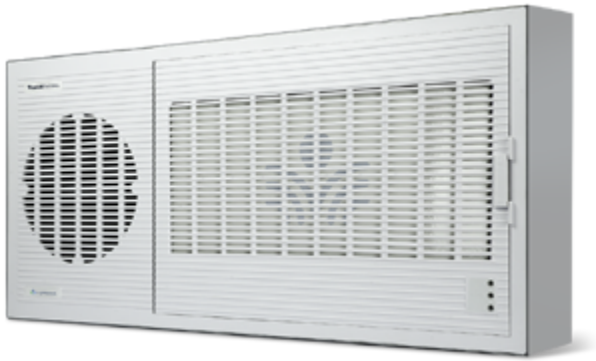
Lightspeed™

Topcat

Classroom Audio System



User Manual

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Important Safety Instructions

1. Do not use the apparatus near water.
2. Clean only with dry cloth.
3. Do not block any ventilation openings.
4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
5. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding- type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the outlet.
6. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
7. Unplug this apparatus during lightning storms or when unused for long periods of time.
8. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
9. When the mains plug or appliance coupler is used as the disconnect device, it shall remain readily operable.
10. Please keep the unit in a good ventilation environment.
11. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
12. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
13. WARNING: Battery pack shall not be exposed to excessive heat such as sunshine, fire or the like.

Important Safety Instructions (cont.)

To avoid potential equipment damage and/or serious injury, READ AND FOLLOW all safety precautions when installing the TOPCAT. WARNINGS are included throughout the procedural steps in this guide, and are repeated below for emphasis.

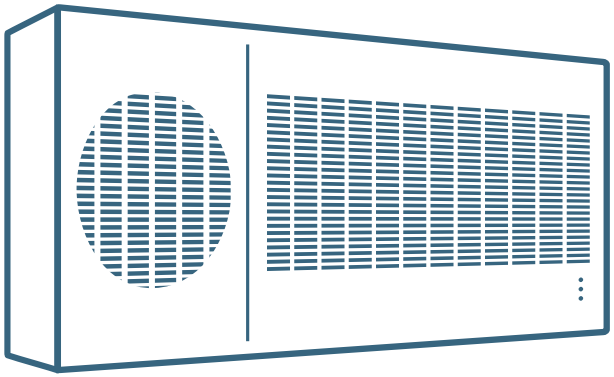
- **USE A LICENSED ELECTRICIAN FOR POWER CONNECTIONS.** The TOPCAT system uses standard 100 – 240VAC power. Obtain the services of a licensed electrician when supplying and connecting power to the ceiling enclosure. BE SURE electrical installation complies with local building codes. Improperly installing and/or connecting power to the system may result in EQUIPMENT DAMAGE, serious INJURY and/or DEATH.
- **DO NOT INSTALL ALONE.** The ceiling enclosure weighs approximately 20 lbs (9 kg), and requires at least two people to install. DO NOT install alone.
- **USE SUITABLE LADDERS.** use proper ladders or support platforms when installing the TOPCAT enclosure. DO NOT stand on chairs, tables, or other unsuitable surfaces.
- **SUPPORT THE CEILING ENCLOSURE PROPERLY. DO NOT** allow the full weight of the ceiling enclosure to rest on the tile grid of the ceiling. The ceiling enclosure is designed to be suspended at TWO POINTS by suspension wires (secured to rafters or other suitable building structure) and to rest LIGHTLY on the tile grid.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure, that may be sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

System Components and Unpacking

The standard configuration of the Topcat system includes:



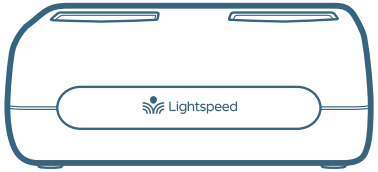
Topcat Access

Classsroom Audio System

and Power Supply

Flexmike

Teacher Microphone



Microphone Cradle Charger

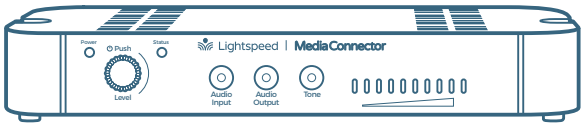
and Power Supply

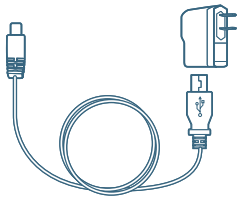
NOTE ON PAIRING: The Topcat and any wireless components (microphones, Activate Station, Media Connector) are pre-paired at the Lightspeed factory as required for proper operation. If paired components are separated and swapped during the installation process, they must be re-paired.

Lightspeed recommends that the microphone(s), Activate System, Media Connector and/or the accessory box be labeled with the room number of the Topcat for which the components are paired.

