TFT-7S

Tecnofire DETECTION

Synoptic repeater panel

TFT-7S

| RSC | 7" COLORS DISPLAY | TOUCH SCREEN | VOICE SYNTHESIS | 32 FLOOR PLANS | 32 ICONS | FLASH MEMORY | USB PORT | ABS V0 BOX |

Synoptic repeater panel for control and management. The Panel has the same features and functions as the TFT-7 Panel, with the possibility to implement the interactive synoptic management of customized graphic maps. The panel can manage and display according to different operating modes, up to 32 graphical maps. On each map you can freely place up to 32 graphic icons. You can associate a System device or a navigation button to each icon. In the event of an alarm, the System automatically displays the map that identifies the location of the device in alarm. The Panel TFT-7S enables to decentralize and extend up to 16 points the management and synoptic control through graphic maps of the devices that make up the System. Integrated flash memory for customization of the graphical interface and dictionaries, manageable from a personal computer as an external drive, via USB interface. RS485 bus connection. Surface-mount, recessed, or on table stand.
Refined design, ultra-thin line. ABS V0 enclosure. Degree of protection IP40.
Dimensions (L x H x P) 225 x 157 x 35mm. Red cover (interchangeable).

**Item no. TF2TFT7S-UK**

OBLIGATIONS AND NOTICES

The synoptic repeater panel TFT-7S can be used only if connected to an expansion serial bus of the Tecnofire control units models: TFA1-298, TFA2-596, TFA4-1192. During design and installation, it is necessary to observe and apply the applicable regulations.

OVERVIEW

The repeater panels allow to expand and decentralize the management and system information stations.
The panels belong to the category "Expansion Devices"; the stations can manage up to 16 expansion devices.
The repeater panels can be connected to the control unit via either Master or Slave Bus, in either open loop or closed loop mode.
The system buses are supervised: in closed loop mode, the control unit is able to detect and report the connection failure, maintaining the normal operation of the network.

ADDRESSING

The ID of the Panel can be set in digital mode via the specific menu. The numeric range of the allowed addresses for the expansion devices is 01 to 16.
The address set must be enabled by the relevant menu available on control unit.
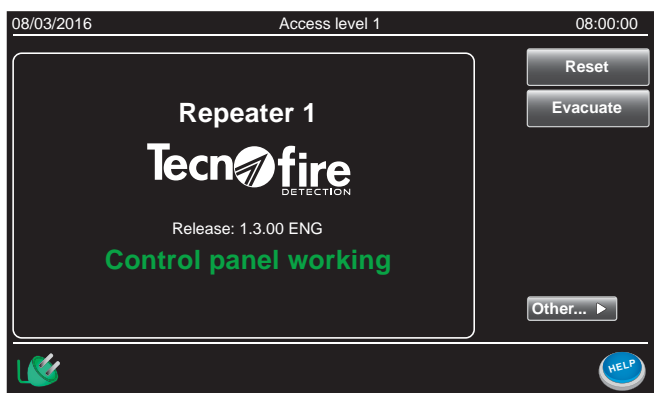
LOCAL SETTING MENU

The operation of the repeater panel TFT-7S can be set via the local setting menu, which enables to set and/or change some operating parameters. Only users provided with Level 3 password can access the menu.

08/03/2016	Access level 3	08:00:00

Menu Level 3	
Versions	1.0.04
Test light signaling	
Sound test	
Test words	
Test strings	
Address repeater	1
Volume	High
Backlighting	100%
Touch screen calibration	

OK
ESC
HELP

Menu	Function
Versions	Information on the equipment of the device
Luminous signal test	Luminous effectiveness of the signals
Sound test	Efficiency of the speakers in siren mode
Words test	Efficiency of the speakers in voice mode
Writing test	Display/listening of dictionary resources
Repeater address	Device address settings
Volume	Speaker volume adjustment
Backlighting	Display backlighting adjustment
Touch screen calibration	Touch screen display calibration
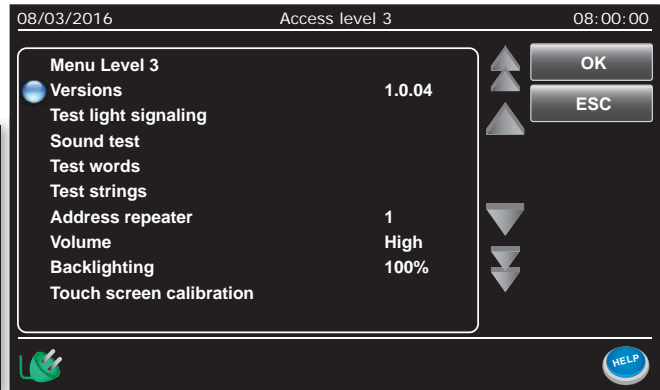
REPEATER PANEL FUNCTIONS

