

**Hearing Everything,  
Changes Everything.**



**TeachLogic®**

# MAXIMIZING INSTRUCTION THROUGH AUDIO

Amplify learning outcomes.



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# TeachLogic®

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## OUR MISSION STATEMENT

TeachLogic® enhances voice clarity for educators and their students in classrooms worldwide through the development of accessible, easy to use, wireless microphone and instructional audio systems specifically engineered for the learning environment.

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1994

SINCE 1994

70K

70K+  
CLASSROOMS

## Who We Are

TeachLogic® is an education technology company specializing in wireless microphones and classroom audio systems. Our advanced technology equips an entire room with “Sound Field amplification” without interference in adjacent rooms. TeachLogic systems are designed for a wide variety of applications: classrooms, training rooms, meeting rooms, and more.

## What We Do

TeachLogic combines its technical expertise in the science of enhancing voice clarity with the development of practical, affordable audio systems in order to support educators worldwide by improving classroom communication.

## Why Choose TeachLogic?

**Proven:** For over 25 years, TeachLogic has designed and developed specialized instructional audio systems for use by educators. Our products have been installed in over 70,000 classrooms worldwide.

**Practical:** Our best-in-class audio systems are known for their long-term reliability. All TeachLogic products utilize high-quality components and are forward and backward compatible with most Audio-Visual equipment, assistive technology, and page, fire, and security alert systems.

**Primary:** TeachLogic instructional audio systems are the foundation of EdTech because they are the first step in maximizing the basic verbal connection between educators and pupils, resulting in higher student retention rates and improved test scores.

**Productive:** We make all TeachLogic products easy to install, with minimal wiring and simple connectors. Quick installation and a user friendly interface means that our systems are ready to use sooner and are used more consistently.

# BARRIERS TO LISTENING

A teacher's voice volume decreases by almost **30%** by the back of the room. This is why the average student listening accuracy is 80%—a B-grade.

**60%**

Percentage of teachers that experience voice related health issues during a school year.

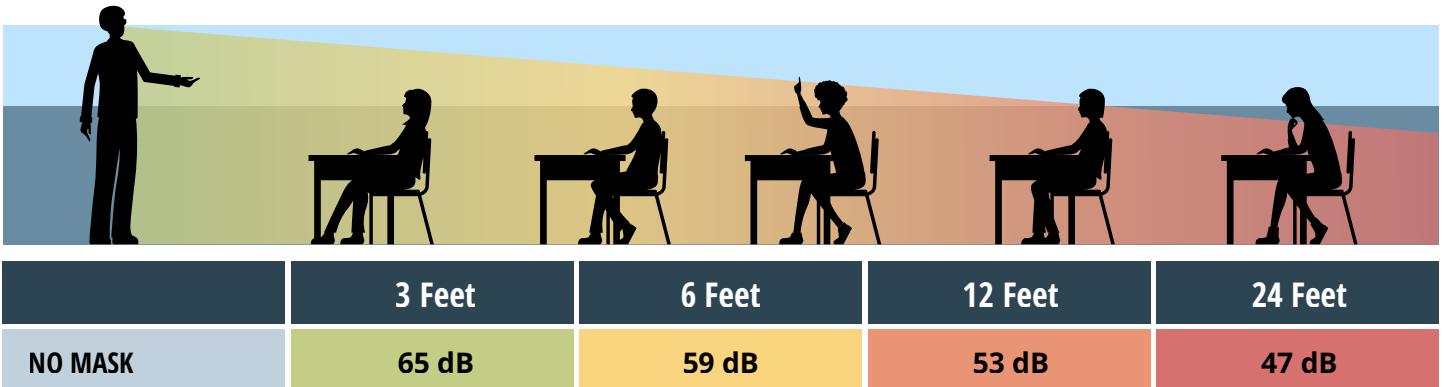
**70%**

Percentage of the school day spent engaged in listening activities.

**80%**

Average listening accuracy of students under normal classroom configuration.

