

STATE OF MAINE DEPARTMENT OF MARINE RESOURCES MARINE RESOURCES LABORATORY P.O. BOX 8, 194 MCKOWN POINT RD W. BOOTHBAY HARBOR, MAINE 04575-0008

PATRICK C. KELIHER
COMMISSIONER

Federal Permit Holder Vessel Tracking Requirements

You are receiving the enclosed Particle TrackerOne vessel tracking device because DMR's records indicate you are the holder of a federal lobster and crab commercial trap gear permit for one of the Lobster Conservation Management Areas. Atlantic State Marine Fisheries Commission (ASMFC) Addendum XXIX requires all federal lobster and crab gear permit holders to install a type-approved tracker by December 15th, 2023. For compliance with the Addendum, DMR currently has a proposed rule that would require federally permitted lobster harvesters to have a tracker operational prior to the first fishing trip after December 15, 2023.

The tracker enclosed is intended for installation on the vessel named on the shipping label of this package. Additionally, the hull number (state registration or USCG documentation number) of the vessel this tracker should be installed on is shown below the barcode on the shipping label. If this number is incorrect, please contact DMR at Tracking.DMR@maine.gov or (207) 579-4214.



Maine Department of Marine Resources 194 McKown Pt Rd PO Box 8 West Boothbay Harbor, ME 04575-0008

Federal Lobster Harvester c/o F/V Some Boat 123 Main St Any Harbor, ME 00000



Your Hull Number

What data will the tracker collect?

The tracker provided collects the time and position of your vessel once per minute while the vessel is moving. While the vessel is tied up, the tracker collects the time and position of your vessel every 6 hours, until in motion again.

Who will pay for tracking?

The enclosed tracker and 3 years of cellular data service is provided to you at no cost through congressional appropriations provided to DMR.

Why did ASMFC establish the tracker requirement?

The goal of the addendum is to collect high resolution spatial and temporal data to characterize effort in the federal American lobster and Jonah crab fisheries for management and enforcement needs. These data will improve stock assessment, inform discussions and management decisions related to protected species and marine spatial planning, and enhance offshore enforcement.

Will my tracker data be confidential?

Yes. As with the landings information reported to the Department by harvesters and dealers, the spatial information collected through the trackers is designated as confidential through Maine law and regulation.

When will tracking be mandatory?

You must have your tracker operational prior to your first lobster fishing trip after December 15, 2023. You will also need to certify to DMR that you have installed your tracker and that it is functional. Once your tracker is installed, please fill out the certification affidavit using the link below or by scanning the QR code on a mobile device:

https://forms.microsoft.com/g/PxNJ0npq6Z



What if I am not actively fishing or take my boat out of the water?

If you expect your tracker to be powered down, please fill out the form below. "Powered down" is defined as the tracker not receiving external power from your vessel for longer than 1 month.

https://forms.microsoft.com/g/g6jnEJgFWj



How should the tracker be connected and installed?

The TrackerOne unit can be connected using either the included USB cable (like a cellphone) or the included M8 cable (which can be hardwired to the vessel circuitry). For most vessels, the USB installation is recommended.

USB Install

The USB cable can be connected to any USB port on the vessel that is powered while the vessel is moving. An AC adapter is included in this package if your vessel has an AC power port available. The USB cable can also be connected to an available port on a computer or plotter; this port must be powered while your vessel engine is on.

1. Connect the USB cable to the port on the right side of the front of the tracker.



2. Connect the other end of the cable to an available USB A port or to an AC outlet with the provided adapter.



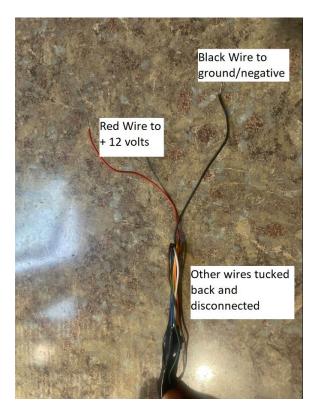
Direct Wire Install

A second installation option is to hardwire the tracker using the M8 cable provided. It can be connected to any 5-30 volt DC power source; the red wire is positive and the black wire is negative. Do not connect anything to the other wires. The other wires can be clipped off or taped back. You will likely need additional length of wire beyond the short wiring harness provided and may also want to use a fuse.

Remove the rubber cover from the M8 port connection on the left of the tracker (next to the USB port). Connect the round silver end of the M8 cable. The connector is keyed and can be rotated until it plugs in. The knurled silver connector should be turned clockwise to secure the cable to the tracker.



Connect the red wire to a positive voltage source (5-30V DC, typically ~12V) and the black wire to negative/ground.



How should the tracker be positioned?

The TrackerOne unit should be in a location within your vessel's wheelhouse where it is approximately level and is near a window. It is not recommended to install the tracker in a vertical position or upside down. It can be optionally held in place with adhesive pads. If the indicator lights are too bright at night, they may be covered with tape; do not turn the tracker over. The tracker is IP67 rated for dust/water immersion, however should be installed in a semi-protected area with other marine electronics (like the wheelhouse). This describes the ideal setup, and trackers tested have performed adequately even when installed in other configurations.

How can I tell that the tracker is operating correctly?

There are three indicator lights on the front of the TrackerOne:

- Charge light is on at any point during which the tracker battery is charging.
- **GPS** light will be blink blue while the tracker is trying to connect to GPS satellites and will be solid blue once a GPS position had been obtained.
- **Cloud** light indicates if the tracker is connected to a cell tower. When connected to cellular, this light will "breathe" cyan. When out of cell service, this light will blink green. This light may blink green for up to an hour the first time you power up your tracker.
- If the cloud light is blinking green while at the dock, or is blinking red, please contact DMR for further support.

What if the tracker does not turn on?

If you start your engine and the lights on the tracker do not turn, please check that the outlet it is connected to has power. An additional troubleshooting step is to unplug the tracker and plug it back in. If this does not work, please contact DMR for additional support.

For technical issues or help installing your tracker, please contact:

Tracking.DMR@maine.gov or (207) 579-4214

Is this necessary if I already have VMS? Will I need both systems?

Yes. There are a few big differences between traditional VMS systems and the tracking devices being sent:

- VMS systems only reports vessel locations every 60 minutes (or every 30 minutes if you have a
 federal scallop permit). The tracking devices required by ASMFC Addendum 29 report a position
 every minute. This rate was determined to be necessary for distinguishing individual lobster
 trawls from transiting activity. This difference in reporting frequency mean that VMS devices are
 unable to satisfy the requirements of Addendum 29.
- VMS reports positions in real-time over satellite. The devices being required for use in Addendum 29 all use cellular data to transmit locations, and store locations internally when out of cell service to be transmitted when back in cell coverage. Due to this, VMS systems have a much greater cost for both the device and the data then the cellular device you are receiving.
- The data produced by the cellular devices is of much higher quality than that produced by VMS, however the VMS system also includes other law enforcement/permitting requirements like hailing in and out. There are none of these requirements for the cellular systems besides having it powered on while the vessel is on, and powering over USB offers a much simpler option than the hardwiring required for VMS.

Other Resources

Addendum 29 full text https://asmfc.org/uploads/file/63d2f215AmLobsterAddendumXXIX_JonahCrabAddendumIV_M
 arch2022.pdf