

# FireClass COM820 Installation

## Introduction

The COM820 is a standard user interface module, which can be driven from an MPM800. The COM820 Indicator Module provides individual address output point status and individual input point control for FireClass Fire Controllers.

This installation sheet contains features, wiring, installation and programming information for the COM820.

## Features

The control module features 20 push button switches and 20 separately programmable indicating LEDs. The FireClass Controller with MPM800 operates the COM820. The COM820 provides the ability to:

- Manual/OFF/Auto/Isolate functions for evacuation or plant control.
- Selective isolate and evacuate functions for fireman's control.
- Selective plant shutdown and override functions.
- Selective system delay and timer functions.

LEDs may be programmed as system status indicators of output devices or control options.

## Technical Specification

Table 1 shows the Technical Specification for the COM820 20-Way Status/Command module.

Parameter	Value
System Compatibility	Use only with FireClass Fire Alarm Controllers
Environment	Indoor Application only
Operating Temperature	-10 to +70 °C
Storage Temperature	-20 to +85°C
Operating Humidity	Up to 95 % non-condensing
Dimensions (HWD)	133.35 x 232.66 x 25.4 mm
Electrical Characteristics	Input Voltage: +5 Vdc, +24 Vdc
Battery Requirements	Refer to the latest version of FireClass Designer program for Battery and Alarm Power Supply calculation.
Electromagnetic Compatibility	<ul style="list-style-type: none"> <li>■ EN50130-4 for Conducted Disturbances, Radiated Immunity, Electrostatic Discharge, Fast Transients and Slow High Energy.</li> <li>■ EN50081-1 for emissions.</li> </ul>

Table 1: Technical Specifications

## Terminals

Table 2 shows the terminal information for the COM820 20-Way Status/Command module.

Terminals	Description	
P6A P6B P4	6-pin Power/Remote Bus	
	pin 1	+24 V
	pin 2	0 V
	pin 3	+5 V
	pin 4	0 V
	pin 5	RBUS+
	pin 6	RBUS-
	AUX -	Auxiliary Voltage input - (both in parallel)
P10 P10A P 10B	16-pin Expansion Bus	

Table 2: COM820 Connectors

## Wiring and Installation Notes

### How to install the COM820 20-Way Status/Command module

- 1 All wiring must comply with local installation regulations and local fire system design requirements.
- 2 All conductors must be free of earths.
- 3 Make Zone ID strips and insert into slots in the back of the module.
- 4 For Door mounting in ANC1-D, ANC2-D, ANC3-D enclosure:  
Remove PCB fixing frame from rear of the ANC enclosure door.  
Locate the COM820 and refit the PCB fixing frame.

### Reference Document

For information on FireClass ANC1-D, ANC2-D and ANC3-D, refer to FireClass Ancillary Housing Fixing Instructions.

- 5 It is not possible to:
  - Connect 2 x COM820 per XBUS interface.

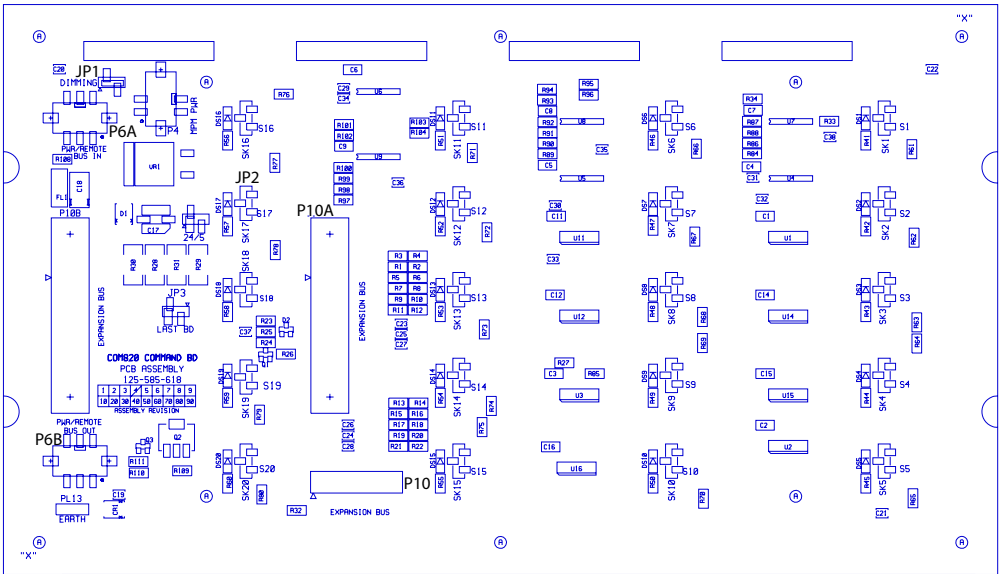


Fig. 1: COM820 20-Way Status/Command module

JP1: Fitted - standard (bright LED)

JP2: Used to enable an onboard 5V regulator off the +24V input. Only used and fitted in a Repeater panel.

- 6 The MPM800 mounts piggyback onto the ANN840/880 in the following ways using stand-offs and screws:
  - Connect the wiring from P6A or P6B (as shown in Figure 1) to the P2 connector of the MPM800 board.

Note that the P6A and P6B (Power Bus IN/OUT) provide +5 and +24 volts DC power and remote bus to the board from the MPM800.

- Fit the PL8 connector of the MPM800 board onto the P10A connector (as shown in Figure 1).

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**MPM800**

For information on MPM800 connectors, refer to FireClass MPM800 Multi-Purpose Interface Module Installation Instructions.

- ### Programming
- #### How to program the COM820 Modules
- 1 Configure the input/output points within guidelines contained in Table 3. Certain output and input points may be dependent on each other.
  - 2 One MPM800 may be used to configure 80 Expansion Bus I/O point addresses.
  - 3 The switches and LEDs are programmed using FireClass Express as Expansion Bus I/O devices.

## Addressing Scheme

Table 3 shows the Typical COM820 Expansion Bus Addressing Scheme for 20-Indicator/20-Switch Module LEDs.

Indicator	Address	Switch	Address
DS1	1	SW1	21
DS2	2	SW2	22
DS3	3	SW3	23
DS4	4	SW4	24
DS5	5	SW5	25
DS6	6	SW6	26
DS7	7	SW7	27
DS8	8	SW8	28
DS9	9	SW9	29
DS10	10	SW10	30
DS11	11	SW11	31
DS12	12	SW12	32
DS13	13	SW13	33
DS14	14	SW14	34
DS15	15	SW15	35
DS16	16	SW16	36
DS17	17	SW17	37
DS18	18	SW18	38
DS19	19	SW19	39
DS20	20	SW20	40

Table 3: Typical COM820 Expansion Bus Addressing Scheme for 20-Indicator/20-Switch Module LEDs.