

# USER GUIDE

## MICROPHONE



INTEGRATED SYSTEMS FOR 21ST CENTURY SCHOOLS.



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## 1. About Your Microphone System

Calypso System's WCM-RF classroom voice amplification solution brings a revolutionary level of sound quality, functionality, and affordability to classroom sound-field reinforcement. Based on patent pending technology that combines infrared (IR) data control and radio frequency (RF) sound quality into a multi-channel system, the WCM-RF solution is the first classroom voice amplification system designed to support and enhance 21st Century teaching and learning styles by facilitating communication and collaboration.

Your classroom microphone system consists of a pendent style microphone with optional lapel attachment, a belt-clip holder, a ceiling or wall-mounted "base station", a specialized amplifier that's most likely hidden from view, and speakers. Optionally, you may also have what is designated as a "Student Microphone", used in tandem with the teacher's microphone.

Using the WCM-RF couldn't be easier. Simply turn the microphone on, adjust the volume, and begin speaking.

Thank you for BEING HEARD with Calypso!



## 2. Usage Topics and Tips Before You Get Started

**Lanyard or Lapel.** The WCM-RF microphone can be used in either Lanyard or Lapel mode. In Lanyard mode, the pendent simply hangs around the teacher's neck on a soft lanyard. To switch modes, simply plug the lapel microphone into the AUX jack on the right side of the pendent. The unit will automatically switch off its internal microphone element, positioned beneath a small hole on the top of the pendent, and use the lapel element instead. In either case, the microphone element should be positioned 4-6" below your chin — for best performance and audio quality.



**Room Signal Coverage.** Your microphone's wireless signal will easily cover a typical classroom and is not solely dependent upon "line of sight" between the pendent and the receiver. However certain factors can impact room signal coverage, including very high ceilings (e.g., greater than 12 feet) and large windows. If you're experiencing signal reliability problems, Calypso offers a number of options for increasing the microphone's signal strength and room coverage pattern. Let your technical director know and we'll be happy to discuss solution options.

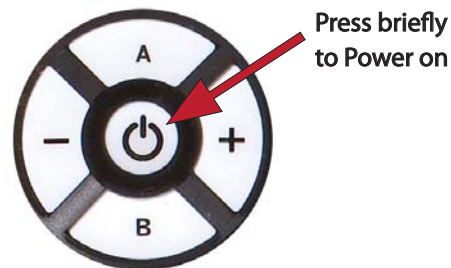
**Auto Off.** In the great majority of classrooms, the WCM-RF is configured to automatically turn its transmission signal off when you step out of the classroom. Of course the great benefit is that you don't need to remember to turn the unit off when stepping out to have a private conversation, nor to turn it back on when you return. Bear in mind, however, that the auto-off feature may not work if you're standing in front of a large window just outside of the classroom. If you have any concerns, simply turn the unit off as you leave and back on as you return.

**iPOD (MP3) Usage.** In addition to lapel microphone use, the AUX jack on the right side of the pendant can also accommodate input from any standard MP3 player. Turn on the microphone, plug in your iPOD and hit play to automatically transmit music wirelessly to your classroom speakers.

**Team Teaching.** In order for two teachers to use their microphones in the same room, both must press the B button on their respective microphones. Doing so enables channel sharing between the two units. If either teacher then presses the A button, channel sharing is disabled.

### 3. Power

**Turn ON/OFF.** Briefly press and release the microphone power button to turn the unit ON or OFF. When turned ON, the red "LINK" light on the top of the pendent will glow steady. This is your indication the microphone is ready to use.



**Microphone Charging and Batteries.** To charge the unit, plug the charging cable into the "charger" jack located on the left side of the pendent and plug the charger into a standard electrical outlet. The "BAT" light on the top of the microphone will glow steady red while charging.

- Keep the unit plugged in for 14 hours for a full charge.
- When fully charged, the microphone provides 12 hours of "talk time".

