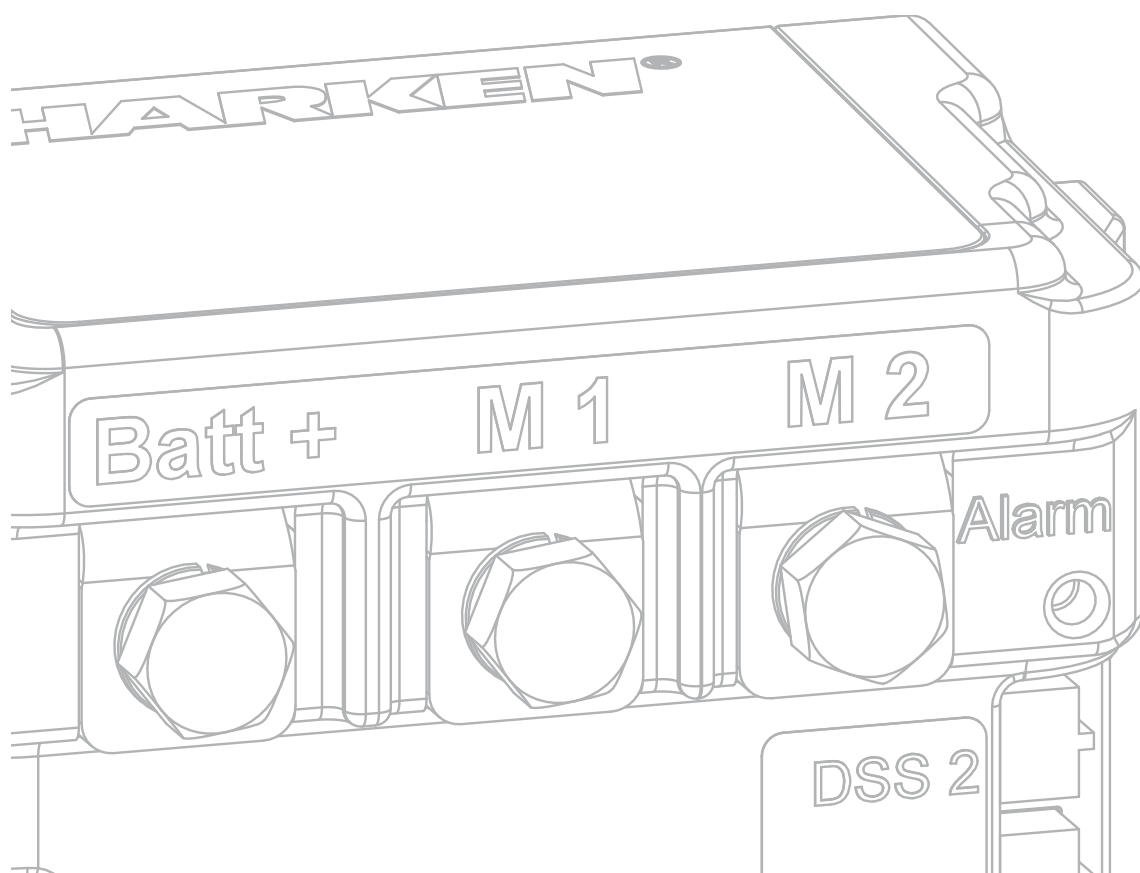


HARKEN®

Dual-Function **Control Box**



Installations manual (EN)

Mod.C

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Intended use: specific and proper use of the device for which it is designed

Improper use: use of the device in a different way from that indicated in the instructions for use specified in this manual

Qualified operator: person who has attended specialisation and training about the use of the device

User: person who uses the device regularly

SYMBOLS



CAUTION!

This denotes mandatory actions by the user; without these actions, the user is subjected to injury and the device can be seriously damaged



NOTE!

This denotes important information concerning the device

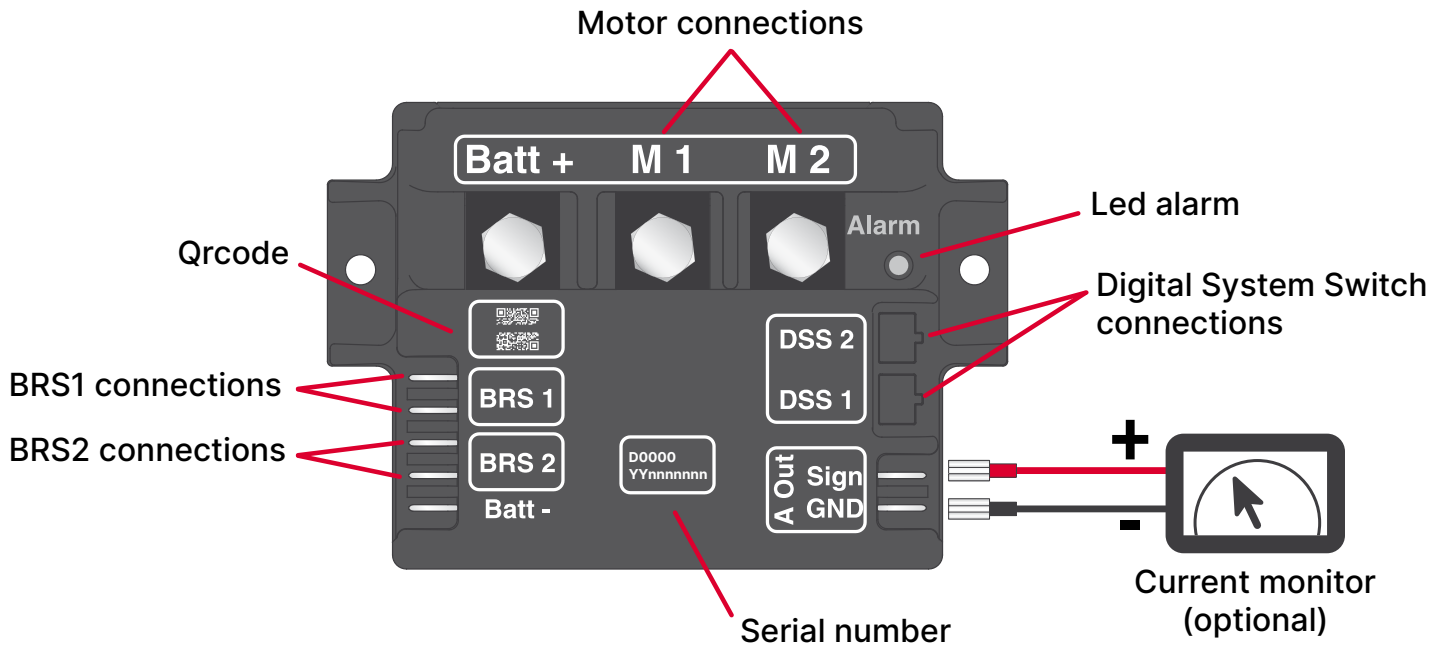
SAFETY INFORMATION



CAUTION! Read this manual carefully and fully understood before using the system to avoid personal injury or property damage during system operation.

