TCAS/ATC Panel Module S737-PED-M-AL-A32-1519

Datasheet - TCAS_ATC Panel Module V3.2 - Rev1.1

Module Dimensions: (WxHxD) mm3	147 x 57 x 16 mm3 *High of Knobs Not included*
Module Line:	Alpha
Backlight (12V):	Yes, Warm White
Backpanel:	Yes, Specific PCB
Hardware Interface: (See Chapter 1.2)	To be connected to a Control Board like SimCard Ethernet, IOCard USB, etc.
Knobs:	Realistic Injection Plastic Knobs
Plug Ready Module	Yes
Simulator Model:	Sim737NG
Scale:	1:1
Price (without VAT)	*Web: Shop*

1 Compatibility

1.1 Software Compatibility

This module uses IDC connectors to interface with the electronic I/O Board, therefore cannot be connected directly to a Computer, it has to be though an electronic Board (see hardware compatibility). If the electronic board is a SimCard, then this module is compatible with the following Add-Ons:

 **iFly737**			 **Prosim737**			 Project Magenta			 PMDG 737NG			 SimAvionics		
FSX	P3D	XPLANE	FSX	P3D	XPLANE	FSX	P3D	XPLANE	FSX	P3D	XPLANE	FSX	P3D	XPLANE
X	X	?	X	X	?	X	X	X	X	X	?	X	X	?

X	Fully compatible, scripts available in downloads sect.
X	Fully compatible, no scripts available (under development)
X	Compatible with some add-on limitations
?	Pending confirmation for the add-on company

FSX	Microsoft Flight Simulator X
P3D	Lockheed Martin Prepar3D
X-Plane	X-Plane

This module has been designed to be connected directly to the "**Sismo Pedestal Backpanel V1**" or superior. This backpanel is an option where cables or other elements are not necessary. If you want to use it in other configuration, just connect the flat ribbon cables following the indications of the "**Wiring Schedule**".

1.2 Hardware Compatibility (I/O Boards)

SimCards Ethernet	IOCards	Phidgets	MIP737	Pokeys USB	Arduino
Yes (Recommended)	Yes	Yes	Yes	No Information	Yes

1.3 Module Backpanel (PCB) Compatibility

This datasheet is valid for the following module backpanels (PCB):

V1	V2	V3	V3.1	V3.2			
No	No	No	No	Yes			

2 Abbreviations

PRM	Plug Ready Module
TCAS/ATC	TCAS/ATC Panel Module

3 Customization

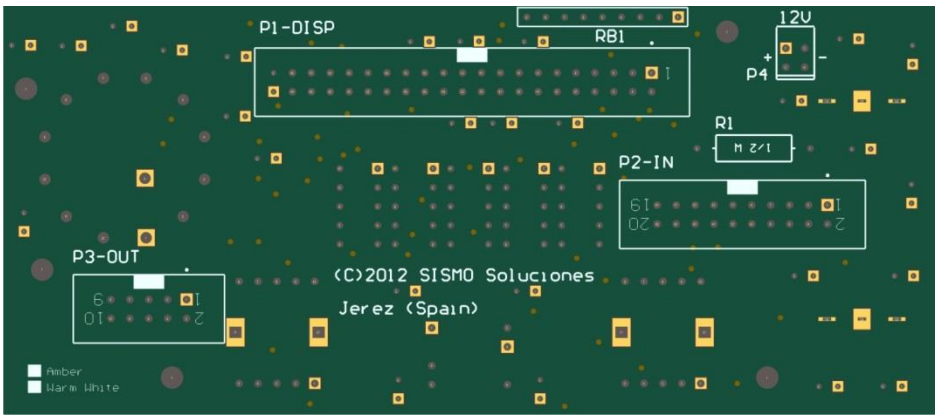
Control Board Type:

SC	This variant of TCAS/ATC is valid to be connected with a SimCard Ethernet
OTHER	This variant of TCAS/ATC is valid to be connected with other I/O Board like IOCards, etc. For more details visit the shop in the web www.sismo-soluciones.com

4 Parts included

- 1 TCAS/ATC Module, fully assembled and ready to be installed in Pedestal.
- Only in configuration "OTHER":
  - 1 Un. 10-pin flat ribbon cable (25cm length). For other lengths, please contact to Sismo.
  - 1 Un. 20-pin flat ribbon cable (25cm length). For other lengths, please contact to Sismo.
  - 1 Un. 40-pin flat ribbon cable (25cm length). For other lengths, please contact to Sismo.

5 Backpanel Connectors



6 Wiring Schedule

6.1 INPUT

Function	State
Dual Rot Encoder – L Bottom Knob	Set A
Dual Rot Encoder – L Upper Knob	Set A
Dual Rot Encoder – R Bottom Knob	Set A
Dual Rot Encoder – R Upper Knob	Set A
Not used	
Switch ALT SOURCE	1
Push-Button IDENT	ON
Rotary2 - ALT RPTG	ON
Rotary4 - TA ONLY	ON
Not used	

P2-IN	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20

State	Function
Set B	Dual Rot Encoder – L Bottom Knob
Set B	Dual Rot Encoder – L Upper Knob
Set B	Dual Rot Encoder – R Bottom Knob
Set B	Dual Rot Encoder – R Upper Knob
Common GND	
1	Switch XPNDR
ON	Rotary1 - STBY
ON	Rotary3 - XPNDR
ON	Rotary5 - TA/RA
Common GND	

