listenpoint®
BY LISTEN TECHNOLOGIES CORPORATION

CUSTOMIZATION GUIDE

ListenPoint Customization Guide

Contents

Introduction

Thank you for purchasing a ListenPoint® System. This system has been designed for creating audio structure for your room. ListenPoint allows you to customize the room for enhanced intelligibility of the orator or presentation. This guide is intended to be utilized by the installer for advanced customization of the ListenPoint system. Within the guide, you will have a series of hyperlinks that will help direct you to the information you desire. The guide will also give you commonly used examples, FAQs and links to many different "white papers".

Product Terms

Control Unit (CU): The CU is where the auxiliary inputs and output are connected. The CU has a LCD display with a single control dial that allows you to customize your ListenPoint system. The CU could be located for on a desk, on the wall for easy access or in a cabinet for ease of connection and security, it also has headphone jack with volume control on the front panel. The CU connects to the Room Module with a single Cat-5e cable.

Room Module (RM): The RM contains the IR sensor and the speaker amplifiers. The RM should be suspended from the ceiling, and all the speakers connect directly to the RM. The RM connects to the *CU* with a single Cat-5e cable.

Control Dial: This is the master control on the *CU.* By rotating the dial you can scroll through menu items and by pushing the dial you can select desired functions.

Equalizer (EQ): The ListenPoint system has two different equalizers. One is used for speaker equalization and the other for room equalization. Equalizers are used to eliminate feedback and increase the intelligibility of the system.

Relay: The relay is a single pole double throw relay (SPDT). It has a three pin Euro connector on the back of the *RM*. Applications for the relay include; silent alarms to help alert an administrator, raising or lowering a screen, or turning on a projector.

LCD: The Liquid Crystal Display is on the *CU* and allows for viewing of the system customization. In the normal operation it shows aux inputs and master volume, M1 battery level, and relative M1 level and also indicates when an external page has been sensed.

Microphone/Media Interface (M1): The M1 can be worn around the neck as a lapel, on the belt or be used as a handheld (additional microphone hand-held sleeve comes with LPT-M1 package). The M1 is a transceiver that sends and receives information (including your voice) to/from the RM. Some buttons may be customized to perform different related tasks. The M1 is also a media interface that can control other external products such as raising or lowering a screen.

ListenPoint Customization

To access the system customization menu, use the *LCD* and control dial on the *CU*, or optionally you can use the ListenPoint Software (downloaded from the Listen website).This part of the customization guide will explain all the parameters you can adjust. Whether you adjust them via *CU* or with ListenPoint Software, the parameters behave the same.

Customizing using the LCD and Control Dial: With the unit on, press and hold the control dial for five seconds. The display on the unit will change to show the customization menu. Turning the control dial will scroll through the functions you can select. Push the dial to select a particular function.

If the control dial is not moved for 2 minutes the *CU* will exit the customization menu and return to the user screen.

You may enable password protection for your entire customization menu by scrolling to the Password Management section and entering a password as directed. A password may be any combination or 4 letters, numbers, or symbols. Make sure to write down your password in a safe place. Note: a forced reset will erase your password and ALL customization settings.

Customization Tree – Condensed

I. Customization Guide
- A. *Speaker Control*
- B. *Paging*
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- D. *Auto Select*
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- F. *Input Names*
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- I. *Password Management*
- J. *Language*
- K. *Display*
- L. *Limited Reset*
- M. *About*
- N. *Done*

Customization Tree – Expanded

(Bold = defaults)

I. Customization Tree
- A. Speaker Control
  1. *Amp* Trim **(Default is 0 dB)**
     - a. Amplifier 1 Trim - 12 dB to +6 dB
     - b. Amplifier 2 Trim - 12 dB to +6 dB

c. Amplifier 3 Trim - 12 dB to +6 dB
d. Amplifier 4 Trim - 12 dB to +6 dB
e. Back

2. *Recall User EQ*
   a. User EQ 1 (* indicates that data is stored in memory)
   b. User EQ 2 (* indicates that data is stored in memory)
   c. User EQ 3 (* indicates that data is stored in memory)
   d. User EQ 4 (* indicates that data is stored in memory)
   e. Flat (Resets both the Speaker EQ to 'Flat' and Parametric to flat)
   f. Back
3. *Save Current EQ*
   a. User EQ 1 (* indicates that data is stored in memory)
   b. User EQ 2 (* indicates that data is stored in memory)
   c. User EQ 3 (* indicates that data is stored in memory)
   d. User EQ 4 (* indicates that data is stored in memory)
   e. Cancel
4. *Adjust Current EQ*
   a. *Speaker EQ*
      i. Flat
      ii. Music
      iii. Speech
      iv. Downloaded 1
      v. Downloaded 2
      vi. Downloaded 3
      vii. Downloaded 4
      viii. Downloaded 5
      ix. AMK SA 615A
      x. Atlas Sound FAP 42T
      xi. Bose Model 16
      xii. Bose Model 32
      xiii. Bose Model 100
      xiv. JBL Control 26C
      xv. **Listen LPT-A104**
      xvi. Listen LPT-A104-P
      xvii. Listen LPT-A105
      xviii. Listen LPT-A106S
      xix. Rauland-Borg ACC1400
      xx. Rauland-Borg ACCWB5
      xxi. Penton CCS6/T
      xxii. Penton JD20XT-B
      xxiii. ProAcoustics PRS-VCA
      xxiv. ProAcoustics PRS-SD4
      xxv. SMART CAS-SPKR-C
      xxvi. SMART CAS-SPKR-W
      xxvii. Soundtube CM62-EZ

xxviii. Soundtube SM4001
xxix. Tannoy CMS501 BM
xxx. Tannoy CVS4
xxxi. Tannoy CVS6
xxxii. Cancel

b. *Room EQ Cut/Boost* **(Default Value is 0 on all bands)**

i.	Adjust Bass	- 12 dB to +12 dB
ii.	Adjust Band 2	- 12 dB to +12 dB
iii.	Adjust Band 3	- 12 dB to +12 dB
iv.	Adjust Band 4	- 12 dB to +12 dB
v.	Adjust Band 5	- 12 dB to +12 dB
vi.	Adjust Band 6	- 12 dB to +12 dB
vii.	Adjust Treble	- 12 dB to +12 dB

