



## CONVENTIONAL FIRE ALARM PANEL GST116

### FEATURES

- ◆ Microprocessor based controller
- ◆ 16 detector zones
- ◆ Maximum 25 detectors in each zone
- ◆ Day / night mode
- ◆ Short / open circuit detection
- ◆ Compact size
- ◆ Easy programming

### DESCRIPTION

GST116 Conventional Fire Alarm Control Panel is a microprocessor based multi-zone fire alarm control panel which is fully complied with European Standard EN54-2. The configuration of the system is programmable and saved in non-volatile memory that will remain the program on the panel even when the panel lost both the main power and battery power.

The panel has 16 detector zones. Each zone can be connected with up to 25 GST smoke or heat detectors while using end of line resistor; or 15 smoke detectors or heat detectors with the active end of line unit. The manual call points can be wired in the same detector zone with the smoke detectors or heat detectors. The number of the manual call points is unlimited.

### SPECIFICATION

Number of detector zone	16
Number of sounder output	4
Power supply	187~242Vac
Operating temperature	0°C to 40°C
Detector loop voltage	24±4Vdc
Max. number of detectors per loop with end of line resistor	25
Max. number of detectors per loop with active end of line unit	15
Detector impedance for fire alarming	150Ω ~ 1.5kΩ (normally 470Ω)
End line resistor of detector loop	4.7kΩ
Sounder output voltage	24±4Vdc
Max. output current	1A
End line resistor of sounder output	4.7kΩ
Auxiliary power output	24Vdc, 0.5A
Standby battery	7Ah
Dimension	380 x 320 x 95mm



GST116

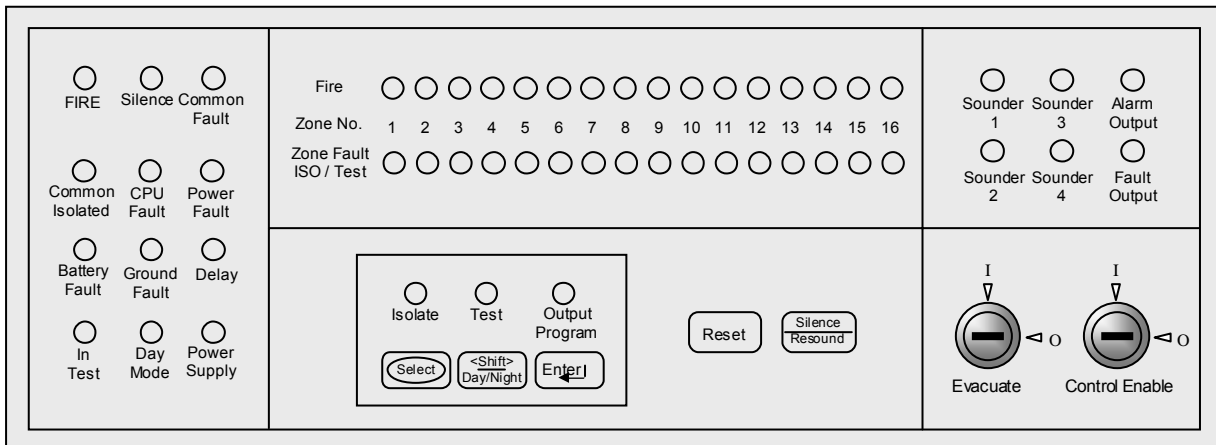
The panel has five supervisory outputs and one non-supervisory output. They are four supervisory sounders and one supervisory alarm output and one non-supervisory fault output (N.O. and N.C. contact).

The panel has functions of alarm indication, fault indication, testing mode and isolation mode, Day / Night Mode selection.

The operation of the panel is simple. All control functions and programming are made by the keypad and switches on the panel or the switches and jumpers on the circuit board. No other programming tools are required. Two keys are provided to ensure secured operation of the control panel.

