The UV-16 is a 2-channel charge amplifier that is compatible with the input of piezoelectric accelerometers and accelerometers with built-in preamplifier. A multi-channel charge amplifier can be configured by coupling together a maximum of 16 units and 32 channels.

- Equipped with LCD display, overload indicator LED, operating switch, input/output terminals, power input terminals and coupling connectors
- It can be mounted on JIS standard racks even with a small number of channels (max. 12 units, 24 channels)
- AC adapter or battery unit BP-17 can be used as the power source

Example of 6-channel configuration
(3 UV-16 units and BP-17 battery unit)
## Specifications

### Input Channels
- 2

### Connector
- Microdot connector

### Types
- Piezoelectric accelerometer
- Accelerometer with built-in preamplifier

### Measurement range
- ACC (acceleration): min, VEL (velocity): min, DISP (displacement): min

### Sensitivity setting
- Setting range: 0.10 to 0.999 in 0.001 intervals
- 1.00 to 9.99 in 0.01 intervals

### Units
- pC/(mm/s) (piezoelectric accelerometer)
- mV/(m/s²) (accelerometer with built-in preamplifier)

### Range
- 7 stages (selected value range differs with the sensitivity setting)

#### In the case of 0.100 to 0.999 sensitivity
- ACC (acceleration): 10, 30, 100, 300, 1 000, 3 000, 10 000
- VEL (velocity): 10, 30, 100, 300, 1 000
- DISP (displacement): 0.1, 0.3, 1, 3, 10, 30, 100

#### In the case of 1.00 to 9.99 sensitivity
- ACC (acceleration): 1.0, 3.0, 10, 30, 100, 300, 1 000
- VEL (velocity): 1.0, 3.0, 10, 30, 100, 300, 1 000
- DISP (displacement): 0.1, 0.3, 1, 3, 10, 30, 100

### Frequency range
- ACC (acceleration): 1 Hz to 15 kHz (current AC output tolerance ±5 %)
- 0.5 Hz to 30 kHz (current AC output tolerance ±10 %)
- VEL (velocity): 3 Hz to 3 kHz (current AC output tolerance ±5 %)
- DISP (displacement): 3 Hz to 500 Hz (current AC output tolerance ±10 %)

### Filter
- Filter Settable to HPF or LPF by channel
  - HPF: OFF, 10 Hz, 20 Hz, 50 Hz
  - LPF: 1 kHz, 3 kHz, 10 kHz, OFF

### Display
- Segment LCD with backlight
- Display content: Settings, bar graph (100 ms cycles)

### Warning display
- LED: x2
- Overload indication: red (by channel)

### Output signal for calibration
- Sine wave, 80 Hz ± 5%, output signal 1 V (peak) ±2%

### Output (current output)
- Output terminals: BNC connector × 2
- Output impedance: 50 Ω (load resistance 10 kHz or more)
- Output voltage: 50 Hz full scale: V1/Peak × 1 ± 3%
- VEL (velocity): V1/Peak × 3 ± 5%
- DISP (displacement): 1 V (Peak) × 5 ± 5%
- Max. output voltage: ±10 V (Peak) or more
- Cross talk: ≤ 10 dB or less between channels (Both channels: sensitivity: 5.00, range: 100, acceleration input signal: 10 kHz)

### Inherent noise
- When input capacitance: 1 000 pF, sensitivity: 5.00, piezoelectric accelerometer, HPF: OFF, LPF: OFF, minimum range

### ACC (acceleration)
- 0.01 mV/(m/s²) or less
- 0.1 mV/(m/s²) or less
- 0.1 mm/(mm/s²) or less
- 0.0015 mm/(mm/s²) or less

### VEL (velocity)
- 0.01 m/s² (RMS) or less
- 0.03 m/s² (RMS) or less
- 0.1 mm/s (RMS) or less
- 0.3 mm/s (RMS) or less

### DISP (displacement)
- 0.015 mm (RMS) or less
- 0.15 mm (RMS) or less
- 0.15 mm (RMS) or less
- 0.5 mm (RMS) or less

### AC adapter
- NC-99A
- NC-99

### Dimensions
- 150 (H) × 36 (W) × 179 (D) mm, Approx. 350 g

### Accessories
- Coupling plate: x 1

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### Optional accessories

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</table>

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**Method for coupling UV-16 and BP-17**

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### Options

**Battery unit BP-17**

Used by connecting to UV-16

- When using dry batteries, the BP-17 can power three UV-16 units.
- (for one unit up to sixteen UV-16 units can be powered by using the BP-17 and AC adapter)

#### IEC R14 (size C) batteries × 8
- Operating time: (when providing power to three UV-16 units)
  - 17 hours (LR14 Alkaline batteries), 5 hours (R14PU Manganese batteries)

#### CHARGE-setting, normal operating conditions, 25 °C
- 8 hours (LR14 Alkaline batteries), 2.5 hours (R14PU Manganese batteries)

#### COLD-setting, normal operating conditions, 25 °C

**AC adapter NC-99A**

- Used when operating the unit with AC electrical power
  - NC-99A: AC100 V to 240 V, 12 V DC (for max. 10 units)
  - NC-99: AC100 V to 240 V, 12 V DC (for max. 16 units)

**Rack mount CF-27**

- Dimensions: 149 (H) × 480 (W) × 320 (D) mm

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**RION CO., LTD.** is recognized by the JCSS which uses ISO/IEC 17025 as an accreditation standard and bases its accreditation scheme on ISO/IEC 17011. JCSS is operated by the accreditation body (IA Japan) which is a signatory to the Asia Pacific Accreditation Cooperation (APAC) as well as the International Laboratory Accreditation Cooperation (ILAC). The Quality Assurance Section of RION CO., LTD. is an international MRA compliant JCSS operator with the accreditation number JCSS 0197.

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