c. *Room EQ Parameters*
   i. Filter 1
      1. Filter 1 Freq (low frequency shelving)
         a. 52Hz/104Hz/ **208Hz**/260Hz
   ii. Filter 2
      1. Filter 2 Type
         a. high pass, low shelf, **peak**, notch, disable
      2. Filter 2 Freq
         a. 80Hz/120Hz/**180Hz**/220Hz/300Hz
      3. Filter 2 Q
         a. 0.2/0.4/0.6/**0.8**/1.0/1.5/2.0
   iii. Filter 3
      1. Filter 3 Type
         a. **peak**, notch, disable
      2. Filter 3 Freq
         a. 220Hz/300Hz/**400Hz**/600Hz/800Hz
      3. Filter 3 Q
         a. 0.2/0.4/0.6/**0.8**/1.0/1.5/2.0
   iv. Filter 4
      1. Filter 4 Type
         a. **peak**, notch, disable
      2. Filter 4 Freq
         a. 600Hz/800Hz/**1.2kHz**/1.6kHz/2.2kHz
      3. Filter 4 Q
         a. 0.2/0.4/0.6/**0.8**/1.0/1.5/2.0
   v. Filter 5
      1. Filter 5 Type
         a. **peak**, notch, disable
      2. Filter 5 Freq
         a. 1.6kHz /2.2kHz /**3kHz**/4kHz/6kHz
      3. Filter 5
         a. 0.2/0.4/0.6/**0.8**/1.0/1.5/2.0

vi. Filter 6
    1. Filter 6 Type
        a. **peak**, notch, low pass, high shelf, disable
    2. Filter 6 Freq
        a. 4kHz/6kHz/**8kHz**/10kHz/12kHz
    3. Filter 6 Bandwidth
        a. 0.2/0.4/0.6/**0.8**/1.0/1.5/2.0
vii. Filter 7
    1. Filter 6 Freq (high frequency shelving)
        a. 5.2kHz/**7.3kHz**/ 10.4kHz / 15.6kHz
viii. Back

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B. *Paging*
1. *Paging Input Trim* **(default is 0 dB)**
    a. Paging Volume - 18 dB to +6 dB
    b. Off
2. *Duck on Page*
    a. **None**
    b. Low (-15dB)
    c. Medium (-20 dB)
    d. High (- Max)
3. *Duck* on 6-12v
    a. **None**
    b. Low (-15 dB)
    c. Medium (-20 dB)
    d. High (- Max)
4. *Back*

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C. *Microphones*
1. *Button Disable*
    a. On
    b. **Off**
2. *Charger Auto Off*
    a. **On**
    b. Off
3. *Low Battery LED*
    a. **On**
    b. Off
4. *Aux Vol Control*
    a. ***On*** **Mute**
    b. Disable

5. *Aux Ducking*
    a. **None**
    b. Low (-15 dB)
    c. Medium (-20 dB)
    d. High (-Max dB)
6. *Soft Button Short*
    a. **No Action**
    b. Aux mute
    c. Relay
7. *Soft Button Long*
    a. No Action
    b. Aux mute
    c. **Relay**
8. *Back*

D. *Auto Select*
1. **On**
2. Off

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E. *CU Input Trims* **(Default value on all trims is 0)**
1. Aux 1 Trim -10db / 0db
2. Aux 2 Trim -10db / 0db
3. Aux 3 Trim -10db / 0db
4. Aux 4 Trim -10db / 0db
5. T-con Input Trim -10db / 0db
6. Bal Input Trim -10db / 0db
7. Back

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F. *Input Names*
1. *Aux-1*
    a. **Aux-1**
    b. Cable
    c. CD
    d. DVD
    e. iPod
    f. Mixer
    g. MP3
    h. PC 1
    i. PC 2
    j. TV
    k. Video
    l. User Defined

i. Alpha/numeric changeable
ii. Scroll through all fields
iii. Keep changes
1. Yes
2. No
3. Cancel

m. Back

2. *Aux-2*
   a. **Aux-2**
   b. Cable
   c. CD
   d. DVD
   e. iPod
   f. Mixer
   g. MP3
   h. PC 1
   i. PC 2
   j. TV
   k. Video
   l. User Defined
      i. Alpha/numeric changeable
      ii. Scroll through all fields
      iii. Keep changes
         1. Yes
         2. No
   m. Back
3. *Aux-3*
   a. **Aux-3**
   b. Cable
   c. CD
   d. DVD
   e. iPod
   f. Mixer
   g. MP3
   h. PC 1
   i. PC 2
   j. TV
   k. Video
   l. User Defined
      i. Alpha/numeric changeable
      ii. Scroll through all fields
      iii. Keep changes
         1. Yes
         2. No
   m. Cancel

4. *Aux-4*
    a. **Aux-4**
    b. Cable
    c. CD
    d. DVD
    e. iPod
    f. Mixer
    g. MP3
    h. PC 1
    i. PC 2
    j. TV
    k. Video
    l. User Defined
        i. Alpha/numeric changeable
        ii. Scroll through all fields
        iii. Keep changes
            1. Yes
            2. No
    m. Cancel
5. *Teleconferencing*
    a. **Teleconference**
    b. User Defined
        i. Alpha/numeric changeable
        ii. Scroll through all fields
        iii. Keep changes
            1. Yes
            2. No
            3. Cancel
6. *Balanced Input*
    a. **Balanced Input**
    b. User Defined
        i. Alpha/numeric changeable
        ii. Scroll through all fields
        iii. Keep changes
            1. Yes
            2. No
            3. Cancel
7. *Back*

Return to Top of Customization Tree

G. *Optional Module*
TBD

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H. *Relay*

1. Relay Mode
    a. Latching
    b. 200ms Pulse
    c. 400ms Pulse
    d. **600ms Pulse**
2. Relay Trigger
    a. 6-12V
    b. Mic
    c. **Either**
3. Back

Return to Top of Customization Tree

I. *Password Management*

1. Set password / numeric fields (**Default is 0000**)
2. Keep changes
    a. Yes
    b. No
    c. Cancel

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J. *Language*

1. **English**
2. Espanol
3. Duetsch
4. Francais
5. Italian

Return to Top of Customization Tree

K. *Display*

1. *Contrast*
    a. +/- 15 **(Default value is 0)**
2. *Backlight*
    a. On
    b. 5 Sec. Delay
    c. 15 Sec Delay
    d. **60 Sec. Delay**
3. *Orientation*
    a. **Normal**
    b. Invert
4. *Inactive Mode*
    a. **aux vol**

b. status only
c. master volume

5. *Inactive Period*
   a. 1 minute
   b. **2 minutes**
   c. 5 minutes
   d. 10 minutes
   e. 15 minutes
   f. 30 minutes
   g. 60 minutes
   h. None
6. *Back*

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L. *Limited Reset*
   1. *Limited Reset*
      a. Yes
      b. No

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M. *About*
   1. CU serial #
   2. CU SW ver.
   3. RM serial #
   4. RM SW ver.

