



# Opencockpits



**Manual Fire Engines B737 Panel IDC.**

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## Introduction:

B737 Fire Engines panel with IDC connection. Mounted in sandwich format professionally painted and engraved.

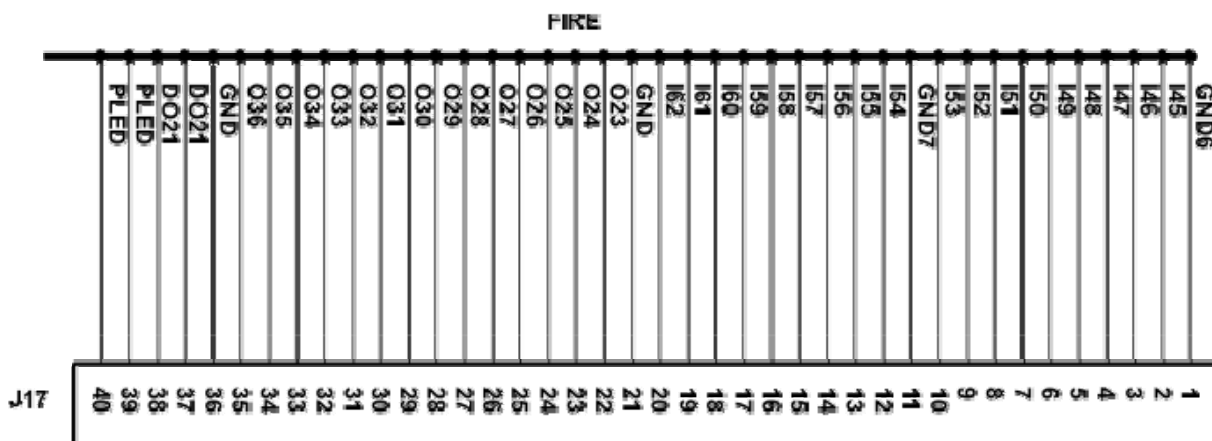
This panel is designed to connect it directly with an I/O card like the Master or PCB Pedestal.

The panel has operative the following components:

- Select and test switches.
- Warning and discharge indicators.
- Fully operative fire handles (without safe triggers).

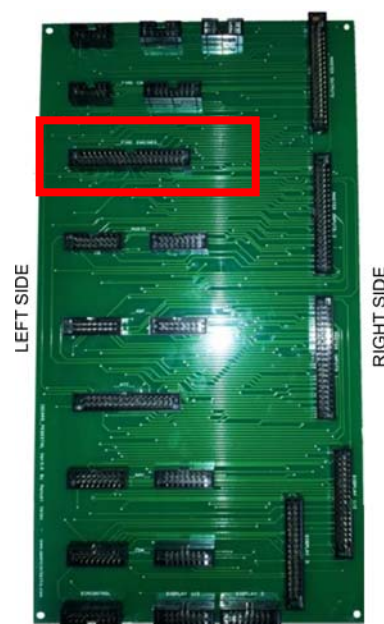
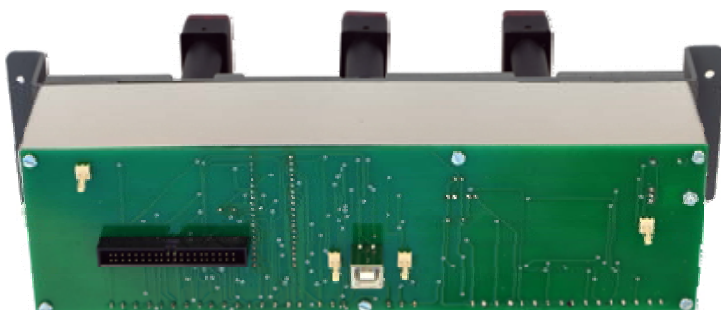
## Wiring Fire Engines:

FIRE ENGINES B737 IDC connector can be plugged to any I/O card and to Pedestal PCB using 40 contacts IDC connector:



The names of the connectors on the PCB panel and the pedestal are the following:

PANEL IDC	PCB PEDESTAL
J1	J17



## Description of connectors Fire Engines:

Fire Engines panel is connected to PCB Pedestal 1 (Master nº1, captain's side) when a Fire Cargo panel is present on PCB Pedestal 2 because they are incompatible in the same PCB or Master (they have common outputs).