- Average Room Noise Level: ~ 50 dB
- Level Students Need to Clearly Hear Audio: + 15 dB above the noise (~ 65 dB)
- Teacher's voice level as it travels across the room



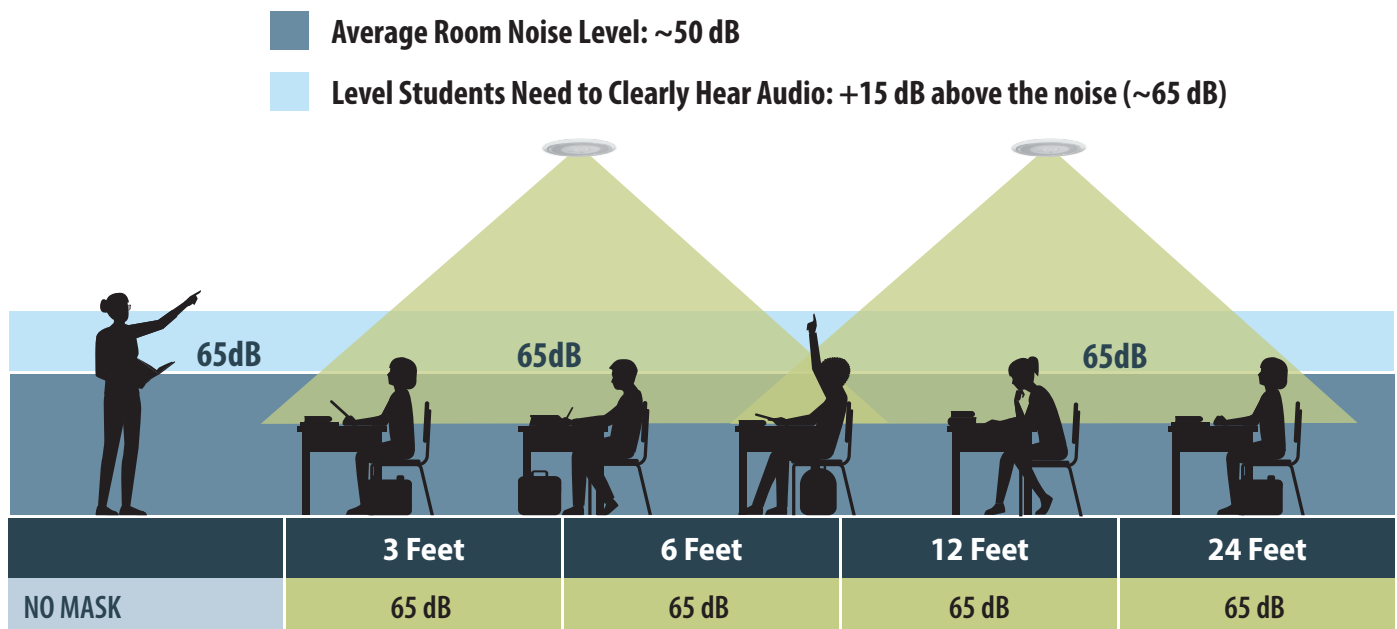
Sound decreases 6 dB every time distance doubles. Even a loud “teacher voice” is too low by the second row.



# HEARING EVERYTHING CHANGES EVERYTHING

TeachLogic® instructional audio systems are specifically engineered for the learning environment. They create the ideal range for sound intelligibility and eliminate the educator's need to raise (project) their voice.

TeachLogic® enhances and distributes a teacher's voice equally throughout the classroom, improving the student learning experience while minimizing voice strain.



The ideal system distributes audio evenly throughout the room to create equitable access for all listeners.