Optional Components

Optional equipment which may be part of your Topcat system



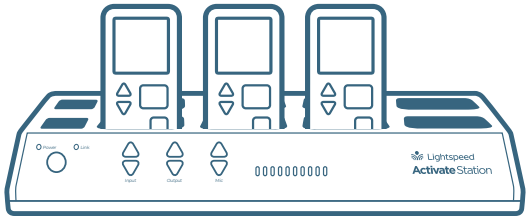


Media Connector

and Power Adapter

Sharemike

Student Microphone *(Optional)*



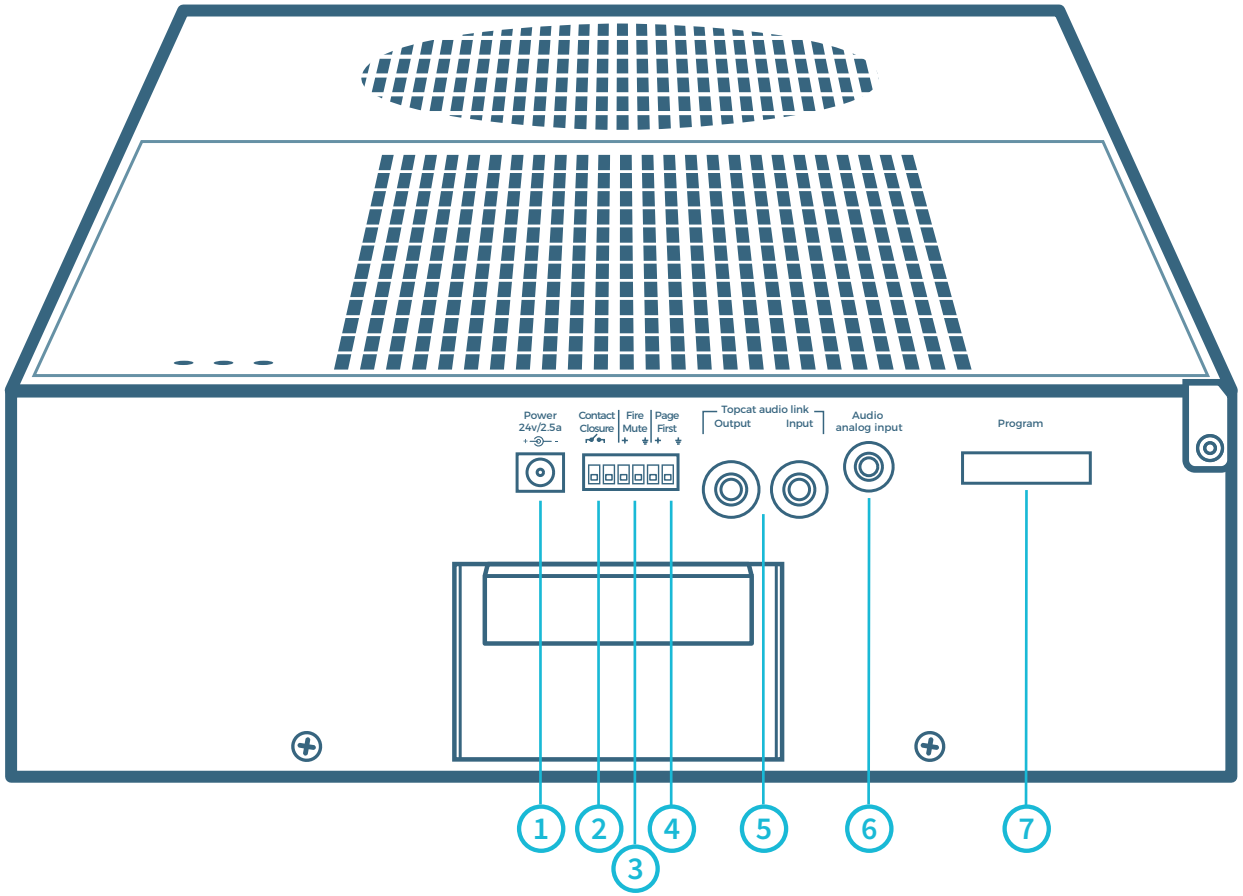
Activate System

Group Learning Pods

DC Extension Cable

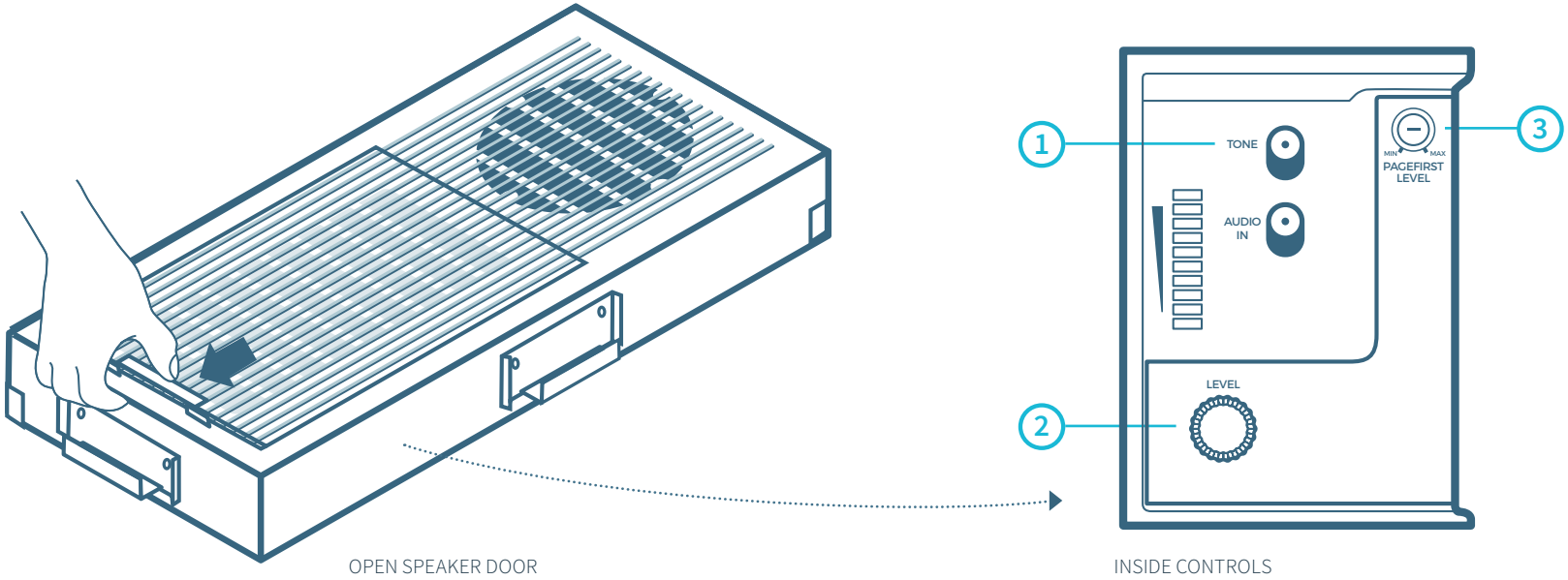
Topcat Side Panel Connections

1. **AUX POWER INPUT CONNECTOR** (optional): For use during installations where AC power is not available in the ceiling. Accepts 24VDC, 2.5A connector from an external power supply.
2. **CONTACT CLOSURE:** Internal relay contact closure to provide signal to notify external system based on user input.
3. **RELAY INPUT:** Senses external relay closure to mute Topcat audio when a signal from a fire alarm, IP paging system or other device is detected.
4. **PAGEFIRST INPUT:** Connect the input from optional PageFirst sensor when interfacing with the building's paging system. Use the ADJ control inside the speaker cavity to adjust the sensitivity if needed.
5. **TOPCAT AUDIO LINK:** Digital Audio Input and Audio Output to connect one Topcat to another.
6. **AUDIO INPUT:** This connection accepts an audio signal from other technology so all multimedia can be distributed evenly throughout the classroom
7. **PROGRAMING CONNECTION:** For factory use only.



Topcat Controls (Inside Speaker Door)

1. **TONE AND AUDIO IN SELECTOR BUTTONS:** Select tone or audio input volume for adjustment
2. **LEVEL ADJUSTMENT:** Adjusts level for tone or audio input volume depending on the mode selected.
3. **PAGEFIRST ADJUST:** Use the Adjust control to adjust the sensitivity of PageFirst if needed.



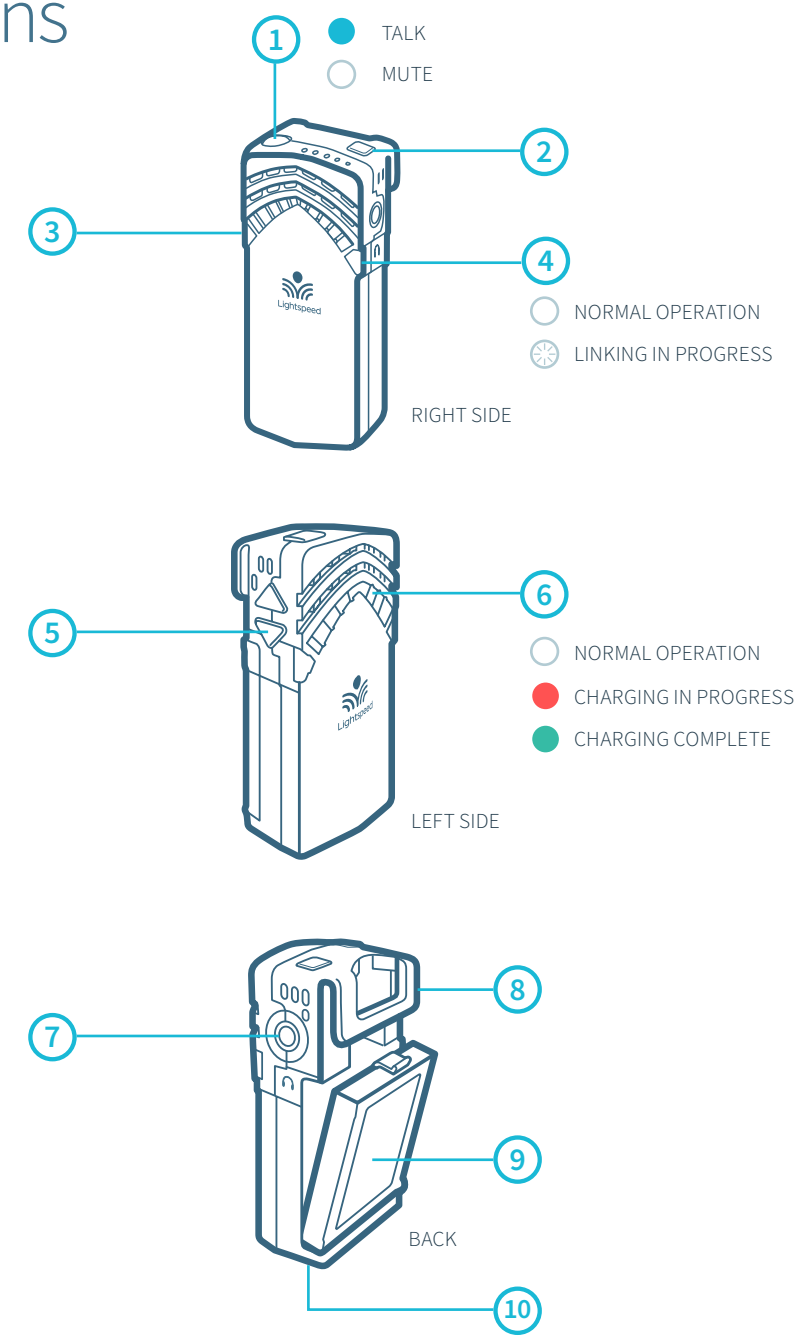
OPEN SPEAKER DOOR

INSIDE CONTROLS

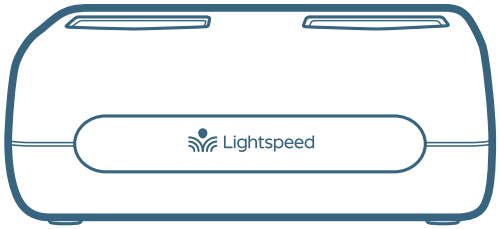
Flexmike Controls and Connections

1. **POWER/MUTE SWITCH:** Press and hold to power on, press to mute, press and hold to power off.
   Blue light: Talk
   White light: Mute
2. **IR TRANSMITTER:** For pairing to base unit.
3. **MIC 1 STATUS:** lighted to indicate microphone is registered as MIC 1
   White: solid = Normal operation
   White: flashing = Linking in progress
4. **MIC 2 STATUS:** When using a second microphone, this LED is lighted to indicate microphone is registered as MIC 2
   White: solid = Normal operation
   White: flashing = Linking in progress
5. **MICROPHONE VOLUME UP/DOWN**
6. **POWER STATUS LIGHT**
   Red light: In operation, turns red to indicate low battery.
   White light: Normal operation

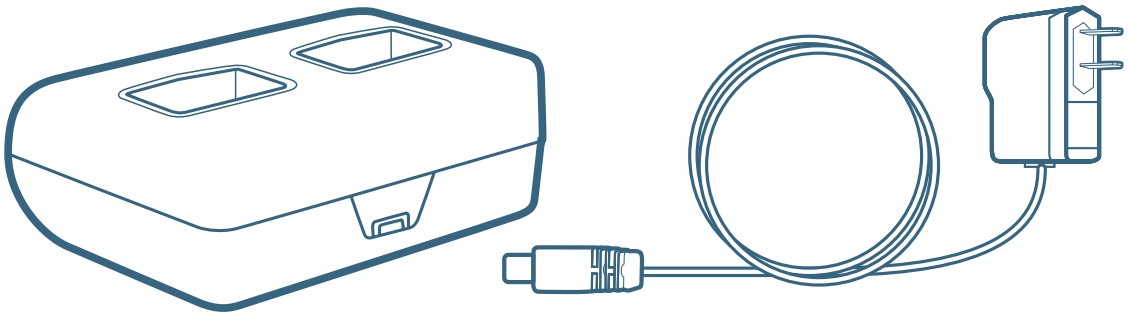
   When charging in Cradle Charger:
   Red light: Charging
   Green light: Charging complete
7. **EARBUD/MIC CONNECTION:** Connect the earbud for monitoring for use with Pods only, also for use with optional EMA (earset) and LMA (lapel) microphones.
8. **LANYARD INTERFACE:** Insert the lanyard into this hook to wear the Flexmike.
9. **BATTERY:** Remove the battery to replace the rechargeable battery pack.
10. **USB INPUT:** Connect audio source to send to Topcat. USB input can also be used for charging.