To conserve battery life, the microphone automatically turns itself off after 5 minutes of non-use. Microphone batteries should be replaced every two years by your school's technical staff. Note that these are NOT Alkaline AA batteries.

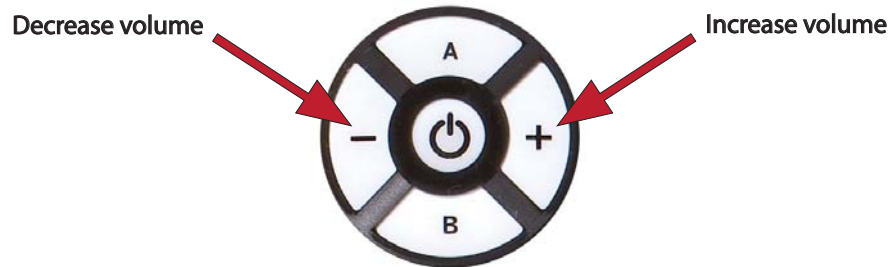


**WARNING:** Installing standard Alkaline AA batteries will severely damage the microphone.

**Low Battery Indicator.** A flashing "Bat" light on the top of the microphone indicates a low battery with about 2 hours of talk time remaining. Recharge the unit at your earliest convenience.



## 4. Volume and Feedback



**Setting Default Volume.** The most common mistake made during initial usage is to set the microphone volume too high, which reduces audio quality and may create feedback. The goal is to set the volume just high enough for the teacher to be clearly heard throughout the entire room. It's important to note that when volume is set properly, the teacher may just barely hear amplification. Accordingly, it's most useful to set your volume while someone else is listening in the back of the classroom.

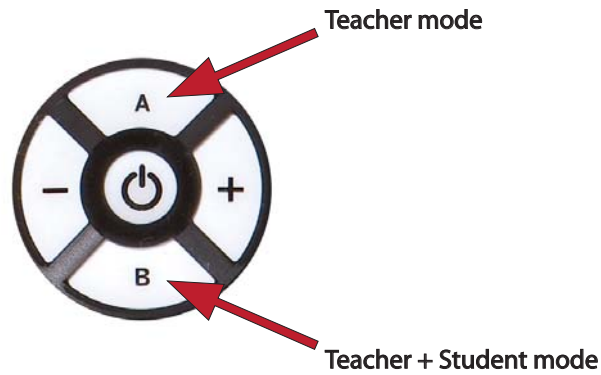
**Benefits of a MIC Volume Button.** The WCM-RF amplifier is a "multi input" amplifier that accommodates up to 4 separate audio inputs, including the microphone. Bear in mind if the amplifier volume is increased while you're playing an iPod or DVD and the input is then switched to the microphone, the higher volume setting may result in a microphone signal that's too high or/and with feedback. For this reason, many Calypso customers define a default "Microphone Volume" button on a wall panel or on your computer that automatically resets the amplifier's volume when switching to the microphone input. Talk to your technology director, installer or Calypso Systems if you're experiencing this type of problem.

**Automatic "Ducking".** In the audio world, the term "ducking" describes a situation where the volume of other sources automatically drops or "ducks" beneath a higher priority audio signal. The WCM-RF is capable of automatic ducking, which is commonly used in combination with your classroom DVD player or other audio source. If your installer configured this option, you will notice that the DVD audio volume will decrease when you begin speaking into the microphone and will automatically return to its prior level when you stop speaking. Ducking volume levels and timing are configurable by the installer.

**Feedback.** All microphone systems are susceptible to feedback. The best way to avoid feedback is to not set the microphone volume too high, and to avoid using the microphone while standing directly beneath or in front of the speakers.

## 5. Student Microphone

The WCM-RF is compatible with an optional student microphone, which can be passed around among students for classroom usage. The student microphone is distinguished from the teacher microphone with a white lanyard clasp. The clasp on the teacher's microphone is black.



