



Installing the Battery Board

Rev 1.0 June 1, 2021 www.multitronix.com

This instruction sheet explains how to install a battery board onto the Mx230 option-20 configuration and thereby convert it into the option-25 configuration.

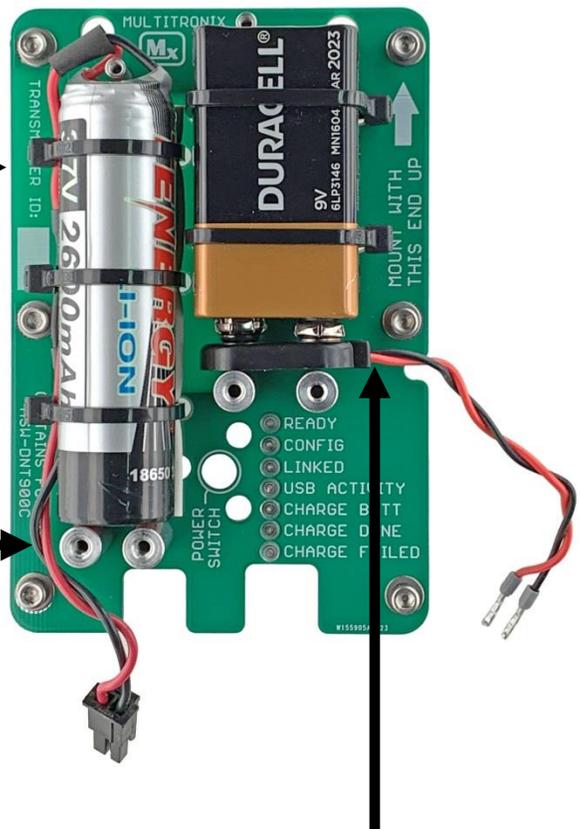
PLEASE NOTE: When handling the battery board, be very careful not to apply any forces to the LED light pipes that extend out the bottom of it. They can be damaged by excessive forces pushing on them.

Step 1: Zip-tie your existing Li-ion system battery to the pyro board in the orientation shown here.

Use three zip-ties.

It is very important that the leads coming from the Li-ion battery are at the top end of the pyro board. This is because the top of the battery contains a safety circuit PC board built into it. We do not want the weight of the battery to be pushing down on that PC board under high acceleration. It is better to have the bottom of the battery resting on these two metal posts during high acceleration.

Route the battery leads alongside the battery and capture them inside the three zip-ties as shown here.

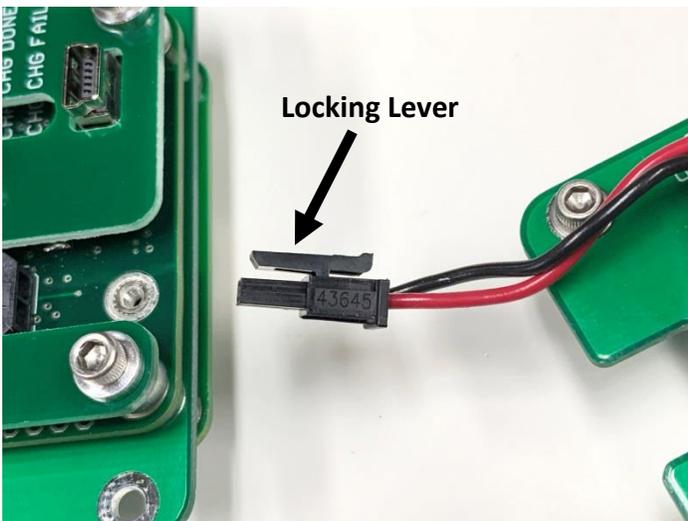


Step 2: Zip-tie your pyro battery to the battery board with the leads coming out the bottom end. This allows the leads to be routed through the slot in the edge of the board in order to connect them to the pyro board battery terminals. The pyro battery should be resting against the two metal posts below it. They are intended to support it during high acceleration.

