

Sirius Connection Box 3027



Sirius Connection Box 3027 VMS interface Vessel Monitoring System Owner's & Installation Manual



Version 1.1

Sirius Connection Box 3027

Disclaimer

Sirius is a brand name owned by Polaris Electronics A/S, Denmark.

We reserve the right to change specifications and instructions given in this manual without notices.

No liability can be accepted for any inaccuracies or omissions in the manual, although every care has been taken to make it as complete and accurate as possible.

This manual applies to firmware release of October 2013.

**Polaris Electronics A/S
Kaerholt 1
DK-9210 Aalborg SO
Denmark**

Telephone: +45 9631 7900

Fax: +45 9631 7901

E-mail: info@polaris-as.dk

Web: www.polaris-as.dk

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Sirius Connection Box 3027

Owner's Manual

Congratulations with your new Sirius Connection Box 3027.

Safety Notices

Before installation please read the Installation Manual carefully.
The equipment must be 10-32 V DC powered only.

Do not attempt to modify the Sirius Connection Box 3027.
Doing so will invalidate the warranty.

The equipment is designed for operation with T&T 3027 in
temperatures between -15° C and +55° C.

Do not use the Sirius Connection Box 3027 in temperatures which
exceed this range.

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About the Sirius Connection Box 3027

There is no on/off switch, as the VMS system must always be turned on, so that the Sirius Connection Box 3027 can show the status of sent reports.

If the equipment is installed with an external switch at the main electrical switchboard, please, be sure that the equipment is always turned on.

Models

There are two different models of the cover:

- Wall mounted (standard)



- Flush mounted (option)



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Indicators & Buttons



Sirius Connection Box 3027

Operation

Front buttons description	
Button name	Function
RESET (S2)	Removes power from antenna and the Sirius Connection Box 3027
MUTE (S1)	Mutes alarm / Dims LEDs by holding the button*

* LED dimming functionality available from PCB version D.

LED description					
Function	Color	On	Flashing	Off	Dimmable
PWR In	Red	Power OK	-	No Power	Yes
GPS	Green	3D position fix obtained	2D position fix obtained	No fix obtained	Yes
SAT Lock	Green	Logged in	Login ongoing	No sat. found	Yes
Zone	Yellow	Inside zone with less than one report pr. hour	Inside zone with more than one report pr. hour	Outside zone	Yes
Ant Con.	Yellow	Connection OK	Communication ongoing	No connection	Yes
Option	Red**	- (Optional)	- (Optional)	- (Optional)	Yes

** This LED is green color on PCBs before version D.

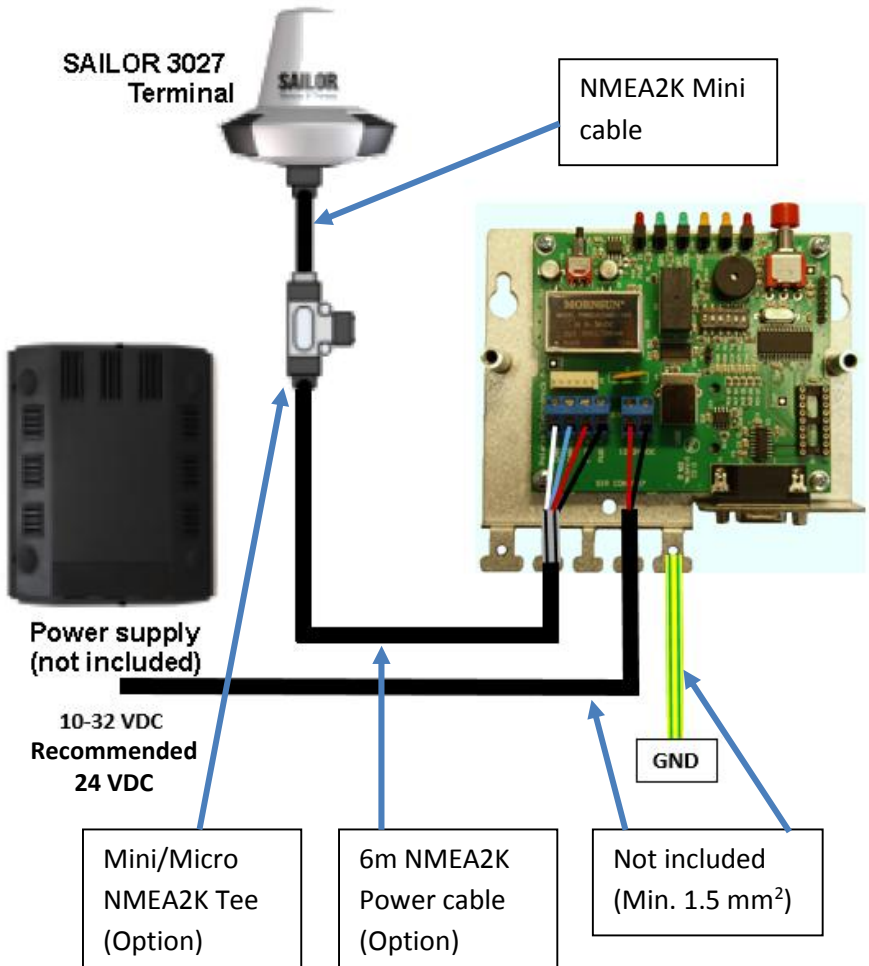
Installation Manual

The Sirius Connection Box 3027 package includes:

