

# audio-technica AT2050 Multi-Pattern Condenser Microphone **User Manual**

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Thank you for purchasing. Before using the product ,read through the manual for future reference.

Although this product was designed to be used safely, failing to use it correctly may result in an accident. To ensure safety, observe all warnings and cautions while using the product.

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### **Safety Precaution**

### **Cautions for the product**

- Do not subject the product to strong impact to avoid malfunction.
- Do not disassemble, modify or attempt to repair the product.
- Do not handle the product with wet hands to avoid electric shock or injury.
- Do not store the product under direct sunlight, near heating devices or in a hot, humid or dusty place.
- Do not place the product on an unstable surface to avoid injury or malfunction due to falling or the like.

#### For customers in the USA

#### **FCC Notice**

#### Warning:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Caution:

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Contact:

Responsible Company: Audio-Technica U.S., Inc. Address: 1221 Commerce Drive, Stow, Ohio 44224, USA Tel: 330-686-2600

#### For customers in Canada

ISED statement:

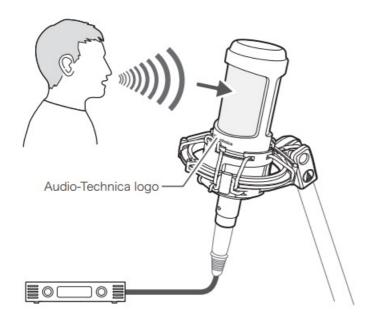
CAN ICES-3 (B)/NMB-3(B)

#### **Notes On Use**

- Be sure to read the connected device's user manual before use.
- When the product is used for a long time, the product may become discolored due to ultraviolet light (especially direct sunlight) and wear.
- Make sure to hold the plug when connecting and disconnecting the cable. The cable may become severed or an accident may occur if you pull on the cable itself.
- When using the cable, be careful not to twist it to prevent damage to the cable.
- Do not wind the cable at the base of the plug to prevent a disconnection.
- When plugging the cable into the microphone and the connected device, check that the connector is facing in the correct direction before inserting it straight. Inserting the connector or plug diagonally may cause a malfunction.
- Turn off the phantom power of the connected device before connecting or disconnecting a cable.
- For important recordings, perform a trial recording beforehand to make sure that the sound is recorded correctly.
- Audio-Technica will not be liable in any way for any loss or damage to software or data connected to the product.

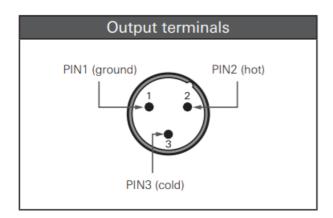
### **Using The Product**

- 1. Connect the product to a device that has a microphone input (balanced input) compatible with a phantom power supply.
- 2. Use the product, positioning the Audio-Technica logo on the front of the microphone toward the sound source.



### **Output terminals**

The output connector is an XLR-M type with polarity as shown in the figure below.



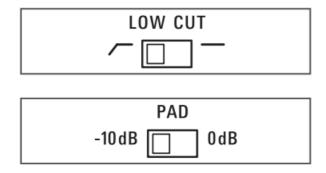
### **Directivity setting**



### **Switch settings**

To reduce the pickup of low-frequency ambient noise (such as traffic, air- handling systems, etc.), room reverberation and mechanically coupled vibrations, turn ON ( ) the low-cut filter switch located on the side of the product.

If audio input exceeds the maximum input sound level, set the pad switch to -10 dB.



### **Specifications**

Element: Externally-polarized (DC bias) condenser Polar pattern: Omnidirectional, Cardioid, Figure-of-eight

Frequency response: 20-20,000 Hz Low cut: 80 Hz, 12 dB/octave

Pad: -10 dB

Open circuit sensitivity: -42 dB (7.9 mV) (0 dB=1 V/Pa, 1 kHz)

Impedance: 120 ohms

Maximum input sound level: 149 dB SPL (1 kHz at 1VTHD) 159 dB SPL (When pad is on.)

Noise: 17 dB SPL (A-weighted)

Dynamic range: 132 dB (1 kHz at Max SPL)

Signal-to-noise ratio: 77 dB (1 kHz at 1 Pa, A-weighted) Phantom power requirements: 11V-52V DC, 4.7 mA Switches: Polar selection, Low cut: on/off, Pad: on/off

Weight: 412 g (14.5 oz)

Dimensions: 171 mm (6.7") long, 52 mm (2.05") maximum body diameter

Output connector: Integral 3-pin XLR-M type

Included accessories: AT8458a shock mount, 5/8"-27 to 3/8"-16 threaded adapter, Pouch

1 Pascal = 10 dynes/cm2 = 10 microbars = 94 dB SPL

For product improvement, the product is subject to modification without notice.

#### **Polar Pattern**



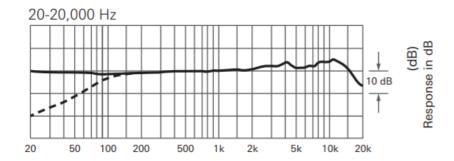
### **LEGEND**

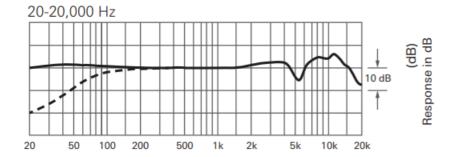


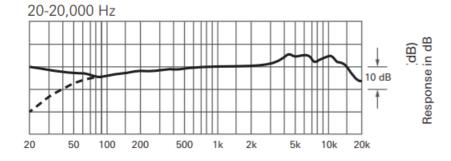
#### **LEGEND**

200 Hz Same as 1 kHz
1 kHz ———
5 kHz Same as 1 kHz SCALE IS 5 DECIBELS PER DIVISION
8 kHz Same as 1 kHz

# **Frequency Response**



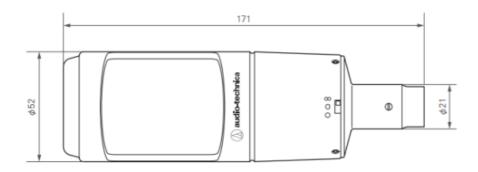




### **LEGEND**

	0°, 50 cm		0°, 50cm, 0°, 50 cm, Low cut
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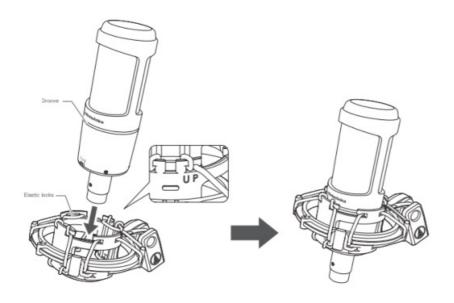
## **Dimensions**



#### **Included Accessories**



#### **How To Use Shock Mount**



Make sure the shock mount's top row of elastic into the microphone groove.

### Warranty

(Please be sure to read the notes below.)

For USA Only

End-User LIMITED WARRANTY information for the USA is available at <a href="www.audio-technica.com/usawarranties">www.audio-technica.com/usawarranties</a>. You may also contact Audio-Technica U.S., Inc. to request a written copy of the Limited Warranty at 1-330-686-2600 or via mail at 1221 Commerce Drive, Stow, OH 44224.

### www.audio-technica.co.jp

### **Audio-Technica Corporation**

2-46-1 Nishi-naruse, Machida, Tokyo 194-8666, Japan www.audio-technica.com

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Global Support Contact: www.at-globalsupport.com

#### **Documents / Resources**



<u>audio-technica AT2050 Multi-Pattern Condenser Microphone</u> [pdf] User Manual AT2050, Multi-Pattern Condenser Microphone