Microphone Cradle Charger



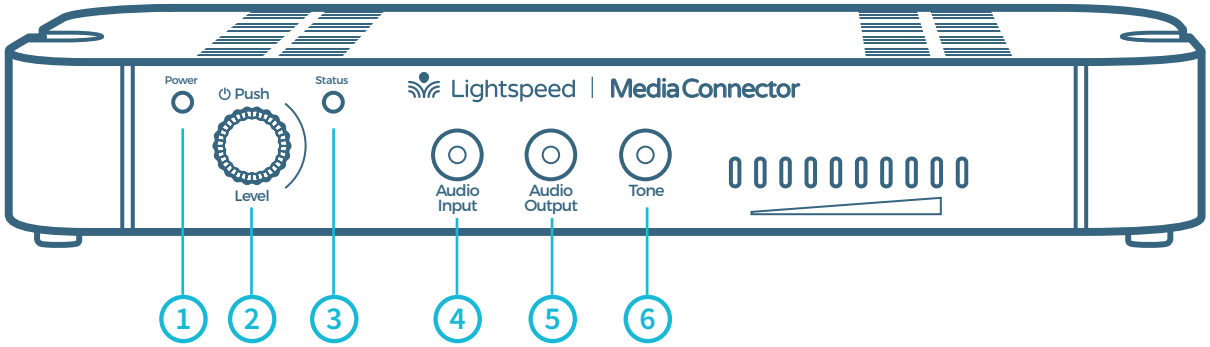
DC POWER PORT: Connect the 5V/1.0A DC power cord



Media Connector Controls and Indicators (Optional)

FRONT PANEL

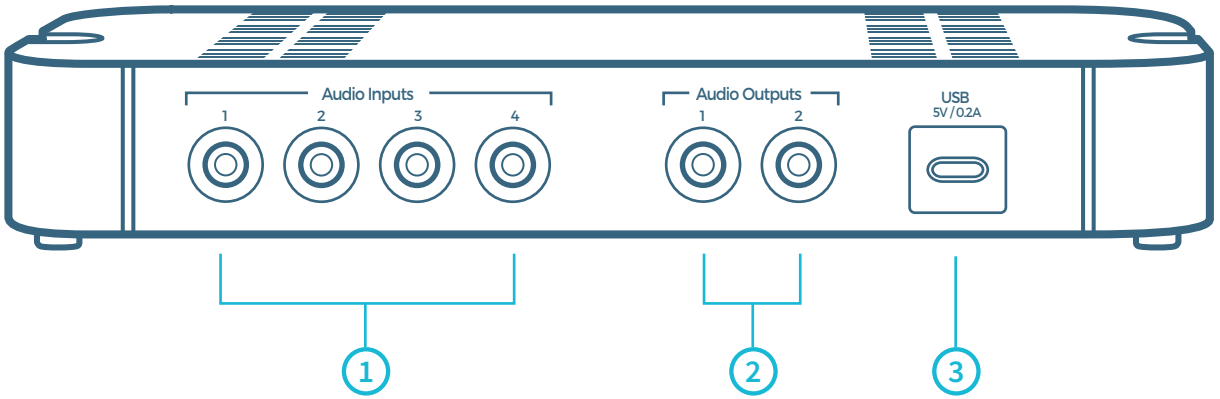
1. **POWER LIGHT**
   White light: Power on
2. **POWER BUTTON / VOLUME ADJUSTMENT:** Press this button to turn the system power on or off. This also functions as an adjustment knob for the volume and tone depending on the mode selected (see 5,6,7 below).
3. **STATUS LIGHT:** Microphone link and pair indicators.
   Blue light: Microphone(s) is paired to the system
   Off: Microphones are not paired to the system
4. **AUDIO INPUT VOLUME SELECTOR:** Selects Volume as the mode for the adjustment knob (2) for the audio sources connected to the audio inputs on the back of the Media Connector.
5. **AUDIO OUTPUT VOLUME SELECTOR:** Selects Volume as the mode for the adjustment knob (2) for the audio device connected to the audio output jack on the back of the Media Connector.
6. **TONE SELECTOR:** Selects Tone as the mode for the adjustment knob (2) for the microphone. This adjusts the bass or treble that is heard through the classroom speaker.



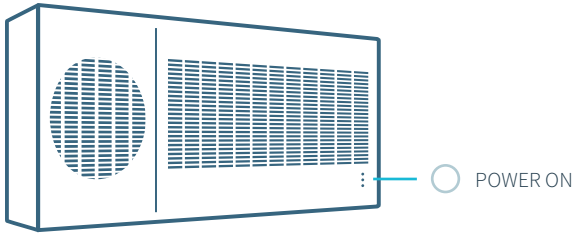
Media Connector Controls and Indicators (Optional)

BACK PANEL

1. **AUDIO INPUTS:** 3.5mm stereo connectors for connecting classroom audio sources to be played through audio system.
2. **AUDIO OUTPUTS:** 3.5mm stereo connectors for connecting to an assisted listening device (ALD) or to a computer for recording.
3. **USB INPUT:** Plug the USB-C end of the power cable into this USB port on the Media Connector.
   - The USB port supplies power to Media Connector when connected to the Media Connector power supply, or from a laptop.
   - It also acts as an input for a digital audio when connected to an audio source. Note that when the USB is used for audio input, the other four audio input jacks are not operational.



Turn Power On



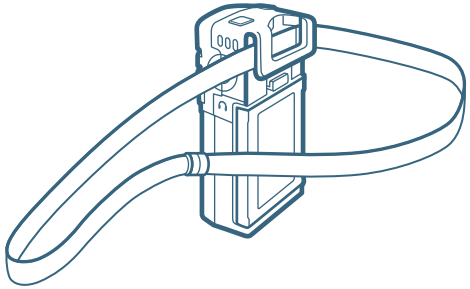
When powered on, the white LED on the Topcat speaker panel will glow. Please refer to the Topcat Installation Guide for instructions.

Set Up and Charging the Flexmike

BEFORE USE, THE FLEXMIKE SHOULD BE CHARGED

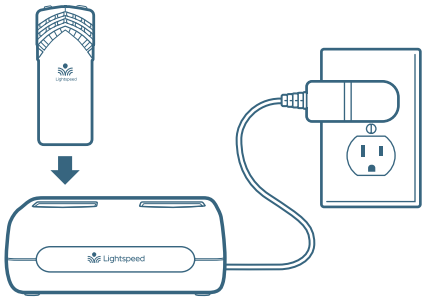
It will take 5-6 hours for the Flexmike to obtain a full charge. A fully charged Flexmike will last for up to 8 hours of use. If microphones are used daily, they should be charged each night.

Replacement lithium polymer battery packs may only be purchased through Lightspeed Technologies (part # 77-L3.7V). Do not attempt to charge with other battery packs. They can overheat and expand creating a significant hazard and damaging the microphone (this is not covered by warranty).



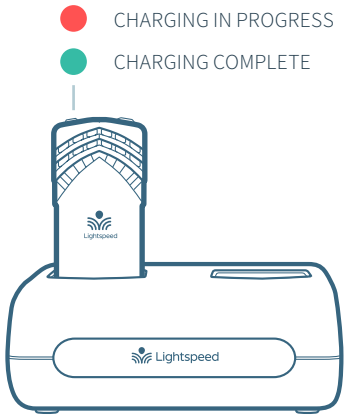
ATTACH LANYARD

Hang the Flexmike on the lanyard opposite the magnetic clasp.



CONNECT CRADLE CHARGER

Plug power cord into the cradle charger and then plug the AC end into an electrical outlet.



CHARGE FLEXMIKE

Place the Flexmike into the cradle.

The LED on the Flexmike power light will glow red indicating charging has started.

It takes about 5.5 hours to fully charge the Flexmike battery. When charging is complete, the power status light will glow green.

NOTE ON PAIRING: If Activate Station was purchased with your system, please refer to page27 for charging instructions.

Pairing Microphones to Topcat

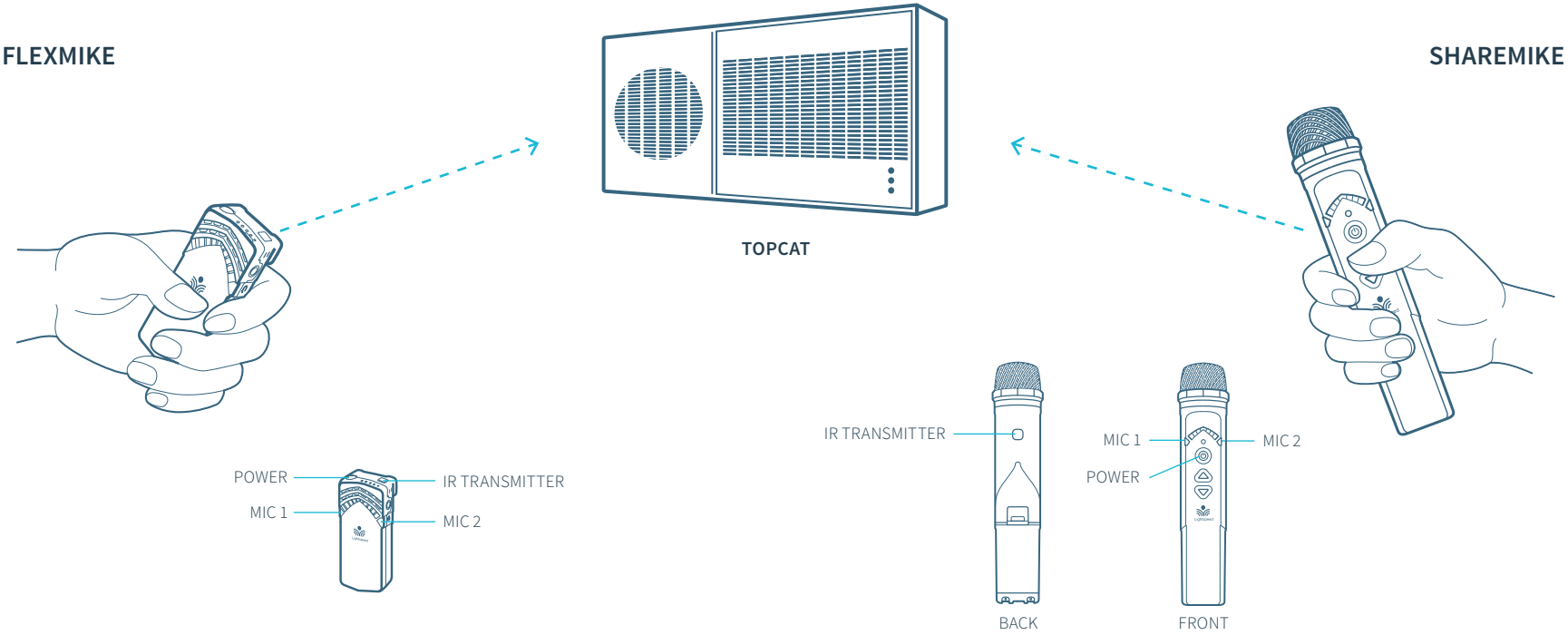
Your system is shipped with microphones and base units pre-paired for quick and easy use.

