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Introduction
Audyssey Installer-Ready Products support professional calibration using the MultEQ® Pro PC application and the Audyssey Installer Kit. Installers bring the Installer Kit and a laptop to an installation site, run the MultEQ Pro application, perform measurements, and transfer MultEQ XT filters from the laptop to the Audyssey Installer-Ready Product. The steps for completing this installation are described in detail in this User Guide.

Getting Started
• Register on the Audyssey Installer Website to get the latest software and documentation. See the appendix, Register on the Audyssey Installer Website (Page 37).
• Install the MultEQ Pro software on the computer to be used for calibration before going to the job. See Software Installation and Configuration (Page 4).
• Purchase a license key for the product, if required. See Licenses and License Keys (Page 13).

Important Safety Precautions
Please review the product’s owner’s manual in detail to ensure safe operation before calibrating with MultEQ Pro.

• Do not cascade other devices between the microphone preamp and the Audyssey Installer-Ready Product. Permanent damage may occur to each piece of equipment.
• Do not connect the calibrated microphone to the product’s microphone input until instructed. Doing so before passing the Product Selection screen (Page 12), could cause microphone feedback at levels that will damage the speakers.

Audyssey Technologies Supported by MultEQ Pro
• Setup – MultEQ Pro measures the speaker system and calculates trims, delays, and suggested bass management settings based on the in-room acoustic response.
• MultEQ XT – This technology automatically customizes your home theater system to overcome the acoustical problems specific to your room. An optimized audio system provides the most clear and balanced sound possible. It is the basis for the rest of Audyssey’s technologies. http://www.audyssey.com/technologies/multeq
• Dynamic EQ – As the volume is turned up or down, Audyssey Dynamic EQ maintains consistent bass response, tonal balance, and surround impression. http://www.audyssey.com/technologies/dynamic-eq
• Dynamic Volume – This technology controls volume levels to eliminate spikes and raise soft dialog for more enjoyable television and movie viewing. http://www.audyssey.com/technologies/dynamic-volume
• Audyssey DSX (Dynamic Surround Expansion) – Delivering 7.1, 9.1 and 11.1 surround sound to your home theater. Audyssey DSX expands surround sound beyond 5.1 with more speakers for an incredibly immersive and realistic home theater experience. http://www.audyssey.com/technologies/dsx
**The Audyssey Installer Kit**

**Kit Components**

**MultEQ Pro Application CD and Setup Guide**

The MultEQ Pro Application and User Guide may be found on the enclosed CD. A printed Setup Guide is included in the Installer Kit.

**Calibrated Microphone and Microphone Stand**

Each microphone is calibrated by Audyssey and comes with a custom calibration curve that matches the microphone to a high-precision ¼” reference microphone. The calibration curve for the microphone is stored on the MultEQ Pro application CD included with the kit.

**Calibrated Preamplifier**

This microphone preamplifier provides phantom power to the microphone and applies fixed gain amplification to the microphone signal. It has no external controls.

**Warning:** Only use the supplied Audyssey Calibrated Preamplifier. **Do not** use any other microphone preamplifier.

**Microphone Mini-XLR Cables**

The Installer Kit contains three 25 ft. mini-XLR cables. The cables are used to connect the microphone, preamp and Audyssey Installer-Ready Product. The cables can be linked together to provide 75 feet of length. Additional mini-XLR cables may be purchased separately and connected together for longer lengths.

For products with a balanced microphone input, place the longest length of cable between the preamplifier and the product. For products with an unbalanced (RCA) microphone input, place the longest length of cable between the microphone and the preamplifier.

**RCA to Mini-XLR Adapter**

If necessary, use this adapter to connect the mini-XLR cable to the proper input on the Audyssey Installer-Ready Product.
**USB to RS232 Serial Cable**
Audyssey Installer-Ready Products with RS232 communication may be connected to the laptop running the MultEQ Pro application using this cable. If the laptop already has an RS232 serial communication port, a standard RS232 cable (not supplied) may be used.

**10 ft. USB Cable**
Audyssey Installer-Ready Products with USB communication may be connected to the laptop using the 10 ft. USB cable.

A longer cable (up to 16ft.), repeating extension cable or USB-over-CAT5 adapter set may be substituted if the laptop must be situated farther than 10 feet from the Audyssey Installer-Ready Product.

**Previous Installer Kits**
Items from previous versions of the Audyssey Installer Kit, such as the Audyssey MM01 Professional Calibration Microphone, can still be used for calibration with newer versions of MultEQ Pro as long as the microphone calibration file is copied into the new MultEQ Pro installation folder.
Software Installation and Configuration

Installing MultEQ Pro - Main Setup

Insert the MultEQ Pro CD into the computer’s CD-ROM drive. The Windows Auto Run feature should automatically launch the MultEQ Pro Main Setup application shown in the sidebar. If it does not, launch the setup program manually by using Windows Explorer to browse the CD-ROM drive. Double click on the file setup.exe.

There are four options to choose from in the MultEQ Pro Main Setup window (depending on the status of necessary installations). Click on the text to begin the operation desired.

