#### AT LAST-CM THAT'S STAGGERINGLY SIMPLE, INCREDIBLY VERSATILE & AMAZINGLY SENSITIVE

If you need information on the condition of rotating machines and you need it now, you'll love the MHC - Classic. Its unique principle of operation lets you instantly check machinery, even if you have no previous measurements and no detailed information on speed, shaft

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diameter even bearing type! As a result the MHC - Classic makes the ideal general purpose Condition Monitoring instrument for the busy Maintenance Engineer who cannot afford the luxury of carrying out periodic measurements around a systematic route.

Despite its simplicity and low cost there are no compromises in its performance, versatility or ruggedness. With the MHC - Classic you'll be picking up a wide range of problems (typically months before final failure) on virtually all rotating machines, for years to come.

Highly sensitive to faults	Monitor most rotating machinery
poor lubrication & rubbing	motor-pump sets
race/ball/roller defects	gearbox & pulley drive systems
grease/oil contamination	<ul> <li>roll and shaft support bearings</li> </ul>
gear teeth pitting, etc	machine tools, etc
even down to 45 rpm!	even works on plain bearings!

## How it works

The MHC - Classic characterises the detected signal in terms of Distress and dB Level. Distress is a proprietary parameter which performs a summation of all the microscopic clicks, crunches, whistles and groans associated with faults. In this way Distress provides a means of instantly recognising suspect machinery at a very early stage. By contrast dB Level is a measure of the overall signal level and is used to trend the rate of degradation of suspect machinery. In fact the MHC - Classic works on the same basic principles that have been well proven over the years in the original MHC - Machine Health Checker.



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#### Sensor:

Sensing Element Integral pre-amplifier Power requirement Calibration Resonant Piezoelectric at ~ 100kHz +24dB gain + 10VDC at< 5mA (provided by MHC-Memo) Factory set to within 1dB of standard value

#### Signal Measurement:

 a) Distress Characterisation Description Range Resolution
 b) dB Level Characterisation

Description

Resolution

Range

Fault indicating parameter 0 to > 40 (typical) 1 unit

Logarithmic scaled mean signal level 0 to 92dB (ie 40,000:1) 1dB

#### General Characteristic:

 Battery Operation
 2 qty. 9V PP3 (or equivalent) batteries

 Lithium Mn
 Up to 80 hours

 Alkaline
 Up to 34 hours

 NiCd/NiMH
 Up to 8 Hours

 (Note use of display backlight and headphones reduces these values)

Display Hold & Compare

Problem Alert Coupling Alert Auto Shut-Off

Audio Output Socket Operating Temperature

Dimension

Weight

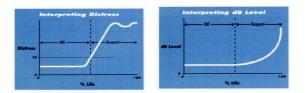
LCD, 2 lines by 16 characters (with LED Backlighting) Yes (shows last 4 values for comparison of Distress and dB Levels) Yes (Auto recognition of high Distress) Yes (Displays LOW if dB level < dB) Yes (LED backlight after 8 seconds, main unit after 5 mins unused) Yes (switched high/low volume range) Main instrument 0 - 50°C Sensor 0 - 70°C

115mm x 220mm x 52mm (main unit)

~ 750g (main unit including batteries & rubber housing)

### QUALITY BUILT ON SOUND TECHNOLOGY

# Simply the best



Nothing works like the MHC-Classic (except its data logging big brother, the MHC - Memo) It incorporates thick film hybrid and microprocessor circuitry to achieve exceptional performance and functionality combined with outstanding reliability and stability.

Unique and patented features in the design of the MHC-Memc system, such as the Distress parameter, the Ultraspan<sup>™</sup> signal processing and the highly reproducible sensor design, set a new benchmark for industrial AE systems and are crucial elements in its powerful capability.



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