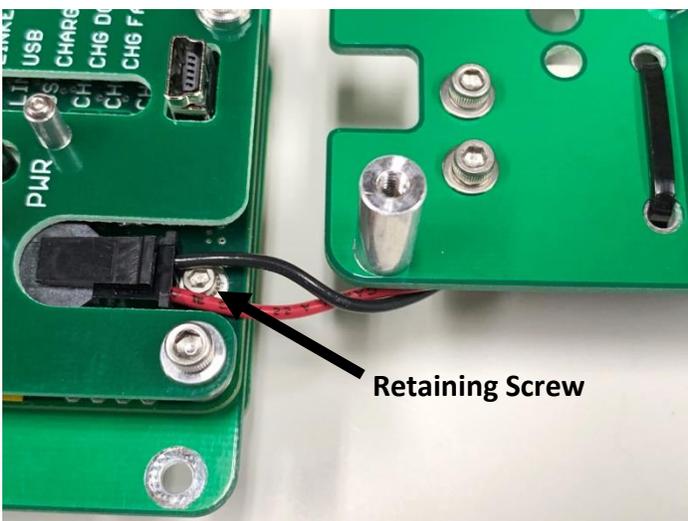
A 9V pyro battery is shown in this picture but you can also use a 2S 7.4V or 3S 11.1V LiPo battery if desired.



This picture shows the Mx230 Option-20 transmitter configuration with the Option-25 battery board alongside it. The battery board is now ready to be mounted over the top of the transmitter.

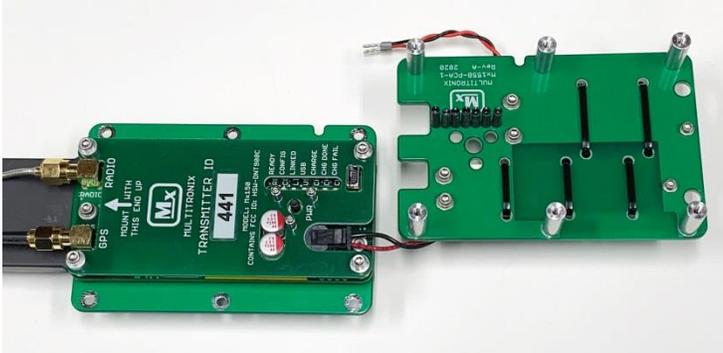


Step 3: Turn the battery board upside down and position it so that the Li-ion system battery leads and connector are routed out the bottom end. The connector needs to be mated with the corresponding one on the transmitter.

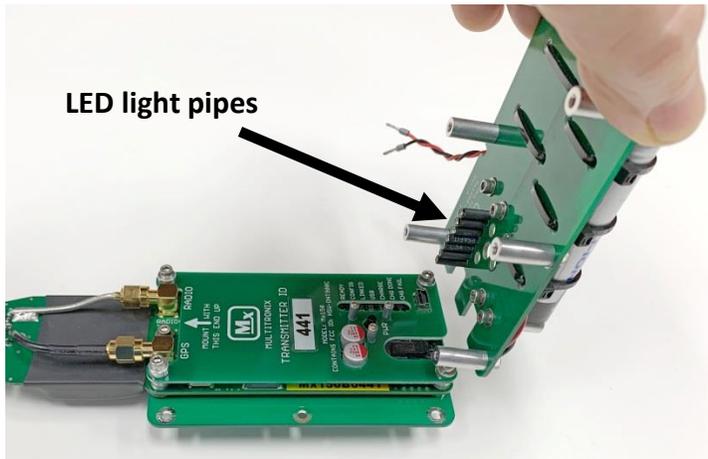


Step 4: Insert the battery connector into the corresponding connector on the transmitter board. Carefully push it in until it is fully seated and the locking lever is engaged and locked onto the mating part.

