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## INTEGRATING SOUND LEVEL METER

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The Integrating Sound Level Meter 2031A is a Type 1 accuracy (Precision grade) instrument conforming to IS 9779:1981, with Calibration traceable to National Physical Laboratory, New Delhi. The special feature of this meter is that it can compute the exponential average level of Sound Pressure Level (Leq) over a period of time. It displays the results at the end of this measurement period, which is user defined without limits. Other parameters indicated at the end of the measurement period are: Lmax, Lmin, SEL and time elapsed. 80

readings of dB values are sampled per second with 12 bit accuracy. Thus this meter is used for assessment of Sound Pressure Level over a period of time. The instrument does not have a memory for saving the results and if this is required then the model 2001 should be considered. The 2031A can be connected to external filters (optional) like the Octave Filter 3011 or Third Octave Filter 3013 and has a DC voltage signal proportional to the Sound Level in dB available on its analog output port which is useful for interfacing with PLCs etc.

### **Features of the 2031A:**

- India's first microprocessor-based integrating Sound Level Meter.
- Designed as per IS:9779- 1981, type 1 accuracy.
- Computed parameters SPL, Lmax, Lmin, Leq, SEL, Elapsed Duration.
- Measurement ranges 34- 134 dB in three overlapping ranges.
- Frequency weighting A, C & Linear as per IS9779 requirements (Type 1).
- Time weighting Slow, Fast & Impulse as per IS9779 requirements (Type 1).
- 0.1 dB resolution.
- Self-test mode.
- Menu driven software with 6 keys.
- 12 bit A/D converter.
- Internal rechargeable NiCd batteries.
- Robust Aluminum die-cast body.
- Battery charge indicator.
- Removable microphone.



## SPECIFICATIONS

### INTEGRATING SOUND LEVEL METER 2031A:

Standards	: Designed as per IS:9779- 1981, Type 1
Measuring Range	: 34- 134 Db
Microphone	: 1/4" Electret Condenser
Calibration	: Factory calibrated, Field calibration by Acoustic calibrator 3022. Calibration traceable to NPL.
Detector	: True RMS
Resolution	: 0.1 dB
Display	: LCD, 16x 2 alpha numeric
Error Indicators	: Overload and under range indication
Frequency weighting	: A,C, Linear as per IS:9779- 1981.
Time Weighting	: Slow, Fast & Impulse, as per IS: 9779- 1981.
Parameters	: SPL, Lmax, Lmin, Leq, Sel, Ln, Elapsed Duration
Simultaneous Parameters:	: SPL, Lmax, Lmin, Leq, SEL elapsed during 1sec or in continuous time mode.
Battery Life	: 24 hours per full charge
Battery Indicator	: Battery life meter with auto shut-off on low battery
Outputs	: Analog output for filters AC output of selected signal
External Power	: External Power Supply 3051 (Optional)
Construction	: Rugged die cast, reflection free, aluminium enclosure
Temperature	: 0 to 50 degree Celsius
Humidity	: 0 to 90% none condensing
Dimensions (mm)	: L255 W 93 H 45mm
Weight	: 1000 gms
Standard accessories	: Battery charger, Microphone, Briefcase type carrying case, Windshield, Operation Manual.
Optional Accessories	: Acoustic Calibrator 3022, Tripod Stand, Mic Extension cable, Octave (3010) or third octave filter set (3013)

Note1 : The above stated item is designed and manufactured exclusively by Baseline Technologies, New Delhi, India. Baseline Technologies reserves the right to amend the above specifications at any time in the interest of improvement of the product or its process. The above specifications do not constitute a contract unless accompanied with a formal offer from Baseline Technologies.

**Manufactured in India by Baseline Technologies, New Delhi, an ISO 9001:2000 company.**

