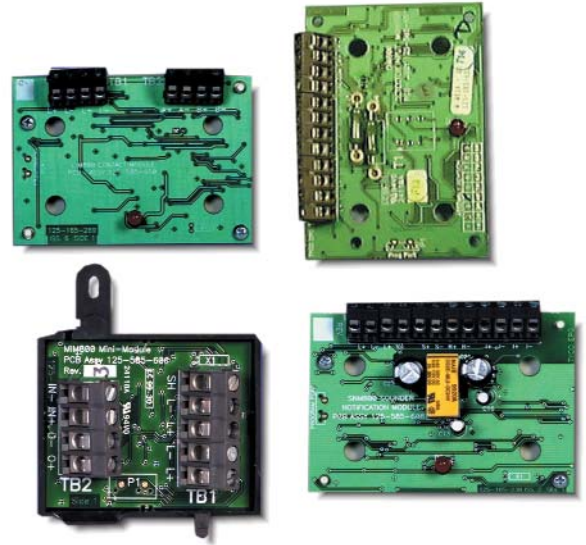# MINERVA® Marine

800 Series Ancillary Equipment

Features:

- Dramatically reduces cabling costs by using these modules
- For passenger ships incorporates loop powered sounders
- Reduced cabling costs for ventilation shut down, fire door, fire damper monitoring and control and sprinkler monitoring
- Higher systems integrity through continuous monitoring
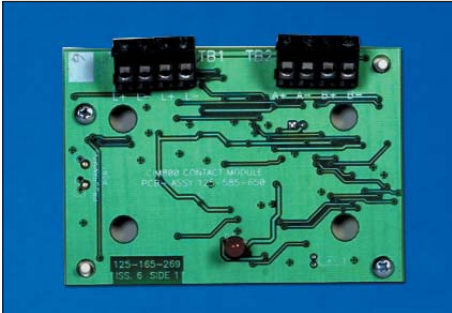
800 Series Ancillary Equipment

An extensive range of ancillary modules has been specifically designed for use with the MX/T2000 range of Fire Controllers.
The 800 range of ancillary modules provide the MX Fire Controller with a wide degree of systems application flexibility. This allows the field addressable loop from the control panel to both receive inputs to the system and control outputs from it.

This broad range of modules allows the scope of the fire detection system to be significantly extended beyond a simple fire detector alarm sounder based alarm system.

The command modules enable fire doors to be closed, fire dampers to be controlled, plus provide an interface to shut down HVAC and other plant control equipment. With the high systems integrity offered on the MX Controller the command modules can also be used to control a public address based evacuation system.

CIM800 Contact Input Module

The CIM800 is a flexible addressable input-monitoring device that fits in the standard ancillary housings.

The CIM800 provides a single input to current MX panels though this can be implemented as two separately wired spurs (Style B) or as a loop (Style A). Both spur and loop input wiring can be configured to monitor normally open or normally closed inputs. In addition both can be configured to initiate an alarm or short circuit fault message in the event of a short circuit on normally open monitoring circuits.
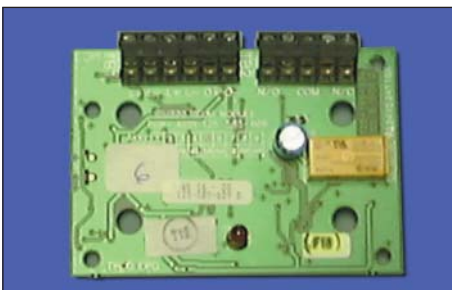
DIM800 Detector Input Module

The DIM800 is designed to power and monitor a circuit of low voltage conventional detectors and callpoints. The detection circuit is powered from an external 24V d.c. supply and is reset by the MX addressable panel. The DIM800 monitors the external 24V d.c. and provides a fault signal if it is lost. The input detection circuit can be wired as one or two spur circuits (Class B), one loop configured circuit (Class A) or one 4 wire detection circuit.

The DIM800 is designed to be compatible with most conventional detection products. Compatibility has been tested to date on the following products:
Compatible Thorn detectors:
M300 Series , M600 Series , S100 Series, H Series, S231F, S231F+, CP200

RIM800 Relay Interface Module

The RIM800 provides a single programmable relay output from the MX DIGITAL addressable loop which can be programmed for a variety of applications including signalling fire conditions to plant, machinery, fire doors, dampers & security systems.