- The Power button is the only operational button on the Student microphone.
- The AUX input on the right side of the student microphone is fully operational for use with a lapel microphone, iPod, etc.
- The teacher enables the student microphone by pressing the B button on the teacher's microphone. Pressing the A button disables the student microphone.

## 6. Trouble Shooting

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- **Blinking “BAT” light.** Low battery. Recharge the microphone at your earliest convenience.
- **Blinking “LINK” light.** When the microphone is turned on, it automatically establishes a wireless link with the receiver, installed on a classroom wall or on the ceiling. If the link light is blinking, the link between the microphone and receiver has not been established. The most common reasons are (a) it’s the very first time the microphone has been used, or (b) the receiver has experienced a loss of power (e.g., the building experiences a temporary power outage). In either case, you can reestablish the link between the microphone and receiver by holding the microphone 3 to 4 feet from the receiver, while turning the microphone on.
- **Blinking “BAT” and “LINK” lights.** This rare condition indicates an internal component failure. Please contact Calypso technical support for assistance.
- **Batteries Won’t Hold a Charge.** Have your microphone batteries replaced by the school’s technical staff. Do NOT use standard AA batteries.

## 7. Safety

### Before using the Microphone

- Be sure to follow all the Safety instructions in this section, which contain important information and/or cautions regarding safety.
- Read this section in its entirety. Please contact Calypso Technical Services for any questions concerning safety issues. Keep this manual handy for future reference.

**Contact info:** Calypso Technical Service  
700 Commerce Dr., Ste. 180  
Woodbury, MN 55125  
www.calypsosystems.com  
651.209.3741

### FCC Compliance

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. Any modifications made to this device that are not approved by Calypso Systems, LLC may void the authority granted the user by the FCC to operate this equipment.

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 correct the interference at his own expense.

### TIA Safety Information

The following is the complete TIA Safety Information for wireless hand-held devices.

#### Exposure to Radio Frequency Signal

Your wireless microphone is a low powered radio transmitter and receiver. When ON, it receives and sends out Radio Frequency (RF) signals. In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices. Those guidelines are consistent with the safety standards previously set by both U.S. And international standards bodies: ANSI C95.1 (1992)\*, NCRP Report 86 (1986), ICNIRP (1996)

\*American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

Those standards were based in comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicists from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

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#### Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against RF signals from your wireless device.

**Pacemakers**

The Health Industry Manufacturers Association recommends that a minimum separation of six (6) inches be maintained between a hand held wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

**PERSONS WITH PACEMAKERS:**

- Should ALWAYS keep the microphone more than six (6) inches from their pacemaker when the phone is turned ON;
- Should not carry the microphone in a breast pocket;
- Should use the lapel microphone with belt mount and opposite the pacemaker to minimize the potential for interference;
- Should turn the microphone OFF immediately if there is any reason to suspect that interference is taking place.

**Hearing Aids**

Some digital wireless devices may interfere with some hearing aids. In the event of such interference, you may want to consult your Technical Director (or Calypso Technical Service to discuss alternatives.)

**Other Medical Devices and Health Care Facilities**

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from the external RF energy. Your physician may be able to assist you obtaining this information.

- Do not use in areas where medical equipment could be affected from the microphone's electromagnetic wave. Make sure to turn OFF the microphone power in close proximity to the medical equipment.

**Safety Information**

Please read and observe the following information for safe and proper use of your wireless microphone and to prevent damage. Also, keep the User Guide in an accessible place at all times after reading it.

**Handling Precautions**

- Do not cover the microphone's RF emitter with your hand or hide the microphone by placing it inside clothes. Covering the RF emitter will disrupt transmission.
- Avoid using the wireless microphone in environments where perspiration or seawater is likely or present, as this could lead to microphone failures.
- Avoid areas exposed to direct sunlight (e.g. windows, skylights, etc.).

