



PAR Clear Lane Audio Interface (LAI) Installation Guide



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LAI Installation

Tools and Materials Required*

**Assuming Digital Microphone, Speaker, Basestation, Transceiver, POE, and Network Cable have been installed already.*

- Basic tool kit- screwdrivers, zip ties, hand drill (as needed)
- Mounting tape (recommend SCOTCH-MOUNT EXTREME DOUBLE-SIDED MOUNTING TAPE)



Pre-Installation

Prior to installation, ensure the LAi connects to the system by testing it prior to installation. *(Take note of the MAC ID of the LAi for systems that use multiple LAis to ensure correct lane assignment and faster installs during portal configuration. Mac IDs are located on the LAi label or on the DT Cloud portal under "LAI-Device ID")*

DHCP Networks

The LAi comes with a default static IP of 192.168.99.3. Use a computer with the same network range (example Windows 11) connected to the same POE switch as the LAi. To set it for DHCP, open 'Windows Powershell' and SSH into the LAi using the following prompts with the current IP address of the LAi: **(A successful message of DHCP enabled for eth0 will display if done correctly)**

1. `ssh debian@192.168.99.3`
2. enter in password : (get PW from PAR) and type **yes** if prompted
3. `sudo /usr/bin/set_ip_address.sh -h -c eth0`
4. **After successfully changing to DHCP, it will state:**
`"Deleted /etc/systemd/network/01-eth0.network and enabling DHCP for eth0.
DHCP has been enabled for eth0"`

Static Networks

Obtain the required IP address, gateway, and DNS servers from the customer's technical team. **Ensure the basestation is on the same network range.** The LAi comes with a default static IP of 192.168.99.3. Use a computer with the same network range (example Windows 11) connected to the same POE switch as the LAi.

1. `ssh debian@192.168.99.3`
2. Enter the password (get PW from PAR) and type **yes** if prompted

3. Enter in new static network information by using command, and enter in same password as needed: (example only)
`sudo /usr/bin/set_ip_address.sh -i 192.168.1.XXX -s 255.255.255.0 -g 192.168.1.1 -d 8.8.8.8 -e 1.1.1.1 -c eth0`
4. If it was successful, you will get the message: "Network configuration for eth0 has been updated."

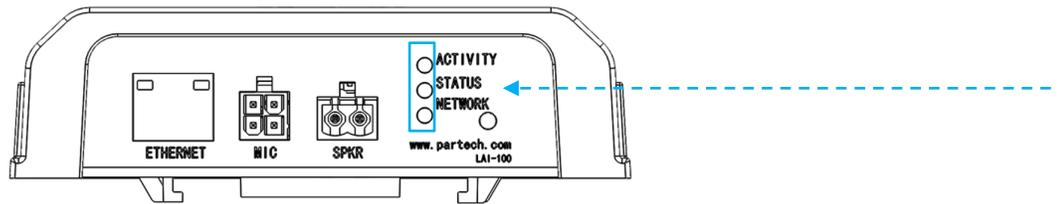
** To get more information on the commands type in : `sudo /usr/bin/set_ip_address.sh`, and enter in the same password: (example below)

Usage: /usr/bin/set_ip_address.sh -i <IP_ADDRESS> -s <SUBNET_MASK> -g <GATEWAY> -d <DNS1> -e <DNS2> -c <CONNECTION_NAME>

Verification

After configuring the LAi per the required network settings above (assuming that the basestation has been set up correctly on the same network), proceed to check the LAi status by observing the LEDs:

1. The bottom two LEDs (NETWORK and STATUS) should be solid green
2. The top LED should be blinking orange until a Lane gets assigned in the DT Cloud



