### ATR2100-USB



### Instruction Manual

ATR2100-USB Cardioid Dynamic USB/XLR Microphone

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# **audio-technica**

### Compliance with FCC rules (USA only)

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.

### FCC WARNING

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

### Canada only

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme á la norme NMB -003 du Canada.

Thank you for buying the Audio-Technica ATR2100-USB cardioid dynamic USB/XLR microphone. Equipped with both USB and an XLR outputs, this digital/analog mic is designed both for live performance and digitally capturing music or any acoustic audio source using your favorite recording software.

The ATR2100-USB offers high-quality articulation and intelligibility perfect for home studio recording, field recording, podcasting, voiceover, and on-stage use. Its cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source.

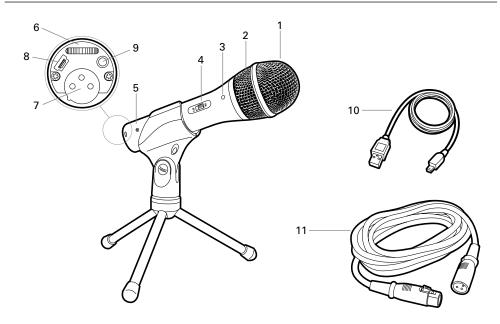
The microphone also features a built-in headphone jack with volume control that allows you to directly monitor your microphone's output during recording. The microphone's focused pickup pattern delivers excellent off-axis rejection, while its A/D converter with a 16-bit, 44.1/48 kHz sampling rate ensures clear, articulate sound reproduction.

Audio-Technica's state-of-the-art design and manufacturing techniques ensure that the microphone complies with the company's renowned consistency and reliability standards.

#### Features

- Handheld dynamic microphone with USB digital output and XLR analog output
- USB output connects to your computer for digital recording, while the XLR output connects with your sound system's conventional microphone input for use in live performance
- Smooth, extended frequency response ideally suited for podcasting, home studio recording, field recording, voiceover, and on-stage use
- Built-in headphone jack allows you to directly monitor your microphone's output without audible delay
- Adjust headphone volume with easy-to-use controls on the bottom of the microphone
- High-quality A/D converter with 16-bit, 44.1/48 kHz sampling rate
- Compatible with Windows and Mac
- Low-mass diaphragm provides excellent frequency response
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source
- Tripod desk stand with folding legs for secure and easily portable tabletop use
- Pivoting, threaded stand mount attaches securely to the supplied tripod or to a conventional microphone stand
- USB and XLR cables included
- Durable metal construction for long-lasting performance
- On/off switch functions for both USB and analog operation

# ATR2100-USB



- 1. **Windscreen**–Multi-stage grille design offers excellent protection against plosives and sibilance without compromising high-frequency clarity
- 2. Capsule–Dynamic microphone element with cardioid polar pattern
- **3. Blue LED**-Blue light shows mic is receiving USB power (**Note**: The blue LED is not affected by the on/off switch position)
- 4. ON/OFF switch–Functions for both USB and analog operation
- 5. Metal construction-Tough, durable, resilient design
- 6. Headphone level control-Up/Down dial controls headphone volume
- XLR connector–XLR connector with analog output for connection to PA system's conventional microphone input
- 8. USB-USB connector for connection to your Mac or PC
- 9. Headphone Jack-1/8-inch (3.5mm) stereo jack for connecting your headphones
- 10. USB cable
- 11. XLRM to XLRF cable

### Setting up your microphone with included pivot mount and tripod desk stand

- A. Screw the pivot mount microphone mount onto the threaded portion of the desk stand.
- **B.** Extend the tripod legs to provide a wide, secure base, and place the tripod desk stand on a flat surface.
- B. Install the ATR2100-USB microphone into the microphone mount, with ON/OFF switch up
- **C.** The top of the microphone should be facing the sound source.
- D. Use a screwdriver or coin to loosen and tighten the pivot screw for angle adjustment.
- **E.** Plug the provided USB cable into the USB output at the base of the microphone, or plug the provided XLR cable into the microphone input of your sound system.

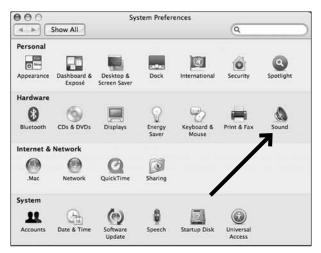
**Note:** Many recording software programs are available online. Audacity is widely used free software for recording and editing sounds. It is available online at http://audacity.sourceforge.net/

# Preliminary setup with Mac OS X

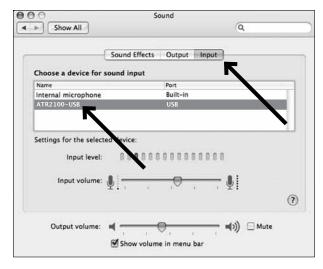
- Plug the free end of the provided USB cable into the USB port on your computer. The microphone's blue LED will illuminate, indicating the microphone is receiving power. Your computer will automatically recognize the USB device and install a driver.
- 2. To select the ATR2100-USB as your audio input, first, open your System Preferences.

