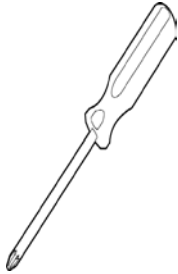


Welcome!

Let's get started.

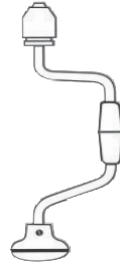
What you will need:



Screwdriver

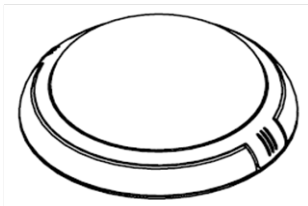


Marking Pencil

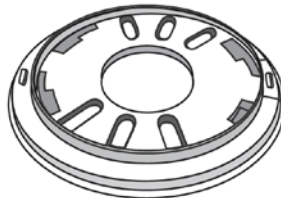


Hole Saw

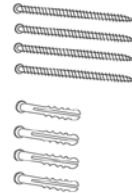
What's in the box:



LPT-T216 ListenPoint®
ALS Module (216MHz)



Mounting Platform

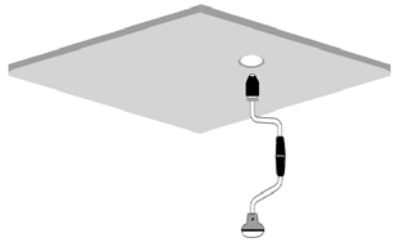


Mounting Hardware

* If you did not receive all listed parts please call Listen Technologies Corporation - See back page for contact information.

Plan and Prepare for Installation

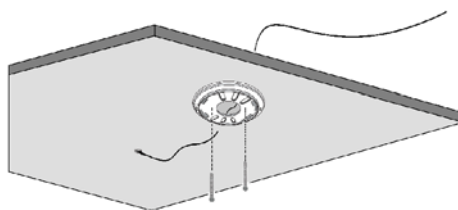
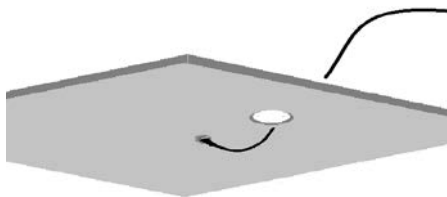
- a. Evaluate the room for optimal placement of the T216 ALS Transmitter.
- b. Decide where you want to install your T216 ALS Transmitter. Use a pencil to mark the center of the Transmitter's location.
- c. Using the mounting template provided; cut a hole in the ceiling with a hole saw.



Items to Remember

- * The distance between the T216 ALS Transmitter and the Room Module should only be a maximum of 50 ft. (15 m).
- * The T216 ALS Transmitter broadcasts an FM signal. FM signal will travel through walls and other visual obstructions. Appropriate attention needs to be paid to placement of the transmitter for optimal privacy and performance within the room.
- * **Do not cut into ceiling without safely checking above the hole location for the presence of any wires, ducting, or any other obstruction that may exist.**

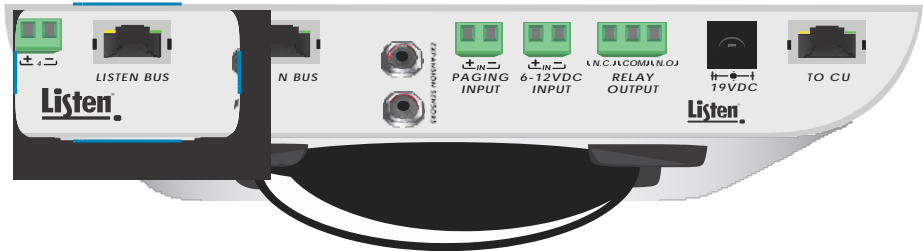
Transmitter Installation



Pull Cable

- a. Run the Cat-5e cable from your ListenPoint® Room Module (RM) to the hole at the desired location for your T216 ALS Transmitter. This may require additional tools to pull the cable through any obstructions.
 - b. Cable should be pulled through the open slot of the mounting platform.
 - c. Mount the ALS Mounting Platform included with the T216 ALS Transmitter on the ceiling using the supplied mounting hardware.
- * May be attached to an electrical box, or directly to the ceiling or ceiling tile.

Attach ALS Transmitter to Room Module and Mount



Connect Transmitter to RM

- a. Connect the Cat-5e cable to the “LISTEN BUS” port on the RM. Connect the other end of the Cat-5e cable directly to the T216 ALS Transmitter via the port.
- b. Mount the T216 ALS Transmitter onto the ALS Transmitter Mounting Platform. The Transmitter will slide in and snap into place.

