Installation & Operation Guide

RTI Intelligent Meetings

UC-IVB-EXM   -   Expansion Microphone

RTI

It's Under Control®

Introduction

In spaces where users are situated beyond the recommended range of the built-in MEMs array microphones in the UC-IVB-50, one or more UC-IVB-EXM Expansion Microphones elevate the audio pickup in the room to make sure all participants are heard.

Sound quality is enhanced with an integrated DSP featuring Acoustic Echo Cancellation (AEC), Automatic Noise Suppression (ANS), and Automatic Gain Control (AGC). The omnidirectional (360°) microphone has a pickup range of 9.8ft/3m. Connect up to five (5) expansion microphones to the UC-IVB-50 via CAT-6 cable to ensure everyone in the room is heard, even in large conference rooms. (Total cable length should not exceed 164ft/50m with 3 UC-IVB-EXMs or 82ft/25m with 5 UC-IVB-EXMs).

Features

Expanded Audio

• Connect to 5 UC-IVB-EXM expansion microphones to an RTI UC-IVB-50.

Advanced Processing

• An integrated DSP features Acoustic Echo Cancellation (AEC), Automatic Noise Suppression (ANS), and Automatic Gain Control (AGC).

Synchronized Muting

• An LED-lit microphone mute button is available with synchronization across all devices.

Microphone

• 4 MEMs linear microphones with 360° (omni-directional) pickup (~3 meters).

Additional Range

• Connect 3 UC-IVB-EXM with a total cable length of 50m of CAT-6.

Package Contents

1x UC-IVB-EXM Expansion Microphone
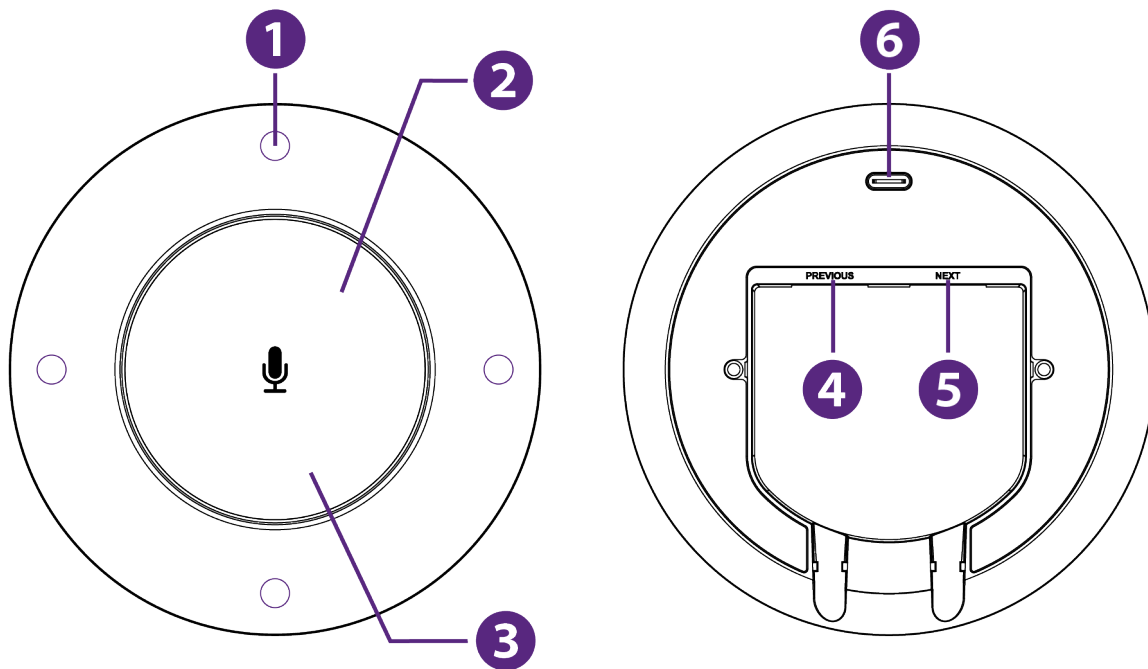
Specifications

