

Thank you for purchasing this product. Before using the product, read through the user manual to ensure that you will use the product correctly. Please keep this manual for future reference.

Features

- Crisp, clear, well-balanced response, even at high SPLs
- Attaches to brass, reeds, piano, snare, toms violin, guitar and accordion
- Dedicated mounting systems permit accurate positioning, provide shock resistance and element protection
- AT8543 power module is equipped with switchable 80-Hz low frequency sounds
- Interchangeable elements available for hyper cardioid and omnidirectional polar patterns
- Also available in a wireless model, ATM350acW and ATM350acH

Caution

- 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.

ATM350a Description

The ATM350a is a fixed-charge condenser microphone with a cardioid polar pattern. It is designed for use in professional live-sound and studio applications.

When used with the available mounts and mounting systems, it provides accurate, consistent pickup of brass, woodwind, piano, drums and many other musical instruments.

The flexible gooseneck allows for precise microphone positioning even under demanding performances.

The cardioid polar pattern of the microphone is more sensitive to sound originating directly in front of the element, making it useful for controlling feedback and reducing pickup of unwanted sounds.

The microphone includes a 4 m (13.1') permanently attached miniature cable. Its free end connects to the provided AT8543 power module via a locking 4-pin connector. The output of the power module is a 3-pin XLRM-type connector.

A switch in the power module permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass filter) to help control undesired ambient noise.

The microphone is enclosed in a rugged housing with a low-reflectance black finish.

ATM350acW Description

The microphone is also available as the ATM350acW wireless model. The ATM350acW features a 1.4 m (55") miniature cable terminated with a locking 4-pin connector for use with Audio-Technica body-pack transmitters.

The ATM350acW specifications are identical to those of the ATM350a (when using an AT8543 power module). However, no power module is included with the ATM350acW, so there is no low-cut function.

ATM350acH Description

The microphone is also available as the ATM350acH wireless model. The ATM350acH features a 1.4 m (55") miniature cable terminated with a screw-down 4-pin connector for use with Audio-Technica cH-style body-pack transmitters. No power module is included (or required) with the ATM350acH. The ATM350acH specifications are identical to those of the ATM350a.

AT8490/AT8490L Description

The AT8490/AT8490L flexible gooseneck permits aiming the microphone in any direction, while a cable strain relief reduces cable-transmitted noise and cable damage. The integral windscreen entirely surrounds the microphone with foam to isolate the microphone from noise transmitted from the instrument and shield the element against accidental damage.

AT8491U Description

Universal clip-on mount features rugged metal construction to withstand the rigor of stage use. The mount is lined with rubber to provide secure mounting, shock resistance and instrument protection. Specially designed mount minimizes contact with instrument. A locking screw holds the mount securely in place.

AT8491P Description

Piano mount features a strong rare-earth magnet which permits secure mounting inside a piano or on any metal surface. The mounting base is lined with soft and protective material to avoid damaging the instrument.

AT8491W Description

The woodwind mount features an adjustable hook and loop fastener strap with rubber pad to firmly secure the mount to the instrument. Specially designed mount minimizes contact with instrument to reduce damping. Rotating gooseneck mount allows easy positioning of the microphone.

AT8491D Description

The drum mount features a patented design which uses the drum lug to securely mount the microphone while still allowing the drum to be tuned. The gooseneck can be positioned vertically or horizontally for optimal placement and a low profile appearance.

AT8468 Description

The violin mount fastens beneath the strings between the bridge and the tailpiece to provide outstanding pickup of violin and other stringed instruments.

AT8491G Description

The guitar mount features a rugged, thumbscrew-adjustable clamp with pads that attaches to guitars and other stringed instruments while leaving fewer marks. You can adjust the clamp length between 90 mm (3.5") and 135 mm (5.3").

AT8491S Description

The surface mount is designed for accordions and other challenging applications. The notched mount can be attached permanently using the accordion's grille screw and the included adhesive silicon pad, or it can be attached temporarily using the included fastener tape pads. A transparent protective film is also included to prevent damage to the instrument's finish.

AT8475 Description

The surface mounting kit for AT8491S includes two adhesive silicon pads, two mount fastener tape pads, two surface fastener pads, and two transparent protective films.

