The Shure Models 515SBGX, 515SBG-18X, and 515SBG-18XF microphones are low-impedance dynamic microphones designed to be mounted on flexible goosenecks or fixed pipes. Optimized frequency response and a unidirectional (cardioid) pickup pattern makes them ideal for language labs, paging applications, and base station communications. They are also recommended for use as talkback or cuing microphones in TV, film, and recording studios.

Because of their low impedance, these microphones retain their level and response characteristics even when long lengths of cable are used. All three models are supplied with a push-to-talk button and a four-conductor cable (two conductors shielded).

**Features**
- Frequency response optimized for announcing, narration, and paging applications
- Cardioid pickup pattern symmetrical about axis
- Neodymium magnet for high signal-to-noise ratio
- Shock-mounted cartridge for quiet operation and low stand/handling noise
- Tough diecast locking grille and handle
- Built-in push-to-talk button controls microphone circuit and relay or control circuit
- 45.7 cm (18 in.) gooseneck and mounting flange supplied (515SBG-18X and 515SBG-18XF only)

**Variations**
- **Model 515SBGX**: Does not include gooseneck or mounting flange.
- **Model 515SBG-18X**: Includes gooseneck and 76.2 mm (3 in.) diameter mounting flange.
- **Model 515SBG-18XF**: Includes gooseneck and 44.4 mm (1-3/4 in.) diameter mounting flange.

### Mounting the 515SBG-18X and 515SBG-18XF
Mount the 515SBG-18X or 515SBG-18XF as follows:

1. Thread the supplied hexnut all the way down on the mounting flange.
2. Thread the gooseneck tightly on the flange.
3. Back the hexnut up against the gooseneck, and use a wrench to tighten the nut firmly against the bottom of the gooseneck.

### Mounting the 515SBX onto a Gooseneck
Mount the 515SBGX onto a gooseneck or fixed pipe with a 5/8 in-27 thread as follows:

1. Unscrew the black end cap from the microphone.
2. Remove the thin metal washer and the metal spacer.
3. Re-install the washer by sliding it back onto the cable and up into the end of the microphone.
4. Slip the cable into the gooseneck or pipe and thread the microphone firmly to the mount.

For additional service or parts information, please contact Shure's Service department at 1-800-516-2525. Outside the United States, please contact your authorized Shure Service Center.

### Connections
These low-impedance microphones are designed for connection to microphone inputs rated at 75 to 300 ohms. Using balanced-line low-impedance cables permits very long cable lengths without affecting response or level. The RED and BLACK cable leads are the microphone conductors for balanced-line connections; the shield is connected to the amplifier ground.

For unbalanced operation, connect the BLACK lead to the shield, and use the RED lead as the microphone conductor.

The GREEN and WHITE cable leads are used to control an external relay or control circuit.

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Wire Color</th>
<th>Function</th>
<th>XLR Connector</th>
<th>1/4 in. Phone Plug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbalanced</td>
<td>Red</td>
<td>Audio</td>
<td>Pin 2</td>
<td>Tip</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Audio Ground</td>
<td>Pin 3</td>
<td>Sleeve</td>
</tr>
<tr>
<td>Input Type</td>
<td>Wire Color</td>
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<td>XLR Connector</td>
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</tr>
<tr>
<td>------------</td>
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<td>-------------------</td>
</tr>
<tr>
<td>Balanced</td>
<td>Shield</td>
<td>Chassis Ground</td>
<td>Pin 1</td>
<td>Sleeve</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Audio +</td>
<td>Pin 2</td>
<td>Tip</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Audio -</td>
<td>Pin 3</td>
<td>Ring</td>
</tr>
<tr>
<td></td>
<td>Shield</td>
<td>Chassis Ground</td>
<td>Pin 1</td>
<td>Sleeve</td>
</tr>
</tbody>
</table>

**Specifications**

**Type**
Dynamic (moving coil)

**Frequency Response**
80 to 15,000 Hz

**Polar Pattern**
Cardioid

**Impedance**
150 Ω rated (180 Ω actual)

**Output Clipping Level**
at 1 kHz
-57 dBV/Pa[1] (1.4 mV)

**Polarity**
Positive pressure on diaphragm produces positive voltage on pin 1 (red wire) with respect to pin 2 (black wire).

**Switch**
Built-in, leaf-type, non-locking, Push-to-Talk

**Shock Mount**
Internal rubber vibration isolator

**Cable**
Highly durable cable with effective hum shielding, four conductors (two-shielded), plastic jacketed

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>515SBGX:</td>
<td>1.8 m (70 in.) inch</td>
</tr>
<tr>
<td>515SBGX-18X/18XF:</td>
<td>1.3 m (51 in.)</td>
</tr>
</tbody>
</table>

**Housing**
Silver finish die casting with black enamel diecast grille and stainless steel screen
Typical Frequency Response

Typical Polar Patterns

Overall Dimensions
**Direction to Actuate Switch**

**Case Ground**
- GREEN
- WHITE
- BLUE
- BLACK
- RED

**Shield**

**Internal Connections**

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**Accessories**

**Furnished Accessories**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen wrench (No. 4)</td>
<td>80A67</td>
</tr>
<tr>
<td>18&quot; Gooseneck, Chrome</td>
<td>G-18</td>
</tr>
<tr>
<td>Mounting Flange, Heavy Duty, Matte Silver</td>
<td>A13HD</td>
</tr>
<tr>
<td>Mounting Flange, Matte Silver</td>
<td>A12</td>
</tr>
<tr>
<td>Black Foam Windscreen for KSM8, SM85, SM86, SM87A, BETA87A, and BETA87C</td>
<td>A85WS</td>
</tr>
</tbody>
</table>

**Replacement Parts**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>Cartridge for 515X Series and 588SDX</td>
<td>R180</td>
</tr>
<tr>
<td>Grille for 515 Series (except 515SDX)</td>
<td>RK334G</td>
</tr>
<tr>
<td>Cable</td>
<td>70A4063</td>
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</tbody>
</table>

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**Certifications**

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from:

[www.shure.com/europe/compliance](http://www.shure.com/europe/compliance)

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