

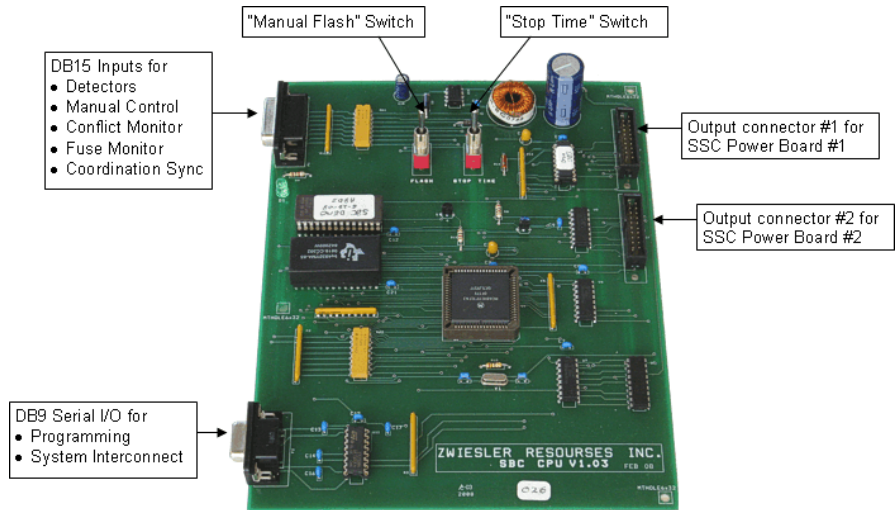
SBC-2400 Traffic Control System

An integrated set of components for advanced traffic control in minimum space and at minimum cost.

SBC-2400 Traffic Controller CPU

- Cost-effective single-board design
- Fits in pole-mounted traffic cabinet
- Utilizes 170 controller software
- 24 signal outputs
- 8 detector inputs
- 8 vehicle signal groups / phases
- 4 ped signal groups / ped phases
- 8 special signal groups / overlaps
- All signal groups / phase outputs assignable
- Fully actuated
- Time-of-day (TOD) coordination
- Police manual control
- Powered by 12 Vdc switching supply

The SBC-2400 Traffic Controller CPU meets worldwide needs for a high performance, cost-effective traffic controller.



The SBC-2400 CPU is based on the latest 170E controller design and uses the same Motorola 68HC11 processor. It can run 170E software and provides the same durability, ruggedness and dependability as the more than 80,000 Type 170 controllers in operation in the USA and in many foreign countries.

The SBC-2400 CPU is a single-board design and does not come with a housing. It is powered directly by the same 12 Vdc power supply that powers the rest of the SBC-2400 traffic cabinet. This approach makes the SBC-2400 Traffic Control System more compact and lower in cost than comparable 170 systems.

SSC Power Board

- Up to 12 signal lamps (4 phases) per Power Board.
- Up to 2 Power Boards per controller to drive up to 24 lamps (8 phases).
- Clean, single-board design.
- LED status indicator for each output.
- All inputs & outputs fused separately.
- Screw terminal connectors.

The SSC Power Board converts the logic level signals that it receives from the traffic controller to 110 or 220 Vac outputs to drive lamp circuits. All signal outputs are fused separately, as is a separate output for an external fan. If one of the signal fuses has blown, the controller software puts the intersection into flash.



A single SSC Power Board connected to an SBC-2400 Controller can drive up to 12 traffic signal lamp circuits (4 phases). Two SSC Power Boards can be connected to an SBC-2400 Controller to drive up to 24 traffic signal lamp circuits (8 phases).



Standard assembly with one SBC-2400 Traffic Controller CPU Board and two SSC Power Boards. The assembly is hinged for easy access to indicators, fuses and screw terminal connectors.

CMU Conflict Monitor Unit



- Monitors up to 6 signal channels for conflicts.
- In case of conflict, a signal to the controller puts intersection into flash.
- Single-board design with protective case.
- Easy programming via DIP switches.
- Fault indication via indicator LEDs.
- Powered by 12 Vdc.



The CMU Conflict Monitor option monitors up to 6 signal channels, which can be 12 Vdc, 110 Vac or 220 Vac, as specified at the time of order.

When two channels are found to be in conflict, the CMU sends a conflict signal to the controller, which then places the intersection into flash. The conflict signal is latched and can only be cleared by a manual reset.

The CMU is a clean, single board design and includes fault indicator lights. Power consumption is only 100 mA at 12 Vdc.

Traffic Cabinets



A pole mounted cabinet as small as 30 x 30 x 30 cm can house all SBC-2400 Traffic System electronics, including detectors. The cabinet should be ventilated and rain-proof to NEMA-3 (IP-64).

Complete traffic control systems, including traffic cabinets of different sizes, are available from Zwiesler Resources.

Provision for 12V Solar Power



All SBC-2400 Traffic System components are powered by 12 Vdc and are highly energy efficient, with solar power in mind. Please contact Zwiesler Resources for solar power options.

When AC power is available, 12V power is normally provided by a single off-the-shelf, regulated 12 Vdc, 1.3A switching power supply, Model RS-15-12.

Traffic Control Software

The SBC-2400 CPU comes with a 170 software package that has been simplified for ease of use. It provides 8 vehicle signal groups / phases, 4 pedestrian signal groups / pedestrian phases, and 8 special signal groups / overlaps. All outputs are assignable, allowing various signal group and phase combinations to handle most intersection requirements.

The software allows fully actuated operation and time-of-day (TOD) coordination. Programming is via a graphical user interface (GUI) on a laptop computer.

By being able to utilize available 170 software, the SBC-2400 CPU can be used for applications other than intersection control, such as ramp metering, sign control, and freeway incident management.