

# ***Superlux®***

## **L401U** **LARGE DIAPHRAGM** **USB MICROPHONE**

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# L401U

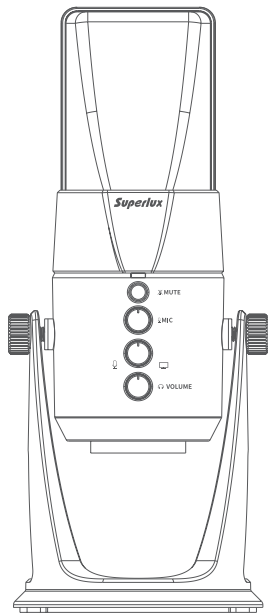
## LARGE DIAPHRAGM USB MICROPHONE

### DESCRIPTION

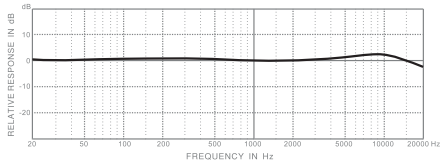
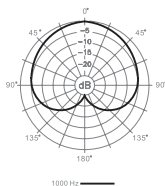
The Superlux L401U USB microphone is equipped with a 1", 3µm ultra-thin gold-plated diaphragm capsule to ensure studio-grade recording quality in any stage, even at home! The plug-and-play system can be compatible with both Windows and Mac OS system and support most of available DAW software. The equipped high quality A to D converter and USB output makes perfect recording effortless.

L401U features a zero-latency stereo headphone monitoring (3.5mm) jack to provide real-time microphone input monitoring. A direct/mixing knob allows you to adjust the monitoring level between microphone input and audio output easily.

The Superlux L401U large diaphragm microphone is a high-quality recording tool that is the right choice for any professional stage, home or studio application.



## L401U FREQUENCY RESPONSE ( CARDIOID )



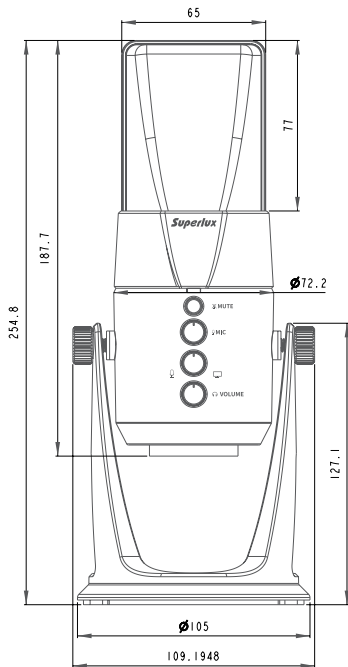
## FEATURES

- USB digital recording condenser microphone.
- Plug-and-play, compatible with Windows and Mac OS system and supports most of the DAW software.
- Ø 1", 3 $\mu$ m ultra-thin gold-plated diaphragm capsule which can capture exquisite and warm sound.
- The cardioid pickup pattern makes L401U very suitable for vocal recording, acoustic instruments and any other sources.
- The built-in headphone amplifier ensures extremely clear and rich playback details even under high volume.
- Direct monitoring provides zero-latency monitoring.
- Built-in high quality AD converter, and with 24 bit, 192 kHz sampling rate.

## SPECIFICATIONS

Type	True condenser, Ø1" ( Ø25.4 mm )
Polar Pattern	Cardioid
Frequency Response	20-20,000Hz
Sensitivity	-34 dBV/Pa ( 20mV/Pa )
Max. SPL	110 dB ( THD <1%, at 1kHz )
Power Requirement	Powered by USB ( 5V DC )
Bit Depth	24 bit
Sampling rate	192 kHz
Volume Control	Direct / mixing monitoring volume control, headphone monitoring volume control
Output jack	USB connector
Impedance	≥ 16Ω
Headphone output power	150mW ( at 1kHz, 1% T.H.D., 16Ω )
T.H.D	< 0.5% ( at 1kHz )
Headphone output jack	3.5mm stereo headphone jack
Dimensions	Ø105 × 254.8mm ( Ø4.13" × 10.03" )
Net Weight	1200g ( 42.3 oz )

\*Note:Specifications are subject to change.