If, for any reason, you need to pair new components, follow this pairing process:

1. From a powered off state, point the IR transmitter lens toward the base unit (for Sharemike, the transmitter lens is located on the back of the microphone).

2. Press and hold the power button for 5 seconds until the mic 1 and mic 2 lights start flashing, then release the button and let the pairing process finish.

3. The ”status” light on the base unit will light up indicating the pairing process is complete. The mic 1 or mic 2 light on the microphone will stay illuminated.



Pairing Topcat to Media Connector (Optional)

Your system is shipped with microphones and base units pre-paired for quick and easy use.

If, for any reason, you need to pair new components, follow this pairing process:

1. From a powered off state, point the IR transmitter lens toward the base unit (for Sharemike, the transmitter lens is located on the back of the microphone).

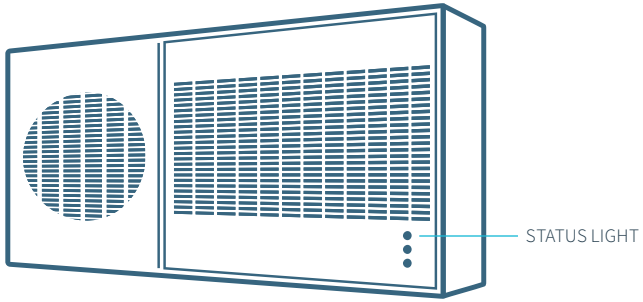
2. Press and hold the Flexmike power button for 5 seconds until the mic 1 and mic 2 lights start flashing, then release the button. At this point, the status light on Topcat will blink for 30 seconds.

   If after 30 seconds the status light blinks rapidly, you will need to start the pairing process again.

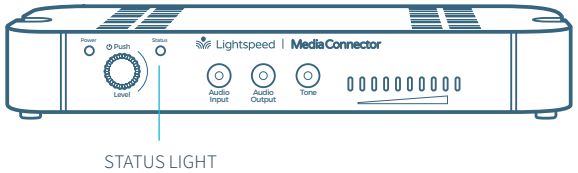
3. With the Media Connector powered off, press and hold the power button to put it into pairing mode.

   When the status lights are solid on both Topcat and Media Connector, pairing is successful.

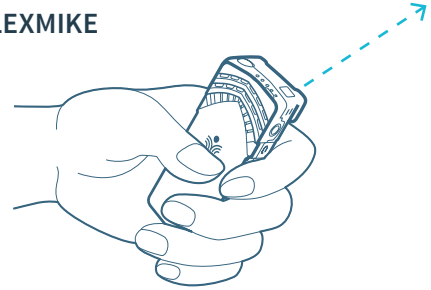
TOPCAT

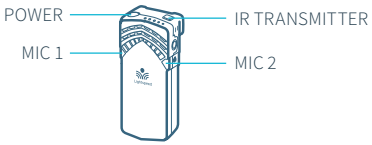


MEDIA CONNECTOR



FLEXMIKE





Optional Media Connector: Initial Set Up

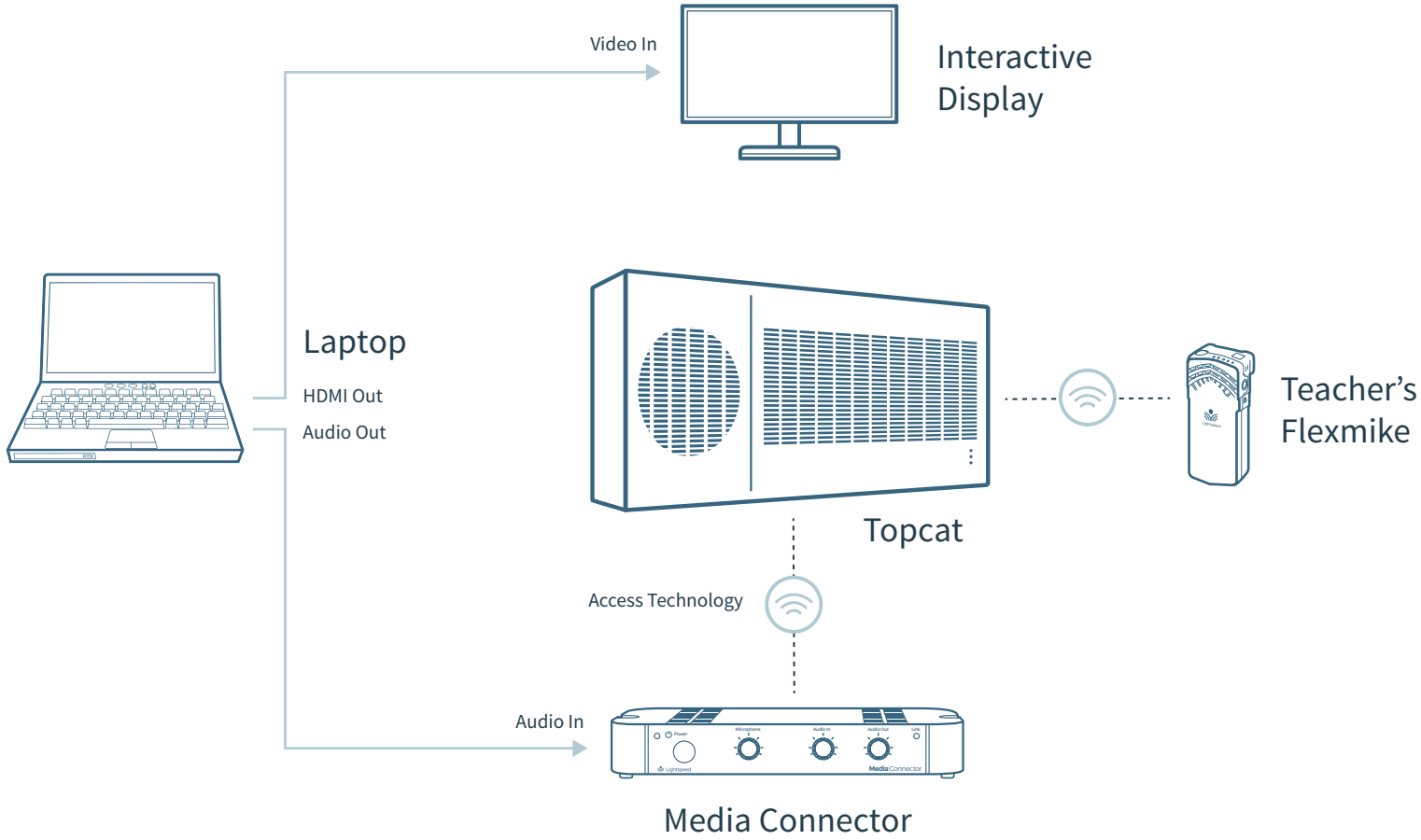
WALL MOUNT OR DESKTOP

The Media Connector can be placed on a table surface or wall-mounted.

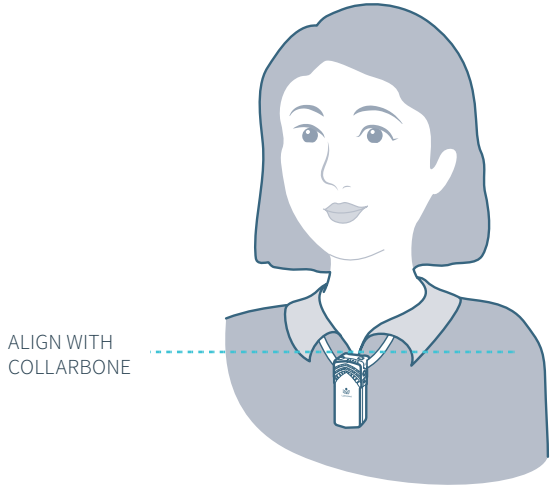
- Choose a location that is convenient to the classroom audio sources and power supply.
- It should be located 3-6 feet off of the floor to allow for good transmission.
- Do not enclose in a metal cabinet or in a location where the signal will be obstructed.

NOTE: The Media Connector does not require a direct line of sight to the Topcat. However it functions best when no obstructions are between the two devices.

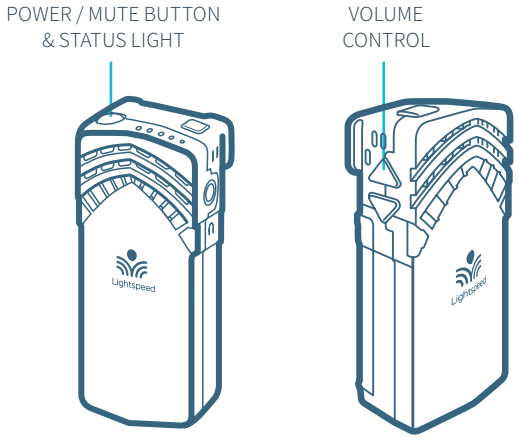
Media Connector: Audio Integration



Operating the Flexmike



1. **AT THE START OF THE DAY, REMOVE FLEMIKE FROM THE CHARGER**
   - The microphone will default to the Mute position, the status light will turn to white.
   - Place the microphone around your neck.
   - Press the power/mute button. The light will turn blue, indicating the microphone is active and ready to use.
   - Adjust volume with the UP/DOWN buttons if necessary.
   - If Flexmike needs to be powered down for some time, press and hold the power button. To power Flexmike again, press and hold the power button until the blue light begins to blink.
2. **PRIVATE CONVERSATIONS**
   - Mute the Flexmike during private conversations by momentarily pressing the power button. When muted, the blue light turns white.
   - When conversation is over, momentarily press the power button again to unmute the Flexmike.
3. **END OF DAY**
   - Place the Flexmike into the cradle charger and ensure the it is plugged in to an outlet.
   - The Flexmike will stay powered on during charging, but will automatically be muted.
   - It is not necessary to turn off the Topcat at end of day, but you may do so by pressing the power button on the front panel of the Activate or the Media Connector.
   - If you do want to power it down, when Flexmike is removed from charging the next day, it will automatically power the Topcat on.