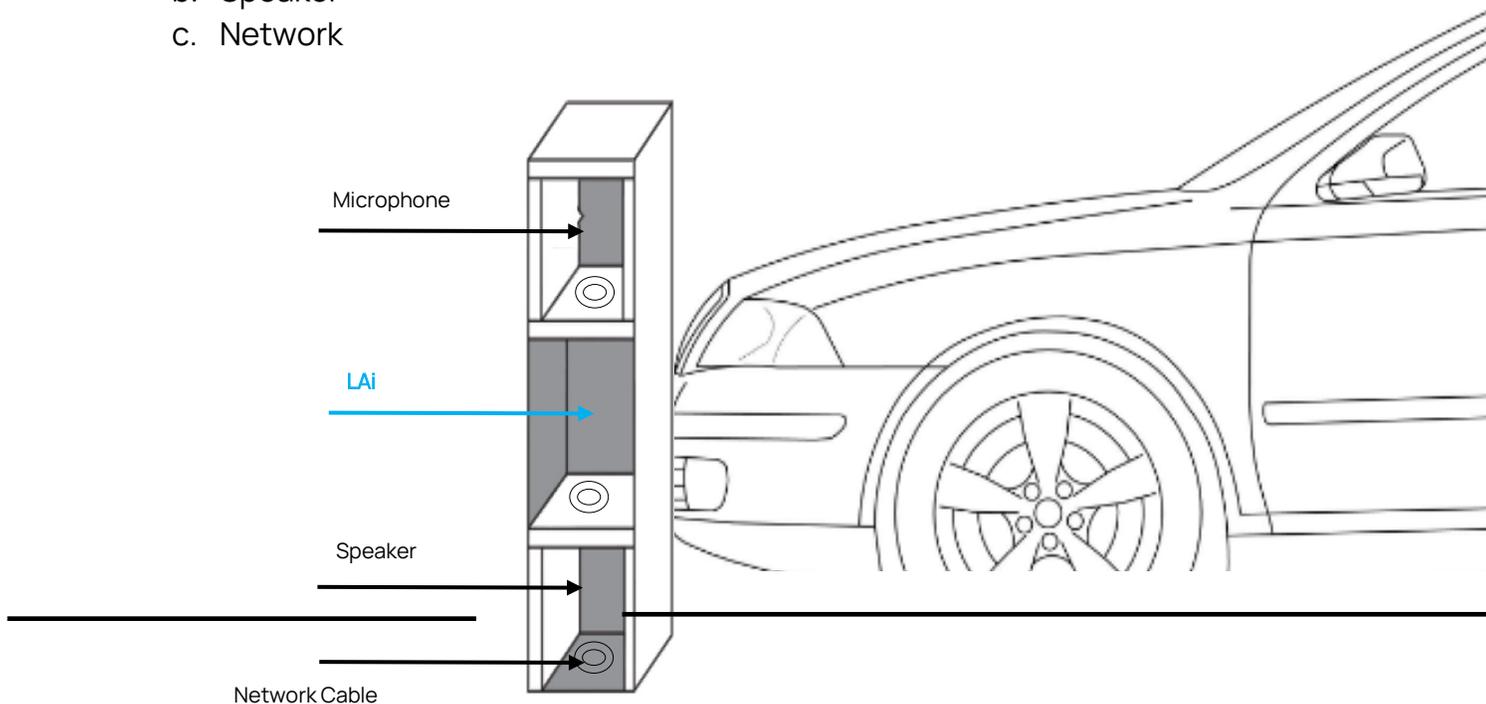
3. Proceed to log into the webpage/portal with the provided link and credentials, <https://portal.drivethru.parotech.com/>. To confirm connection, go to 'Devices' on the left panel, then select your Basestation. Click on the 'Actions' ellipsis and select 'Settings'. Go to the 'Volume & Devices' then to the 'Connected Devices' section. It should show under 'LAis', 'Connected'. Then go to the 'Actions' ellipsis, select 'Edit LAi Settings', then select the correct Lane #, and then click 'Apply Changes' (using the MAC ID that was mentioned to note during installation on page 3). This is useful when installing Drive-Thrus with multiple lanes. Click on 'Apply Changes'. All 3 LEDs of the LAi should be solid green now. You can disconnect and proceed to installation.

