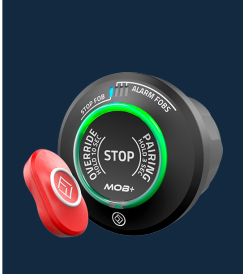


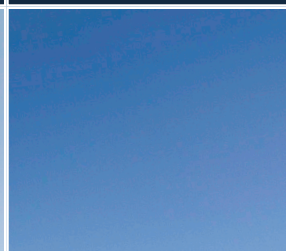


MOB+

WIRELESS MAN OVERBOARD SYSTEM



**USER
GUIDE**
MOB+ MULTIFOB



FELL Marine
2018
Designs, prices and features
subject to change.

To read the full user manual,
see video tutorials and other
useful information - visit:
WWW.FELLMARINE.COM

YOUR PERSONAL LIFEGUARD



WIRELESS MAN
OVERBOARD
DETECTION



AUTOMATIC ENGINE
EMERGENCY STOP



SECURE UP TO 4
PEOPLE ONBOARD



BE PROTECTED IN ALL
CONDITIONS

INNOVATING BOATING SAFETY

MOB+ is the most recognized wireless MOB system in the world. The system consists of an easy to install HUB mounted in your boat and up to four wearable FOBs. The FOBs communicate wirelessly with the HUB. Four FOB's can be connected to the HUB at the same time, with one unit acting as the captain's stop unit, and the additional three as alarm or stop units for passengers.

- ✔ PEACE OF MIND
- ✔ FREEDOM OF MOVEMENT
- ✔ SAFE BOATING MADE SIMPLE
- ✔ AWARD WINNING DESIGN
- ✔ WORLD LEADING MOB DEVICE

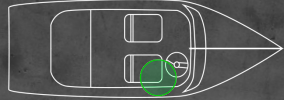


Corded Lanyard

-1972

Falling overboard is one of the most likely cause of death while boating

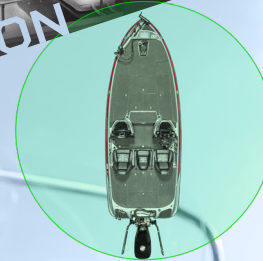
Traditional lanyard type cut-off switches are not always used by boaters, resulting in a rising trend in both injuries and fatal accidents. According to USCG statistics almost 60% of all boat related deaths in 2016 was caused by fall overboard.



- ✗ Freedom of movement
- ✗ Easy to use
- ✗ Convenience
- ✗ Good-looking and pioneering



NEXT GENERATION
WIRELESS BOATING
-2018



A WIRELESS REVOLUTION

MOB+ sets a new standard for wireless man overboard devices and safety onboard. MOB+ is developed to provide 100% stability and save you in just one second should you fall over board.

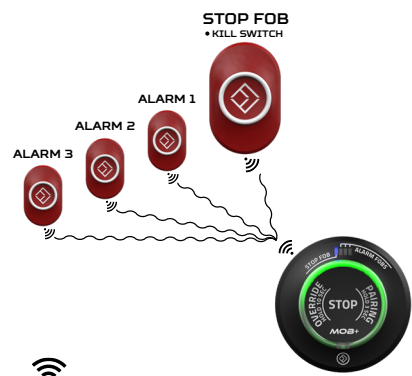
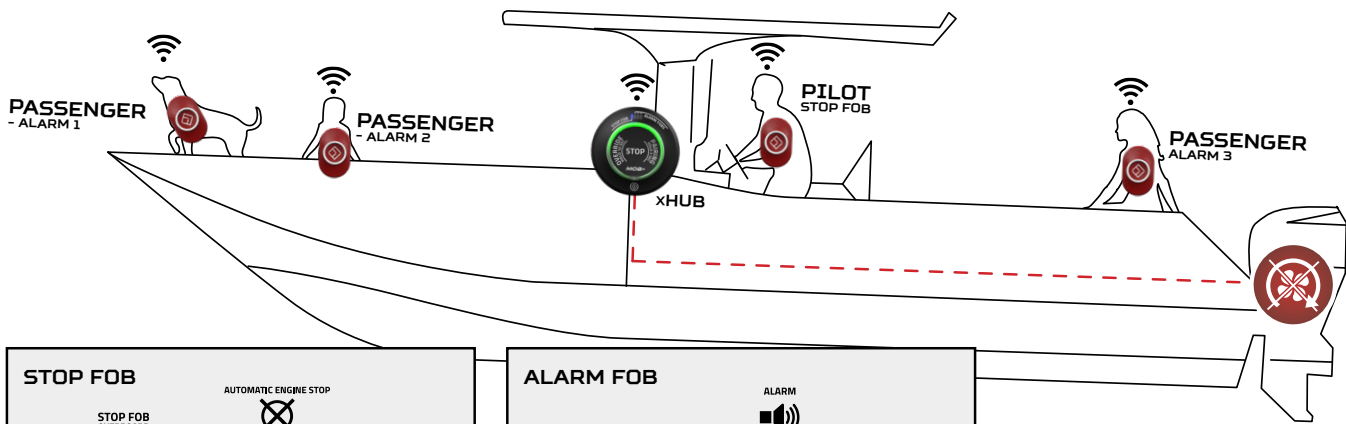
SECURE PILOT AND PASSENGERS