This model provides a simple and low-cost solution to protect a small space from fire such as houses, shops, hotels, schools and factories.

# ILLUSTRATION



## LAYOUT OF PANEL GST116

DETECTOR ZONE 1	○ INPUT 1 -		L	○	POWER SUPPLY
	○ INPUT 1 +		EARTH	○	220 Vac
DETECTOR ZONE 2	○ INPUT 2 -		N	○	
	○ INPUT 2 +				
DETECTOR ZONE 3	○ INPUT 3 -		EARTH	○	EARTH TO CHASIS
	○ INPUT 3 +		PW ON	○	POWER ON SIGNAL
DETECTOR ZONE 4	○ INPUT 4 -		COM 0V	○	COMMON, 0V
	○ INPUT 4 +		COM DAY	○	DAY MODE SIGNAL
DETECTOR ZONE 5	○ INPUT 5 -		COM FIRE	○	FIRE ALARM SIGNAL
	○ INPUT 5 +		COM ISO	○	ISOLATION SIGNAL
DETECTOR ZONE 6	○ INPUT 6 -		FLT	○	FAULT SIGNAL
	○ INPUT 6 +	REPEATER OUTPUT	Z8	○	ZONE 8 ALARM SIGNAL
DETECTOR ZONE 7	○ INPUT 7 -		Z7	○	ZONE 7 ALARM SIGNAL
	○ INPUT 7 +		Z6	○	ZONE 6 ALARM SIGNAL
DETECTOR ZONE 8	○ INPUT 8 -		Z5	○	ZONE 5 ALARM SIGNAL
	○ INPUT 8 +	DETECTOR ZONE	Z4	○	ZONE 4 ALARM SIGNAL
DETECTOR ZONE 9	○ INPUT 9 -		Z3	○	ZONE 3 ALARM SIGNAL
	○ INPUT 9 +		Z2	○	ZONE 2 ALARM SIGNAL
DETECTOR ZONE 10	○ INPUT 10 -		Z1	○	ZONE 1 ALARM SIGNAL
	○ INPUT 10 +				
DETECTOR ZONE 11	○ INPUT 11 -		AUX	○	24 Vdc POWER
	○ INPUT 11 +	AUX SUPPLY	+	○	OUTPUT
DETECTOR ZONE 12	○ INPUT 12 -				
	○ INPUT 12 +				
DETECTOR ZONE 13	○ INPUT 13 -		NO	○	OUTPUT CONTACT
	○ INPUT 13 +	FAULT OUTPUT	COM	○	FOR FAULT
DETECTOR ZONE 14	○ INPUT 14 -		NC	○	
	○ INPUT 14 +				
DETECTOR ZONE 15	○ INPUT 15 -		+	○	ALARM OUTPUT
	○ INPUT 15 +	ALARM OUTPUT	-	○	24Vdc, 1A
DETECTOR ZONE 16	○ INPUT 16 -				
	○ INPUT 16 +	BAT	+	○	STANDBY BATTERY
			-	○	24Vdc
SOUNDER 1 24Vdc, 1A	○ OUTPUT 1 +		SOUNDER	+	SOUNDER START
	○ OUTPUT 1 -	SOUNDER START	-	○	INPUT
SOUNDER 2 24Vdc, 1A	○ OUTPUT 2 +				
	○ OUTPUT 2 -	SOUNDER OUTPUT	+	○	DAY MODE
SOUNDER 3 24Vdc, 1A	○ OUTPUT 3 +		-	○	INPUT
	○ OUTPUT 3 -				
SOUNDER 4 24Vdc, 1A	○ OUTPUT 4 +				
	○ OUTPUT 4 -				

## TERMINALS OF GST116

**MASTER CONTROLS CO., LTD.**

100/69 Vongvanit Building B, 22<sup>nd</sup> Floor, Rama 9 Rd., Huaykhwang, Bangkok 10320 Tel: 02645-1440-43 Fax: 02248-7701