

ANNUNCIATOR

(MODULE-TYPE WITH RELAY + PLC)



24 Windows Guide
YSANS-38-ILO-D110

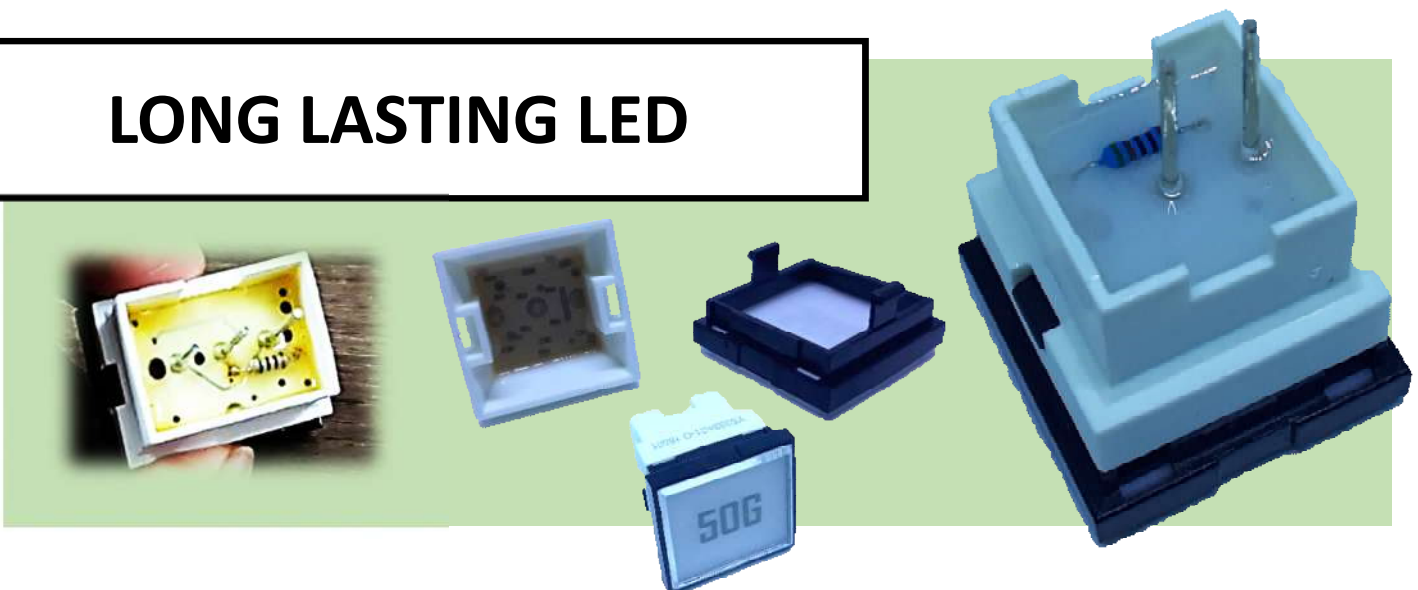
COMPLETE MODULE-TYPE



SQUARE LAMP ONLY

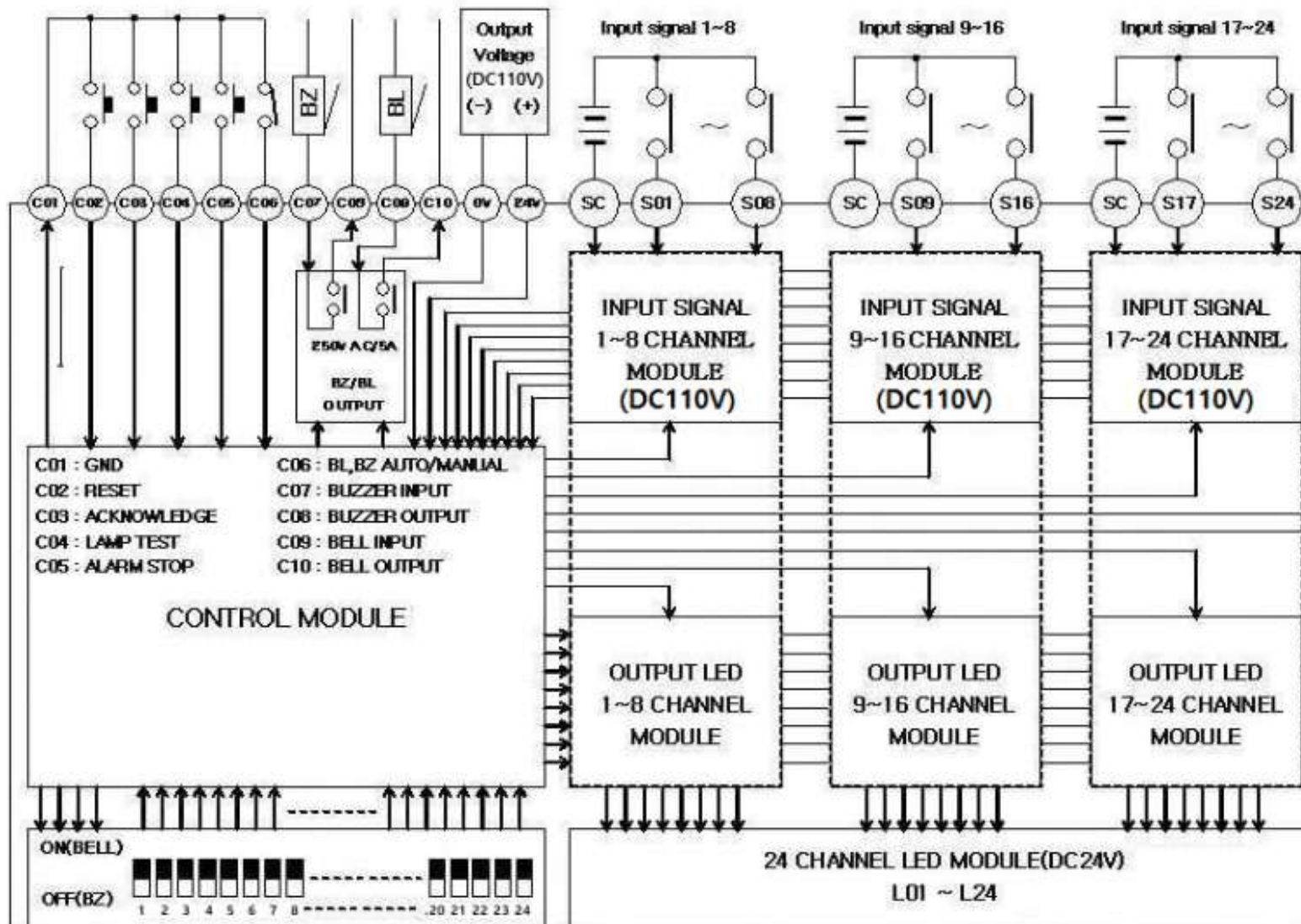


LONG LASTING LED



24 Windows Product Circuit Diagram

Inside Circuit Diagram(24CH)