Operation and Maintenance

The ATM350a requires 11V to 52V phantom power for operation.

Output is low impedance (Lo-Z) balanced. The signal appears across Pins 2 and 3; Pin 1 is ground (shield). Output phase is "Pin 2 hot" — positive acoustic pressure produces positive voltage at Pin 2.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1 to Pin 1, etc.

The 80-Hz low-cut filter switch on the AT8543 power module makes it easy to switch from flat frequency response to low-frequency roll-off. This minimizes pickup of undesired low-frequency noise, such as from air conditioning systems. To engage the high-pass filter, slide the switch toward the "bent" line.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

User Manual / Accessories

Packages

ATM350U :

ATM350a, AT8490, AT8491U, AT8543, AT8468, hard shell carry case

ATM350UL :

ATM350a, AT8490L, AT8491U, AT8543, AT8468, hard shell carry case

ATM350PL :

ATM350a, AT8490L, AT8491P, AT8543, AT8468, hard shell carry case

ATM350W :

ATM350a, AT8490, AT8491W, AT8543, AT8468, hard shell carry case

ATM350D :

ATM350a, AT8490, AT8491D, AT8543, AT8468, hard shell carry case

ATM350GL :

ATM350a, AT8490L, AT8491G, AT8543, AT8468, hard shell carry case

ATM350S, ATM350SL :

ATM350a, AT8490 (ATM350SL: AT8490L), AT8491S, AT8475, AT8543, AT8468, hard shell carry case

ATM350UcW :

ATM350acW, AT8490, AT8491U, AT8468, hard shell carry case

ATM350UcH :

ATM350acH, AT8490, AT8491U, AT8468, hard shell carry case

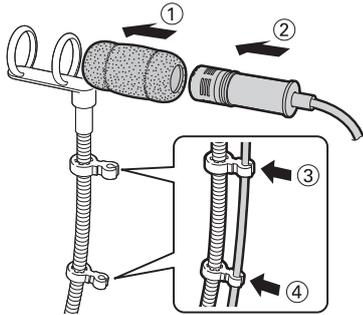
DISCLAIMER

This product is designed to be used as a removable microphone mount on various musical instruments. When used properly, this product will not harm the finish or otherwise damage instruments. As a precaution, however, this product should not be left on an instrument indefinitely, and, ideally, should be removed after each use. Audio-Technica shall not be responsible or liable for any damages caused to a musical instrument as a result of using this product.

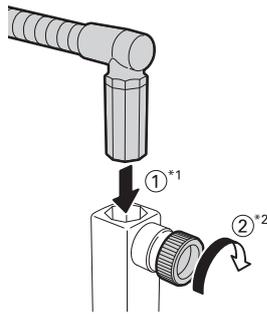
Mounting the microphone

AT8490/AT8490L

Gooseneck (standard/long)



Fixing the gooseneck on the mounts

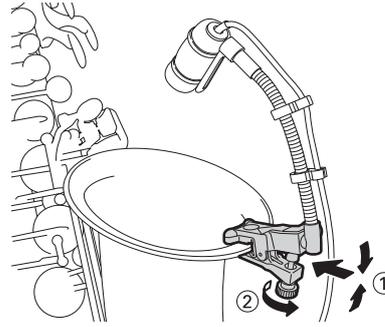


- The gooseneck can be fixed at every 90° angle.
- *1 Insert the gooseneck until it reaches the bottom of the hole on the mount. Firmly tighten the screw on the mount to secure it.
- *2 Do not force the screw if there are any foreign objects in the way. Do not use any tools to tighten the screw. Doing so could strip the threads or damage the screw.

Setting the mounts on instruments

AT8491U

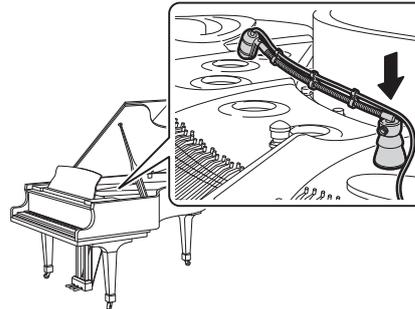
Universal clip-on mount



- To prevent damage to the instrument, take care not to tighten the screw excessively.

