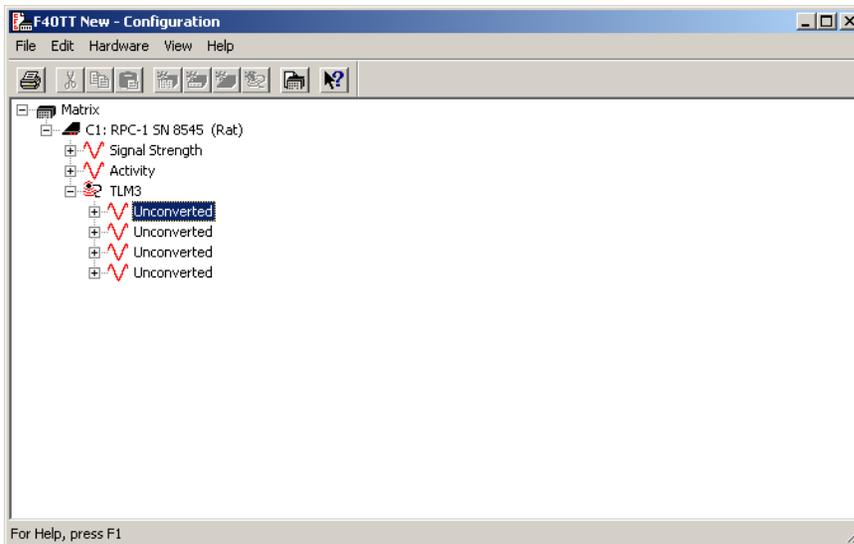
10. The device is now configured. Repeat for additional transmitters or proceed with data collection.

Dataquest A.R.T. version 4.0 and earlier

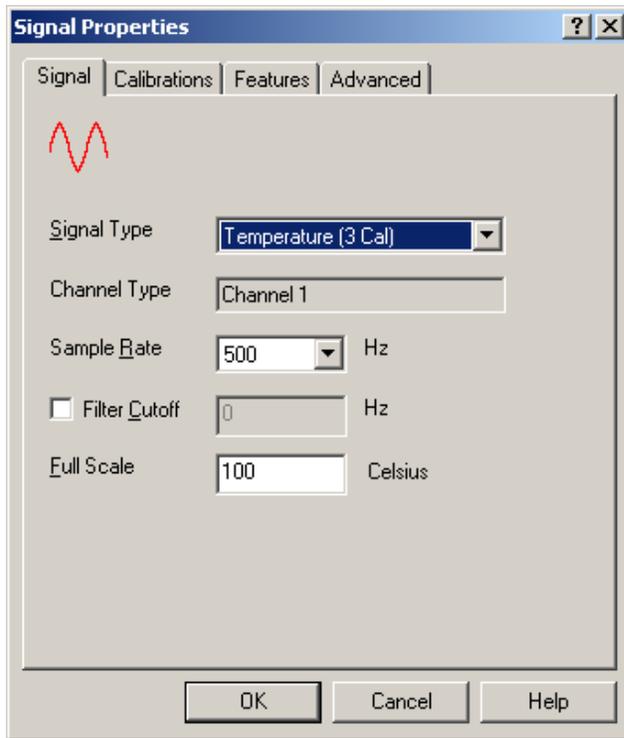
1. In Dataquest A.R.T. Acquisition, go to **Hardware|Configuration**.
2. Highlight the receiver in which the F40-TT will be used, right-click and choose "**New Transmitter**".
3. Select the model name '**TLM3**' from the list of transmitters and enter the device's unique serial number and select Next>



