

AnTech®



Shot Detector

AnTech's Shot Detector detects and records vital signals that cannot easily be heard

It is extremely important to be able to detect whether perforating guns have successfully fired because of the dangers of retrieving a live gun string. If it didn't fire properly, something is wrong, and that creates dangerous unpredictability. AnTech's shot detector records shots downhole and provides complete confidence of the success of the perforating operation.

The challenge with shot detection is to be able to detect signals that cannot easily be heard or seen. When the guns fire, the shock of detonation is transmitted to surface through the ground, up the fluid column and up the drill pipe or tubing. In the process, most of the high frequencies are filtered out so the signal that reaches surface is a low frequency. This frequency is below the audible range of the human ear so it will get missed. Higher frequencies that do arrive will represent a very low proportion of the signature energy. By electronically recording the shot signature it is possible to see the low frequency vibrations and review the signal trace after the event. Something that is not possible with just listening for a one-off event.

ShotView™ is battery powered and can be left unmonitored for playback and analysis after the event.

It can record any two of the following sensors:

- Geophone in the ground
- Hydrophone in the mud pit or sea
- Accelerometer on the tubing or drill pipe
- Microphone (pressure) sensor on the tubing or annulus



Features & Benefits

Confirms Firing of the Shot – demonstrates the success of the job by detecting low frequencies and records the firing of the shot.

Unobtrusive - installed away from the rig floor.

Simple to Use – quick and easy installation. Single button operation.

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No Downhole Tools needed – the system uses a probe at surface, eliminating the need for any additional downhole equipment.

Report Graphic Output – recordings are played back and displayed in a simple graphical format using the software provided, which is easily transferred to client reports.

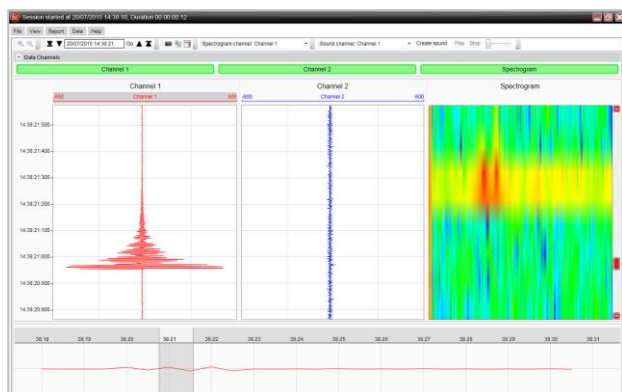
Portable – long life rechargeable battery on digital recorder allows for extended use without a battery re-charge.

Choice of Sensors – Geophone, hydrophone, accelerometer (Ex Rated), microphone (Ex Rated).

Digital data format – data is recorded in digital format to ensure that it can be easily transferred and manipulated for both playing back and reporting purposes.

Standard SD Card Storage – data is stored in the SD Card and can be downloaded directly to a laptop using ShotView™ software.

Simple to use ShotView™ software – simple user interface and graphical display.



Robust design – device is purpose built for wellsite operations with reliability and robustness as key factors in its design. Can be operated with protective case closed in adverse weather conditions.

Optional accessories – to increase the ease and flexibility of operations, a carry case to store the unit and the associated cables is available as optional accessories.

Ratings & Specification

Type: Geophone		
Geophone Sensor (AN-08382)		
Cable Length	m	2
Natural Frequency	Hz	10

Shot Detector Box (AN-14590)		
Size	mm	530 L, 470 W, 220 H
Power Connection		IEC switched and fused mains connector
Battery Life	Hrs	Up to 140 hrs normal usage (recharge 4 hrs)
Voltage	V (AC)	90 - 250
Frequency	Hz	50 - 60
Operating Temperature	°C	-20 to +40
Sensor Connections		IP68 3-pin Buccaneer Socket
Weight	kg	10
IP Rating		IP54
Timing		Built-in Real Time Clock

ShotView™ Software		
Format		CD
Compatibility		PC only – standard specification
Operating System		Windows 7 & 8

Typical Applications

TCP operations

- Shoot and pull
- Permanent installations

Contact Us

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