Via the repeater panel, you can perform the system management functions shown in the table.

Funzioni del pannello ripetitore	Abilita disabilita funzione "Impianto presidiato"
	Attiva le modalitità di segnalazione "Evacuazione"
	Effettua la Tacitazione delle segnalazioni di allarme
	Effettua la Tacitazione ed il ripristino delle sirene
	Effettua il Ripristino dei dispositivi

NOTIFICATION MODES

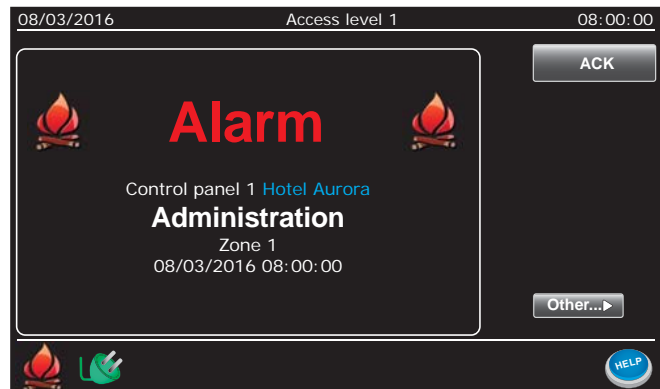Alarm notification is divided into several phases.
When the control unit receives an alarm, the repeater panel enables the speaker in siren mode and displays the (flashing) message indicating the type of event.
The operator acknowledges the event by pressing the "Mute" button.
The muting causes the disabling of the speaker and the display of the detailed list of the events contained within the folder of the acknowledged event.
By selecting an event and pressing the "Mute" button, the voice synthesis that enunciates the selected event is activated. In the case of an alarm and if the zone has an associated alarm plan, by pressing again the "Mute" button, a window appears that contains the text of the alarm plan that is associated with the Zone.
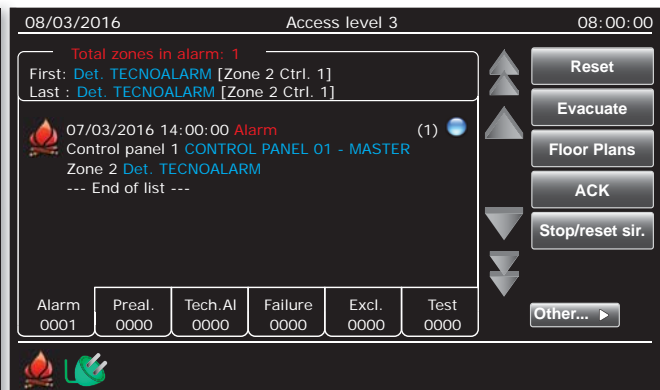In the lower area, the display shows the 6 folders in which the events are stored according to their category. The folders remain visible up the next reset of the control unit. The reset erases all the events contained in the folders and resets the counters.

08/03/2016	Access level 1	08:00:00

Alarm

Control panel 1 Hotel Aurora
Administration
Zone 1
08/03/2016 08:00:00

ACK
Other...▶
HELP

Specializations of archive folders	
Alarme 0000 — Collects fire Alarm events by Zone	Panne 0000 — Collects the Fault events of the Zones and of the System
Préal. 0000 — Collects fire Pre-alarm events by Zone	Excl. 0000 — Lists the out of service devices
Al. tech. 0000 — Collects Technological Alarm events by Zone	Test 0000 — Collects alarm events recorded from devices under test

Notes: 1) The folders can contain up to a maximum of 9999 events.
2) The contents of the folders is deleted and the counters are reset each time you run a reset of the control unit.
3) We remind that the events remain stored in the "Event History" of the control unit.