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3. Next, click Sound to display the Sound preference pane.



4. Click the Input tab and select the ATR2100-USB as the device for sound input.



Your preferences are now set to use the ATR2100-USB on your Mac with GarageBand or another recording program of your choice.

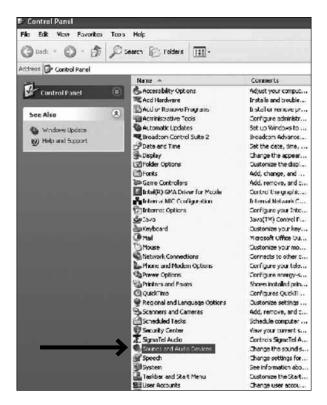
### Preliminary setup with Windows XP

(Service Pack 2; other operating systems may vary slightly)

- Plug the free end of the USB cable into the USB port on your computer. The microphone's blue LED will illuminate, indicating the mic is receiving power. Your computer will automatically recognize the USB device and install a driver.
- 2. In the lower right portion of your screen you may see a message that new hardware was found; or you may see a driver software installation notice.
- To select the ATR2100-USB as your default recording device, begin at your Start menu. Select Control Panel.

Internet Internet Explorer E-mail Microsoft Office Outlook	My Documents My Recent Documents My Recent Documents
Microsoft Office Word 2003	📄 My Music 😏 My Computer 📢 My Network Places
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4. Select Sounds and Audio Devices.



## Preliminary setup with Windows XP (continued)

- 5. Select the Audio tab, and choose ATR2100-USB as the default device.
- Adjust computer volume by clicking on the Volume button beneath Sound recording Default device.

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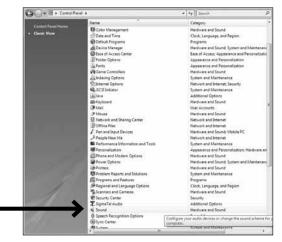
7. Through the Wave In window, you can set the computer volume or mute the microphone.

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Options Help
Wave In
Balance: B 4
Volume:
-   -
Mute all
ATR2100-USB

Your preferences are now set to use the ATR2100-USB with Windows XP with the recording program of your choice.

### Preliminary setup with Windows Vista

- Plug the free end of the USB cable into the USB port on your computer. The microphone's blue LED will illuminate, indicating the mic is receiving power. Your computer will automatically recognize the USB device and install a driver.
- In the lower right portion of your screen you may see a message that new hardware was found; or you may see a driver software installation notice.
- To select the ATR2100-USB as your default recording device, begin at your Start menu. Select Control Panel.
- 4. Select (double-click) Sound.



 Select the Recording tab. Make sure that the AT2100-USB microphone is set as the default recording device. (You should see a green check mark beside the USB microphone icon.)

*	Microphone		=
4	SigmaTel C-Major Aud Working		
1	Microphone	•	
-	Working		

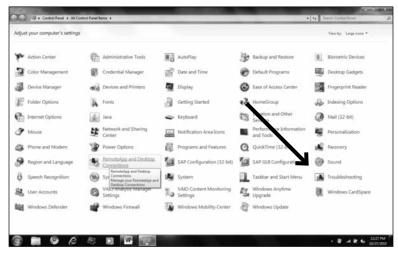
Your preferences are now set to use the ATR2100-USB with Windows Vista with the recording program of your choice.

### Preliminary setup with Windows 7

- Plug the free end of the USB cable into the USB port on your computer. The microphone's blue LED light will illuminate, indicating the mic is receiving power. Your computer will automatically recognize the USB device and install a driver.
- In the lower right portion of your screen you may get a message that new hardware was found; or you may see a driver software installation notice.
- Start menu > Control Panel > Sound To select the ATR2100-USB as your default recording device, begin at your Start menu. Select Control Panel.

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2	isco AnyConnect VPN Client	Mike Edwards
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	Aicrosoft Excel 2010	Pictures
	dobe Reader 9	Music
	otus Notes	Computer
	Tunes	Control Panel
Se s	nipping Tool	Devices and Printers
	Connect to a Projector	Default Programs
	Getting Started	Help and Support
A	ll Programs	2
Searc	th programs and files	9 Shut down 🔸

4. Select Sound.



5. The following screen will pop up:



### Preliminary setup with Windows 7 (continued)

- Sound
  Playback Recording Sounds Communications
  Select a recording Twice below to modify its settings:

  Microphone
  ATR-USB-Mic
  Default Device
  Default Device
  Confligure
  Set Default 
  Properties
  OK Cancel Apply
- 6. Select the Recording tab, and choose ATR-USB Mic as the default device.

 Double click on the ATR-USB-Mic icon to open the Microphone Properties window. Select the levels tab to adjust microphone level (loudness). You may need to come back to this window to readjust the level after you begin recording.

ncements Advanced
53 (1)
0.0 dB

Your preferences are now set to use the ATR2100-USB with Windows 7 with the recording program of your choice.