Microphone

Microphone .... Omnidirectional microphone array. Pickup Range: 9.8ft/3m

Frequency Response .... 100Hz~10KHz

Sensitivity .... -26dBFS

Signal-to-Noise Ratio 62dB

DSP .... Full Duplex

.... AEC (Automatic Echo Cancellation)

.... AGC (Automatic Gain Control)

.... ANS (Automatic Noise Suppression)

General

Input / Output RJ-45

USB-C Port .... Firmware Upgrade via Windows App

Power Supply.. Powered by UC-IVB-50

Power Consumption.. 1.5W (Max)

Dimensions (ØxH)... 4.25" x 1.04" / 108mm x 26.5mm

Product Weight... 0.31lb/140g

Operating Temperature .... +32 to + 104°F / 0 to + 40°C

Storage Temperature .... -4 to + 140°F / -20 to + 60°C

Humidity.. 10% to 90%, non-condensing

Warranty .... Three Years (Parts & Labor)

All features and specifications subject to change without notice

Panel Description


No.	Name	Description
1	Microphone Array	• 4 x 360° Omnidirectional MEMS microphones
2	🎤	Press this button to toggle between mute and unmute states for all connected microphones, including the attached UC-IVB-50 and any connected UC-IVB-EXM microphones.
3	Status LED	The Status LED indicator beneath the button indicated 5 states: • Solid White: The UC-IVB-EXM is powered on. • Blinking White: The UC-IVB-EXM is being upgraded. • Solid Blue: The UC-IVB-EXM is detecting audio. Note: When no audio is detected, the LED will be off. • Solid Red: The UC-IVB-EXM is muted. • Breathing White: The UC-IVB-EXM is in sleep mode (follows the standby state of the UC-IVB-50).
4	PREVIOUS	• If this is the only UC-IVB-EXM in use or the first in a series of UC-IVB-EXM microphones, connect this port to the UC-IVB-50. • If this is a cascaded/additional UC-IVB-EXM microphone, connect this port to the NEXT port on the upstream UC-IVB-EXM.
5	NEXT	• If this is the only UC-IVB-EXM in use, do not use this port. • If this is a UC-IVB-EXM in a series of microphones, connect this port to the PREVIOUS port on the next downstream UC-IVB-EXM.
6	USB-C Port	This port is only used for the firmware upgrading process.

