

Product Information

Bulletin



2400 Nelson Miller Parkway Louisville, KY 40223 (502) 244-7400 Fax: (502) 244-7444 www.safetran.com

SUBJECT: Solid-State Crossing Controller III

NO: PIB 3-03

CONCERN: New Features and Enhancements

DATE: 5-15-2003

I. BACKGROUND

Safetran will shortly be phasing into production various new features and enhancements for the microprocessor-based Solid-State Crossing Controller (SSCC III). These hardware and software changes provide an ideal platform for future expansion of features and additional enhancements. **Although the SSCC III part numbers have not changed, the SSCC III units with enhanced features can be easily recognized in the field by the letter “A” following the SSCC III lettering on the front panel (SSCC III A).**

The new SSCC IIIA units are direct “drop-in” replacements for existing SSCC III units. Electrical connections on the SSCC IIIA units are identical to those on the SSCC III.

II. NEW FEATURES

- The Echelon® port is now standard and allows SSCC IIIA operational logging data to be recorded by a SEA/R (80250) or SEAR II (80273) recorder.

NOTE

SEA/R must be equipped with level ER28 or later software .

The Echelon LAN interface provides direct connection to a SEA/R or SEAR II for external data recording purposes. The LAN port also allows the SSCC IIIA to be connected to an ATCS network.

- Two or more SSCC IIIA units can be programmed for synchronized lamp flash.

A non-vital I/O connector (Flash Sync I/O) is provided with programmable functions. When two or more SSCC IIIA units are operating in master/slave mode, this connector can provide a sync input on the slave unit(s) and a sync output on the master unit to enable synchronized lamp flashing between all connected SSCC IIIA units.

- An internal event recorder has been added that stores events for approximately 8 train moves. Either a laptop or pocket PC may be used to view the stored data.

The front panel DIAGNOSTIC port provides a standard RS-232 serial interface. By connecting a laptop or pocket PC running the Safetran GDT software to this port, the event data stored in the SSCC IIIA can be viewed or downloaded.

- A configuration menu has been added which includes a programmable Loss of Shunt (LOS) time from 1 to 20 seconds for the SSCC IIIA inputs.

The SSCC IIIA provides seven programmable crossing activation vital inputs. For areas where poor or intermittent shunting can be a problem, a Loss of Shunt timer can be configured for these inputs to hold a valid shunt indication for a period of time ranging from 1 to 20 seconds.

- New LAMP TEST DELAY features provide a programmable delay time to allow a maintainer time to walk from the bungalow to the flashers before the lamps begin flashing.

A programmable delay timer allows from 30 seconds to 2 minutes for the maintainer to get into position to view the lamps. A second programmable timer can be set to flash the lamps from 15 to 60 seconds. This test can be automatically repeated to allow the maintainer time to move to the other side of the crossing and view those flashers without returning to the bungalow.

- A Query menu provides access to version information for the software currently running on each microprocessor in the SSCC IIIA.

The SSCC IIIA contains a master processor and two (20-amp units) or four (40-amp units) slave processors. The Query menu allows the operator to view version information for the master and slave executable files as well as the master and slave boot files.

- For installations requiring isolation of the gate control circuit, Safetran can provide Isolated Gate SSCC IIIA units that include all of the features mentioned above plus individual positive (GC+) and negative (GC-) gate control connections. With these units, the gate circuit return is not referenced to battery.

These special SSCC IIIA units are identified by unique part numbers and the nomenclature “*ISOLATED GATE*” appearing above the part number on the front panel. Part numbers are 91185 for the 20-amp units and 91180 for the 40-amp units. Special lighting/surge panels, part numbers 91181-1 and 91181-2, are also required with these units.