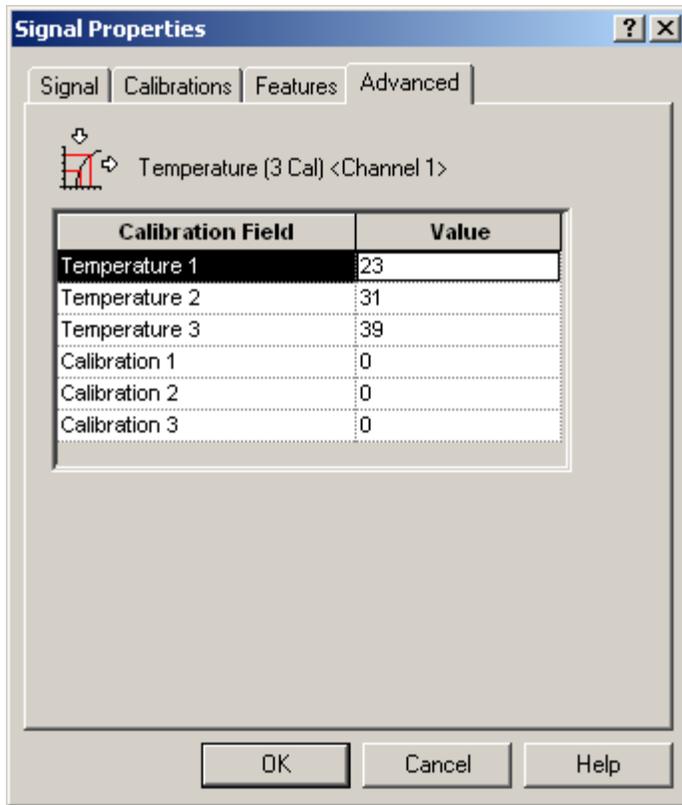
4. Select the species and create a unique Animal ID name, select Finish>
5. A new transmitter will appear in the configuration window with 4 channels listed as 'unconverted'.



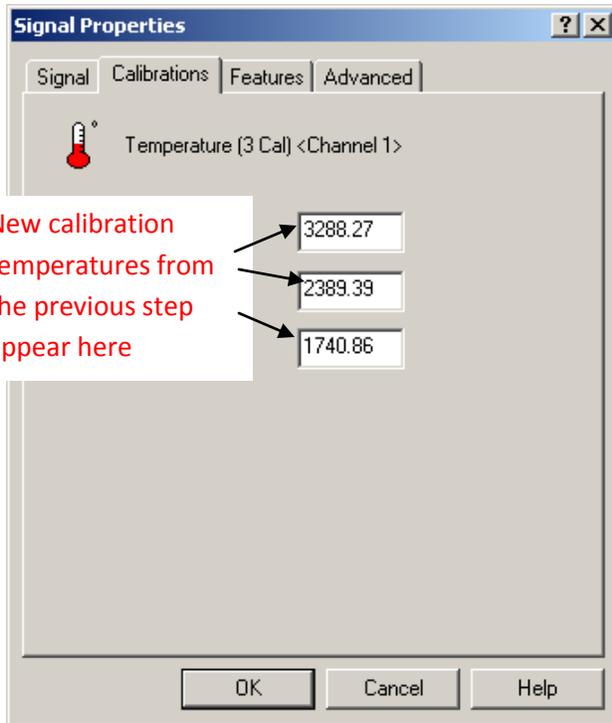
6. Select and right-click the first unconverted signal and choose **Properties**.
7. Change the signal type to 'Temperature (3 Cal)'.



8. Go to the **Advanced** Tab and adjust the temperature values to 23, 31, 39 as shown:



9. Optionally, the calibration values can be entered here or you may revert back to the **Calibrations** tab.
10. Enter the calibration values found on the sterile package and select **OK**.