Illuminated Annunciator System

1. Overview

Illuminate annunciator system is the intelligent alarm system that is alarmed trouble for operation in all alarm system requirements

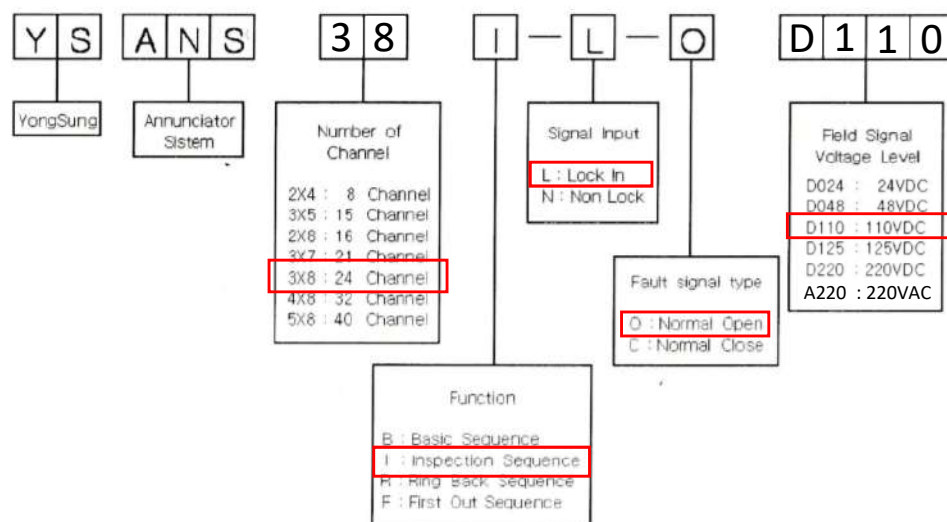
This is controlled by SCM(Single Chip Microcomputer) and used a luminous semiconductor.