- Install and use the device only as described in the technical information supplied.
- This manual is an integral part of the device and aims to provide all the information needed for its safe and correct use.
- Improper use can cause severe harms to users, equipment and the boat.
- This information is destined exclusively for qualified operators.
- Installation of the device by personnel who are not experts may cause serious damage to the winch and the boat.
- Harken cannot be responsible for damage or injury resulting from unsafe product use, lack of maintenance or incorrect product and/or system installation or operation.
- Please mind the proper cable section in according to the involved wiring distances between supply voltage and the Harken devices.
- It is recommended to design, check and maintain the proper electrical insulation status for all the installed components.
- Cable, wirings and connections are not supplied by Harken: customer will take care of the correct installation and wiring in according with components' manuals and IEC reference regulations.
- Do not mix Harken wiring into other multicable devices.
- Never substitute any part with one that is not original. Even though they look similar and are both made by Harken, the non-original part may not be suitable and the warranty will be invalidated.
- Failure to install the device will void its warranty and the Harken product to which it is connected.
- Refer to the warranty on the web site www.harken.com.
- This manual is available only in English. If you do not fully understand the English language, do not carry out the operations described in this manual. For any doubts, questions or comments contact the Harken distributors nearest to you or contact the Harken Italy Technical Service by e-mail: techservice@harken.it
- See www.harken.com for additional safety information.

An overview of the product Harken Dual Function Control Box is shown below:



Details:

- BRS1 and BRS2: two terminals for each Harken BRS switch.
- DSS1 and DSS2: one plug for each Harken Digital System Switch.
- Led alarm to monitoring the operating conditions of the device.
For the numbers and the colors of the led alarm, see the table of errors shown in the User Manual for Dual Function Control Box, provided into the packaging of the winch and available on the website www.harken.com
- Serial number: this is a unique reference of each Dual Function Control Box. It is used to get support from Harken Technical Service.



NOTE!

Current monitor: optional feature for a Harken qualified operator, two connections to detect the current value of the device.
The current monitor connections are not to be used for the installation and for the use of the device.

This manual gives information about the standard installations of the Dual Function Control Box for the following Harken products:

- Winch Radial
- Winch Performa
- Winch Rewind
- Winch UniPower
- Winch Classic
- FlatWinder™ 250
- FlatWinder™ 500
- Captive Winch



NOTE!

All other information are described into the User Manual for Dual Function Control Box into the following paragraphs:

- INTRODUCTION
- OVERVIEW
- INSTALLATION
- USAGE
- DIAGNOSTICS, TROUBLESHOOTING AND FAULTS



CAUTION!

The device must only be installed by specialised personnel under the customer's responsibility.



CAUTION!

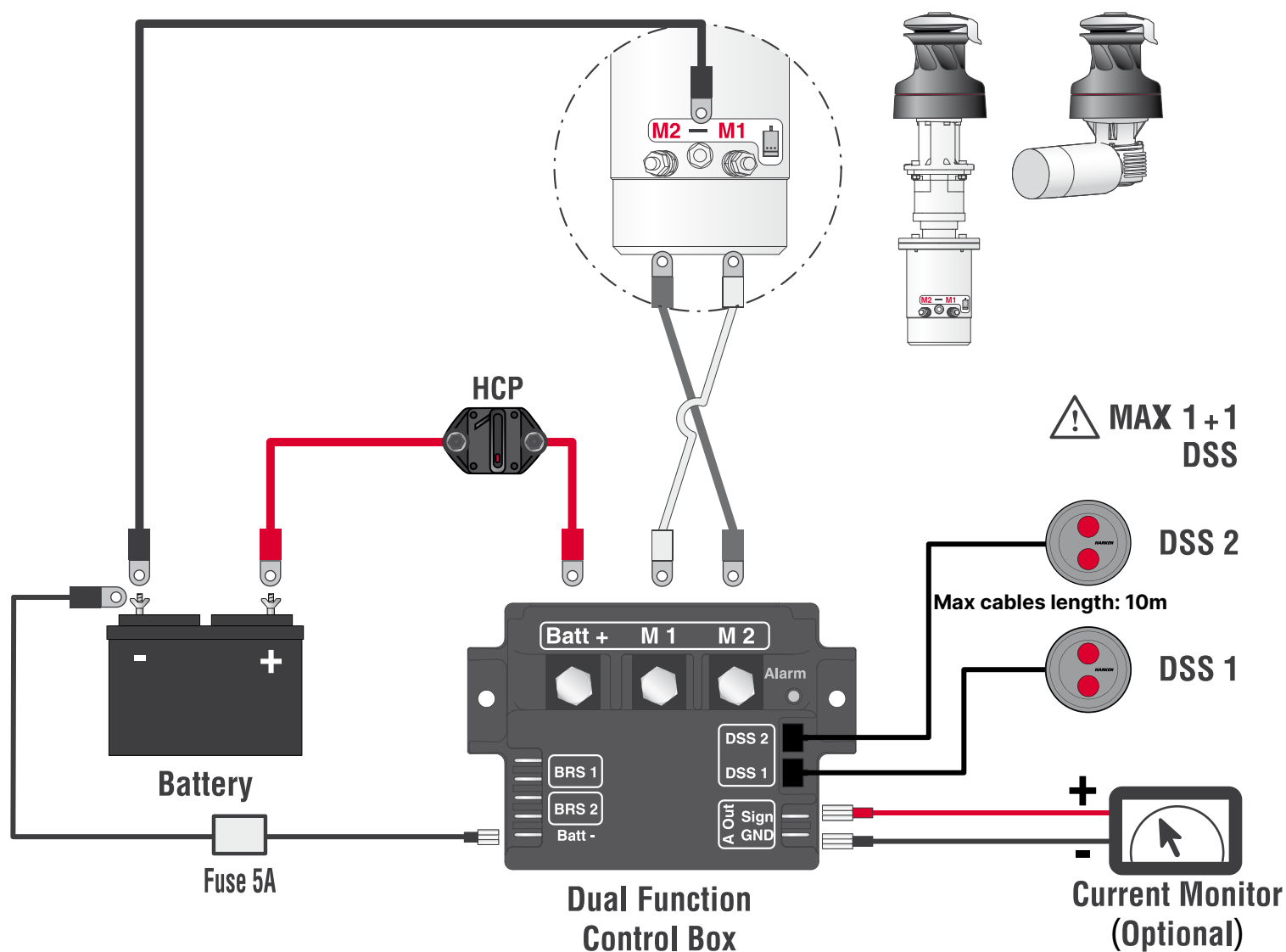
Cut power off before proceeding with installation.