N. Done

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Return to Customization Guide Condensed

ListenPoint Customization Instructions

Speaker Control

Amp Trim (volume):
You may adjust the output level for each amplifier output in the room. There are four amplifiers in the powered versions of the *RM*. If a speaker is too loud for a particular portion of the room or if a certain speaker needs to have more level, the trim for that particular speaker or zone can be adjusted. The trim may be adjusted down to -12dB or up to +6dB in one dB steps. Please keep in mind that adjusting the trim of a particular zone may cause feedback if it is turned up too loud. Normally these trims are left at 0.

Recall User EQ:
The ListenPoint system can save equalization presets for future use. Saving the preset will allow your settings to be recalled when needed. There are four designated slots where the settings can be saved – User *EQ* 1-4. If a User *EQ* is recalled, it will override both the Speaker *EQ* and Room *EQ* settings. Once you have successful set up your *EQs*, you should save the settings to a User *EQ*, which if the settings are accidentally changed you can recall your preferred setting.

Save Current EQ:
After determining the room equalization, the setting can be stored within the CU. This will allow you to come back to a setting if needed. Be aware that you can save over the top of this setting. The ListenPoint CU has the ability to save up to four different preset EQ settings. When a setting is saved, the word (Empty) will be removed from that particular User EQ. To clear all EQ settings, a Hard reset of the system must take place.

Adjust Current EQ:
Your ListenPoint system has two independent equalization circuits; *Speaker EQ and Room EQ*. *Speaker EQ* is a set of predefined equalization curves for specific industry standard loudspeakers. *Room EQ* is the second circuit designed for room equalization. This is helpful when you have specific room induced anomalies, such as bass buildup, ringing or areas of feedback. The circuit consists of 7 bands of parametric equalization.

Speaker EQ:
You may select any of the available speaker models. These are predefined and cannot be edited. If the speakers you are using are not in the list, you can use one of the “Generic” speakers in the list or use the “Flat” setting and then utilize the Room EQ to adjust your speakers. The ListenPoint Room Speaker library is part of the firmware and as such can be updated via a PC. Listen will add speaker models via firmware updates.

Room EQ Cut/Boost:
You can adjust the 7 filters of Room Equalizer via the Room *EQ* Cut/Boost graphical display. You have two tone controls and five parametric filters –as follows, Tone controls; Filters 1 (Bass) and 7 (Treble), the bass is set at 250Hz and the treble is set at 7.3kHz. Filters 2 through 6 have full parametric equalization functionality. The Room *EQ* Cut/Boost graphical interface allows you to increase or decrease the gain of any of the 7 filters (as long as they are not disabled). To select the filter type or other parametric settings use the Room *EQ* Parameters menu.

Room EQ Parameters:
These filters (2 through 6) allow you to select the *type of filter* (Peak/dip, Notch, Shelving, and filter pass), the *center frequency*, and the *bandwidth* of the equalization curve. You can also "Disable" a filter, disabling a specific filter with cause that filter to have no effect on the sound. It effectively takes that filter out of the circuit.

The ListenPoint parametric *EQ* is a highly versatile equalizer and will allow you to fine tune a room for maximum sound clarity. It is highly recommended that users seek the assistance of a qualified sound professional when setting up their system.

Go back to Customization Guide Speaker Control

Paging

Paging Volume:
The ListenPoint system allows for a facility's paging system to be connected into the ListenPoint system via the Paging Input. An internal jumper in the *RM* allows you to set the paging input to 8 ohm, 25 Volt, 70 Volt, or 100 Volt paging input (this requirement depends on your existing paging system). If you choose to have your ListenPoint system pass the pages to your ListenPoint speakers in addition to or instead of the existing paging speakers, the volume of the page may be raised or lowered by 24 dB. If Paging Volume is set to "Off" the pages will not pass through the ListenPoint system. In some applications you may still want an external page to duck the ListenPoint system via Page Ducking. Use Paging Volume to adjust the level of facility pages in your ListenPoint system, or to turn them off.

Page Ducking:
Page ducking will lower the volume of the current room audio (M1s and auxiliary inputs) from the ListenPoint system to allow for a page to come through the ListenPoint system, or a separate paging system. The amount of ducking can be changed to either none, low (-15 dB), medium (-20 dB), or high (Max dB). The higher the Page Ducking setting, the lower the volume from the ListenPoint M1 and auxiliary inputs during a page.

In order for an external page to duck the ListenPoint audio, the system must know when a page is happening. There are two different options for a page to be sensed – both are inputs that are located on the *RM*, and can be set separately, to allow for two different levels of ducking.

1. **Ducking on Page:** The system will detect a page on the Paging Input, when paging audio is detected the ListenPoint system will either duck the system audio and pass the page

through or not depending on the settings in Paging Volume setting. When a signal is present at the Paging input, the system audio will be ducked according to this setting.

   a. none
   b. low (-15 dB)
   c. medium (-20 dB)
   d. high (Max dB)

2. **Ducking 6-12V:** When a signal is present at the 6-12V input, the system audio will be ducked according to this setting.
   a. none
   b. low (-15 dB)
   c. medium (-20 dB)
   d. high (Max dB)

   Note: Contact a professional installer for assistance with interfacing to existing paging systems.

Microphones

The M1 has many parameters or features that may be set either globally or locally. Global features apply to all M1s, and Local features apply to all M1s but may be reconfigured locally on the unit itself. This is helpful when you want one or more M1s to behave differently than the others. The first four features are Local features. To read more about how to reconfigure Local features on the microphone see the *M1 customization* section.

Button Disable:
It is possible to disable the buttons of the M1. This feature is useful when you want to keep users from having access to control or volume settings. Note the Mute button is not disabled with this feature. You can turn this feature On or Off.

Charger Auto Off:
If Charger Auto Off is enabled, whenever the M1 is placed into a battery charging platform or connected to a charger, it will automatically power down and start a standard charging cycle. When an M1 is removed from a battery charging platform or unplugged from a charger, it will automatically power up.

Low Battery LED:
The LED of the M1 can be programmed to blink when the battery is low. At 10% the LED will blink red twice per second. When the battery is down to 5% of its charge the LED will blink red four times per second. The microphone can also be programmed to have its Beeper beep for low battery indication.

Aux Vol Control:
The M1 has individual auxiliary volume control functionality. The unit can be programmed to raise its own individual or the currently active auxiliary input.

1. **On Mute:** This allows the volume buttons to control the microphone, but when you mute the microphone, the volume buttons will now control the currently active auxiliary input.
2. **Disable:** Disable will not allow for the volume of the auxiliary inputs volume to be controlled while the M1 while its muted. This is helpful in situations when you have a pass around M1 and you do not want students to control the level of the aux input.

Note: For additional volume control information see *Soft Button*.

