

# f90 Condenser Instrument Microphone

## OVERVIEW

The f90 is a cost effective miniature clip-on condenser microphone used for drum and percussion applications. The f90 is intended for rehearsal bands, small clubs, schools and Houses of Worship.

Characterized with a uniformly controlled cardioid polar pattern the f90 provides a rich, full sound at distances of 3-4 inches off the drum head. With a smooth and accurate response over a frequency range of 50 Hz - 18 kHz, the f90 is lightweight, compact, and simple to use. The flexible gooseneck, along with the 90 degree angle of the microphone head, puts the microphone in the proper position for placement directly over the sound source. Final adjustments can be made by simply twisting or bending the gooseneck into the desired position.

The f90 operates on phantom voltage of 9-52 Volts and is supplied with a phantom power adapter, 6' integrated mic cable, and foam windscreen.

## SUPPLIED ACCESSORIES

6' attached shielded cable with mini XLRf connector

**APS910** - 48 V phantom power adapter for use with electret condenser microphones

**WS90** - External foam windscreen for reducing wind, sibilance, and pop noise



## FEATURES

- Low profile condenser clip-on microphone
- Warm, natural sound reproduction
- Tension fit clamping system for rim mounting
- 3 year warranty

## APPLICATIONS

- Rack toms, floor toms, snare drums
- Hand percussion
- Cymbals, percussion, brass



APS910



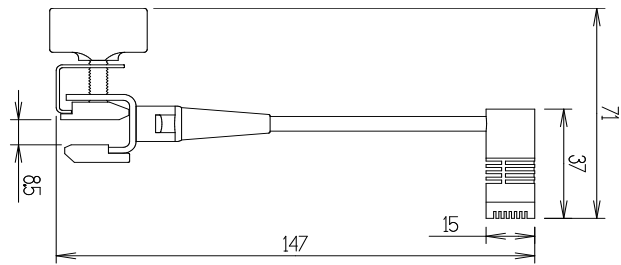
WS90

# f90

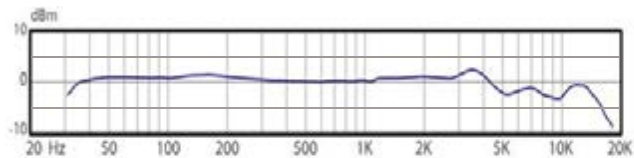
## SPECIFICATIONS

|                        |   |
|------------------------|---|
| Transducer Type        | Pre-polarized Condenser   |
| Frequency Response     | 50 Hz - 18 kHz  |
| Polar Pattern          | Cardioid  |
| Output Impedance       | 250 ohms  |
| Sensitivity            | 8.8 mV / Pa @ 1k  |
| Equivalent Noise Level | 29 dB (A-weighted)  |
| Signal to Noise Ratio  | 65 dB   |
| Maximum SPL            | ≥135 dB   |
| Power Requirements     | 9-52 V phantom  |
| Connector              | 3 pin mini to 3-pin XLRm (APS910)   |
| Polarity               | Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 |
| Materials / Finish     | Machined Brass Capsule  |
| Gooseneck              | Flexible Steel  |
| Weight                 | 170 g / 6 oz  |
| Length                 | 147 mm / 5.1 in   |

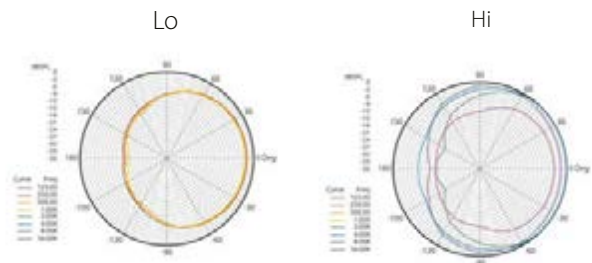
## DIMENSIONS (mm)



## FREQUENCY RESPONSE



## POLAR PATTERNS



**PRODUCT REGISTRATION:** Please register your product online at [www.audixusa.com/docs\\_12/about/product\\_registration.shtml](http://www.audixusa.com/docs_12/about/product_registration.shtml).

