FATHOM®
e-power system

M7000-X+ SYSTEM
Quick Start Guide

ENGLISH

This document is a reference guide for starting up a Fathom® M7000-X+ system in preparation for safe and successful operation. It assumes all the necessary equipment is installed and configured, and the system is ready to use. Images used in this document may not exactly match the screen on your unit due to your system's specific configuration or continuous software improvements.

PRECAUTIONS AND WARNINGS

Before operating the system:

- Read the full M7000-X+ System Operation Manual and all the documentation that came with your outboard engine.
- Check for damaged wiring, loose connections, and battery State-of-Charge (SoC).

⚠ **WARNING:** Be aware of carbon monoxide (CO) from the engine exhaust. Ensure CO sensors are unobstructed and functional. Never swim near outboards during charging. Refer to the full M7000-X+ System Operation Manual for more information.

⚠ **WARNING:** Be aware of hazardous voltages. Only authorized personnel should service the system.

⚠ **WARNING:** Batteries can pose electrical shock, arcing hazard, and chemical exposure dangers. Never attempt to repair or open batteries.

MODES OF OPERATION

Propulsion mode

When the engine(s) are in gear and the boat is underway, charge rate will increase with engine speed. The system will automatically transition from 12 V to 48 V at a predetermined RPM threshold, typically at or around cruising speed.

Throttle Only mode

Mercury Marine outboards with Digital Throttle and Shift (DTS) include a **THROTTLE ONLY** button, also known as Neutral Warm-up. This mode allows you to elevate the engine(s) RPM to warm up the engine(s) or quickly charge the 12 V electrical systems. Throttle Only mode should not be used for extended charging events.

A   Neutral light (one per lever)
B   THROTTLE ONLY button

Charge control mode

When the M7000-X+ system is enabled, charge control allows the system to control Mercury Marine V10 and V12 engine(s). This control allows the system to start, stop, increase or decrease RPM, alter engine performance parameters, and lock out vessel propulsion.

User-selectable charge modes

The M7000-X+ system provides two user-selectable charge modes. Extend mode operates the engine(s) at a lower speed that is quieter but charges at a lower rate. Boost mode offers increased charge rates but operates the engine(s) at a higher speed.

Shore power charging

➔ *Note: Verify that the input of the CombiMaster® does not exceed the output rating of the shore power pedestal. Adjust as necessary.*

When the vessel is connected to shore power, the M7000-X+ system automatically routes AC power to the boat's AC power systems. Available power not used by the boat's AC loads is used to charge the batteries. Once shore power is disconnected, the AC system automatically draws from the battery system. If the AC demand is greater than the shore power supply, the system draws from the 48 V power bank to supplement the required need.

➔ *Note: When the CombiMaster supplements the shore power AC load, the 48 V power bank is no longer charging and charge level will decrease.*

1   Verify the current capacity of the shore power pedestal.
2   For Garmin® displays, navigate to the system's switching page and adjust to match the pedestal output.
3   For OEM displays, use the side bar function buttons to locate the input current page and adjust to match the pedestal output.
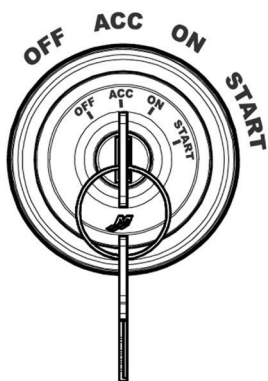
Load shedding

During high discharge, the M7000-X+ system automatically shuts down certain non-critical electrical loads.

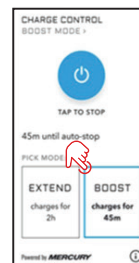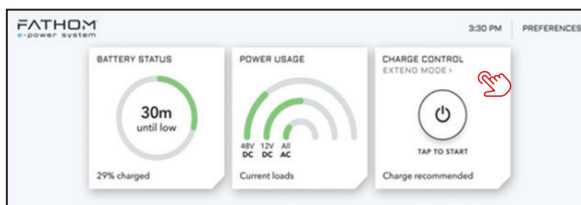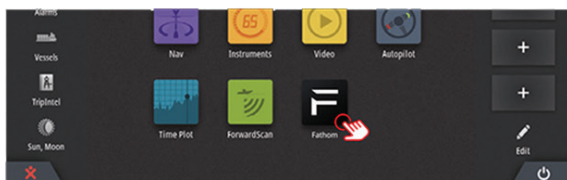# BEFORE STARTING FATHOM CHARGE CONTROL

➔ *Note: Before starting the Fathom M7000-X+ system, check the boat's surroundings. Engine exhaust contains carbon monoxide and can impact nearby boats or people.*

1   Confirm the boat's systems are in good working order.
2   Ensure cowls are closed and latched.
3   Ensure outboards are trimmed down and water inlets are below waterline.
4   Turn on the boat's battery systems using the remote battery switch(es).
5   Check all non-Fathom key switches are in the OFF position.
6   Select which Fathom-ready outboard(s) to start by placing the key switch in the **ACC** position.

