

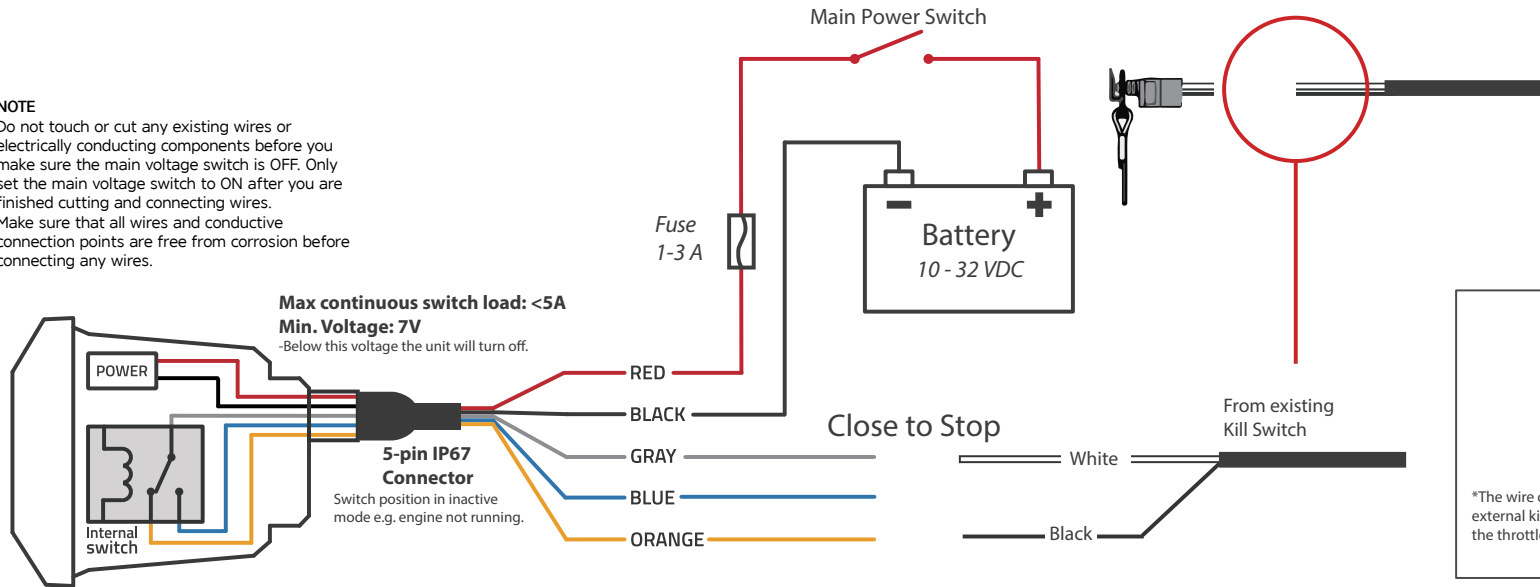


# Quick guide Yamaha Installing MOB+ Wireless Man OverBoard System



## NOTE

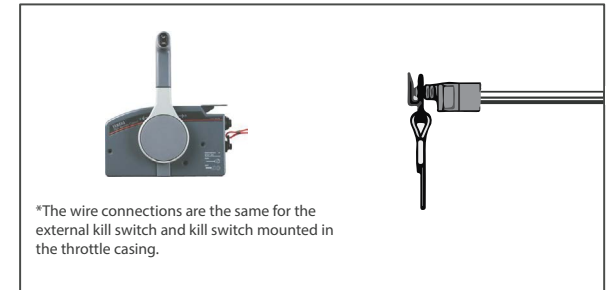
Do not touch or cut any existing wires or electrically conducting components before you make sure the main voltage switch is OFF. Only set the main voltage switch to ON after you are finished cutting and connecting wires. Make sure that all wires and conductive connection points are free from corrosion before connecting any wires.



## IMPORTANT NOTICE!

The function of the kill switch must be tested after installation to verify that it stops the engine in the event of an emergency situation.

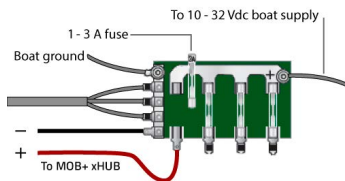
This is done by submerging the xFOB in water or walking with the xFOB away from your boat until the engine stops. The xHUB will then light red and give a sound signal to indicate a man over board event.



