



NAV6 Antenna Replacement System V3 NAV6 Replacement NAVTEX Receiver Module V3 Instruction Guide

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Important Information

This equipment is not approved for use by SOLAS convention vessels within the Global Maritime Distress and Safety System (GMDSS)

It is intended for use by leisure craft and other non-SOLAS vessels wishing to participate within GMDSS

Safety Warnings

This instrument is for use as an aid to sailors and should not lead to a reduction in the level of good seamanship required at all times

Reception of messages cannot always be guaranteed as this depends on local radio propagation

The correct magnetic variation must be input at the navigation instruments (e.g. GPS, electronic compass) for the accurate display of COG, set, waypoint bearing and heading.

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Congratulations on purchasing this high quality ICS Electronics Ltd product. Please take the time to read this manual carefully as it contains some essential information regarding the operation and maintenance of the product.

We recommend that you regularly visit the ICS website www.icselectronics.co.uk for information on updates, the availability of software upgrades, further options and support. The support pages contain frequently asked questions about the NAV6 that you may find useful. There is also a NAVTEX database providing a list of operational NAVTEX stations and their details.

The IMO and various national coastguards also operate informative websites that you may wish to visit; see www.icselectronics.co.uk/links.

This Instruction Guide

This instruction guide is intended for use in conjunction with the ICS Antenna Replacement System V3 only. It is not the full NAV6 user Manual - should you require information about operation of your NAV6 NAVTEX system then please contact ICS Electronics or visit our web site www.icselectronics.co.uk.

What's in the Box?

The following items should be in your box:

- NAV6 eNAVTEX Receiver V3 Module (Black Box)
- 4 x Stainless Steel Mounting Screws
- Detachable NAV6 Receiver Module Connector Strip (Green)
- Instruction Guide (this document)

If you have purchased the **ICS NAV6 Replacement Antenna with eNAVTEX RX Module V3**, your box should contain the following in addition to the above:

- Passive NAVTEX Antenna with 10m Cable Attached (White tube style antenna)

If any of these items are damaged or missing please contact the seller you purchased this product from.

Selecting the Correct Replacement System

Instructions

If you are replacing the complete NAV6 antenna system continue to the next section called "Replacing the Complete Antenna System".

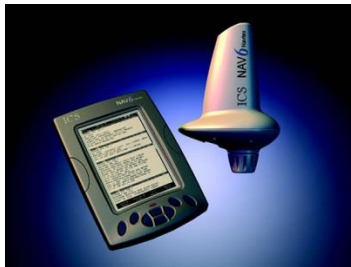
If you are just replacing the NAV6 receiver module only then go to the section called "Replacing the NAV6 Receiver Module Only", starting on page 10.

Replacing the Complete Antenna System

Step 1 – Identification of Antenna System

First you will need to identify the type of antenna system that is currently installed with your NAV6 NAVTEX System. This section covers the ICS Active "Fin" style antenna system as shown below:

- ICS Active "Fin" style antenna system (integrated receiver modules and wire antenna)



ICS NAV6 "Fin" style antenna system (Shown with NAV6 Display Unit)

If your antenna system does not look like the photograph above then please contact ICS support and we shall help you identify the antenna system and provide installation guidance.

Step 2 – Remove the old Antenna System

Disconnect your power supply to the existing NAV6 Display unit. It is recommended that this is done at the circuit breaker or removal of the relevant fuse(s) on your boat.

NOTES:

It is possible that other terminal blocks and wiring (non-standard) systems may have been installed in your boat, please consult with the installer if you are unsure of the wiring connections or contact ICS for technical assistance.

Cut the antenna cable at the point where it enters the base of the “fin” antenna unit. Remove and dispose of the “fin” antenna unit subject to local environmental regulations.

Leave the old antenna wiring in place – this will be used later in the installation process.