Note : The encoders are Elma 37 type

6.2 OUTPUT

Function	State
Led XPNDR FAIL	ON
Led ATC1	ON
Not used	
Not used	
Not used	

P3-OUT	
1	2
3	4
5	6
7	8
9	10

State	Function
ON	Led ATC
ON	Led ATC2
	Not used
	Not used
Common GND	

6.3 DISPLAY

6.3.1 SC-Variant

	Function	P1-DISP		Function
GROUP 1 (8 displays)	Display 7S - Segment **A** - Displays 1 to 8	1	2	Display 7S - Segment **B** - Displays 1 to 8
	Display 7S - Segment **C** - Displays 1 to 8	3	4	Display 7S - Segment **D** - Displays 1 to 8
	Display 7S - Segment **E** - Displays 1 to 8	5	6	Display 7S - Segment **F** - Displays 1 to 8
	Display 7S - Segment **G** - Displays 1 to 8	7	8	Display 7S - **DP** - Displays 1 to 8
	Not used	9	10	Common GND - GND for pins 1 to 8
	Not used	11	12	Not used
	Not used	13	14	Not used
	Not used	15	16	Display6 - TCAS/ATC Active 1 (right display)
	Display7 - TCAS/ATC Active 2	17	18	Not used
	Not used	19	20	Common GND - GND for displays 1 to 8
GROUP 2 (8 displays)	Display 7S - Segment **A** - Displays 9 to 16	21	22	Display 7S - Segment **B** - Displays 9 to 16
	Display 7S - Segment **C** - Displays 9 to 16	23	24	Display 7S - Segment **D** - Displays 9 to 16
	Display 7S - Segment **E** - Displays 9 to 16	25	26	Display 7S - Segment **F** - Displays 9 to 16
	Display 7S - Segment **G** - Displays 9 to 16	27	28	Display 7S - **DP** - Displays 9 to 16
	Not used	29	30	Common GND - GND for pins 9 to 16
	Not used	31	32	Not used
	Not used	33	34	Not used
	Not used	35	36	Display14 - TCAS/ATC Active 3
	Display15 - TCAS/ATC Active 4	37	38	Display16 - TCAS/ATC Active 5 (left display)
	Not used	39	40	Common GND - GND for displays 9 to 16

6.3.2 OTHER Variant

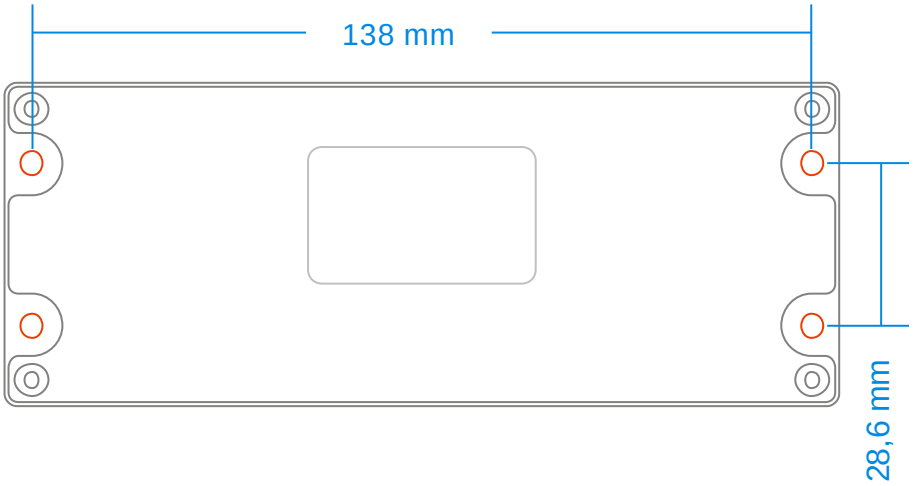
	Function	P1-DISP		Function
GROUP 1 (8 displays)	Display 7S - Segment **A** - For All Displays (CC)	1	2	Display 7S - Segment **B** - For All Displays (CC)
	Display 7S - Segment **C** - For All Displays (CC)	3	4	Display 7S - Segment **D** - For All Displays (CC)
	Display 7S - Segment **E** - For All Displays (CC)	5	6	Display 7S - Segment **F** - For All Displays (CC)
	Display 7S - Segment **G** - For All Displays (CC)	7	8	Display 7S - **DP** - For All Displays (CC)
	Not used	9	10	Common GND - GND for pins 1 to 8
	Not used	11	12	Not used
	Not used	13	14	Not used
	Not used	15	16	Display6 - TCAS/ATC Active 1 (right display)
	Display7 - TCAS/ATC Active 2	17	18	Not used
	Not used	19	20	Common GND - GND for displays 1 to 8
GROUP 2	Display 7S - Segment **A** - For All Displays (CC)	21	22	Display 7S - Segment **B** - For All Displays (CC)
	Display 7S - Segment **C** - For All Displays (CC)	23	24	Display 7S - Segment **D** - For All Displays (CC)
	Display 7S - Segment **E** - For All Displays (CC)	25	26	Display 7S - Segment **F** - For All Displays (CC)

	Display 7S - Segment **G** - For All Displays (CC)	27	28	Display 7S - **DP** - For All Displays (CC)
	Not used	29	30	Common GND - GND for pins 9 to 13
	Not used	31	32	Not used
	Not used	33	34	Not used
	Not used	35	36	Display14 - TCAS/ATC Active 3
	Display15 - TCAS/ATC Active 4	37	38	Display16 - TCAS/ATC Active 5 (left display)
	Not used	39	40	Common GND - GND for displays 9 to 13

6.4 Backlight

P4 - 12V	
Backlight	12V for backlight. This voltage can be provided directly from a 12 V DC power supply or can be provided by “dimmer backlighting board” to have the dimming functionality available.

7 DZUS Position



8 Related Documentation

ID	DOCUMENT	Revision
01	User Manual – SimCards Ethernet	See the latest on our website
02	Datasheet – Pedestal Backpanel	See the latest on our website

9 Pictures

End of Document