

# Multibeacon

Transponder / Responder *with* Telemetry



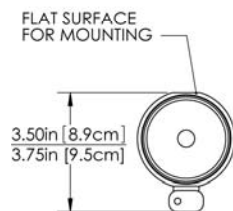
The ORE Model 4377A / 4378A Series Multibeacons are the standard telemetry responder/ transponder used in conjunction with the ORE Trackpoint and BATS USBL underwater acoustic tracking systems. These beacons combine the functionality of the Model 4370 series Multibeacon with a reliable analog telemetry feature. The telemetry functions are compatible with all ORE acoustic tracking systems.

## Applications:

- ROV Tracking and Navigation
- Sonar Towfish Navigation
- AUV Tracking
- Subsea Structure Relocation
- Subsea Salvage Operations
- Diver Navigation
- Mooring Marking and Relocation

## Model 4377A Multibeacon with Telemetry

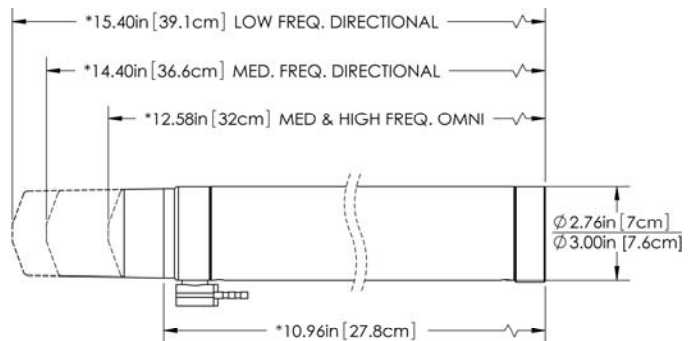
The Model 4377A Multibeacon with Telemetry features an integral omnidirectional transducer, pressure or other sensor telemetry and is depth rated to 1000M. An optional directional transducer is available providing deeper/long range performance. A pressure sensor is incorporated into the beacon providing high accuracy depth information. As an option, the beacon can be interfaced to an external sensor through the addition of an extra connector on the beacon's end cap.



1000m  
3000m DEPTH RATING

## Model 4378A Multibeacon with Telemetry and Remote Transducer

The Model 4378A Multibeacon with Telemetry and Remote Transducer is available for installations where size and mounting area are at a premium and the addition of a pressure sensor or other sensor information is required. The remote transducer head is streamlined to minimize drag while permitting the electronics section to be mounted inside the vehicle. This unit interfaces with the Model 4325A and 4335B remote transducers.



\* THESE LENGTHS FOR STANDARD LIFE UNITS (1 AA BATTERY PACK)  
FOR 2 AA PACKS ADD 3.87in  
FOR 1 C-CELL PACK ADD 9.13in



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# Specifications

## 4377A / 4378A Multibeacon

	Model 4377A	Model 4377A-D	Model 4378A	Model 4378A-D
Transmitter Output Power	200 W	250 W	200 W	250 W
Navigation Reply Frequencies	MF 17 - 30 kHz	LF 12 - 16 kHz MF 17 - 30 kHz	MF 17 - 30 kHz	LF 12 - 16 kHz MF 17 - 30 kHz
Telemetry Reply Frequencies (Trackpoint)	22 - 29 kHz	LF 12 - 13 kHz MF 23 - 26 kHz	22 - 29 kHz	LF 12 - 13 kHz MF 23 - 26 kHz
Telemetry Reply Frequencies (BATS)	MF 17 - 30 kHz	LF 12 - 16 kHz MF 17 - 30 kHz	MF 17 - 30 kHz	LF 12 - 16 kHz MF 17 - 30 kHz
Source Level and Beam Pattern	190 dB re 1 $\mu$ Pa @1M, omnidirectional	196 dB re 1 $\mu$ Pa @1M, Directional $\pm$ 30° beam	Model 4325A Remote Transducer, 190 dB re 1 $\mu$ Pa @1M, omnidirectional	Model 4335D Remote Transducer, 199 dB re 1 $\mu$ Pa @1M, Directional $\pm$ 30° beam
Dimensions	2.75 in. Diameter X 12.58 in. Length	2.75 in. Diameter X 14.4 in. Length	2.75 in. Diameter X 11.0 in. Length	2.75 in. Diameter X 11.0 in. Length
Weight in Air	4.5 lbs.	6.0 lbs.	4.0 lbs. *	4.2 lbs. *
Weight in Water	1.8 lbs.	2.8 lbs.	1.8 lbs. *	1.8 lbs. *
Case Material	6061 Aluminum, Hard coat anodized	6061 Aluminum, Hard coat anodized	6061 Aluminum, Hard coat anodized	6061 Aluminum, Hard coat anodized
Depth Rating	1000 m standard 3000 m optional	1000 m standard 3000 m optional	1000 m standard 3000 m optional	1000 m standard 3000 m optional
Interrogation Frequency	17 or 19 kHz	20.5 or 22.5 kHz	17 or 19 kHz	20.5 or 22.5 kHz
Turnaround Time, Transponder / Responder	15 ms / 2 ms	15 ms / 2 ms	15 ms / 2 ms	15 ms / 2 ms
Inhibit Time	1.9 seconds	1.9 seconds	1.9 seconds	1.9 seconds
Receive Sensitivity	100 microvolts RMS	100 microvolts RMS	100 microvolts RMS	100 microvolts RMS
Pressure Sensor	60,150,300,600,1000, 3000 meter settings	60,150,300,600,1000, 3000 meter settings	60,150,300,600,1000, 3000 meter settings	60,150,300,600,1000, 3000 meter settings
Battery Type	NiCad, rechargeable, 1,2, or 3 Amp Hr Rating	NiCad, rechargeable, 1,2, or 3 Amp Hr Rating	NiCad, rechargeable, 1,2, or 3 Amp Hr Rating	NiCad, rechargeable, 1,2, or 3 Amp Hr Rating
Battery Charger	Model 4324C	Model 4324C	Model 4324C	Model 4324C
Listening Life / Interrogations (Trackpoint)	5 days / 20,000	5 days / 20,000	5 days / 22,000	5 days / 20,000
Listening Life / Interrogations (BATS @ 10 ms pulse)	5 days / 20,000	5 days / 20,000	5 days / 20,000	5 days / 20,000

\* Does not include Remote Transducer



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