- **Install Microsoft .NET** (Shown only if .NET Framework 4.5 is not detected)
- **Install MultEQ Pro** (Will prompt for installation of .NET Framework)
- **Uninstall MultEQ Pro** (Shown only if MultEQ Pro is already installed)
- **MultEQ Pro Setup Guide**
- **Add Microphone File to MultEQ Pro** (Shown only if MultEQ Pro is already installed)

Installing Microsoft .NET Framework 4.5

Microsoft .NET Framework 4.5 must be installed before installing, uninstalling or running the MultEQ Pro software. The Microsoft .NET Framework is a software component that can be added to the Microsoft Windows operating system.

The .NET Framework 4.5 installation program can be launched by clicking the link on the MultEQ Pro Main Setup screen. This option is not displayed if the setup program detects that .NET Framework 4.5 or later is already installed.

It is highly recommended that Windows Update is run after installation of .NET Framework 4.5 in order to receive the latest service packs and security updates from Microsoft. This is typically found on the Windows Start Menu under *All Programs*. 
Installing MultEQ Pro
Click “Install MultEQ Pro” to begin the installation wizard (Figure 2). The software installation program will guide you through the MultEQ Pro application setup. The Audyssey End-User License Agreement (EULA) must be accepted to continue with installation of the MultEQ Pro application (Figure 3). Select the location where the application will be installed (Figure 4).

Once the MultEQ Pro installation is complete, the software application will appear in the “Audyssey Labs” folder on the Windows Start menu. Repeat the MultEQ Pro installation for each laptop to be used for installations.

Uninstalling MultEQ Pro
A dialog with a progress bar will appear as the MultEQ Pro application is uninstalled. The dialog will disappear once the uninstallation is complete.

Viewing the Setup Guide
An electronic version of the MultEQ Pro Setup Guide is available to view at any time during the setup.

Adding a Microphone File to MultEQ Pro
If more than one installer kit has been purchased, it is highly recommended the microphone calibration file from each of your MultEQ Pro CDs be installed on each company laptop used for installation. This allows measurement microphones to be shared and used with any company laptop.

The “Copied One File” window will be displayed after each microphone calibration file is successfully copied to the laptop (Figure 5).

It is important to have the matching microphone calibration file, microphone and preamp. Each microphone and preamplifier set is measured by Audyssey and the calibration file stored on the installation CD of the installer kit.

Registered Installers may retrieve lost microphone calibration files through the Audyssey Installer Website.

MultEQ Pro 3.6 & MultEQ Pro 4.0
MultEQ Pro 3.6 is necessary for all installer ready receivers made prior to 2014. MultEQ Pro 4.0 has been updated for use with all receivers made in 2014 and later.
Some Installer-Ready Products connect to the laptop using an RS232 (serial COM port) connection. If the computer is not equipped with such a port, use the USB to RS232 connector provided in the Audyssey Installer Kit.

A driver CD is provided with the cable, the driver for the USB to RS232 adapter is located on the RS232 cable Installation disc. Microsoft Vista will display a prompt requiring installation of the driver (Figure 6).

Select the option, “Locate and install driver software (recommended)”.

A new window will prompt for the disc that came with the USB Serial Controller (Figure 7). Insert the RS232 Cable CD. Choose the option, “Don’t Search Online” (Figure 8) as the driver is included on the RS232 Cable CD and a driver found online may not be compatible.

If a Windows Security warning appears stating that the publisher cannot be verified, select, “Install this driver software anyway” (Figure 9).

Once the installation is complete, MultEQ Pro may be used with the USB to RS232 adapter. It is only necessary to perform this procedure once on each PC.
Calibration Setup
This section describes how to set up the equipment to perform a calibration.

Connecting the Installer Kit Components
A  Connect a mini-XLR cable to the microphone.
B  Place the microphone stand upright and extend the boom arm. Attach the microphone holder to the end of the boom arm. Insert the microphone into the holder so it points to the ceiling.
C Connect the mini-XLR cable from the microphone to the input (MIC IN) of the microphone preamp.

D Connect another mini-XLR cable to the output (LINE OUT) of the mic preamp. Connect the mini-XLR-to-RCA adapter to this mini-XLR cable if required by the product being calibrated.

E Prepare to connect the mini-XLR-to-RCA adaptor to the audio input that will be used for microphone signal but **Do not** connect it yet. Doing so before completing the Product Selection screen of the MultEQ Pro application might cause microphone feedback at levels that could damage the speakers (Page 12).

F Connect the laptop to the Installer-Ready Product using the USB cable, an RS232 cable or the supplied USB to RS232 adapter.

Provide enough slack so that the cable will not be disconnected accidentally during calibration. An accidental disconnection usually requires the user to restart the entire process.

It is **not** advised to substitute a different USB to RS232 cable than the one included in the Installer Kit. However, an active extension or hub may be used to extend USB length.

G Connect the AC adapter and Power cable to the preamplifier.

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**Preparation of Audio Equipment**

**Amplifier or Preamplifier Configuration**

Set the Amp Assign, Pre-out Assign, XLR Out Polarity and Subwoofer Configuration in the receiver or preamplifier menus as necessary. This must be done before calibration start; speakers disabled in the Amp Assign will not show in MultEQ Pro. If these settings are changed
after completing the MultEQ Pro calibration, MultEQ XT cannot be enabled and the calibration will have to be performed again with the new settings.

