

TXC7002/TXC7004/TXC7008 /TXC7016



Conventional Fire Alarm Control Panel

Feature and Benefits

1. Up to 16 zones can be detected, compatible with conventional detectors and manual call points. Each of the 16 zones can be individually configured as maximum 15 conventional detectors. The total number of detectors and manual call points in a zone shall not exceed 32.
2. Three sounder outputs, one alarm output, one fault output and one disable/supervisory output.
3. Able to report short and open circuits of zones, sounder outputs and alarm output.
4. Test and disable functions.
5. Programmable on manual call point connection, sound modes, sounder delay modes and output delay modes.
6. Three access levels settable via the key switch and the internal switch.
7. Providing external ports includes RESET, EVAC, SILENCE.
8. Designed with standby batteries and space provision for two sealed lead-acid batteries.

Overview

The TXC7002/TXC7004/TXC7008/TXC7016 Conventional Fire Alarm Control Panel is designed in compliance with EN 54-2 and EN 54-4. It's compatible with TXC7101 Conventional Smoke Detector by EN 54-7, TXC7111 Conventional Heat Detector by EN 54-5, TXC7141 Conventional Manual Call Point by EN 54-11 and TXC7301 Conventional Sounder Strobe designed by EN 54-3.

Control functions of the panel are enabled by a key switch and programming functions are enabled by an internal switch. This series of panels are basically the same in application and operation, their differences are zones and sounder outputs. TXC7016 Conventional Fire Alarm Control Panel (called FACP for short) will be described as the example in the following sections.



Technical Specification

The main technical Specification of the controller are shown in the table.

Type	TXC7002/TXC7004/TXC7008/TXC7016
Input Voltage	<ul style="list-style-type: none"> ❖ Input Voltage: 100V~230VAC^{+10%}_{-15%}, 50/60Hz ❖ Input Current: 1.2 A ❖ Fuse: 250VAC, T2A in SPS ❖ Recommended Wiring: 1.5mm² or above shield cable, complying with local installation codes. <p><i>Note: External overcurrent protection device is required and should be installed near the equipment.</i></p>
Operating Voltage	<ul style="list-style-type: none"> ❖ Minimum Operating Voltage: 21.5V ❖ Maximum Charging Current: 350 mA ❖ Maximum Charging Voltage: 27.6V ❖ Battery Type: Sealed lead-acid battery ❖ Maximum Battery Charging Capacity: 2 batteries, 7Ah/12V. ❖ Recommended Battery Manufacturer and Model: Yuasa NP7-12 ❖ Maximum internal resistance of the batteries: 1Ω ❖ Standby current of batteries when fully load: 0.1A ❖ Maximum operating current of the batteries: 2.1A
Detection Zone	<p>The FACP provides maximum 16 zones; each can be individually configured with maximum 15 conventional detectors.</p> <ul style="list-style-type: none"> ❖ Output voltage: 18VDC~28VDC ❖ Standby current: less than 6mA (connecting with 15 conventional detectors) ❖ Alarm current: about 25mA ❖ End-of-line-resistor: 4.7kΩ ❖ Resistance range for fire alarm: 150Ω~1.5kΩ (normally 510Ω) ❖ Recommended wiring: 1.0mm² or above shield cable, complying with local installation codes. ❖ Recommended cable length: no longer than 1000m
Output Interface	<ul style="list-style-type: none"> ❖ Fault output <ul style="list-style-type: none"> ➢ Type: normally open/close contact output ➢ Contact capacity: 1A/24VDC ❖ Disable/supervisory output (defaulted disable output) <ul style="list-style-type: none"> ➢ Type: normally open/close contact output ➢ Contact capacity: 1A/24VDC ❖ Alarm output <ul style="list-style-type: none"> ➢ Type: voltage output, normally open/close contact output are available (defaulted voltage output)



	<ul style="list-style-type: none"> ➤ Contact capacity: 1A/24VDC ➤ Output voltage: 18VDC~28VDC ➤ Output current: 300mA in alarm ➤ End-of-line-resistor: 4.7kΩ ❖ Sounder 1# output <ul style="list-style-type: none"> ➤ Type: voltage output, normally open/close contact output (defaulted voltage output) ➤ Contact capacity: 1A/24VDC ➤ Output voltage: 18VDC~28VDC ➤ Output current: 300mA in alarm ➤ End-of-line-resistor: 4.7kΩ ❖ Sounder 2#~3# output <ul style="list-style-type: none"> ➤ Type: voltage output ➤ Output voltage: 18VDC~28VDC ➤ Output current: 300mA in alarm ➤ End-of-line-resistor: 4.7kΩ ❖ Auxiliary Power Output <ul style="list-style-type: none"> ➤ Output voltage: 18VDC~28VDC ➤ Output current: 20mA in standby and maximum 500mA in alarm ❖ Recommended wiring: 1.0mm² or above shield cable, complying with local installation codes. ❖ Recommended cable length: no longer than 1000m
<p>Input Interface (For future use)</p>	<ul style="list-style-type: none"> ❖ RESET/EVAC/SILENCE input <ul style="list-style-type: none"> ➤ Type: normally open contact input ❖ Recommended wiring: 1.0mm² or above shield cable, complying with local installation codes. ❖ Recommended cable length: no longer than 1000m
<p>Installation and Storage</p>	<p>The FACP is applicable for indoor use below the elevation of 2000m. Overvoltage level is Class II and pollution degree is 2.</p> <ul style="list-style-type: none"> ❖ Installation Environment <ul style="list-style-type: none"> Temperature: -5°C~50°C Relative humidity≤95%, non-condensing ❖ Storage Environment: <ul style="list-style-type: none"> Temperature: -25°C~50°C Relative humidity≤95%, non-condensing



