



Opencockpits



Manual ATC B737 Panel IDC.

Index:

MANUAL ATC B737 PANEL IDC.....	1
INDEX:.....	2
INTRODUCTION:.....	3
WIRING ATC:.....	3
DESCRIPTION OF CONNECTORS ATC:.....	4
DECLARATION OF INPUTS AND OUTPUTS:.....	5
LINKS OF INTEREST:.....	5

Introduction:

B737 ATC panel with IDC connection. Mounted in sandwich format (8mm height) professionally painted and engraved.

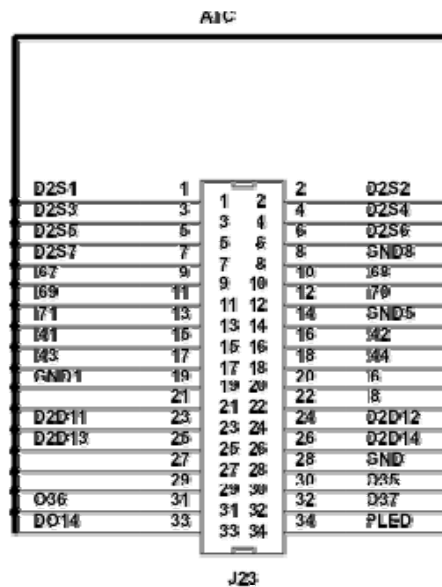
This panel is designed to connect it directly with an I/O card like the Master or PCB Pedestal.

The panel has operative the following components:

- Switch XPNDR & ALT SOURCE.
- High precision encoders.
- Mode rotary switch.
- Indicators of active mode and fail.

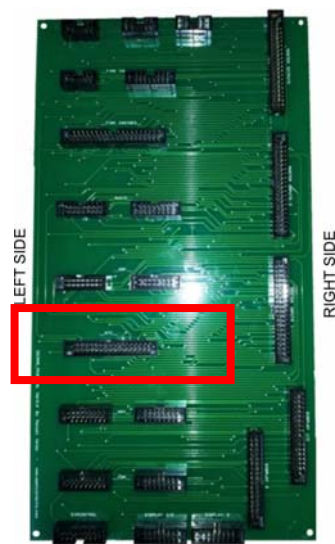
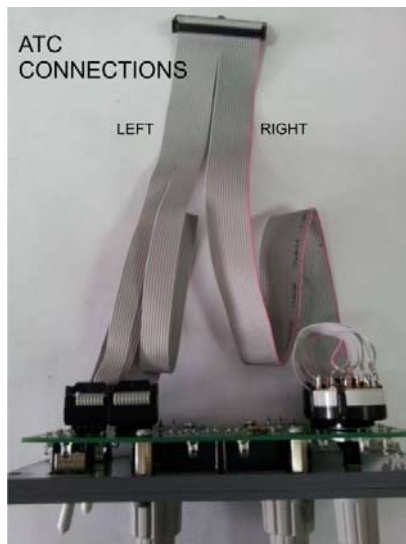
Wiring ATC:

ATC B737 IDC connectors can be plugged to any I/O card and to Pedestal PCB using 34 to 16+10+10 contacts IDC connectors:



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

PANEL IDC	PCB PEDESTAL
J1-2-3	J23



Description of connectors ATC:

ATC panel is connected to PCB Pedestal 2 (Master n°2, FO side).

J23 CONNECTOR		
I/O	PIN	FUNCTION
D2S1	1	
D2S2	2	
D2S3	3	
D2S4	4	
D2S5	5	
D2S6	6	
D2S7	7	
GND8	8	GND common for Inputs I67...I71
I67	9	Input 139 Rotary switch STBY
I68	10	Input 140 Rotary switch ALT RPTG OFF
I69	11	Input 141 Rotary switch XPNDR
I70	12	Input 142 Rotary switch TA ONLY
I71	13	Input 143 Rotary switch TA/RA
GND5	14	GND common for Inputs I41...I44
I41	15	Input 113 Encoder digit jump
I42	16	Input 114 Encoder digit jump
I43	17	Input 115 Encoder increment-decrement of digit
I44	18	Input 116 Encoder increment-decrement of digit
GND1	19	GND common for Inputs I6...I8
I6	20	Input 78 IDENT push button
I7	21	Input 79 switch mode 2 XPNDR
I8	22	Input 80 switch mode 2 ALT SOURCE
D2D11	23	
D2D12	24	
D2D13	25	
D2D14	26	
D2D15	27	
GND	28	GND common for outputs
O34	29	Output 98 FAULT LED
O35	30	Output 99 ATC INDICATOR
O36	31	Output 100 ATC MODE 1 INDICATOR
O37	32	Output 101 ATC MODE 2 INDICATOR

DO14	33	Negative for backlight
PLED	34	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:

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

```
// DIGITS ATC
```

```
Var 140, name ATC, Link IOCARD_DISPLAY, DEVICE 20, Digit 90, Numbers 5
```

```
// INDICADORES ATC
```

```
Var 300, name ATCFAULTL, Link IOCARD_OUT, DEVICE 20, Output 98 // ATC XP-FAULT INDICATOR
```

```
Var 302, name ATCATCL, Link IOCARD_OUT, DEVICE 20, Output 99 // ATC DISPLAY "ATC" INDICATOR
```

```
Var 304, name ATCATC1L, Link IOCARD_OUT, DEVICE 20, Output 100 // ATC DISPLAY "1" INDICATOR
```

```
Var 306, name ATCATC2L, Link IOCARD_OUT, DEVICE 20, Output 101 // ATC DISPLAY "2" INDICATOR
```

```
// ENCODERS ATC
```

```
Var 374, name E_ATCLEFT, Link IOCARD_ENCODER, DEVICE 20, Input 113, Aceleration 1, Type 2 // DIGIT SELECTION ENCODER
```

```
Var 376, name E_ATCRIGHT, Link IOCARD_ENCODER, DEVICE 20, Input 115, Aceleration 1, Type 2 // DIGIT INCR/DECR ENCODER
```

```
// INPUTS ATC
```

```
Var 428, name S_ATCIDENT, Link IOCARD_SW, DEVICE 20, Input 78 // IDENT PUSHBUTTON
```

```
Var 430, name S_ATCXP2, Link IOCARD_SW, DEVICE 20, Input 79 // XP2ND 2 MODE
```

```
Var 432, name S_ATCALTS2, Link IOCARD_SW, DEVICE 20, Input 80 // ALT SOURCE 2 MODE
```

```
Var 434, name R_ATCSTB, Link IOCARD_SW, DEVICE 20, Input 139 // ROTARY SWITCH
```

```
Var 436, name R_ATCALT, Link IOCARD_SW, DEVICE 20, Input 140 // ROTARY SWITCH
```

```
Var 438, name R_ATCXP, Link IOCARD_SW, DEVICE 20, Input 141 // ROTARY SWITCH
```

```
Var 440, name R_ATCTA, Link IOCARD_SW, DEVICE 20, Input 142 // ROTARY SWITCH
```

```
Var 442, name R_ATCTARA, Link IOCARD_SW, DEVICE 20, Input 143 // ROTARY 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/>