First Come, First Served: First connected xFOB becomes the STOP FOB. Successive connections automatically become ALARM FOBs.

Universal FOBs: Use any universal xFOB with the same xHUB system, just pair and connect.

FOB Status Indication: The xHUB has four light bars indicating connected xFOBs.

Battery indication: Each xFOB has more than 300 hours battery life.



STOP FOB

AUTOMATIC ENGINE STOP

CONNECTION: The first connected xFOB on each boat trip will be assigned as the "Master" and become the STOP FOB.

MOB EVENT: The STOP FOB will automatically shut down the engine if the pilot falls overboard.

MOB EVENT RESTART: After 6 seconds any remaining passengers onboard can restart the engine without interfering with the system.

ALARM FOB

ALARM

THREE ALARM FOBs: In addition to having the STOP FOB, three additional xFOBs can be connected as ALARM FOBs for family, children, dogs or other crew members onboard.

ALARM FUNCTION: If any of the ALARM FOBs falls overboard the xHUB will sound the MOB Alarm, flashing on the xFOB indication bar and flashing red on the light circle.

CONNECTION SEQUENCE

- FIRST CONNECTION**
- 1 STOP FOB
- SECOND CONNECTION**
- 2 ALARM FOB
- THIRD CONNECTION**
- 3 ALARM FOB
- FOURTH CONNECTION**
- 4 ALARM FOB

IN THE ZONE

As long as you stay within wireless range you are free to drive your boat and move about as you feel like. Just relax as MOB+ cares for you if a MOB event should occur.



IN THE WATER

Should you fall overboard the MOB+ will stop the engine because the wireless connection is lost when submerged in over 4 inches of water, even if you are still within 50 feet of your boat.



OUT OF RANGE

If you get out of the wireless range of MOB+, whether by falling overboard in the water or walking away from your boat on the docks, the engine will stop.

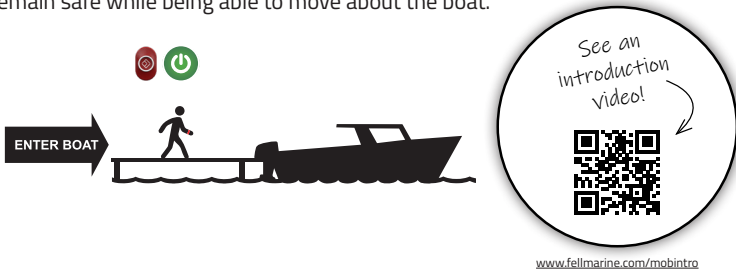




ON

CONNECT AS PILOT

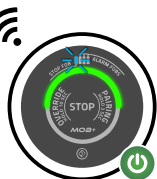
To start each boating trip, connect with a simple click on your FOB. This will allow your engine(s) to start and you will remain safe while being able to move about the boat.



www.fellmarine.com/mobintro



Click & Release to connect



STOP FOB Connected



You can now start your engine(s)



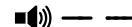
Safe to start driving



Click & Release to disconnect



STOP FOB Disconnected



Automatic engine stop



Shut down ignition

DISCONNECT AS PILOT

Disconnect with a simple click on your FOB. We recommend that you disconnect the Pilot FOB before leaving the boat. Disconnecting while the engine(s) are running will turn off the engine(s).



OFF



Turn ON boat battery

Before attempting to connect your FOB(s), make sure the MOB+ HUB has power. Typically the MOB+ is powered from the main house battery. Turn the boats Master Switch to ON



20h Time-Out

The normal FOB to HUB connection will automatically time-out after 20h and shut down your engine(s). This is to prevent unnecessary battery drainage of the xFOB battery. Click FOB again to reconnect.