# **Additional Information**

### Using headphones

The 1/s" (3.5 mm) headphone jack on the bottom of the microphone allows you to directly monitor your recording with a pair of headphones. When your preliminary setup is completed, and your USB microphone is connected to your computer's USB port (the microphone's blue LED is illuminated), plug your headphones into the headphone jack on the bottom of the microphone. While talking into the microphone, you should hear yourself in the headphones. Adjust the volume up or down by rotating the the Up/ Down dial on the bottom of the microphone. **Note:** The Up/ Down dial only adjusts the volume of the microphone output; it does not adjust the microphone level.

#### Selecting software

You have many choices in recording software. Audacity, available for free online at http://audacity.sourceforge.net/, is a widely used software program that provides basic recording software.

### Setting your software levels

Correct adjustment of microphone level is important for optimum performance. Ideally, the microphone level should be as high as possible without overloading the input of your computer. If you hear distortion, or if your recording program shows levels that are consistently overloaded (at peak levels), turn the microphone volume (or level) down, either through your control panel (or system preferences) settings, or through your recording software. If your recording program shows insufficient level, you can increase the microphone gain either from the control panel (or system preferences) settings or through your recording program.

No further microphone level adjustments should be needed, as long as the acoustic input does not change significantly.

#### Positioning your microphone

It is important to position the microphone directly in line (on axis) with the person speaking/singing or instrument (or other sound source) to achieve the best frequency response of the microphone.

For use in speaking/singing applications, the ideal placement for the microphone is directly in front of the person speaking/singing. The same placement is optimal when miking an instrument such as an acoustic guitar, drums or piano. Experiment with different mic placements to find the best sound for your particular setup.

### **XLR** operation

For live-sound applications, connect the XLRF connector of the included XLR cable to the XLRM output on the bottom of the microphone; connect the cable's XLRM connector to a standard XLRF microphone input on your mixer. Turn the microphone's ON/OFF switch to the "ON" position. Set the microphone's level by following the instructions included with your mixer. **Note:** The ON/OFF switch does not affect the LED.

### Protecting your microphone

Take care to keep foreign particles from entering the windscreen. An accumulation of iron or steel filings on the diaphragm, and/or foreign material in the windscreen's mesh surface, can degrade performance.

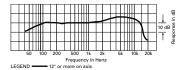
# ATR2100-USB Specifications<sup>†</sup>

Element: Dynamic Polar Pattern: Cardioid Frequency Response: 50 – 15,000 Hz Power Requirements: USB Power (5V DC) Bit Depth: 16 bit Sample Rate: 44.1 kHz/48 kHz Controls: On/off switch; headphone volume control Weight: 268 g (9.5 oz) Dimensions: 183.0 mm (7.20") long, 51.0 mm (2.01") maximum body diameter Output Connector: USB-type/XLR-type Headphone Output Power: 10 mW @ 16 ohms Headphone Jack: 3.5 mm TRS (stereo) Accessories Included: Stand clamp for <sup>5</sup>/<sub>8</sub>"-27 threaded stands, tripod desk stand, 2 m (6.6') mini USB cable, 3 m (9.8') XLRF-type to XLRM-type cable

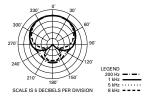
System Requirements: Macintosh: MAC OS X; USB 1.0 or 2.0; 64 MB RAM (minimum) Windows: XP/Vista/Windows 7; USB 1.0 or 2.0; 64 MB RAM (minimum)

th the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request. Specifications are subject to change without notice.

### Frequency Response



#### Polar Pattern



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# ATR2100-USB U.S. Lifetime Limited Warranty

This product is warranted in the U.S.A. by Audio-Technica U.S., Inc. (A.T.U.S.) for the lifetime of the original purchaser. During the warranty period, A.T.U.S. will repair or replace these products, provided they are sent prepaid to the address below, with proof of original purchase and \$15.00 for handling and return to a U.S. address. Check or money order required; no cash or stamps. A.T.U.S. reserves the right to replace any product with one of equal value.

Except to the extent precluded by applicable state law, A.T.U.S. will have no liability for any consequential, incidental, or special damages; any warranty of merchantability or fitness for particular purpose expires when this warranty expires. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Outside the U.S.A., please contact your local dealer for warranty details.

### Register your product at audio-technica.com

Audio-Technica U.S., Inc. 1221 Commerce Drive, Stow, Ohio 44224 USA

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To reduce the environmental impact of a multi-language printed document, product information is available online at www.audio-technica.com in a selection of languages.

Afin de réduire l'impact sur l'environnement de l'impression de plusieurs, les informations concernant les produits sont disponibles sur le site www.audio-technica.com dans une large sélection de langue.

Para reducir el impacto al medioambiente, y reducir la producción de documentos en varios leguajes, información de nuestros productos están disponibles en nuestra página del Internet: www.audio-technica.com.



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