TIPS TO OBTAIN OPTIMUM AUDIO PERFORMANCE

- Speak in a natural voice. A normal conversational speech level will provide an adequate signal. It is not necessary to increase the intensity of your voice—the audio system provides adequate amplification (approximately 5 – 10 dB) above ambient room noises.
- Avoid wearing jewelry that may rub or bump against the microphone.
- Mute the Flexmike, with a momentary press of the power button, during private conversations with a student, parent, or other classroom visitor. An additional momentary press of the power button will unmute the Flexmike.
- Recharge microphone(s) each night. When recharged nightly, the microphone will last through a typical school day.

Using Your Microphone as a Wireless Audio Link

You can connect your second (or third) microphone to your computer's USB port to enable a wireless 2-way audio link.

1

With the appropriate USB cable (USB-C for Flexmike/Sharemike) connect your microphone to your computer's USB port. This will also power/charge your microphone.

2

Open sound settings on your computer:

- Select FlexmikeAudio as the Output source to send all computer audio to the 975 system
- Select FlexmikeAudio as the Input source to use the Lightspeed microphones as the computer microphone audio for video conferencing and recording applications.

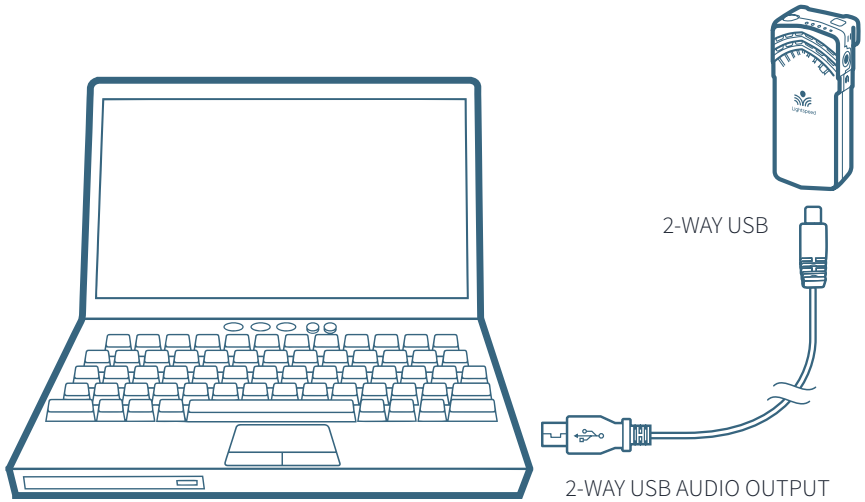
3

You may also need to select FlexmikeAudio as the speaker and microphone audio in your video conferencing application the first time you use it.

Need to edit copy for Topcat

SEND AUDIO FROM THE COMPUTER to the 975 to ensure all audio from the computer (videos, video conferencing, audiobooks, music, etc) can be played through the Lightspeed 975 system and speakers.

SEND AUDIO TO THE COMPUTER from the 975 to ensure the teacher's Flexmike and any student microphones are clearly picked up by a video conferencing solution.



Plug your external audio equipment, such as a computer, into the USB input on the bottom of the Flexmike

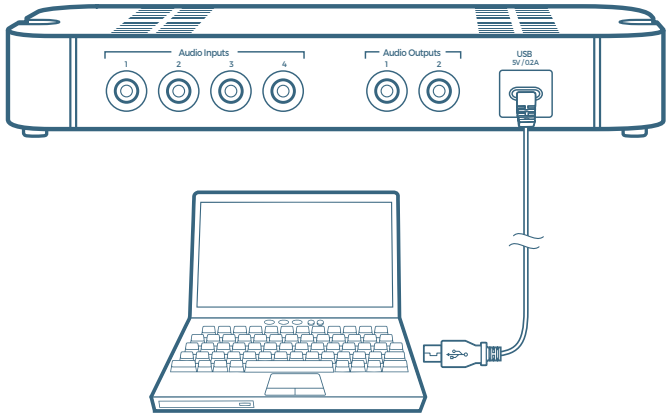
USB cable sold separately. Lightspeed offers a USB-A to USB-C cable for sale (part #USBC)

TIP: If your system includes two Flexmikes, you can use one mic for instruction and the second mic to transmit audio through the system.

Using the Media Connector

1. Plug the micro USB end of the power cable into the USB port on the back of the Media Connector. Plug the other end of the cable into the USB power adaptor. Also, the USB cable could be plugged into a computer for power.
2. Connect the audio source(s) to the Media Connector using the 3.5mm cables provided.
3. Set the audio source volume to provide sound through the Topcat Access.
4. Use the AUDIO IN volume control on the front of the Media Connector to increase or decrease the audio source sound level.

NOTE: The Media Connector can be used as the primary volume control for connected audio sources. When it is powered on and registered to Topcat, it locks out Master Volume and Tone controls on the Topcat.



USE THE MEDIA CONNECTOR AS THE MASTER AUDIO VOLUME CONTROL FOR OTHER AUDIO INPUT SOURCES

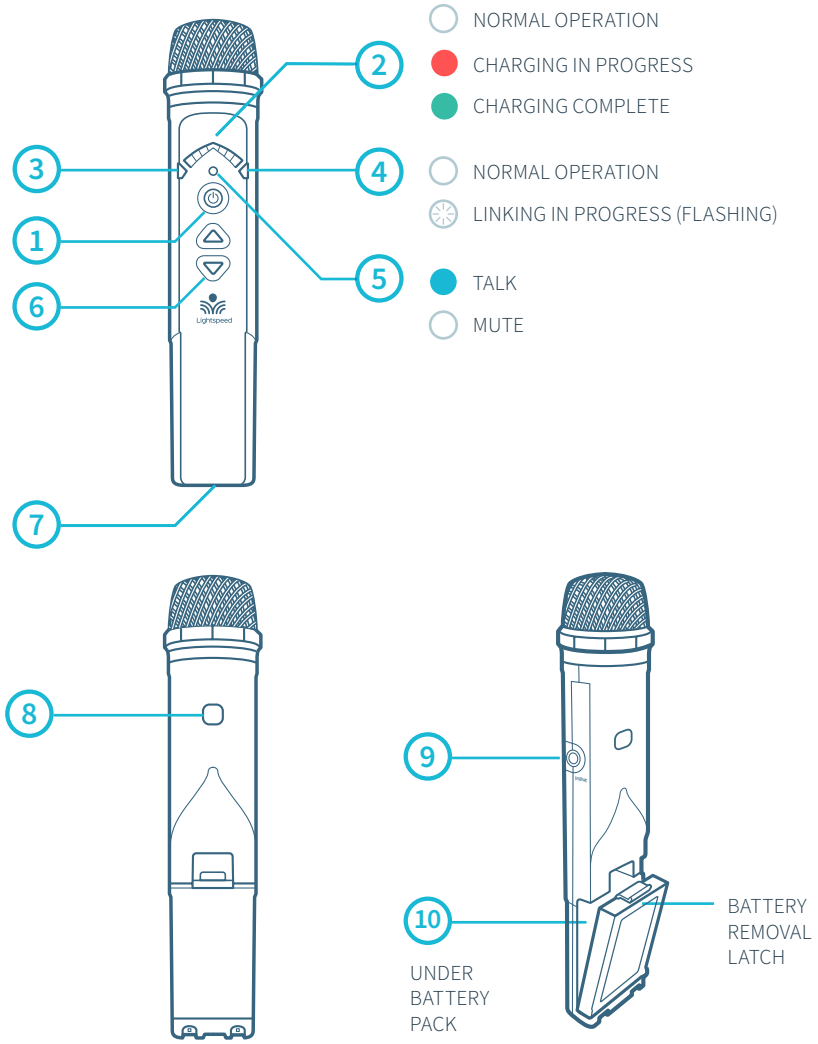
When two or more audio sources are connected, you will need to normalize volume settings by setting all connected audio sources to the same sound level while leaving the Media Connector AUDIO IN volume control set to its center setting. The Media Connector is an audio mixer using a master volume control to adjust the volume of all audio sources at once. Use the following procedure to set audio source volumes:

1. Connect the multimedia audio sources to the Media Connector using the 3.5mm cables provided.
2. Set the AUDIO IN volume control on the Media Connector to its center position.
3. Turn on an audio source that does not have an accessible audio level control (DVD, VCR player).
4. Adjust the Media Connector AUDIO IN volume control so the audio level playing through the speaker is appropriate for the classroom.
5. Turn off the first audio source.
6. Turn on the second audio source. Use its volume control to balance the audio output to the same audio level played through the speaker as the first source.
7. Repeat steps 5 and 6 for the remaining audio sources.
8. Now, the Media Connector's AUDIO IN volume can be used to increase or decrease the volume level for all audio sources as desired.

