

Exterior Lights Control Panel Module (BP)

S7NG-FOH-M-YL-A15-0605

Datasheet - BP Exterior Lights Control Panel Module V1.5 - Rev1.3.docx



| | |
|--|--|
| Module Dimensions: (WxHxD) mm3 | 597 x 85 x 25 mm3 <i>Height of Knobs Not included</i> |
| 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) | <i>Web: Shop</i> |

1 Compatibility

1.1 Software Compatibility

This module uses IDC connectors to interface with electronic I/O Boards, they 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 FWD Backpanel V1.6” or higher. This backpanel is an option where cables or other elements are not necessary. If you want to use it in another configuration, just connect the flat ribbon cables following the indications on 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):

| BP Cap V1.6 | BP F/O V1.6 | Eng Starter Rotaries V1.1 | Eng Starter Backlight V1.1 |
|-------------|-------------|---------------------------|----------------------------|
| Yes | Yes | Yes | Yes |

2 Abbreviations

| | |
|-----|-------------------------|
| PRM | Plug Ready Module |
| FWD | Forward Overhead Module |
| BP | Bottom Panel |

3 Customization

This module does not include the Magnetic Engine Starter Module. You may choose to purchase these together and we will install them before shipping.

There is an option of including Light switches metal caps shaped like a “T”. See pictures.

This module includes a 3mm laser-cut rear panel. If you already have a FWD Overhead Frame (see website for current version) you will not need this panel.

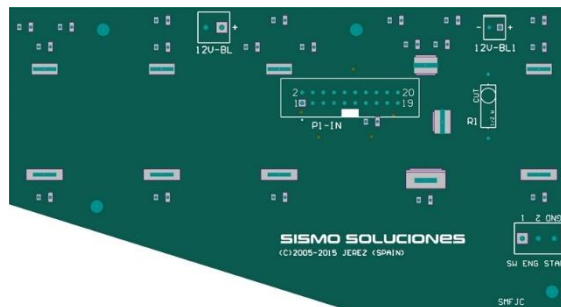
4 Parts included

- 1 Un. Exterior Lights Control Panel Module, fully assembled and ready to be installed on the FWD.
- 3 Un. 20-pin flat wire cable (25cm length). For other lengths, please contact Sismo.
- 7 un. screws painted.

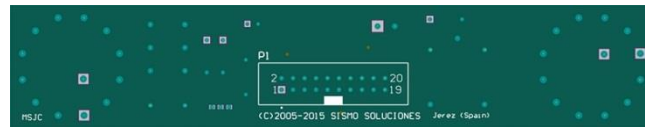
5 Backpanel Connectors



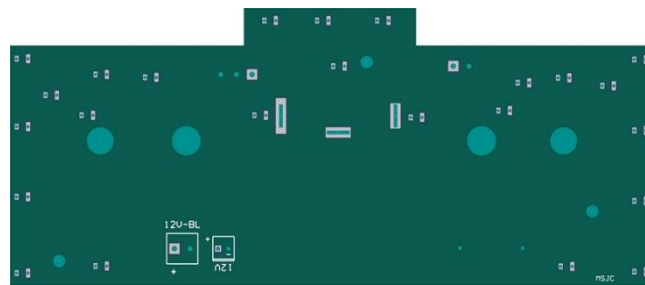
Captain Side



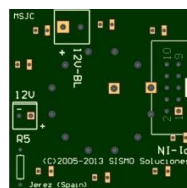
F/O side



Eng Starter Rotaries



Eng Starter Backlight



* In case of using standard rotaries

6 Wiring Schedule

6.1 Captain Side

| Function | State | P1-IN | | State | Function |
|---------------------------------|-------|-------|----|-------|-------------------------------------|
| Not used | | 1 | 2 | | Not used |
| Not used | | 3 | 4 | | Not used |
| Not used | | 5 | 6 | | GND for Backlight |
| Toggle Switch: TAXI AUTO | ON | 7 | 8 | | GND for Backlight |
| 12V+ CC for Backlight | | 9 | 10 | | Common GND for Inputs of pin 7 |
| Toggle Switch: RETRACT L | ON | 11 | 12 | ON | Toggle Switch: RETRACT R |
| Toggle Switch: INBOARD L | ON | 13 | 14 | ON | Toggle Switch: INBOARD R |
| Toggle Switch: RUNWAY TURNOFF L | ON | 15 | 16 | ON | Toggle Switch: RUNWAY TURNOFF R |
| Toggle Switch: APU START | ON | 17 | 18 | ON | Toggle Switch: APU OFF |
| 12V+ DC for Backlight | | 19 | 20 | | Common GND for Inputs pins 11 to 18 |

12V-BL-BL1

12V DC for backlight. This voltage can be provided directly from a 12 V DC power supply or can be provided by the backlight connector in the backpanel to have the dimming functionality available.

