



FE-074-HA/C Charge Head Amplifier

For IEPE style connection.



1mV/pC sensitivity.



Capable of driving long cables.



Wide frequency response.



Low Noise (Typ. 0.014pC equiv.)

The Fylde FE-074-HA/C ICP Charge Amplifier is a unit intended for application as a head amplifier in IEPE type systems using nominally 2 - 4mA.

Designed for use with piezo type transducers, the 074-HA/C is calibrated to develop an output voltage proportional to input charge, measured in pico-coulombs.

Versions are available with a sensitivity of either 1mV/pC, or 10mV/pC when low signals require amplification.

The unit will operate to transmit ac signals down low cost co-axial cable and is compatible with IEPE sources of 2 to 6mA.

The frequency response extends from approximately 1Hz to 25kHz with a dynamic range extending from the millivolt range through to 2V RMS.

Connection is BNC or micro-dot input and BNC output.

Description

The FE-074-HA/C is an inline Charge head amplifier operating on the IEPE principle. The amplifier delivers its signal down a single coax which also serves to provide power for the amplifier from the (nominally) 2 - 4mA source situated in the receiving amplifier. It is ideal for applications with low signals in noise and vibration measurements.

Specification

INPUT	Sensitivity	1pC develops 1mV
	Accuracy	$\pm 0.5\%$ typ. $\pm 1\%$ max.
	Protection	protected against static discharge.
	Connector	BNC socket.
OUTPUT	Supply	standard 4mA IEPE.
	Level	nominally 10V dc.
	Protection	protected against over-voltage or reverse.
	supply.	
	Range	2V RMS maximum
	Cable	10,000pF maximum
	Connector	BNC plug.
FREQUENCY RESPONSE		<1Hz to >25kHz -3dB.
HARMONIC DISTORTION		(< .05%)
NOISE	referred to output	15 μ V RMS 1Hz - 60kHz measurement
	referred to input	0.014pC RMS. equiv. 0.00014g RMS. for 100pC/g transducer.

GENERAL ARRANGEMENT

The amplifier is presented as an aluminium tube of external dimensions 13mm x 55mm including BNC socket input and BNC plug output. An optional input BNC to Microdot adaptor is available.