Designing the Installation

The LAi should be placed in the speaker post where the Digital Microphone and Speaker are located.

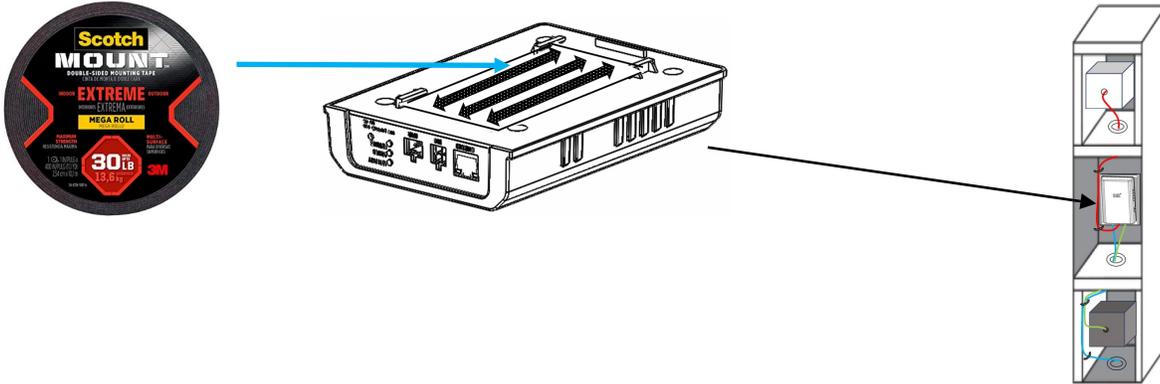
Choose the desired location for the LAi ensuring the following cables are within reach:

- a. Microphone
- b. Speaker
- c. Network



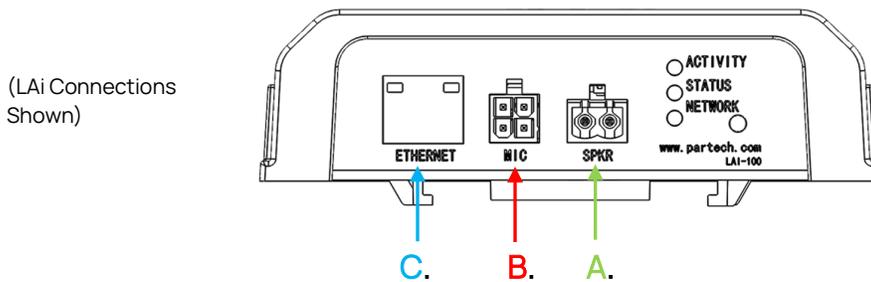
Installing the LAi

1. Using SCOTCH-MOUNT EXTREME DOUBLE-SIDED MOUNTING TAPE, cut three strips and adhere them to the back of the LAi Lane Hardware sliding plate.
2. Find the appropriate location inside the post for mounting. LAi must be mounted with the connectors facing downward to prevent water or any liquid from entering the unit.

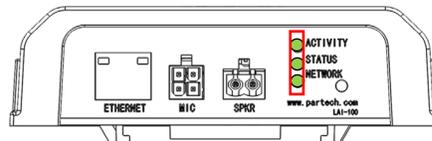


LAi Connection

1. Connect the following to the LAi (use zip tie cables where applicable):
 - A. Connect Menu Speaker **green** connector to the “SPKR” connection jack
 - B. Connect the Digital Microphone **white** connector to the “MIC” connection jack
 - C. Connect the Network Cable to the “ETHERNET” connection jack