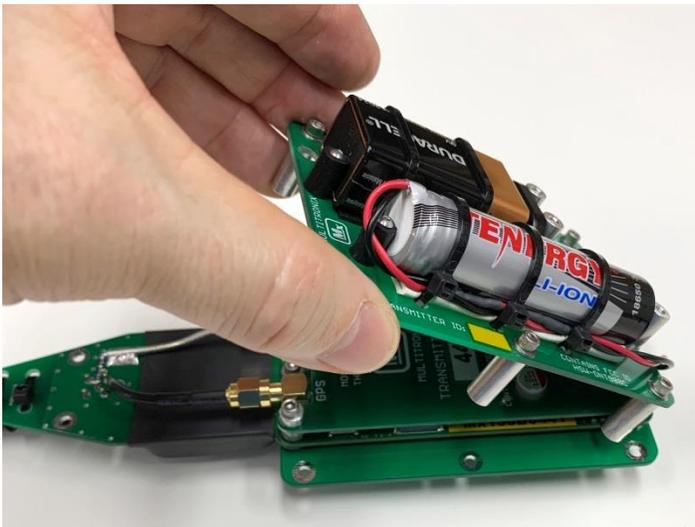
Carefully spread the red and black battery leads apart and install the small retaining screw. It requires a 5/64" hex driver. This screw is important. It ensures the connector will not back out and become disconnected under high acceleration.



This shows the orientation of everything now that the battery connector has been mated.



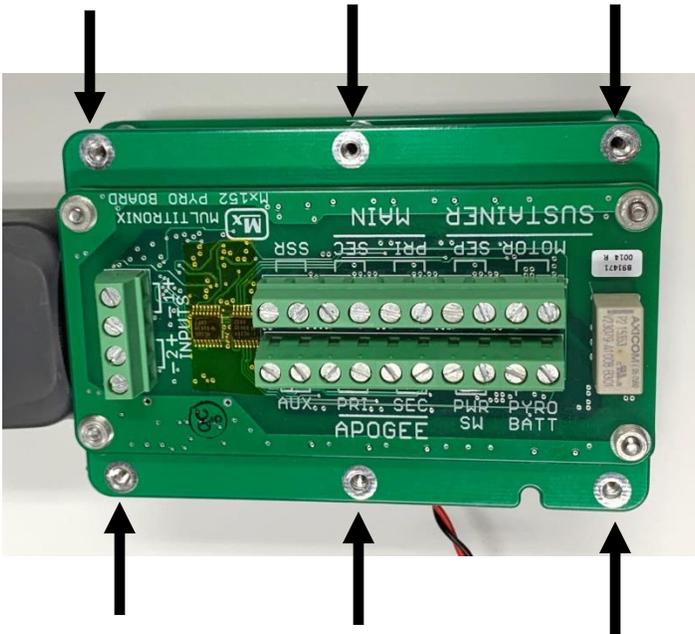
Step 5: Grab the top end of the battery board, lift it up and rotate it into position above the transmitter board. Rotation will be somewhat restricted by the length of the connected battery cable. Rotate it slowly. Take care to make sure the LED light pipes drop into the corresponding slot on the transmitter board.



Step 6: Continue rotating the battery board while also lowering it into the proper position on the transmitter board.



Step 7: Lay the battery board all the way down onto the top of the transmitter. It should now be resting on the six metal standoffs.



Step 8: Hold everything together and carefully flip the unit over so that it is now resting on the battery board. The pyro board should now be facing up as shown here.

Step 9: Install six washers and six socket head screws into the locations indicated by the six arrows. The screws are 5/16" long and require a 3/32" hex driver or Allen wrench.

PYRO BATT terminals



Step 10: The battery board is now properly mounted to the transmitter. The last step is to connect the pyro battery leads to the PYRO BATT terminals on the pyro board. **Be extra careful to get the polarity right!** Also while hooking them up, make sure the battery leads do not touch each other or any exposed metal on the pyro board.