Aux Ducking:
The Aux ducking settings allows the M1 to reduce the gain of the auxiliary inputs when someone is talking into the microphone. This is helpful when a presenter wants to talk over a DVD or other auxiliary input. The amount of ducking can be set to low (-15 dB), medium (-20 dB), or high (-Max dB). The higher the Aux Ducking setting, the lower the volume from the auxiliary inputs while the microphone is active.

Soft Button:
The Soft Button is a multifunction button that may be programmed to control one of three different functions within two operational modes, 'Short' or 'Long' (press of this button). If you press the Soft Button for more than 30ms (about a third of a second) it will send a 'Short' command, if you press and hold the Soft Button for more than 4 seconds it will send a 'Long' command. You can set the 'Short' and 'Long' commands separately.

Soft Button Short:
1. No Action
2. Aux Mute – when a short command is sent, all the auxiliary inputs will be muted. When the short is resent, all auxiliary inputs will be un-muted.
3. Relay – when a short command is sent, the relay will be activated or deactivated, depending on its settings in the relay setup. When Relay option is selected, Relay Trigger must be set to "mic" or "either" on the System Settings tab.

Soft Button Long
1. No Action
2. Aux Mute – when a long command is sent, all the auxiliary inputs will be muted. When the long is resent, all auxiliary inputs will be un-muted.
3. Relay – when a long command is sent, the relay will be activated or deactivated, depending on its settings in the relay setup. When Relay option is selected, Relay Trigger must be set to "mic" or "either" on the System Settings tab.

Go back to Customization Guide Microphone

Auto Select

Auto Select:

Auto Select allows the *CU* to automatically detect the currently active input. This allows for the system to make some intelligent decisions about how to operate. When Auto Select is enabled, it allows the M1 to control the level of the currently active aux input. Also when the Master *CU* control is disabled, Auto Select selects the aux input to be controlled by the control wheel by default.

On:

The *CU's LCD* display will always show the currently active aux input in the window for level adjustment. Also if the M1s Aux Vol Control is enabled, and the M1 is muted the volume controls on the M1 will adjust the currently active aux input.

Off:

The *CU's LCD* display with always show the last adjusted aux input in the window for level adjustment. Also if the M1s Aux Vol Control is enabled, and the M1 is muted the volume controls on the M1 will adjust the last adjusted aux input.

Go back to Customization Guide Auto Select

CU Input Trims

Aux Trim 1-4:

You can trim the level of each auxiliary input on the *CU*. The control unit will allow you to compensate for the volume differences by adjusting the trim of the individual input. Each input can be trimmed -10 to 0 dB.

T-con Input Trim:

You can trim the level of the T-con input on the *CU*. The control unit will allow you to compensate for the volume differences by adjusting the trim of the individual input. Each input can be trimmed -10 to 0 dB.

Balanced Input Trim:

You can trim the level of the balanced input on the *CU*. The control unit will allow you to compensate for the volume differences by adjusting the trim of the individual input. Each input can be trimmed -10 to 0 dB.

Go back to Customization Guide Level Controls

Input Names

Auxiliary name changing:

Your ListenPoint system allows you to customize the name or label for any aux input. Each input can be named from one of the preset input labels or can be user defined. The presets names are:

1. Aux-1
2. Cable
3. CD
4. DVD

5. iPod
6. Mixer
7. MP3
8. PC 1
9. PC 2
10. TV
11. Video
12. User defined

If you select User Defined, you will be able to enter up to 14 letters or numbers to personalize the label.

Teleconferencing:
Your ListenPoint system allows you to customize the name or label for your Teleconferencing input, you will be able to enter up to 14 letters or numbers to personalize the label.

Balanced input:
Your ListenPoint system allows you to customize the name or label for your Balanced input, you will be able to enter up to 14 letters or numbers to personalize the label.

Go back to Customization Guide Input Names

Optional Module

To be added at a later date.

Go back to Customization Guide Optional Module

Relay

The *Relay* may be activated via the M1 (see *microphone settings*). The *Relay* parameters control how the relay behaves. The relay can be set to latching, or momentary. The duration of the momentary contact may be adjusted as well. It can also be activated via 6-12 VDC.

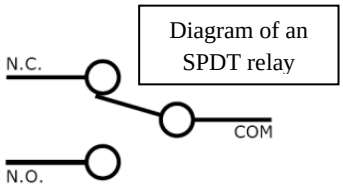


Diagram of an SPDT relay

1. **Latching**: When the relay is activated it will latch 'active', causing the N.O. contacts to be closed, and the N.C. contacts to be open. The relay will remain active until it is deactivated by second pulse or the unit is powered down. Example (link to examples)
2. **200ms Pulse**: When the relay is activated it will latch 'active' for 200ms, causing the N.O. contacts to be closed, and the N.C. contacts to be open for 200ms. Example (link to examples).
3. **400ms Pulse**: When the relay is activated it will latch 'active' for 400ms, causing the N.O. contacts to be closed, and the N.C. contacts to be open for 400ms. Example (link to examples).
4. **600ms Pulse**: When the relay is activated it will latch 'active' for 600ms, causing the N.O. contacts to be closed, and the N.C. contacts to be open for 600ms. Example (link to examples)

Go back to Customization Guide GPI Relay

Password Management

Adding Password:

For added security of your system, a password can be added. The password must consist of a combination of four letters, numbers or symbols. To set the password, enter the password screen, rotate the Control Dial to the desired letter, press the Control Dial to enter that letter, and it will move you to the next space. Once you complete all four letters, you'll have an option to save or cancel.

Go back to Customization Guide password Management

Language

Changing language of the *CU* menu:

You may select different languages to operate the *CU* menu in.

1. English
2. Espanol
3. Duetsch
4. Francais
5. Italian

Go back to Customization Guide Language

Display

The display has several adjustments to make it easy for the user to operate.

1. *Contrast:* The contrast of the display can be changed for better off axis viewing
2. *Backlight:* The backlight has a timeout delay.
    a. On: The backlight remains on whenever the unit is powered up
    b. 5 Sec. Delay: The backlight will turn off after 5 seconds
    c. 15 Sec. Delay: The backlight will turn off after 15 seconds
    d. 60 Sec. Delay: The backlight will turn off after 60 seconds
3. *Orientation:*
    a. Normal – The display will have normal orientation
    b. Inverted – The display will have an inverted orientation (useful when you mount the *CU* on a wall or under a desk i.e. upside down)
4. *Inactive Mode:*
    a. Master Volume - When the Control Dial has not been moved for x seconds, the display will revert to the Master Volume window and the Control Dial will control the overall level of the system.
    b. Aux Volume - When the Control Dial has not been moved for x seconds, the display will revert to the currently active aux input volume window and the control dial will control the level of the currently active aux input.
    c. Status Only – When the Control Dial has not been moved for x seconds the LCD display will revert to the Status display.