* To snap into place, simply align notches and turn clockwise until it snaps.

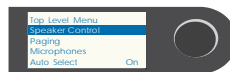
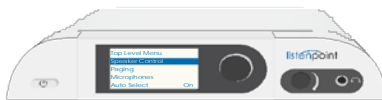
Installation is complete!

Configure Your System

Adjust Menu Items on the ListenPoint® Control Unit

To access CU Menu Items follow this sequence:

- a. First, ensure that your ListenPoint® System has the latest updates in firmware (See included card with Update Information).
- b. Press the CU control knob.
- c. Scroll down to the “Optional Module” Tab and push the control knob.



Select Power Level

- a. The Transmitter has 3 levels of power: High, Medium (default) and Low. This allows for customizable transmission applications in a variety of environments and circumstances.
- b. The default **Medium** level has the optimal coverage for a standard 30 ft. x 30 ft. (9 m X 9 m) room.
- c. The **High** setting has a range of 150 ft. (46 m)
- d. The **Low** setting has a range of 10 ft. x 10 ft. (3 m X 3 m)
- e. Highlight the power level that best suits your environment and Press the CU control knob.

For advanced help in determining Transmitter placement, please call Listen Technologies Corporation - See back page for contact info.

Channel Settings

- a. The T216 ALS Transmitter has 57 channel settings—19 wide band and 38 narrow band. Adjust the FM receivers to the desired channel.
 - b. Tune the receivers to the transmission channel.
- * We recommend the use of genuine Listen® wireless receivers and accessories for solid performance and the highest standards of quality.



Channel Selection

It is important to choose channels that are free from interference to achieve proper operation of your Listen equipment. This process is trial and error. Before turning on the transmitter, listen to the wide band channels (Channels that start with a "2" for 216MHz when using a Listen receiver). Listen to the audio through the headphone or on a Listen receiver. Choose a channel with the least amount of interference. Unless you are interfacing with an existing narrowband transmission system, always use a wide band channel. If you are using multiple channels follow this process:

- a. **Same Space.** If you are using multiple transmitters in the same space, the most number of channels that will work simultaneously is three at 216MHz. With all of the transmitters off, listen for interference on all the wide band channels via the headphone jack on a Listen receiver. Using the frequency compatibility tables on page 9, eliminate any channels that have noticeable interference. Now choose the channels with the widest channel spacing. It is recommended that adjacent channels be spaced at least 300 kHz. If there is no interference the following channels are recommended: Channels 2A, 2K and 2V at 216MHz.
- b. **Distributed Spacing.** If you are using transmitters that are spread out over space, you can achieve more simultaneous broadcast channels. However, it is critical that your receiver(s) be located as close to its transmitter as possible. You can use adjacent channels (see frequency compatibility tables on page 10) in this case as long as the adjacent channel transmitter is at least 50% further away from the receiver as its transmitter. Example: The transmitter or the receiver on channel E is 100 feet from the receiver. The adjacent channel transmitter on channel D should be at least 150 feet away.

216 MHz Compatibility Chart

Frequency MHz	Listen	Phonak Microfield	Comtek	Williams	Gentner	CSI	AVR	LightSpeed
216.0125	1A	1	1				C01	N01
216.025	2A	41	41		1	1		
216.0375	3A	2	2					
216.0625	1B	21	3					
216.075	2B	42	42		2	10		
216.0875	3B	4	4				C05	
216.1125	1C	5	5					
216.125	2C	43	43	A	3	6		
216.1375	3C	22	6					
216.1625	1D	23	7					
216.175	2D	44	44	B	4	14		
216.1875	3D	8	8					
216.2125	1E	9	9				C09	N09
216.225	2E	45	45	C	5	2		
216.2375	3E	24	10					
216.2625	1F	25	11					
216.275	2F	46	46	D	6	11		
216.2875	3F	12	12				C12	N12
216.3125	1G	13	13					
216.325	2G	47	47	E	7	7		
216.3375	3G	26	14					
216.3625	1H	27	15					
216.375	2H	48	48	F	8	15		
216.3875	3H	16	16				C18	N18

216 MHz Compatibility Chart

Frequency MHz	Listen	Phonak Microfield	Comtek	Williams	Gentner	CSI	AVR	LightSpeed
216.4125	1J	17	17				C21	
216.425	2J	49	49	G	9	18		
216.4375	3J	18	18					
216.5125	1K	61	21					
216.525	2K	29	51	H	10	3		
216.5375	3K	62	22					
216.5625	1L	28	23					
216.575	2L	52	52	I	11	12		
216.5875	3L	64	24				C24	N64
216.6125	1M	65	25				C25	
216.625	2M	53	53	J	12	8		
216.6375	3M	81	26					
216.6625	1N	82	27					
216.675	2N	54	54	K	13	16		
216.6875	3N	68	28					
216.7125	1P	69	29				C29	
216.725	2P	55	55	L	14	19		
216.7375	3P	83	30					
216.7625	1R	84	31					
216.775	2R	56	56		15	4		
216.7875	3R	72	32				C32	N72
216.8125	1S	73	33				C33	
216.825	2S	57	57			13		

