

FVM10

Frequency to Voltage Conversion Module



Logitech instruments are available with analogue input and output module options for flexibility of end user installation, and to provide an easy interface to existing instruments and signal sources.

However, for end users with applications where a full instrument is not suitable, and only a low cost interface is required, we can supply a choice of modules for Frequency-to-Voltage conversion or for Signal Conditioning.

These are housed in compact DIN rail mounting enclosures to provide a rapid low cost method to interface between our Magnetic Pick-ups and Flowmeters, and your equipment.

Model **FVM10** is a Frequency to Voltage Conversion module that provides a 0V to 10V analogue output voltage that is proportional to a pre-scaled input frequency range. It is built as a compact, light weight modular universal mounting unit that can be clipped onto TS35 or TS32 DIN rails.

Interconnections from the Magnetic Pick-up signal source to the module input, and from the module output to the user's instrument or control panel, are made via clearly labelled terminals.

The 24V DC power supply (clean) for the module itself is normally provided by the end user, however **Logitech** can provide a suitable power supply if none is available on the installation. Contact our Sales Office for details.

The module is factory configured for the target parameters and maximum operational range specified when ordering. For example, for a 160 toothed wheel target, with an operational range of 0 to 1800 rpm, a module would be set to produce a 10.0V output for an input frequency of 4800Hz.

Note: The design of this module is not suitable for unprotected use in adverse environmental conditions.

Please contact our Sales Office for information on other products.

Calibration

This model has a calibration adjustment that can be re-checked by the end user if necessary. Adjustment is made via a potentiometer that is accessed through the top of the module.

All modules are factory set before despatch to within an accuracy of 1% full scale. However, if there is a need to check the settings:

1. If the normal target can be used to generate a steady signal at maximum speed then this could be used as the signal source. Preferably, calculate the frequency that will be generated by the target at maximum speed and use a signal generator to produce the test signal (across MPU & Common) and monitor the frequency with a **Logitech** Tachometer.
2. Use a suitable instrument – ideally a digital multimeter – to monitor the DC voltage obtained on the output between O/P and Common.
3. With an input signal to the module corresponding to maximum speed, if necessary adjust the calibration potentiometer cal. until the output signal from the module reads 10.0V.

Specification

Connections - 6-way terminals	1	Common
	2	MPU Signal in
	3	Screen
	4	+24V DC supply (clean)
	5	Common
	6	O/P configured as requested on purchase order



Power supply	24V DC @ 10mA nominal (operates between 7V to 30V DC, reverse polarity protected)
Signal input	From Magnetic Pick-up
Dimensions	90mm high x 23mm wide x 58mm deep
Weight	60g approx
Enclosure material	Grey Polyamide 6.6
Operating temperature	0°C to +70°C

MADE IN THE UK

Reliability, Guaranteed



Logitech Electronics Limited

e: sales@logitechelectronics.com

t: +44 (0)1952 820444

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www.logitechelectronics.com

Lane End | Church Aston | Newport | Shropshire | TF10 9JJ | UK