Crestron **MP-FSMIC**
FreeSpeech™ Wireless Microphone
Installation Guide

CRESTRON

Further Inquiries
If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling Crestron® at 1-888-CRESTRON [1-888-273-7876]. For assistance in your region, please refer to the Crestron Web site (www.crestron.com) for a listing of Crestron worldwide offices.

You can also log onto the online help section of the Crestron Web site ww.crestron.com/onlinehelp) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Future Updates
As Crestron improves functions, adds new features and extends the capabilities of the MP-FSMIC, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron Web site periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download coumn.

Regulatory Compliance

As of the date of manufacture, the MP-FSMIC has been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.

CE

DESCRIPTION

Crestron FreeSpeech™ systems provide a very simple and affordable solution for adding speech reinforcement as part of a complete classroom media presentation system. Compact and lightweight, the MP-FSMIC can be clipped to a lapel, hung around the neck, or placed in a tabletop stand*. As part of a complete FreeSpeech wireless mic system, the MP-FSMIC affords reliable and hassle-free operation. Simply press the **ON** button and go.

Advanced FreeSpeech RF/IR wireless technology ensures consistent performance with complete freedom of movement — and minimized risk of noise or feedback. The infrared "beacon" signal prevents interference between multiple FreeSpeech systems in adjacent rooms, and even shuts the mic off automatically if the instructor leaves the room with the mic on.

An internal rechargeable battery provides six hours of usage to last a full school day. Recharging for up to two MP-FSMICs is handled by the MP-FSDS2 docking station*.

MP-FSMIC

*Item(s) sold separately or as part of a MP-FS100_PAK or MP-FS200_PAK system package.
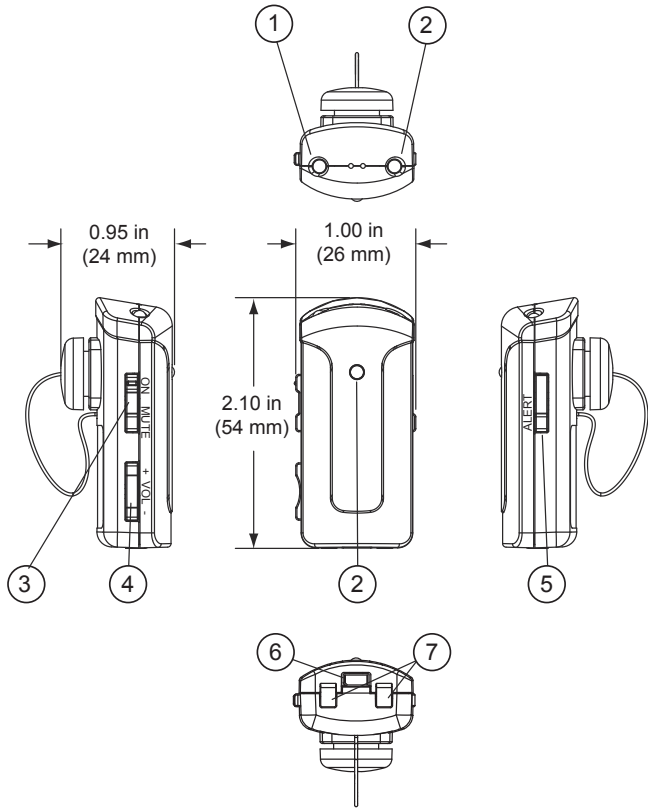
SPECIFICATIONS

Specifications for the MP-FSMIC are listed in the following table.

