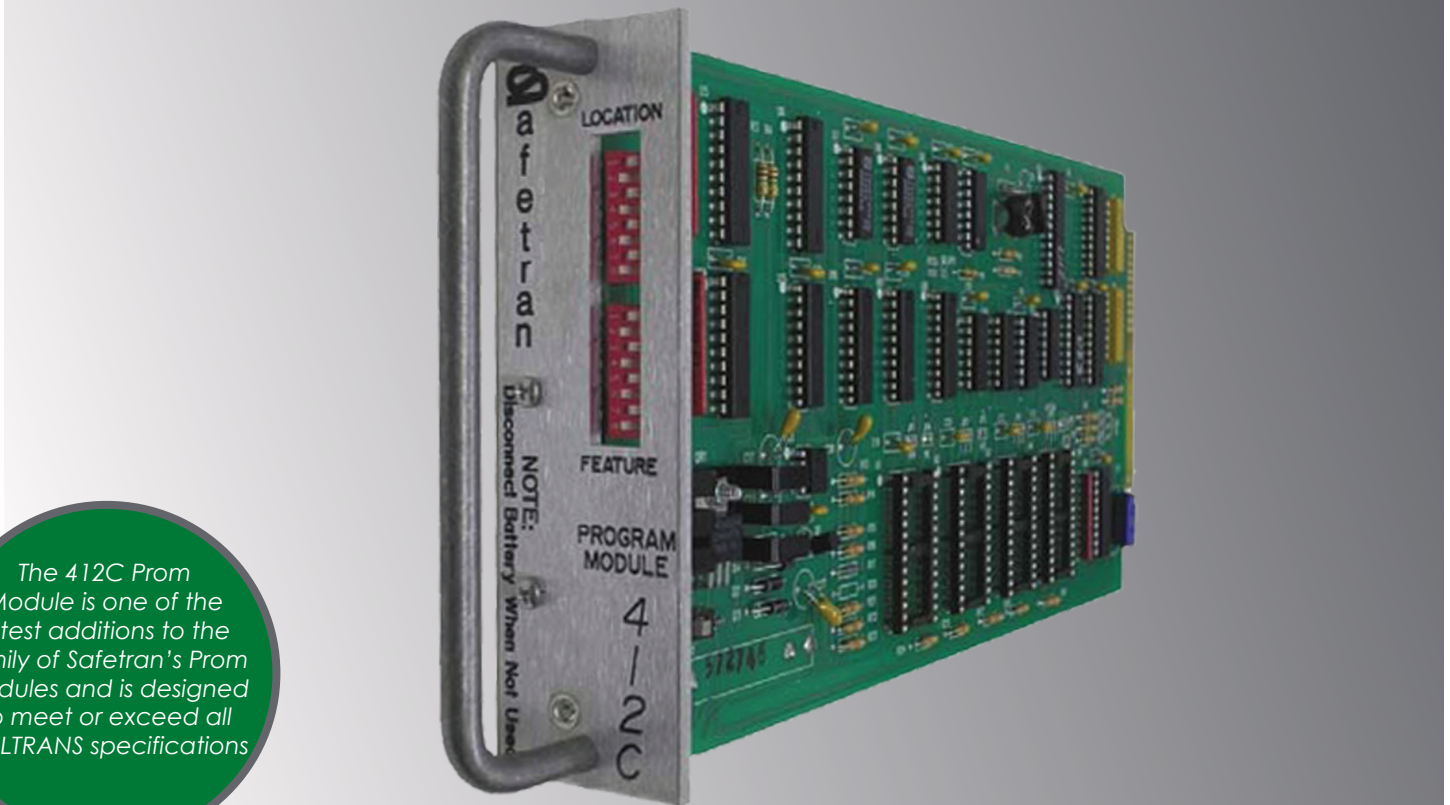


Model 412C PROM Module



The 412C Prom Module is one of the latest additions to the family of Safetran's Prom Modules and is designed to meet or exceed all CALTRANS specifications

About the 412C Module

The 412C Prom Module is one of the latest additions to the family of Safetran's Prom Modules and is designed to meet or exceed all CALTRANS specifications. Memory map and type of memory devices can be selected through a series of soldered jumpers. In addition, the 412C provides extended down time accumulation of up to 72 hours. This is an extension to the 4 hour and 15 minute downtime accumulator in the 170 controller. Two eight position dip switches mounted on the front panel allow for variable modes of software operation. A lithium battery is supplied for back-up power to the volatile memory devices and the down time accumulator circuitry. Battery is not installed during shipment. A write protect feature, under direct software control, provides additional capability to the 412C Prom Module.

- ### At A Glance
- One in a family of traffic PROM modules
 - Meets or exceeds all Caltrans specifications
 - Extended down time accumulator
 - New handle design
 - Positive latch to prevent insertion damage
 - Supports VLSI memory devices
 - Compatible with most popular software packages

Application

The 412C can be installed in all 170 controllers and based on the software requirements, configured to operate with most standard popular software packages. The 412C Prom Module provides the user with a platform to interchange data and programs.

Conveniences

The 412C provides several convenient and useful features for the 170 users. A new handle design is provided with the module, making insertion and removal faster and easier. In addition, there is a mechanical device to prevent the insertion of the module upside-down, thus eliminating damage to the module. There are four sockets that accept up to four 28 pin memory devices. The standard configuration provides for the installation of 2-27128 EPROMs (16K each) 1-1225 NOVRAM (8K) and 1- 6264 RAM (8K). HCT drivers are used in the 412C to increase noise immunity. A battery clip and on/off RTCA logic switch is provided. A lithium battery installed in the clip will provide back-up to onboard RAM and the down time accumulator circuitry.

Basic Specifications

- Memory - Total 64K memory map
- Size - Fits standard PROM module slot (meets Caltrans size specifications)
- Mechanical - Mechanical stop supplied to prevent accidental insertion upside-down
- Battery Back-Up - Battery clip to hold one "AA" cell is provided to back-up RAM and to operate the down time accumulator
- Memory Devices - 8K-32K EPROM, RAM, NOVRAM, and EEPROM
- Sockets Configuration:
 - Four 28-pin sockets
 - Four preset configurations are provided.
 - Other configurations are available
- Write Protect - Write protect circuitry provided to protect RAM during power downs
- Identification Switches - Two identification switch packages on front panel decoded at addresses 7000 and 7001
- RTCA Circuit - A real-time clock adjuster circuit is provided that extends the down time accumulation to 72 hours
- Logic Switch - A SPST logic switch is provided to control standby power to the RTCA circuit only. With switch in the ON or OFF position, RAM backup power is supplied constantly. Remove battery from clip when storing module for periods longer than 1 week

