

# TS Remote Display Annunciator

**Configuration and Operators Manual** 

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TS-RD-ANNUNCIATOR TS-RD-CONTROLER



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# 1 Introduction

In any environment, there is a need to reliably inform occupants of any impending danger, so that they may make an informed decisions on the continued safety of themselves and those with whom their care has been entrusted, and any other personnel in the area.

The TS Remote Display Annunciator performs this function.

The system comprises of a main control board, and up to 31 remote displays. The main control board received status messages from a Taktis panel, and distributes the alarm messages to the remote displays.





Main Control Board

Remote Display Annunciator



# 2 Main Control Board

### 2.1 General

This board is located inside the Taktis Fire Control Panel and is attached to the status printer port.

It listens to this port and analyses each message and determines whether it is a fire message and should be transmitted to the Remote Displays.

### 2.2 Remote Display

An 8 x 2 LCD display is provided to give visual indications of the overall system status and details of any faults.

The status of each of the Remote Displays is cycled through at one second intervals. The first line shows the address of the Remote Display The second line shows that display's status.

These include:

NORMAL	Remote display is normal
MUTED	Remote Display Buzzer has been muted (permanently silenced)
FAULT	There is a fault on the remote display
MISSING	The remote display has not responded to any communications messages
EXTRA	An unexpected Remote Display has been detected
CONFIG SW FAULT	Incorrect switch setting



## 2.3 Configuration

The control board offers the flexibility to be configured for driving up to 31 remote display units, with the option for a Nurse Call interface or to be set exclusively for Nurse Call interface mode. This configuration can be achieved by adjusting the position of specific switches:

- 1. **Remote Display Configuration:** To determine the number of remote display units connected, utilize switches 1 through 5 to select any number between 1 and 31.
- Nurse Call Interface Only: Switch 8 serves a distinct purpose—it is dedicated to configuring the control board for Nurse Call interface mode only. Setting switch 8 to the 'on' position ensures that the control board exclusively operates as a Nurse Call interface and disables monitoring and control for the Remote Displays.

Please note: Switches 6 and 7 are reserved and should not be used. If Switch 8 is in the 'off' position and the address is set to 0, a configuration error (CONFIG SW FAULT) will be displayed.

A configuration switch is provided for potential future enhancements."



### 2.4 Terminations



#### 2.4.1 Fault

A clean contact fault relay is provided to facilitate connection back to a Fire Panel input, or other monitoring device.





#### 2.4.2 ISOL 232

An electrically Isolated 232 output is provided to interface to third party equipment if required.

	2	Board:	19200
	- 💽 🛫 [	Data:	8
15	8	Stop Bit	1
¥ 8		Parity:	None
		Flow:	None

Please contact support@incitefire.com.au for string format if required

#### 2.4.3 EIA 485

This connects to all the field display annunciators. Cabling should be shielded and connected to the Earth Terminal provided.



Note: Total cable length should not exceed 1.2km

#### 2.4.4 Power

The 24v Power in is only required if power is not available via the Printer Ribbon.



#### 2.4.5 Taktis Printer Ribbon

This connects the Taktis Fire Panel to the Main Control Board. Only the supplied ribbon cable should be used; otherwise, severe damage may result.





# 3 Remote Annunciator Board

The purpose of the Remote Annunciator is to notify individuals of hazardous situations, intended for both occupants and staff.

This unit comprises a display, 4 lines by 40 characters, 3 operator buttons and internal configuration switches.



**NOTE:** When programming the fire systems, please consider the following important points:

- **Character Limit for Descriptions**: Please be aware that only the initial 40 characters of the Zone Description and Point Description will be visible. Any characters beyond this limit will be truncated. This is crucial information to keep in mind during fire system programming, especially if the descriptions exceed 40 characters.
- Latching Configuration for Alarm Inputs: Local panel inputs configured as 'Alarm' types, such as 'Fire Panel MCP' (Manual Call Point), must be set to 'latching' to ensure proper operation, including message clearing upon reset. This restriction does not affect Loop Devices and they can be configured as either latch or non-latching alarms.
- **Restricted Use of "\" Character:** Avoid using the backslash character ("\") in the Location or Zone Description fields, as this character is reserved for internal functions.

# 3.1 Terminations

All cabling is to a termination board located in the rear of the cabinet. In and Out terminals are provided so that only 1 cable needs to be inserted into 1 terminal.





## 3.2 Display



Fire alarm messages always take precedence.

#### 3.2.1 System Messages

Several messages apart from Fire Alarms can be displayed.

These are in the format:



Faults can include:

COMMUNICATIONS FAULT: This signifies that the Annunciator has lost all communications with the Control Board. This can indicate that the main panel has been turned off, or that there is a cabling fault.

POWER SUPPLY FAULT: This indicates that there is a fault with the local power supply. The maintenance contractor should be informed.

INCORRECT ADDRESS SET: This indicated that the internal Address switches are incorrectly set, and the annunciator may not be able to respond to any Fire Alarm messages. The maintenance contractor should be informed.

#### 3.2.2 Fire Messages



The displayed alarm information is organized as follows:

Line 1: Zone number, Panel number, and Device Address

- Line 2: Zone description (40 Characters Max)
- Line 3: Point description (40 Characters Max)
- Line 4: Current alarm number and the total alarms in the buffer

Only one alarm is displayed at any given time.