- Sirius Connection Box 3027
- User & Installation Manual

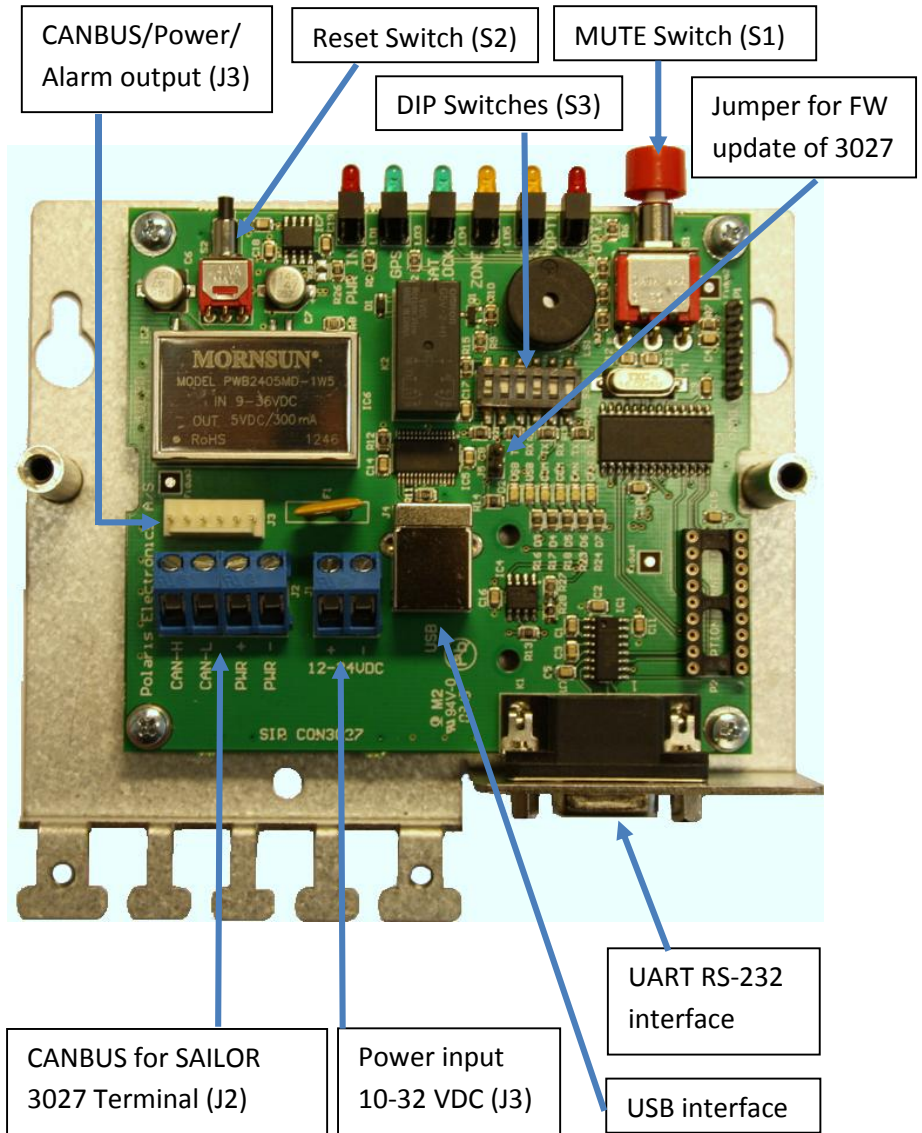
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Installation Overview



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Connectors & Switches



Sirius Connection Box 3027

Compass Safe Distance

Distance to compass must be at least 70 cm.

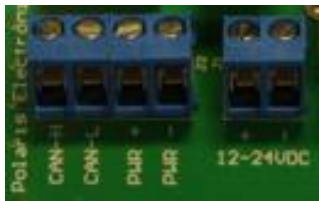
Do not install the Sirius Connection Box 3027 closer to magnetic compasses.

Power & Antenna Connection

Connect the Sirius Control Box 6130 LRIT to 12 or 24 V DC (10-32 V DC). Recommended is 24 V DC.

It is recommended to include a fuse in the power supply.

Wiring of cable terminals			
NMEA2K cable (J2)		Power cable (J1)	
CAN-H	White wire	12-24VDC +	Positive wire
CAN-L	Blue wire	12-24VDC -	Negative wire
PWR +	Red wire		
PWR -	Black wire		



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Configuration

Configuration can be done by below setup.

HyperTerminal settings for UART RS-232 and USB port.	
Setting	Value
Bits per second	115200
Data bits	8
Parity	None
Stop bits	1
Flow control	None

Make a HyperTerminal connection to the Sirius Connection Box 3027.