HELPFUL ADVICE

ICS offer a wide range of software upgrade options for the NAV6 display unit to help enhance and improve your safety at sea. Should you wish to consider any of these upgrade options, this is an excellent point to review the options since some require the NAV6 display unit to be upgraded via a serial connection. The serial connection is most accessible at this stage and may save you time and cost in the future. These include:

ICS.6050.01	NAV6 Standard Display to NAV6 Standard V2 Display
ICS.6050.02	NAV6plus Display to NAV6plus Display V2
ICS.6050.03	NAV6 Standard Display to NAV6plus Display V2
ICS.6050.04	NAV6 Standard Display V2 to NAV6plus Display V2
ICS.6050.05	NAV6 Rx V2 to NAV6 eNAVTEX Rx
ICS.6020.30	NAV6 Display USB/Serial Programming Lead

Step 3 – Fitting the New Passive NAVTEX Antenna

Select a suitable position for the new passive antenna (supplied with this product) on your boat. Install the antenna and route the cabling to the position you have selected for the NAV6 NAVTEX Receiver Module V3. In most cases you will be able to re-use the older antenna mount since the size and thread is the same.

HELPFUL ADVICE

You may find it useful to use the old antenna cabling as a “pull-through” for the new antenna cable. Do not discard the old cable once removed – it will be re-used later.

NOTE: ICS stock a wide range of antenna mounts, one of the most popular is the nylon push pit rail mount, ICS part Number ICS.903.03

At this point, if you have not used the old antenna cable as a “pull-through”, then it can now be removed. **Do NOT discard the cable – it will be re-used later.**

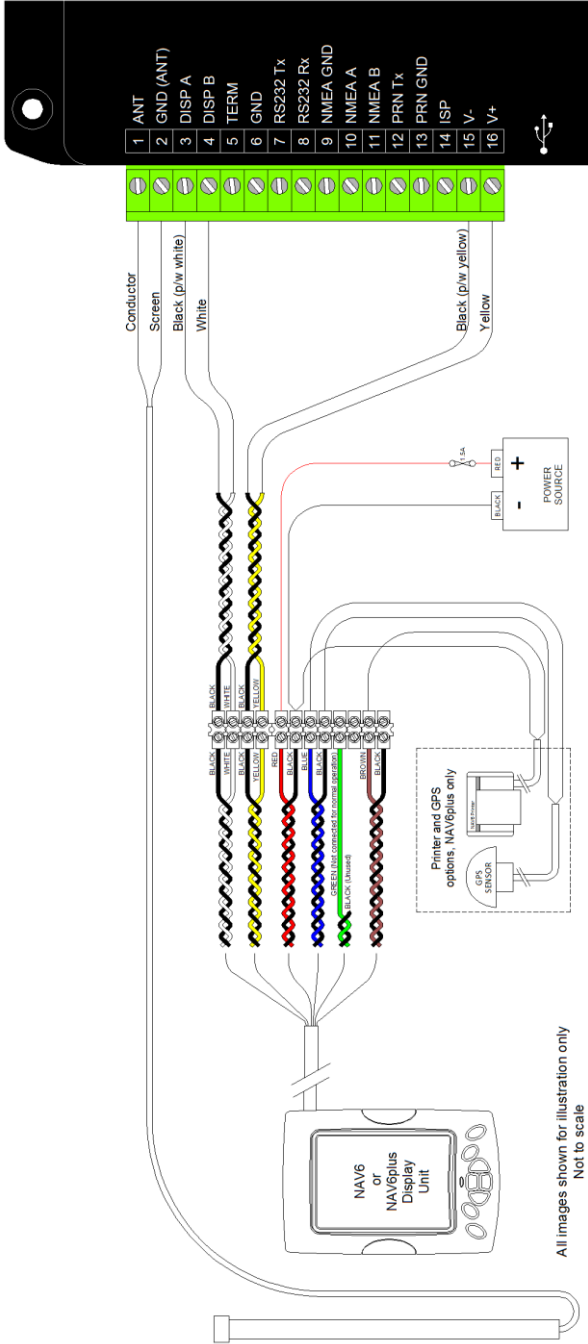
Step 4 – Fitting the NAV6 NAVTEX Receiver Module V3

Select a suitable dry, safe location for the NAV6 NAVTEX Receiver Module V3. It should be a minimum of 0.6m from the NAV6 display unit. Fit the module using the supplied screws.

