

May 31, 2011

TIMCO Engineering Inc. 849 NW State Road 45 Newberry, FL 32669

SUBJECT: <u>Class II Permissive Change – Description of Changes</u> FCC ID: PWO819DA, IC: 4726A-819DA

The changes modify the gain control circuitry from a more primitive analog method to digital control using a microcontroller and digital attenuators. The actual placement of the digital attenuators (in the RF paths) is the same as the previous analog controlled pin diodes. The linearity of the digital attenuators is better than the linearity of the analog attenuators being replaced. Also, the associated detectors that enable measuring RF levels are being changed to devices with better linearity. In addition, the inputs to the detectors are now isolated by more than 25 dB from the RF lines being sensed; whereas previously, the detectors were coupled directly to the RF paths without significant isolation.

The first page of the attached file (811210 CIIPC Schematics & Parts List.pdf) shows the components that were removed, and the second page shows the components that are being added.

Sincerely,

Richard Kline Senior Electrical Engineer