



## OPERATING INSTRUCTIONS

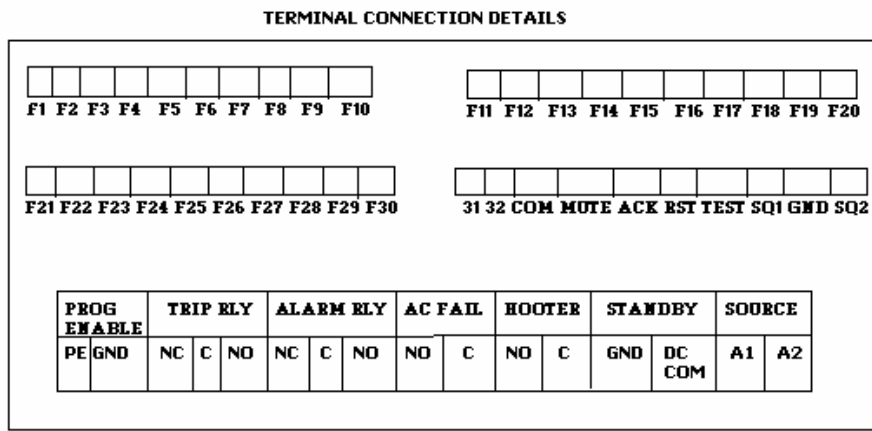
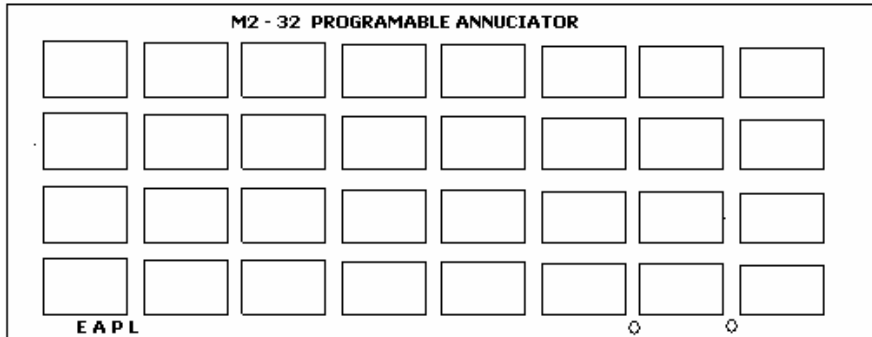
**Model : M2-32**

OPI No. : OPI/129

PAGE : 01 of 05

DATE : 10/12/2009

M2-32 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---- F32** : Individual fault I/P terminals for respective window (Potential free). Connect WRT COM.
- MUTE, ACK, RST, TEST** : External push buttons, 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**

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

	<b>OPERATING INSTRUCTIONS</b>  <b>Model : M2-32</b>	OPI No. : OPI/129
		PAGE : 01 of 05
		DATE : 10/12/2009

### 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, 1<sup>st</sup> 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.

	<b>OPERATING INSTRUCTIONS</b>	OPI No. : OPI/129
	<b>Model : M2-32</b>	PAGE : 01 of 05
		DATE : 10/12/2009

**Step4.**

To program 5<sup>th</sup> window press SEL button till window 5 glows, once, 5<sup>th</sup> 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 1<sup>st</sup> or 5<sup>th</sup>, 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**

<b>SEQUENCE OF OPERATION (Manual Reset)</b>			
<b>Fault</b>	<b>Switch Operation</b>	<b>Window</b>	<b>Relay</b>
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**

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



## OPERATING INSTRUCTIONS

Model : M2-32

OPI No. : OPI/129

PAGE : 01 of 05


DATE : 10/12/2009

### SEQ1 - OPEN SEQ2 - GND

<b>MANUAL RESET+ REPEAT ALARM</b>			
<b>FAULT</b>	<b>SWITCH OPERATION</b>	<b>WINDOW</b>	<b>RELAY</b>
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

<b>FIFO SEQUENCE</b>			
<b>FAULT</b>	<b>SWITCH OPERATION</b>	<b>WINDOW</b>	<b>RELAY</b>
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

	<b>OPERATING INSTRUCTIONS</b>	OPI No. : OPI/129
	<b>Model : M2-32</b>	PAGE : 01 of 05
		DATE : 10/12/2009

<b>FAULT INPUT AND OUTPUT SELECTION FOR PARTICULAR WINDOW</b>					
<b>Switch operation</b>	<b>RED LED</b>		<b>GREEN LED</b>		<b>PROGRAM SELECTED FOR</b>
	<u><b>ON</b></u>	<u><b>OFF</b></u>	<u><b>ON</b></u>	<u><b>OFF</b></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.