08/03/2016	Access level 3	08:00:00

Total zones in alarm: 1
First: Det. TECNOALARM [Zone 2 Ctrl. 1]
Last : Det. TECNOALARM [Zone 2 Ctrl. 1]

07/03/2016 14:00:00 Alarm   (1)
Control panel 1 CONTROL PANEL 01 - MASTER
Zone 2 Det. TECNOALARM
--- End of list ---

Reset
Evacuate
Floor Plans
ACK
Stop/reset sir.
Other... ▶

| Alarm	Preal.	Tech.Al	Failure	Excl.	Test
0001	0000	0000	0000	0000	0000

DIAGNOSTIC FUNCTIONS

The control unit manages a set of specific diagnostic functions for the expansion devices.
The diagnostic functions that are available for the repeater panel allow to:
- Identify the equipment and versions of the resources.
- Read the statistics from the communication monitor
- Monitor the value of the power voltage.

08/03/2016	Access level 3	08:00:00
Menu Test Repeater 1		
● Versions		
Statistics		
Power monitor		
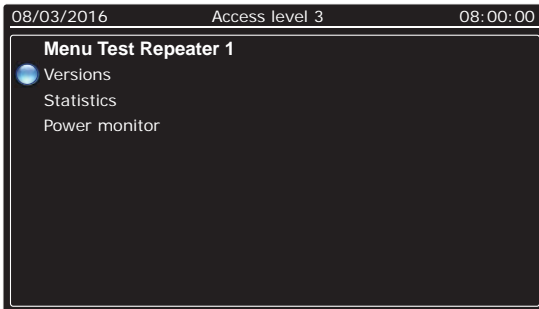
Repeater test	
Versions	Resource equipment and version
Statistics	Communication monitor statistics
Power supply monitor	Power supply voltage monitor

Power supply monitor	
Supply voltage	Detects the voltage value

Statistics	
Frames sent	Communication frames counter
Errors	Faulty frames counter
Success Rate	Percent value
Error rate	Percent value

| Versions	
Firmware	Device firmware version
Writings	Set of writings used
Font	Font type
Alternative font	Alternative font type
Dictionary	Dictionary version
Alternative dictionary	Alternative dictionary version
Serial number	Serial number of the device
Licences	Enabling string

SCENARIOS PROGRAMMING

The synoptic repeater panel manages up to 32 scenarios, on each scenario you can have up to 32 icons. Scenario programming consists in placing on a map, representing the topography of the site under surveillance, icons that identify the system devices and their location.
The characterization of the icons allows the operator to correctly identify the device simply by touching the icon. The icons can be associated with functional buttons for selection and display of specific scenarios.
The operation of the panel can be limited to just the display of the scenarios or be extended to complete interactive operation. The display mode can be chosen between automatic rotation or fixed. The display times of each scenario and of stop are programmable.
The detection of an alarm by a device attached to a scenario of the synoptic panel causes the display of the related scenario. The icon that identifies the device that has detected the alarm is visually highlighted along with its identifying information.
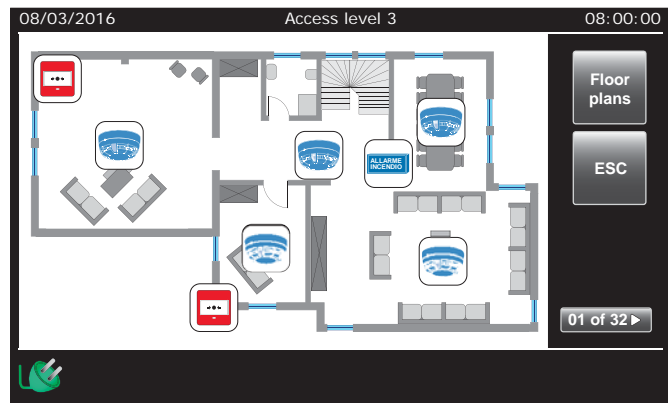
Scenario programming	
Programming	**Funzione**
Scenario selection	Select the scenario to be programmed
Scenario naming	Assign a name with max. 24 characters
Scenario enabling	Enables the display of the scenario
Map association	Associates the map to the scenario
Icon placement	Select and place the icons on the map