The advantage of system is exceptional function, reliability and low electric power consumption.

2. Function and Features

- (1) Illuminate annunciator system can be alarmed 8, 15, 16, 21, 24, 32 and 40 circuit signals and sent directly by light signal through rectangle lamp with fonts.
- (2) This system can be defined variably by needs the alarm signal for input signal circuit.
 - 1) It can be selected A or B contact by user
 - 2) It can be either high pitched(buzzer), or low pitched(bell) in alarm tone
 - 3) Alarm sound is selected minimum process of manual return or automatic return(15sec)
- (3) Sound alarm equipment is possible to send contact of alarm control of low, high pitched simultaneously. Therefore user can operate directly buzzer or bell
- (4) Variable sequence for indication (4 types)
- (5) Input signal applies to DC(Direct Current) 220V, 110V, 48V and 24V

3. Type and Classification



4. Performance Summary

Rating Voltage		DC24, DC110V, DC125V, DC220V, AC220V (Fixed at factory)
Power Consumption	YS ANS 8	Above 10W
	YS ANS 15	Above 12W
	YS ANS 16	Above 13W
	YS ANS 21	Above 20W
	YS ANS 24	Above 25W
	YS ANS 32	Above 30W
	YS ANS 40	Above 45W
	YS ANS 64	Above 60W
Fault Signal	Type	NO / NC
	Duration Time	Above 15ms
	Field Contact Voltage	DC24, DC48V, DC110V, DC125V, DC220V, AC220V (Fixed at factory)
Lamp Rating		DC24V 20mA
Lamp Color		Red, Green, Yellow, Orange, Blue, White
Ambient Temperature		-25 ~ 50°C
Relative Humidity		45 ~ 85%

5. Description of Indication and Function

(1) Indication(New Rectangle Lamp 34-NRL34)

- When trouble signal is got by operation for function, Indicator is lighting and flickering

(2) Ground(C01)

- This function is operated with push button switch and rotary switch as power of RESET, ACKNOWLEDGE, LAMP TEST, OPERATION TEST, BUZZER and BELL AUTO/MANUAL

(3) Reset(C02)

- Signal is input from C01 to terminal of C02, All alarm signal is extinguished and ANS is returned to initialization.
Also all function is operated normally according to user's setting after setting internal function, function of BUZZER, BELL and AUTO/MANUAL then RESET signal is input
but, ANS can be performed after inputting signal of Acknowledge(C03) and Alarm stop(C05)

(4) Acknowledge(C03)

- Signal is input from C01 to terminal of C03, indicator lamp changes from flickering to lighting