216 MHz Compatibility Chart

Frequency MHz	Listen	Phonak Microfield	Comtek	Williams	Gentner	CSI	AVR	LightSpeed
216.8375	3S	76	34					
216.8625	1T	85	35					
216.875	2T	58	58			9		
216.8875	3T	86	36					
216.9125	1U	77	37				C37	N77
216.925	2U	59	59			17		
216.9375	3U	88	38					
216.9625	1V	79	39				C39	
216.975	60	60			5			
216.9875	80	40				C40	N80	

Listen SQ™

People are accustomed to listening to low noise, high fidelity audio (delivered via CD, DVD, etc.). FM radio systems, such as those made by Listen Technologies, have more inherent noise compared to most sound systems.

To minimize noise, Listen uses a noise reduction technology called Listen-SQ™. Both the transmitter and receiver must have the SQ feature enabled to achieve the desired results. SQ is available on your T216 Transmitter and Listen receivers.

If you are planning to use this product with older Listen systems that do not have Listen SQ or equipment not manufactured by Listen, you should disable Listen SQ.

Your Listen equipment has been shipped to you with the SQ feature enabled. You may need to disable the SQ function for one or more of the following reasons:

- a.** You are using your new Listen system with older version Listen equipment that does not have the SQ function.
- b.** You are using your new Listen system with equipment supplied by other manufacturers.
- c.** You expect that end users may bring and use their own receivers that don't have the SQ function..

Phonak® and 3rd Party Hearing Devices

- a. Your ListenPoint® T216 Transmitter is able to interface with Phonak® hearing devices. Select the Phonak option in the CU control menu and press enable.

* We recommend the use of genuine Listen® wireless receivers and accessories for solid performance and the highest standards of quality.

Test Your System

Power Up and Test the System

- a. Push the power button on the CU (turning on CU will also power the RM).
- b. Test the system with a fully charged microphone – push any button on the microphone or simply remove from the Charging/Storage Station to turn on. Wait 10 Seconds, and then adjust the volume on the microphone until you have a comfortable listening level.
- c. Set the FM receivers to the appropriate channel.
- d. Listen for noise or interference.

RF Maximization Strategies

For proper and dependable operation, Listen receivers should receive a strong and consistent signal from the originating transmitter. The following strategies should be used maximize this signal:

- a. When using your system, keep in mind that the location of both the transmitter and receiver is critical to maximizing signal strength.
 - b. Eliminate or minimize obstructions between the transmitter and the receivers.
 - c. Minimize the distance between the transmitter and the receivers.
 - d. Stay clear of metal objects.
 - e. Keep the headphone cables connected to the receivers fully extended. Do not shorten or coil headphone cables. These cables are the antennas for your portable products.
- * **If the RF signal to the 216MHz model receivers is too high, the audio will be distorted. This may happen if you are within 5 feet of the 216MHz transmitter.**

Compliance Notice and FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. These devices may not cause harmful interference, and
2. These devices must accept any interference received, including interference that may cause undesirable

Listen's LPT-T216 Assistive Listening Transmitter (216MHz)

This transmitter is authorized by rule under the Low Power Radio Service (47 C.F.R. Part 95) and must not cause harmful interference to TV reception or United States Navy SPASUR installations. You do not need an FCC license to operate this transmitter. This transmitter may only be used to provide: auditory assistance to persons with disabilities, persons who require language translation, or persons in educational settings; health care services to the ill; law enforcement tracking services under agreement with a law enforcement agency; or automated maritime telecommunications system (AMTS) network control communications. Two-way voice communications and all other types of uses not mentioned above are expressly prohibited.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate Listen's equipment.

FCC Statement

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 to correct the interference at his own expense.

RF Safety Instructions

For RF Safety and per FCC and Industry Canada regulations, the product should never be installed within 8-inches (20cm) of typical people locations.

Contacting Listen

If technical service is needed, please contact Listen.

Pre-authorization is required before returning Listen products.

If products were damaged in shipment, please contact the carrier, then contact Listen for replacement or repair requirements payable by the carrier.

Listen's corporate headquarters are located in Bluffdale, Utah U.S.A.

We are open Monday through Friday, 8am to 5pm Mountain Time.



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