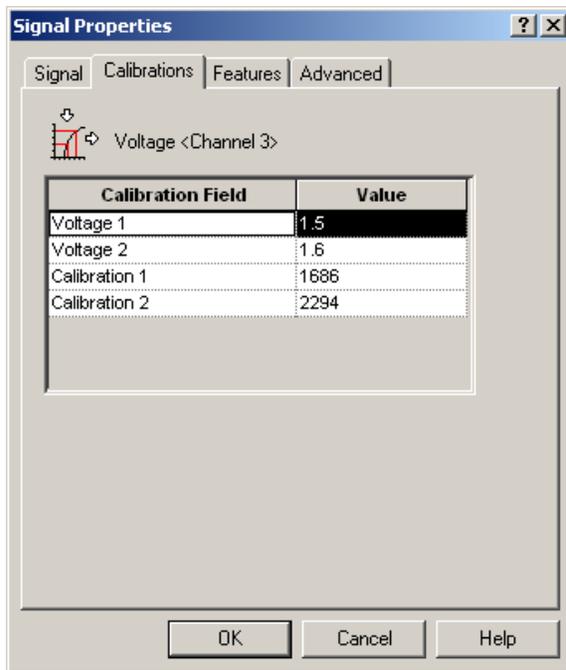
Note: The calibration values shown are examples. Use those found on each device's sterile package.

11. Repeat steps 6-10 for channel 2.

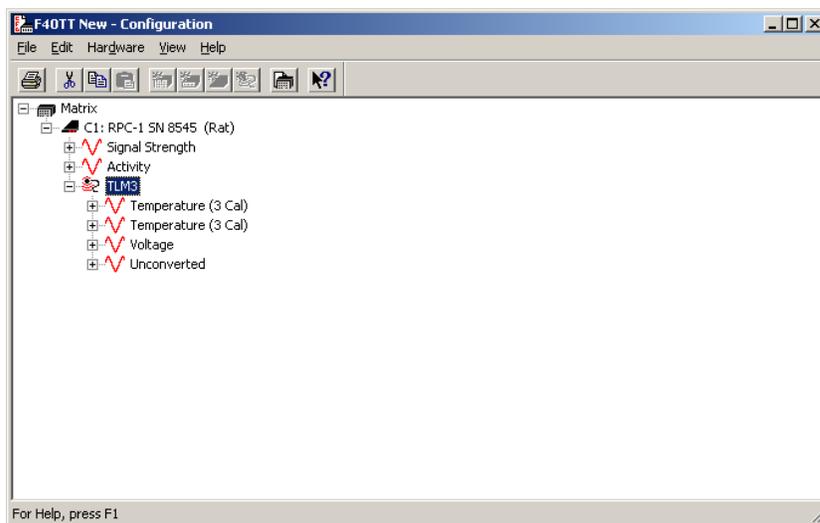
12. For channel 3, change the 'unconverted' signal to **Voltage in the signal properties window.***

13. Enter the battery voltage levels and calibrations found on the sterile package and select **OK.**

****Please note that for A.R.T. versions 2.2 and earlier, the 'voltage' signal type is not available. Channel 3 should be left as 'unconverted' and the battery voltage data will not be usable.***



14. Leave channel 4 with the **'unconverted'** designation.
15. The device is now configured and should appear as shown. Repeat steps for additional transmitters or exit Hardware Configuration.



16. In the main Acquisition window, double-click the animal ID icon to access the subject's

Source Settings. Remove the check for the Period data in waveforms and parameters so it is not saved (online). It is not necessary to save these data.

Source Settings

Sampling Mode

Continuous

Duty-Cycled

Protocol

Scheduled

Sampling Settings

Segment Duration: 10 seconds

Save waveforms every 1 interval(s) (every 1 hours)

Video Settings

Associate Camera Camera1

Waveforms:

Data Type	Channel	Online
Temperature 2	1	<input checked="" type="checkbox"/>
Temperature 2	2	<input checked="" type="checkbox"/>
Voltage	3	<input checked="" type="checkbox"/>
Period	0	<input type="checkbox"/>
Signal Strength	5	<input checked="" type="checkbox"/>
Activity	4	<input type="checkbox"/>

Parameters:

Data Type	Channel	Online
Temperature 2	1	<input checked="" type="checkbox"/>
Temperature 2	2	<input checked="" type="checkbox"/>
Voltage	3	<input checked="" type="checkbox"/>
Period	0	<input type="checkbox"/>
Signal Strength	5	<input type="checkbox"/>
Activity	4	<input checked="" type="checkbox"/>

OK Cancel Help

uncheck

uncheck