Subwoofer Configuration
Configure the input of each subwoofer to disable or bypass any low-pass filter present. This might be accomplished with a switch or by using a different input (sometimes labeled “LFE” or THX). If the low-pass filter cannot be defeated, turn it to its maximum frequency or THX setting. Bypassing the low-pass filter gives MultEQ Pro the most flexibility in calculating filters and crossover values. This will provide the best blend between satellite and subwoofer speakers.

Any subwoofer gain controls should be set to their nominal settings, such as at the THX position or at 12 o’clock on a conventional level control.

Phase or polarity controls, if they exist, should be set to 0° or “normal.”

Disable any “Auto,” “Standby” or “Sleep” mode that may turn off the power to the subwoofer if no signal is received. This will ensure that the subwoofer is always on and ready to output the MultEQ test signal. Failure to disable this mode could mute the beginning of the test signal, giving inaccurate subwoofer measurements.

Amplifiers
Turn on all amplifiers, disabling any “Auto,” “Standby” or “Sleep” mode if applicable. If a gain control is present, turn it to its “THX” setting, if applicable.
Performing the Calibration

Overview and Screen Sequence
The MultEQ Pro application consists of a series of screens leading the user through the calibration process.

A The MultEQ Pro version number is listed at the top right of the screen.

B The sequence of screens is listed in the left column of the application to help track progress. This sequence may be different depending on the product selected in the “Product Selection” screen.

C The current screen is highlighted in bold within the list.

D Move forward and backward through the screens by clicking the “◄” (back) and “►” (forward) buttons on each screen.

E The Product Selection, Job Information, Options and Zone Configuration screens are used only once during a session.

F The remaining screens are encountered once for each zone that is calibrated.
Welcome

The Welcome screen is displayed upon starting the MultEQ Pro application. Click the “►” button to continue.
Product Selection

1. Choose the product being calibrated from the list of Installer-Ready Products. Make sure the communication cable (USB, RS232 or Ethernet) is connected and press the “►” button.

2. Products that require additional connection information will display one or more dialogs prompting the user to enter the required information or select a configuration. For RS232-connected products, this will include the COM port. For Ethernet connected products, this will include the IP address. Consult the Appendix or the specific product's Owner's Manual for more information.

3. If the product being calibrated requires a License Key, the dialog in Figure 10 will be displayed. A valid License Key must be entered in order to continue with the calibration.
Licenses and License Keys
A license to calibrate an Audyssey Installer-Ready Product may be purchased on the Audyssey Installer Web Site. Purchasing the license does not immediately associate that license with an individual Audyssey Installer-Ready Product. Instead, the license exists as a credit in the user’s account until it is associated with a specific Audyssey Installer-Ready Product by entering that products’ serial number. Once this is accomplished, the product with the associated serial number is licensed for its lifetime, and a License Key may be generated at any time. The License Key informs the software that the specific product attached to the computer has been associated with a license.

Serial Numbers
The “Enter License Key” dialog will display the serial number of the connected product. In some cases, the MAC address and model number of the product are used instead of the serial number. In all cases, the Serial Number entered on the Audyssey Installer Website must match exactly the Device Serial field shown in this dialog.
Job Information

Fill in the “Customer or Job Name” field. This information will help identify calibration results uploaded to the Audyssey Installer Website.

Enter your name in the “Technician’s Name” field.
From the “Microphone” list, select the serial number that matches the microphone to be used for the calibration (Figure 11). See Adding a Microphone File to MultEQ Pro (Page 5) for instructions on installing additional microphone calibration files. In MultEQ Pro 4 click the ‘Add…’ button to add a microphone.
Zone Configuration

Some Audyssey Installer-Ready Products allow calibration of channels in different zones, while others only allow calibration of the channels in the main zone (Figure 12). Zone Configuration options will be displayed according to the capabilities of the Product.

Figure 12 - Zone Configuration for Main Zone
Select *None* from the drop-down menu for unused channels. If any channel is part of another zone, select the radio button in the appropriate zone column. Moving a speaker to a zone other than the one currently being calibrated will ensure that any existing calibration on that channel is preserved. Selecting “None” for a channel will clear that channel’s calibration.

**Note:** Using Audyssey DSX™ requires that Height and/or Wide channels be selected. Figure 12 shows a compatible selection.

Select a Zone

If the product supports multiple zones, and channels were assigned to multiple zones on the Zone Configuration Screen, the “Select a Zone” screen will be displayed. Select the zone to be calibrated.
Room Dimensions

Enter the dimensions of the listening room by clicking the up/down arrows next to each field or by typing values into each one. Select from English or Metric units (Feet or Meters).

**Note:** If desired, manually calculate and write down the volume of the room \((Area \times Height)\) to help select an Audyssey target curve later. See Target Sound Options (Page 28).

The information entered at this screen will be included with the calibration results uploaded to the Audyssey Installer Website, but it will not affect the filters created by MultEQ Pro.
**Equipment Info**

Enter information about the customer’s audio equipment.

The information entered at this screen will be stored on the Audyssey Installer Website account but will not affect the filters created by MultEQ Pro.
Subwoofer Level Matching

Some Audyssey Installer-Ready Products support a level-matching tool for setting subwoofer levels. The Subwoofer Level Matching tool makes sure that trims are always within the available range of the AVR or preamplifier.

1. **Place the microphone at the main listening position** with its tip pointed directly at the ceiling. Connect the output (LINE OUT) of the microphone preamplifier to the microphone input of the product being calibrated.