Cut the new antenna (coax) cable to a suitable length such that it will reach the NAV6 NAVTEX Receiver Module V3 without pulling on the cable. Bare the Antenna cable end so that the core and screen wires are exposed and prepared suitable for connection to the detachable NAV6 Receiver Module Connector Strip (Green).

Using the old antenna (twisted pair) cable removed earlier, cut the cable to a suitable length such that it will reach from the Display Unit terminal block to the NAV6 NAVTEX Receiver Module V3 without pulling on the cable. Prepare the cable end so that the core wires are exposed suitable for connection to the detachable NAV6 Receiver Module Connector Strip (Green).

Make the connections to the NAV6 Receiver Module Connector Strip (Green) as shown in the wiring diagram overleaf:



All images shown for illustration only
 Not to scale
 Wire colours shown refer to Display Unit

Push fit the Detachable NAV6 Receiver Module Connector Strip (Green) into the NAV6 Receiver module.

Restore your power supply to the NAV6 Display Terminal Block. If the connections have been made correctly, the Display Unit will boot up as normal and the red LED will be lit on the NAV6 NAVTEX Receiver Module V3.

Replacing the NAV6 Receiver Module Only

Step 1 – Identification of the NAV6 Receiver Module

First you will need to identify the type of NAV6 Receiver Module that is currently installed on your boat. These instructions assume you have the “White Box” NAV6 receiver as shown below (it is shown with the passive antenna):



If your NAV6 Receiver Module does not look like the photograph above then please contact ICS support and we shall help you identify your NAV6 Receiver Module and provide installation guidance.

Step 2 – Remove the old receiver module

Disconnect your power supply to the existing NAV6 Display unit. It is recommended that this is done at the circuit breaker or removal of the relevant fuse(s) on your boat.

Carefully disconnect the orange terminal block from the white box receiver. The old receiver can be discarded in accordance with local environmental regulations.

Unscrew the orange terminal block screws and pull out the wiring. It may be useful to mark each connection with masking tape (or similar) before they are removed so that you can easily identify the wire colour/connection type in later steps. The ICS recommended wiring will be shown on the user manual supplied with your original system.

NOTES:

It is possible that other terminal blocks and wiring (non-standard) systems may have been installed in your boat, please consult with the installer if you are unsure of the wiring connections or contact ICS for technical assistance.

HELPFUL ADVICE

ICS offer a wide range of software upgrade options for the NAV6 display unit to help enhance and improve your safety at sea. Should you wish to consider any of these upgrade options, this is an excellent point to review the options since some require the NAV6 display unit to be upgraded via a serial connection. The serial connection is most accessible at this stage and may save you time and cost in the future. These include:

