



Recover your marine instruments with VEMCO's shallow water acoustic release

Key Features

- ▶ Depth rating: 500 metres
- ▶ **AR** battery life: 28 months
AR-2 battery life: 60 months
- ▶ Real-time unit health information retrieval
- ▶ Quick and reliable release - typically within 30 seconds
- ▶ Easy re-arming method
- ▶ Release mechanism: push-off titanium pin has a copper sleeve to reduce biofouling and is controlled by a DC motor
- ▶ External case designed for easy attachment of marine instruments and flotation for buoyancy



The Ascent Acoustic Release is ruggedly designed for superior performance, reliability and real-time communications. It is available in two battery life models:

- ▶ **Ascent AR** with a battery life of 28 months
- ▶ **Ascent AR-2** with a battery life of 60 months

Obtain Real-time Information from Deployed Units

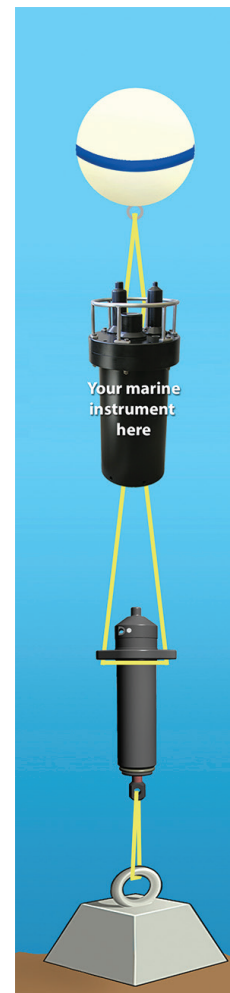
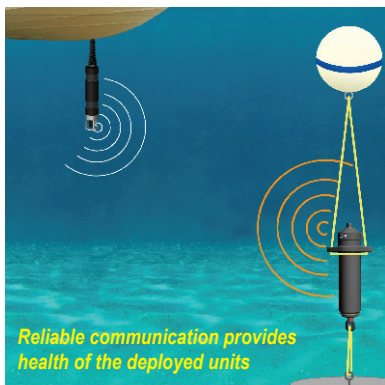
- ▶ Unit health
- ▶ Tilt, depth and temperature
- ▶ Estimated remaining battery life
- ▶ Release status and activating the release
- ▶ Ability to get range and depth information as the unit is rising to the surface
- ▶ Estimate the distance between Ascent Acoustic Releases and the surface Deck Box
- ▶ Locate deployed units

Unit Discovery Mode Option

- ▶ Determine which Ascents are within range of the Deck Box without having to remember specific serial numbers and exact release locations

Superior Communications

- ▶ 35 years experience in underwater communications
- ▶ Designed specifically for shallow water
 - reduced reflections
 - superior reliability
- ▶ Sophisticated transmission protocol
- ▶ Coded communication messages
 - pass more real-time information
 - eliminate false triggers



Ascent AR and Ascent AR-2 Specifications

AR Dimensions AR-2 Dimensions	Length: 401 mm, 342 mm without release lug Length: 465 mm, 406 mm without release lug Diameter: 81 mm Float attachment bracket width: 165 mm
AR Weight AR-2 Weight	2350 g in air; 500 g in water 2746 g in air; 812 g in water
AR Power supply AR-2 Power supply Common to AR and AR-2	1 - 3.6 V Lithium D cell battery 1 - 3.6 V Lithium DD cell battery 1 - 4 V Lithium AA cell battery (for release motor only)
AR Unit battery life AR-2 Unit battery life	Approximately 28 months Approximately 60 months
Release battery life	> 100 releases per battery
Maximum depth	500 metres
Communication	Acoustic via the VR100 Deck Box and Bluetooth®
Mooring	Mooring lug opening - 19 mm; Float attachment bracket - 2 x 14 mm
Firmware	Field upgradeable acoustic release firmware
Max test load	1000 lbs
Max safe working load	250 lbs
Max release load	250 lbs



Communicate from the Surface to Deployed Acoustic Release

The VR100 Deck Box is used with a transponding hydrophone to communicate from the surface with deployed Ascents and provides easy, remote release of your marine instruments. Researchers will be able to retrieve real-time unit status information using a simple interface. *Note that the VR100 Deck Box and transponding hydrophone are sold separately.*

VR100 Deck Box Physical Specifications

Frequency range	12 to 200 kHz
Dimensions (approx)	34 cm x 32 cm (with handle extended) x 15 cm
Weight with gel cell	6.5 kg
Battery Life	Approximately 12 hours with backlight off
PC communication	Computer controlled via USB connection
Gain control	Automatic or manual
Hydrophone type	Omni-directional: VHTx Transponding (50-85 kHz)
Hydrophone cable length	25 metres
Display	4 x 20 character LCD display
Water resistance	Splash proof case
Software	VR100 PC Host Software compatible with Windows Vista/7/8



VR100 Deck Box



Transponding Hydrophone

Additional VR100 Features

- ▶ GPS time and position display and data logging
- ▶ Improved sensitivity and noise rejection over conventional analog units