2. **Click the “Measure” button** to begin testing the level of the currently selected subwoofer. A band-limited pink noise test signal will be produced by the subwoofer. The “Level” field will remain blank for several seconds while data is acquired. Once a level is displayed, it may take several more seconds to stabilize.

**Note:** Each Installer-Ready Product can support one of two different level measurement methods supported by MultEQ Pro.

a. **Continuous Average** – If a *Reset* button is shown, the measurement is a continuous time average. The level value will continue to stabilize as long as the measurement is allowed to continue. The “Reset” button must be pressed after any change to the subwoofer’s gain knob.

b. **Moving Average** – If no “Reset” button is shown, the measurement is a moving average. After about 5 seconds, the Level will be valid, though it may continue to fluctuate. In this case, every time the subwoofer’s gain knob is moved, wait 5 seconds for the level to stabilize again.
3. **Adjust the level control on the subwoofer amplifier** until the reading indicates 75 dB ± 3 dB. If applicable, use the “Reset” button as described above.

4. **Click the “Next” button** to begin testing the next subwoofer. If two or more subwoofers are connected, repeat the level adjustment procedure for each subwoofer.

5. **Press the “►” button** to move to the “Measurement” screen once level matching of the subwoofers is complete.
Measurement

Before taking measurements, review the procedure for *Calibration Setup* (Page 7).

**Measuring the First Position**

1. **Position the microphone in the primary seating position** at ear height of a seated listener. If there is no single primary seating position, choose a location in the center of the primary seating area.

   **Note:** The first measurement should be taken in the primary listening position because the software uses the first position to calculate the delays and trims that will be used in the calibration.
2. **Point the microphone tip directly at the ceiling** using a tripod. Do not hold the microphone in your hand during measurements as this will produce inaccurate results.

3. **Connect the microphone preamplifier’s** output (LINE OUT) to the microphone input of the product being calibrated.

4. **Click “Measure.”** A series of test signals will be emitted from each speaker and recorded.

5. **Warnings.** Some warnings may be shown for the first position only.
   - Absolute polarity (the direction a speaker’s cone moves when subjected to a voltage) is detected. If this warning is displayed, the wiring should be checked. If no problem is found, it is safe to ignore this warning.
   - Speaker/Zone mismatches are detected. For example, the user will be notified if a subwoofer is detected on a satellite channel or if no speaker is detected on a channel where a speaker was configured.

6. **Errors.** In some cases, the calibration cannot proceed until a problem is fixed.
   - Microphone Disconnected – check the microphone connection and try the measurement again.
   - Noise Too High – If the background noise exceeds a certain threshold, the system will not attempt to overcome it. The background noise must be reduced.
   - Unable to achieve adequate Signal to Noise Ratio (SNR). – The level of the test signal will be increased in an attempt to overcome background noise. Such level increases will occur at most twice per channel. If an adequate SNR is still not achieved, the background noise must be reduced.
   - A missing Left or Right Front speaker is considered an error.
   - If all speakers in the zone are undetected the calibration will not continue.
   - For receiver or preamplifier calibrations, a mismatch between the type of speaker detected and the zone configuration is considered an error.

**Measuring Subsequent Positions**

1. **Move the microphone to the next listening location.** Even if there is only one listening position, move the microphone to positions in a sphere around that position (see **Creating a sweet spot** in the **Tips for Taking Measurements** section below.)
2. Click “Measure.”
3. Audyssey recommends measuring at least 8 positions. A minimum of 3 positions must be measured in order to continue past the “Measurement” screen.

Tips for Taking Measurements

1. **Refrain from talking**, during or between measurements or within several seconds of the last speaker measurement.
2. **Make the room as quiet as possible.** Background noise can disrupt the room measurements. Close windows and turn off cell phones, televisions, radios, air conditioners, fluorescent lights, home appliances, light dimmers or other devices.
3. **Do not sit or stand directly between any of the speakers and the microphone** during the room measurements.
4. **Measure only locations around the center of the listening area.**
5. **Avoid measuring near corners, walls, doorways or in extreme off-axis positions** unless listeners will normally be situated in these locations.
6. **Measure at least 8 positions.** Taking measurements in more positions increases the data that MultEQ Pro can use to calculate the equalization filters. This improvement comes with diminishing returns. Measuring more than 8 or 10 positions in a small room rarely improves the quality of the calibration. The maximum number of measurements supported by MultEQ Pro is 32.

7. **Vary the height of the microphone** by a few inches between measurement positions to account for standing waves between the floor and ceiling.
8. **Creating a sweet spot.** If only one seating position will ever be used for listening, 6 or more measurements should still be taken. MultEQ requires information from the entire
listening area, even if this area is the size of a person’s head. Never measure a position more than once.

**More Measurement Features**

- **Undo Last** – Press this button to erase the previous measurement if the microphone moved while measuring, noise interrupted the measurement, etc.
- **Clear All** – Press this button to clear all measurements and start over with the first position.
- **Save Measurements** – Press this button to save the current measurements to a file. A dialog will be displayed allowing the user to choose the location of the saved file.
- **Load Measurements** – Press this button to load a set of measurements from a file. Loading measurements will clear the current set of measurements. However, after loading measurements, more positions may be measured.

Load measurement files from the same product that was measured. It is valuable to make a note of the Zone Configuration settings in use when the measurement file is saved.