## THE IDEAL SYSTEM FOR SOUND INTELLIGIBILITY:

### Wireless Microphones



Wireless microphone for clarity

+

### Amplifier/Receiver



Amplifier for volume

+

### Speakers



Speakers to evenly distribute the sound

# COMPARE AUDIO SOLUTIONS



Ovation™  
OA-50



Maxim™  
IMA-540



Matrix™  
IMA-121

## Standard Classroom

## Standard Classroom

## Standard Classroom

Key Applications	Audio + Life Safety	Audio + Life Safety	Out of Sight w/ Wall Controller
WIRELESS TECHNOLOGY	DECT	IR	IR
VIDEO CONFERENCING COMPATIBLE	√	√	√
MOBILE CART COMPATIBLE	√	√	√
# MICS SUPPORTED	2	2	2
# AUDIO INPUTS	4	4	2
# LINE OUTPUTS	2	2	1
WATTS	50	50	50
# SPEAKERS SUPPORTED	4	4	4
EQ	5 Band	5 Band	Tone
CONFERENCING ECHOGUARD	√	√	
DIGITAL FEEDBACK GUARD	√	√	√
LESSON CAPTURE OUTPUT	√	√	
ASSISTIVE LISTENING (ALS) OUTPUT	√	√	√
COMPUTER ANTI-HUM	√	√	
PAGE MUTE CONNECTION	√	√	√
FIRE ALARM INPUT	√	√	
SECURITY ALERT INTERFACE	√	√	√
RS-232 COMPATIBLE	√	√	√
SLEEP MODE	√	√	√
REMOTE CONTROL PANEL	√		√
BLUETOOTH			√

# COMPARE AUDIO SOLUTIONS



Forum™  
IMA-240



Spectrum™  
IMA-840



Quantum™ II  
IRQ-360

## Standard Classroom

## Large Classroom

## Mobile/Portable Solution

Key Applications	Instructional Audio	Audio + Life Safety	No Installation Required
WIRELESS TECHNOLOGY	IR	IR	IR
VIDEO CONFERENCING COMPATIBLE	✓	✓	✓
MOBILE CART COMPATIBLE	✓	✓	✓
# MICS SUPPORTED	2	2	2
# AUDIO INPUTS	3	4	1
# LINE OUTPUTS	2	2	1
WATTS	50	100	19
# SPEAKERS SUPPORTED	4	8	2
EQ	3 Band	5 Band	Tone
CONFERENCING ECHOGUARD		✓	
DIGITAL FEEDBACK GUARD	✓	✓	
LESSON CAPTURE OUTPUT	✓	✓	
ASSISTIVE LISTENING (ALS) OUTPUT	✓	✓	
COMPUTER ANTI-HUM	✓	✓	
PAGE MUTE CONNECTION		✓	
FIRE ALARM INPUT		✓	
SECURITY ALERT INTERFACE		✓	
RS-232 COMPATIBLE		✓	
SLEEP MODE	✓	✓	
REMOTE CONTROL PANEL			
BLUETOOTH			

# Infrared Audio Solutions

## Maxim™

The Maxim™ is our premier digital amplifier. It includes features to amplify instructional audio sources and life safety integrations to make all school communications heard, including pages, fire alarms, and security alerts. When paired with wireless microphones, the Maxim™ is the teacher's best instructional aid for lesson comprehension and on-task behavior.



4 AUDIO  
INPUTS



2 MICS



RS-232



SECURITY  
ALERT



FIRE  
ALARM



PAGE  
MUTE



FEEDBACK  
GUARD



ASSISTED  
LISTENING  
COMPATIBLE



MOBILE CART  
COMPATIBLE



VIDEO  
CONFERENCING  
COMPATIBLE

## Spectrum™

The Spectrum™ is our most powerful amplifier, suitable for use in large learning spaces up to 2500 sq ft. It has the same feature set as the Maxim™ and 2x the power (100 W).

When paired with wireless microphones, the Spectrum™ ensures that crystal clear sound is delivered to every seat in the room.



4 AUDIO  
INPUTS



2 MICS



RS-232



SECURITY  
ALERT



FIRE  
ALARM



PAGE  
MUTE



FEEDBACK  
GUARD



ASSISTED  
LISTENING  
COMPATIBLE



MOBILE CART  
COMPATIBLE



VIDEO  
CONFERENCING  
COMPATIBLE

# Infrared Audio Solutions

## Matrix™

The Matrix™ is ideal for any room where the amplifier needs to be out of sight. It connects to the same ceiling sensor and speakers as our other user friendly systems connect to.

With a simple CAT-5 cable, the TeachLogic® CPS-121 (or CPR-125) wall controller manages the audio sources and volume levels so that the amplifier can be installed somewhere secure.



