

Industrial Machinery Monitoring

Acoustic Emission modules designed for system builders



As a result of pioneering developments at Holroyd Instruments Ltd, Acoustic Emission (AE) is finally coming of age as an industrial measurement technology. Our success with portable AE instruments has led to an increasing demand for hardwired systems for both end-user and OEM applications. To address the varied requirements of the modern system builder Holroyd Instruments Ltd has developed a range of DIN rail mounting AE modules. These can form the heart of bespoke hardwired systems, tailored precisely to the needs of the end-user.

Use our AE modules to create systems to monitor:

- **Rotating Machinery** – motors, pumps, gearboxes, shaft bearings etc.
- **Reciprocating Machinery** – compressors, hydraulic pumps, engines, etc.
- **Intermittent Machinery** – linear bearings, valve actions, linkages etc.
- **Process Cycles** – track the AE signature of production processes.

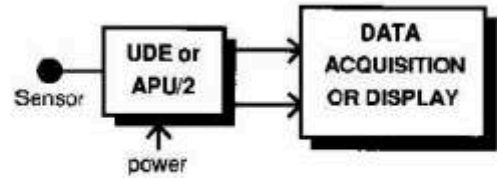
If you would like to discuss your application with one of our experienced engineers or need more information on any of our products, call us now:

HOLROYD
Instruments

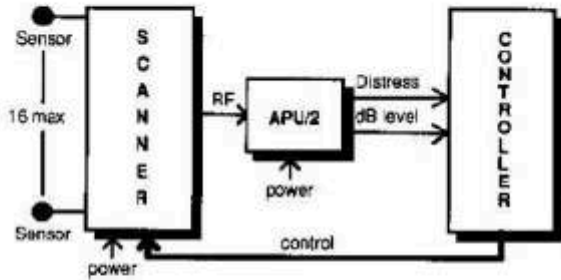
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Versatile Sensor Options:

- SWT/2 – General purpose AE sensor with built-in pre-amplifier and line drive electronics.
- SWT/2WP – A waterproof version of the SWT/2 for submersed applications.
- AUT/2 – A sealed airborne ultrasonic transducer with built-in pre-amplifier and line drive electronics.
- XT/2 & DP2 – Separate AE transducer and pre-amplifier units.



BASIC APPLICATIONS



SCANNER / APU/2 APPLICATION

Advanced Processing Unit – APU/2

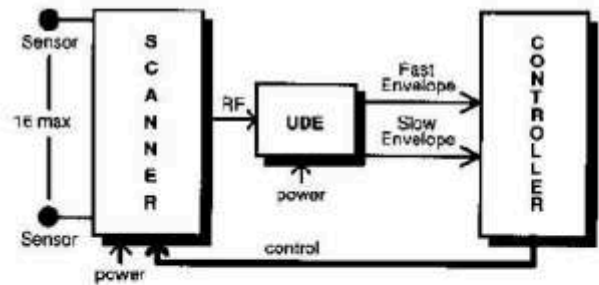
(for rotating machinery)

The APU/2 module contains the same advanced signal processing as the highly successful Holroyd Instruments MHC – Machine Health Checker. With outputs of Distress and dB Level the APU/2 is ideally suited to monitoring the condition of rotating machinery such as motors, pumps, gearboxes, shaft supports etc. To further enhance measurement integrity the APU/2 automatically detects and diagnoses sensor wiring faults.

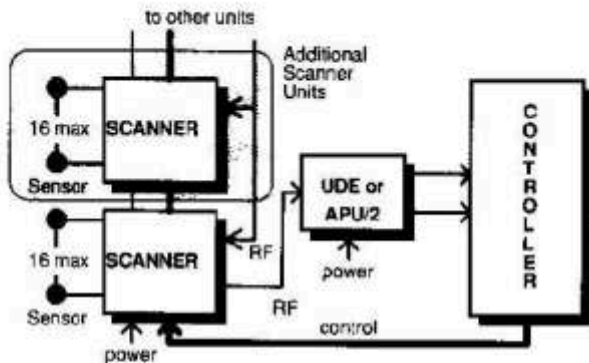
Ultraspan Dynamic Enveloper – UDE

(for non-rotating machinery, mechanisms and processes)

The UDE module with its broad dynamic range and fast envelope output makes available a new and powerful capability. Through further analysis of the UDE output, systems can be created to monitor traditionally awkward machinery (such as intermittent, reciprocating, linear bearings, valve mechanisms, linkages etc.) as well as both fast and slow process cycles. To further enhance measurement integrity the UDE automatically detects and diagnoses sensor wiring faults.



SCANNER / UDE APPLICATION



EXTENDING SCANNER CHANNELS

16 Channel Scanner

(for multiple monitoring channels)

The 16 Channel Scanner module provides an economical interface between multiple sensors and either an APU/2 or a UDE module. The 16 Channel Scanner provides the necessary phantom drive power to the sensor pre-amplifiers and its channel selection is controlled by an external PC, PLC or other controller. Scanners can be linked together to make 32, 48 etc channel systems.