

### **Frequently Asked Questions**

### Can I use multiple xFOBs at the same time?

Yes. The new MOB+ Wireless Man OverBoard system allows for up to 4 connections at the same time.

Choose to connect an AlarmFOB with alarm only, or stop and alarm functionality.

This unique feature enabled with the revolutionary WiMEA Protocol allows you to have any combination of alarm or stop functionality for your passengers, crew or pets onboard.

Easily switch pilots while driving, secure any kids or pets onboard with either an alarm or have the engine stop if they fall overboard.

# I tried to dip the xFOB in a bucket of water but the engine did not shut off. Why?

The MOB+ system will not shut off the engine if the xFOB is only exposed to rain, splashes or a bucket of water.

The range in air will vary depending on the wireless surroundings of your boat from at least 50 feet, but if you fall into the water as in the ocean or a lake, the MOB+ system will detect a man over board situation and stop the engine. In this case the range in air does not matter and even 3 feet between the xHUB in your boat and your wearable xFOB will kill the engine when the xFOB enters the water.

## How can I be sure that the engine(s) will stop if I fall over board with the MOB+?

WiMEA® Protocol is based on an active data transfer between the connected xFOB unit and xHUB. This means that no matter what happens, if the xFOB unit is in the water or far enough away from the xHUB (normally more than 50 feet/15 meters) the wireless signal will be broken and the xHUB will activate MOB mode which stops the engine(s).

# Can I bypass using the xFOB to run the engine? (In case of loss or failure)

Yes, on the MOB+ you can override the system in two ways;

- The xHUB installed in the boat has a button. If you press & hold this button for 10 seconds it
  will enter Override Mode. In Override Mode you can drive the boat without the need to
  connect the xFOB. The xHUB will sound a bip every 30 second and blink yellow every 2
  seconds to remind you that you are not wirelessly connected. The Override Mode will shut
  down after 8 hours. After 8 hours you need to press & hold for 10 more seconds to re-enter
  Override Mode.
- 2. In the unlikely event that there is a failure to the xHUB you can physically override the unit. The cable leading to the xHUB comes with an emergency plug, this plug can be inserted into the IP68 connector on the cable wires (kill switch wires) leading to the engine(s). This will physically jump the the kill switch wires to bypass the kill switch allowing the engines to start and run.

# Will the wireless signal from MOB+ affect other instruments on board, or on nearby boats?

No. WiMEA® Protocol is a unique wireless protocol, comparable with Bluetooth 2,4 GHz protocol or the WiFi protocol in wireless routers in your home. WiMEA® Protocol complies with strict requirements for separation of wireless signals. This is tested and certified to comply with the R&TTE directive for this kind of product at Nemko in Norway as required by CE and IEC60945 certification in the EU, and by FCC in US and Canada.

In the unlikely event that you experience interference on other systems we suggest you consult the respective systems producer to be sure it complies with the R&TTE directive and has the necessary certifications. Do not hesitate to contact FELL directly if you experience interference on other systems close to your MOB+ system. Please see the user manual for details regarding WiMEA® Protocol.

## My engine uses the kill switch to reset fault/status codes - Will I still be able to do this with the MOB+?

Yes, some engine brands motors use the kill switch to toggle ON/OFF with the mechanical switch to reset the codes (after service etc.).

This is done in the same way with MOB+, by clicking on the xFOB ON/OFF in the same toggling pattern. Normally toggling ON/OFF on the xFOB 3 times within 10 seconds.

### Can I or passengers start the engine after I as the driver has fallen into the water?

Yes. In a man over board situation MOB+ will automatically turn of the engine and then activate Override Mode after 6 seconds.

When in Override Mode those still on board will be able to start the engine directly without any interaction with MOB+. This gives additional safety as those on board do not need to know how to operate the system, but still can rescue the driver quickly.

### How long is the battery life on the xFOB?

At least 300 hours active connected hours. Smart power saving functionality turns the xFOB off when it's not in use. The battery in the xFOB is standard coin cell battery, CR2032.

## How much distance can I have between me and my xHUB without losing connection?

MOB+ has a working range of 50 feet / 15 meters. The range my be longer in some installations as wireless signals may be reflected from other objects in vicinity.

# How quickly does the engine shut off when I fall into the water with a connected xFOB?

WiMEA® Protocol ensures engine stop within 1.2 seconds after the xFOB has been submerged into the water or is out of range.

#### dSTART - How does it work?

6 seconds after the engine has shut down due to a Man Over Board event, the engines can be restarted by anyone left on the boat without having any prior knowledge of the MOB+.

The 6 seconds timeout has been chosen to make sure engines of all types will come to a complete stop.

#### Does the xBAND come in different sizes?

The xBAND has an adjustable locking mechanism, allowing you to adjust the size from XS 5.3 in / 13.5 cm - XL 8.5 / 21.6 cm in wrist circumference.

### I have an existing kill switch. Can I install the MOB+?

Yes

MOB+ is easily installed using wires from your existing kill switch.

### I do not have an existing kill switch. Can I install MOB+?

Yes, in most cases you will be able but it depends on your engine type.

The internal switch in the MOB+ xHUB functions as a mechanical relay. This enables it to function as a traditional kill switch and hence if you have an engine already supporting a traditional lanyard your engine will also support the MOB+.

**Outboard Gasoline** 

All outboard gasoline engines are fully supported by the MOB+.

**Inboard Gasoline** 

All gasoline engines are electronically controlled and can be switched using a mechanical switch. If your engine does not have an existing kill switch it will require you finding a suitable circuit to break to shut of the engine.

**Inboard Diesel** 

For newer diesel engines like Volvo Penta and Mercruiser, there is support for kill switch and connection can be made to the existing kill switch wires from the MOB+.