CAUTION!

Each winch features its own Dual Function Control Box: check the correct association before installing.

WINCH RADIAL - PERFORMA - CLASSIC - FLATWINDER™ 250



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.



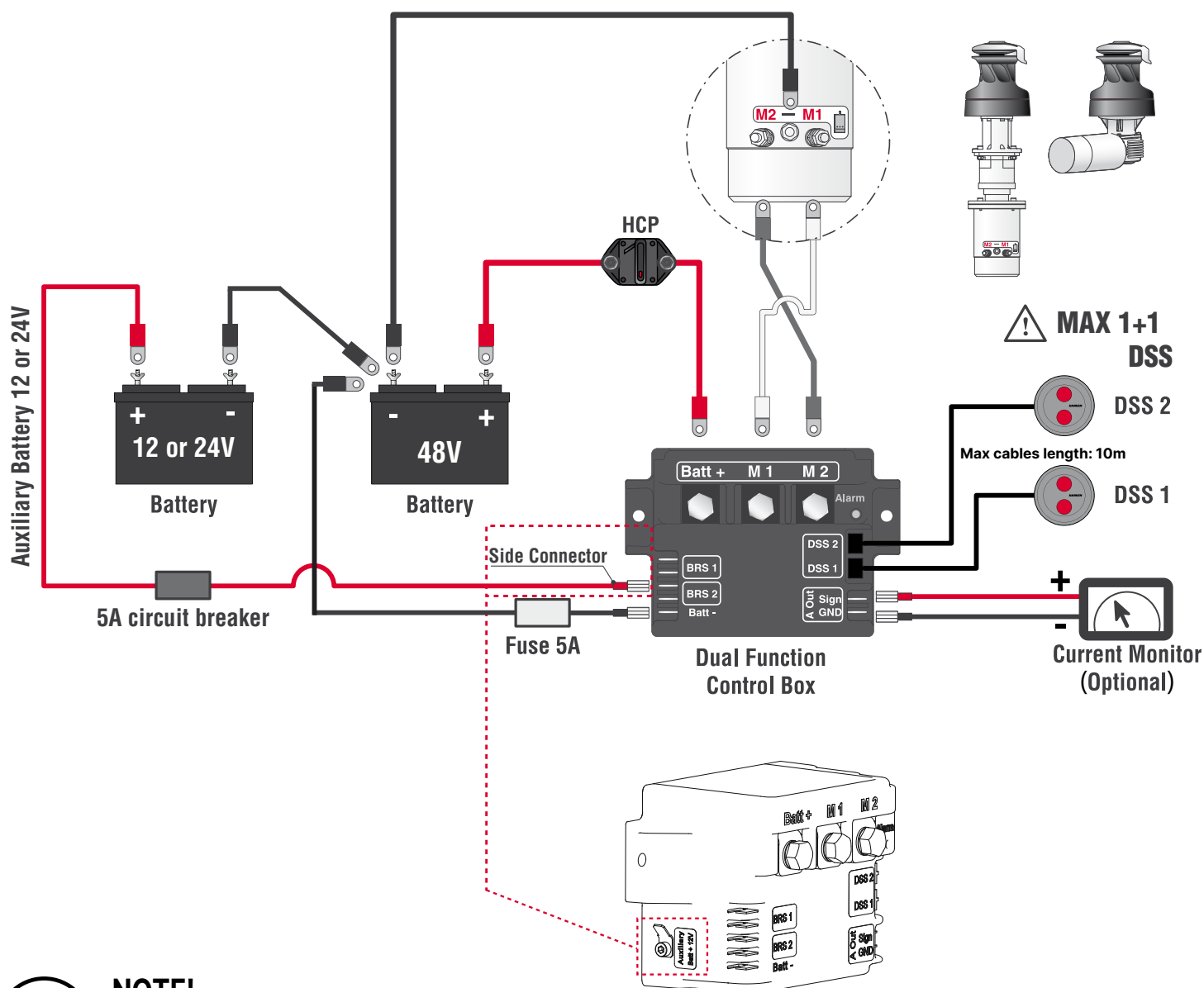
CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

Fig.2

WINCH RADIAL - PERFORMA - CLASSIC - FLATWINDER™ 250

48V



NOTE!

48V is the main battery tension value supplied to the motor through DFCB.
12V or 24V is the auxiliary battery supplied to the DFCB through the side connector.



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

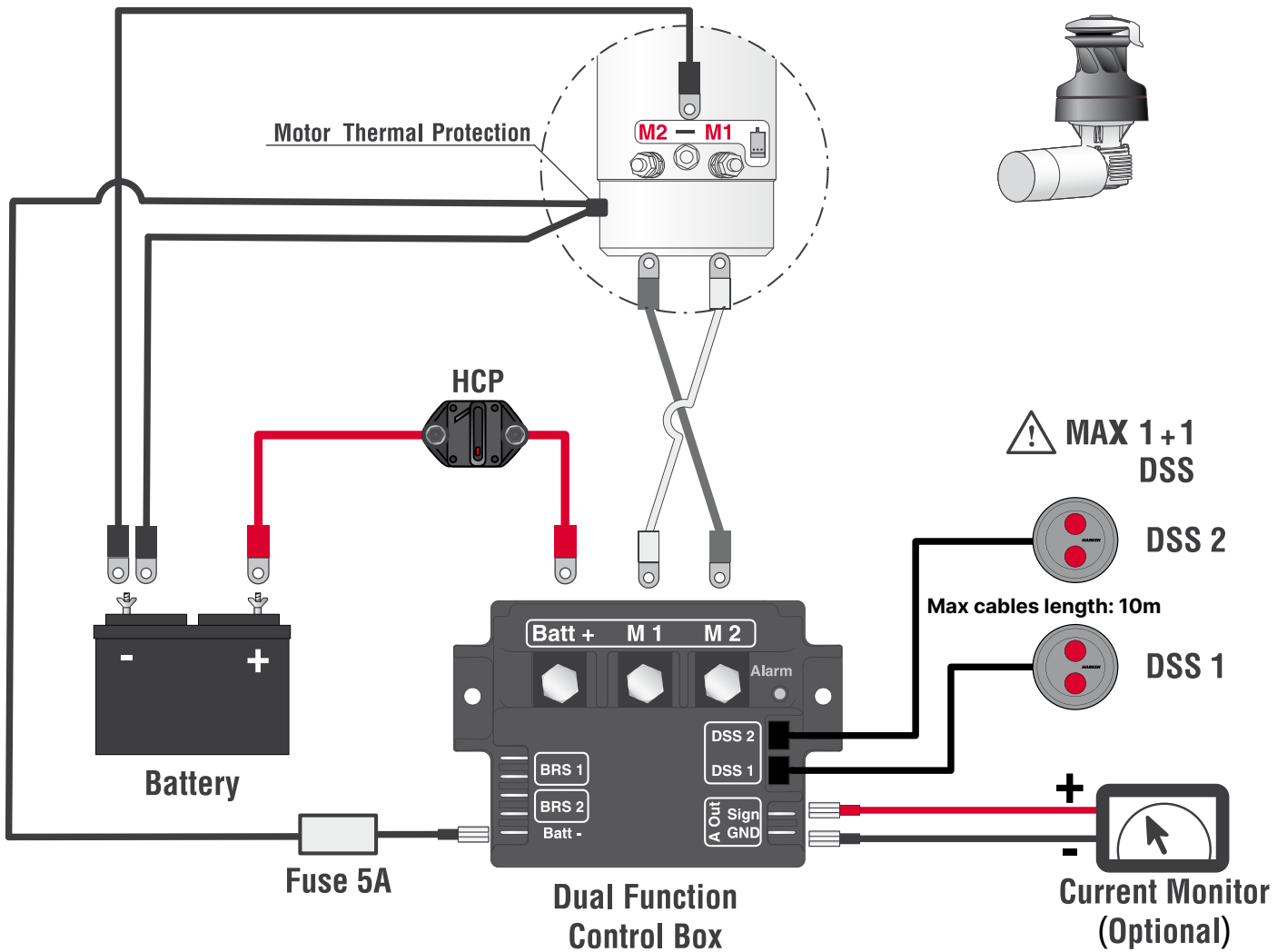
Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.



CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH REWIND - FLATWINDER™ 500



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.

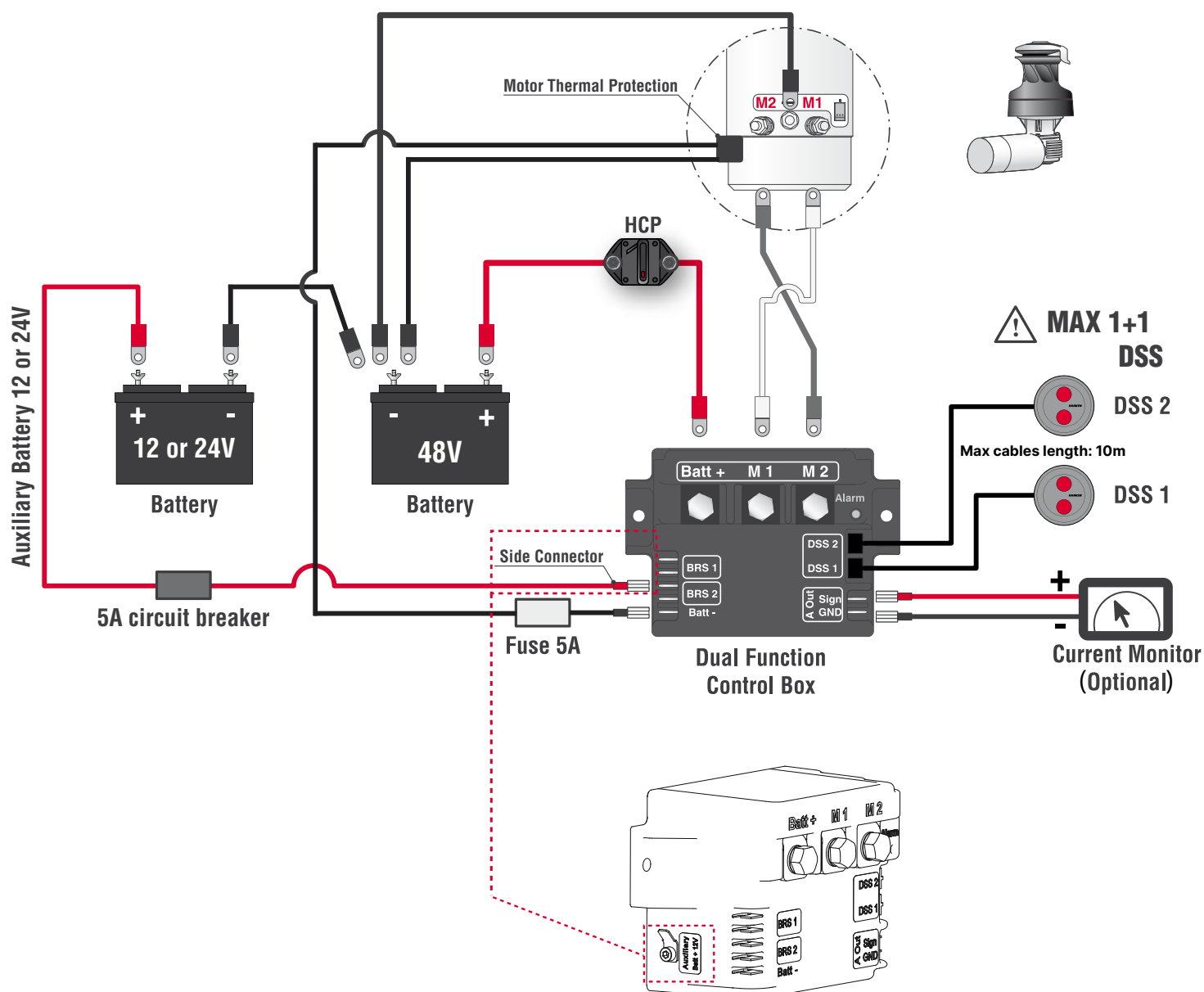


CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH REWIND - FLATWINDER™ 500

48V



NOTE!

48V is the main battery tension value supplied to the motor through DFCB.
12V or 24V is the auxiliary battery supplied to the DFCB through the side connector.