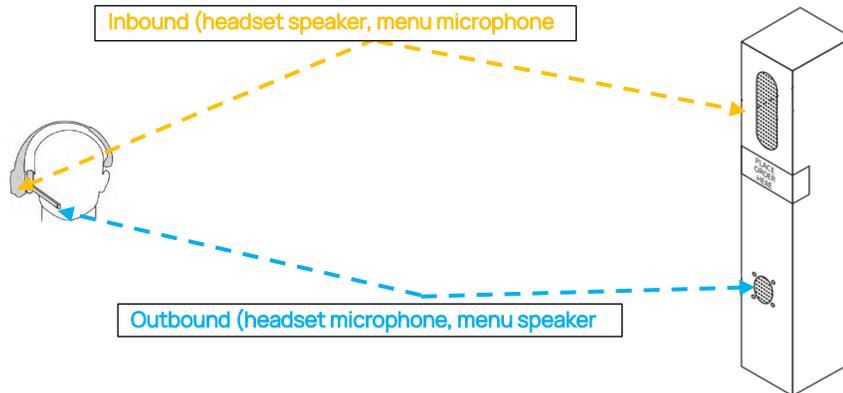


2. Ensure the Basestation, Transceiver, and POE are all powered on.
3. Once the LAi has power connected over the ethernet/network cable, all LEDs should be green.

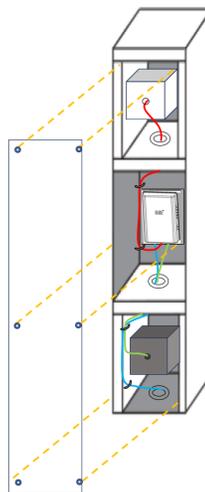


Test the LAi and Finalize Install:

1. Use a registered headset and test the audio of the LAi's inbound and outbound. Adjust the gains accordingly to the site and environment using the DT Portal. Use two people as needed. (Use the other quick reference guides as needed for the Headset, Transceiver, and Basestation and/or the Complete PAR Clear System Installation Manual)



- A. Adjust the audio out at the speaker post lane by selecting '**Volume & Devices**', then '**Volume Settings**', the '**Lane Volume**'. Adjust the '**Day Time Speaker Volume**', '**Night Time Speaker Volume**', and '**Greeter Message Relative Volume**' accordingly as needed for the corresponding Lane. Select '**Apply Changes**' when completed.
 - B. Adjust the main audio inbound for all headsets by selecting '**Headset Volume**' tab and adjust the '**Headset Speaker Baseline Volume**' as needed. Click on '**Apply Changes**' when done.
2. Confirm audio settings are acceptable and place the cover back on the speaker post to finalize the install.



LAI Specifications

Physical

Parameter	Specification or Requirement
Dimensions (l x w x d)	6 5/8" L x 4 7/8" W x 1 3/8" D
Weight	0.3 kg

Electrical

Parameter	Specification or Requirement
Input Power	PoE 802.3af, 15.4 W source
Data Connectivity	Audio over IP connection using Ethernet 10MB/100MB RJ45 Ethernet physical layer
Audio Output Power	95dB SPL (linear weighting) at 5W rated power, [1 m] 1kHz sine wave

Functional

Parameter	Specification or Requirement
Indicator	Red, Green and Blue LED
Operating Altitude	= < 2000 meters
Operating Temperature	0 to 60 C

FCC Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canada Note: CAN ICES-3 A/NMB-3 A

This device complies with part 15 of the FCC Rules and with Industry Canada license-exempt standard RSS-210 as of the date printed. Operation is subject to the following two conditions: (1) this device may cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Cet appareil est conforme avec la norme RSS-210 d'Industrie Canada exempte de licence à compter de la date imprimée. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil peut causer des interférences, et (2) cet appareil doit accepter toute interférence, y compris celles pouvant provoquer un fonctionnement indésirable de l'appareil

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Version History

Date	Version	Notes
1/8/24	A	Added document number and part# to footer of document, added pictures from photoshoot
6/24/24	B	Change to operating altitude, and 15.4W source
11/25/24	C	General formatting/layout changes
12/5/24	D	Added Static IP instructions
7/09/25	E	Removed PW, and replaced with "Please contact PAR", updates to DHCP and Static IP instructions, removed irrelevant portal screen shots