Unit:mm

## FUNCTION DESCRIPTION

### **A** USB Connection indicator :

When the LED lights up, it indicates that the USB cable has been connected correctly and gotten power from USB port.

### **B** Microphone mute button :

When pressing this button, it only stops the input signal from going into the computer. If choosing "direct monitoring" when pressing the mute button, it is still able to monitor the microphone pickup signal.

### **C** Microphone gain knob :

Microphone gain knob can be used to adjust the gain of microphone.

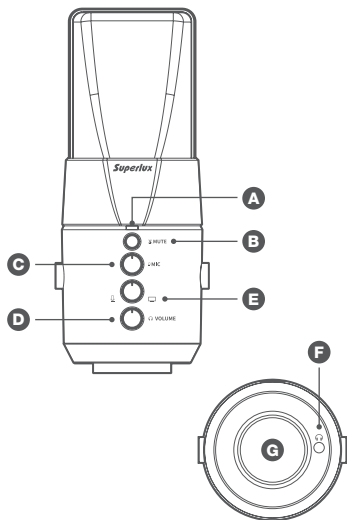
### **D** Headphone volume control :

The volume control can be used to adjust volume of the headphone.

### **E** Monitoring mixing control knob :

The monitoring mixing control knob can be used to adjust the mixing percentage between microphone direct signal and the output from recording software of computer / equipment.

**Ps.** When turning the button counterclockwise, it increases the direct signal of microphone and decreases the signal from computer / equipment. On the other hand, when turning the button clockwise, it increases the signal from computer / equipment and decreases the direct signal of microphone. It is suggested to start from the center of the knob to keep the balance between direct signal of microphone and the signal from computer / equipment.



### **F** Monitoring mixing control :

The 3.5 mm headphone output jack can be used to connect headphones or active monitoring speakers.

### **G** USB connector :

The furnished USB-B type to USB-A type connector cable can connect to any equipment with USB-A type port to record.

## SYSTEM REQUIREMENT

USB 2.0, 5V DC

## RAM :

64MB ( minimum request )

## OPERATING SYSTEM :

Microsoft Windows 10

Microsoft Windows 7 ( Service Pack 1.0 version or above )

Microsoft Windows Vista Business ( Service Pack 2.0 version or above )

Microsoft Windows XP Home/PRO ( Service Pack 3.0 version or above )

Apple Computer Mac OS X 10.7 version or above

## FURNISHED ACCESSORIES

Type B USB

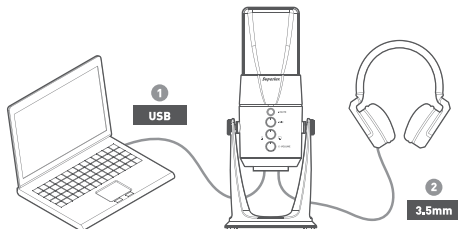
Cable ( 3m )



## INSTALLATION

The furnished 3m USB cable can connect L401U USB microphone to the computer / equipment.

The USB-B type connector of the cable can be attached on the USB microphone. The USB-A type connector at the other end can be connected to the general USB port with power supply.



※Notice : The USB port of computer should supply 5V power.

## QUICK START

1

Put the L401U on the desk surface. Turn the side of L401U with Superlux trademark and LED indicator to the source. Adjust the grille to face the sound source directly.

2

Connect the USB-B type connector of the USB cable to the USB port at the bottom of L401U. Connect the USB-A type connector at the other end of the USB cable to the USB port of computer.

※Notice : Please make sure that the operating system ( MAC OS or Windows ) pop up the information window to notice the USB audio software has been found.

3

Turn on the application software / music recording software. Turn off the master output into mute condition. Then select the "Superlux L401U" as the input port.

4

Set a new MONO track in the recording software.

5

Adjust the volume of microphone.

### Windows operating system

Proceed the recording in DAW recording software. Or enter into the Control Panel / Sound / Play Sound playback to find "Superlux L401U".

### MAC OS operating system

System Preferences / Sound System Preferences / Sound dialog box. Set the input volume level.

6

Set the input volume level at 50% position. Then adjust the gain knob on the microphone to control the input volume.

7

Connect the headphone into the headphone output connector of L401U. Adjust the L401U USB Microphone directly to the source, then increase the volume to the suitable level.