Use FOB to stop engine

The Pilot FOB acts as a stop button to shut down the engine(s) at any time. While the Pilot FOB is connected, click the button on the FOB to activate stop. The same stop function can be activated by clicking on the dash mounted HUB.



Disconnect Stop FOB

Disconnecting the Pilot FOB (STOP FOB) will disconnect all FOBs regardless of their connected state and shut down the engine(s).



NEW FOB SETUP & SYNC

Pairing is only necessary the first time you use the system and not necessary before each boating trip. Pairing is the first-time-use procedure of synchronizing your FOBs unique IDs with your HUB to allow the two to connect wirelessly.



Press and hold the button on your HUB.



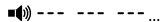
The HUB starts flashing blue and gives a sound signal indicating Pairing Mode.



Press and hold the button on your FOB



The HUB will give a sound signal and a green light to indicate a successful pairing.



Smart FOB memory

The HUB can store the ID of up to 20 unique FOBs at any given time. If pairing more than 20 FOBs the system will start overwriting the first stored FOB IDs. The HUB will continue to remember the FOB IDs even though the unit lose power.



One FOB, multiple boats

To use a particular FOB on multiple boats, you need to re-pair the FOB for each time the FOB is transferred to the new vessel. The FOB only remember its last paired HUB, this is to prevent it from connecting to more than one HUB at the time.



No FOB available



Press and hold the button on your HUB for 10 seconds



Success!



You can now start your engine(s)

FOB MISSING - OVERRIDE



If you have lost your FOB or if it's out of battery, you can always override the system. Remember that when you override the system you will NOT be protected in a man overboard situation.



No FOB available



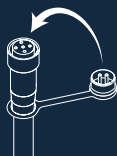
Press and hold the button on your HUB for 10 seconds



Success!



You can now start your engine(s)



Emergency Cap

In the unlikely event that the MOB+ System stops functioning. Unplug the xHUB and plug the emergency cap into the cable to be able to drive your boat. The emergency cap is located on the cable supplied with the MOB+ xHUB.



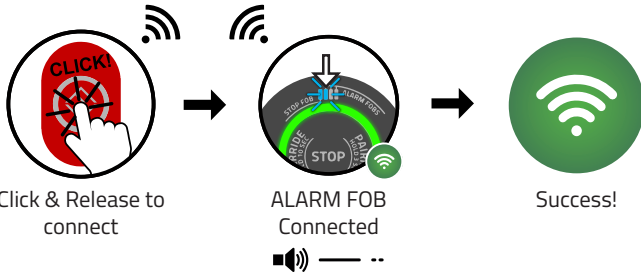
8h Time-Out

Override Mode automatically times out after 8h and shuts down your engine(s) to prevent engine start if the boat is left unobserved. After time-out the Override Mode can be reactivated as shown above.



CONNECT AS PASSENGER

After the Pilot has connected his or hers FOB as a STOP FOB, connect additional 3 FOBs as Alarm FOBs with a simple click on the passenger FOBs.



Connect anyone

Did you know that you can connect just about anyone with a passenger FOB. Connect your kids, wife or the family dog while boating to keep them safe from falling overboard.



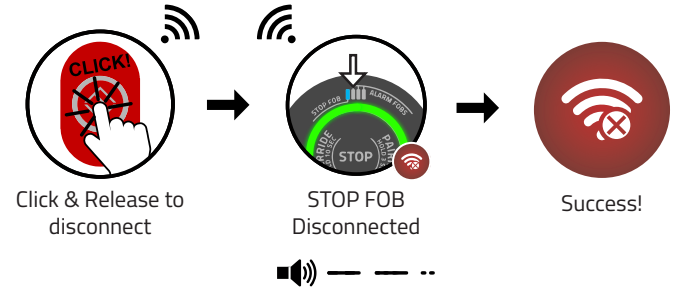
Multiple Pilot FOBs

The connected Pilot can configure a passenger FOB to become an additional Pilot FOB, allowing up to all 4 FOBs to act as STOP FOBs. Press 3 sec on the HUB before connecting an Alarm FOB. See www.fellmarine.com/support

DISCONNECT AS PASSENGER



Disconnect a passenger with a simple click on the appropriate passenger FOB. The passenger can reconnect at any time as described on the previous page.



