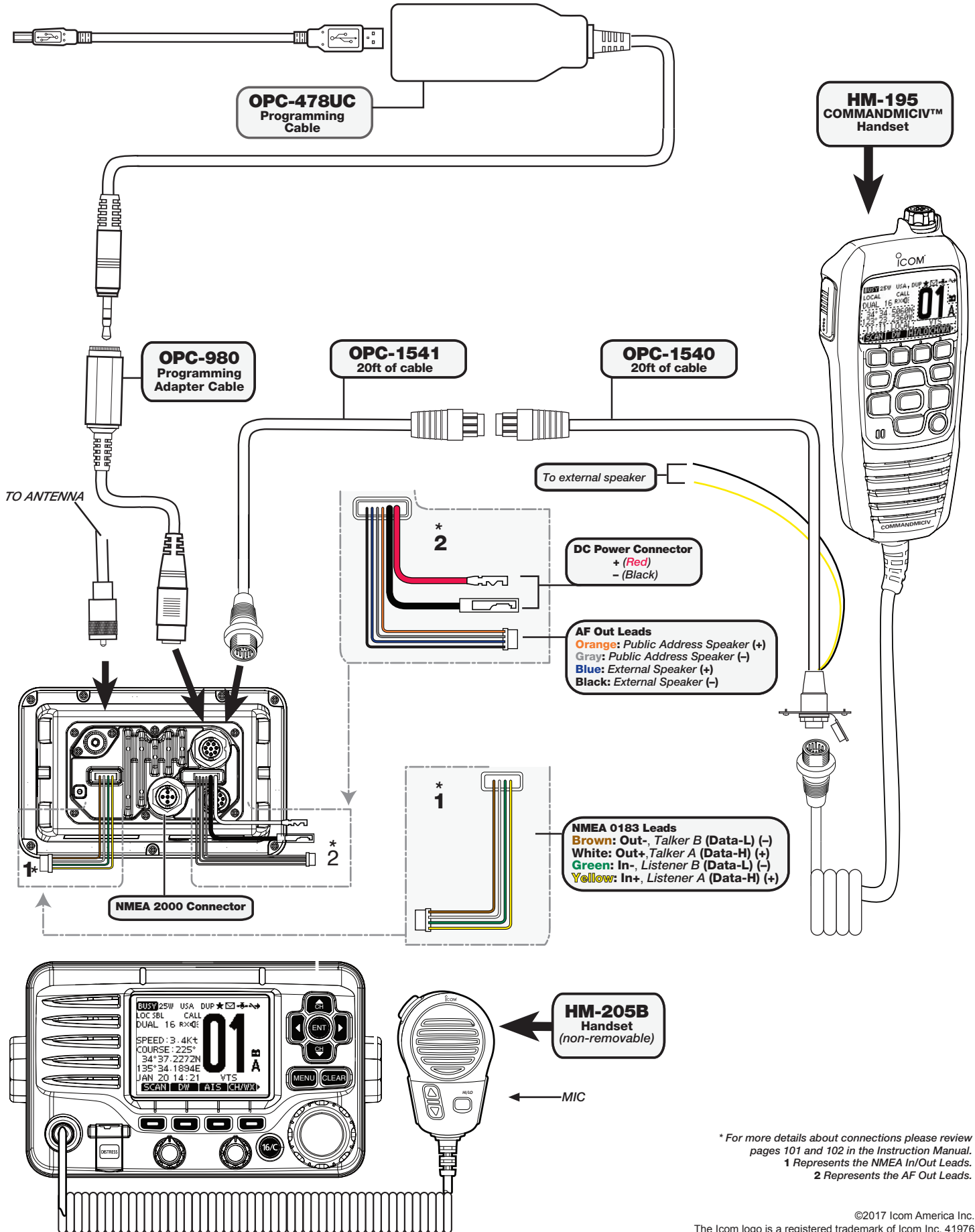


# IC-M506

## VHF MARINE TRANSCEIVER

For Models with Front-Mounted Microphones



\* For more details about connections please review pages 101 and 102 in the Instruction Manual.  
1 Represents the NMEA In/Out Leads.  
2 Represents the AF Out Leads.

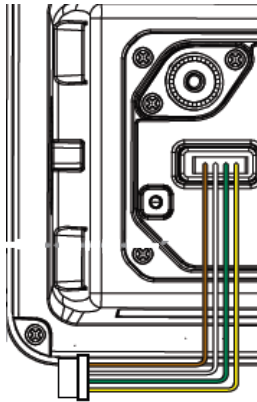
## Connecting a GPS to Your M506 radio

The back panel of your M506 radio has a connector with four wires. Two of the wires can be used to accept NMEA 0183 data from a GPS device.

Note: NMEA 2000 connections are made from the NMEA 2000 connector (round 5-pin) at the back of the radio.