※Notice : If you hear the distortion, it means the input is overloaded. Please lower the volume until no distortion.

Now you can start recording in the recording software, or follow instruction from other communication application software with L401U.

※Notice : If you feel the volume too loud or not enough after adjusting the gain knob of microphone, please check your recording system or refer to the "troubleshooting" of this manual to solve the problem.

## USB AUDIO EQUIPMENT DRIVER

If you encounter a problem, please check whether driver has been setup successfully. If not, you can download at [www.superlux.com.tw](http://www.superlux.com.tw)

## WINDOWS OPERATING SYSTEM

The screenshot shows the Windows Control Panel window for 'Hardware and Sound'. The left sidebar lists various system settings, with 'Hardware and Sound' selected. The main content area displays several categories: 'Devices and Printers', 'AutoPlay', 'Sound' (highlighted), 'Power Options', 'Windows Mobility Center', 'Pen and Touch', 'Infrared', and 'Tablet PC Settings'. Each category includes a list of links to specific configuration options.

Hardware and Sound

← → ↕ ⌕ > Control Panel > Hardware and Sound

Control Panel Home

System and Security

Network and Internet

- **Hardware and Sound**

Programs

User Accounts

Appearance and Personalization

Clock and Region

Ease of Access

**Devices and Printers**  
Add a device | Advanced printer setup | Mouse | Device Manager |  
Change Windows To Go startup options

**AutoPlay**  
Change default settings for media or devices | Play CDs or other media automatically

**Sound**  
Adjust system volume | Change system sounds | Manage audio devices

**Power Options**  
Change battery settings | Change what the power buttons do | Change when the computer sleeps |  
Adjust screen brightness | Choose a power plan

**Windows Mobility Center**  
Adjust commonly used mobility settings | Adjust settings before giving a presentation

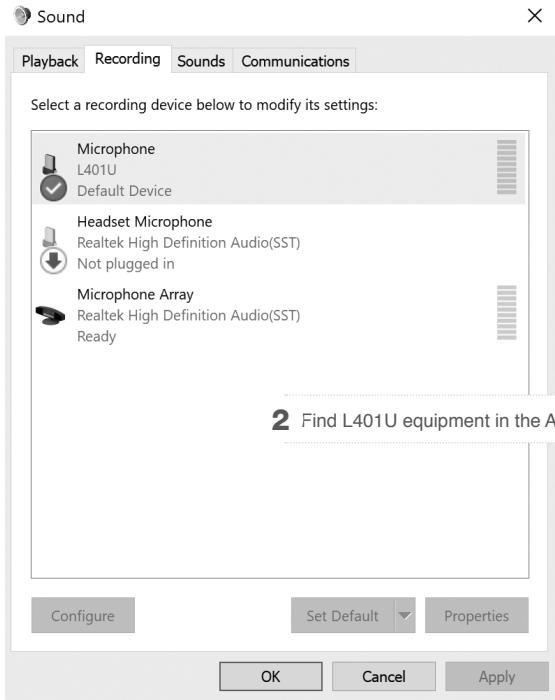
**Pen and Touch**  
Change tablet pen settings | Turn flicks on and off | Set flicks to perform certain tasks |  
Change touch input settings

**Infrared**  
Send or receive a file

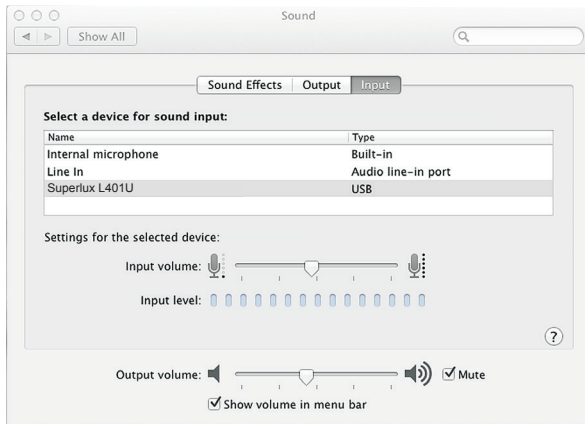
**Tablet PC Settings**  
Calibrate the screen for pen or touch input | Set tablet buttons to perform certain tasks |  
Choose the order of how your screen rotates | Specify which hand you write with