The RIM800 relay coil is monitored. The RIM800 relay contact is rated for 2A @ 24V d.c. but can be used to switch mains voltage when used with the HVR800.
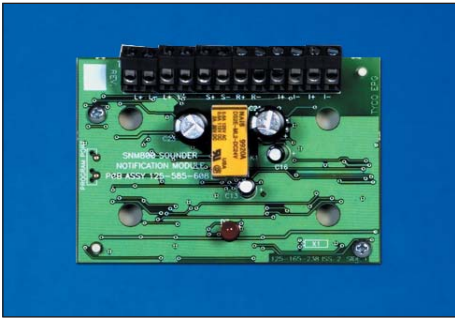
MIO800 Multi Input Output Module

The MIO800 is a general purpose interface module for use with MX Technology™ fire detection systems. It allows multiple input and output connections to be made between external equipment and the MX Digital loop. Three inputs and four outputs are provided. Each input and output can be programmed independantly using the MX Consys configuration tool to provide customised functionality.

An IP55 rated D800 style housing is used as the standard enclosure with the option of a DIN-Rail mounting kit for in-cabinet installations.

SNM800 Sounder Notification Module

The SNM800 is a remote addressable sounder circuit output device capable of switching sounder and speaker circuits up to 2A @ 24V d.c. or provide a monitored output facility for other applications. These can be used in addition to the two sounder circuits provided as standard on most MX detection panels.

The SNM800 can support sounder circuits wired as a spur (Class B – Style Y) or in a loop configuration (Class A – Style Z).

The SNM800 can be configured with a RIM800 to provide a secure monitored extinguishing release solenoid control.
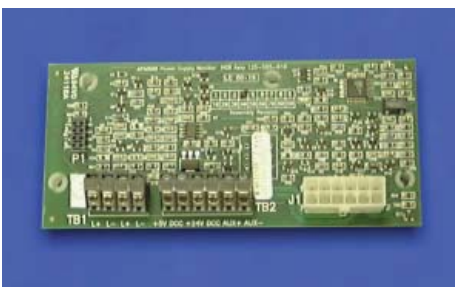
TM520 Timer Module

The TM520 provides an output that can be activated based on a delay time. If either the key-switch on the module is activated, or a predefined event within the control panel occurs then a timed delay (set between 10 minutes and 2 hours 10 minutes) is started. When the delay reaches zero the TM520 output is activated. The unit sounds an internal buzzer and shows a red LED when the output is active, and shows a yellow LED when the timer is counting down. To provide a warning that the delay is nearly over, the red LED and the buzzer will pulse 5 minutes before the end of the delay .

The TM520 requires a separate 24V DC supply to operate. The module is not addressable and will therefore not take an address on the loop.

APM800 Addressable Power Supply Monitor Module

The APM800 is an MX addressable power supply monitoring module which is usually used with the PSM800 power supply module to make an addressable power supply. The APM800 is designed to fix to studs on the top of the PSM800.
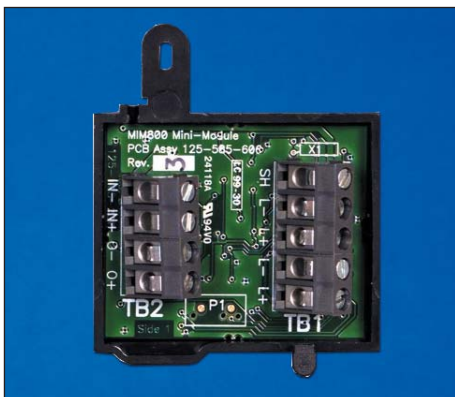
The APM800 monitors the PSM800 for mains failure, earth fault, battery charger fault and battery fault. It can reset the PSM800 resettable 24Vd.c. output and initiate a battery test which then reports battery voltage and current to the controller.

