Outdoor Microphone Protection
For community, construction, mining, aircraft or other outdoor noise monitoring

**Highlights**
- Microphone Protection in any weather
- Use with any ½ inch microphone and preamplifier
- Built in water repellent barrier (rain hat)
- Flexible mounting options
- IEC 61672 Class 1 compliant when used with Model 831 or LxT
- Easy microphone calibration
- Optional desiccants
- Fully characterized with
  - 0°, 90°, and random response
  - Wind Noise Reduction

**Applications**
- Outdoor Noise Monitoring
- Construction Noise
- Mining Noise
- Aircraft Noise
- Amusement Parks
- Environmental Impact Studies
- Industrial Noise Monitoring
- Night Clubs
- Concerts
- Motorsports

When making outdoor noise measurements, sensitive microphones and equipment can be exposed to all types of weather including rain, dew, wind and heat. Protect your microphones from potentially adverse environment conditions that can lead to incorrect measurement by using the EPS2116.

The EPS2116 is designed to work with almost any combination of ½ inch precision microphone and preamplifier and provides for easy acoustic calibration to make sure your measurements are accurate. Because the EPS2116 is designed with an integral rain shield it will keep your microphone dry even in a driving rain.

Combine the EPS2116 with the Larson Davis PRM2103-FF outdoor microphone and Model 831 sound level meter to produce an ideal outdoor noise measuring system that will work in a wide variety of climates, without the need for desiccants and with minimal routine maintenance. When combined with the PRM2103-FF the integrated heater eliminates the need for desiccants and the remote calibration check minimizes routine maintenance.
**Acoustical Frequency Response (typical)**

Data shown includes effects of Model 831 EPS2116 correction filters

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>Free field</th>
<th>Random</th>
<th>90 Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>-6 dB</td>
<td>0 dB</td>
<td>0 dB</td>
</tr>
<tr>
<td>1,000</td>
<td>-4 dB</td>
<td>2 dB</td>
<td>2 dB</td>
</tr>
<tr>
<td>10,000</td>
<td>2 dB</td>
<td>6 dB</td>
<td>8 dB</td>
</tr>
</tbody>
</table>

**Environmental Specifications**

- **Operating Temperature**
  - -40 °F to 158 °F (-40 °C to 70 °C)
- **Operating Humidity**
  - 0 to 100% relative humidity
- **Wind**
  - Wind induced noise

**Physical**

- **Diameter**
  - 1.6 in (41 mm) – Body
  - 3.0 in (76 mm) – Windscreen
- **Height**
  - 15.8 in (40 cm)
  - 16.8 in (43 cm) with ¼ - 20 adapter
- **Venting**
  - Bottom of preamplifier by connector
- **Mounting**
  - ¾ in NPT (Pipe Thread R ¾)
  - ¼ - 20 camera thread using included adapter
  - 1.5 in (38 mm) speaker stand using included adapter
- **Weight**
  - 0.71 lb. (332 g)
- **Materials**
  - UV resistant
- **Desiccants**
  - Optional – tubular type

**Compliance**

IEC 61672-1 (2002) Class 1 and ANSI S1.40-1984*

IEC 61010-1 (2001) Safety

ROHS & CE

*When used with Model 831 or LxT and appropriate connection filter

**EPS2116 Environmental Protection System**

- **Supported Preamplifiers (Typical)**
  - PRM2103 Outdoor Preamplifier for Model 831
  - PRM831 Standard Model 831 preamplifier
  - PRMLXT1 &1L Standard SoundTrack LxT1 preamplifier
  - PRMLXT2 & 2L Standard SoundTrack LxT2 preamplifier

**Optional Accessories**

- TRP001 Camera type tripod
- TRP003 Portable tripod use with ADP034
- TRP019 Permanent, tilt-down pole use with ADP100
- TRP020 Semi-permanent tripod use with ADP100
- W3011 Replacement windscreen
- ADP100 Adapter connecting EPS2116 to TRP019 or TRP020
- DSC003 Desiccant cartridges

**Ordering Information**

EPS216 Environmental Protection System for ½ inch microphones and preamplifiers

For environmental noise monitoring and building acoustics, Larson Davis offers a full line of instruments, accessories and software. For personal noise and vibration exposure monitoring, Larson Davis complements this with sound level meters, personal noise dosimeters, human vibration meters, audiometric calibration systems and hearing conservation programs.

Visit [www.larsondavis.com](http://www.larsondavis.com) to locate your nearest sales office.