5. *Inactive Period:* Time in minutes before the LCD Display reverts back to the setting as defined in “Inactive Mode”.
    a. 1 minute
    b. 2 minutes
    c. 5 minutes
    d. 10 minutes
    e. 15 minutes
    f. 30 minutes
    g. 60 minutes

Go back to Customization Guide display

Limited Reset

Limited Reset:

The Limited Reset is a feature that will reset all settings to default except for the following.

1. Room EQ’s
2. Speaker EQ
3. Users EQ’s
4. Language Selection

This allows for situations where a reset will fix an unwanted setting, but have no effect on settings that might have required a lot of work.

Note: A full system reset is available by pressing and holding the Reset Button on the back of the *CU* for 7 seconds. This will reset all settings within the *CU* and *RM*.

Go back to Customization Guide System Reset

About

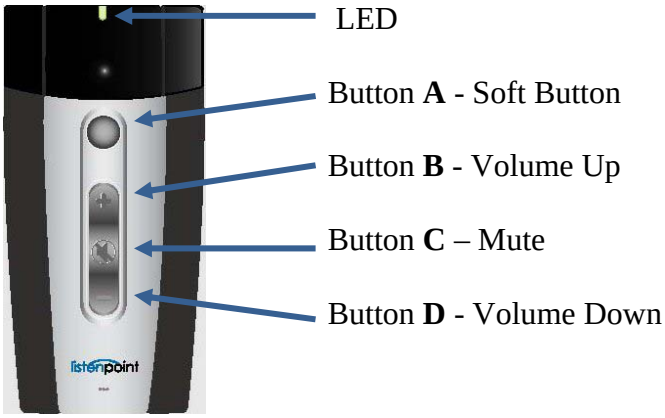
About:

Selecting the about menu item will display the model numbers and software versions for both *the CU* and *RM*.

Go back to Customization Guide About

ListenPoint Microphone/Media Interface Customization

The ListenPoint LPT-M1 Microphone/Media Interface (M1) can be programmed to perform advanced features with the ListenPoint system. Use the following button designations to control programming of the unit.



These features are set in the *CU* Customization menu, but can be changed locally. You can enter the Local Programming mode on a single M1 and make changes to that M1, or you can have the M1 copy the global settings from the system via its IR link using the M1 Initialization mode. If you want to reset the M1 to the Global settings in the *CU*, use the M1 Initialization mode. This mode will copy the settings from the *CU* into the M1 and reset the M1 with the global settings.

M1 Programming

To enter the local programming mode on a M1:

1. Power the unit on (does not need to be linked to a *RM)*
2. Press and hold buttons A & D for five (5) seconds.
3. The LED will flash Amber indicating the M1 is in local programming mode.
4. By touching the following buttons you can turn on/off the local modes.

Button to push	Feature
A	Low battery beep – On/Off
B	Undefined
C	Button disable - On/Off
D	Charger auto Off – On/Off

5. Push and hold (for 1 second) the button assigned to the function you want to toggle on or off.
    a. Four quick Green flashes of the LED indicate the feature in ON.
    b. Four quick Red flashes of the LED indicates the feature is OFF.
6. To exit the local programming mode press button A & D for three (3) seconds, the M1 will return to its normal operating mode.
7. If you do nothing for 30 seconds the M1 will return to normal operation mode by itself.

M1 Initialization – Downloading Global Settings

1. To enter the M1 Initialization Programming mode
    a. Power up the M1.
    b. Wait for the M1 to link with the *RM* (Requires the unit to be in auto registration, see below steps to place M1 into auto registration).
        i. Indicated by the solid green LED
        ii. Amber indicates the M1 has not linked with the system.
    c. Press the B & D buttons simultaneously for 5 seconds
    d. The LED will flash Amber.
    e. You are now in the M1 Initialization mode.
        i. The M1 will load the global settings as set in the *CU* into the M1.
            1. Button Disable
            2. Charger Auto Off
            3. Low Battery LED
        ii. Once the initialization is complete the LEDs will stop flashing and the M1 will return to normal operating mode.

Instant On/Auto Registration

The ListenPoint system offers two options to register the M1 for use with the system. With any infrared sound field system, the M1 must transmit audio via light to a sensor (usually placed on the ceiling). The ListenPoint M1 has two different options for detection by the system.

Instant On – Instant On is when the M1 is automatically detected by the system and is set to a particular frequency. Keep in mind, if two transmitters are on the same frequency and detected by the same system, interference will occur. Follow these instructions to program a M1 on a set frequency.

1. Power down the M1 by pressing and holding the mute button (C).
2. Press and hold buttons A & C for three seconds. The M1 will blink during this process.
3. After holding down these buttons for three seconds, the LED will illuminate RED. Upon releasing the buttons, the LED will now blink RED rapidly.
4. While the LED is blinking, press button A for channel one or button B for channel two.
5. The M1will then be active on the chosen channel and the green LED will be illuminated.

Note: To determine which channel the M1 is programmed to, turn the unit off/on. When the unit is initializing, the LED will blink RED – once for channel one or twice for channel two.
Note: The M1 has the Instant On status as the default.

Auto Registration – A great feature for those times when M1 will be used in more than one place. As the M1 enters a room, it will automatically register with the RM. Follow these instructions to program a M1 to auto registration.

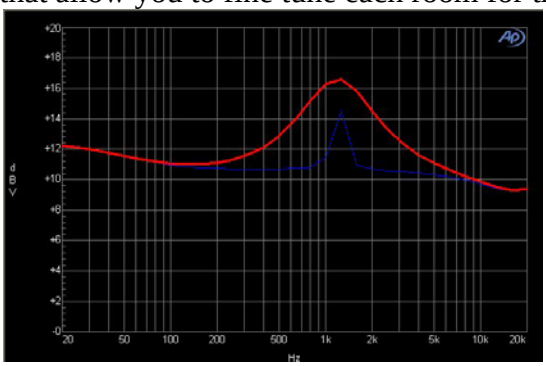
1. Power down the M1 by pressing and holding the mute button (C).
2. Press and hold buttons A & C for three seconds. The M1 will blink during this process.
3. Let the M1 sit idle for 18 seconds. The LED will blink rapidly during this time.
4. After 18 seconds, the M1 will turn off. Upon the next initialization, the M1 will automatically auto register to the system.

Note: It may take a few seconds for registration. For best results, move the M1 close to the RM on the ceiling. Once the M1 is linked with the system, it will not need to register again unless turned off.

