N8XJK Super Booster

I recently purchased the N8XJK Super Booster and share my initial impressions.

Purchase Method

West Mountain Radio makes great product, but their shipping to Canada is pretty expensive. Here is what it would have cost to get the booster shipped here (in USD):

Shipping Method

United Parcel Service (1 pkg x 3 lbs total) 👼				
UPS Worldwide Expedited	\$102.93 🔾			
UPS Saver	\$109.27 ()			
Customs/Duties/Taxes:	+\$13.00			

ATTN CANADIAN CUSTOMERS!

For Canada only, the cost calculated during the order process includes shipping, brokerage, and all duties/taxes.

Thankfully, GPS Central in Alberta carries West Mountain Radio gear and sells it for pretty much the same price (after exchange rate):

	Booster	Shipping	Duty / Taxes	Total
WMR (in USD)	\$249.95	\$102.93	\$13.00	\$365.88
WMR (in CAD ¹⁾)	\$354.93	\$147.58	\$18.46	\$520.97
GPS Central	\$360.00	\$20.00	\$45.60	\$425.60

The Power Booster is currently not listed on GPS Central's website, but I sent them an email and they have it in stock so I was able to buy it over the phone, and I received it 3 days later.

Radio World in Ontario also carries West Mountain Radio equipment, but their shipping is a bit more expensive (probably because of distance). Here's the shipping options for a similarly sized item (they also don't have the Power Boost on their website yet):

3 Shipping Method •

Purolator shipping is not available for PO Box addresses. If you select Purolator shipping with a PO Box, we will automatically reassign the order to be shipped by Canada Post Expedited service.

O Canada Post Expedited (up to 7 days): \$28.99

O Canada Post Xpresspost (up to 3 days): \$56.67

O PurolatorGround (up to 6 days): \$73.91

Canada Post Priority (up to 2 days): \$78.39

O PurolatorExpress (up to 2 days): \$85.74

We have a list of retailers on the Link page sorted by distance (and most-likely by shipping prices).

About The Unit

The Power Booster is meant to boost the voltage of a battery that's as low as 10.5V to as high as 15V.

The idea is that while transmitting at high power (say 50W or 100W), the voltage that the radio sees can easily drop below 11.7V because of the voltage drop. This is totally fine for the battery, but many radios need at least 11.7V to function properly. So without the booster, a battery that's over 50% full could be useless for transmitting at high power. The Booster ensures that the radio sees a constant voltage above 13V even if the battery drops below 11.7V.

My Setup and First Impressions

At the moment, I have my batteries in the containers feeding a distribution block in the house, which feeds a few low power items as well as the Power Booster, which feeds a second distribution block which feeds four radios. The Solar controller and the power supply (on a timer) feed the battery side distribution block to charge the batteries.



Here are a few things I noticed:

- When connecting the Booster for the first time (with no load on it), I noticed that the input voltage dropped very quickly for a very short moment, which was enough to reboot the Packet and Echolink computers as well as the modem that are connected to the battery distribution block. I'm not sure if that's normal but I tried it a bunch of time and it was pretty consistent. Once connected, there was no other issues.
- I initially set the output voltage to 14V, and using the batteries, everything was very good. I then tried to turn on the power supply to charge the battery and the external speaker of my radio started picking up a hum.

¹⁾ The Exchange Rate was 1.42 when I bought it