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- (5) Lamp test(C04)
- Signal is input from C01 to terminal of C04, all indicator can be checked as lighting then lighting is turned off after input terminal of reset is input from signal of C01
- (6) Alarm stop(C05)
- Signal is input from C01 to terminal of C05, alarm signal (Buzzer or Bell) according to trouble signal is extinguished
- (7) BELL, BUZZER auto/manual(C06)
- Signal is input from C01 to terminal of C06, function is set as AUTO, when trouble signal is got, alarm signal is operated and turned off during 15sec automatically
- The other side, Signal is not input from C01 to terminal of C06, function is set as MANUAL when trouble signal is got, signal alarm is operated automatically and turned off by inputting signal from C01 to terminal of C02 and C03 manually
- (8) Alarm signal(C07~C10) – refer to terminal circuit
- Alarm signal of BUZZER : C07, C08 (CONTACT : AC250V 3A / DC30V 5A)
 - Alarm signal of BELL : C09, C10 (CONTACT : AC250V 3A / DC30V 5A)
- (9) Input signal of trouble – refer to terminal circuit
- SC(signal common) : connecting 0V of voltage of input signal of incident
 - S01~S64(signal channel) : inputting +V of voltage of input signal of incident through A or B contact
- (10) Selector switch for BUZZER, BELL
- Each channel of Right side in back of annunciator system can be selected Buzzer or Bell according to high or low incident signal as Picture 1.

CHANNEL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CHANNEL NO.	17	18	19	20	21											
ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<Picture. 1> 21 Sound alarm Selector Switch

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6. Indicating type of Rear Terminal Block

YS ANS - 38 I-L-O D110					
	C01	GROUND		S07	SIGNAL INPUT 7(+)
	C02	RESET		S08	SIGNAL INPUT 8(+)
	C03	ACKNOWLEDGE		S09	SIGNAL INPUT 9(+)
	C04	LAMP TEST		S10	SIGNAL INPUT 10(+)
	C05	ALARM STOP		S11	SIGNAL INPUT 11(+)
	C06	BZ,BL A / M		S12	SIGNAL INPUT 12(+)
	C07	BUZZER INPUT		SC	SIGNAL INPUT 13~24 COM(-)
	C08	BUZZER OUTPUT		S13	SIGNAL INPUT 13(+)
	C09	BELL INPUT		S14	SIGNAL INPUT 14(+)
	C10	BELL OUTPUT		S15	SIGNAL INPUT 15(+)
	P1	RATING VOLTAGE		S16	SIGNAL INPUT 16(+)
	P2	RATING VOLTAGE		S17	SIGNAL INPUT 17(+)
	SC	SIGNAL INPUT 1~12 COM(-)		S18	SIGNAL INPUT 18(+)
	S01	SIGNAL INPUT 1(+)		S19	SIGNAL INPUT 19(+)
	S02	SIGNAL INPUT 2(+)		S20	SIGNAL INPUT 20(+)
	S03	SIGNAL INPUT 3(+)		S21	SIGNAL INPUT 21(+)
	S04	SIGNAL INPUT 4(+)		S22	SIGNAL INPUT 22(+)
	S05	SIGNAL INPUT 5(+)		S23	SIGNAL INPUT 23(+)
	S06	SIGNAL INPUT 6(+)		S24	SIGNAL INPUT 24(+)

7. Setting method of Function and Sequence

- When annunciator is divided into body and above case, User can see function and sequence selector switch then set function and sequence circuit

SW NO.

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

ON

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

OFF

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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※ N.O : Normal Open L.I : Lock In
N.C : Normal Close N.L : Non Lock

	SW1	SW2	SW3	SW4	SW5		SW6		SW7	SW8
Basic Sequence	OFF	OFF	-	-	N.O	OFF	L.I	OFF	-	-
					N.C	ON	L.L	ON		
Inspection Sequence	ON	OFF	-	-	N.O	OFF	Only L.I		-	-
					N.C	ON				
Ring Back Sequence	OFF	ON	-	-	N.O	OFF	L.I	OFF	-	-
					N.C	ON	N.L	ON		
First Out Sequence	ON	ON	-	-	N.O	OFF	L.I	OFF	-	-
					N.C	ON	N.L	ON		

It is possible to select Alarm sound either manual return or automatic return in all sequence

