



Customer Service Bulletin SD800004 Upgrade to SLP45100 Power Control Modulator

Continual Improvement is a cornerstone of the Southern Avionics Company Quality Management System. We issue Customer Service Bulletins to inform our valued customers of product upgrades and/or helpful technical information that may enhance the reliability of your equipment.

We have recently made improvements to our SLP45100 Power Control Modulator. We have found operation at frequencies of 200kHz and below can result in accelerated failure of an onboard capacitor due to its high Equivalent Series Resistance (ESR). An audible noise may be heard from the PCM as power is increased, and the transmitter may shut down at higher power levels.

Application: This bulletin applies to **SLP45100 Power Control Modulator PCB, Revision K or earlier**. This applies to SE transmitters purchased before 27 February, 2013. SLP45100 is used in the SLE45100 PCM Modules in SE series Transmitters.

The SLE45100 module is used in transmitter model SE125 IP66 Single with part numbers SLF33300 and SLF33001, and in transmitter model SE125 IP66 Dual with part numbers SLF33400, SLF33401, and SLF33402.

Identifying Transmitter part numbers listed above:
Locate the serial tag on your transmitter enclosure. The prefix "SLF" plus the first five (5) characters of your serial number indicate the SAC Transmitter Part Number as detailed below. The specific transmitters affected are referenced by the last four (4) characters in your serial number.

For example: A Serial Number of 33010XX0L0024 represents a SAC Transmitter part number of SLF33010.

SLP45100 update details: Capacitor C30 has been changed from a single 10UF/50VDC to a parallel combination of two 4.7UF/25VDC capacitors to improve low-band frequency operation by reducing Equivalent Series Resistance.



Tools needed:

- Phillips Head Screwdriver #2
- Phillips Head Screwdriver #1
- Soldering iron (25 Watt)
- Solder RoHS compliant or 60/40

Time required:

0.25 Manhours

Equipment needed:

2 – 4.7uF, 25VDC Capacitors per board

Field update instructions for SLP45100 Power Control Modulator:

1. Disconnect and remove the SLE45100 PCM Module assembly from the transmitter drawer(s).
2. Remove the aluminum cover on the SLE45100 PCM Module assembly.
3. De-solder and remove the 10UF, 50VDC, Alum Elec Capacitor (our part number 6C671010) at C30. Detail illustrated in Figure 1 below.
4. Install two parallel 4.7UF, 25VDC, Ceramic Capacitors (our part number 6C564700 or equivalent) at C30, one capacitor stacked on top of the other. Detail illustrated in Figure 2 below.
5. Reinstall the aluminum cover on the SLE45100 PCM Module assembly and reconnect the PCM assembly into the transmitter drawer(s).

Diagrams and/or photographs are included for your assistance. Please insert this bulletin, including illustrations below, in your manual. Thank you for choosing Southern Avionics Company for your NDB needs. We appreciate your business.

This Customer Service Bulletin and others may be found at <http://www.southernavionics.com/customer-service-bulletins/>.



