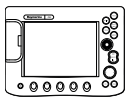
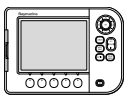
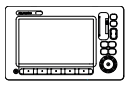
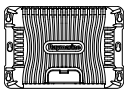
Engine identification & setup for legacy MFDs

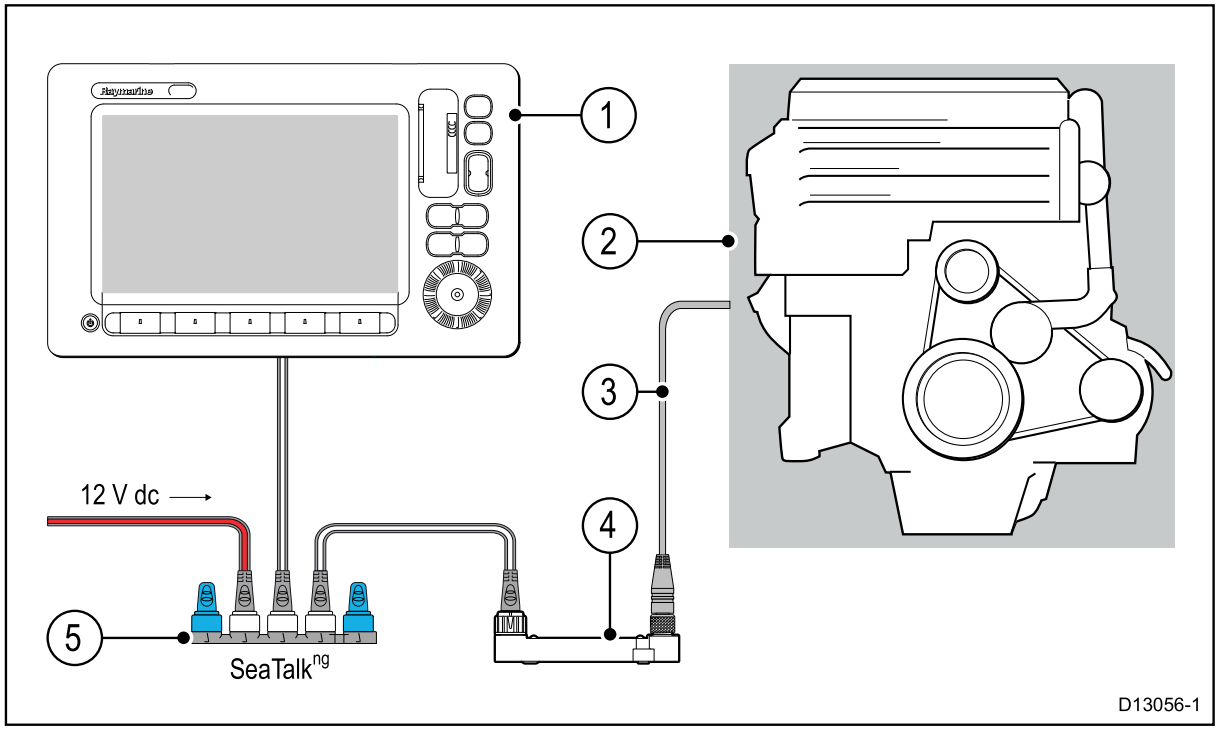
Applicable products

The information in this document refers to the following Raymarine products:

	Product variants		Product variants
	C-Series Classic C70, C80, C120 E-Series Classic E80, E120		A-Series Classic A50, A50D, A57D, A70, A70D
	C-Series Widescreen C90W, C120W, C140W E-Series Widescreen E90W, E120W, E140W		G-Series GPM400

Typical system — legacy MFDs

Example: basic system — engine interface only



1. Legacy MFD (e.g. E-Series Widescreen).
2. Vessel engine(s), connected to engine CAN bus (e.g. J1939).
3. Engine-specific adaptor cable.
4. ECI unit.
5. SeaTalkng 5-way block.

Engine identification — legacy MFDs

Before attempting to display engine data on legacy MFDs, Raymarine highly recommends that you refer to your engine representative / dealer. For your information, the basic procedure for displaying engine data on a legacy MFD is detailed below.

Important: Before you can display Engine data on a legacy MFD, you must:

- Ensure that your MFD is running the latest software version. Refer to www.raymarine.com/software/ to download the latest software.
- For engines with a NMEA2000 CAN bus, ensure that the CAN bus is outputting the relevant PGN messages that include the engine instance data. If in doubt, please contact your engine dealer.
- Only specific engine configurations are currently supported by legacy MFDs. **Refer to the important "Engine instancing and setup — legacy MFDs" section in this document.**
- Make the data connections, according to the instructions provided in the **87202 ECI Installation instructions**.
- Ensure all data buses are powered up (including all engine CAN data buses, gateways, and also the SeaTalk^{ng} bus).
- Start the engine. Ensure that you follow any applicable sequencing rules, as specified in the **"Engine instancing and setup"** information.
- Select the "Engine Data Page" on your MFD and ensure that the engine data is displayed correctly. You may need to configure a custom data page containing a specific arrangement of data dials. Refer to your MFD handbook for more information on how to do this.

Engine instancing and setup — legacy MFDs

Before you can display engine data on your legacy MFD, your engine(s) may require "instancing" (assigned a unique ID / address) by an engine representative / dealer.

Single engine installations

Engine instancing is NOT required for single engine vessels.

Multiple engine installations

Legacy MFDs currently have limited support for multiple engine installations.

The following table details the different types of engine supported, and the instancing requirements for each.

Engine CAN bus protocol	Number of engines	Engine CAN bus configuration	Number of ECI units	Start up Engines in sequence?	Instancing by Engine dealer required?
NMEA 2000	1	Single CAN bus	1	Only 1 engine to start up — sequence not applicable.	Not required.
NMEA 2000	2+	Single shared CAN bus	1	Any sequence.	Instancing may be required. Contact your Engine dealer.
NMEA 2000	2+	Separate CAN bus for each engine	**For legacy MFDs, this engine configuration is NOT currently supported or recommended by Raymarine. A current generation LightHouse MFD is required.**		
J1939	1	Single CAN bus	1	Only 1 engine to start up — sequence not applicable.	Not required.
J1939	2+	Single shared CAN bus	1	Start your engines in sequence, from port through to starboard.	Not required.
J1939	2+	Separate CAN bus for each engine	**For legacy MFDs, this engine configuration is NOT currently supported or recommended by Raymarine. A current generation LightHouse MFD is required.**		