**SERVICE AND WARRANTY:** This microphone is under warranty for a period of 3 years to be free of defects in material and workmanship. In the event of a product failure due to materials or workmanship, Audix will repair or replace said product at no charge with proof of purchase. Audix does not pay or reimburse shipping costs for warranty repairs or returns. The warranty excludes any causes other than manufacturing defects, such as normal wear, abuse, environmental damage, shipping damage or failure to use or maintain the product per the supplied instructions. No Implied Warranties: All implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose are hereby excluded. The liability of Audix, if any, for damages relating to allegedly defective products shall be limited to the actual price paid by Dealer for such products and shall in no event include incidental or consequential damages of any kind. Should your microphone fail in any way, please contact the Audix Service department at 503.682.6933. A Return Authorization is required before returning any product. OTHER THAN THIS WARRANTY, AUDIX MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS, THE USE OF THE PRODUCTS, THE PERFORMANCE OF THE PRODUCTS. AUDIX SHALL NOT BE LIABLE FOR SPECIAL INCIDENTAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES ARISING FROM OR BASED ON THE SALE, USE, STORAGE OR DISPOSAL OF THE PRODUCTS, AUDIX'S SERVICE WORK, BREACH OF WARRANTY, BREACH OF CONTRACT. NEGLIGENCE, OR ANY OTHER THEORY OF LIABILITY, EVEN IF AUDIX HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## ARCHITECT AND ENGINEER SPECIFICATIONS

The microphone shall be of the condenser type available in a cardioid polar pattern and shall have a 6' cable terminating in a mini-XLR female connector. The microphone shall be provided with a remote cylindrical phantom power adapter that will allow the microphone to operate between 9 - 52 volts phantom power. The microphone shall have a sensitivity of 8.8 mV / Pa and a nominal impedance of 250 ohms at 1 kHz. The microphone shall have a maximum SPL level of ≥135 dB and is machined out of brass with a length of 7 mm and a capsule diameter of 15 mm.

## OPERATION AND MAINTENANCE

The f90 is a low impedance microphone and should be plugged into a "mic level" input on your console, mixer, or recording device. The f90 requires phantom power and will NOT operate without phantom power voltage (9 - 52 Volts) which is available on most professional mic preamps and mixing devices. Avoid plugging or unplugging the microphone from the PA system unless the channel is muted or the volume of the system turned down. Failure to do so may result in a loud "popping" noise which could seriously damage the speakers in the PA system.

**APS910 phantom power supply:** Note that the mini XLRf connector at the end of the f90 mic cable plugs into mini XLRm side of the APS910 power supply. From there, plug a standard XLR-XLR microphone cable to complete the connection from the APS910 to the mixing board.

The f90 is manufactured to exacting specs with roadworthy construction. However, the capsule is highly sensitive and should be handled with care. Avoid extreme temperatures and be sure to store your microphone in the pouch provided when not in use. Moisture of any kind can adversely effect the sound and performance of your microphone.

## USER TIPS

**Drums:** The f90 is designed to clip onto the rim of a drum, drum suspension system, and some types of stands. The position of the f90 should be 2-3" off the drum head. It is not necessary or desirable to place the microphone too close to the drumhead.

**Miking more than one drum with one mic:** The f90 has a wide cardioid pick-up pattern, which means that it is possible to use the mic to pick up multiple drums. For example: the mic could be placed between the snare and the high hat, effectively miking both instruments. The same could be done for two rack toms.

**Percussion:** The f90's integral clamp fits most standard (butcher-block) timbale and conga rims, but a separate stand may be needed to accommodate curved conga/bongo rims.

**Brass:** The f90 can be used successfully for saxophone, trumpet, and trombone. Simply attach the clamp to the bottom part of the bell so that the mic is pointing in the direction of the bell. Do not try to force the mic inside the bell as the mic is designed to sound best if it is slightly off axis.

Further miking techniques may be found at [www.audixusa.com](http://www.audixusa.com).



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ver 3.0.05-16