J17 CONNECTOR		
I/O	PIN	FUNCTION
GND6	1	Comon for Inputs I45...I53
I45	2	OVHT DET B LEFT (1)
I46	3	OVHT DET A LEFT (1)
I47	4	TEST OVH FIRE
I48	5	TEST FAULT INOP
I49	6	BELL CUT OUT
I50	7	OVHT DET B RIGHT (2)
I51	8	OVHT DET A RIGHT (2)
I52	9	ENGINE EXTINGUISHER TEST 2
I53	10	ENGINE EXTINGUISHER TEST 1
GND7	11	Common for Inputs I54...I62
I54	12	HANDLE 1 LEFT DISCH
I55	13	HANDLE 1 PULL (Switch off when pulled and on when pushed)
I56	14	HANDLE 1 RIGHT DISCH
I57	15	HANDLE APU LEFT DISCH
I58	16	HANDLE APU PULL (Switch off when pulled and on when pushed)
I59	17	HANDLE APU RIGHT DISCH
I60	18	HANDLE 2 LEFT DISCH
I61	19	HANDLE 2 PULL (Switch off when pulled and on when pushed)
I62	20	HANDLE 2 RIGHT DISCH
GND	21	Comon for outputs O23...O36
O23	22	ENG 1 OVERHEAT
O24	23	APU BOTTLE DISCHARGE INDICATOR
O25	24	APU DET INOP INDICATOR
O26	25	FAULT INDICATOR
O27	26	WHEEL WELL INDICATOR
O28	27	ENG 2 OVERHEAT
O29	28	L BOTTLE DISCHARGE
O30	29	R BOTTLE DISCHARGE
O31	30	HANDLE 1 ACTIVETED (red led)
O32	31	HANDLE APU ACTIVETED (red led)
O33	32	HANDLE 2 ACTIVETED (red led)
O34	33	L GREEN LED
O35	34	APU GREEN LED
O36	35	R GREEN LED
GND	36	Common for outputs O23...O36
DO21	37	Negative for backlight
DO21	38	Negative for backlight
PLED	39	Positive for backlight
PLED	40	Positive for backlight
It takes 2.5 volts to 2.9 volts.		
¡ActiveWarning: may burn more voltage backlight!		

The USBDimcontrol card is recommended. It is also recommended to use 3 volt power for the backlight.

***Declaration of inputs and outputs panel Fire Engines:***

To declare variables of inputs and outputs must use the following format (the list belongs to the pedestal's definition file of Opencockpits pedestal).

## // OUTPUTS FIRE ENGINES

Var 248, name ENG1\_OVHL, Link IOCARD\_OUT, DEVICE XX, Output 23 // ENGINE 1 OVERHEAT

Var 250, name APUBOTDISL, Link IOCARD\_OUT, DEVICE XX, Output 24 // APU BOTTLE DISCHARGE

Var 252, name APUDETINOPL, Link IOCARD\_OUT, DEVICE XX, Output 25 // APU DET INOPERATIVE

Var 254, name FIREFAULTL, Link IOCARD\_OUT, DEVICE XX, Output 26 // FIRE ENGINES FAULT

Var 256, name FIREWHELLL, Link IOCARD\_OUT, DEVICE XX, Output 27 // FIRE WHELL WELL

Var 258, name ENG2\_OVHL, Link IOCARD\_OUT, DEVICE XX, Output 28 // ENGINE 2 OVERHEAT

Var 260, name LBOTDISL, Link IOCARD\_OUT, DEVICE XX, Output 29 // ENGINE 1 BOTTLE DISCHARGE

Var 262, name RBOTDISL, Link IOCARD\_OUT, DEVICE XX, Output 30 // ENGINE 2 BOTTLE DISCHARGE

Var 264, name FIRE1L, Link IOCARD\_OUT, DEVICE XX, Output 31 // ENGINE 1 FIRE HANDLE LIGHT