The first alarm processed is identified on the display with the text 'first,' as this alarm is considered the 'Hot Spot' with the highest level of danger.

Consecutive alarms do not automatically appear on the display; they can be accessed using the scroll buttons.

Up to 10 alarms can be displayed. The FIRST alarm is always retained, while the nine most recent alarms are stored in the buffer.

A buzzer is provided to draw attention to any new alarms that have occurred."



### 3.3 Operator Buttons

Three operator buttons are provided. These are capSense<sup>®</sup> buttons which react to the proximity of a person's finger.



#### 3.3.1 Buzzer Mute

Pressing this button will silence the buzzer until a new Fire Alarm is triggered.

If you hold your finger on this button continuously for 3 seconds, the buzzer will be muted, and a double beep will confirm the activation.

The buzzer will remain muted until the Mute button is touched again.



#### 3.3.2 Scroll Buttons

These buttons allow an operator to scroll the alarms should more than one alarms be present.



#### 3.3.3 Indicators

#### 3.3.3.1 Fire Indicators

These are in the shape of a fire and randomly flicker whenever a fire alarm is present.



#### 3.3.3.2 Muted

This indicator lights whenever the buzzer is muted. It does not light when the buzzer has been silenced.



#### 3.3.3.3 Scroll Alarms

This indicator shows that there is more than 1 Fire Alarm present.



#### 3.3.3.4 Comms Fault

This indicates that the Annunciator is offline and will not receive any Fire Alarm information.





# 3.4 Configuration

There are three configuration options available:

- 1. Unit Address Sw1-6
- 2. Diagnostics Menu Sw7
- 3. Zone Filtering Sw8

#### 3.4.1 Unit Address

In the default setup, the only configuration necessary is to set DIP switches 1-6 for the unit's address.

Unit addresses can range from 1 to 31.

Setting an address outside of this range will trigger a fault and generate a warning message. The annunciator will also become inoperable



Rear of Remote Display PCB

#### Address Table

Add	S1	S2	S3	S4	S5	Add	S1	S2	S3	S4	S5	Add	S1
1	1	0	0	0	0	9	1	0	0	1	0	17	1
2	0	1	0	0	0	10	0	1	0	1	0	18	0
3	1	1	0	0	0	11	1	1	0	1	0	19	1
4	0	0	1	0	0	12	0	0	1	1	0	20	0
5	1	0	1	0	0	13	1	0	1	1	0	21	1
6	1	0	1	0	0	14	0	1	1	1	0	22	0
7	1	1	1	0	0	15	1	1	1	1	0	23	1
8	0	0	0	1	0	16	0	0	0	0	1	24	0

1	S2	S3	S4	S5	
	0	0	0	1	
	1	0	0	1	
	1	0	0	1	
	0	1	0	1	
	0	1	0	1	
	1	1	0	1	
	1	1	0	1	
	0	0	1	1	

Add	S1	S2	S3	S4	S5
25	1	0	0	1	1
26	0	1	0	1	1
27	1	1	0	1	1
28	0	0	1	1	1
29	1	0	1	1	1
30	0	1	1	1	1
31	1	1	1	1	1

0 = Switch OFF 1 = Switch ON



#### 3.4.2 Zone Filtering



Zone Filtering is used when you want to restrict the displayed alarms. There are two independent filter ranges that can be configured. Each filter consists of a lower (from) and upper (to) zone value. This setting will filter out all messages except those that fall within the specified ranges.

To enter the Zone Filter configuration menu, switch Dipswitch 8 to the "On" position. This will activate the Zone Filter configuration mode.

- Use the "Buzzer Mute" button to select the hundreds digit.
- Use the Scroll UP arrow to set the tens digit.
- Use the Scroll Down arrow to set the unit's digit.

Press the Configuration button on the back of the PCB to store the settings and proceed to the next configuration option.

Once all settings are correctly configured, switch Dipswitch 8 back to the "Off" position.

#### 3.4.3 Diagnostics Menu



To access the Diagnostics Menu, follow these steps:

Set Dipswitch 7 to the "On" position. This will enable the Diagnostics Menu.

In this menu, the display will show the following information:

- Total number of received messages.
- Number of bad or malformed messages.
- Details of the packages containing bad data.

This menu can be highly useful when diagnosing data communication issues

Pressing the Configuration button on the back of the PCB will reset the counters back to zero.

To return to the normal mode, switch Dipswitch 7 to the "Off" position. This will deactivate diagnostics menu and bring the device back to its standard operating mode.



# 4 Specifications:

# 4.1 Control Board



Parameter	Description
Display	2 line x 16 character display
Size	115mm x 95mm
Operation Voltage Range	18 to 33V DC
Current consumption	Quiescent 60mA @ 24v Alarm 60mA @ 24v
Communication	RS485 @ 19200kbs - max 1.2km
Max number of Remote Displays	31

# 4.2 Remote Display



Parameter	Description
Construction	1.2mm mild sheet steel
IP Rating	IP30
Finish	Epoxy powder coated
Colour - lid & box	BS 00 A 05 grey - fine texture
Weight	2kg
Display	4-line x 40-character display
Size	234mm x 170mm x 51m
Operation Voltage Range	18 to 33V DC
Current consumption	Quiescent 45mA @ 24v Alarm 60mA @ 24v
Communication	RS485 @ 19200kbs





Notes:



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