Be sure to enter the same Zone Configuration settings that were used when creating the measurement file that is to be loaded. MultEQ Pro will provide a warning message if these settings do not match. Continuing with a mismatched zone may result in incorrect equalization applied to one or more speakers.
Detection Results

If calibrating an Audyssey Product (e.g. Sound Equalizer), enter the distance, trim and selected crossover value for each channel into the preamplifier. MultEQ Pro transfers these values to all other products automatically.

The Detection Results Screen displays the following values calculated from the measured data.

- **Speaker Type** indicates whether the detected loudspeaker is a satellite or subwoofer.
- **Distance** may be displayed in either English (feet) or Metric (meters) units by clicking the “Dist” heading (in blue). The preamplifier or receiver will calculate delays to apply to each channel to time-align all speakers so they are effectively equidistant from the first measurement position.
- **Trim** is displayed in dB. This number is an absolute Trim – the adjustment required such that movies will play at reference level with the volume knob at “0 dB” or the reference volume setting appropriate to the specific product.
- **Crossover options** are displayed in a drop-down selection box if a subwoofer was detected. If no subwoofer was detected, the front left and right speakers will reflect large, while the satellite speakers will allow bass management frequencies starting with their natural cutoff detected by MultEQ Pro.

When a subwoofer has been detected the crossover recommendations are optimized for the best blend between satellite and subwoofer. These are listed in the drop-down menu starting with the most recommended crossover setting at the top.

For every crossover frequency option, MultEQ Pro calculates a satellite filter that will best blend it with the subwoofer. For this reason, it is extremely important that the bass
management frequency entered in the preamplifier be the same as the crossover frequency selected on this screen.

The “Large” setting should be used only when the low frequency capability of a speaker extends below 40 Hz. Even in this case, bass management may be a good idea for the following reasons.

- Audyssey ALFC technology provides higher resolution correction filters on the subwoofer channel than is possible for satellite speakers.
- Subwoofers usually can produce content below even a very capable full-range speaker.
- A subwoofer is usually better able to produce the lowest frequencies at a level higher than a full-range speaker with less audible distortion
- If no bass management is used, the subwoofer will produce no output when the system is in 2 channel mode.
1. Choose a Target Curve\(^1\) to be used in computing the MultEQ XT Filters
   
   a. **Flat** – A Flat target curve should be used only in very small rooms, where the listener is situated very close to the speakers. It is also appropriate in a THX system where re-equalization is applied.
   
   b. **High Frequency Roll-off 1 (Default)** – This curve introduces a slight roll-off at high frequencies that accounts for the balance between direct and reflected sound for small to medium size rooms (room volume less than 2500 cu. ft.).
   
   c. **High Frequency Roll-off 2** – This curve introduces a slightly greater roll-off at high frequencies that restores the balance between direct and reflected sound for medium to large size rooms (room volume between 2500 and 5000 cu. ft.).
   
   d. **SMPTE 202M** – An international standard target curve is used for the high frequency roll-off applied in a typical 500-seat movie theater. It is appropriate for professional mixing spaces and dubbing stages that must be calibrated for film sound postproduction. It can also be used in extremely large playback spaces (room volume greater than 5000 cu. ft.).

2. Choose application of Midrange Compensation – It is recommended that *Midrange Compensation* be enabled (default) for initial listening tests. This target curve adjustment is sometimes useful for correcting the directivity difference that occurs between the midrange

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\(^1\) **Target Curves Explained** An audio system that reproduces sound with no coloration from 20 Hz to 20 kHz will not always produce the correct sound when combined with the acoustic response of a room. The main reason for this is that loudspeakers are much more directional at high frequencies than they are at low frequencies. This change in directivity causes the balance of direct sound and reflected (reverberant) sound to vary between the high and low ends of the frequency spectrum. The human ear perceives this imbalance as a “brightening” or emphasis of the high frequencies. A target curve compensates for this psychoacoustic effect by moderating the high frequency content.
and high frequency drivers of many speakers. It is possible to return to this screen later and disengage this option.

3. **Customize the target curve** – Press the “Design” button to launch the Target Curve Designer feature.

4. **Proceed to the next screen.** Correction filters will be calculated automatically.

In some systems, MultEQ Pro calculates two sets of MultEQ XT filters that are transferred to the product.

- A set of filters based on the user-selected target curve
- A set of filters based on the Flat curve

In such systems, the *Flat* target curve will not be displayed as an option. Note that target curve modifiers (described below in the section *Target Curve Designer & Target Curve Editor*) are applied to both the *Flat* target curve and the user-selected target curve. If enabled, Midrange compensation is also applied to both the *Flat* and selected target curves.

**Disconnect the Microphone**

*Warning:* Disconnect the Calibrated Preamplifier’s output (LINE OUT) from the product’s microphone input before continuing. Leaving the microphone connected could cause feedback at levels that will damage the speakers.
Target Curve Designer and Target Curve Editor
The “Target Curve Designer” and “Target Curve Editor” windows are used to customize the frequency response of the base target curves on a channel-by-channel basis. All target curves on the “Target Sound Options” screen are affected by these edits.

The Target Curve Designer
The “Target Curve Designer” window allows creation of target curve modifiers and the assignment of individual modifiers to one or more channels.

