

# CTM 77LS CARDIOID ELECTRET MICROPHONE

## **Description**

The **Astatic CTM 77LS** is a superior low-noise, electret condenser cardioid microphone designed for professional vocalists and musicians. The **CTM 77LS** provides the performance and features to satisfy today's most demanding professionals.

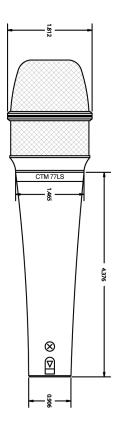
The wide and flat frequency response of the **CTM 77LS** provides natural transparent sound quality. The cardioid pickup pattern minimizes annoying feedback (when used close to sound reinforcement speakers and monitors) and reduces the pickup of unwanted off-axis sounds. A transformerless electronic design provides optimum low frequency response and low distortion. An effective internal multistage pop filter minimizes wind and breath noise.

The **CTM 77LS** has a Flex-Form<sup>TM</sup> hardened steel grille screen that dramatically resists deformation while greatly reducing any risk of adverse performance caused by a bent or dented ball screen. This unique ability to retain its original shape assures that the **CTM 77LS** will maintain its attractive appearance.

The **CTM 77LS** features the exclusive (I.N.R.-3<sup>TM</sup>) Impact Noise Rejection system. Our proprietary rubber shock mount isolates the transducer from the barrel, thus dramatically reducing cable, stand and handling noise. The need for any external shock mounting device is virtually eliminated.

The low-frequency response of the **CTM 77LS** may be enhanced by increasing or decreasing the distance from the sound source. This phenomenon is technically known as "proximity effect". Nominal or "flat" response is generated at a distance of 24 inches or more. However, as the distance to the sound source decreases, the bass sensitivity increases, providing a solid, robust character.

The **CTM 77LS** is supplied complete with a zippered vinyl protective pouch and a snap-in microphone swivel-mount.





# **CAD Quality**

All **Astatic CTM 77LS** microphones are audio tested and inspected prior to shipment. Our absolute commitment to quality insures that **Astatic** microphones remain the **Best Value** in today's competitive industry.

# **Operation and Maintenance**

The **Astatic CTM 77LS** is one of the finest instrumental and recording microphones available. Although it is extremely durable, it should be stored in the zippered pouch provided to protect it from dust and dirt when not in use.

If the front screen becomes soiled by dirt or residue, it may be cleaned using the following procedure. Unscrew the front screen assembly and remove the inside foam windscreen. Wash the foam windscreen using a mild detergent, and let dry thoroughly. Follow the same method for the grille screen. To clean the mike housing, use a cloth dampened with isopropyl alcohol.

## **Specifications**

## **Generating Element:**

Electret condenser (Phantom Powered)

#### Polar Pattern:

Unidirectional (Cardioid)

#### Frequency Response:

50 Hz - 18 kHz

#### **Output Level:**

#### **Open Circuit Voltage:**

 $-55 \, dB \, (0 \, dB = 1 \, volt \, per \, microbar)$ 

#### Impedance:

500 ohms

### **Dynamic Range:**

110 dB

#### **Equivalent Noise Level:**

Less than 22 dB, A weighted

#### **Maximum SPL:**

132 dB (1% THD, open circuit)

#### **Powering:**

#### **Supply Voltage:**

9 - 52 Vdc, positive pins 2 & 3 reverse polarity protected

#### **Current Required:**

Less than 5 mA over operating voltage range

#### **Phasing**

Positive pressure on diaphragm generates a positive voltage on pin 2 relative to pin 3

#### Grille Screen:

Hardened Steel Mesh

#### Case:

Steel and die cast zinc alloy

#### Finish:

Durable soft feel, non-slip, midnight black.

#### **Dimensions:**

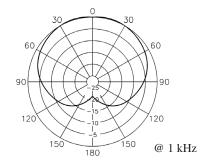
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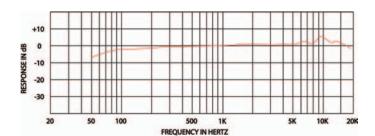
# **Architects' and Engineers' Specification**

The microphone shall be an electret condenser type, low impedance with wide-range frequency response, uniform from 50 Hz to 18 kHz. Output level at 1 kHz shall be -55 dB (0 dB = 1 volt per microbar). The polar response shall show a minimum of -15 dB at 180 degrees between 300 Hz and 1500 Hz. The transducer shall be isolated from handling noise and other mechanically generated vibration. The microphone case shall be steel and die-cast zinc alloy. The microphone shall have a length of 6 25/32" and a maximum diameter of 1 13/16". The microphone shall be finished in a soft feel, non-slip midnight black. A snap-in clamp and a zippered vinyl protective pouch shall be supplied.

The Astatic Model CTM 77LS is specified.

## SPECIFICATIONS FOR CTM 77LS





#### TWO-YEAR LIMITED WARRANTY

Omnitronics, LLC ("ASTATIC") hereby warrants that this product will be free of defects in material and workmanship for a period of two years from the date of purchase. In the unlikely event a defect occurs ASTATIC will, at its option, either repair or replace with a new unit of equal or greater value. You should retain proof of purchase to validate the purchase date and return it with any warranty claim. Return warranty claims carefully packed, insured and prepaid to the Service Department at the address listed below.

This warranty excludes exterior finish or appearance, damage from abuse, misuse of the product, use contrary to ASTATIC's instructions or unauthorized repair. All implied warranties or merchantability or finiteses for a particular purpose are hereby disclaimed and ASTATIC hereby disclaims liability for incidental, special or consequential damages resulting from the use or unavailability is product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

Note: No other warranty, written or oral is authorized by Omnitronics, LLC.