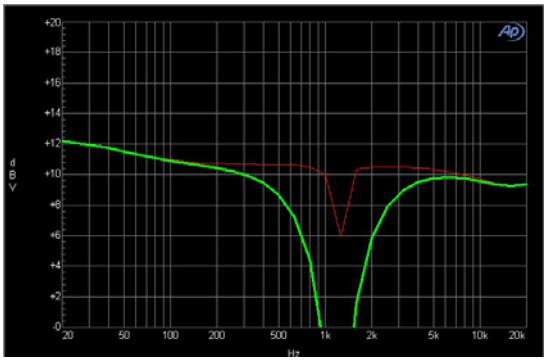
Glossary

***Parametric Equalizers*:** Parametric equalizers allow you to control the three primary parameters of sound, which is amplitude, center frequency, and bandwidth. Typically parametric equalizers can be configured to shape the room in many different ways. Below is a listing of the EQ types that are available in your ListenPoint system. Only the Peak filter takes advantage of all three parameters. Typically you will work to reduce feedback with this EQ. Each of your 5 bands of parametric EQ can be set up to operate in any of the following modes.

Peak: With a Peak/Dip filter you will be able to select the frequency you want to control (Center Frequency), set how broad or narrow you want the control to be (Bandwidth) and then adjust how much you want to cut or boost that frequency (Amplitude). Your ListenPoint Filters have 5 overlapping frequency sets that allow you to fine tune each room for the best possible sound.

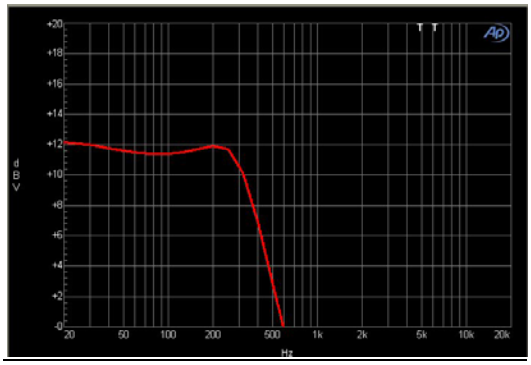


Notch: With a Notch filter you only control the frequency you use to notch. There is no bandwidth or 'how much' control, as you only Notch. The notch is preset at a very narrow bandwidth and is a very deep cut. The Notch filter is very effective for reducing room resonances and eliminating feedback.

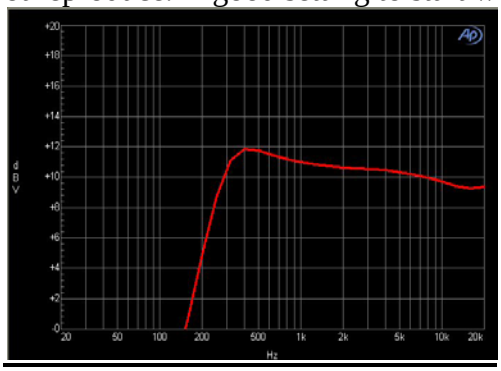


Low pass: The Low pass filter is used to attenuate higher frequencies. As with the Notch filter, you only control the frequency however with the Low pass filter, all the frequency above the

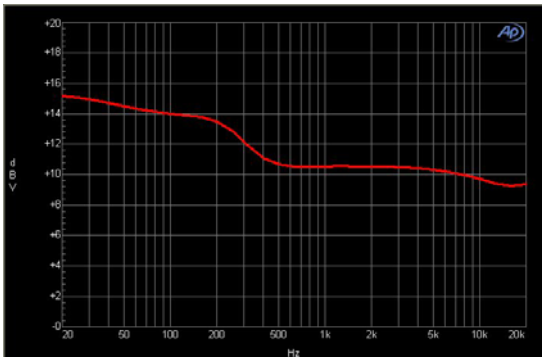
frequency you select will be attenuated. This is useful when you have too much high frequency noise from a playback source.



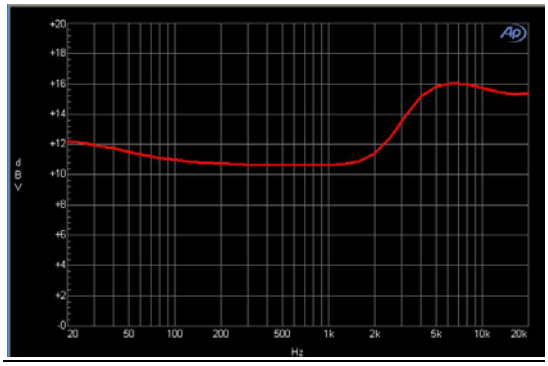
High pass: The High pass filter is used to attenuate unwanted lower frequencies such as air conditioning noise, handling noise and other environmentally induce sound The High pass filter works just the opposite of the Low pass filter, it attenuates al the frequencies below your selected frequency. Low frequency rumble or noise is not reproduced by the speakers, so it is good practice to eliminate these sounds so the amplifiers do not waste energy trying to amplify these sounds that the speakers cannot reproduce. A good setting to start with is about 80Hz.



Low Shelf: The Low Shelf filter allows you to move all the lower frequency up or down together below your selected frequency. This allows you to either increase or decrease the bass response.

