

Replacing/Upgrading ST30, ST50, ST50+ displays/transducers with current systems

This references ST30, ST50 and ST50+ (plus) Speed, Depth, Bidata or Tridata instrument displays and transducer replacement

ST30/ST50/ST50+ Depth and Speed Display and Transducer Replacement Instructions

If you are upgrading the displays to one of the more recent systems, the following still applies as the old style transducers are compatible with the new systems. Use the information below and in the manuals provided you will be able to connect the transducers to the new system.

The ST30 and ST50/ST50+ line of instrument transducers are now discontinued. In their place, any of the current series of instrument Speed, Depth or Triducer transducers designed for Raymarine may be utilized.

To achieve this with the ST50/ST50+ displays only, you need to cut the round transducer connector off the old transducer and expose the wires. You then can connect them colour for colour to the new transducer using a suitable connection box for the area you are installing in. Once this has been done you can then use the round connector to connect the new transducer to the display.

If you are upgrading the display, cut the connector off the transducers and use 1/8 inch spade connections to connect to the transducer to the display.

For ST30 connections you use 1/8 inch spade connections crimped onto the transducer wires.

Please be aware that some of the earlier transducers were smaller in diameter and as such the skin fittings will need to be removed and the hole made slightly larger to accommodate the new transducer housing. For compatibility for the housings we recommend you contact the manufacture of the transducer, Airmar, who will be able to assist in identifying and recommending a suitable replacement.

ST50 and ST60 Depth Transducer connections are different. ST60 has 3 connections for Depth at the back of the Instrument. ST50 has 2 Depth connections at the Instrument plug where the black and screen cable cores are connected together.

Some earlier Speed transducers also did not have a temperature sensor which is now necessary for the displays to know that there is a Speed transducer attached. To work around this you attach a 10k ohm resistor to the two remaining pins in the Speed connection, Brown and White. To do this you use 1/8 inch spade connections and crimp them on to each leg of the resistor and connect to the display.

Even earlier transducers may have different colour wires. Below is a cross reference guide to which wires correspond to the current colour wires.

Retired Speed Transducers	Current Speed Connections
Yellow	Brown
Blue	White
Green	Green
Screen	Screen
Red	Red
Retired Depth Transducers	Current Depth Transducers
Red	Blue
Screen	Screen