

## SHORE-CABLED PAM

### DESCRIPTION

The Shore-Cabled PAM monitoring system offers a long-term solution for deployment close to the shore. A sea bed mounted hydrophone is physically cabled to the receiver station to enable continuous monitoring of coastal waters with no ongoing marine operations. This makes it ideally suited to simultaneous acoustic and visual monitoring of marine mammals.





The system comprises a metal frame secured to the seabed, supporting the hydrophone which is cabled back to the shore. The standard system is supplied with a 500m hydrophone cable but this can be extended in 250m increments utilising underwater connectors.

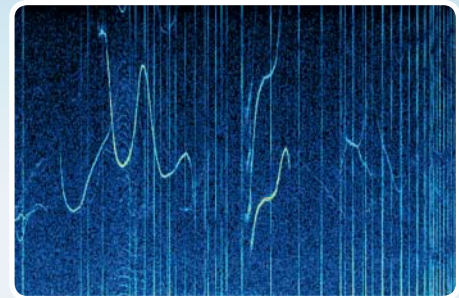
Hydrophones can be configured for targeted frequency range. The signals are processed at an electronics unit for visual spectrogram display (in PAMGuard) and amplified speakers can be fitted. A remote



wireless link can also be provided from the onshore point of receipt to a listening station up to 2km away in line of sight. Installation is conducted by divers who secure the frame to the seabed using concrete blocks. SMART System requires specialist Seiche technicians in set up stage.

### APPLICATIONS

-  Long term underwater sound recording
-  Baseline marine mammal monitoring
-  Ambient noise measurement
-  Sound source verification



### MECHANICAL INFORMATION

Length: 500m

Diameter: 14mm over cable, 32mm over mouldings, 64mm over connectors

Weight: 120kg (500m) 60kg (250m)

Connector: Seiche underwater connectors, ITT connector

### CASE STUDY

A system has been successfully installed off the coast of Sweden for an ongoing outreach project. The sea bed frame is cabled to a local lighthouse where the signal is transmitted to a shore based monitoring station using an RF transmission system. The incoming acoustic signal is then displayed in real-time for the purpose of education and public outreach.