



## 4ET IMPLANT BATTERY CALIBRATION SETTINGS

When using the 4ET implants, many researchers monitor the implant battery voltage using Ponemah's display features to determine when the voltage level is low enough to require replacing the transmitter module. To obtain accurate battery voltage measurements, the calibration values located on the back of the transmitter packaging are entered in the PhysioTel/ HD Hardware Configuration dialog.

To enter the battery voltage calibration values:

 Select Hardware | Edit PhysioTel / HD (MX2) Configuration... The PhysioTel / HD Hardware Configuration menu will open.

▲ MX2 Configuration ▲ 0.847233 MI ▲ 0.4ET-52 5 0.55RI 0.46FT-52 5 0.75RI 4.04ET-52 5 0.77RI 8.47231 M2 ▲ 0.4ET-51 5 0.4ET-51 5	n PC-2 F2 SN 1491 PC-2 F2 SN 1491 PC-2 F2 SN 1487 IN 8067 (#11) PC-2 F2 SN 1497 PC-2 F2 SN 1495 IN 8063 (#12)	Selected MX2s 847233 M1 847231 M2 846672 M3		Available MX2s 747221 Mike-747223 765433 SoftwareLab3 (747228) MX2-Bank B1 831611	
● J4:Ri J4:Ri ■ 846672 M3 ■ ● 4ET-S1 S ● J3:Ri ■ J4:Ri ■ ● 4ET-S1 S ● J1:Ri ■ J2:Ri	PC-2 F1 SN 1486 PC-2 F1 SN 1488 N 8051 (#13) PC-2 F2 SN 1489 PC-2 F2 SN 1484 N 8057 (#16) PC-2 F1 SN 1480 PC-2 F1 SN 1480 PC-2 F1 SN 1492 N 8058 (#14) PC-2 F1 SN 1499 PC-2 F1 SN 1493	* Select NY2(c) from list on right to add im	<- Add Remove ->	MX2 USB 1.1 765432 721988_FormalTest 748881-JPK (test1) SoftwareLab4 - 747227 SoftwareLab2 (721991) SoftwareLab1 (765441) 913640 827491 721989_FormalTest Adamski - 747224 728503 Eric MX2 - 765442	
		Add MX2(s) to your configuration by	, where the mean of the mean o	ck a MX2 icon (on the left) to add implants.	

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## 2. Select the 4ET device from the tree view on the left to display the *Implant Details*.

PhysioTel / HD Hardware Configuration 2.0.1810	08.5, Copyright © Data Sciences International 1996-2018	
Configuration Inventory	Implant Details	0
Configuration Inventory	Name: #9   Implant Model: 4ET-52   Serial Number: 8066   Enabled: Ø   HD Search Status:   Battery Status:     Signal Type   Enable Rate(Hz)   Calibrations   Ch1   EGO •   Ø   10 •   35   678.59   37   619.56   39   561.31        Ch2   Enable Rate(Hz)   Calibrations   Ch3   EMG •   Ø   555   1   603   Ch4   Battery Voltage •   Ø   10•   0   555      Ch4   EGO •   Ø   10•   Ø   Ch5   EGO •   Ø   Ch7   Activity •   Ø   Create New Implant                  Create New Implant      Ch5   EGO •   Ø   Ch6   EGO •   Ø <td>n.</td>	n.
	Save & Exit	el

- 3. Double-click on the Battery Voltage **0** field highlighted above and enter the low voltage value from the 4ET calibration information on the implant package. This is typically **1.6** volts.
- 4. Enter the calibration value for the 1.6v reading into the calibration field.



PhysioTel / HD Hardware Configuration 2.0.181	08.5, Copyright © Data Sciences International 1996-2018	
Configuration Inventory	Implant Details	0
Configuration Inventory MV2 Configuration 4 0847233 M1 4 04ET-52 SN 8066 (#9) 0 J5:RPC-2 F2 SN 1491 0 J6:RPC-2 F2 SN 1491 4 04ET-52 SN 8067 (#1) 0 J8:RPC-2 F2 SN 1497 9 J8:RPC-2 F2 SN 1497 4 04ET-51 SN 8063 (#12) 0 J1:RPC-2 F1 SN 1486 4 J6:RPC-2 F1 SN 1486 4 J6:RPC-2 F1 SN 1486 4 J7:RPC-2 F1 SN 1489 4 J7:RPC-2 F1 SN 1492 4 J7:R	Implant Details         Name:       #9         Implant Model:       #ET-52         Implant Model:       #ET-52         Serial Number:       8066         Enabled:       #         HD Search Status:       Battery Status:         Signal Type       Enable Rate(Hz)       Calibrations         Ch1       EEG       #       500       mV scate 205         Ch2       Temperature (3       #       10       35 678.59       37 619.56       39 561.31         Ch3       EMG       #       500       mV scate 201       10       10       15 678.59       10	m
	Chage implant details, modify channel settings, or assign receivers. Click 'Refresh Battery Status' button to retrieve battery information.	•
	Save & Exit Cancel	

- 5. Repeat this process for the high voltage calibration by double-clicking on the **1**. Enter the high voltage value. This is typically **1.8** volts.
- 6. Ensure the battery voltage channel is activated; i.e. checked. If it is not checked, click on the checkbox as shown below.



	Implant Details						0
<ul> <li>▲ MX2 Configuration</li> <li>▲ 42233 M1</li> <li>▲ 4ET-52 SN 8066 (#9)</li> <li>④ 35:RPC-2 F2 SN 1487</li> <li>④ 4ET-52 SN 8067 (#11)</li> <li>④ 35:RPC-2 F2 SN 1497</li> <li>④ 847231 M2</li> <li>④ 947231 M2</li> <li>④ 947231 SN 8053 (#12)</li> <li>④ 947231 SN 8057 (#16)</li> <li>④ 33:RPC-2 F1 SN 1484</li> <li>④ 846672 M3</li> <li>④ 846672 M3</li> <li>④ 846672 M3</li> <li>④ 947231 SN 8058 (#14)</li> <li>④ 34:RPC-2 F1 SN 1480</li> <li>④ 34:RPC-2 F1 SN 1492</li> <li>④ 84672 F1 SN 8058 (#14)</li> <li>④ 34:RPC-2 F1 SN 1492</li> <li>④ 94751 SN 8058 (#14)</li> <li>④ 31:RPC-2 F1 SN 1493</li> <li>④ 92:RPC-2 F1 SN 1493</li> </ul>	Name: Implant Model: Serial Number: Enabled: HD Search Status: Battery Status:	#9 4ET-52 8066			T	Receiver(s) Associated with Implant	
	Signal Type Ch1 EEG Ch2 Temperature ( Cal) Ch3 EMG Ch4 Battery Voltage Ch5 EEG Ch6 ECG Ch7 Activity Create New Implant	Enable	Sample Rate(Hz) 500 • m 10 • 500 • m 10 • 500 • m 1000 • m 1 •	Calibrations           V scale         205           35         678.59           V scale         201           1.6         555           V scale         209           V scale         208	37 619.56 1 603	39 561.31	H H
	Change implant	details, modif	y channel settir	igs, or assign receiver	rs. Click 'Refresi	h Battery Status' button to retrieve battery information	on.

- 7. Repeat this process for each additional implant.
- 8. After entering the calibration information for all configured implants, click Save and Exit.

This process will provide you with accurate battery voltage information that can be displayed using Ponemah graphs or the Digital Displays.