AT8491P

Piano mount

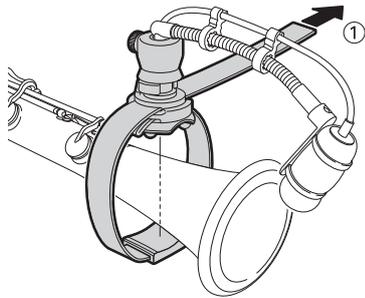


- The mount should be fixed on a metal surface. Keep mobile phones, analog clocks and magnetic cards etc. away from the magnet in the bottom of the mount to prevent content from being damaged or erased.

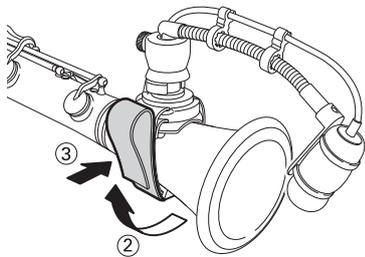
AT8491W

Woodwind mount

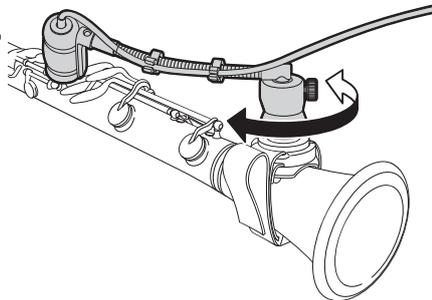
1.



2.



3.

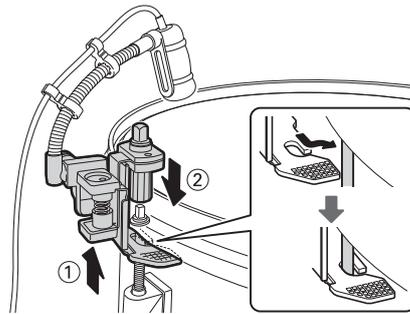


- Adjust the position of the microphone by rotating the top of the mount.

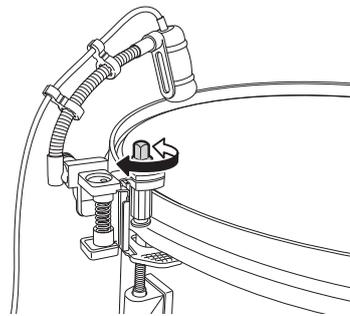
AT8491D

Drum mount

1.



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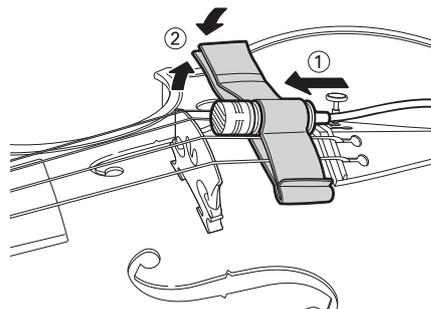


- The top bolt rotates freely to allow tuning when the microphone is mounted.

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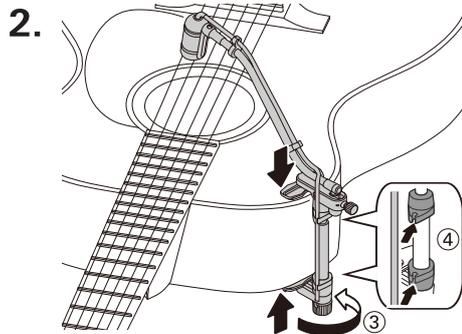
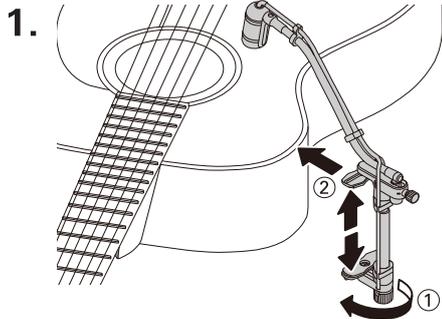
AT8468