6.2 F/O Side

| Function | State | P1-IN | | State | Function |
|----------------------------------|-------|-------|----|-------|-------------------------------------|
| Not used | | 1 | 2 | | GND for Backlight |
| Not used | | 3 | 4 | | GND for Backlight |
| Not used | | 5 | 6 | | Not used |
| Not used | | 7 | 8 | | Not used |
| 12V+ DC for Panel Backlight | | 9 | 10 | | Not used |
| Toggle Switch: ENG START BOTH L | ON | 11 | 12 | ON | Toggle Switch: ENG START BOTH R |
| Toggle Switch: LOGO LIGHT | ON | 13 | 14 | ON | Toggle Switch: POS STEDY |
| Toggle Switch: POS STROBE STEADY | ON | 15 | 16 | ON | Toggle Switch: ANTI COLLISION |
| Toggle Switch: WING LIGHT | ON | 17 | 18 | ON | Toggle Switch: WHEEL WELL LIGHT |
| 12V+ DC for Backlight | | 19 | 20 | | Common GND for Inputs pins 11 to 18 |

SW ENG START

| | |
|-----|---------------|
| 1 | Position 1 ON |
| 2 | Position 2 ON |
| GND | GND |

12V-BL-BL1

12V DC for backlight. This voltage can be provided directly from a 12 V DC power supply or can be provided by the backlight connector in the backpanel to have the dimming functionality available.

6.3 Engine Starter Rotaries



| Function | State | P1-IN | | State | Function |
|--------------------------------|-------|-------|----|-------------------------------------|--------------------------------|
| Rotary ENG START 1: Position 1 | | 1 | 2 | | Rotary ENG START 1: Position2 |
| Rotary ENG START 1: Position 3 | | 3 | 4 | | Rotary ENG START 1: Position 4 |
| Not Used | | 5 | 6 | Common GND for Inputs 1 to 4 | |
| Rele: Magnetic Switch | ON | 7 | 8 | Common GND for Inputs 1 to 4 | |
| Rele: Magnetic Switch | ON | 9 | 10 | Common GND for Inputs 1 to 4 | |
| Rotary ENG START 2: Position 1 | ON | 11 | 12 | ON | Rotary ENG START 2: Position 2 |
| Rotary ENG START 2: Position 3 | ON | 13 | 14 | ON | Rotary ENG START 2: Position 4 |
| 5V+ CC | | 15 | 16 | 5V+ CC | |
| 12V+ CC | | 17 | 18 | | Not Used |
| 12V+ CC | | 19 | 20 | Common GND for Inputs pins 11 to 14 | |

6.4 Engine Starter Backlight

| SW ENG START | |
|--------------|---------------|
| 1 | Position 1 ON |
| 2 | Position 2 ON |
| GND | GND |

12V-BL-BL1

12V DC for backlight. This voltage can be provided directly from a 12 V DC power supply or can be provided by the backlight connector in the backpanel to have the dimming functionality available.

Note: It is not necessary to connect the **12V-BL** if all of the IDC Connectors are in place. This is due to the fact that the backlight travels through the flat ribbon cables, in the contact map, these are in the   es.

The **12V-BL** connectors which appear on the PCB have a different purpose. They are used for applying backlighting to the gauges.

Taking into account the fact that the backlighting travels through the IDC Connectors, one should be cautious when connecting these. If the physical orientation is not correct, the 12V in the circuit will react in unpredictable ways and damage your module.

Each circuit has a different contact map and the 12V does not necessarily follow the same pattern in all modules.

6.5 In case of using standard rotaries

| Function | State |
|------------------------|-------|
| Rotary: ENG START GRD | ON |
| Rotary: ENG START CONT | ON |
| Not used | |
| | |
| | |

| P1-IN | |
|-------|----|
| 1 | 2 |
| 3 | 4 |
| 5 | 6 |
| 7 | 8 |
| 9 | 10 |

| State | Function |
|------------------------------------|-----------------------|
| ON | Rotary: ENG START OFF |
| ON | Rotary: ENG START FLT |
| | |
| | |
| Common GND for Outputs pins 1 to 4 | |

12v-BL and 12V connectors are not used.