Sharemike Controls and Connections

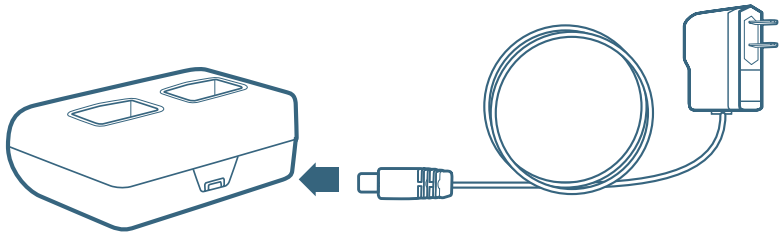
1. **POWER BUTTON**
2. **POWER STATUS LIGHT**
   Red light: During operation, turns red to indicate low battery
   White light: Normal operation

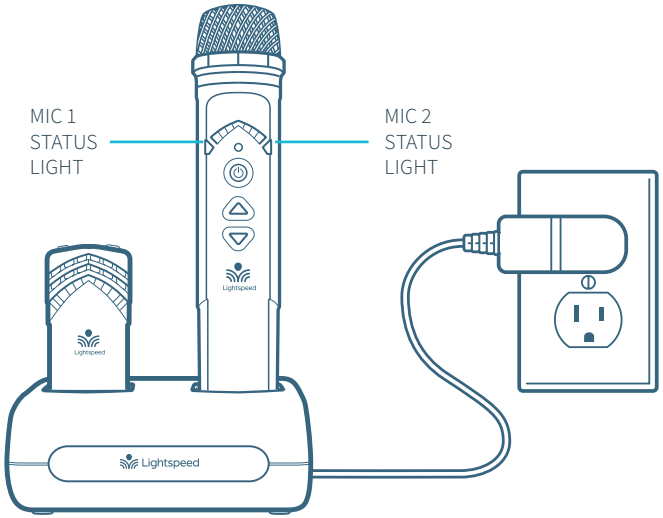
   When charging in Cradle Charger:
   Red light: Charging
   Green light: Charging complete
3. **MIC 1 STATUS:** Lighted to indicate microphone is registered as MIC 1
   White: solid = Normal operation
   White: flashing = Linking in process
4. **MIC 2 STATUS:** Lighted to indicate microphone is registered as MIC 2
   White: solid = Normal operation
   White: flashing = Linking in process
5. **MUTE/TALK STATUS LIGHT**
   Blue: solid = Talk
   White: solid = Mute
6. **MICROPHONE VOLUME UP/DOWN**
7. **USB INPUT:** Connect audio source to send to Topcat. USB input can also be used for charging.
8. **IR TRANSMITTER:** For pairing to base unit
9. **AUDIO INPUT:** Plug a laptop or other audio device into this jack to wirelessly transmit the audio signal to be played through the system.
10. **VOLUME LOCK:** Disables volume controls.



Sharemike: Charging

1. Make sure the charger is plugged into a wall outlet. Connect one end of the charging cable into the jack labeled CHARGE on the bottom of the Sharemike.
2. Plug the other end into the USB-C jack on the back of the cradle charger.
3. If the Sharemike is registered as MIC 2, the MIC 1 light on the microphone will glow red to indicate charging.
4. Leave the Sharemike plugged in overnight (8-10 hours) to obtain a full charge. The light will turn green when charging is complete.
5. If Sharemike is registered as MIC 1, low battery and charging indicator will be the MIC 2 light.
6. During charging the blue light will stay on.



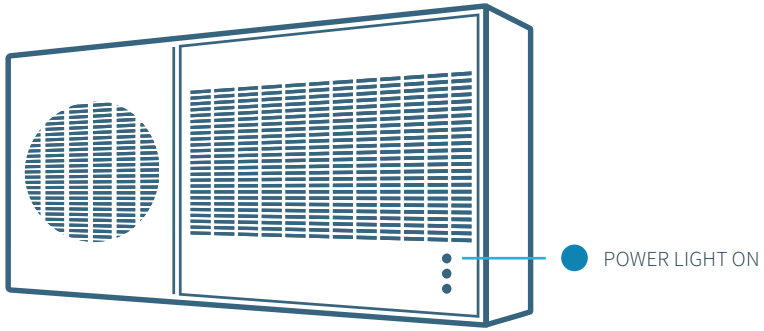


PLEASE NOTE: The Topcat and microphone(s) are paired together at the factory and all components should be kept together as a system. Moving them from one system, or room, to another will result in the need to re-pair.

Sharemike: Initial Set-Up

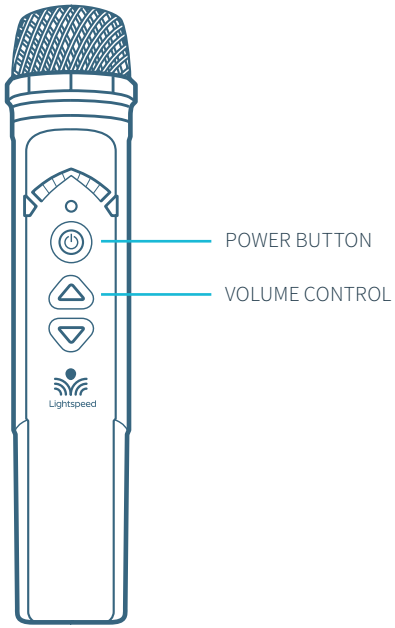
ENSURE THE TOPCAT IS POWERED ON

- The blue light on the speaker panel of the Topcat will glow.



TURN ON THE SHAREMIKE

- Press and hold the power button until the LED lights.
- While speaking in a normal voice, increase the volume using the Activate Volume button or the Media Connector Microphone Volume knob until your voice is barely audible.



PLEASE NOTE: This equipment is designed to supplement and distribute the user's voice so they are able to speak in a conversational tone. Having the volume set too high will result in feedback and listener fatigue.

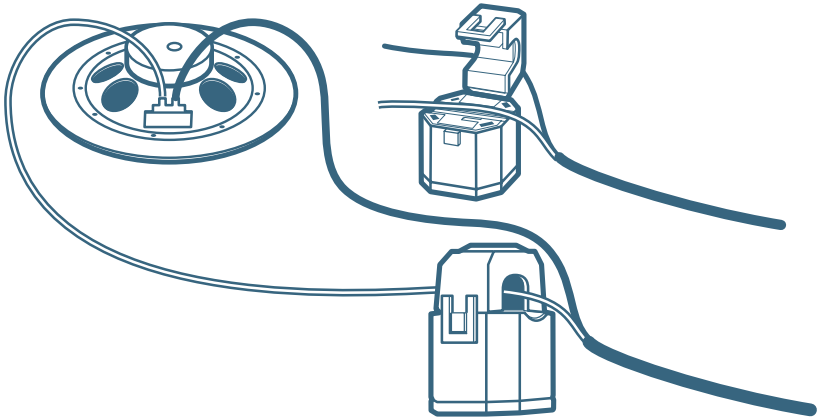
Optional PageFirst Kit

This PageFirst feature for the Topcat interfaces with an independent classroom paging system. When the page is broadcast, all audio from the system is muted, ensuring important school-wide messages are never missed. Please note that PageFirst is not compatible with telephone or IP-based paging systems.

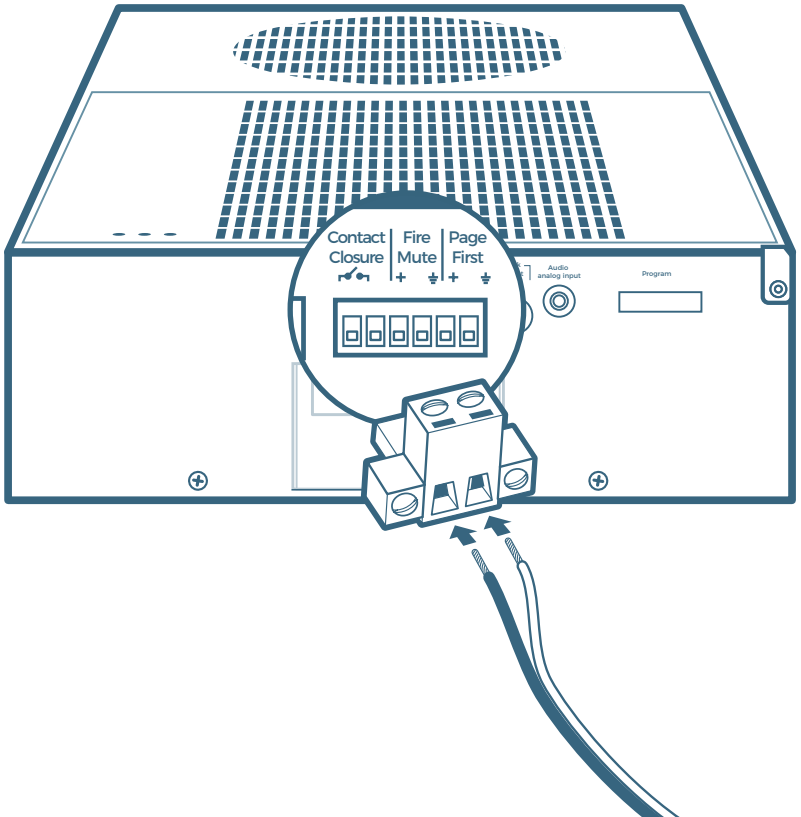
HOW IT WORKS

1. PageFirst sensor clip is hung around a lead wire attached to the classroom paging speaker.
2. The clip is hard-wired to the amplifier.
3. As a page is broadcast, the sensor clip detects the audio signal through induction and immediately mutes the amplifier.
4. When the page is over, the audio from the amplifier returns to normal volume level.

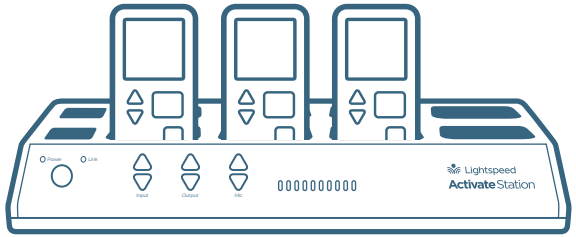
For full installation details, refer to the Topcat Installation Guide



TO TOPCAT



Activate System with Pods



For Small Group Instruction

Activate with Pods is a two-way communication system that can be seamlessly added to the Topcat classroom audio system to facilitate small group instruction.