2 AUDIO INPUTS



2 MICS



PAGE MUTE



SECURITY ALERT



FEEDBACK GUARD



ASSISTED LISTENING COMPATIBLE



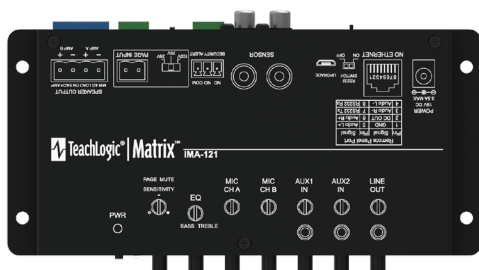
MOBILE CART COMPATIBLE



VIDEO CONFERENCING COMPATIBLE



BLUETOOTH®



### CPS-121 Wall-Mounted Control Panel >

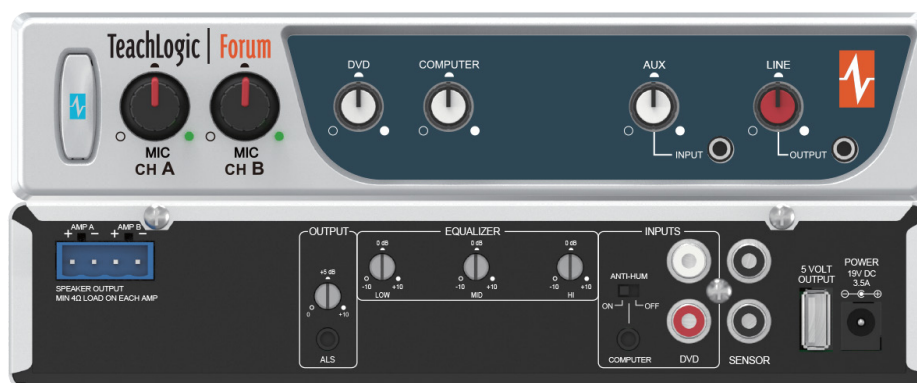
Controls the Matrix™ audio sources and adds Bluetooth® to your system.



CPS-121 Instructional Audio Control Panel

## Forum™

The Forum™ is our entry level amplifier, ideal for learning spaces up to 1600 sq ft. This amplifier/receiver/mixer combo supports 2 infrared wireless microphones and 3 audio inputs. It is suitable for virtually any installation location including on a mobile cart.



3 AUDIO INPUTS



2 MICS



FEEDBACK GUARD



ASSISTED LISTENING COMPATIBLE



MOBILE CART COMPATIBLE



VIDEO CONFERENCING COMPATIBLE

# Portable/Mobile Audio Solutions

## Quantum™ II

The Quantum™ II is a self-contained instructional audio system designed for portable or permanent use. Two wireless microphones can be used simultaneously—one for the teacher and one handheld for student participation. Its powerful 30-watt amplifier can be expanded to 50 watts of total output when connected to an additional 8 ohm speaker. Also, multiple units can be used concurrently to expand room coverage.

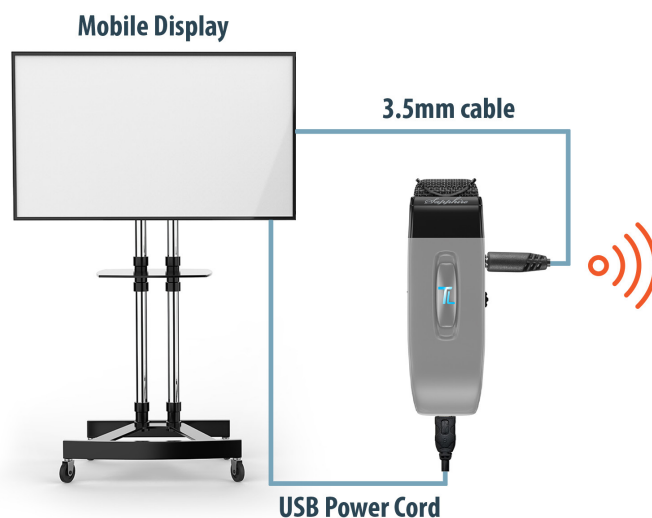
 **WEIGHT** | 4 LB 4 OZ       **SIZE** | 6.25" W x 14" H x 4.75" D



## IRT-66 AirLink™

### Mobile Display Transmitter

Every TeachLogic system is mobile cart ready. Simply connect our IRT-66 AirLink™ transmitter to the TV's USB power and audio output, and the mobile display will transmit through the TeachLogic audio system. This works with all installed TeachLogic systems, but can also be added to almost any existing audio system.