Icons characterization	
Programming	**Function**
Type	Selection of the device represented by the icon
Control Unit	Selection of the control unit from which the device depends
Line	Selection of the line on which the device is connected
Device	Zone or Repeater device selection
Scenario opening	Selection of the scenario invoked by the button icon

| Scenario display mode	
Programming	**Function**
Operation	Normal only display or interactive
Scenario	Auto rotating or fixed display
Automatic	Display time of the scenario
Manual	Stop time of automatic rotation
Sensible area	Sizes of the icon sensitivity area
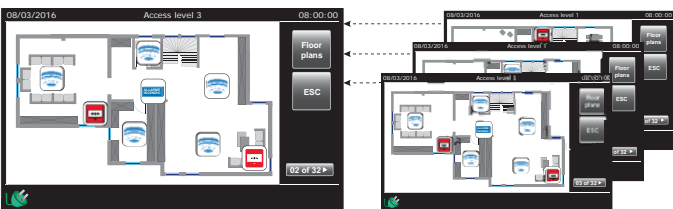
Automatic rotation - displays the maps in sequence according to a rotation, marked by the time ¨Automatic Display¨.
In case of alert, the rotation stops to display the scenario concerned by the event.

Fixed - With this mode in resting conditions, the scenario chosen by the user is displayed.
In case of alert, the scenario concerned from the event is displayed.

Synoptic repeater panel

ICO_MAP FOLDER

The synoptic panel repeater is fitted with a 128Mbyte non-volatile Flash memory. To access and view the contents of the memory you need to connect a personal computer to the USB port of the repeater.
The computer sees the repeater's memory as an external drive. The repeater memory contains all the resources necessary for operation.
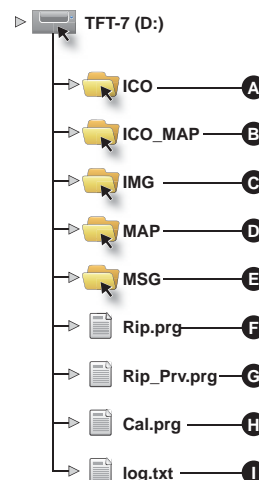
USB port
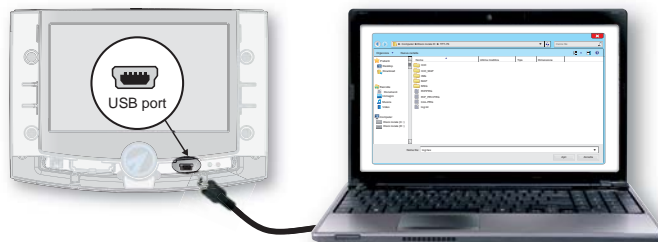
DATA STORAGE STRUCTURE

The drawing on the side illustrates the logical structure with which data is stored within the memory of the synoptic panel repeater.
The following table summarizes the contents of the folders and the function of the files contained in the memory of the synoptic repeater panel.
Warning: before disconnecting the USB cable from the Repeater, disconnect the drive using the procedure for hardware safe removal.
On startup, the repeater loads the data stored in the memory required for its operation.

▷ 🖴 TFT-7 (D:)
- 📁 ICO — Ⓐ
- 📁 ICO_MAP — Ⓑ
- 📁 IMG — Ⓒ
- 📁 MAP — Ⓓ
- 📁 MSG — Ⓔ
- 📄 Rip.prg — Ⓕ
- 📄 Rip_Prv.prg — Ⓖ
- 📄 Cal.prg — Ⓗ
- 📄 log.txt — Ⓘ