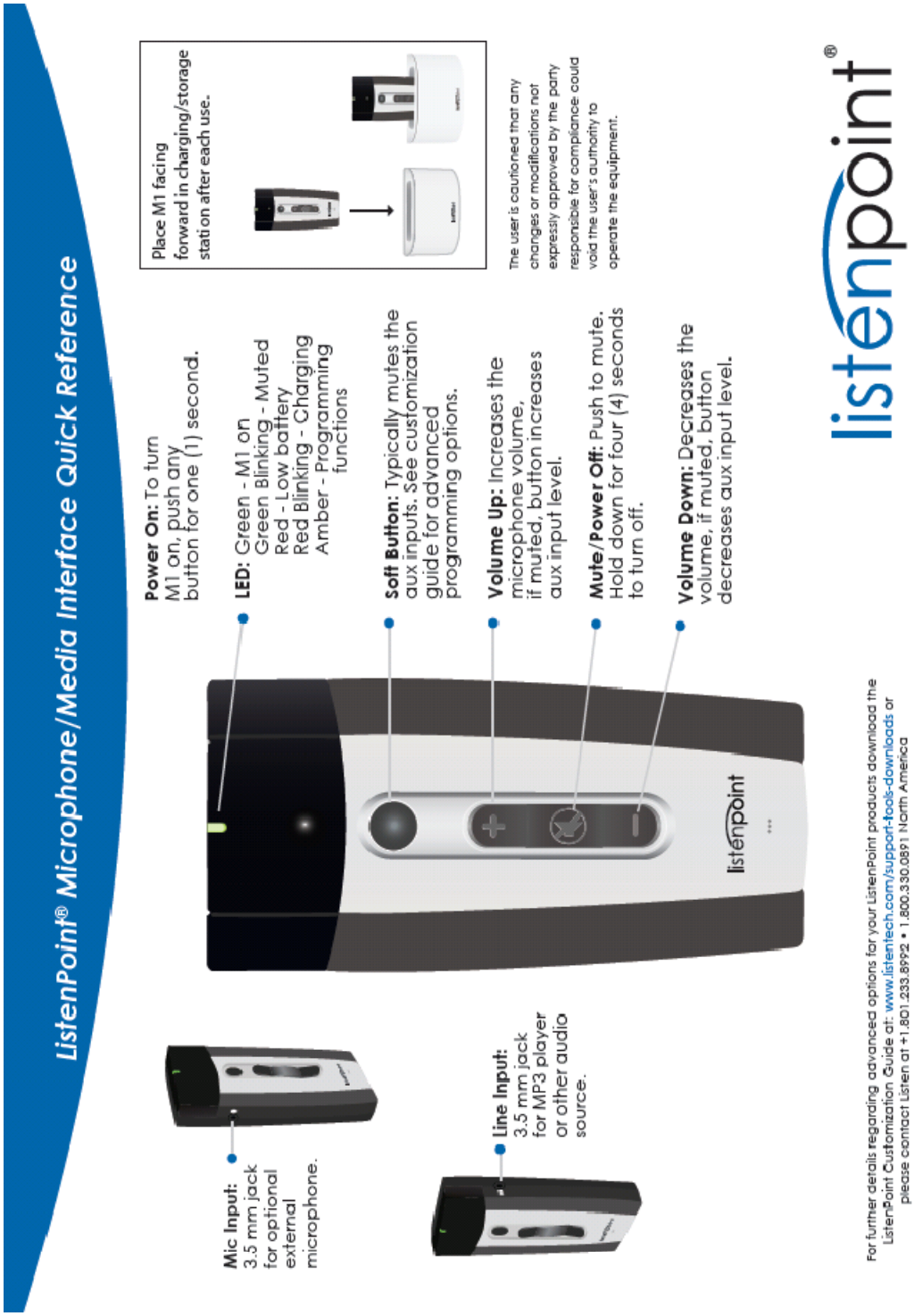


High Shelf: The High Shelf filter allows you to move all the higher frequencies up or down together above your selected frequency. This allows you to either increase or decrease the bass response.


+20
+18
+16
+14
+12
+10
+8
+6
+4
+2
-0
dB V
20
50
100
200
500
1k
2k
5k
10k
20k
Hz

ListenPoint Quick Reference

Microphone/Media Interface Quick Reference Front



ListenPoint® Microphone/Media Interface Quick Reference

The ListenPoint system offers two options to use the LPT-M1 ListenPoint Microphone/Media Interface (M1) with the system - ***Instant On***™ (default setting) and ***Auto-Registration.***

Instant On™ - The M1 is set to a specific frequency/channel. The default factory setting is set to channel 1. If there are more than one M1s in the same room, additional units must be set on another channel to avoid interference.

To change channel, follow these instructions:

1. Power down the M1 by pressing and holding the mute button (button C) until LED goes out.
2. Press and hold buttons A & C for three seconds.
3. After holding down these buttons for three seconds, the LED will illuminate RED. Upon releasing the buttons, the LED will blink RED rapidly indicating you are in programming mode.
4. While the LED is blinking, press button B to change the M1 to channel 2 (in a four M1 system, buttons C & D will program the unit to channels 3 & 4). To put the unit back on channel 1, press button A.
5. The M1 will then be active on the chosen channel and the GREEN LED will be illuminated.

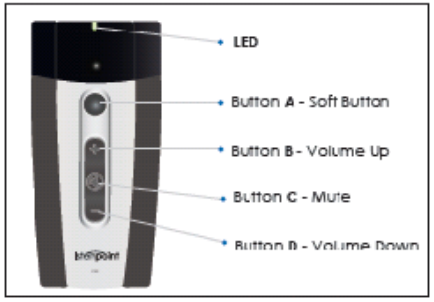
NOTE: To determine which channel the M1 is programmed to, turn the unit off/on. When the unit is initializing, the LED will blink RED – once for channel 1, twice for channel 2 etc. All units are shipped default on channel 1. If there are two or more M1s in the same room, be sure one has been programmed to another channel.

Auto Registration - As the M1 enters a room, the system will automatically determine the frequency for use.

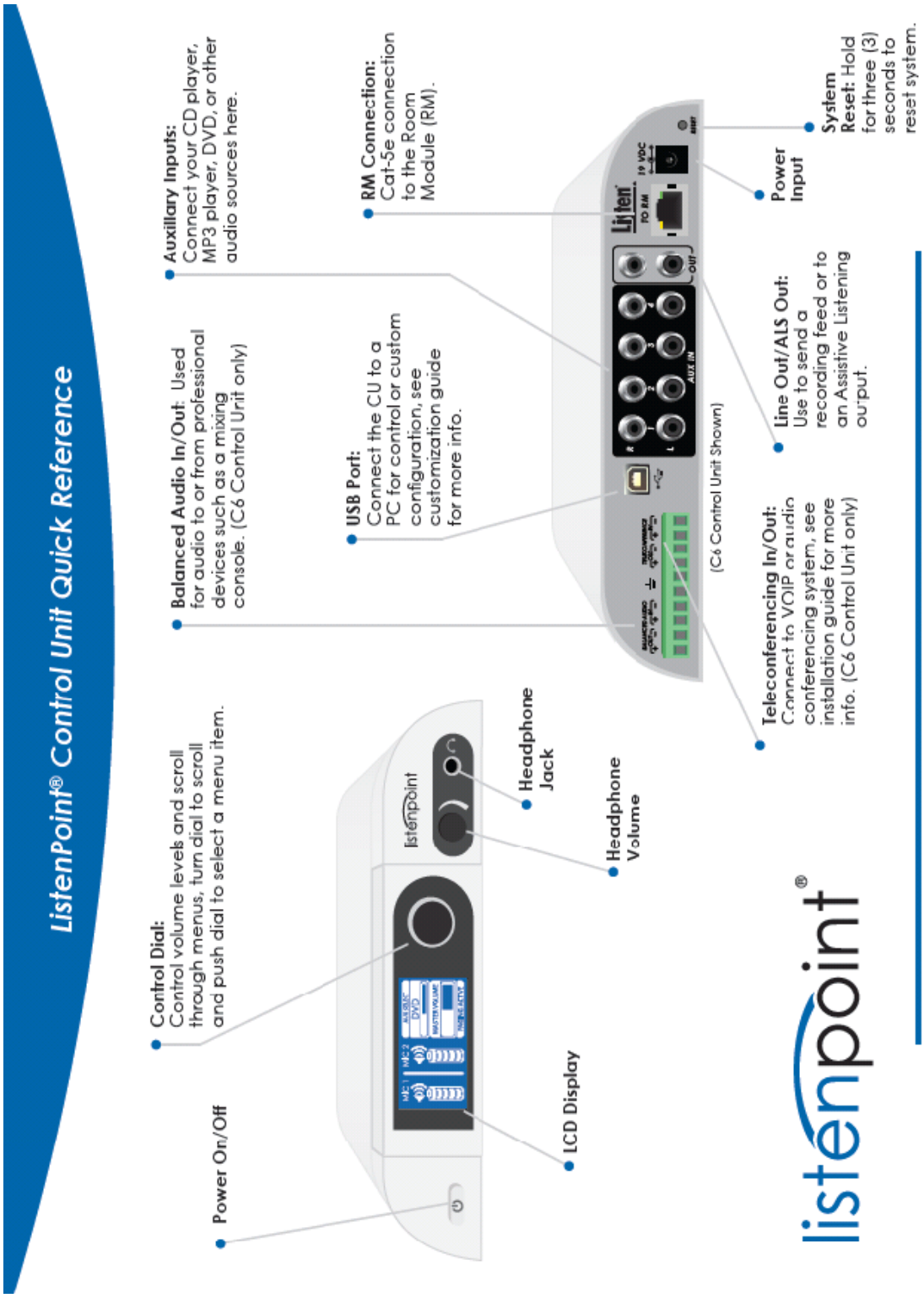
To enable ***Auto-Registration,*** follow these instructions:

