A2106
Diesel Engine Tachometer

Operating Instruction

Advent diesel Tachometer
Model A2106

General description

Featuring a patented **"Inverting" vertical LCD display** which gives extremely good flexibility in operation in almost any application, the instrument can be used in the normal mode or with the display inverted for applications where access is difficult within confined areas.

The vertical display aids measurement through almost 270º. of operating angle where the user can read the display readily throughout.

Hands free operation - once the instrument is turned on it will automatically remain powered up as long as it is receiving input pulses.

Display features & Specification

Display	- Inverting LCD Vertical 5 digit display
Display functions	- 180º. Inverting
On target indicator	- Yes
Low Battery indicator	- Yes
Function icons	- rpm, rpm ×2 (1:2), Mx

Controls - 3 push-buttons

On/off normal mode	- Dual action rocker type touch push-button (UP ARROW)
On/off inverted mode	- As above but for inverted operation (DOWN ARROW)
Program control	- Selects 1 pulse/rev or 1 pulse/2 revs mode (1:2 symbol)

Measurement range

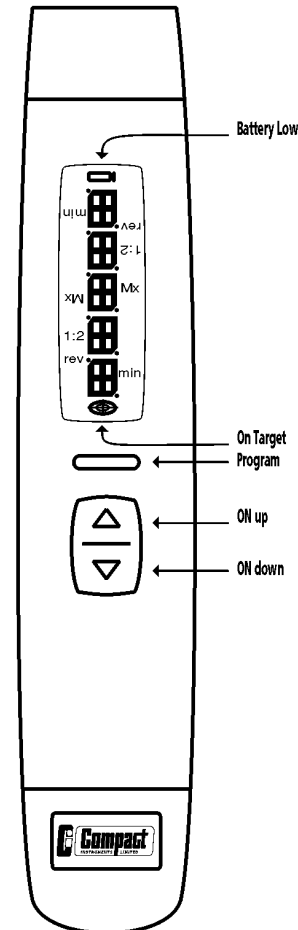|	
Measurement ranges	- rpm, rpm ×2, maximum speed capture (in both ranges)
Speed range rpm	- 100 - 8,000 rpm
Resolution maximum	- ± 1 rpm
Accuracy	- ±0.05% ±10 rpm (± 0.5% maximum speed capture)
Timebase	- 0.8 seconds normal mode
	0.1 seconds in maximum speed capture mode
Memory features	- Last reading held for 5 seconds, automatic power down 4.5 minutes after last input pulse received or last button pressed

Power requirements **-** 4 x AAA alkaline cells

Standard kit - Includes operating instructions, Remote carrycase and your choice of transducer (order separately)

Operation of the Instrument

rpm measurement

1   Check that the transducer is the correct size for the injector pipe. Select any convenient injector pipe and choose a position which is straight for at least 20mm. Clean all paint and corrosion from the pipe using an abrasive, wipe clean and fit the transducer. Do not use excessive force when tightening transducer. Do not rotate or slide the transducer when clamped as damage can occur. Connect transducer cable to the B.N.C. socket on the Diesel tachometer. Push the ¼" (6.35mm) cable receptacle onto the transducer blade terminal and connect the earth clip to a convenient earth point. Ensure all cables are clear of hot manifolds, fans or other rotating components, before starting the engine.

2   Start the engine. Momentarily press one of the **ON** buttons to turn the instrument on. The **on target** icon will glow or flash steadily. If not re-position the transducer.

3   The diesel tachometer has been factory set to **1:2**. This is suitable for all types of diesel engine except 2 stroke. Should it become necessary to change this mode press both the **Program** button and one of the **ON** buttons at the same time and release, the current range icons will flash, pressing either of the **ON** buttons will toggle the range icons. To confirm the selection, press the **Program** button once.

4   To use in an inverted orientation simply press the **Down** button once and the display will automatically invert.

5   **Maximum speed capture-** To enable maximum speed capture mode press the **Program** button once, the instrument will now switch to fast timebase mode, the **Mx** icon will be visible and from now on the display will only change if the current speed is the highest since the **Program** button was pressed. To reset the maximum value ready to capture another reading, press the **ON** button once.

6   To exit the maximum speed capture mode, press the **Program** button once, the **Mx** icon will then turn off and the Timebase will revert to 0.8Secs and will continuously display the current speed.

Battery Low
On Target
Program
ON up
ON down

Compact

Available transducers

DES/09	4.5mm pipes
DES/10	6mm pipes
DES/11	6.35mm pipes
DES/12	8mm pipes
DES/14	7mm pipes

Typical transducer

30.0   17.   6.5   19.6   25.0