

Yacht Devices

User Manual

Smart Relay YDSR-01

2018

Package Contents

Device	1 pc.
This Manual (eight pages)	1 pc.
Blade "FASTON" receptacles	5 pc.
Screws	2 pc.

Warranty and Technical Support

1. The Device warranty is valid for two years from the date of purchase. If a Device was purchased in a retail store, the sale receipt may be requested when applying for a warranty claim.
2. The Device warranty is terminated in case of violation of the instructions in this Manual, case integrity breach, or repair or modification of the Device without manufacturer's written permission.
3. If a warranty request is accepted, the defective Device must be sent to the manufacturer.
4. The warranty liabilities include repair and replacement of the goods and do not include the cost of equipment installation and configuration, as well as shipping of the defective Device to the manufacturer.
5. Responsibility of the manufacturer in case of any damage as a consequence of the Device's operation or installation is limited to the Device cost.
6. The manufacturer is not responsible for any errors and inaccuracies in guides and instructions of other companies.
7. The Device requires no maintenance. The Device's case is non-dismountable.
8. The manufacturer accepts applications under warranty and provides technical support only via e-mail or from authorized dealers.
9. The contact details of the manufacturer and a list of the authorized dealers are published on the website: <http://www.yachtd.com/>.

Overview

The Smart Relay helps you when you have two loads and only one power switch. For example, you have a combined deck/steaming light on the mast and only two wires (positive and negative) inside the mast. Smart Relay powers the first channel when you turn the power switch on, and powers the second channel when you cycle the power switch twice in one second.

Smart Relay contains a bi-stable RT424F05 relay and uses power only when channels are switching; at all other times it consumes less than 0.5 mA. It can switch DC loads with continuous current up to 8A and peak current of 15A (4 seconds, 10% duty rate). To switch between channels, you should cycle the power in one second.

If you need to have one load constantly on and one should also be on after fast cycling of the power, just connect the first load to the incoming power terminals and the second load to channel 2.

Please, read this short manual carefully. Improper installation can cause device damage or a short circuit.

Thank you for purchasing our product and happy voyages!

Specification

Device parameter	Value	Unit
Supply and load voltage	6..16	V
Current consumption, max.	< 0.5	mA
Continues load current, max.	8	A
Peak current (4 seconds, duty cycle 10%)	15	A
Reverse polarity protection	Yes	
Blade terminals width	6.3	mm
Device dimensions (with terminals)	53x18x33	mm
Weight	25	gr
Operating temperature range	- 40..85	°C
Water ingress protection rating	IP67	

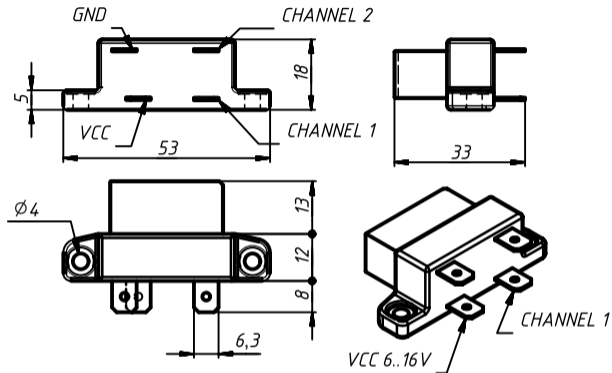


Yacht Devices Ltd declares that this product is compliant with the essential requirements of EMC directive 2014/30/EU.



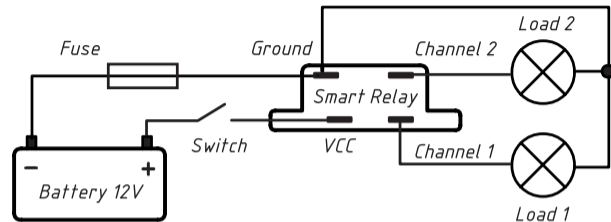
Dispose of this product in accordance with the WEEE Directive. Do not mix electronic disposal with domestic or industrial refuse.

Device Drawing



Device is equipped with four standard blade "FASTCON" terminals (6.3mm x 0.8mm). Five receptacles with insulation are supplied with the device, they are widely available in any electronics store.

Electrical Scheme and Installation



Smart switching is managed by a micro controller inside the device's case. High voltage (over 16V) on VCC terminal can cause permanent damage to the device.

Resistance between the active channel terminal and VCC terminal is always zero.

Despite the fact that the device is waterproof, the terminals are open and sea water can cause a short circuit. Do not place the device where it can be flooded by water, gets wet in the rain or sprayed with water. Always use an electrical fuse in your circuit.