Connected passengers

Make sure to keep an overview of who onboard you have connected with Alarm FOBs. If you have selected to connect any of the passenger FOBs as STOP FOBs, make sure to disconnect them while the engine is idle to avoid abrupt stops.



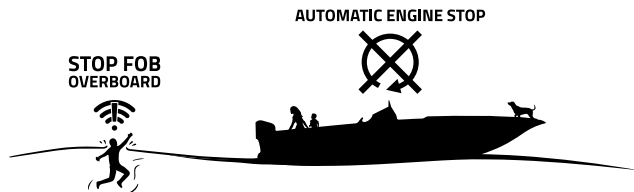
Disconnect Alarm FOBs

Disconnecting any Alarm FOB will not shut down the engine(s). Connect or disconnect an Alarm FOB at any time while the Pilot FOB is connected.



PILOT OVERBOARD

In a Man OverBoard event with the pilot FOB, the MOB+ will automatically shut down the engine(s) and sound an alarm.



Man OverBoard



Automatic engine stop

6sec



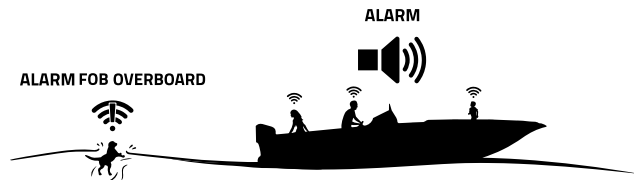
dStart activated



Restart engine(s) without interacting with the system

PASSENGER OVERBOARD

In a Man OverBoard event with a passenger FOB, the MOB+ will automatically sound an alarm to notify the pilot driving.



Passenger OverBoard



Light and sound ALARM



Acknowledge ALARM



Rescue missing person in the water



dStart

6 seconds after an MOB event with a STOP FOB, the MOB+ automatically activates dStart to allow any remaining passengers in the boat to restart the engine(s) directly. The mode flashes yellow and times out after 2 hours.



2h Time-Out

MOB Mode automatically times out after 2h shuts down your engine(s). This is to prevent engine start if the boat is left unobserved after leaving the boat without disconnecting the xFOB.



Disengage Alarm

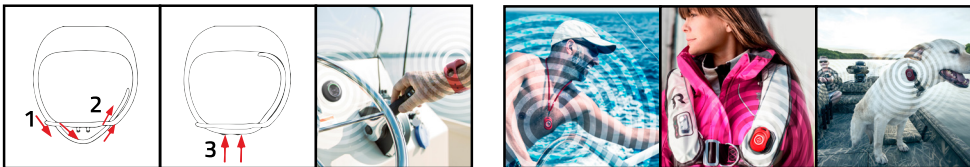
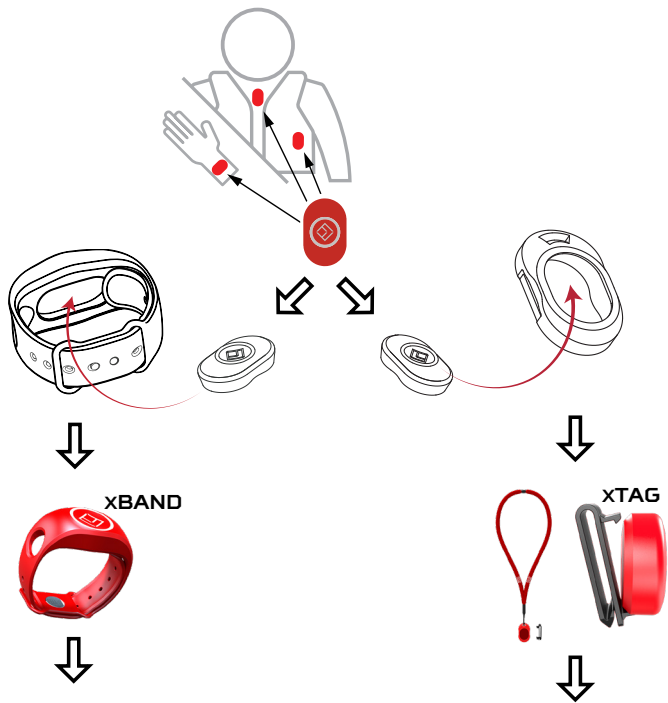
If a connected passenger FOB goes overboard or out of range the HUB will sound an alarm. To disconnect the alarm, simply click the button on the HUB. The passenger can at any time reconnect the passenger FOB.



