



## **SURE-SHOT™ ACOUSTIC FLUID LEVEL SYSTEMS**

Through extensive research and comprehensive field testing, Nelgar Oilfield Services Ltd. has developed a **Sure-Shot™ Acoustic Single-Shot Fluid Level System** and a **Sure-Shot™ Acoustic Pressure Survey Fluid Level System\***. They feature the following technological advancement over other major competitors'.

- **dual-channel signal processor** - enables the system to simultaneously process the fluid and tubing collar signals independently.
- **independent signal sensitivity adjustments** - provide optimal noise filtration for fluid and collar.
- **multiple sound generating mechanisms** - provide convenience and flexibility in obtaining optimal fluid levels in high and low pressure applications.
- **colour coded real-time display** - distinguishes fluid and collar reflections for easy interpretation of the fluid levels.

The **Sure-Shot™ Acoustic Single-Shot Fluid Level System** consists of a digital sound processing instrument and a wellhead attachment.

In addition to the single-shot system, the **Sure-Shot™ Acoustic Pressure Survey Fluid Level System** has a data recording and storage capability.

All wellhead attachments consist of a sound generator (gun) and a sound receiver (microphone).

These systems are a cost effective tool in oil and gas well production optimization - **increase production and reduce operating expenses.**



## Sure-Shot™ Acoustic Single-Shot Fluid Level System

Features	Benefits
<b>Sound sources</b> – well gas, CO <sub>2</sub> & nitrogen, 10 gauge & 45 caliber blank cartridges	Implosion – releasing the well gas utilizing the wellhead attachment. Explosion – discharging either compressed gas or a blank cartridge into the wellbore utilizing the wellhead attachment. Applications of sound sources are based on the well characteristics for optimal fluid levels.
<b>Sound generators</b> - 3,000 psi (compressed gas) - 1,500 psi (blank cartridge)	Convenient and flexible - Multiple sound generating mechanisms for high and low pressure applications. Light weight and rugged.
<b>Sound receiver</b>	Extremely sensitive
<b>Data processing</b>	Dual-channels – independent fluid and collar signal processing. Sensitivity adjustments – independent for fluid and collars for optimal noise filtration.
<b>Real-time display</b>	Colour coded – simplifying the fluid level interpretation process.
<b>Output</b>	Flexible – electronic or paper strip chart.
<b>Fluid level reading</b>	Electronic 11-point collar counter – reading fluid level on laptop screen. 11-point collar counter – reading fluid level on paper strip chart. Travel time – calculating fluid level depth for wells with collarless tubing, or without tubing.
<b>Storage and shipping case</b>	Waterproof and durable construction with pre-formed foam.



<b>Sure-Shot™ Acoustic Pressure Survey Fluid Level System *</b>	
<b>Features</b>	<b>Benefits</b>
<b>Sound sources</b> – CO <sub>2</sub> & nitrogen	Explosion – discharging compressed gas into the wellbore utilizing the wellhead attachment.
<b>Sound generator</b> - 3,000 psi	Light weight and rugged.
<b>Sound receiver</b>	Extremely sensitive
<b>Sample rate</b>	User defined.
<b>Data processing and recording</b>	Dual-channels – independent fluid and collar signal processing. Sensitivity adjustments – independent for fluid and collars for optimal noise filtration. Recording – solid state flash memory for data security and integrity.
<b>Real-time display</b>	Colour coded – simplifying the fluid level interpretation process.
<b>Output</b>	Flexible – electronic or paper strip chart.
<b>Fluid level reading</b>	Electronic 11-point collar counter – reading fluid level on laptop screen. 11-point collar counter – reading fluid level on paper strip chart. Travel time – calculating fluid level depth for wells with collarless tubing, or without tubing.
<b>Storage and shipping case</b>	Waterproof and durable construction with pre-formed foam.

\* Please note that the **Sure-Shot™ Acoustic Pressure Survey Fluid Level System** is for rental and internal use only at this time.