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

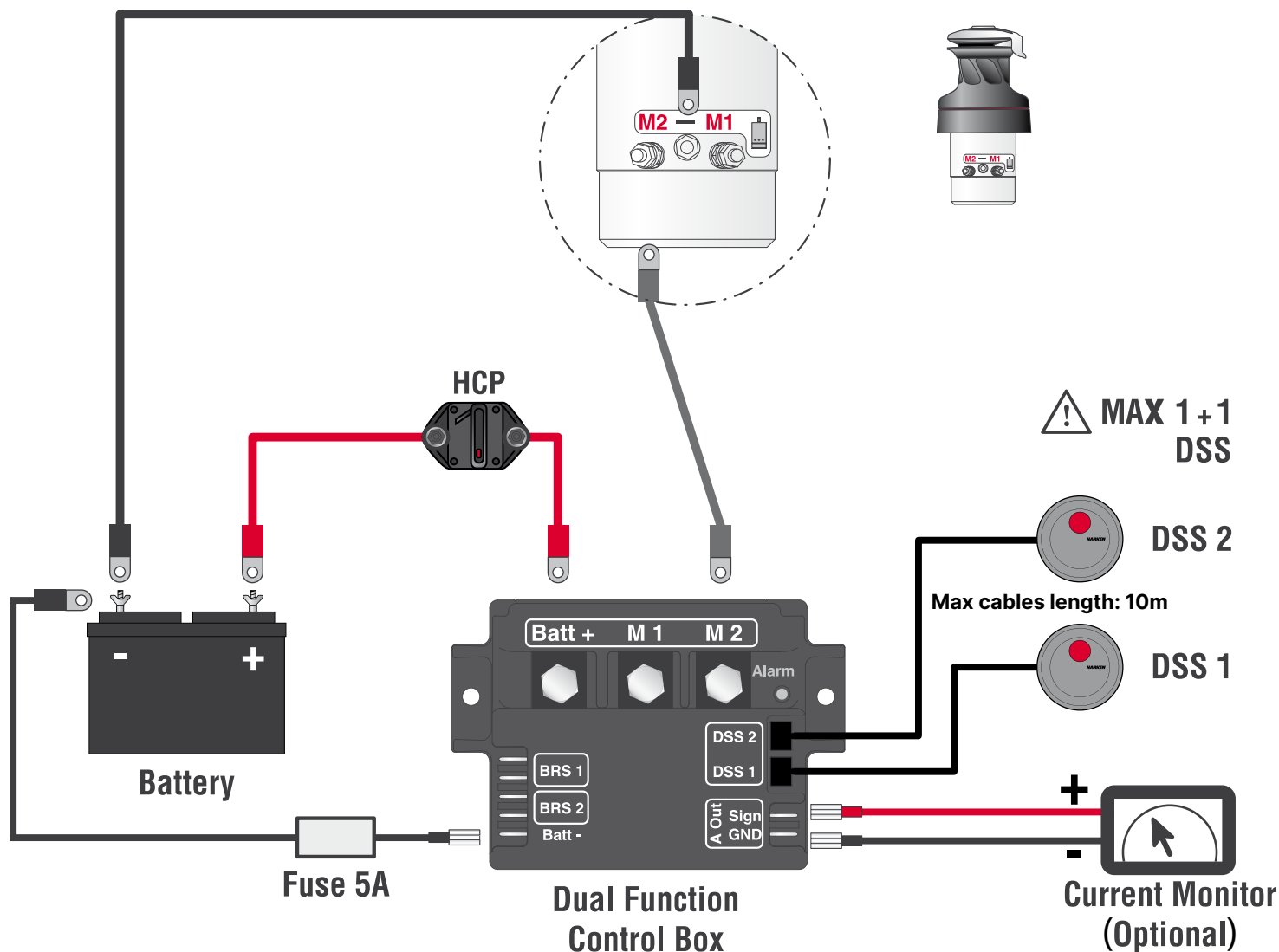
Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.



CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH UNIPOWER



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.



NOTE!

For 2 or less Digital System Switches, the decoder is not necessary

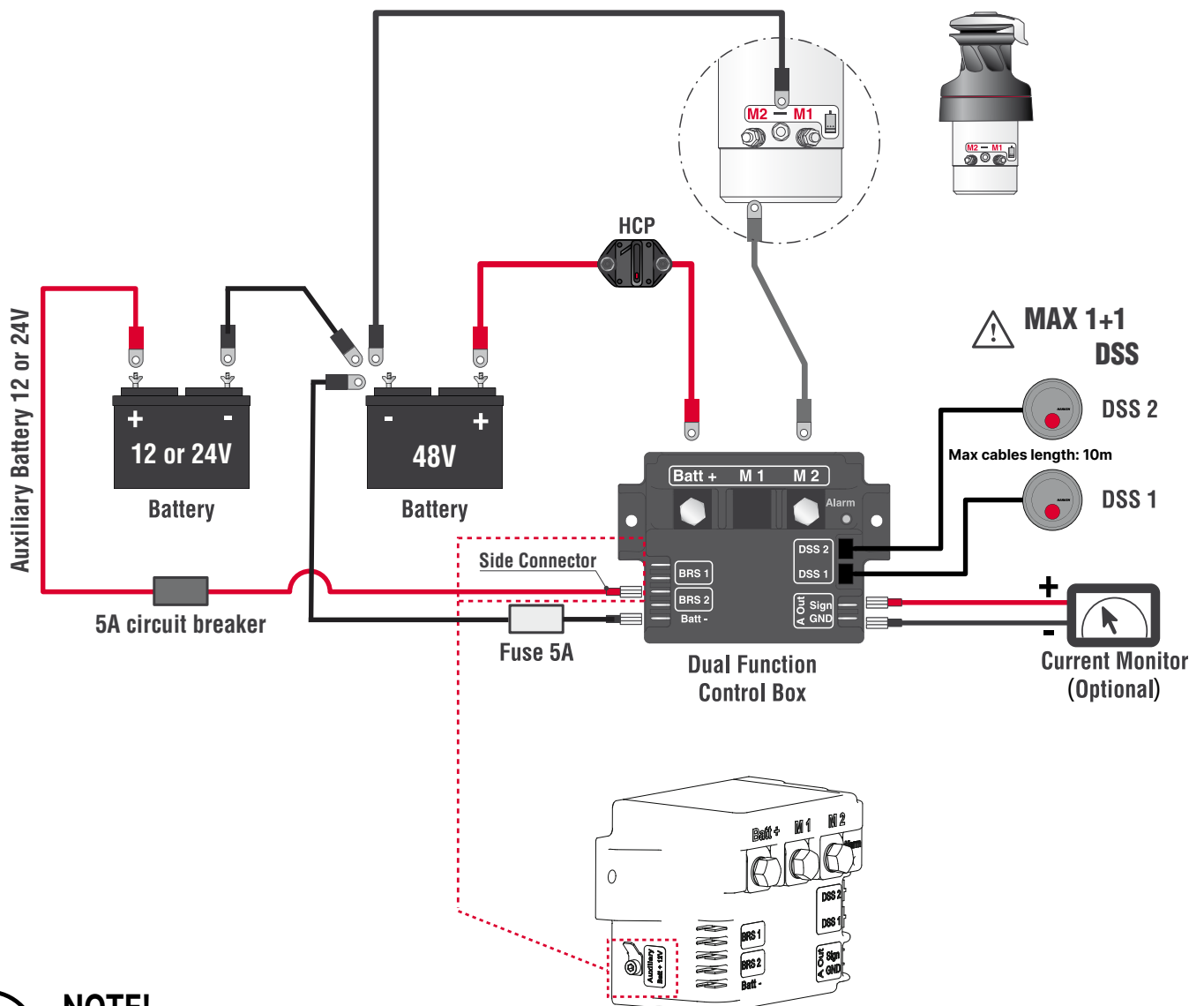


CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH UNIPOWER

48V



NOTE!