Applications

1. Power up to 5 UC-IVB-EXM Microphones up to 82ft/25m
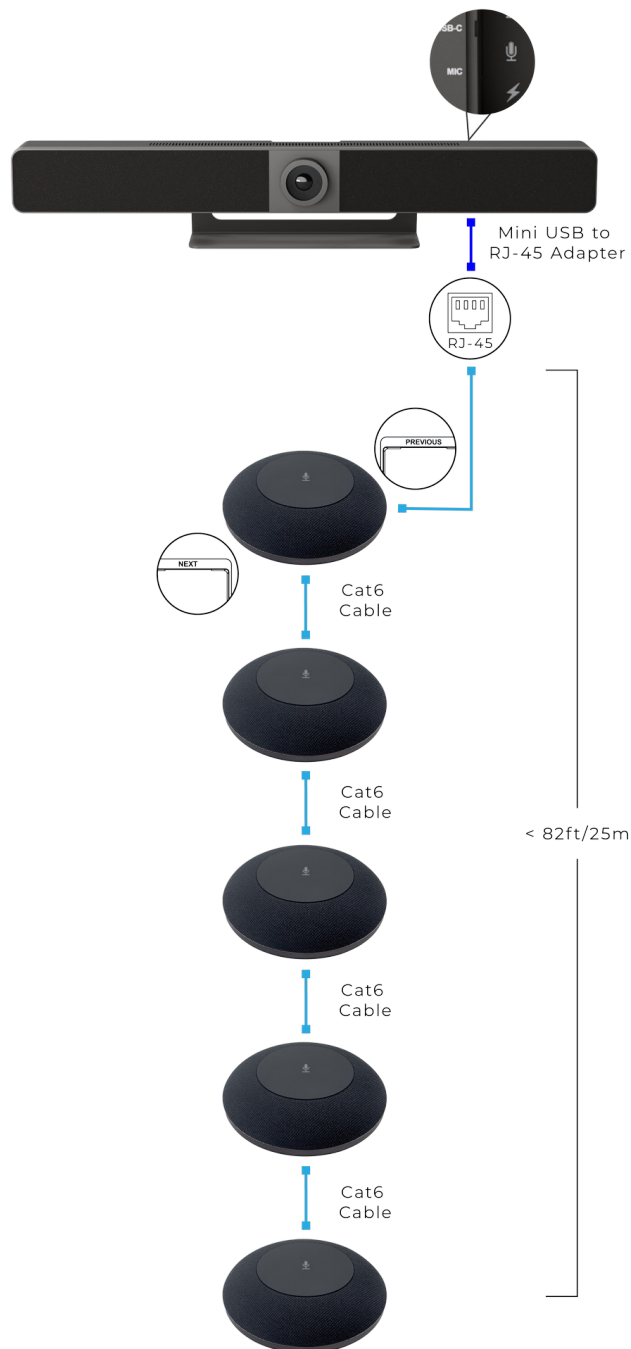
2. Power up to 3 UC-IVB-EXM Microphones up to 50m
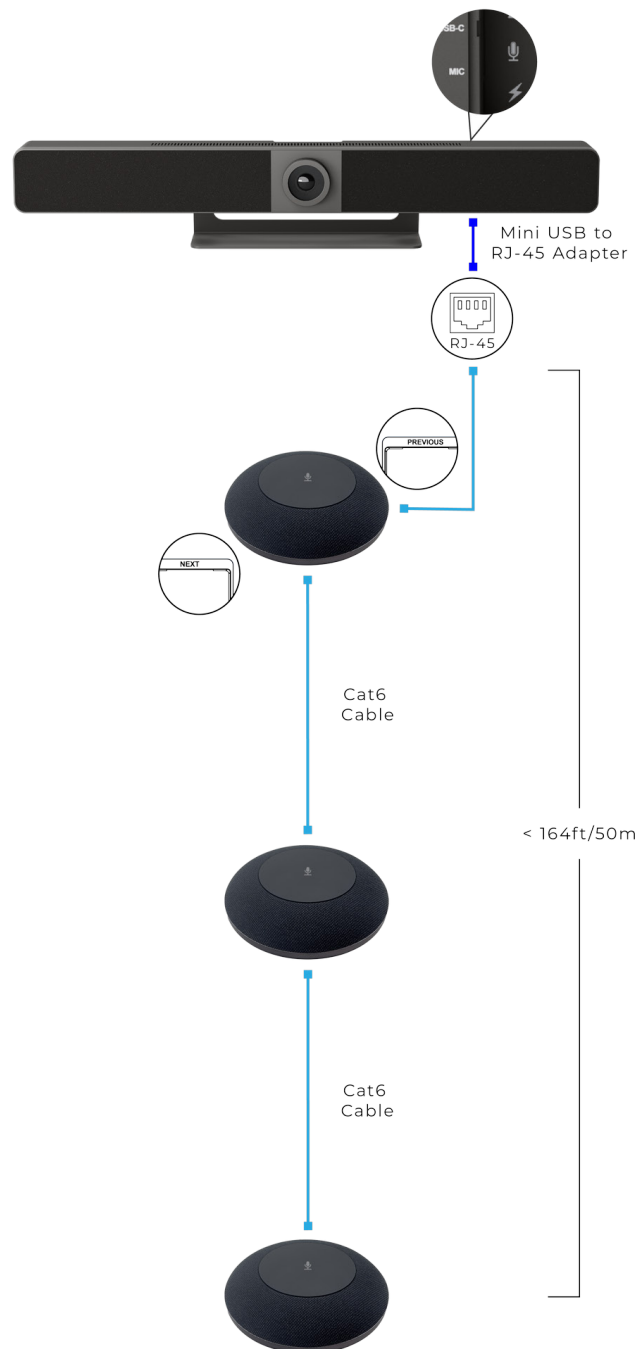
Note:

- For cascading of up to three microphones, the total length of all CAT6 cables in use shall not exceed 50 meters.
- For cascading of up to five microphones, the total length of all CAT6 cables in use shall not exceed 25 meters.

