

# CM2 SIDESCAN SONAR TRANSCEIVER (STR), SPECIFICATION

## 1. GENERAL

The C-MAX CM2 Sonar Transceiver Unit (STR) allows the CM2 digital towfish and digital tow cable telemetry to be interfaced to any host PC running MaxView sonar data acquisition software or acquisition software from third-party suppliers. The sonar appears to the host PC simply as a USB peripheral; the USB link combining sonar data, status and control. The advantages of the USB interface are that the data remains digital throughout and that no extra hardware is needed to interface to any computer, including laptops.

As well as transmitting the sonar data and status to the host PC, the STR also supplies power and control commands to the towfish. Power is not extracted from the USB link.

In addition to the USB interface, the STR can also be configured to use an alternative analog interface (generated from the original digital signal) to allow compatibility with the widest possible variety of data acquisition systems.

## 2. INTERFACES

Tow cable

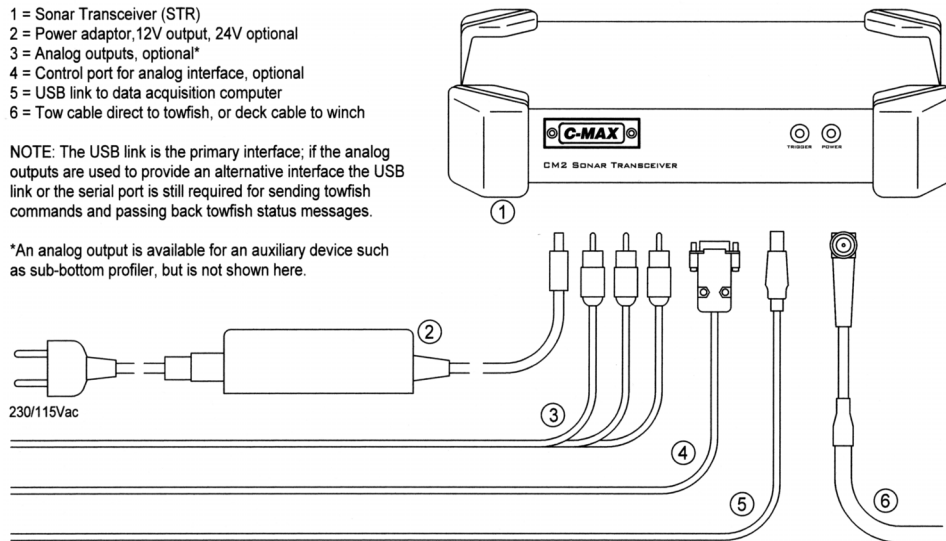
USB (slave, peripheral to acquisition computer)

Optional analog echo, trigger and control/status

- 1 = Sonar Transceiver (STR)
- 2 = Power adaptor, 12V output, 24V optional
- 3 = Analog outputs, optional\*
- 4 = Control port for analog interface, optional
- 5 = USB link to data acquisition computer
- 6 = Tow cable direct to towfish, or deck cable to winch

NOTE: The USB link is the primary interface; if the analog outputs are used to provide an alternative interface the USB link or the serial port is still required for sending towfish commands and passing back towfish status messages.

\*An analog output is available for an auxiliary device such as sub-bottom profiler, but is not shown here.



CM2 Sonar Transceiver Connections

### **3. DATA HANDLING, COMMANDS AND STATUS MESSAGES**

Consult C-MAX for detail of the handling of the digitized echo signal, and the commands and status messages between the STR and the towfish. A DLL is available for developers of third-party interfaces.

### **4. PANEL DISPLAY**

The STR is fitted with a red Power LED and a green Trigger LED. The trigger LED flashes at the ping rate.

### **5. POWER**

Power input; 12V at 3A peak (can optionally be specified to accept 24V at 1.8A peak)

An auto-ranging external power adaptor is also supplied so that the STR may be powered from any 110/230V AC supply.

### **6. MECHANICAL**

The STR is protected by a robust stainless steel splashproof enclosure (297 x 204 x 60mm), with rubber corners.

### **7. ENVIRONMENT**

0 to +45°C; 10 to 90% RH; 40G, operating  
-10 to +55°C; 2 to 95% RH; 40G, non-operating  
IP64

The above specifications may be changed without notice.

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