## Mobile Cart Solutions

### Solution 1:

Wirelessly connect to any TeachLogic classroom audio system using our IRT-66 AirLink™ transmitter.

### Solution 2:

Add an amplifier and 2 speakers to the cart for a mobile sound system.



# INFRARED SYSTEM COMPONENTS



We specialize in infrared wireless microphones and audio systems for learning environments.

## Sapphire™

The vocal clarity of the Sapphire™ is unsurpassed. It boasts high level output, reliable connectivity and exceptional definition. It functions as either a neck worn or handheld mic.



Borrowing from the world of studio recording where crystal clear sound is a must, the Sapphire™ pendant microphone is the clearest and best sounding teacher microphone available. At 1.4 oz, the Sapphire is also the lightest teacher microphone in its class. Worn on a lanyard and powered for up to 8 hours by a rechargeable battery, it's perfect for daily use.

Wearing a wireless microphone allows the teacher to move freely around the room but sound just a few feet away.



WEIGHT | 1.4 OZ



SIZE | 3.5" H



8 HOUR RUNTIME



3.5 MM INPUT



SECURITY ALERT

THE MOST COMPACT IR PENDANT MICROPHONE AVAILABLE

## ICS-55 Ceiling Sensor

The ceiling sensor receives the IR transmission from the microphones and sends it to the amplifier/receiver via its plenum-rated RCA cable. Six large detecting diodes, each with a "fisheye" lens provide 360° coverage while minimizing the required transmission distance of the microphone for more reliable performance.



## Handheld

Wireless handheld microphone for all TeachLogic® infrared audio systems.

The handheld microphone/transmitter is used primarily by students for interactive class participation. This sturdy, powerful tool can help students gain confidence when presenting or reading aloud while providing improved vocal clarity for the benefit of other students in the classroom.



WEIGHT | 10.3 OZ



SIZE | 9 5/8" H

## BRC-60 MICROPHONE CHARGER

The BRC-60 is the ideal charging solution for TeachLogic wireless microphones. Charges up to two Sapphire™ pendant mics and one IRH-35 handheld microphone. Performs maintenance charging to keep batteries ready for daily use.





# Ovation™ - DECT Audio System

## Ovation™

The Ovation™ stands out in its class with the power, superior voice quality, and a feature set that supports the myriad of classroom audiovisual technologies connected to it. Users will applaud its easy-to-use interface while it is hands down, or maybe up, one of the easiest systems to set up and requires virtually no maintenance over TeachLogic's famously long service life.