Violin mount



AT8491G

Guitar mount

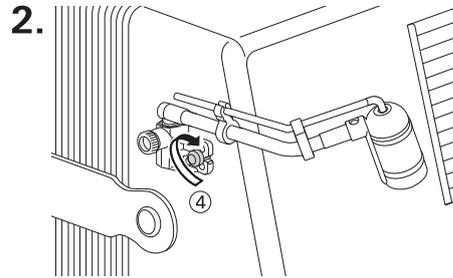
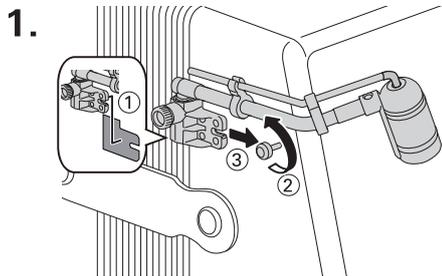


- Rotate the screw and adjust the length, and then tighten the screw to secure in place.
- To prevent damage to the instrument, take care not to tighten the screw excessively.

AT8491S

Surface mount

- When using the grill fastening screw on the accordion. Depending on the shape of the screw, it may not be possible to install in this way.

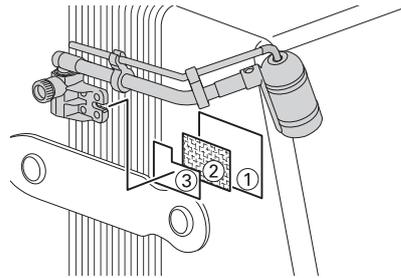


- Affix the adhesive silicon pad to the back side of the mount. Loosen the grill fastening screw on the accordion, insert the mount, and then tighten the grill fastening screw to secure in place.

AT8491S

Surface mount

- When using surface fasteners



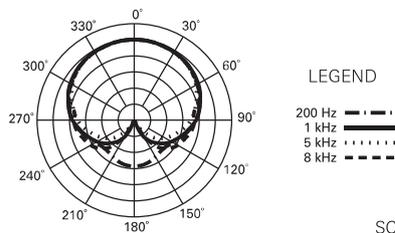
- Affix the transparent protective film (①) to the body of the instrument, and affix a surface fastener tape pad (②) on top of that. Also affix a mount fastener tape pad (③) to the back side of the mount, and then affix it to the surface fastener on the body of the instrument to secure in place.
- Affix the transparent protective film on a clean, flat surface so that air bubbles do not form.
- You cannot affix the transparent protective film on unfinished wooden parts.
- To stabilize the adhesive strength of the adhesive sides of the surface and mount fasteners (②, ③), let them sit for about a day after affixing them before using the mount.

Specifications

Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	Cardioid
Frequency response	40 - 20,000 Hz
Low frequency roll-off	80 Hz, 12 dB/octave
Open circuit sensitivity	-49 dB (3.5mV) (0dB=1V/Pa, 1 kHz)
Impedance	200 ohms
Maximum input sound level	159 dB SPL (1 kHz THD 1%)
Dynamic range	130 dB (1 kHz at Max SPL)
Signal-to-noise ratio	65 dB (1 kHz at 1Pa, A-weighted)
Phantom power requirements	11 - 52 V DC, 3.5 mA
Switch*	Flat, roll-off
Weight	Microphone: 14.5 g (0.5 oz), Power module: 90 g (3.2 oz)
Dimensions	Microphone: 37.8 mm (1.49") long, 12.2 mm (0.48") diameter Power module: 92 mm (3.62") long, 18.9 mm (0.74") diameter
Output connector	Power module: Integral 3-pin XLRM-type
Cable(s)	4.0 m (13.1') long (permanently attached to microphone), 3.2 mm (0.13") diameter, 2-conductor shielded cable with HIROSE HR10-type connector
Optional interchangeable elements	UE-O omnidirectional, UE-H hypercardioid
Accessories	AT8543 power module, microphone instrument mount, AT8468 violin mount, hard shell carry case

- Characteristic weighting measured when connected to an AT8543 power module.
 - 1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL
 - For product improvement, the product is subject to modification without notice.
- * Mounted on an AT8543 power module.

Polar pattern



Frequency response

40-20,000 Hz

