#### Summary of Transmitter Packaging Modifications

Dominion Wireless improved the design of the PPD transmitter to include an injection-molded plastic housing, more permanent enclosure marking, a longer-life battery, rapid-install RF board shields, and the addition of an external antenna option. No modifications were made to the frequency control circuitry. Below is a detailed list of the modifications.

## Change Description

Housing The prior housing was purchased and modified. The new housing is a custom injection molded unit that will be of different dimensions. In both cases, the plastic housing is not used for shielding.

# <u>Change</u> <u>Description</u>

Marking The prior marking was contained on an adhesive label. It will now be embossed into the plastic enclosure.

## Change Description

Battery The prior battery was a 6 V Lithium cell. The new battery is a 9 VDC alkaline cell.

### <u>Change</u> <u>Description</u>

Shields The new shields clip into surface mount clips. The prior design used solder-tabs.

#### <u>Change</u> <u>Description</u>

uP Crystal We are changing the microprocessor crystal to a surface mount part from a thru-hole package.

#### Change Description

Antenna The new housing will include an external antenna option - it is a flexible quarter wave wire that permanently attaches and is not field-changeable. The standard option will remain the internal antenna manufactured by Linx Technology that Rheintech tested and approved last run. The gain of the prior unit is -4dBi. The gain of the optional external antenna is +1 dBi. Testing will be conducted under both internal and external antenna configurations.