48V is the main battery tension value supplied to the motor through DFCB.
12V or 24V is the auxiliary battery supplied to the DFCB through the side connector.



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.

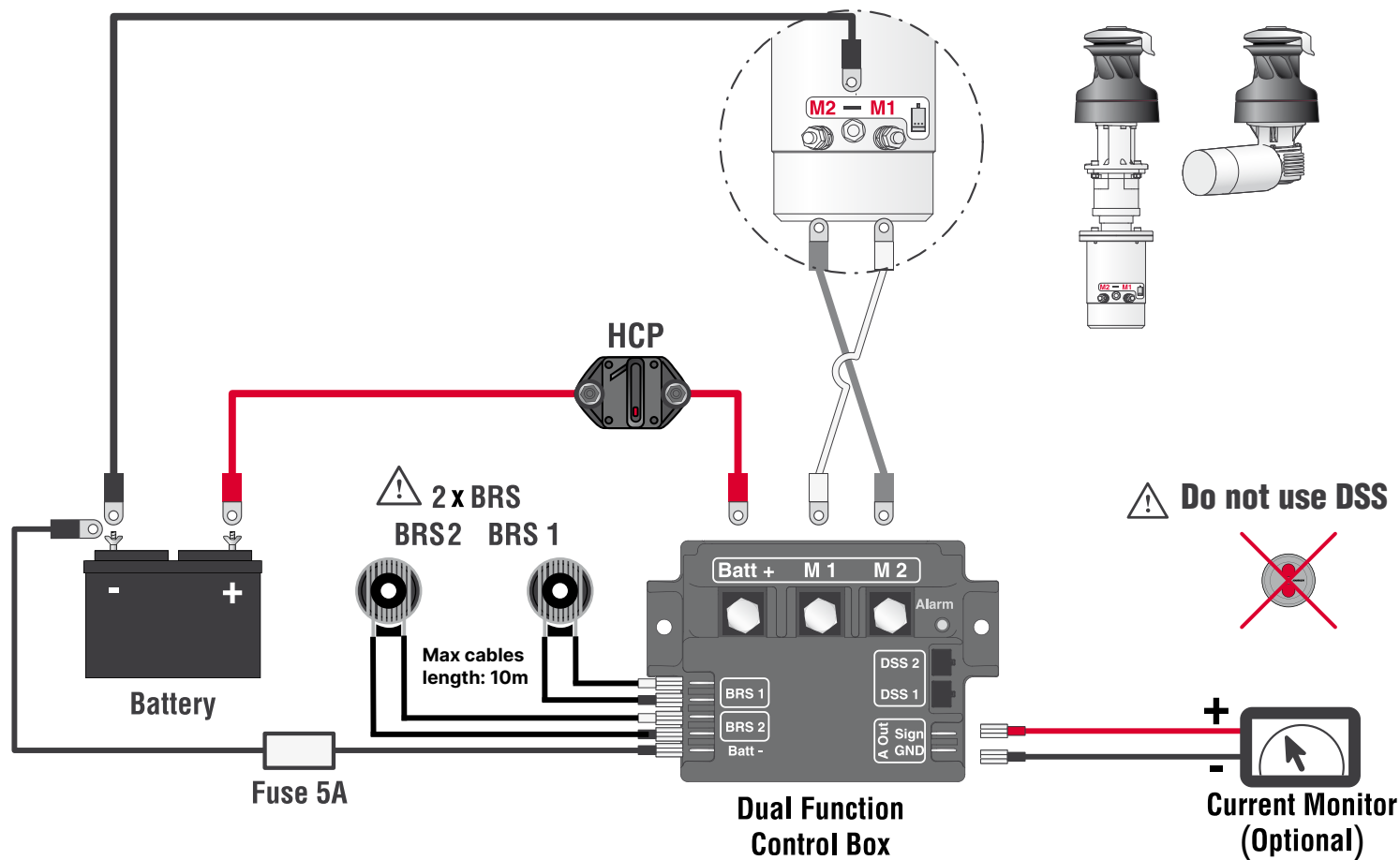


CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH RADIAL - PERFORMA - CLASSIC - FLATWINDER™ 250

BRS



CAUTION!

Connect only one BRS switch to own couple of terminals, as shown in the image above. To install more BRS switches, please contact Harken Technical Service at techservice@harken.it



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

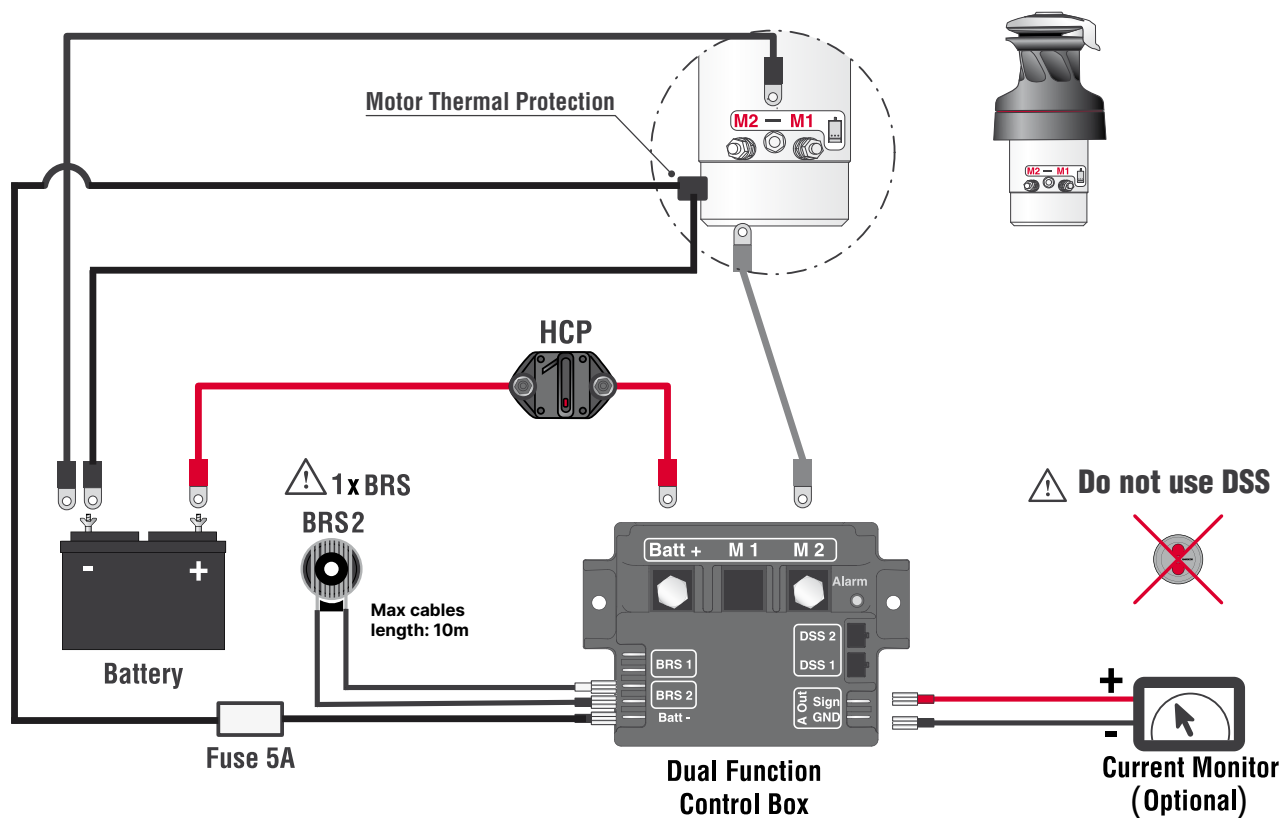
Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.



CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH UNIPOWER BRS



CAUTION!

Connect only one BRS switch to own couple of terminals, as shown in the image above. To install more BRS switches, please contact Harken Technical Service at techservice@harken.it



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.

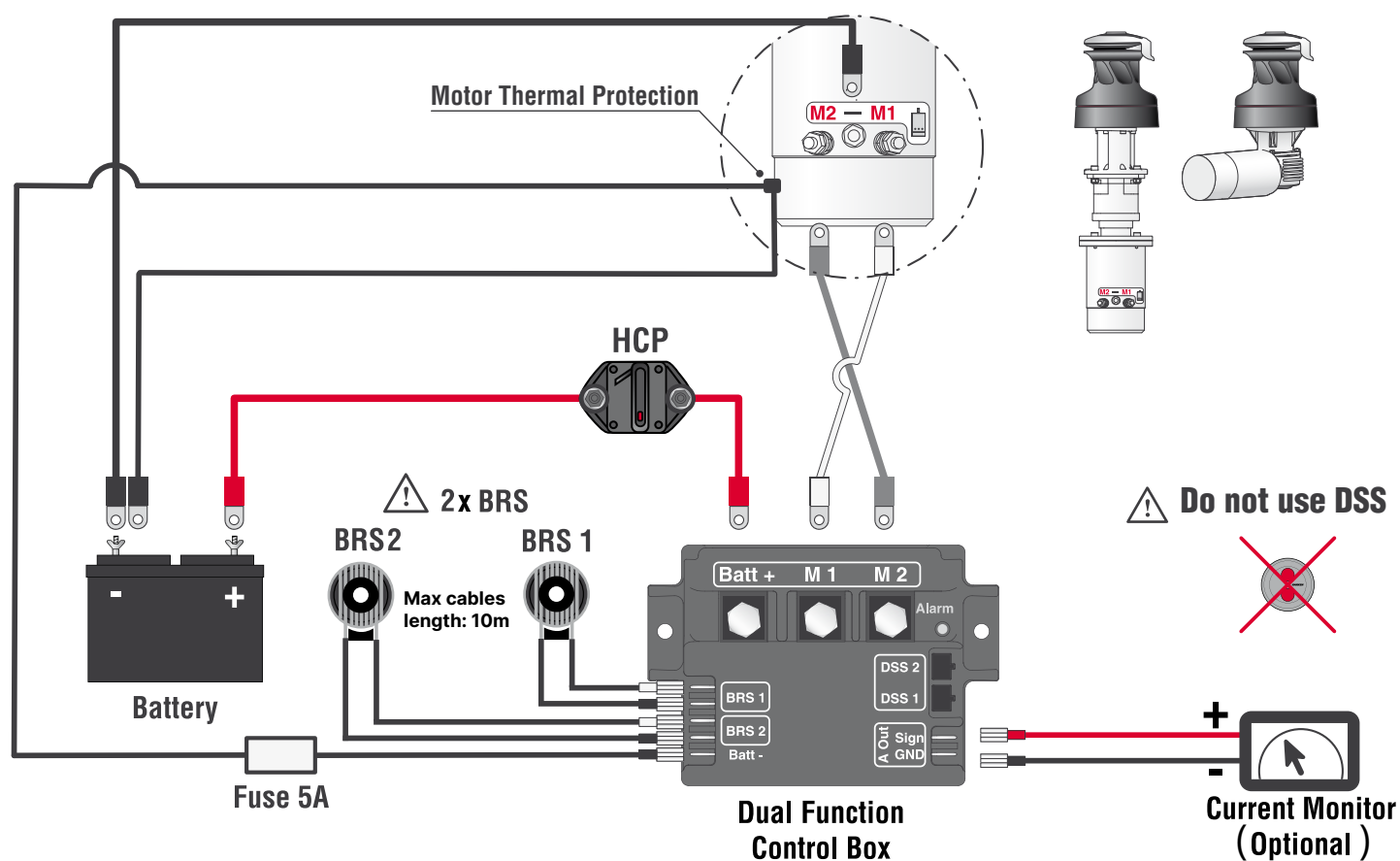


CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH REWIND - FLATWINDER™ 500

BRS



CAUTION!

Connect only one BRS switch to own couple of terminals, as shown in the image above. To install more BRS switches, please contact Harken Technical Service at techservice@harken.it



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.