8. Definition of Sequence

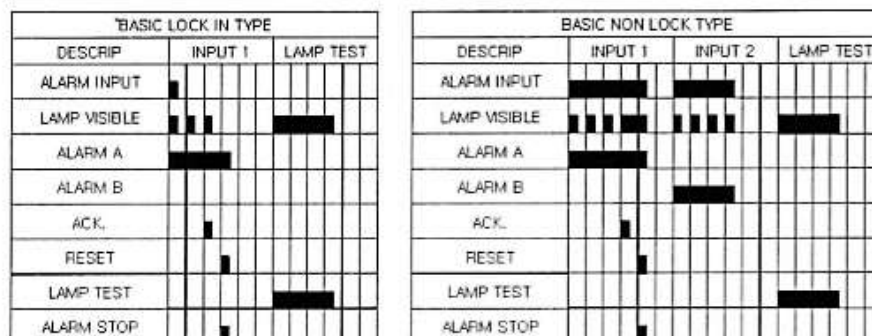
(1) Basic sequence

It is used to be alarm system frequently.

If operation is normal, Lamp is turned off but, incident signal is occurred, pertinent lamp starts flicking with alarm signal then user notice about abnormal situation.

If user pushes ACK and Alarm button, Lamp is turned off and alarm signal is extinguished then return to normal situation.

Timing Diagram



(2) Inspection sequence

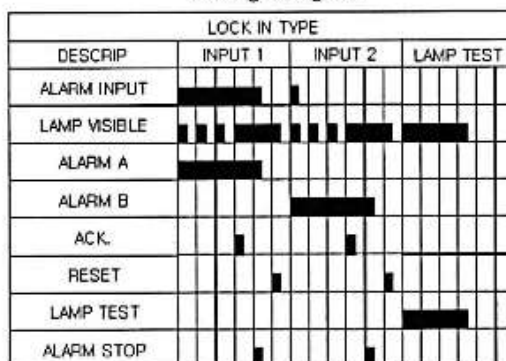
All function of system is same as basic sequence including memory function of alarm input signal

Annunciator system can keep indicating abnormal place even though a defect place is returned to normal condition and user pushes ACK button and Alarm button, Lamp is turned off from flicking state and alarm signal is extinguished.

Alarm lamp keep lighting for notifying defect place even if input signal is canceled and lamp is turned off according to pushing Reset button then system is turned to normal condition

Annunciator system is only for lock in type

Timing Diagram



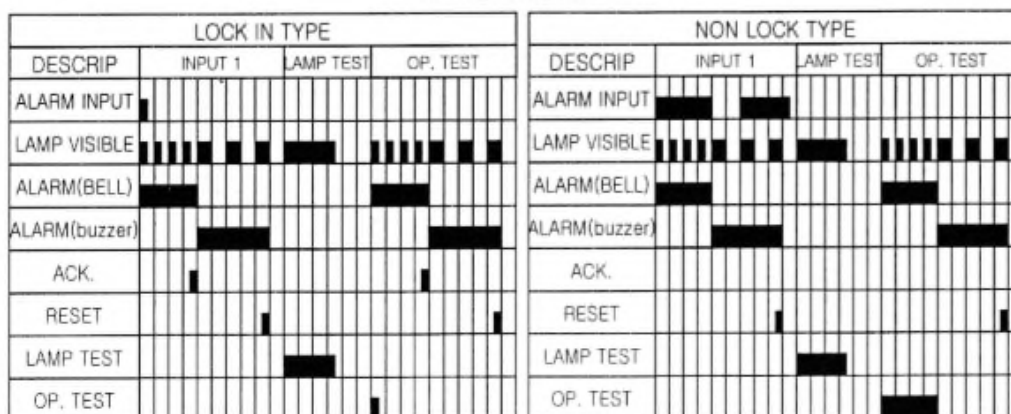
(3) Ring rear sequence

Annunciator system is same as basic sequence, but when alarm starts, lamp is fast flicking with alarming first step. At this time if pushing ACK. button, lamp changes to slow flicking with alarming second step

For stopping second alarm step, operator has to push reset button

In case of NON LOCK, system can notify operation from alarm condition to normal condition

Timing Diagram



(4) First out sequence

This sequence is for distinguishing between first alarm(reason) and second alarm(result)

Alarm lamp of first abnormal signal is fast flicking with alarm sound then second abnormal signal is slow flicking