- **Add New** – Add a new target curve modifier by clicking the “Add New” button. A file name is generated at the bottom of the “Name” column.
- **Load...** – Use the “Load...” button to choose a previously saved target curve modifier file. Only individual modifier files are saved and loaded. Channel assignments cannot be saved.
- **Save** – Use the “Save” button to choose a filename and location for the target curve modifier. The default save location is the “My Documents\Audyssey\Measurements” folder.
- **Select Channels** – Use the radio buttons to the right of the file names to select the channels to which each target curve modifier is applied. Each modifier may be applied to as many channels as desired. Each channel may have only one modifier applied to it.
- **Delete** – Use the “X” button to remove a target curve modifier from the list. If the file has been saved, this will not delete the file. However, changes made to the modifier since it was created, loaded or saved will be lost.
- **Done** – Exit the Target Curve Designer, applying the current configuration.
- **Edit** – Click the “Edit” button to launch the “Target Curve Editor” window. This window is used to edit the frequency response of the corresponding target curve modifier.
Using the Target Curve Editor

Figure 13 - Target Curve Editor - the High Frequency Roll Off 1 target curve is shown with Midrange Compensation disabled (see Target Sound Options, page 28)

The “Target Curve Editor” is launched from the “Target Curve Designer” in order to edit a target curve modifier. A graph of the audible frequency spectrum is displayed, with the target curve modifier plotted in blue. The Audyssey base target curve that was selected on the Target Sound Options screen is displayed in the background so that the customized target curve can be viewed as the modifier is edited.

Placing and Adjusting Grips

Grips are control points that are used to edit the target curve modifier. They appear as blue squares on the target curve modifier and turn green when selected.

A grip is placed at each end of the graph by default. These two grips can never be moved horizontally or deleted, but they can be moved vertically.

Add new grips to the modifier by left-clicking the graph in the desired location. Grips may also be added by typing in the desired frequency and gain. Enter this information in the text boxes in the lower left corner of the window and press enter.

Control points must be separated by at least 1/3 octave. Clicking too close to an existing grip will not insert a new grip.

Limits of +/-3dB are imposed on the vertical range (gain) of the target curve modifier so that the target curve cannot consume the available headroom to the detriment of the equalization range (Figure 14). Clicking or attempting to type in a number outside of this range will insert a grip at the nearest allowed gain value.
Move grips by dragging or editing values. To move a grip with the mouse, place the mouse pointer over it. Press and hold the left mouse button, then move the mouse to guide the cursor to the new location. To move the grip by typing in new values, select the grip, then type in the new values and press the “Enter” key. Alternatively, right-click on the grip to display its context menu and select “Enter Point Values.”

Select multiple grips by holding the CTRL key. Hold the CTRL key and left-click on each grip to be selected. Once selected, all grips may be moved as a single group.

Delete grips by selecting the grip and pressing the DELETE key. Alternatively, right click on the grip to display its context menu, then select “Delete Point(s).”

When finished, apply the edits to the modifier by clicking the “OK” button in the bottom right corner of the window. To return the target curve modifier to its previous state, press the “Cancel” button. The “Target Curve Editor” window will close.

Spend some time placing grips and moving them to get a sense of how best to edit the modifier. Create several grips and move them in relation to each other, avoiding sharp peaks.
Save Results

Figure 15 - Save Results

- **Transfer To [Product]** – If applicable, click this button to temporarily transfer filters and calibration parameters to the product. This is often faster than permanently saving the filters and will not overwrite previous filters and calibration parameters. Use this feature to test a new calibration, or new target sound options without overwriting an existing calibration. If the “Save Permanently to [product]” button is not clicked before exiting the application, the previous state will be restored.

- **Save Permanently to [Product]** – Once the target sound options have been finalized, transfer the filters and calibration parameters (if applicable) to the product’s permanent memory by clicking this button. This may take several minutes to complete.

- **View Results…** – Click the “View Results…” button to view a graphical display of the frequency response correction for each channel. The default HTML browser will automatically open a window displaying a Customer Certificate titled, “Audyssey MultEQ XT Room Correction Results.” If the filters have only been temporarily transferred using the “Transfer to [Product]” button, the certificate will display a “DRAFT” watermark over the content. To display the certificate without the “DRAFT” watermark, permanently save the filters, then click the “View Results…” button again.

To print the certificate, set printing margins to their minimum values. In Internet Explorer, open the File menu and select Page Setup. Enter “0” for all four margins. The browser will automatically adjust margins to their minimum values.

By uploading the calibration results to the Audyssey Installer Website, the certificate will be available for viewing and printing at any time (see Create Customer Certificate, Page 37).
Audyssey Demonstration
The following features may be used after filters have been transferred or saved permanently to the product.

- **MultEQ On/Off** - Demonstrates the MultEQ XT filters. Audyssey has assembled instructions and recommended film titles for demonstration purposes (see *Audyssey Recommended Demos*, Page 45).
- **Dynamic EQ On/Off** – Demonstrates the Dynamic EQ feature. MultEQ filtering will always be enabled when Dynamic EQ is enabled.
- **Dynamic Volume On/Off** - These buttons may be used to demonstrate the Dynamic Volume feature. MultEQ and Dynamic EQ will always be enabled when Dynamic Volume is enabled.
- **Audyssey DSX On/Off** - Demonstrates the Audyssey DSX feature. This technology is independent of MultEQ XT, Dynamic EQ and Dynamic Volume.

