



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>

F40TT New - Configuration		- 🗆 🗵
File Edit Hardware View Help		
a . • • • • • • • • •		
Matrix G:: RPC-1 SN 8545		
Gignal Strength Activity	New Transmitter - Step 1	<u>?×</u>
····'₩ Moving Average	Select the transmitter type, then enter the serial number of the transmitter.	
	Transmitter Type	
	Senai Number	
	< Back Next> Cancel Help	
For Help, press F1		//.

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

5. 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:

Signal Properties		? ×	
Signal Calibrations Features	Advanced		
Temperature (3 Cal) <0	Channel 1>		
Calibration Field	Value	T II	
Temperature 1	23 🖣		
Temperature 2	31	$\leftarrow \rightarrow \rightarrow$	Critical step
Temperature 3	39		
Calibration 1	0		
Calibration 2	0		
Calibration 3	0		
ОК	Cancel	Help	

- 6. Optionally, the calibration values can be entered here or you may revert back to the **Calibrations** tab.
- 7. 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**.



Signal Properties		? ×
Signal Calibrations Features	Advanced	
,≎		
🗘 🗘 🗄 Battery Voltage < Chan	nel 3>	
Calibration Field	Value	
Voltage 1	1.5	
Voltage 2	1.6	
Calibration 1	1686	
Calibration 2	2294	
ļ		
ΠΚ	Cancel Help	

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>



🚰 F40TT New - Configuration	
File Edit Hardware View Help	
a 195 may 19	
Matrix	
Ker I in tools We Transmitter - Step 1 Select the transmitter type, then enter the:	erial
number of the transmitter.	×
Serial Number	
<back. nex<="" th=""><th>t> Cancel Help</th></back.>	t> Cancel Help
For Help, press F1	1.

- 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)'.





9	iignal Properties			? ×
	Signal Calibration	ns Features Ad	dvanced	,
	$\wedge \wedge$			
	<u>S</u> ignal Type	Temperature (3	3 Cal)	•
	Channel Type	Channel 1		_
	Sample <u>R</u> ate	500 💌	Hz	
	Filter <u>C</u> utoff	0	Hz	
	<u>F</u> ull Scale	100	Celsius	
		OK	Cancel	Help

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



Signal Properties		? ×	
Signal Calibrations Features	Advanced		*
	Channel 1>		
Calibration Field	Value		
Temperature 1	23		+
Temperature 2	31		Critical step
Temperature 3	39		
Calibration 1	0		
Calibration 2	0		
Calibration 3	0		
J			
	1 (
ОК	Cancel He	elp	

- **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.



Signal Properties		
Signal Calibrations Features Advanced		
Temperature (3 Cal) < Channel 1>		
New calibration temperatures from the previous step appear here		
OK Cancel He	lp	



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.



Signal Properties	<u>? ×</u>
Signal Calibrations Features	Advanced
◆ Voltage <channel 3=""></channel>	
Calibration Field	Value
Voltage 1	1.5
Voltage 2	1.6
Calibration 1	1686
Calibration 2	2294
,	
OK	Cancel Help

- **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.

EF40TT New - Configuration	
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5 1 B E 5 5 2 G N	
Matrix Mat	
For Help, press F1	11.

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	Waveforms:			
	Data Type	Channel	Online	T I
	Temperature 2	1		
C Duty-Cycled	Temperature 2	2		
	Voltage	3		
	Period	0 [
C Schoduled Interval 1 (60 mins)	Signal Strength	5	N	
	Activity	4		unched
,	Data Type	Channel	Online	1
	Data Type	Channel	Online	
Save waveforms every 1 interval(s)	Temperature 2	1		
	Temperature 2	2	<u>N</u>	
(every 1 hours)	Voltage	3		
Miles Collins	Period	U		
	Signal Strength	5		unchec
🗖 🗖 Associate Camera Camera 1 📃 🔽	Activity	4	M	1
	1			
	1			
OK Ca	ncel Help			

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