Safety Suggestions

Read and Follow Instructions
Read all safety and operating instructions before operating the unit.

Retain Instructions
Keep the safety and operating instructions for future reference.

Heed Warnings
Adhere to all warnings on the unit and in the operating instructions.

Accessories
Only use attachments/accessories specified by the manufacturer.

Heat
Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.

Power
Unplug this apparatus during lightning storms or when unused for long periods of time.

Power Sources
Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.

Power Sources
Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.

Power Cord Protection
Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cord plugs at power receptacles and at the point at which they exit from the unit.

Water and Moisture
Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.

Object and Liquid Entry
Do not allow objects to fall or liquids to be spilled into the enclosure through openings.

Servicing
Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.

Damage Requiring Service

The unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

Cleaning

To clean this product, lightly dampen a lint-free cloth with plain water or a mild detergent and wipe the outer surfaces.

NOTE: Do not use harsh chemicals as damage to the unit may occur.

Federal Communications Commission Notice

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. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

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 the 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.

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.
2. This device must accept any interference received including interference that may cause undesired operation.

Industry Canada Compliance Statement

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 harmful interference.

2. This device must accept any interference received including interference that may cause undesired operation.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Ce dispositif ne peut causer des interférences nuisibles.

2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.

Declaration oF Conformity (DoC)

The Declaration of Conformity for this product can be found on the RTI website at:
www.rticontrol.com/declaration-of-conformity

Contacting RTI

For news about the latest updates, new product information, and new accessories, please visit our web site at: www.rticontrol.com
For general information, you can contact RTI at:

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Shakopee, MN 55379
Tel. +1 (952) 253-3100
info@rticontrol.com

Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).

RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready:

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

Please do not return products to RTI without return authorization.

Limited Warranty

RTI warrants new products for a period of three (3) years (excluding consumables such as rechargeable batteries which are warrantied for one (1) year) from the date of purchase by the original purchaser (end user) directly from RTI / Pro Control (herein referred to as "RTI"), or an authorized RTI dealer.

Warranty claims may be initiated by an authorized RTI dealer using the original dated sales receipt or other proof of warranty coverage. In the absence of the receipt of purchase from the original dealer, RTI will provide warranty coverage extension of six (6) months from the date code of the product. Note: RTI warranty is limited to the provisions set forth in this policy and does not preclude any other warranties offered by third parties who are solely responsible for those other warranties.

Except as specified below, this warranty covers defects in product material and workmanship. The following are not covered by the warranty:

- Product purchased via unauthorized sellers or internet sites will not be serviced- regardless of purchase date.
- Damages caused by accident, misuse, abuse, neglect or acts of God.
- Cosmetic damage, including, but not limited to, scratches, dents and normal wear and tear.
- Failure to follow instructions contained in the Product Installation Guide.

- Damages due to products used in an application or environment other than that for which it was intended, improper installation procedures or adverse environmental factors such as incorrect line voltages, improper wiring, or insufficient ventilation.

- Repair or attempted repair by anyone other than RTI and Pro Control or authorized service partners.

- Failure to perform recommended periodic maintenance.

- Causes other than product defects, including lack of skill, competence or experience of user.

- Damage due to shipment of this product (claims must be made to the carrier).

- Altered unit or altered serial number: defaced, modified or removed.

RTI Control is also not liable for:

- Damages caused by its products or for failure of its products to perform, including any labor costs, lost profits, lost savings, incidental damages, or consequential damages.

- Damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made on behalf of a third party.

- Loss of, or damage to, data, computer systems or computer programs.

RTI's liability for any defective product is limited to repair or replacement of the product, at the sole discretion of RTI. In cases where the warranty policy conflicts with local laws, the local laws will be adopted.

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