MP-FSMIC Specifications

SPECIFICATION	DETAILS
Wireless Communication	
RF	2.4 GHz ISM Device; 79 Channels FHSS (2402 to 2480 MHz)
IR	38 kHz
Range (typical)	50 ft (~15 m) indoor, subject to site-specific conditions (requires MP-FS-RX1 or MP-FS-RX2 receiver)*
Battery	
Battery Type	Lithium Ion Polymer, 3.7 Volt, 180 mAh
Usage per Charge	6 hours
Charging Time	2 hours
Cycle life	>500 cycles (80% capacity) (Requires MP-FSDS2 docking station/charger)*
Environmental	
Temperature	41° to 104° F (5° to 40° C)
Humidity	10% to 90% RH (non-condensing)
Enclosure	Plastic, matte black, includes magnetic clip for lapel or lanyard attachment
Dimensions	
Height	2.10 in (54 mm)
Width	1.00 in (26 mm)
Depth	0.95 in (24 mm)
Weight	0.7 oz (20 g)
Included Accessory	
MP-FS-LANYARD	Lanyard for MP-FSMIC
Available Accessories	
MP-FS-RX1	FreeSpeech Single-Channel Wireless Mic Receiver
MP-FS-RX2	FreeSpeech Dual-Channel Wireless Mic Receiver
MP-FS100_PAK	FreeSpeech Single-Channel Wireless Mic System Package
MP-FS200_PAK	FreeSpeech Dual-Channel Wireless Mic System Package
MP-FSDS2	FreeSpeech Dual Wireless Mic Docking Station/ Charger
MP-FSTTS	Tabletop Stand for MP-FSMIC

*Item(s) sold separately or as part of a MP-FS100_PAK or MP-FS200_PAK system package.

MP-FSMIC Overall Dimensions

0.95 in (24 mm) 1.00 in (26 mm) 2.10 in (54 mm)

Connectors, Controls & Indicators

#	CONNECTORS, CONTROLS & INDICATORS	DESCRIPTION
1	Status	(1) Dual-color green/red LED. Blink patterns show operational status and battery/charging condition[1]
2	IR Beacon	(2) Infrared LEDS, transmit operation data to MP-FSIR IR Beacon Sensor(s)[2]
3	ON/MUTE	(1) Rocker button, turns wireless mic on and off, and mutes mic audio
4	VOL	(1) Rocker button, adjusts mic volume when mic is unmuted, adjusts program (line) volume when mic is muted
5	ALERT	(1) Push button, triggers alert out relay and/or alert tone
6	Service Port	Used for firmware upgrades
7	Charger Contacts	Connect to contacts in Docking Station/Charger[2]

1. Refer to the Microphone LED Blink Codes chart in the next column.
2. Item sold separately or as part of a MP-FS100_PAK or MP-FS200_PAK system package.

INSTALLATION

Installation of the MP-FSMIC consists of the following:

1. Connect the power pack supplied with the MP-FSDS2 Dual Docking Station/Charger to line power and then to the docking station. The green LED on the docking station indicates power is applied.
2. Place the mic in the docking station, and allow it to charge for at least two hours. When the battery is fully charged, the mic's Status LED blinks green.*
3. Use the included magnetic clip for lapel or lanyard attachment, or place the mic in a tabletop stand. During operation, the mic should be positioned approximately four inches (100 mm) from the speaker's mouth.

*Refer to the Microphone LED Blink Codes chart in the next column.

Microphone LED Blink Codes**

Charge Complete	G G	G G	G G	G G	G G
Charge in Progress	R	R	R	R	R
On But Not Paired	G G G G G	G G G G G	G G G G G	G G G G	G G G
Muted	GGG	GGG	GGG	GGG	GGG
Paired	G	G	G	G	G
Missing Beacon While Paired	R	R	R	R	R
Low Battery	RG	RG	RG	RG	RG
Low Battery & Muted	RGGG	RGGG	RGGG	RGGG	RGGG
Low Battery & Missiing Beacon	RR	RR	RR	RR	RR
Low Battery & Not Paired	GRGRGRGRGRGRGRGRGRGRGRGRG				
Shutting Off	RRRRRRRRRRRRRRRRRRRRRRRRRRR				

**In the table, G=green; R=red

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact an authorized CRESTRON dealer. Only authorized CRESTRON dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touch screen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.