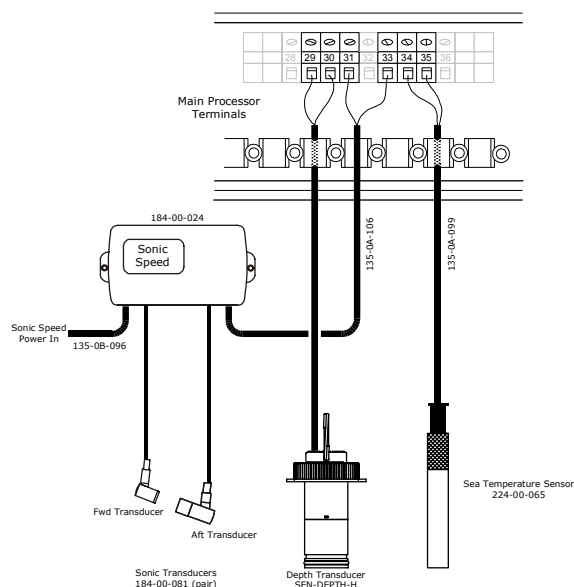# frequently asked questions

B&G

MicroSonic Speed TTL Hardware and Wiring Modifications

This document describes the procedure to modify the MicroSonic Speed Processor (254-00-024) to transmit TTL (5V square wave) boat speed signal.

Procedure
Modifying the MicroSonic processor hardware

1) Switch off power to the system electronics.
2) Open up the MicroSonic processor by removing the six slot–head screws located on the reverse side of the case.
3) Carefully remove the PCB from the white support pillars, by squeezing the tabs, and then sliding the PCB off the support.
4) Remove C50 and replace with a shorting link (piece of wire).
5) Remove C12 and replace with a shorting link (piece of wire).
6) Change R5 from 15kΩ to 100Ω
7) Reassemble the MicroSonic PCB onto the support pillars, ensuring that the contacts engage correctly with the rear-case connector pins, and replace the cover.
8) Re-wire the system as detailed below:

TERMINAL	FUNCTION	CABLE and WIRE COLOUR
	Depth Transducer	15m cable attached
29	Depth -	Black
30	Depth +	Blue
	MicroSonic Speed Signal	15m cable (135-0A-106)
31	Boat Speed +	Red (Sonic Speed Terminal 25)
33	Boat Speed -	Blue (Sonic Speed Terminal 26)
		Screen not connected
	Sea Temperature Sensor	9m cable attached
34	Sea Temperature Supply	Red
35	Sea Temperature Input	Green
		Blue not connected

<ENDS>