Dynamic EQ and Dynamic Volume use parameters that can be changed to adjust for listening conditions or content.

**Dynamic EQ Reference Level Offset**
Audyssey Dynamic EQ uses the standard film mixing level as its reference. However, due to the lack of standardization outside the film industry, the reference level for other types of content may not match that of film content. In order to adjust Dynamic EQ for other reference levels, Dynamic EQ supports a Reference Level Offset of 5 dB, 10 dB and 15 dB.

- **0 dB** – Reference film level.
- **5 dB** – Suitable for listening to classical music and other content with an extremely wide dynamic range.
- **10 dB** – Suitable for viewing TV and listening to other audio sources with a moderately wide dynamic range.
- **15 dB** – Suitable for listening to pop, rock music and other content mixed at a high level.

**Dynamic Volume Mode**
- **Midnight** – This heavy setting and adjusts volume the most, causing all sounds to be of roughly equal loudness.
- **Evening** – This medium setting prevents loud and soft content from differing greatly from average content level.
- **Day** – This light setting adjusts volume the least, but still prevents extreme differences in the loudest and softest passages of any content.
Audyssey Settings

Figure 16 - Audyssey Settings

The “Audyssey Settings” screen is displayed if the product supports configuration of Dynamic Volume presets or of Audyssey DSX.

- **Dynamic Volume Preset** - Use the sliders to adjust the range of Dynamic Volume compensation for each of the preset values. The heavier end of one slider is nearly equivalent to the lighter end of the next slider. When moved close together, adjacent sliders push each other to ensure a noticeable difference between presets.

In most cases, all three sliders should be adjusted together. For example, in a highly reverberant room, all sliders should be adjusted toward the heavier end of their range, while in a very dry room all sliders should be adjusted toward the lighter end of their range.

Press the “Reset” button to undo changes and restore default settings.

- **Audyssey Demonstration** – These features enable demonstration of Audyssey technologies and are the same as those on the “Save Results” screen.
Calibration Complete

Calibration Wrap-up

1. **Lock the receiver / preamplifier settings** so they cannot be inadvertently changed. Changing the distance, delay and bass management settings will detract from the calibration. Additionally, the front-panel on some receivers will show the system as uncalibrated. In most cases, MultEQ filters can still be enabled, but they will be working without the added benefit of correct delays, trims and bass management.

2. **Instruct the customer** on proper use of the system. Outline when to use Dynamic Volume and explain the options for Dynamic EQ reference. Audyssey provides recommended demonstration content and instructions in the Appendix of this document. Let the customer know that the addition or removal of furniture, acoustic treatments or speakers necessitates recalibration.

3. **Upload the calibration results** to the Audyssey Installer web site. This allows viewing and printing the customer certificate, equipment and calibration parameters at a later date.

4. **Print the certificate**. Instructions may be found on the Audyssey Installer Web Site.
Appendix

Register on the Audyssey Installer Website
Before installing Audyssey products at a customer's home, be sure to visit the Audyssey Installer Website at www.audyssey.com/InstallerWeb to register your personal account.

You must register on the Audyssey Installer Website in order to:
- Purchase and activate product licenses
- Upload installation results and store customer certificates
- Download updates for MultEQ Pro software
- Download user guides, manuals and marketing materials

Enter your Username and Password to enter the site.

If you have not yet registered on the site, click the Register button and follow the instructions. Upon completion of the registration process, you'll be taken back to the Sign In page.

To register, you must already be an Audyssey installer with an Audyssey Installer Kit. Each Installer Kit has an assigned 5-digit serial number, located in three places:

1. The lower right corner of the outer box in which the Installer Kit is shipped.
2. The front of the Audyssey Calibrated Microphone.
3. The back of the Audyssey Calibrated Preamplifier.

After entering the Installer Kit serial number, click the Create New Account button.

Enter the required information and click the Submit button. The Sign-In page will follow.

Audyssey Registered Installer
After signing in, the Welcome screen gives a brief overview of the Installer Website. Use the provided links to navigate the site’s functions.

Certificate Overview
This page explains the details of the Customer Certificate.

Create Customer Certificate
Upload MultEQ Pro calibration results to generate a Customer Certificate. Certificates can be printed using instructions provided on the site.

View Customer Certificates
View archived MultEQ Pro calibration results by clicking the View Customer Certificate link next to the name assigned to each job (see Job Information, page 14).

Purchase/Activate MultEQ Pro Licenses
Purchase and manage your MultEQ Pro Licenses and License Keys.

Download Microphone Calibration Files
Retrieve lost Audyssey Microphone Calibration files using the 5-digit serial number labeled on the mic.
**Edit Account Settings**
Change account settings such as Username, Password, Company Name, Address, etc.