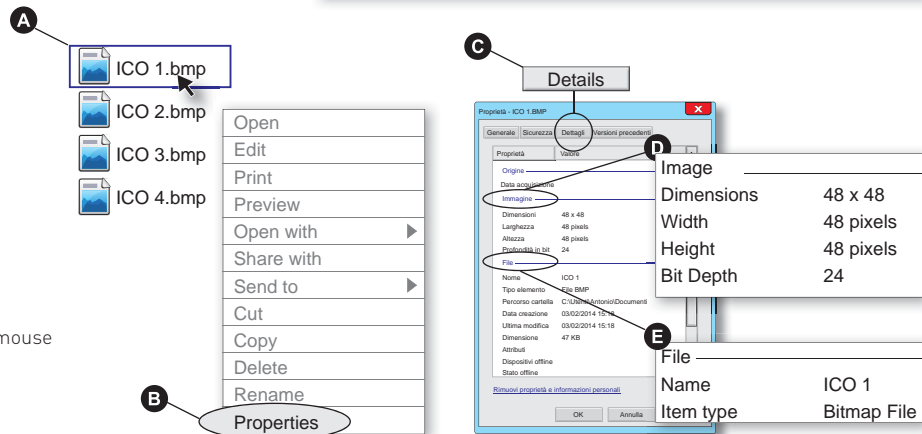|	Folder – File	Function description	Specific notes and warnings	
A	ICO	The folder contains the icons and images used by the repeater to indicate the functional states of the system.	Caution - To avoid issues on the interpretation of the symbols and discrepancies in the display modes between the various devices of the System, it is forbidden to change the names and the contents of the ICO folder	
B	ICO_MAP	The folder contains the icons used for the creation of the graphical maps, viewable from the device "Synoptic Repeater"	The icons in the folder ICO_MAP depict graphically the devices and the functional elements accompanying the graphical maps. You can add customized icon files to the folder, the files must meet the requirements of the table "File requirements in the folder ICO_MAP"	
C	IMG	The folder contains the background images, the drawings of the keys and of all the functional elements used by the system to graphically display all the functional states on the repeater.	Caution - To avoid malfunctions and discrepancies of the display modes in the various devices of the System, it is forbidden to change the contents of the folder and/or the file names of the IMG folder	
D	MAP	The folder contains the image files that the device "Synoptic repeater" uses to display the graphical maps.	The files in the MAP folder depict the background images used for the construction of the graphical maps. You can add image files to the folder. The files must meet the requirements of the table "File requirements in the folder MAP"	
E	MSG	The folder contains the files for text management and for speech synthesis The repeater can handle two languages. The repeater works in mono or dual language mode, based on the files in the folder	File of the first language str.bin (text strings) font.bin (font used) msg.bin (dictionary)	File of the second language str_alt.bin (text strings) font_alt.bin (fonts used) msg_alt.bin (dictionary)
F	RIP.PRG	System file (for Repeater functions) Backup file of programming data managed by the control unit.	Warning - Customization file managed by the repeater. The file should not be renamed or edited manually	
G	RIP_PRV.PRG	System file (for Repeater functions) Backup file of local programming data of the repeater	Warning - Customization file managed by the repeater. The file should not be renamed or edited manually	
H	CAL.PRG	System file (for Repeater functions) File with calibration data of the touch screen. If the file is missing, on startup the repeater prompts to perform the calibration procedure.	Warning - Customization file managed by the repeater. The file should not be renamed or edited manually	
I	log.txt	Initialization log file, the Repeater at each startup generates a file called log.txt. The file includes any startup errors, typically missing or corrupt files. The log file is overwritten on each startup, so when you examine the file, you need to take into account that the data refer only to the last startup.		

Caution: To activate any changes made on the folders or files in the memory of the repeater you must restart the device.

Synoptic repeater panel

ICO_MAP FOLDER

The ICO_MAP folder contains the image files of the icons that the synoptic repeater panel overlays to the maps when displaying scenarios.
The icons are customizable, for the realization of the graphic files that represent them, follow the rules in the table "Image file requirements - ICO_MAP Folder."

