





BLACKBOX

Technical Specifications:

Blackbox 130 is a compact low-cost intelligent controller that allows users to locally program the unit and give a readout of level. Economical and simple to program and operate, users benefit from extremely accurate and reliable digital echo processing with access to the dB and dBR range of transducers, measuring from 125 mm (4.9 in) right through to 40 m (131.2 ft).



PHYSICAL: MOUNTING OPTION SPECIFIC

Mounting Option:	Standard Wall Mount:	Large Wall Mount:
Controller Body Dimensions:	130 mm x 150 mm x 63.5 mm (5.1 in x 5.9 in x 2.5 in)	130 mm x 180 mm x 85 mm (5.1 in x 7.09 in x 3.3 in)
Weight:	Nominal 0.7 kg (1.4 lb)	Nominal 0.8 kg (1.7 lb)
Enclosure Material/ Description:		ABS Base with polycarbonate lid, flammability rating UL 94 HB
Cable Entry Detail:	Underside fitted with 3 x M20, nylon cable glands suitable for 6 mm to 12 mm (0.2 in to 0.5 in) cable	Underside fitted with 3 x M20, nylon cable glands suitable for 6 mm to 12 mm (0.2 in to 0.5 in) cable
Transducer Cable Extensions:	2-core screened (2 conductor 20 AWG screened)	
Nominal Separation:	1,000 m (3,280 ft), for greater separation distances please contact us	

ENVIRONMENTAL

IP Rating:	IP66/67
Max. & Min. Temperature (Electronics):	-20 °C to +55 °C (-4 °F to +131 °F)
Flammable Atmosphere Approval:	All Blackbox units must be mounted in a safe area. Compatible with approved dB Transducers
CE Approval:	See EU Declaration of Conformity in the manual
UL Approval:	UL Listed. UL Listed to Canadian Safety Standards. Certificate Number E257330.

PERFORMANCE

Accuracy/Repeatability:	0.25% of the measured range or 6 mm (0.2 in), whichever is greater
Resolution:	dBMACH3 0.3 mm (0.01 in), dB3 0.5 mm (0.02 in), dB6 and dB10 1 mm (0.04 in), dB15 1.5 mm (0.06 in), dB25 2.5 mm (0.1 in), and dB40 5 mm (0.2 in).
Min. & Max. Range:	Dependent on Transducer. Nominally 125 mm to 40 m (4.9 in to 130 ft)
Echo Processing:	DATEM (Digital Adaptive Tracking of Echo Movement)
Rate Response:	Fully Adjustable

OUTPUTS

Analog Output:	Isolated output of 4-20mA or 0-20mA into 1 $k\Omega$ (user programmable and adjustable) 0.1% resolution
Digital Output:	RS232 for programming and data extraction
Volt Free Contacts, Number, & Rating:	2 form "C" (SPDT) rated at 2 A at 240 V AC
Display:	2 x 12 alpha numeric





PROGRAMMING

On-board Programming:	Via RS232 using supplied software
PC Programming:	Via RS232 using supplied software
Programming Security:	Via Passcode (user selectable and adjustable)
Programmed Data Integrity:	Via non-volatile RAM
Remote Programming:	Via RS232 using optional handheld calibrator
SUPPLY	

Power Supply:	115 V AC +5% / -10% 50/60 Hz, 230 V AC +5% / -10% 50/60 Hz, 10-28 V DC, 10 W maximum power (typically 5 W)
Fuses:	50mA at 230 V AC, 100mA at 115 V AC

REMOTE COMMUNICATIONS

Power Supply:

Power supplied via Blackbox RS232 interface



Blackbox Drawing Front and Side



I N F O @ P U L S A R M E A S U R E M E N T . C O M

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