With the small group audio pods and the vActivate app, Activate opens up communication and interaction between the teacher and student groups, including:

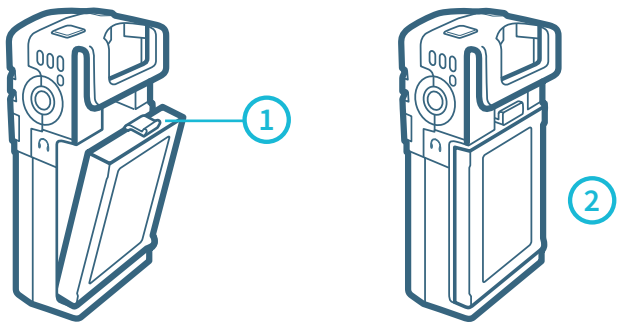
- Teacher monitoring of individual small groups
- Direct instruction to each independent group
- Student group sharing with the whole class
- Reinforce and redirect group activities
- Capture audio and video of student groups or of individual speaker

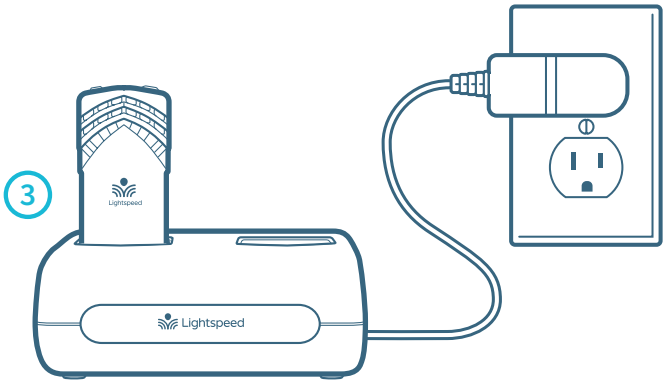
If your Topcat system was configured with Activate pods, please refer to the Activate System user guide for operation and setup instructions.

Flexmike Battery Replacement

Battery part # 77-L3.7V

1. Push down on the latch and carefully pull the battery pack away from the Flexmike.
2. Insert new battery pack as shown and make sure the latch is secure.
3. Place the Flexmike in a cradle charger to charge the battery pack.

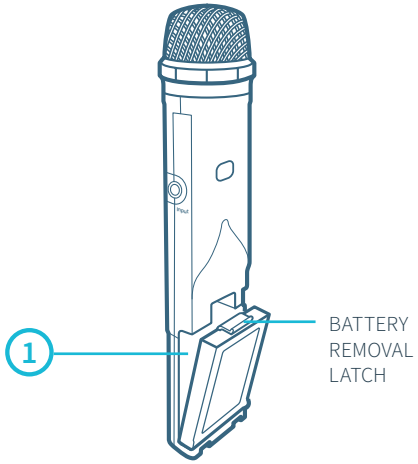


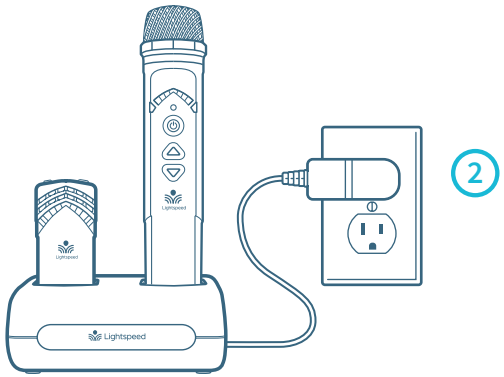


Sharemike Battery Replacement

Battery part # 77-L3.7V

1. Push down on the latch and carefully pull the battery pack away from the Sharemike.
2. Insert new battery pack as shown and make sure the latch is secure.
3. Place the Flexmike in a cradle charger to charge the battery pack.





Please dispose of all batteries properly. Lightspeed provides battery recycling at no charge. Contact us at 800-732-8999 for details. Available in U.S. only. Customers outside the U.S. should contact their local reseller.

Troubleshooting

PROBLEM: Low battery indication: Most problems are directly related to low battery power. Please run through the "Battery Check" items first. For remaining troubleshooting, use known good, fully-charged batteries.

SOLUTION: Battery Check

- Confirm batteries are charged each night. A solid red light on the battery status light indicates a low battery.
- Confirm proper batteries are used: Flexmike and Sharemike require the Lightspeed 77-L3.7V rechargeable battery pack.
- Make sure the microphones obtain a full charge. A full charge takes 5-6 hours.
- When charging the transmitter, the red charging light is solid. The green light will be solid when a full charge is reached.

PROBLEM: Microphone doesn't indicate a "Ready" signal (solid green light)

SOLUTION: Follow these steps to ensure the system is ready to use.

- Ensure the power button on the microphone is turned on. Once turned on, the blue light should begin blinking.
- Power the microphone off, then on again after a few seconds. Wait for up to 30 seconds for the blue light to turn solid, indicating READY for operation.

PROBLEM: Low volume or feedback

SOLUTION: Follow these steps to eliminate low volume or feedback:

- If the volume is too high, feedback will occur. Adjust accordingly.
- Adjust the volume level on the Flexmike.

PROBLEM: No sound from speaker and wireless components

SOLUTION: Follow these steps to produce sound from Topcat:

- Confirm that the white POWER light located on the front panel of the Topcat is on.
- Confirm the microphone is powered on and linked to the Topcat. The MIC 1 status light will be green on the Topcat indicating the microphone is linked.
- Confirm that the microphone is turned on. There will be a solid blue light on the top of microphone to indicate it is powered on and ready.
- Confirm that microphone is not muted. A solid white light on the top of microphone will indicate it is muted.
- Check speaker connections on the Topcat. Make sure the cables are properly connected (see page 9 of this manual or the Installation Guide for more information).
- If an Activate Station or Media Connector is paired with the Topcat, make sure that the volume level of the Activate or the Media Connector is not turned down all the way.
- Slowly turn up the volume level while talking into the microphone.

If you still have questions after reviewing these instructions, call Lightspeed Technical Services at 800.732.8999, 5am–5pm, PST.

Customers outside the U.S. should contact their local reseller.

Five-Year Limited Warranty

Lightspeed Classroom Audio Systems are guaranteed against malfunction due to defects in materials and workmanship for a period of five (5) years, beginning at the date of the purchase invoice. If such malfunction occurs, the product will be repaired or replaced (at Lightspeed's option) without charge during the warranty period.

Lightspeed's Warranty Exchange Program applies to all classroom audio systems within the five (5) year warranty period. If a classroom audio product or component has an issue that requires service, a refurbished replacement will immediately be sent to the customer to minimize downtime. Customers will receive the exchange product(s) or component(s) within 2-3 days. A prepaid return label will be included with exchanged products so original malfunctioned equipment can be returned to Lightspeed. Any exchanged equipment will remain covered under the original five-year warranty.

1. Warranty on transceivers is five (5) years.
2. Warranty on Lightspeed NiMH and Lithium Polymer rechargeable batteries is one (1) year.
3. A prepaid shipping label will be provided by Lightspeed for warranty repairs within the United States. Customers outside the U.S. should refer to the Lightspeed website (www.lightspeed-tek.com) for warranty repair instructions.
4. Warranty does not extend to finish, appearance items, or malfunctions due to abuse or operation other than specified conditions, nor does it extend to incidental or consequential damages. Repair by other than Lightspeed or its authorized service agencies will void this warranty. Information on authorized service agencies is available from Lightspeed Technologies, Inc.

Our Service Department (800.732.8999, 5am–5pm, PST) will handle your repair or replacement needs.

Customers outside the U.S. should contact their local reseller.

Safety Warnings and Certifications

CAUTION

RISK OF ELECTRICAL SHOCK
DO NOT OPEN

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

The lightning flash with arrowhead symbol inside an equilateral triangle is intended to alert the user to the presence of non insulated “hazardous voltage” within the product’s enclosure, which may be of sufficient magnitude to induce a risk of electric shock to persons.

The exclamation mark inside an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying this product.

USE A LIGHTSPEED SUPPLIED BATTERY ONLY

CERTIFICATIONS

This product is listed to UL standards and requirements for electrical safety by Underwriters Laboratories Inc.

This product conforms with the essential requirements of the following European Union Directives: 2004/108/EC Electromagnetic Compatibility (EMC) and 2006/95/EC Low Voltage Directive (LVD).

Lightspeed Technologies launched a formal product recycle program in Europe that complies with the European Union Directive 2002/96/EC on Waste Electrical and Electronic Equipment (“WEEE Directive”). Please visit www.lightspeed-tek.com for more information.

This product is manufactured using lead-free processes and is free of other materials harmful to the environment. It conforms to the most stringent new European guidelines for consumer products (RoHS).

Précautions de Sécurité et Certifications

ATTENTION

RISQUE D'ÉLECTROCUTION
NE PAS OUVRIR

CONFORMÉMENT AUX NORMES D'INSTALLATION APPLICABLES, CE PRODUIT DOIT ÊTRE INSTALLÉ PAR UNE PERSONNE FAMILIARISÉE AVEC LA CONCEPTION ET LE FONCTIONNEMENT DU PRODUIT ET CONSCIENTE DES RISQUE ENCOURUS.

L'éclair flèche dans un triangle équilatéral avertit l'utilisateur de la présence d'une "tension dangereuse" non isolée a l'interieur de l'appareil, qui peut être d'une ampleur suffisante pour constituir un risque d'électrocution.

Le point d'exclamation contenu dans un triangle équilatéral avertit l'utilisateur de la présence d'importantes instructions d'exploitation et de maintenance dans la documentation qui accompagne ce produit.

UTILISEZ UNIQUEMENT LA BATTERIE LIGHTSPEED FOURNIE

CERTIFICATIONS

Ce produit est certifié conforme aux normes et aux exigences UL en matière de sécurité électrique par Underwriters Laboratories Inc.