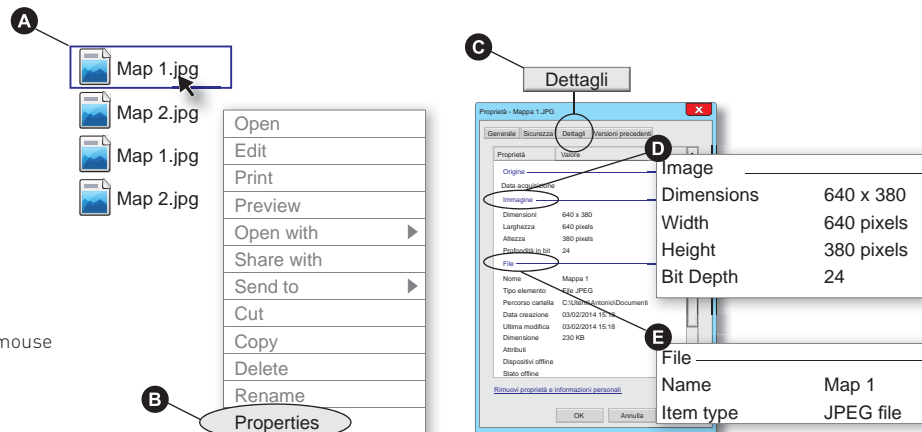| Image file requirements- ICO_MAP Folder	
Format	Images must be in Bitmap format, with .BMP file extension
Size	The image size must be 48 x 48 pixels (width x height)
Depth	The depth of the images should be 24 bit
Transparency	To achieve transparency, use a magenta background
File name	The name can consist of a maximum of 8 characters + 3 for the extension (.BMP)
Type of characters	Alphanumeric, uppercase or lowercase (avoid any other type of character)

A

ICO 1.bmp
ICO 2.bmp
ICO 3.bmp
ICO 4.bmp

Open
Edit
Print
Preview
Open with ▶
Share with
Send to ▶
Cut
Copy
Delete
Rename
B Properties

C Details

Proprietà - ICO 1.BMP
Generale Sicurezza Dettagli Versioni precedenti
Proprietà   Valore
Origine
Data acquisizione
Immagine
Dimensioni   48 x 48
Larghezza   48 pixels
Altezza   48 pixels
Profondità in bit 24
File
Nome   ICO 1
Tipo elemento   File BMP
Percorso cartella C:\Users\Antonio\Documenti
Data creazione   03/02/2014 15:18
Ultima modifica 03/02/2014 15:18
Dimensione   47 KB
Attributi
Dispositivi offline
Stato offline
Rimuovi proprietà e informazioni personali
OK   Annulla

D Image
Dimensions   48 x 48
Width   48 pixels
Height   48 pixels
Bit Depth   24

E File
Name   ICO 1
Item type   Bitmap File

Image file properties check
A - Select the file, right-click with the mouse
B - Click on properties
C - Click on details
D - VerCheck the image properties
E - Verify file name and type

MAP FOLDER

The MAP folder contains the image files of the map that the synoptic repeater panel uses when displaying scenarios.
The maps are customizable. For the realization of the graphic files that represent them, follow the rules in the table "Image file requirements - MAP Folder."

Image file requirements- MAP Folder	
Format	Non progressive JPEG images (.JPG or .BMP extension)
Size	The image size must be 640 x 380 pixels (width x height)
Depth	The depth of the images should be 24 bit
File name	Name of up to 8 characters + 3 characters for extension (JPG or BMP)
Type of characters	Alphanumeric, uppercase or lowercase (avoid any other type of character)

A

Map 1.jpg
Map 2.jpg
Map 1.jpg
Map 2.jpg

Open
Edit
Print
Preview
Open with ▶
Share with
Send to ▶
Cut
Copy
Delete
Rename
B Properties

C Dettagli

Proprietà - Mappa 1..JPG
Generale Sicurezza Dettagli Versioni precedenti
Proprietà   Valore
Origine
Data acquisizione
Immagine
Dimensioni   640 x 380
Larghezza   640 pixels
Altezza   380 pixels
Profondità in bit 24
File
Nome   Mappa 1
Tipo elemento   File JPEG
Percorso cartella C:\Users\Antonio\Documenti
Data creazione   03/02/2014 15:18
Ultima modifica 03/02/2014 15:18
Dimensione   230 KB
Attributi
Dispositivi offline
Stato offline
Rimuovi proprietà e informazioni personali
OK   Annulla

D Image
Dimensions   640 x 380
Width   640 pixels
Height   380 pixels
Bit Depth   24

E File
Name   Map 1
Item type   JPEG file

Image file properties check
A - Select the file, right-click with the mouse
B - Click on properties
C - Click on details
D - Check the image properties
E - Verify file name and type

CONNECTION TO THE SERIAL LINE

The connection of the expansion devices is carried out on either the Master Bus or the Slave Bus of the control unit. The connection can be realized in open loop or closed loop. The connection line is balanced, the balance must be made by dip switches or jumpers only on the last device connected.