1. Power down the M1 by pressing and holding the mute button (button C).
2. Press and hold buttons A & C for three seconds.
3. Let the M1 sit idle for 18 seconds. The LED will blink rapidly during this time.
4. After 18 seconds, the M1 will turn off. Upon the next initialization, the M1 will automatically auto-register to the system.

NOTE: It may take a few seconds for registration. For best results, move the M1 close to the RM on the ceiling. Once the M1 is linked with the system, it will not need to register again.



Control Unit Quick Reference Front



ListenPoint® Customization Quick Reference

Control Unit Customization - Two Ways

Directly on LCD Display on Control Unit:

Press and hold rotary knob to enter customization mode.

Customization Screen

Via ListenPoint Software:

Download ListenPoint Software at:
www.listentech.com/support-tools-downloads

Software Customization Screen

M1 Microphone/Media Interface Customization

For certain M1 customizations, you must simultaneously press the UP and DOWN buttons while the M1 is connected to the ListenPoint system, the yellow LED will flash.

Detailed Customization

For more detailed customization options for both the Control Unit and M1, download the ListenPoint Customization Guide at:
www.listentech.com/support-tools-downloads

or contact Listen at:
+1.801.233.8992 • 1.800.330.0891 North America

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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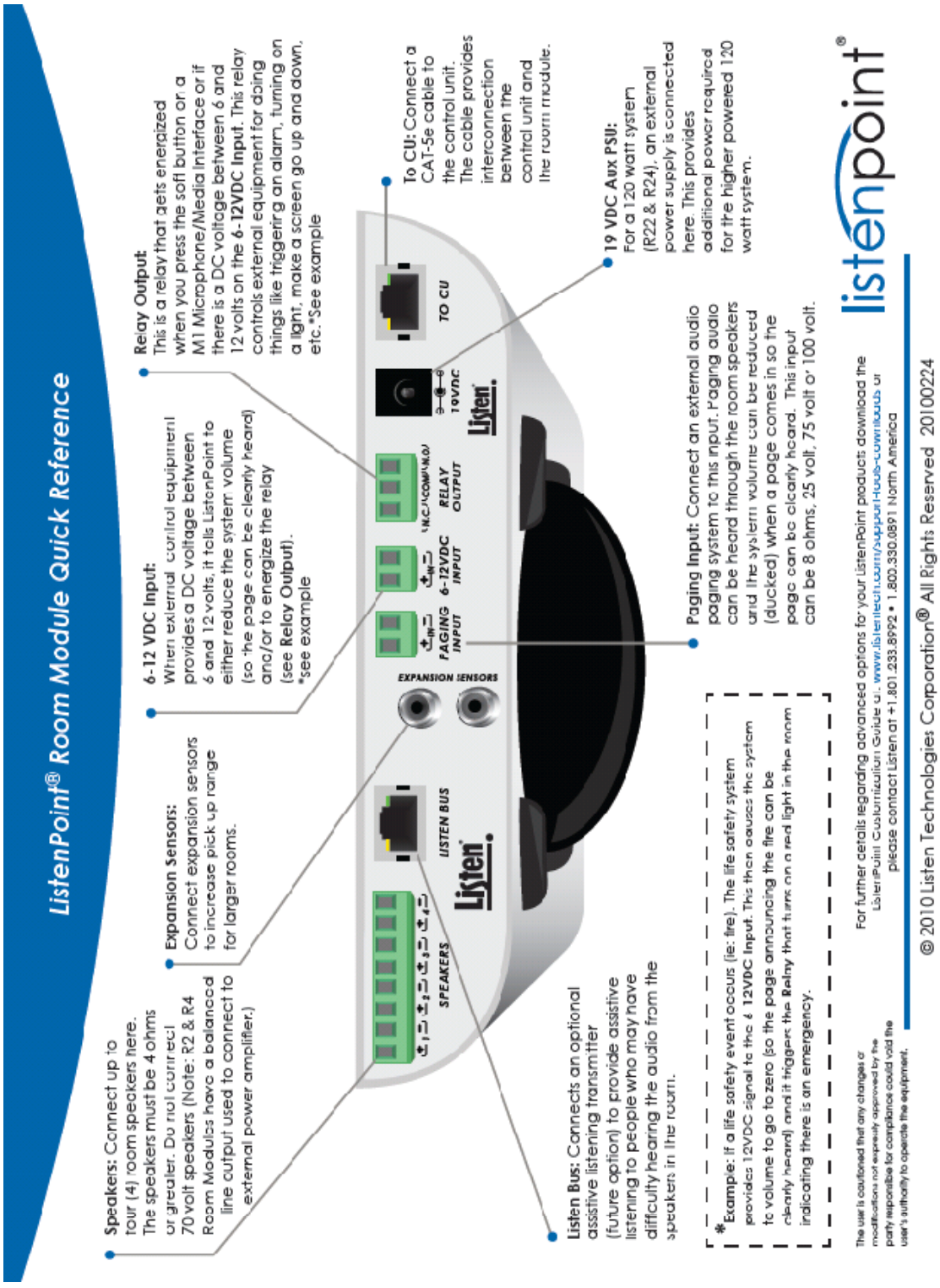
Room Module Quick Reference



References

List our LPT Application notes
Install speaker et al
www.synaudcom.com/speakerplacementsoftware
ListenPoint

ListenPoint Compliances

FCC Part 15 – The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.