Names and Location

1 The front panel of the FACP is shown as in Fig.1.

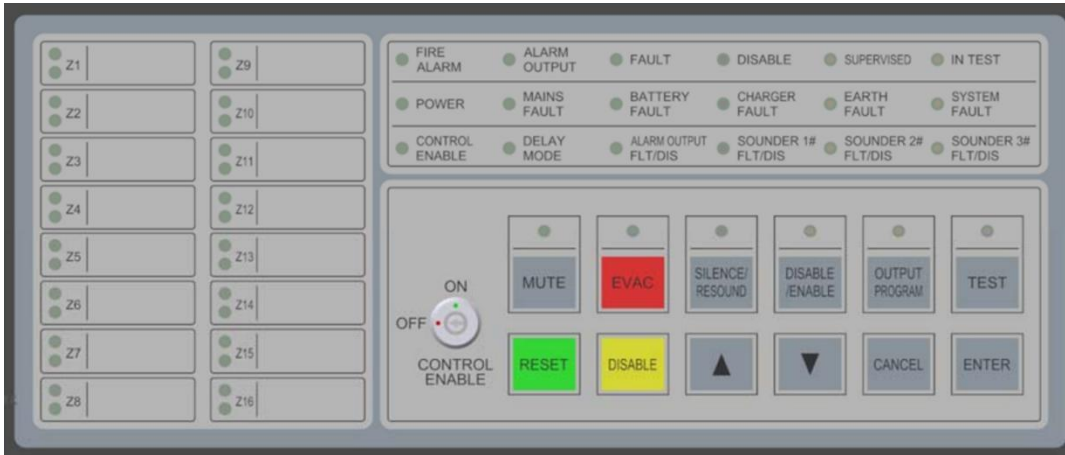


Figure 1 The front panel of the FACP

2. The internal construction of the FACP is shown in Fig. 2.

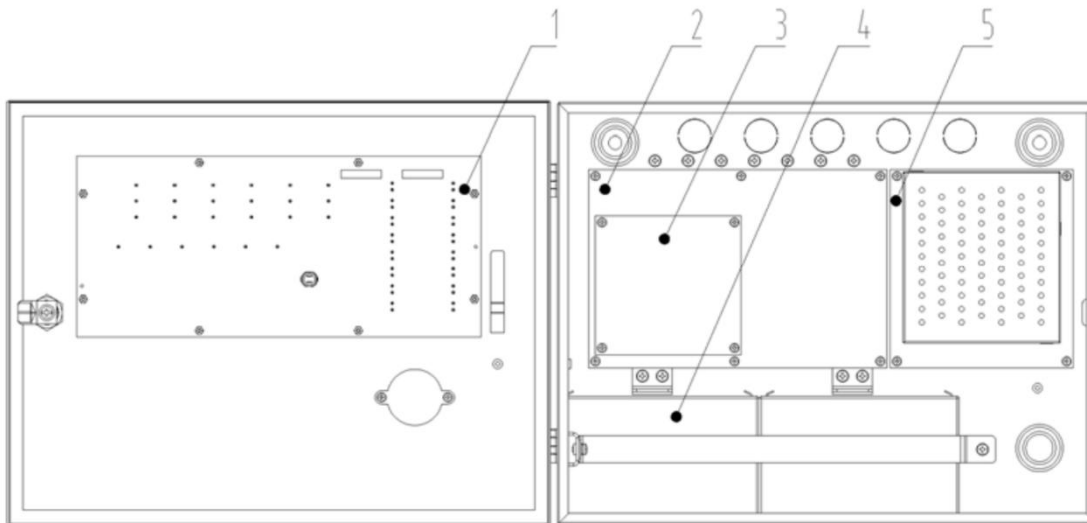


Figure 2 The internal construction of the FACP

① Display board ② Control board ③ Extension board ④ Batteries ⑤ Power board