### *M506 Connections*

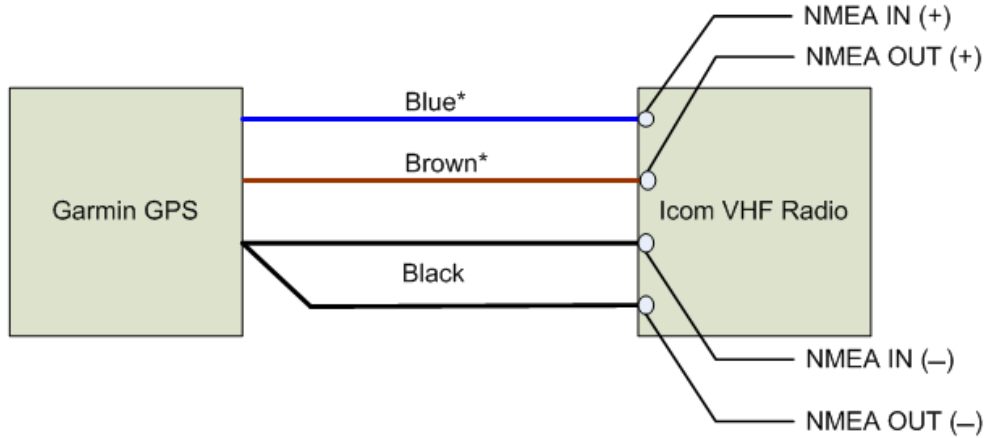
<i>Radio</i>		<i>GPS</i>
NMEA in + (yellow wire)	→	NMEA / Data out
NMEA in - (green wire)	→	NMEA / Data ground
NMEA out + (white wire)	→	NMEA / Data in
NMEA out - (brown wire)	→	NMEA / Data ground



### GPS Example Connections

You will need to cut the wires from the 4-pin connector and solder them to the NMEA wires from your GPS (only cut wires from the connector that you will need). For more specific information, consult the individual instruction manual from the GPS manufacturer.

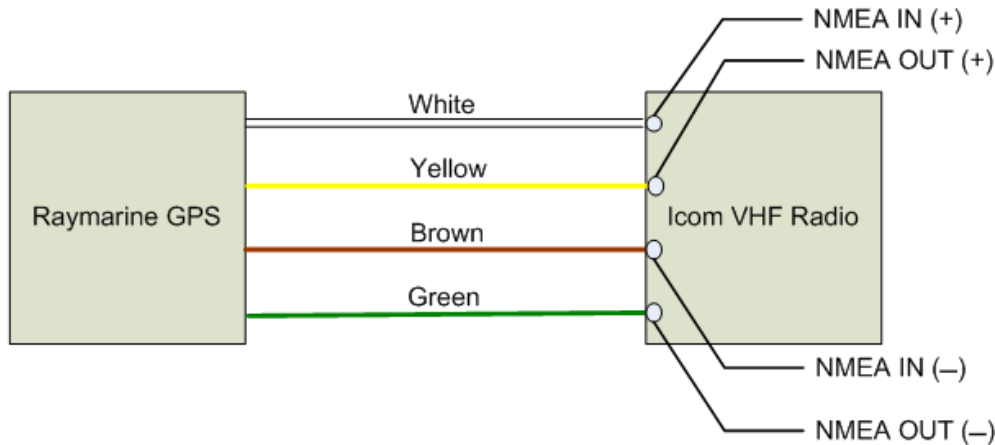
#### Garmin GPS



\*Garmin models 172c, 182d, 152, and 178d can have blue or green connected to NMEA IN (+) and brown or white connected to NMEA OUT (+).

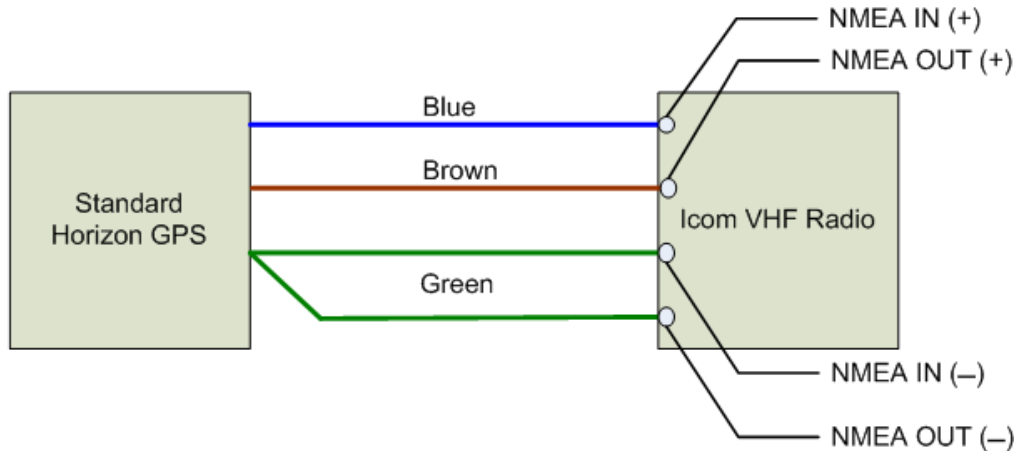
#### Raymarine GPS

Note: When using some Raymarine equipment you may need to connect your Icom radio directly to the Raymarine GPS itself, not through a repeated port from other equipment, such as a plotter. This ensures that the proper NMEA sentence passes to the radio.



Shows connections for Raymarine models 420, 320, and 425

## Standard Horizon GPS



Shows connections for Standard Horizon models 155c/1000d and 175c

### ***Troubleshooting Your GPS Connection***

- Your Plotter/GPS receiver must be capable of sending the proper sentences (listed below) set for NMEA 0183 (Check your Plotter/GPS instructions for information.)
- Verify that the plotter/GPS device is sending GPRMC, GPGGA, GPVTG, GPGLL, or GPGNS sentences. (Check Plotter/GPS Instructions.)
- If you are still not receiving latitude and longitude, you can try setting the plotter to send one sentence at a time (if possible). This can help it find the most compatible sentence.
- Have a technician check the plotter/GPS using test equipment to verify it is sending the GPS sentence.
- Check the solder points on the radio and plotter connectors. Some connectors are very small, increasing the likelihood of solder bridging.