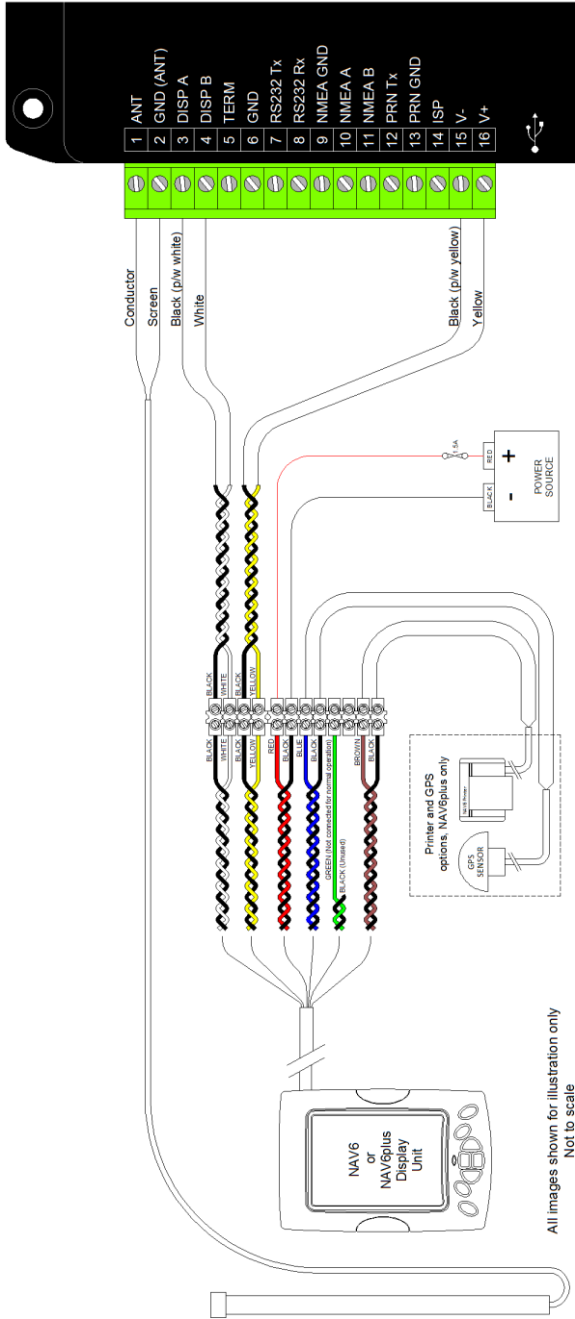
ICS.6050.01	NAV6 Standard Display to NAV6 Standard V2 Display
ICS.6050.02	NAV6plus Display to NAV6plus Display V2
ICS.6050.03	NAV6 Standard Display to NAV6plus Display V2
ICS.6050.04	NAV6 Standard Display V2 to NAV6plus Display V2
ICS.6050.05	NAV6 Rx V2 to NAV6 eNAVTEX Rx
ICS.6020.30	NAV6 Display USB/Serial Programming Lead

Step 3 – Fitting the NAV6 NAVTEX Receiver Module V3

Select a suitable position for the NAV6 NAVTEX Receiver Module V3 and fit using the supplied 2x stainless steel screws.

If necessary, cut the antenna (coax) and receiver (twisted pair) cables to a suitable length such that they reach the NAV6 NAVTEX Receiver Module V3 without pulling on the cables. Bare the cable ends so that the core and screen wires are exposed and prepared suitable for connection to the detachable NAV6 Receiver Module Connector Strip (Green).

Make the connections to the NAV6 Receiver Module Connector Strip (Green) as shown in the wiring diagram overleaf:



All images shown for illustration only
Not to scale
Wire colours shown refer to Display Unit

Push fit the Detachable NAV6 Receiver Module Connector Strip (Green) into the NAV6 Receiver module.

NOTE: If you have an active antenna system you will need to purchase a separate power supply unit as the NAV6 NAVTEX Receiver Module V3 does not have an in-built antenna power supply.

Should you wish to purchase a single outlet antenna power supply unit, the ICS part number is ICS.905.07.

Restore your power supply to the NAV6 Display Terminal Block. If the connections have been made correctly, the Display Unit will boot up as normal and the red LED will be lit on the NAV6 NAVTEX Receiver Module V3.

Fuses

The **NAV6** displays and receiver have built-in resettable fuses on the 12V inputs. This fuse will trip if the unit due to a fault condition draws excessive currents. Power must be disconnected from the unit for 10 seconds in order for a fuse to reset.

V3 Display Upgrade

If, at any point in the future, you wish to upgrade your NAV6 system to take advantage of the new V3 barometer and compass features, the firmware in your Display Unit will need to be updated. The wiring of your NAV6 System will also change.

For more details, please refer to the NAV6 V3 User Manual or contact ICS Electronics at support@icselectronics.co.uk

Warranty

ICS Electronics Ltd warrants to the original end-user that this product will be free from defects in materials and workmanship for a period of one year from the date of purchase. During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or a similar model, which may be a refurbished model) at ICS Electronics' option, without charge for either parts or labour. For warranty repair, the unit must be returned, carriage pre-paid, to the ICS Electronics Ltd. dealer from whom it was first purchased. This limited warranty shall not apply if the product is modified, tampered with, misused, subjected to abnormal working conditions (including, but not limited to lightning and immersion in water) and use with power supplies and other options not specifically recommended by ICS Electronics Ltd.

Please contact us for further details of our warranty repair procedure.

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Technical Support

Should you have any question or require technical support, please contact ICS on:

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