When connection is running, it will answer a [Enter] command with:

:

Setup

From the DIP Switch you can do below setup.

DIP Switch default settings				
Pin	Settings	Function	ON	OFF
1	ON	120 ohm termination CAN bus	Enabled	Disabled
2	OFF	Communication port selection	UART RS-232	USB port
3*	OFF	GPS and SAT Lock LED update	No update	Auto update
4	ON	Future SW option	Always on	Not allowed
5	ON	Future SW option	Always on	Not allowed
6	ON	Operation selection	Normal operation	Debug/programming

*Not used from software version 1.1

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Trouble Shooting Guide

See below Errors in the alarm list

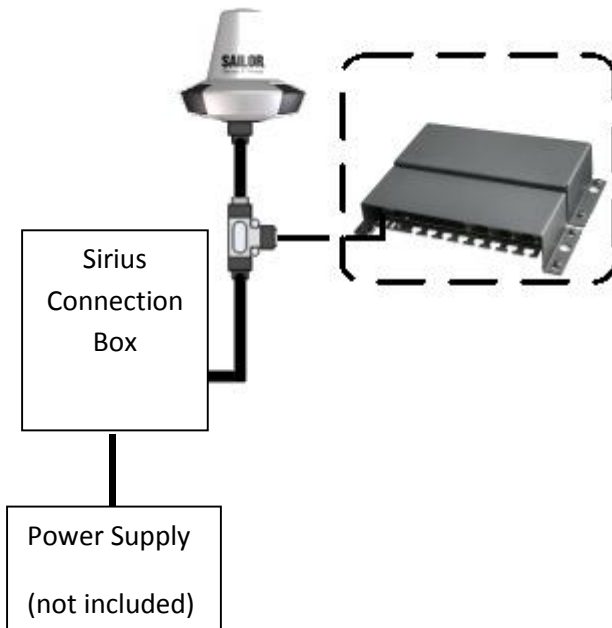
Alarm		
Error	Possible Causes	Possible Solution
No antenna connection at startup	Incorrectly installation	Check installation. Connections and cables.
	Cable defective	Replace cable
	3027 defective	Replace 3027 antenna
Lost connection to antenna	Loose connection in connectors	Check connections and plugs.
	Cable defective	Replace cable
	3027 defective	Replace 3027 antenna
No SAT LOCK	Signal blockage by obstruction	Relocate 3027 antenna
	Signal blockage by interference from other system	Relocate 3027 antenna or interfering system
	3027 defective	Replace 3027 antenna
No GPS signal	Signal blockage by interference from other system	Relocate 3027 antenna or interfering system
	3027 defective	Replace 3027 antenna

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Firmware Update

The firmware of the Sirius Control Box 3027 can only be updated by Polaris Electronics A/S.

The firmware of the SAILOR 3027 can be updated by setting the jumper in the Sirius Connection Box 3027 and connecting a SAILOR 6194 Terminal Control Unit to the Mini/Micro NMEA2K Tee.



Please note that the Sirius Connection Box 3027 is disabled as long as the jumper is mounted.

Remove jumper again after firmware update.

Sirius Connection Box 3027

Warranty

The Sirius Connection Box 3027 has a 24 months warranty from the date of purchase.

Warranty Service is available worldwide through authorized service dealers.

Products returned will, at the sole discretion of Polaris Electronics A/S, either be repaired or replaced free of charge within normal working hours. Freight charges, insurance, duties or any other costs are the responsibility of the customer.

Maximum liability shall not, in any case, exceed the contract price of the products claimed to be defective.

On-Board Service can be arranged by Polaris Electronics A/S or local service dealers upon request. Expenses associated with replacement of the defective modules/parts, on-board time, overtime, travel, lodging, per diem, insurance, duties or any other costs are the responsibility of the customer. Additional expenses associated with replacement of antenna cable, dry docking and precautionary measures are not covered by this warranty.

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Validity: This warranty is effective only when proof of purchase and equipment serial number are presented. Furthermore, the installation and operation have to be carried out in accordance with the product manual. Warranty liability does not apply to any equipment which has become inoperative due to misuse, accident, neglect, sea water damage or unauthorized repair.

Polaris Electronics will not be liable for any loss, incidental or consequential damages whether based upon warranty, contract or negligence, or arising in connection with the sale, installation, use or repair of the product. Consequential damages include, but are not limited to, any loss of profit, property damage or personal injury. The terms of warranty as described does not affect your statutory rights.

All enquiries relating to this warranty or approved service agents should be sent to:

Polaris Electronics A/S
Kaerholt 1
DK-9210 Aalborg SO
Denmark

Telephone: +45 9631 7900
Fax: +45 9631 7901
E-mail: info@polaris-as.dk
Web: www.polaris-as.dk

End of Life Statement

The European Waste Electrical and Electronic Equipment Directive aims to minimize the environmental impact from electrical and electronic devices when they reach end of life.

We strongly urge you to treat the equipment in accordance with local legislation when it becomes waste after end of life.