➔ *Note: The ACC position may be labeled differently in custom applications.*

7   Notify occupants before starting engine(s).
8   Connect lanyard to the safety switch and set to **Run**.
9   Select the **Fathom** app icon on the multi-function display (MFD) to open the Fathom app.
10 Select the **CHARGE CONTROL** icon to expand tile.
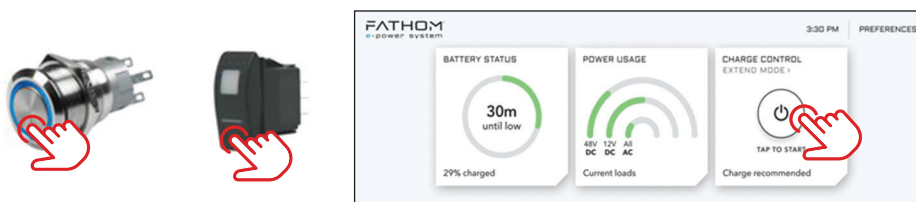11 Select the desired charge mode.

STARTING FATHOM CHARGE CONTROL

You can start Fathom charge control by either:

- Pressing the mechanical Fathom button. The Fathom system will have either a momentary pushbutton or rocker switch.
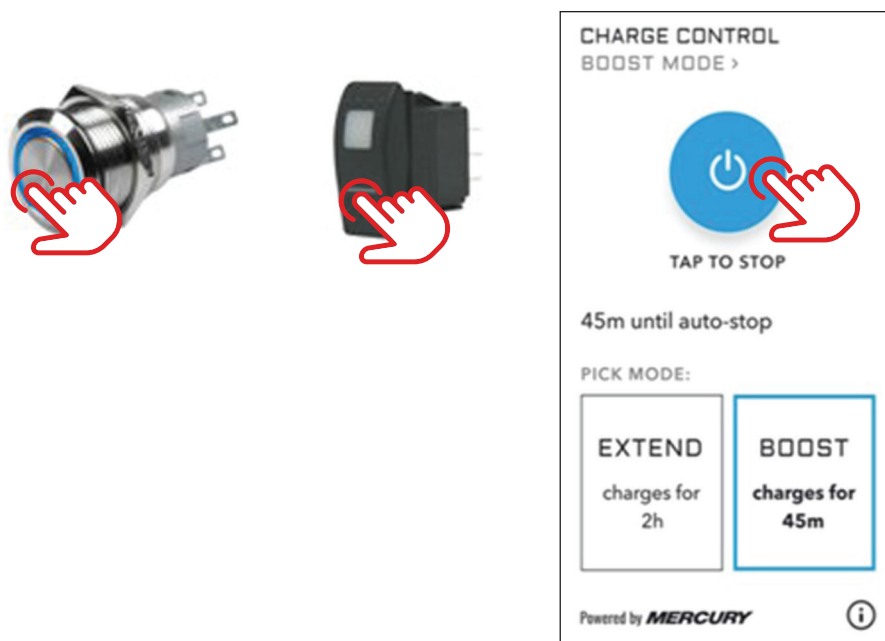- Opening the Fathom app from the MFD and selecting the **TAP TO START** power icon.

→ *Note: Remain onboard during charging.*

STOPPING FATHOM CHARGE CONTROL

You can stop Fathom charge control by either:

- Pressing the mechanical Fathom button.
- Opening the Fathom app from the MFD and selecting the **TAP TO STOP** power icon.
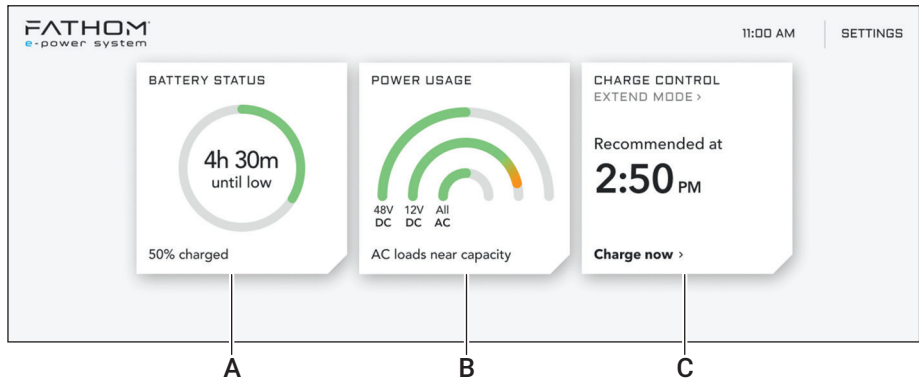
- Turning the outboard key switch(s) to the **OFF** position.
- Pulling the emergency stop lanyard.
- Pressing the Mercury Start/Stop button.

→ *Note: The recommended and more controlled shutdown method is to use the Fathom button or* **TAP TO STOP** *option. All other methods are treated as emergency stops, abruptly shutting down the engine(s).*

→ *Note: If the State of Charge (SoC) is 50% or higher, shutting off the battery(s) by the remote battery switch(s) allows for seasonal storage for up to three months. A minimum SoC of 75% is required for entering long-term storage for up to 6 months. The batteries should not drop below 25% any time during storage.*

MONITORING AND DISPLAY

The Fathom app display is divided into three primary tiles. For more information, refer to the Fathom App Guide.

A **BATTERY STATUS** - View SoC, voltage, current, temperature, and relay status.

B **POWER USAGE** - Monitor current loads and power draw.

C **CHARGE CONTROL** - Select charge mode and view estimated charge times.