**1** Click "Sound" at the control panel.

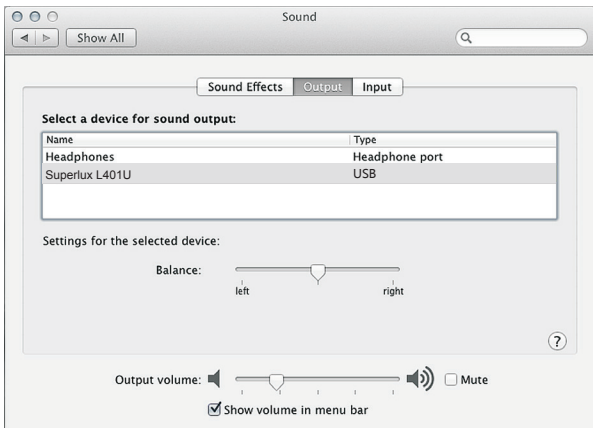




## MAC OS OPERATING SYSTEM



- 1 Open the sound setting window from the system setting.



**2** Choose L401U at the tabs of input and output.

## TROUBLESHOOTING

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Problem	Solution
No output from headphone.	Check the volume of headphone and microphone volume control.
The volume of microphone is not enough.	Adjust the microphone gain knob on L401U first. If the volume still not enough, please refer to the adjustment as below : <b>Windows operating system :</b> Control Panel / Sound and Audio Devices / Audio tab / Recording, click "Volume" to adjust the microphone gain. <b>MAC OS system :</b> System Preferences / Sound / Input tab, adjust the input gain.
The volume of headphone is not enough.	First, adjust the volume control knob of headphone. Please follow the below steps if the volume is still not enough: <b>Windows Operating system :</b> Control Panel / Sound and Audio Devices / Audio tab / Sound Playback / Click "Volume" to adjust the output volume of headphone. <b>Mac OS Operating system :</b> System Preferences / Sound / Output tab to adjust output volume.

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## KNOWING YOUR MICROPHONE

### Type of transducer



#### Condenser

With an extremely light weight diaphragm, it is very sensitive to sound. Very small versions are available for hidden applications. High performance condenser microphones are regarded as standard equipment in recording studios for extreme detail capturing. They operate with phantom or battery power.

### Type of directivity



#### Cardioid

It picks up most signal on axis, rejects side noise, and picks up least to the back. It is suitable for live sound reinforcement. With its apparent proximity effect, most singers like to take advantage of the bass boost but cardioid mics are not good for speech.



**WARNING! INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH IF MISHANDLED COULD RESULT IN DEATH OR SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE.**

- ※Do not expose the unit to rain or an environment where it may be splashed by water or other liquids as doing so may result in fire or electric shock.
- ※Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
- ※Do not subject to extreme force and do not pull on the cable, it might cause the product failures.
- ※Keep this product and the equipment which used together dry and avoid to exposure to extreme high temperature and humidity.



## LIMITED WARRANTY

For compliance with the instructions which record in the user manual, Superlux Enterprise provide one year period warranty for all material and producing quality from purchase date. This warranty term will adjust according to different country or area. Please contact local distributor to receive more information. In the validity period, if there's any material, producing quality, or any function unavailable, Superlux will repair or replace the parts. This warranty is only for the product which selling by distributor or agent which authorized by Superlux. However, the situation below is excluded in the warranty : The damage which caused by accident, abuse, improper instructions, self-modification and repair, or damage from transportation, not complying with the instructions which record in the manual, repair by the company which didn't authorized by Superlux Enterprise, request by distributor without authorized, or the serial number sticker on Superlux product is unidentified, modified, or removed. All repair of Superlux products can only accept from repair centre, distributor or agent which authorized by Superlux. Unauthorized repair, maintenance and modification will not receive relevant warranty and will be excluded in the warranty. Any repair guarantee under warranty need to provide selling receipt from authorized distributor or agent to make sure your Superlux product still in the warranty period. To obtain the original authorized repair warranty, please contact authorized distributor, agent or send an e-mail to [support@superlux.com.tw](mailto:support@superlux.com.tw) to contact us.