## Connecting the Power

(10-30 Vdc)

1. Use a test light or a voltmeter to determine the polarity of the voltage source.
2. Connect the red (+ or positive) wire to the positive voltage terminal. (If you use the fuse block on the boat, route the positive connection through the fuse, as shown on the diagram.)
3. Connect the black (- or ground) wire to the negative voltage terminal.
4. Install or check the 1-3 A fuse (in the in-line fuse holder, or on the fuse block of the boat).
5. Use wire hoods suitable for the wire dimension (20AWG, 0.75mm<sup>2</sup>) or connection point on the fuse block.



## NOTE

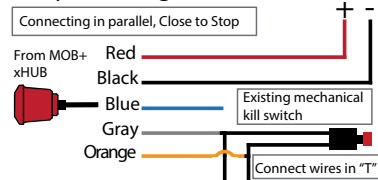
The maximum MOB+ xHUB input voltage is 32 Vdc. Do not exceed this voltage because this can damage the MOB+ xHUB and void the warranty.

## NOTE

Use an AGC / 3AG - 1-3 Amp replacement fuse. If it is necessary to extend the power and ground wires, use 20 AWG or thicker wire. You can wire the Power Wires directly to the main boat battery, or if your boat has an electrical system, you might be able to wire the Power Wires to an unused holder on the fuse block. In any case it should be after the main power switch to avoid current drainage when the boat is left unattended.

It is very important that the MOB+ gets supplied power from a stable source which is not susceptible to voltage drops as if it gets below 7V supply voltage, the unit will restart and stop your engine.

## Keep existing kill switch



MOB+ can be installed together with your existing kill switch by connecting it in series or parallel. If you should connect in series or parallel depends on your existing kill switch function. The above picture shows an example with Close to Stop connection.

## Connecting Signal wires

The switching function inside xHUB is a double throw relay and can be connected to switch any circuit on and off, and thus perform the old kill switch function.

Yamaha uses «Close to Stop» kill switch principle as standard. This means that the engine kill switch shorts circuits to stop the engine.

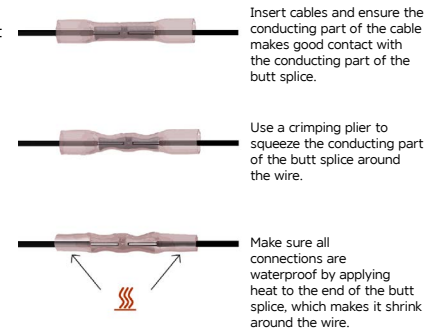
We recommend to verify this by simply trying to start the engine(s), whilst the existing kill switch signal wires are not connected. See the user manual for further instructions.

1. Common - Grey - Always used when connecting the MOB+ xHUB Signal wires.
  2. Open to Stop (OS) - Blue - Used when your existing system is a Open to Stop kill switch system.
  3. Close to Stop (CS) - Orange - Used when your existing system is a Close to Stop kill switch system. This is the principle used by Yamaha.
- ### Installing MOB+ in a metal boat

If your helm is made out of conducting materials the wireless signals from MOB+ may be degraded. The amount of signal degradation experienced may vary from across boats and must be tested for each case. If the signal is very poor you can install a separate external antenna outside of your helm to increase the signal strength. Please contact FELL support at [www.fellmarine.com/support](http://www.fellmarine.com/support) for more information.

## NOTE

Make sure that all wire connections are waterproof by using heat shrinkable butt splices or similar when connecting wires.



## Multiple engine configurations

If you have multiple engines on your boat and your boat is already fitted with a kill switch you can connect the wires as described above to the two existing signal wires leading to the existing mechanical switch in your helm or throttle.

In some cases the existing kill switch will have one pair of wires per engine and a MOB+ Multiple Engine Harness is needed. This splitter translates the signal from the single mechanical kill switch into a kill switch signal for multiple engines and so the MOB+ can be connected plug and play like a single engine installation. This can be ordered in your nearest MOB+ dealer.

Some engine brands also offer their own diode splitter, and can be ordered through your engine dealer.

## NOTE

If you have multiple engines and do not have an existing kill switch, see user manual for this on [www.fellmarine.com/support](http://www.fellmarine.com/support). Please contact your local engine retailer or manufacturer for further assistance.

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