## 8. Calypso Warranty Statement

This Non-Transferable warranty is provided to original purchasing end user, herein referred as “customer”, of Calypso Systems product line defined as: WCM-RF, WCM-RFB2, CA-1000, CA-1050, CB-50, CB-75, CB-1000, CB-1050, CB-5000, CM-3000, CR-1200R, CSD-500, Encore!, ION-LT2, and Maestro, herein referred as “product”.

This warranty is applicable to product sold or distributed to customer by an authorized Calypso Systems Dealer, OEM, Value Added Reseller or sold directly to the end user by Calypso Systems, LLC. This warranty becomes effective from the moment the end user completes purchase and receives product. This warranty shall remain in effect for 3 years from the moment of purchase as long as the original customer of the product continues to own and use the product. This warranty does not apply to accessories such as power supplies and cables, which carry standard 12-month manufacturer warranties.

### Terms

Calypso Systems warrants that product shall be materially free of defects in material and workmanship under normal use and service during the warranty period. In the event that Calypso Systems receives notice from the customer during the warranty period that product does not conform to this warranty, Calypso Systems shall, at its sole option, either repair or replace the non-conforming product. The warranty on the replacement or repaired product shall continue for the duration of the original warranty. All returned product becomes the property of Calypso Systems.

### Procedures

A product may only be returned with the prior written approval of Calypso Systems. Such approval shall reference a Return Material Authorization number (RMA) issued by authorized Calypso Systems technical support personnel. Transportation costs, if any, incurred in connection with the return of a defective item to Calypso Systems shall be borne by the Customer. Transportation costs incurred in connection with the re-delivery of a repaired or replaced item to the Customer shall be borne by Calypso Systems. However, such costs shall be borne by the Customer if Calypso Systems, reasonably determines that the product is not defective. If Calypso Systems determines, in its sole discretion, that the allegedly defective product is not covered by the terms of the warranty provided hereunder, or that a warranty claim is made after the warranty period, the cost of repair by Calypso Systems, including all shipping expenses, shall be reimbursed by the Customer. Calypso Systems shall have no liability with respect to data contained in any system returned to Calypso Systems.

### Exclusions

The foregoing warranties and remedies are for the Customer’s exclusive benefit and are non-transferable. Any and all warranties shall be void regarding System components that are damaged or rendered unserviceable by: (1) acts or omissions of non-Calypso Systems personnel; (2) misuse, theft, vandalism, fire, water, or other peril; (3) alterations of or additions to the System or any element thereof performed by personnel not certified by Calypso Systems to perform such alterations and additions or (4) the Customer’s failure to operate the product in conformance with Calypso Systems published operating parameters, including environmental specifications.

### Disclaimer of Warranty

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE LIMITED WARRANTIES REFERRED TO IN THE PARAGRAPHS ABOVE SHALL BE IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE. Calypso Systems, LLC SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

### Limitation of Liability

TO THE EXTENT ALLOWED BY APPLICABLE LAW, Calypso Systems, LLC AND ITS SUPPLIERS EXCLUDE THEMSELVES FROM ANY LIABILITY FOR ANY LOST REVENUE OR PROFIT, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, OR PUNITIVE DAMAGES OF ANY KIND CAUSED OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF Calypso Systems, LLC AND ITS AUTHORIZED RESELLERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL Calypso Systems, LLC OR ITS SUPPLIER’S TOTAL LIABILITY TO THE CUSTOMER, WHETHER IN CONTRACT NEGLIGENCE, STRICT LIABILITY, TORT OR OTHERWISE, EXCEED THE PRICE PAID BY THE CUSTOMER. THE FOREGOING LIMITATIONS SHALL APPLY EVEN IF ANY REMEDY PROVIDED HEREIN SHALL FAIL ITS ESSENTIAL PURPOSE. THIS LIMITATION OF LIABILITY, HOWEVER, WILL NOT APPLY TO ANY CLAIMS FOR PERSONAL INJURY.