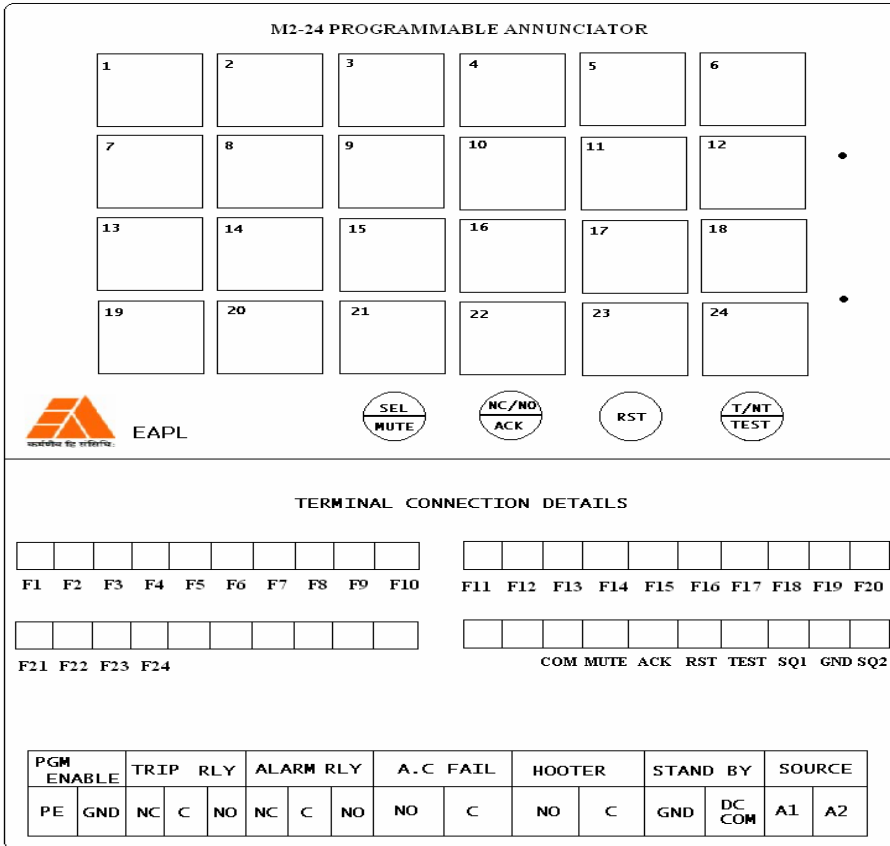


M2-12/16/24 is a powerful Microprocessor based programmable Annunciator with control output. It has selectable NO or NC type fault I/Ps for each Window. Trip or Alarm relay selection for each window and External terminals for remote operations.



A1,A2 : Source Voltage (85V to 270V AC/DC)

DC COM & GND : Stand by DC supply (12V DC)

HCOM & HNO : Relay contacts for Hooter during power Fail.

ACFCOM & ACFNO : Relay contacts for indicating AC failure

PE & GND : Short - Program Enable
Open – Program Disable

COM : Common fault I/P Terminal.

F1---- F24(M2-24) : Individual fault I/P terminals for
F1----F16(M2-16) respective window (Potential free).
F1----F12(M2-12) Connect WRT COM

MUTE, ACK, RST,TEST : Front panel push buttons, Rear external push button connection for remote operations.
Connect WRT GND

SEQ1, SEQ2 : selection of required sequence of operations.
Connect WRT GND

Testing of windows for working condition

- 1) Apply source voltage between A1 & A2 (85V to 270V AC / DC)
- 2) Remove the short between PE & GND to operate in RUN mode.

Press

- 2) Test Button - All windows starts flashing and relay switches on.(Trip / Alarm)
- 3) Mute Button - Relay switches OFF (Trip / Alarm)
- 4) ACK Button - Flashing window becomes steady to acknowledge the fault
- 5) RST Button - Window switches OFF indicating fault is rectified.

Selection of Standard Sequence of Operation :

- 1) SEQ1, SEQ2 Terminals are left open - unit works in Manual Reset Mode.
- 2) SEQ1 is shorted to GND and SEQ2 left open - unit works in Auto Reset Mode.
- 3) SEQ1 is left open & SEQ2 is shorted to GND- unit works in Manual Reset + Repeat Alarm mode.
- 4) SEQ1 & SEQ2 are shorted to GND unit works in First in First out Mode

How to Program

Short PE & GND terminals at the rear.