For the connection of the devices on the Bus lines RS485 (Master Bus and Slave Bus) it is essential to use: twisted multipole signal and power supply shielded cable with flexible wires.

The maximum length allowed for Bus lines of the system is 1000 mt. You can achieve greater distances using a fibre optic connection instead of an electric cable.

For reasons of electrical safety and to improve the immunity to electrical interference, the shielding of the cables must be connected in order not to stop their path and must be connected to the ground terminal only inside the fire detection control unit.

Bus extension / cable specifications		
Max. extension 1000 m	Min. section	Electrical resistance
Power supply wires	2 x 1.5mm²	<13.3 Ohm x Km
Signal wires	2 x 1mm²	<19.5 Ohm x Km

OPEN LOOP CONNECTION
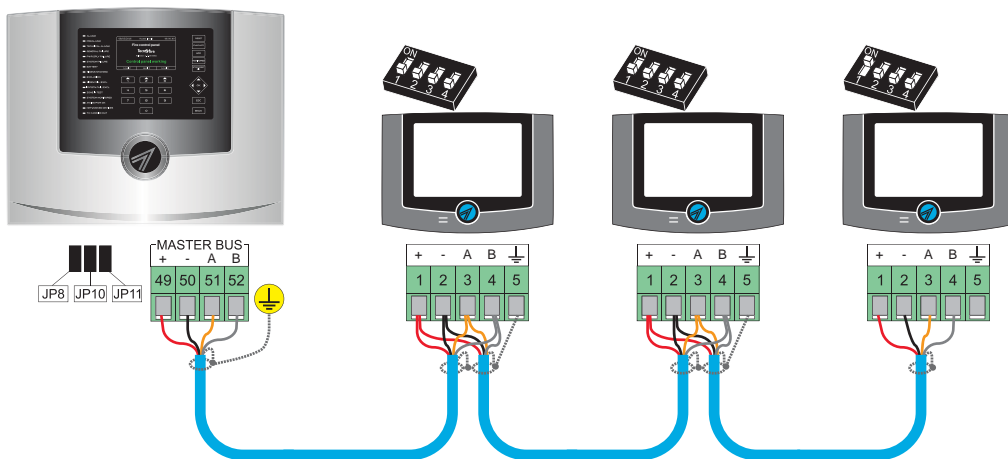
CLOSED LOOP CONNECTION

TFT-7S
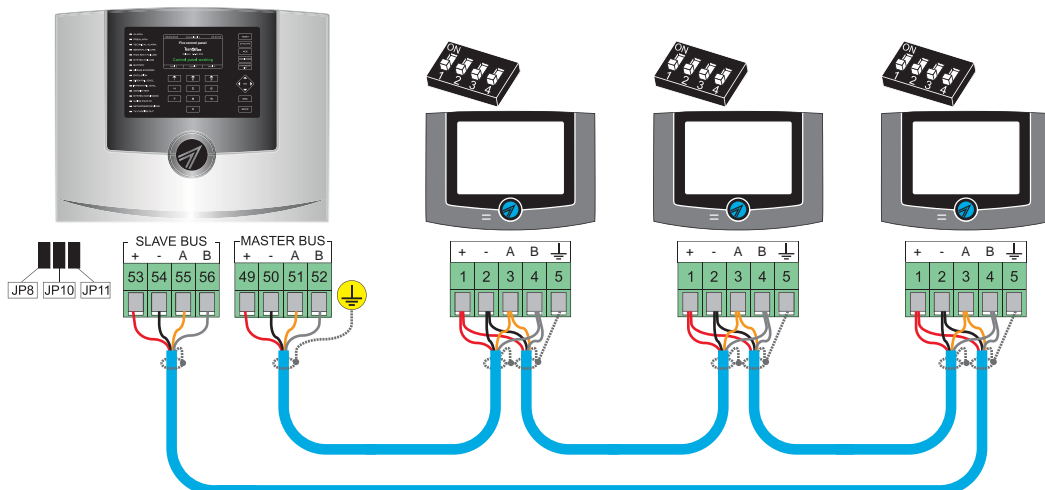
EQUIPMENT
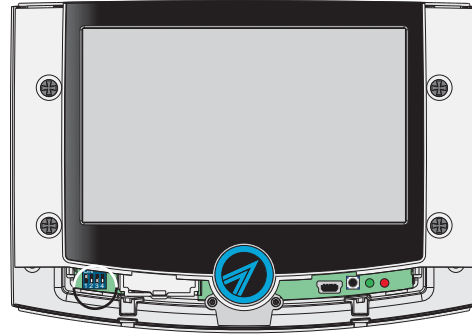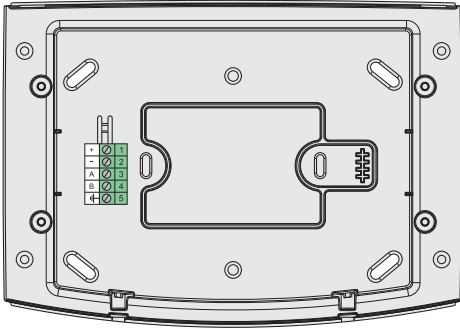
1	+24V DC	Serial line power supply positive
2	-	Serial line power supply negative
3	A	Serial line channel A
4	B	Serial line channel B
5	⏚	Shield anchor