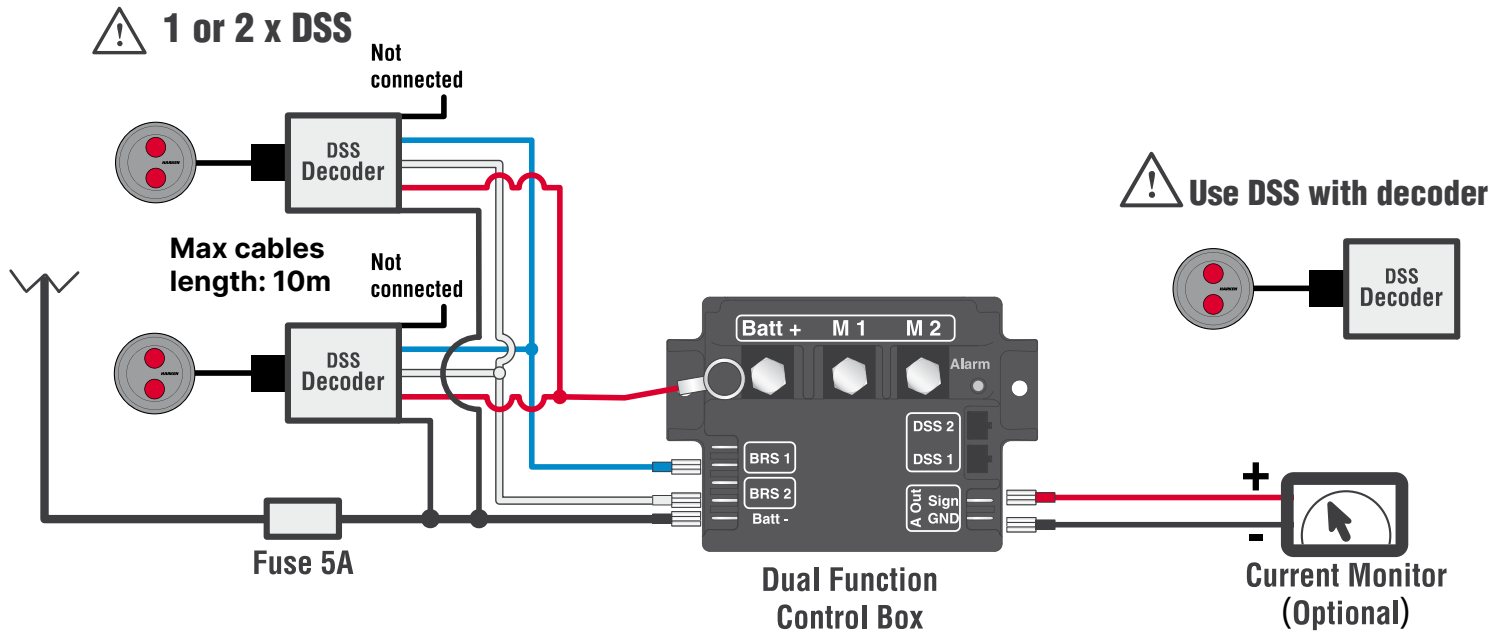


CAUTION!

Never short-cut BRS1 or BRS2 contacts to Batt+

WINCH RADIAL - PERFORMA - REWIND - UNIPOWER - CLASSIC - FLATWINDER™

DSS DECODER

**NOTE!**

For more than 2 Digital System Switches:

- do not connect any BRS switches
- connect the DSS outputs to BRS1 and BRS2 inputs as shown in the image above
- the connection to the motor follows the wiring schemes shown in this manual
- for UniPower Winch use Single DSS version

**NOTE!**

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)

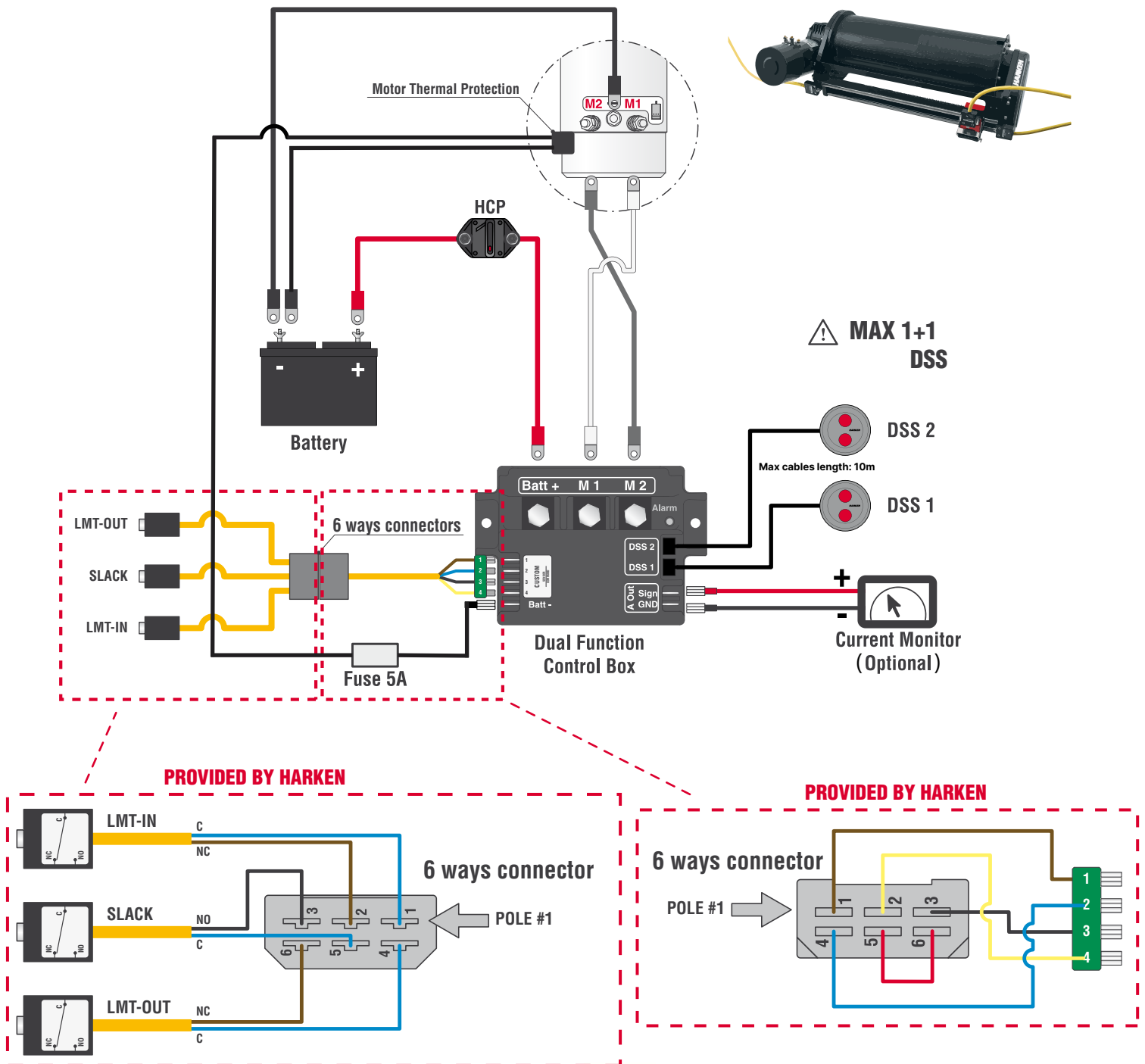
**NOTE!**

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.

**CAUTION!**

Never short-cut BRS1 or BRS2 contacts to Batt+

CAPTIVE WINCH



NOTE!

All ground connections (Batt -) must be connected at the same point: Batt- of DFCB to - of battery (as shown in the wiring above)



NOTE!

Minimize the distance between motor and DFCB.
Minimize the distance between DFCB and HCP.

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