At this time if pushing ACK. button, alarm sound is stoped and lamp changes from fast flicking to slow flicking

Finally other alarm lamps keep lighting and turning off as cancelling abnormal signal

At this time if pushing Reset button, system is returned to normal condition.

but, After pushing ACK button, if abnormal signal is occurred before pushing Reset button, alarm lamp is indicated as slow flicking

Timing Diagram

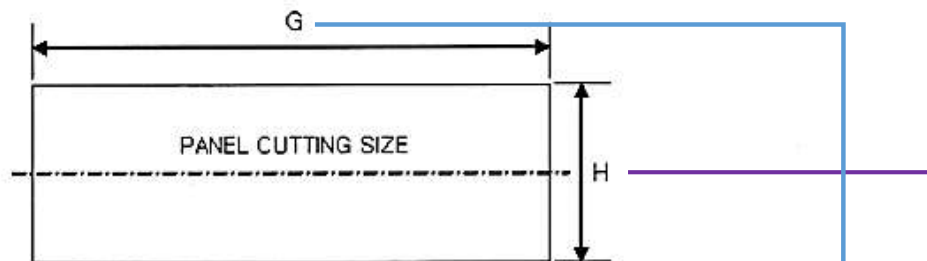
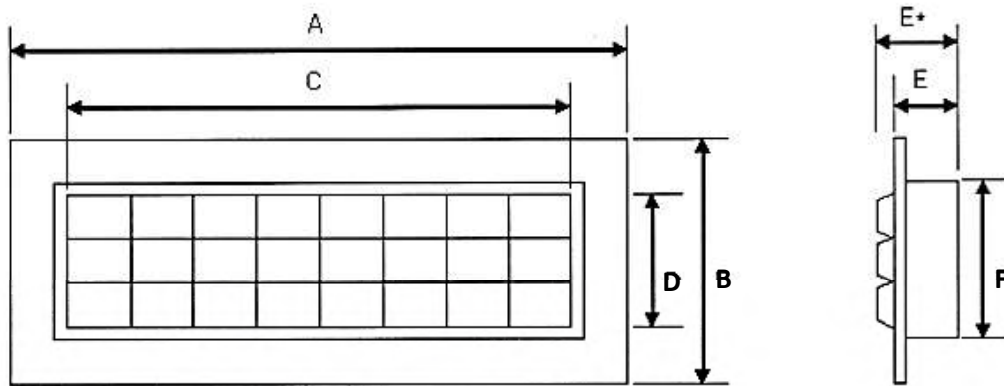
LOCK IN TYPE																
DESCRIP	INPUT 1				INPUT 2				LAMP TEST				OP. TEST			
ALARM INPUT 1	1	1	0	0	0	0	0	1	1	1	1	0	0	0	0	
ALARM INPUT 2	0	0	0	1	0	0	1	1	1	1	1	0	0	0	0	
LAMP VISIBLE 1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	
LAMP VISIBLE 2	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	
ALARM A	1	1	1	0	0	1	1	1	0	0	0	0	1	1	0	
ACK.	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	
RESET	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	
LAMP TEST	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	
OP. TEST	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	

NON LOCK TYPE																
DESCRIP	INPUT 1								LAMP TEST				OP. TEST			
ALARM INPUT 1																
ALARM INPUT 2																
LAMP VISIBLE 1																
LAMP VISIBLE 2																
ALARM A																
ACK.																
RESET																
LAMP TEST																
OP. TEST																

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9. Shape and Panel Attachment Dimension



Type	Dimension (Unit:mm)								
	A	B	C	D	E	E*	F	G	H
8CH (2X4)	210	110	160	60	192	197	90	192	92
15CH (3X5)	250	140	200	90	192	197	120	232	122
16CH (2X8)	370	110	320	60	192	197	90	352	92
21CH (3X7)	330	140	280	90	192	197	120	312	122
24CH (3X8)	370	140	320	90	192	197	120	352	122
32CH (4X8)	370	170	320	120	192	197	150	352	152
40CH (5X8)	370	200	320	150	192	197	180	352	182
64CH (8X8)	370	290	320	240	192	197	270	352	272