If your engine does not support a traditional lanyard with a mechanical shut-off switch then the MOB+ is not currently supported in your case.

## I have more than one / multiple engine(s) on my boat (or kicker engine)

MOB+ can be installed directly in most boats with multiple engines. If your boat comes prepared for/ or you have an existing kill switch, MOB+ can be connected to existing wires.

Some engine manufacturers such as Yamaha use a multi-pole kill switch in cases with multiple engines installed. In this case you will need a MOB+ Multi Engine Harness which is available from all our retailers.

The Multi Engine Harness can also be used to wire a kicker engine in a way so that both your kicker engine and main engine will stop in a man over board installation. Each engine can still be run separately if needed.

Please note that all engines will need to share a common ground potential (Negative (-) pole on the batteries will have to be connected).

#### I have an outboard engine, but no console. Can I install the MOB+?

MOB+ is designed to be installed on a console but you can install MOB+ xHUB (boat unit) close to the drivers position on a designated surface.

Note that it may be required to install wires from your MOB+ xHUB into the cover of your outboard engine.

#### I have a boat made from metal. Can I install the MOB+?

Yes, if you have a boat which hull is made from metal the MOB+ can still be used and will function as intended.

If you have a metal cabin surrounding the console in your boat the signal may be degraded outside of the cabin.

Actual signal reduction if any will vary from boat to boat. Should the signal be noticeably worse the range for wireless connection between the xFOB and the xHUB will be reduced and the system can go into MOB mode which will cause unintentional engine stops.

We recommend in this case to use an extended cable for the antenna which can be set up outside of the driver cabin/console.

## Do I have to install the xHUB in a fully visible position e.g. in the front of the console?

The recommended way to mount the xHUB is closely positioned to the driver position with a good visibility of the lights showing the mode of operation. The lighting on the front of the xHUB also shows the number of connected xFOBs and will blink if the battery status of the xFOB is low.

However it is also possible to install the xHUB hidden away behind a cover of glass fiber or wood. When installing the xHUB hidden, it is important to check the working range of the MOB+ after installation. Also make sure the unit is easily accessible to check the battery status of the xFOB and use the button on the xHUB.

#### How hard is it to install?

Installation of the MOB+ is easy.

We recommend that the person installing the system is familiar with wire connections and has mounted marine electronics before.

The xHUB is connected to power (+/-) with two wires and two additional wires to the existing kill switch wires.

Since the system is only a relay on the existing kill switch wires it does not infringe with the engine systems in any way.

The xHUB is mounted in the dashboard, near to the drivers position in a 2 1/16 inch hole. Bullet splices, butt splices and cable is included in MOB+ Basepack.

### What are the maintenance requirements for MOB+?

The casing on MOB+ is made from high quality materials and does not require maintenance except from cleaning.

Check that all wires and leading connection points are without any corrosion and that they fastened and properly connected.

We recommend to change the battery in your xFOB unit yearly.

#### How do I clean the MOB?

Clean the exterior capsuling of the units with a moist cloth with a mild detergent. Avoid using chemicals that can damage plastic materials.

## Engine warning when the MOB+ goes into MOB Mode or the MOB+ is not connected, is this normal?

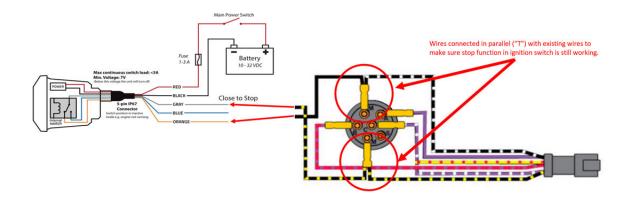
Normally this is standard engine system function. Most modern engines will give a warning to indicate that the emergency stop lanyard is not connected when trying to start the engine, or if the emergency stop lanyard is engaged while the engine is running.

Check if the warning comes on when you try and crank the engine without connecting the MOB+. If you get a "check engine" or "general warning" this indicates that the engine is giving a warning to let you know that the MOB+ must be connected (or the regular emergency stop lanyard in a system using the old lanyard based system).

### Evinrude engine not able to stop engine after MOB+ installed

If you have installed the MOB+ on your Evinrude engine and you are not able to stop your engine with the ignition switch after installation this is because the ignition switch uses the same wires as the MOB+ to stop the engine.

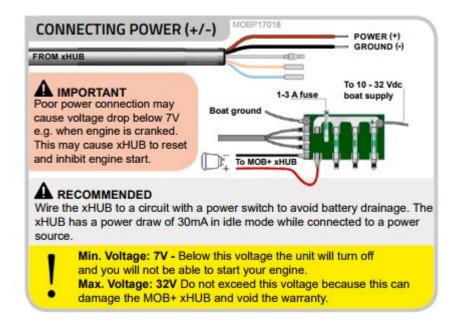
For this reason the wires going to the MOB+ need to be connected in parallel with the existing wires so that the wires already going into the ignition switch must not be removed.



### Do I have to install the MOB+ after a main power switch?

The MOB+ User Manual instructs that power to the MOB+ should be drawn from after a main power switch. This is to ensure that a stable power source is used, and that long stretches of wires using to small gauge (thickness) which can cause voltage drops, are avoided.

Also the user flow of the MOB+ where the system is powered on after the main switch will allow connection between the xFOB and xHUB before the ignition switch is turned on which is a more natural way to start a boating trip.



Snapshot from user manual showing power recommendations

With the above in mind, the power to the MOB+ can be drawn from other sources without any issues as long as the voltage source is not susceptible to voltage drops and the connection is done securely and water proof.