



A2105
Ignition Engine Tachometer
Operating Instruction

Tel: +44 (0)1204 532544
Fax: +44 (0)1204 522285
www.compactinstruments.co.uk

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Advent Ignition Tachometer

Models A2105

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 270°. 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	- 180°. Inverting
On target indicator	- Yes
Low Battery indicator	- Yes
Function icons	- rpm, rpm x2 (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 / 2revs mode (1:2 symbol)

Measurement range - both models

Measurement ranges	- rpm, rpm x2, maximum capture (in both ranges)
Speed range rpm	- 100 - 18,000 rpm
Resolution maximum	- ± 10 rpm
Accuracy	- ± 0.05% ± 10 rpm (± 0.5% maximum hold)
Timebase	- 0.8 seconds normal mode 0.1 seconds in maximum hold mode
Memory features	- Last reading held for 5 sec's, 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, Stub antenna & carrycase.

Operation of the Instrument

rpm measurement

- 1 Attach the stub antenna to the front of the unit. Start the engine and either point the tachometer at one of the spark plug leads from a distance of up to 75mm or connect the optional remote input lead to the BNC connector at the front of the instrument and attach the clip to one of the HT leads. If the engine is a multi-cylinder one, then ensure the instrument is close to one lead but at least 100mm away from any others or a false reading may occur.
2. 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 Instrument/lead relative to the ignition HT Lead.
3. If the engine ignition system fires only once every other rev (e.g. 4-strokes) then select the **1:2** mode.
- 4 To select / deselect this mode press both the **Program** button and one of the **ON** buttons at the same time and release both, 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.

5. To use in an inverted orientation simply press the **Down** button once and the display will automatically invert.
6. Maximum Capture - To enable maximum 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.
7. To exit the maximum capture mode, press the **Program** button once, the **Mx** icon will then turn off and the Timebase will revert to 0.8 seconds and will continuously display the current speed.