SB520 Sounder Boost Module

The SB520 enables the SNM800 to drive sounder circuits with higher currents whilst maintaining the reverse polarity integrity line monitoring.
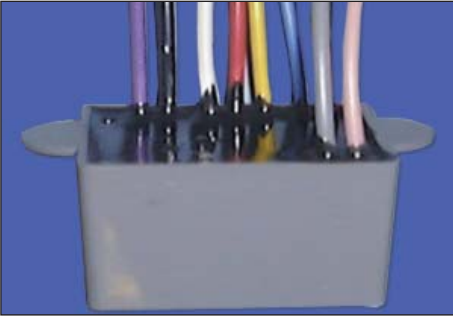
MIM800 Mini-Input Module

The MIM800 is a small MX addressable module designed for monitoring a single input circuit. The MIM800 can monitor normally open or normally closed inputs and provides open and short circuit monitoring of the line.

The MIM800 is designed for fitting in small devices such as flow switches, special detection devices and explosion proof callpoints. A variant of the MIM800 is used in all callpoints and pullstations.

HVR800 High Voltage Relay

The HVR800 is a non-addressable device which allows a low current mains rated relay to switch up to 10A. Alternatively a low voltage drive signal such as that provided by the RIM800 or 80 way mimic can be used to switch the integral mains relay.

CP820M Indoor Callpoint

The CP820M is an indoor MX addressable manual callpoint with programmable status LED. The CP820M is designed for LPCB approvals . The CP820M provides high speed communication to the MX panel of a manual fire alarm.

CP830M Outdoor Callpoint

The CP830M is an outdoor MX addressable manual callpoint with programmable status LED. The CP830M is designed for LPCB approvals . The CP830M provides high speed communication to the MX panel of a manual fire alarm.

MX Ancillary Module Housings

Double Gang Mounting Cover

The double gang mounting cover allows any of the 800 module range to be mounted individually onto a standard electrical double gang backbox.

The mounting cover allows either surface or flush mounting.

Ancillary Housing 8

The Ancillary Housing 8 can incorporate:

- 8 x standard 800 Ancillary modules

Additionally a stacking kit is available that doubles the number of modules that can be accommodated within the Ancillary 8 housing.

Ancillary Housing 3

The Ancillary Housing 3 is a low cost polycarbonate housing that can incorporate:

- 3 x standard 800 Ancillary modules

D800 Ancillary Housing

The D800 Ancillary Housing is a surface mount IP55 polycarbonate housing which will accomodate any one of the 800 module range except for the APM800/MIM800/TM520.

MX Ancillary Module Technical Look-Up Table

Module	No. Of Inputs	No. Of Outputs	Output Rating Used	No Of Addresses	Powered From	Operating Temperature	Operating Humidity	Dimensions (mm)
CIM800	2	N/A	-	1	Loop	-25ºC to +70ºC	<95% RH	60 x 84 x 14
DIM800	2	N/A	-	1	24V dc PSU	-25ºC to +70ºC	<95% RH	60 x 84 x 14
RIM800	N/A	1	24Vdc 2A	1	Loop	-25ºC to +70ºC	<95% RH	60 x 84 x 14
SB520	N/A	1	15A for sounders	-	24V dc PSU	-25ºC to +70ºC	<95% RH	60 x 84 x 14
SNM800	N/A	1	2A for sounders	1	24V dc PSU	-25ºC to +70ºC	<95% RH	60 x 84 x 14
TM520	1	1	24Vdc 1A	-	24V dc PSU	-20ºC to +70ºC	<95% RH	87 x 148 x 14
APM800	N/A	N/A	N/A	1	PSM800	-25ºC to +70ºC	<95% RH	57 x 127 x 25
MIM800	1	1	4.5mA	1	Loop	-25ºC to +70ºC	<95% RH	13 x 48 x 57
HVR800	1	1	10A at 24Vdc/ 240Vac	-	24Vdc/ 24Vac/ 120Vac/ 240Vac	-25ºC to +70ºC	<95% RH	26.5 x 73.6 x 41.5
CP820M	N/A	N/A	N/A	1	Loop	-25ºC to +70ºC	<95% RH	87 x 87 x 19
CP830M	N/A	N/A	N/A	1	Loop	-25ºC to +70ºC	<95% RH	135 x 135 x 30
MIO800	3	4	24Vdc 2A	1	Loop	-25ºC to +70ºC	<95% RH	72 x 110 x 18

tyco / *Safety Products*