4 AUDIO INPUTS



2 MICS



RS-232



SECURITY ALERT



FIRE ALARM



PAGE MUTE



FEEDBACK GUARD



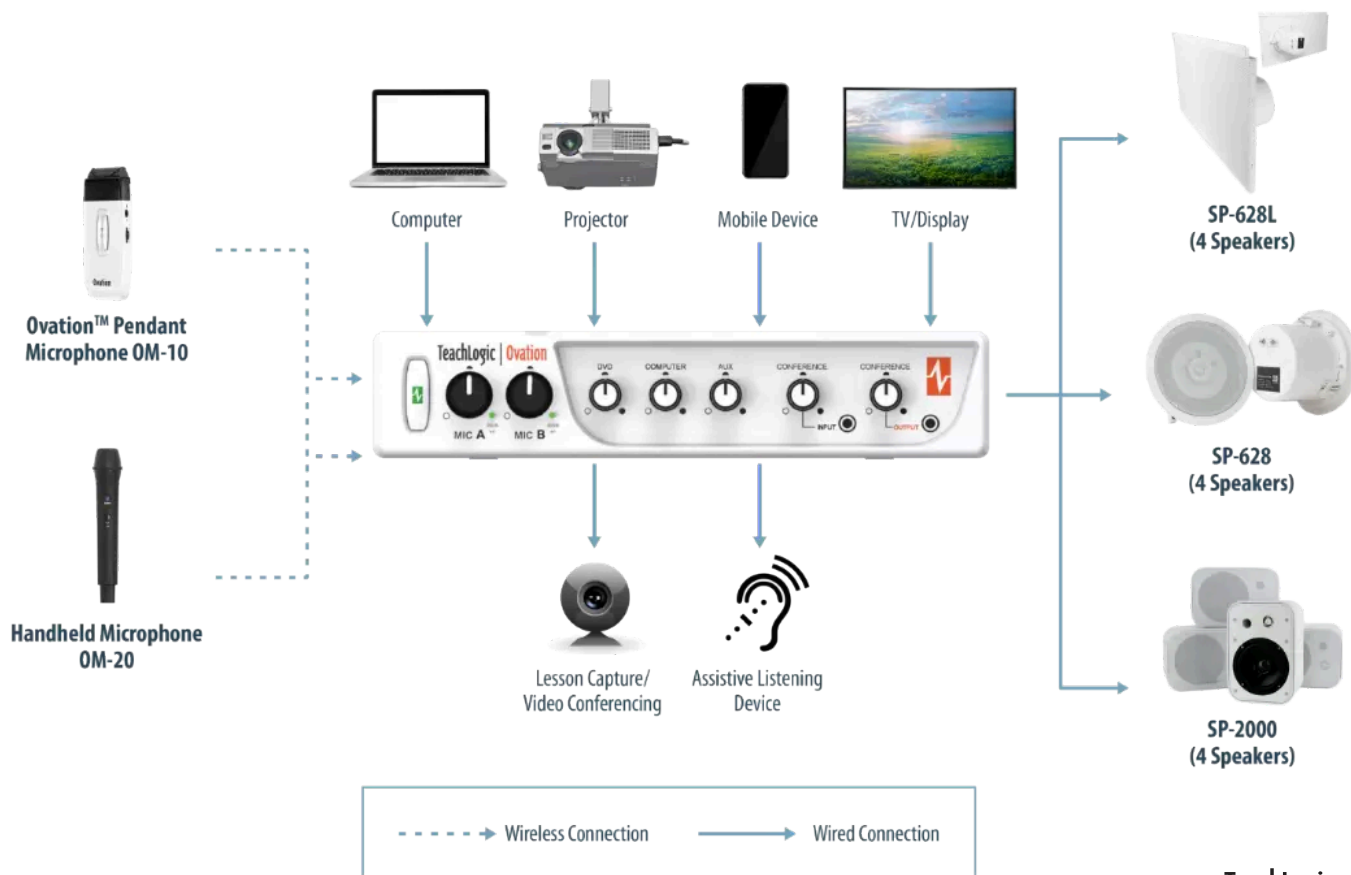
ASSISTED LISTENING COMPATIBLE



MOBILE CART COMPATIBLE



VIDEO CONFERENCING COMPATIBLE



# DECT SYSTEM COMPONENTS

We specialize in DECT wireless microphones and audio systems for learning environments.



## OVATION™

- Tailored microphone capsule design for natural clarity in the frequency range of human speech
- Cardioid polar pattern picks up audio from the teacher while mitigating unwanted noise
- Updated industrial design with gloss white and black for modern visual presence and easy cleaning
- Large ON/OFF/MUTE button for easy control of microphone operation



This is the most compact DECT teacher microphone available. Designed with an "easy button" to turn ON/OFF/MUTE for daily use. The additional volume switches for mic and audio input volume prevents the need to adjust the amplifier after its initial set up, plus a 3.5 mm Auxiliary port enables the use of lapel mic or allows a connected audio source to wirelessly transmit through the system.

## OP-10

For putting the OA-50 into or out of Standby Mode, pairing the microphones, and radio-resetting the OA-50, when amplifier is out of reach.



## HANDHELD

Our handheld mic boosts student confidence by clearly amplifying their voice giving them a commanding presence in front of their peers. The only student mic featuring Push-To-Talk (PTT) function to prevent an "open mic" sharing from getting out of hand. An anti-roll bezel prevents accidental mic drops.



WEIGHT | 10.3 OZ



SIZE | 9 5/8" H

## OC-20

There's no place like home. This drop-in charger allows the user to drop in the microphones at the end of each day so they are recharged, ready, and easy to reach the next morning. The magnetic base ensures they stay put when mounted on the amplifier or WC-400 wall cabinet.