1	ON	Terminated bus line
	OFF	Non-terminated bus line
2	ON	Reserved use, leave in OFF position
	OFF	
3	ON	BOOT function enabling
	OFF	Normal operation
4	ON	CLR function enabling
	OFF	Normal operation

L 225mm

H 157mm

D 35mm

D 16.5mm

Wall mounting

Flush mount

Tecnofire DETECTION

Synoptic repeater panel

DEDICATED ACCESSORIES		

	TFT7-LCGT	Titanium grey replacement cover	**Item no. TF2TFT7LCGT**
	TFT7-LCG	Metal grey replacement cover	**Item no. TF2TF7LCG**
	TFT7-LCN	Black replacement cover	**Item no. TF2TFT7LCN**
	TFT7-LCB	White replacement cover	**Item no. TF2TFT7LCB**

	Table support for repeater panel TFT-7. The support offers an effective ergonomic solution in all situations where the repeater panel must be placed on a work bench. Continuous tilting adjustment Refined design. ABS V0 enclosure. Degree of protection IP40. Base plate dimensions (W x H) 200 x110mm. White.	
	TFBASE-TFT7LT	**Item no. TF2TFBASETFT7LT**

	Recessed base for repeater panel TFT-7. The base can be wall mounted to create the predisposition to the mounting of the repeater panel TFT-7. **Warning:** the repeater panel TFT-7 is always sold with recessed base included.	
	TFBASE-TFT7L	**Item no. TF2TFBASETFT7L**

	Mini USB interface cable for programming of the repeater panels TFT-7	
	TFCM-USB	**Item no. TF2TFCAVOMINIUS**

TFT-7S - Technical and functional specifications

Overview	Device Name	**TFT-7S**
	Description	**Synoptic repeater panel**
	Communication protocol	**FIRE-BUS**
	Addressing	**Digital**
	Connection	**Bus RS485**
User interface	Display	**Colour TFT7" resistive touch screen**
	Resolution	**800x480 pixel**
	Functional information	**Dynamic iconography**
	Speech synthesis	**Multilingual dictionary**
	Speaker	**Multi-Function**
	Contextual help	**With audio and graphics**
	Graphical interface	**Customisable**
	Manageable scenarios	**Up to 32**
	Icons for scenario	**Up to 32**
Hardware specification	Data memory	**Flash 1Gbit**
	Management interface	**Porta USB**
Electrical specifications	Power supply	**From Serial Bus**
	Rated voltage	**24V DC**
	Operating voltage	**18V...30V DC**
	Typical draw (idle)	**90mA @ 24V DC**
	Max draw (when transmitting)	**240mA @ 24V DC**
Physical specifications	Operating temperature	**+5°C...+40°C**
	Relative humidity	**10%...93% (non-condensing)**
	Protection Degree	**IP40**
	Enclosure	**ABS V0**
	Dimensions (L x H x D)	**225 x 157 x 35mm**
	Weight	**350g**
Conformity	Year of CE marking	**14**
	Approved for use in combination with control units TFA1-298, TFA2-596 and TFA4-1192	

N.B. The declarations of conformity and performance are available on the website: www.tecnofiredetection.com

CE 0051 IMQ

Tecnofire DETECTION

by **Tecnoalarm**

csq IQNet