Ce produit est conforme aux principales exigences des directives de l'Union Européenne suivantes : 2004/108/EC Electromagnetic Compatibility (EMC) and 2006/95/EC Low Voltage Directive (LVD).

Lightspeed Technologies a lancé un programme de recyclage de produits en Europe conformément à la directive de l'Union Européenne 2002/96/CE relative aux déchets d'équipements électriques et électroniques (directive « DEEE »). Veuillez visiter notre page Web www.Lightspeed-tek.com pour plus de renseignements.

Ce produit est fabriqué en utilisant des processus sans plomb ni aucune autre matière nuisible à l'environnement. Il est conforme aux nouvelles règles européennes les plus strictes en matière de biens de consommation (RoHS).

Canada, Industry Canada (IC) Notices

English

This device complies with Industry Canada license exempt RSS standard(s). This Class B digital apparatus complies with Canadian ICES-003 and CAN ICES-3(B)/NMB-3(B).Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. The IC for this device is IC ID 1732B-LS975. This includes accessories such as the Flexmike (IC 1732B-LSFMN), Sharemike (IC 1732B-LSSMN) and Media Connector (IC 1732B-LSMCN).

French

Canada, avis d'Industrie Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-247.Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement. L'identifiant IC de cet appareil est IC ID 1732B-LS975. Ceci inclus les accessoires comme le Flexmike (IC 1732B-LSFMN), Sharemike (IC 1732B-LSSMN) et un Media Connector (IC 1732B-LSMCN).

Cet équipement est conforme aux limites d'exposition aux radiations IC inaux doivent suivre les instructions d'utilisation spécifiques pour satisfaire la conformité à l'exposition IC, veuillez suivre les instructions de fonctionnement décrites dans ce manuel.

FCC Notice to user

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.

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 (that is, the antenna for radio or television that is receiving" the interference).
- Reorient or relocate and increase the separation between the telecommunications equipment and receiving antenna.
- Connect the telecommunications equipment into an outlet on a circuit different from that to which the receiving antenna is connected.
- Consult the dealer or an experienced radio/TV technician for help.

English

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. No change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

French

NOTE IMPORTANTE: Pour se conformer au règles d'exposition des ondes RF par la FCC, la (ou les) antenne(s) utilisée(s) par ce transmetteur doivent être installées de façon à être séparée d'une distance d'au moins 20 cm de toute personne et ne doit pas être utilisée près ou en conjonction avec aucune autre antenne ou transmetteur. Aucune modification à l'antenne ou à l'appareil n'est permise. Toute modification à l'antenne ou à l'appareil peut résulter que l'appareil excèdera l'exposition aux ondes RF règlementaires et ainsi annuler le droit à l'usager d'utiliser l'appareil.

FCC RF Radiation Exposure Statement

This device (Access Link) complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with a minimum distance of 20cm between the radiator (Access Link) and any part of your body.

For body worn operation, the portable part (Flexmike) has been tested and meets FCC RF exposure guidelines.

This device must not be co-located or operating in conjunction with any other antenna or transmitter. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice to Canada User

English

This device complies with Industry Canada license exempt RSS standard(s).

Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

French

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

1. L'exploitation est autorisee aux deux conditions suivantes :
2. l'appareil ne doit pas produire de brouillage, et l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Radiation Exposure Statement

English

Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) recommended by international guidelines. The guidelines were developed by Health Canada and include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

French

Votre appareil mobile est un émetteur-récepteur radio. Il est conçu pour ne pas dépasser les limites d'exposition aux ondes radio (champs électromagnétiques de fréquence radio) recommandées par les directives internationales. Les lignes directrices ont été élaborées par Santé Canada et comprennent une marge de sécurité importante destinée à assurer la sécurité de toutes les personnes, indépendamment de l'âge et de la santé.

NOTICE FOR USB

NOTE: Lightspeed is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the 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.

EU Declaration of Conformity

Lightspeed
A Learning Company

CE

EU Declaration of Conformity
According to EU Directives EMC 2014/30/EU, LVD 2014/35/EU, RED 2014/53/EU

Manufacturer: Lightspeed Technologies, Inc.

Address: 11509 SW Herman Rd,
Tualatin, Oregon 97062

We herewith declare that the following systems comply with the appropriate basic safety and health requirements of the Directive based on its design and type, as brought into circulation by us. In case of alteration of the system, not agreed upon by us, this declaration will lose its validity.

Products: **Redcat Access, Flexmike, Flexcat Pod, Flexcat Charging Station, Flexcat Handheld Remote Control, Media Connector Access, Sharemike, Topcat, Access Link, 955 Access, Activate Station, Activate Pod, TCQ2, DRQ, Mobile Connector**

Model Numbers: **LSRCA 1881, LSFM 1881, FCP 1881, FCCS, FCHRCB, LSMCA 1881, LSSM 1881, LSTCA 1881, LSAL 1881, LS955 1881, LSACT 1881, LSPOD 1881, TCQ2, DRQ, MCX**

As applicable, products conform to the following EU/AS/NZ test standards listed below:

Safety Standards: **IEC/EN 60065 and amendments**

EMC/RF Standards: **EN301 406 V2.1.1 (2009-07)**
EN 301489-1/-6
EN 301489-1/-17
EN 50371 (2002)
EN 50385 (2002)
EN 300 328
EN 55022
EN 55024
AS/NZ CISPER 22
AS/NZ 4268

The Technical Construction File is available to proper authorities and the product is CE marked.

Lightspeed Representative:

Michael Frost, Compliance Engineer

Date: December 12, 2018

P/N: 085-0013-07

LIGHTSPEED TECHNOLOGIES / 11509 SW HERMAN ROAD / TUALATIN, OR 97062 / 800.732.8999 / WWW.LIGHTSPEED-TEK.COM

System Components

STANDARD COMPONENTS

TCNG	Topcat all-in-one ceiling-mount wireless audio base station
24V2.5	24V/2.5A power supply for TCN
FSC	Transceiver cradle charger, power supply
USBC	USB-C charging cable
USB1	USB-AC charging/power adapter
FMNG	Flexmike classroom transceiver with battery pack and lanyard
NH2.4V	AA NiMH rechargeable battery pack for Flexmike
FL	Flexmike lavaliere cord

STANDARD COMPONENTS (outside U.S. and Canada)

TCN	Topcat all-in-one ceiling-mount wireless audio base station
24V2.5	24V/2.5A power supply. specific country
FSC	Transceiver cradle charger, power supply
USBC	USB-C charging cable
USB1	USB-AC charging/power adapter
FMN	Flexmike classroom transceiver with battery pack and lanyard
NH2.4V	AA NiMH rechargeable battery pack for Flexmike
FL	Flexmike lavaliere cord

OPTIONAL ACCESSORIES

INS-F6	Activate for small group instruction
INS	Activate charging station with Bluetooth
24V1.75	24V/1.75A power supply for ACT
SMN	Sharemike handheld transceiver with battery pack
NH2PK	AA NiMH rechargeable battery pack for Sharemike
UDC	Charging cable for Sharemike
MCN	Wireless audio transceiver
USB1	MCA power supply
UMCB	USB Type A-Micro B power cable for MCA
DC50	50’ plenum rated DC power cable kit
EMA	Earset microphone with TRRS connector for Flexmike
LMA	Lapel microphone with TRRS connector for Flexmike

System Specifications

TOPCAT

Description	All-in-one ceiling-mount wireless base station
Panel size	16.25” x 8.25”
Frequency response	60 Hz - 18 kHz (-10dB)
Wireless communication	Access Technology (1.9 GHz + RF4CE)
Tone control	1 bass/treble control, inside cabinet
Audio input	One (1) 3.5mm stereo w/ volume control inside cabinet
Power output	20W RMS x 2
Power input	AC: 100-240V ~ 50 / 60Hz 1.5A | DC:24V / 2.5A
PageFirst input	2-pin euro-blick w / sensitivity adjust
Audio Link indicators	2 indicators for Flexmike 1 and 2
Device registration	Push button for pod(s), Flexmike(s), Sharemike, Activate, and Media Connector
Dimensions (W x H x D)	24” x 12” x 3.7” (595 x 295 x 94mm)
Weight	13.6 oz. (6.2 kg)

FLEXMIKE (1-2)

Description	Pendant-style transceiver
Earbud lanyard	Magnetic clasp with integrated earbud
Wireless communication	Access Technology (1.9 GHz)
Audio distortion	<1%
Integrated microphone	Uni-directional electric
Earbud output	3.5mm
Audio input	3.5mm
Volume control	+/- 6 dB
Battery power	23.7V LiPo battery pack
Battery life	8 hours (fully charged)
Charging	2 contacts for cradle charging
USB connection	Type C for charging and audio
Power	On/off switch
Registration	Push button for registration with Topcat
Dimensions (L x W x H)	2.9” x 1.1” x 1.0” (74 x 28 x 25mm)
Weight	1.8 oz (51g)

SHAREMIKE

Description	Handheld transceiver
Wireless communication	Access Technology (1.9 GHz)
Audio distortion	<1%
Integrated microphone	Uni-directional dynamic
Audio input	3.5mm
Battery power	LiPo battery pack
Battery life	8 hours (fully charged)
Charging	5V charging jack
Power	On/off button
Registration	Push button for registration with Topcat
Dimensions (L x W x H)	2.25” x 2.25” x 8.75” (57.2 x 57.2 x 222.3mm)
Weight	7.36 oz (209g)

MEDIA CONNECTOR

Description	Wireless audio transceiver
USB Power	5V type C USB connector
Wireless communication	Access Technology (1.9 GHz + RF4CE)
Tone control	1 bass/treble control
Audio input	3.5mm stereo (x4) w/ master volume
Audio output	3.5mm stereo (X2) mixed w/ volume control
Audio Link indicator	1 LED on front panel
Registration indicator	1 LED on back panel
Device registration	Push button for Topcat
Dimensions (W x H x D)	7.6” x 5” x 1.13” (193 x 127 x 29mm)
Weight	9.6 oz. (272g)

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