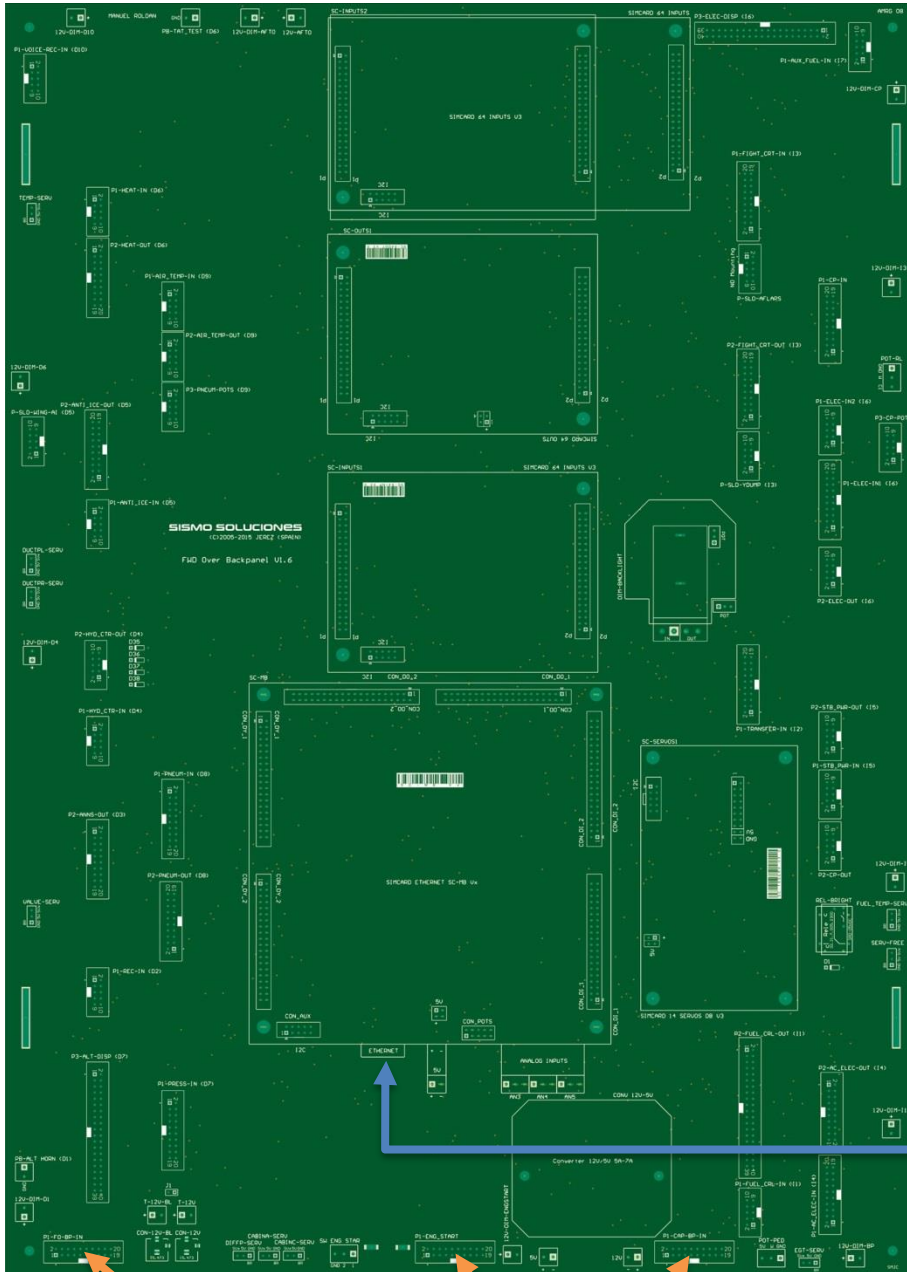
7 Screws Position



8 FWD Overhead Backpanel (Optional)

With Sismo's FWD Overhead Backpanel the connections between all the FWD Over modules and the control electronic (SimCards Ethernet) is very easy and professional. The backpanel supports all the functionality of the overhead, like backlight, dimming, power supply converter, extensions, etc.

www.sismo-soluciones.com



Ethernet Port
To Computer



BP Panel

9 Related Documentation

| ID | DOCUMENT | Revision |
|----|--|-------------------------------|
| 01 | User Manual – SimCards Ethernet | See the latest on our website |
| 02 | User Manual – FWD Overhead | See the latest on our website |
| 03 | User Manual – Hookup & Wiring Guideline | See the latest on our website |
| 04 | Datasheet – Magnetic Engine Starter Module | See the latest on our website |

10 Pictures



Notice the "T" metal caps



End of Document