



The Topping Electronics Model 412C PROM module is designed for installation in all type 170 controllers. The 412C can be configured to operate with most software packages, providing the user with an interchange platform for data and programs. A series of soldered jumpers allows for selection of memory map and type of memory devices. Two front panel accessible eight position DIP switches may be used to uniquely identify a controller location, capabilities or any other needed parameter. A crystal controlled Real Time Clock Adjuster (RTCA) circuit may be used to extend the 170 controllers Down Time Accumulator to 72 hours with increased accuracy. A lithium battery is supplied for backup power for volatile memory devices and the RTCA. A battery switch controls backup power for the RTCA circuit only. Power to most components on the 412C is supplied via an on board regulator generating +5V from the 170 controller's +12V supply.

Meets or exceeds CALTRANS and Ontario Ministry of Transportation specifications.

Compatible with most popular traffic software packages.

Extended down time accumulator.

Positive mechanical stop to prevent upside down insertion damage.

Battery voltage monitor to warn of defective or missing lithium backup battery.

SPECIFICATIONS**Memory**

Total 64K Memory Map

EPROM: 2764, 27128 or 27256

SRAM: 6264 or 62256

NOVRAM: DS1225Y

Size

Fits standard 170 controller PROM module slot.

Mechanical

Mechanical stop prevents accidental insertion upside down.

Battery

Battery and battery holder for one 3.6V AA cell Lithium Thionyl Chloride backup battery.

Configuration

Five preset memory configurations are provided. Other special configurations can be provided.

Write Protect

A software controlled write protect circuit is provided to protect RAM during power downs.

Identification Switches

Two 8 pole identification switch packages are accessible through the front panel.

RTCA Circuit

A crystal controlled real time clock adjuster circuit is provided. This extends the down time accumulation ability of a 170 controller to 72 hours with increased accuracy.

Battery Switch

The battery switch controls the standby power for the RTCA circuit only. RAM backup power is always provided when a battery is installed. Note that the battery should be removed from the holder when the module is to be stored for periods in excess of one week.