



Flarm Interface Board

FIB V1.0

INSTALLATION MANUAL

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Welcome

Thank you for purchasing the FIB, Flarm interface Board.

This PCB was designed to simplify the task of cabling when a Flarm device is used with 3rd party products such as

- Triadis Altair Glide Computer
- Triadis Vega Vario
- Swift Avionics Flarm-Nav
- Ediatec remote Flarm Display
- Swiss-BAT remote Flarm displays (Artronic style)



Sport flying is an activity that is associated with considerable risks for crew, passengers, third parties and other objects. In order to make full and safe use of FLARM-NAV, it is absolutely essential to be fully aware of the risks, operating conditions, restrictions and limitations associated with the use of FLARM-NAV. This includes familiarity with and observance of this Installation and User Manual.

We always welcome suggestions for the improvement of FLARM-NAV.

The latest version of this handbook and other related documents can be found at the website

www.swiftavionics.com.au This website also has answers to Frequently Asked Questions.

The website also carries announcements when new software versions or functions are available. If you enter your name on the mailing list, you will automatically receive notification of changes as and when they happen: <http://www.swiftavionics.com.au/>

Overview

The Flarm Interface board is a useful accessory when a custom cable needs to be manufactured to interface any device that requires serial data, power and ground from a device with Flarm standard outputs. The device is connected in series between two RJ45 cables. It is also possible to connect a 6 wire RJ11 6P6C connector as supplied with some third party Flarm Display devices



Swift does not guarantee the accuracy of this document.



Swift Avionics releases this information for the use of its customers, but cannot take any responsibility for installations using this data due to the custom nature of said installations. The responsibility of testing and checking polarities and data connections lies solely with the end user. Swift Avionics Pty Ltd offers no warranty on damage incurred to any instruments or hardware while using this product.



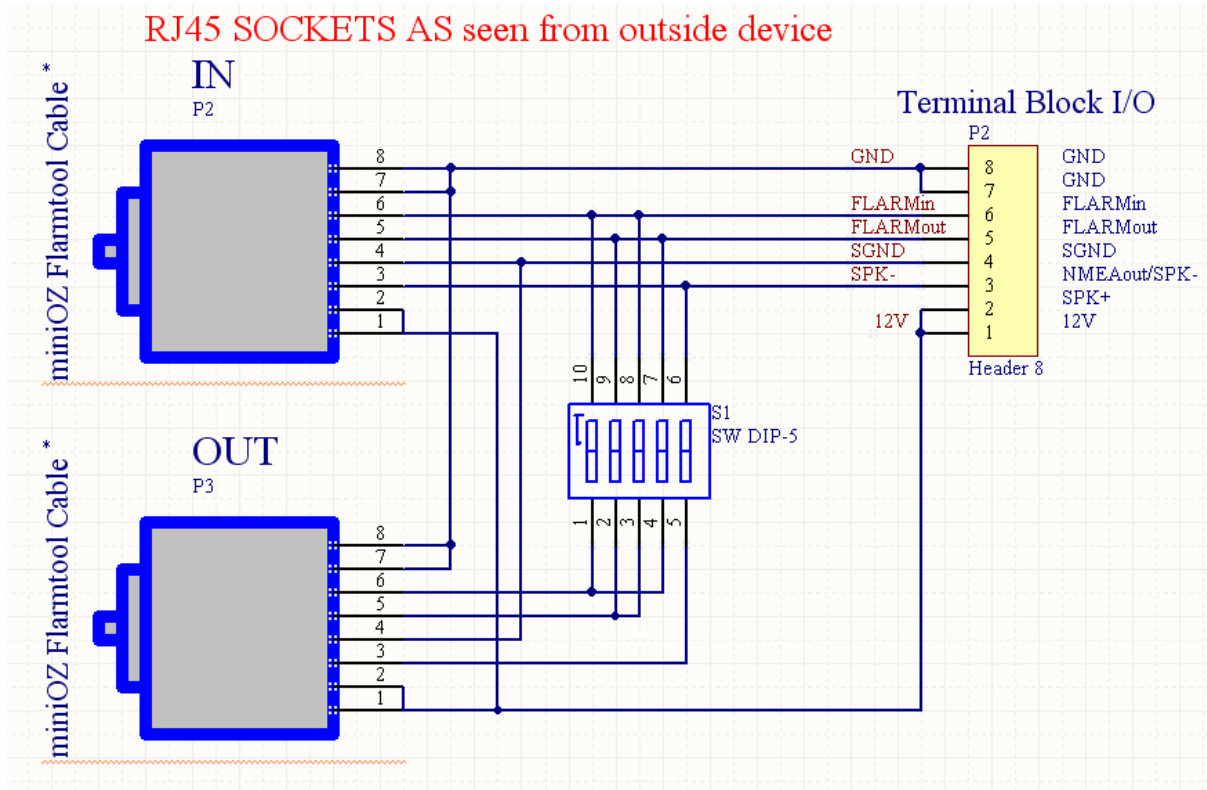
This product is NOT SUITABLE for use with EW Avionics Microrecorder devices due to reverse polarity of Power and Ground on these devices

Schematic Diagram

The image below shows the wiring found on the FIB.

- It can be seen that through use of the dip-switches on the PCB, it is possible to entirely disconnect, reverse or connect the FLARMin and FLARMout lines between the IN and OUT connectors.
- This makes it very easy to make a “null modem” cable where you need to reverse Transmit and Receive lines inside the cable to get good communications between two devices.
- Also note the ability to open circuit the feed between pin 3 on both IN and OUT connectors, as this pin is used as the Audio Alarm Drive pin from the output of Flarm-NAV.
- The Terminal I/O Block can be used to gain access to data lines for connection to a PDA etc.
- The following page contains a table of recommended connections for different devices.

Flarm Interface Board Schematic



SWIFT AVIONICS FLARM Breakout board												
IN	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ	MiniOZ
OUT	Ediatic	Swiss-BAT	FlarmNAV	ALTAIR X4	ALTAIR X5	Ediatic	Swiss-BAT	FlarmNAV	ALTAIR X4	ALTAIR X5	ALTAIR X4	ALTAIR X5
DIP-SW 1	ON	ON	ON	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
DIP-SW 2	ON	ON	ON	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
DIP-SW 3	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
DIP-SW 4	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
DIP-SW 5	ON	ON	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
Terminal Block I/O Screw Connector												
GND	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-	BATTERY-
GND	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
FLARMIN	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
FLARMOUT	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
SGND	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
SPK-	N.C.	N.C.	Speaker-	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
12V	N.C.	N.C.	Speaker+	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
12V	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+	BATTERY+
FlarmNav Port B	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav	FlarmNav
FlarmNav Port B	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT	Swiss-BAT
FlarmNav Port B	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic	Ediatic

Note : When connecting any device to an ALTAIR, please DO NOT connect power via the Screw Terminal I/O, as the ALTAIR supplies a switched power supply for connected devices vis the Altair interface board which houses X4 and X5 connectors
DIP-SW = the block of five switches
N.C. = Not connected