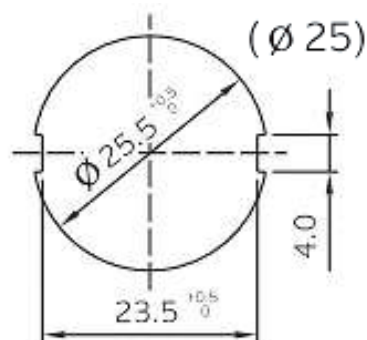
Notes) Window size : 30mm×40mm(approx)

A : $(n \times 40) + 50$, B : $(n \times 30) + 50$, C : $n \times 40$, D : $n \times 30$, E : 192, E* : 197

F : $(n \times 30) + 30$, G : A-18, H : F+2

Cutting Size for 4 Push Buttons

Ø25



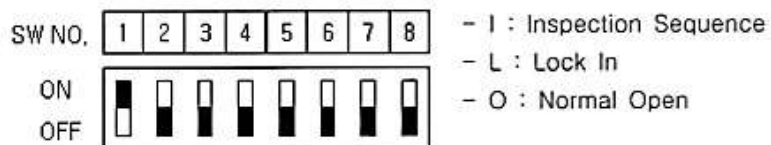
10. User Guide

(In case of YS ANS 37 I-L-O D110 : Basic Sequence)

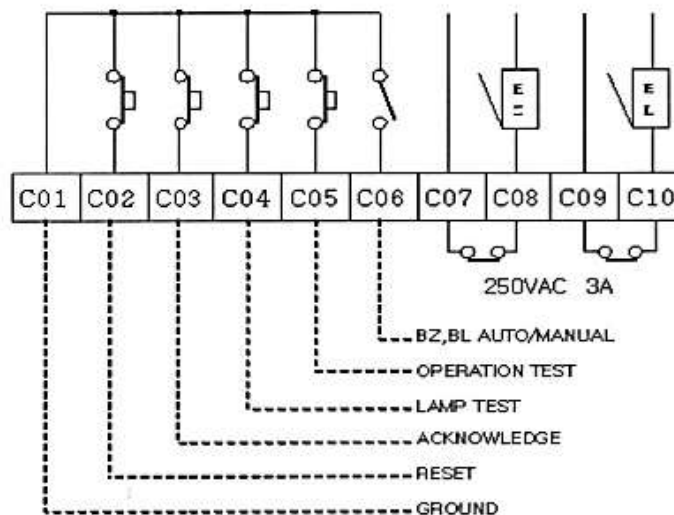
(1) Setting method of function and sequence

- Setting method of function and sequence is fixed according to order requirement when product is took out

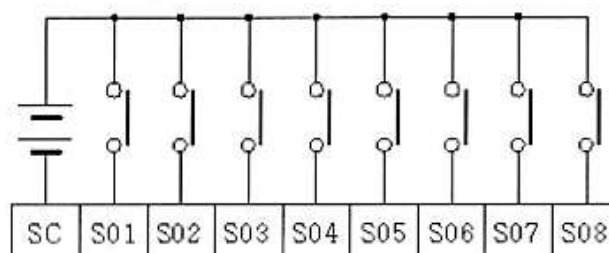
If User want to set function and sequence differed from original order requirement, User have to attend to operation



(2) Control part circuit



(3) Signal part circuit



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- (-V) of Voltage for trouble signal is connected with SC then contact of relay for trouble signal is connected with (+V)

(4) Setting method of BELL, BUZZER

- Buzzer is set as Off when product is took out
- It is placed on right side of top in the rear of product
- Bell and Buzzer can be set separately according to weigh a matter of trouble each

CHANNEL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CHANNEL NO.	17	18	19	20	21											
ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Remarks in Use

- (1) Please attend to using voltage. When product is took out, rating voltage and signal voltage of trouble input is fixed according to user's order requirement
- (2) If setting of function and sequence is incongruity, annunciator system is able to be malfunction
- (3) Annunciator system can be operated normally with more then 20ms of trouble input voltage