WEIGHT | 1.4 OZ



SIZE | 3.5" H



8 HOUR RUNTIME



3.5 MM INPUT



SECURITY ALERT

THE MOST COMPACT DECT PENDANT MICROPHONE AVAILABLE

# Speakers

Evenly distribute sound to every seat in the classroom.



## CEILING MOUNT SPEAKERS WITH TILE BRIDGE (SP-628)

Full range speaker with a 6.5" woofer and a high frequency dome tweeter for wide dispersion of critical "consonant" frequencies. Speaker is enclosed in a sealed metal backcan with plenum rating.



## LAY-IN PANEL WITH FULL RANGE SPEAKER (SP-628L)

Same SP-628 speaker mounted on a quarter ceiling panel with T-bar attached for labor saving installation. Heavy duty, powder coated for buzz free performance. Ideal for design continuity.

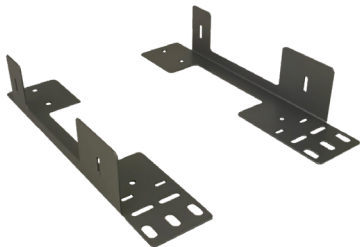


## WALL MOUNT SPEAKERS WITH BRACKET (SP-2000)

Two-way speaker with a 5.25" woofer and a 1" high frequency mylar dome tweeter housed in a port-tuned enclosure. Extended bass response for full, rich sound. Flexible use as wall mounted or bookshelf/tabletop speakers.

## MOUNTING ACCESSORIES

Add these convenient accessories to create the perfect storage solution for system components.



## SM-401 UNIVERSAL MOUNT

This versatile mount, made from powder coated steel, is designed specifically for our amplifiers. It allows for mounting on top of, or underneath surfaces such as shelves, desks, or walls. Plus, the "ears" can be bent 90 degrees for mounting. The brackets attach to predrilled holes in the side of the amplifier.



## WC-400 WALL MOUNTING CABINET

This low profile wall cabinet houses an amplifier for easy but discreet access, while the sturdy metal lid is the perfect resting place for the BRC-60 charger.

# TECH TALK: IR vs. DECT WIRELESS TRANSMISSION

TeachLogic uses the 2 most common and robust wireless transmission technologies to deliver crystal clear audio: Infrared (IR) and DECT. This page will help you understand the advantages of each.

## Sapphire™ Infrared (IR) Technology



**High Fidelity:** Infrared systems transmit/receive a full range of sound frequencies (frequency response) and are immune to radio interference.



**Speed of Light:** Latency is the delay before the transmission of sound. IR transmits the teacher's voice from the microphone to the amplifier instantaneously.



**Stays in the Room:** Because IR transmission is light based, it does not pass through solid walls. What is said in the room stays in the room.



**Always Ready:** Because IR waves cannot permeate solid walls, you can use any mic in any room. The microphone is "paired" as soon as it enters the room.

If you want to use any mic in any room, you don't have glass walls, and you want to make sure what is said in the room stays in the room, go with IR.

## Ovation™ DECT 6.0 Technology



**Go The Distance:** DECT uses radio waves to travel longer distances to fill oversized rooms with reliable connectivity.



**Latest and Greatest:** Our new DECT 6.0 systems transmit/receive the full range of human speech and do it faster than the previous generation of DECT.



**New Heights:** DECT is ideal in rooms with ceilings over 14' and where the architecture inhibits line of sight between the mic and amplifier.



**No Glass Ceiling:** DECT is ideal in schools that use large amounts of glass in their construction, especially between classrooms where there is clear line-of-sight between rooms.

If you need to cover a large room, have glass walls, your rooms are an odd shape or have ceilings over 14', then go with DECT.

### The TeachLogic Difference

- All components reproduce the entire frequency range of human speech and beyond
- Universal audio connections that are forward and backward compatible
- Universal intercom connections compatible with and validated by major manufacturers



**TeachLogic, LLC**  
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**teachlogic.com**

An instructional audio system is the most inclusive and least disruptive solution to learning loss because it directly helps overcome hearing loss. No other single intervention is so impactful for an entire classroom.



**TeachLogic<sup>®</sup>**