Transponder/Responder

Model ME8000



The ME8000 Transponder is a self contained low powered microprocessor controlled unit compatible with the Sonar Type 2093 system.

The unit is fitted with a Pressure Sensing Transducer that enables the depth of the unit to be transmitted acoustically to the surface.

There are two externally operated switches, one for the selection of the operating channel and the other to switch the unit on and off. A removable underwater plug enables battery replacement without dismantling the unit.

The standard Alkaline battery pack provides a month of listening life with a full charge operating for 6 hours per day at once per 5 seconds.

The ME8000 is particularly suitable for underwater tracking and location applications where size and weight are important factors. Examples of such use are Remote Vehicle and Towfish tracking and Wellhead or other target marking. There are currently four standard ME8000 models for 1000m and 2000m depth rating with either omni-directional or directional transducers. Typically the omni-directional units are more suited to shallow water applications whilst the directional units are more suited to operations in deeper water.

Custom re-packaged units are available to order to suit individual requirements for minimal additional cost. The battery pack size, transmit power and channel frequencies may also be tailored to suit a specific application, contact Marine Electronics for further details.

- External switches select HPR300, HPR400, or ORE Trackpoint channel
- o External On/Off switch
- Responder trigger, power supply and charger connector are Simrad responder compatible
- Operating depth to 3000m
- Directional or omni-directional transducer
- Automatic switching to self-powered transponder mode if ROV power/trigger fails
- Externally powered for continuous operation
- Field changeable transducer



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Transponder/Responder

Model ME8000



		Omni Directional Transducer Directional Transducer 2000m Directional Transducer
		327mm 322mm 390mm
Specifications		
Channels:	HPR300 – 14 Channels	
	HPR400 – 56 Channels	
	ORE Trackpoint – 32 Channels	
Repetition Rate:	Maximum 2 per second	Anodised
		Housing and End Caps
Battery Type:	NimH 18v at 1.2AH	
Charging Time:	3 hours using charger type	
	ME7656NMH	
Quiescent Life:	1 month	
Temperature:	Operating: 0° to +50°C	
	Storage: -20° to +65°C	
Rx Sensitivity:	10µv r.m.s.	
External Power:	+22v to +30v DC	
External Tower.	+220 10 +300 DO	
14/- 1-1-4	<u>1000m</u> <u>2000m</u>	70mm
Weight:	In Air 1.85kg 3.1kg In Water 0.7kg 1.0kg	Charging/responder socket with rubber cover fitted
Operating Depth:	1000m to 3000m (option)	Channel Selection Switch A
Tx Pulse Length:	HPR – 10msec, Trackpoint 1.3r	
-		ON/OFF Channel Switch Selection Switch B
Rx Bandwidth:	400Hz (+/-3dB)	(Shown in ON position)
Turnaround Delay:	HPR300 – 30msec	
	HPR400 – 60ms	
	ORE Trackpoint – 15ms	
Responder Trigger:	>2msec +5v pulse	
	(>+4v inhibits receiver)	
	Directional Omni-Direction	al
Tx source Level:	190dB re 1µPa @ 1m 187dB re 1µPa @1m	Marine Electronics Ltd.,
		Unit 10,

+/-45° Conical +/-90° Doughnut

70,000

70,000

Tx Beam Pattern:

No. of Replies:

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