FOB indication

The HUB has four blue bars on top indicating the status for each connected FOB. If a FOB goes overboard the light circle will flash red simultaneously as the respective FOB light bar flashes.

HOW TO WEAR



USEFUL INFORMATION

TESTING SUBMERSION



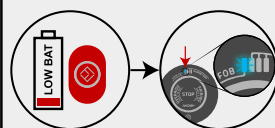
A bucket of water is not sufficient to test the functionality of MOB+. Test the system in the sea or ocean/lake.

FOB RANGE



MOB+ has a range of 50 ft / 15 m. The range may vary as wireless signals may be reflected from other objects in vicinity.

BATTERY INDICATION



The HUB will indicate low battery on the FOB by blinking the light bar respective to the connected FOB.

EMERGENCY STOP



You can at any given time (when connected) use the button on the HUB or FOB as an emergency engine stop.

WATERPROOF

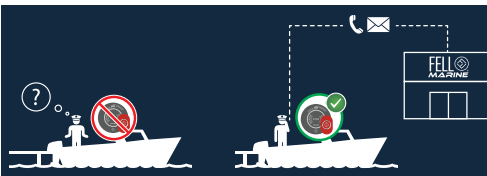


The FOB is waterproof down to 15ft/3m. The HUB is waterproof down to 5ft/1m.

BATTERY TYPE



FOB battery type: CR2032
*Available at most convenience stores
FOB battery life: 300h




WE ARE HERE TO HELP

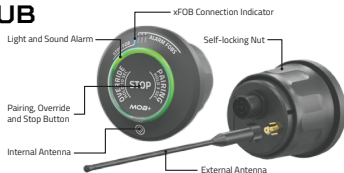
Please feel free to contact us with any inquiry.

Web: fellmarine.com/support
 Email: support@fellmarine.com
 Phone US: +1 855-683-FELL
 Phone EU: +47 32 82 82 80

Need help?
Scan this!



xHUB



MEASUREMENTS AND PERFORMANCE

Weight	164g / 5.8oz.
Housing material	ASA / TPU / PBT / POM – RoHS
Temperature range	From -15°C / 5°F to 55°C / 131°F
Voltage Source	10-32Vdc
Energy consumption Active mode	2.5W max. at 13.8Vdc, Standby: <30mA, <0.4W max. at 13.8V
Fuse	1A-3A
Alarm decibel level	>85db
Kill Switch max electricity	8A continuously, 10A puls

WIRELESS PERFORMANCE

Frequency area	EU: 868 MHz	US: 915 MHz
RF signal (in)	10 dBm max.	
RF signal (out)	10 dBm max.	
4D Antenna diversity	✔	

WE ARE HERE TO HELP

Please feel free to contact us with any inquiry.



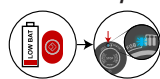
Web: fellmarine.com/support
 Email: support@fellmarine.com
 Phone US: +1 855-683-FELL
 Phone EU: +47 32 82 82 80

WATCH VIDEOS!

On www.fellmarine.com/videos you will find installation and user guide videos.

xFOB

xFOB Battery



xHUB will indicate low battery on the xFOB by blinking the light bar respective to the connected xFOB.



MEASUREMENTS AND PERFORMANCE

Weight	10g / 0.35oz.
Housing material	ASA / TPU / POM
Temperature range	From -15°C / 5°F to 55°C / 131°F
Voltage Source	Coin Cell Battery – 3V nominal
Power consumption	0.3 µA in sleep (0.00033 W) 30 mA in active mode (0.098W)
Battery life	300 hours continuous usage

WIRELESS PERFORMANCE

Frequency area	EU: 868 MHz	US: 915 MHz
RF signal (in)	10 dBm max.	
RF signal (out)	10 dBm max.	
4D Antenna diversity	✔	

BATTERY XFOB

Battery type	CR2032
Battery voltage	3V lithium battery

CERTIFICATIONS

Wireless	US: FCC Part 15C	EU: R&TTE - ETSI EN 300 220
EMC	US: CISPR16	EU: EN 301 489
IP Grade	xFOB™: IP68, xHUB™: IP67 EN60945	
Materials	RoHS (2002/95/EC)	
Flammability	IEC 60950 1&22	

The MOB+ is tested and certified to meet all the current standards – for your safety. ABYC A33 & E-11 Compliant (US Emergency engine/propulsion kill devices standard)

COMPLIES WITH
 ABYC A-33 & E-11
ABYC
 Boatng Safety... Built In