Var 266, name FIREAL, Link IOCARD\_OUT, DEVICE XX, Output 32 // APU FIRE HANDLE LIGHT

Var 268, name FIRE2L, Link IOCARD\_OUT, DEVICE XX, Output 33 // ENGINE 2 FIRE HANDLE LIGHT

Var 270, name FIREG1L, Link IOCARD\_OUT, DEVICE XX, Output 34 // FIRE ENGINE 1 GREEN LED

Var 272, name FIREGAL, Link IOCARD\_OUT, DEVICE XX, Output 35 // FIRE APU GREEN LED

Var 274, name FIREG2L, Link IOCARD\_OUT, DEVICE XX, Output 36 // FIRE ENGINE 2 GREEN LED

## // INPUTS FIRE ENGINES

Var 500, name S\_OVHTDET1A, Link IOCARD\_SW, DEVICE XX, Input 46 // FIRE ENGINE 1 OVERHEAT A DETECTOR SWITCH

Var 502, name S\_OVHTDET1B, Link IOCARD\_SW, DEVICE XX, Input 45 // FIRE ENGINE 1 OVERHEAT B DETECTOR SWITCH

Var 504, name S\_FETSTOVH, Link IOCARD\_SW, DEVICE XX, Input 47 // FIRE ENGINES TEST OVH-FIRE SWITCH

Var 506, name S\_FETSTFAULT, Link IOCARD\_SW, DEVICE XX, Input 48 // FIRE ENGINES TEST FAULT-INOP SWITCH

Var 508, name S\_BELLCOUT, Link IOCARD\_SW, DEVICE XX, Input 49 // FIRE ENGINES BELL CUT OUT SWITCH

Var 510, name S\_OVHTDET2A, Link IOCARD\_SW, DEVICE XX, Input 51 // FIRE ENGINE 2 OVERHEAT A DETECTOR SWITCH

Var 512, name S\_OVHTDET2B, Link IOCARD\_SW, DEVICE XX, Input 50 // FIRE ENGINE 2 OVERHEAT B DETECTOR SWITCH

Var 514, name S\_EXT1TEST, Link IOCARD\_SW, DEVICE XX, Input 53 // FIRE ENGINE EXTINGUISHER 1 TEST SWITCH

Var 516, name S\_EXT2TEST, Link IOCARD\_SW, DEVICE XX, Input 52 // FIRE ENGINE EXTINGUISHER 2 TEST SWITCH

Var 518, name S\_HND1DW, Link IOCARD\_SW, DEVICE XX, Input 55 // FIRE ENGINE HANDLE 1 DW SWITCH

Var 520, name S\_HND1L, Link IOCARD\_SW, DEVICE XX, Input 54 // FIRE ENGINE HANDLE 1 LEFT SWITCH

Var 522, name S\_HND1R, Link IOCARD\_SW, DEVICE XX, Input 56 // FIRE ENGINE HANDLE 1 RIGHT SWITCH

Var 524, name S\_HNDADW, Link IOCARD\_SW, DEVICE XX, Input 58 // FIRE ENGINE HANDLE APU DW SWITCH

Var 526, name S\_HNDAL, Link IOCARD\_SW, DEVICE XX, Input 57 // FIRE ENGINE HANDLE APU LEFT SWITCH

Var 528, name S\_HNDAR, Link IOCARD\_SW, DEVICE XX, Input 59 // FIRE ENGINE HANDLE APU RIGHT SWITCH

Var 530, name S\_HND2DW, Link IOCARD\_SW, DEVICE XX, Input 61 // FIRE ENGINE HANDLE 2 DW SWITCH

Var 532, name S\_HND2L, Link IOCARD\_SW, DEVICE XX, Input 60 // FIRE ENGINE HANDLE 2 LEFT SWITCH

Var 534, name S\_HND2R, Link IOCARD\_SW, DEVICE XX, Input 62 // FIRE ENGINE HANDLE 2 RIGHT SWITCH

With this we end this manual, we invite you to read the manuals for the other elements of Opencockpits and SIOC software and we thank you for trusting us.

## Links of interest:

Customer Support Zone:

<http://www.opencockpits.com/catalog/info/>