Press SEL/MUTE button, 1st window glows. By pressing NC/NO/ACK Button, the Red Led can be toggled from ON to OFF and vice versa. If the RED LED glows the input fault terminal can be programmed for NC type sensing & if RED LED is OFF input fault terminal can be programmed for NO type sensing.

By pressing T/NT/TEST Button, GREEN LED can be toggled from ON to OFF and vice versa. If the GREEN LED glows the output programmed is for ALARM RELAY and if the GREEN LED is OFF the output programmed is for TRIP RELAY.

Press SEL button again, second window glows & by pressing the NC /NO and T / NT Buttons required input sensing and relay output can be programmed. Follow the above procedure for rest of the windows. Once the programming of the windows is complete, remove short at PE & GND terminals, to save the program.

Example to Program 1 & 5 Window

Step1.

Short PE & GND terminals on rear side.
Press SEL/MUTE button on front panel, first window glows

Step2.

Now press NC /NO button to select input fault as NC or NO. If NO is required as fault input sensing, press NC /NO button to select RED LED(OFF), else if NC is required as input fault sensing select Red LED ON.

Step3.

Press the T/NT switch on front panel to select Alarm or Trip relay. If Alarm relay to be programmed, press T/NT switch to select Green LED ON else, select Green LED OFF for Trip relay.

Step4.

To program 5th window press SEL button till window 5 glows, once, 5th window is selected. Repeat the step2 & step3.

Step5.

Remove the short at program Enable .Now the Annunciator is ready for application.

RUN Mode

When fault occurs in 1st or 5th, corresponding faulty window starts flashing and respective relay (Trip or Alarm) changes over.

Press

- a) MUTE Button : Relay switches OFF (Trip or Alarm) & window continues flashing.
- b) ACK Button: Flashing of window stops and becomes steady.
- c) RST: Steady indication goes OFF indicating fault is rectified.

SEQ1, SEQ2 - OPEN

SEQUENCE OF OPERATION (Manual Reset)			
Fault	Switch Operation	Window	Relay
NO	-----	OFF	OFF
YES	-----	Flashing	ON
YES	Mute	Flashing	OFF
YES	Ack	Steady ON	OFF
YES	Manual Reset	Steady ON	OFF
Rectified	Manual Reset	OFF	OFF

SEQ1 - GND SEQ2 - OPEN

SEQUENCE OF OPERATION (Auto Reset)			
Fault	Switch Operation	Window	Relay
NO	-----	OFF	OFF
YES	-----	Flashing	ON
YES	Mute	Flashing	OFF
YES	Ack	Steady ON	OFF
Rectified	Automatic Reset	OFF	OFF

SEQ1 - OPEN SEQ2 - GND

MANUAL RESET+ REPEAT ALARM			
FAULT	SWITCH OPERATION	WINDOW	RELAY
NO	-----	OFF	OFF
YES	-----	FLASHING	ON
YES	MUTE	FLASHING	OFF
YES	ACK	STEADY ON	OFF
YES	RESET	FLASHING	ON
YES	MUTE	FLASHING	OFF
YES	ACK	STEADY ON	OFF
Rectified	RESET	OFF	OFF

SEQ1 - GND SEQ2 - GND

FIFO SEQUENCE			
FAULT	SWITCH OPERATION	WINDOW	RELAY
NO	-----	OFF	OFF
F1	-----	FAST FLASHING	ON
F2		F2 FAST FLASHING F1 Slow FLASHING	ON
F3		F3 FAST FLASHING F2 SLOW FLASHING F1 STEADY	ON
YES	MUTE	ABOVE CONDITION	OFF
YES	ACK	STEADY ON	OFF
RECTIFIED	RESET	OFF	OFF

FAULT INPUT AND OUTPUT SELECTION FOR PARTICULAR WINDOW					
Switch operation	RED LED		GREEN LED		PROGRAM SELECTED FOR
	<u>ON</u>	<u>OFF</u>	<u>ON</u>	<u>OFF</u>	
NC /NO	√	----	----	----	NC TYPE
NC /NO	----	√	----	----	NO TYPE
T / NT	----	----	√	----	ALARM Relay
T / NT	----	----	----	√	TRIP Relay

CAUTION:

- 1) After programming remove PE & GND shorting.
- 2) Connect RC Filter across the I/P of Alarm or Contactor to have better noise immunity.