**Contact /Tech Support**
Contact Audyssey with questions or comments.

**Downloads**
Download Audyssey support materials.

**Privacy**
Audyssey does not sell, license or rent personal information entered on the Installer Website.

**Sign Out**
Sign out of the Audyssey Installer Website.
## Installer-Ready Product Features

### Audyssey Laboratories

<table>
<thead>
<tr>
<th>Product</th>
<th>Supported Features</th>
<th>Technical Support</th>
</tr>
</thead>
</table>
| Sound Equalizer V1 / V1b / Balanced | - MultEQ XT  
                           - ALFC  
                           - Zones (up to 8)  
                           - Transfer Filters temporarily | **Audyssey Laboratories, Inc**  
Audyssey provides free technical support to Audyssey installers. Technical support by phone is available from 9:00 A.M. to 5:00 P.M. (Pacific Standard Time).  
**Tel:** (213) 625-4300 x0  
**Fax:** (213) 625-4383  
**E-mail:** techsupport@audyssey.com |
| Subwoofer Equalizer              | - MultEQ XT  
                           - ALFC  
                           - Subwoofer Level Matching  
                           - Zones (up to two)  
                           - Transfer Filters temporarily |                                                        |

### Notes

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<tr>
<th>Product</th>
<th>Supported Features</th>
<th>Technical Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVR-5805</td>
<td>• MultEQ XT</td>
<td>Denon Electronics</td>
</tr>
<tr>
<td>AVR-xx08CI</td>
<td>• MultEQ XT</td>
<td>Denon Electronics provides free technical support to Audyssey installers.</td>
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<tr>
<td>AVR-xx10CI</td>
<td>• MultEQ XT</td>
<td>Denon Electronics</td>
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<td></td>
<td>• ALFC</td>
<td>Denon Electronics provides free technical support to Audyssey installers.</td>
</tr>
<tr>
<td></td>
<td>• Dynamic EQ</td>
<td>Denon Electronics</td>
</tr>
<tr>
<td></td>
<td>• Dynamic Volume (with paid upgrade)</td>
<td>Denon Electronics provides free technical support to Audyssey installers.</td>
</tr>
<tr>
<td></td>
<td>• Dynamic EQ (w/ reference level)</td>
<td>Denon Electronics provides free technical support to Audyssey installers.</td>
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<td>• Dynamic Volume (w/ preset controls)</td>
<td>Denon Electronics provides free technical support to Audyssey installers.</td>
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<tr>
<td></td>
<td>• AUDYSSEY DSX – no software control</td>
<td>Denon Electronics provides free technical support to Audyssey installers.</td>
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<td>• Subwoofer Level Matching</td>
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<td>AVR-5308CI</td>
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<td>• Dynamic EQ</td>
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<td>AVR-5308CI</td>
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<tr>
<td>AVP-A1HDCI</td>
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<td>3D Edition</td>
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<td>• Dynamic EQ (w/ reference level)</td>
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<td>• Dynamic Volume (w/ preset controls)</td>
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<td></td>
<td>• AUDYSSEY DSX – no software control</td>
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<tr>
<td>AVR-4520</td>
<td>• MultEQ XT 32</td>
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<td>• ALFC</td>
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<td>• Dynamic Volume (with free firmware upgrade)</td>
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<td>AVR-X4000</td>
<td>• MultEQ XT 32</td>
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<td>AVR-X4100</td>
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<td>AVR-X5200</td>
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<td>AVR-X7200</td>
<td>• Audyssey DSX</td>
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<td>• Audyssey LFC</td>
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<td></td>
<td>• MultEQ Pro</td>
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Notes
### Integra

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<tr>
<th>Product</th>
<th>Supported Features</th>
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<tbody>
<tr>
<td>DTR-70.4</td>
<td>• MultEQ XT32&lt;br&gt;• ALFC&lt;br&gt;• Dynamic EQ&lt;br&gt;• Dynamic Volume&lt;br&gt;• AUDYSSEY DSX</td>
<td>Integra Division of ONKYO U.S.A. CORPORATION&lt;br&gt;18 Park Way, Upper Saddle River, New Jersey 07458</td>
</tr>
<tr>
<td>DTR-80.3</td>
<td>DHC-80.3&lt;br&gt;DTR-70.3&lt;br&gt;DTR-80.1&lt;br&gt;DHC-80.1&lt;br&gt;DTR-70.1&lt;br&gt;DTR-80.2&lt;br&gt;DHC-80.2&lt;br&gt;DTR-70.2</td>
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<tr>
<td>DTR-80.1</td>
<td>• MultEQ XT&lt;br&gt;• ALFC&lt;br&gt;• Dynamic EQ&lt;br&gt;• Dynamic Volume&lt;br&gt;• AUDYSSEY DSX – See notes below</td>
<td>Integra provides free technical support to Audyssey installers. Technical support by phone is available from 9:00 A.M. to 5:00 P.M. (Eastern Standard Time).</td>
</tr>
<tr>
<td>DTR-70.1</td>
<td></td>
<td><strong>Integra Customer Support</strong>&lt;br&gt;Toll Free: 800-225-1946&lt;br&gt;Tel: 201-785-2600&lt;br&gt;Fax: 201-785-2650</td>
</tr>
<tr>
<td>DTR-7.8</td>
<td>• MultEQ XT&lt;br&gt;• ALFC&lt;br&gt;• Dynamic EQ&lt;br&gt;• Dynamic Volume</td>
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<td>DTR-8.8</td>
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<tr>
<td>DHC-8.8</td>
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<tr>
<td>DTC-9.8</td>
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<tr>
<td>Notes</td>
<td>• D**-.9 series supports two Dynamic Volume Presets, “Daytime,” and “Midnight”.&lt;br&gt;• D**-.0.1 series supports three Dynamic Volume Presets, adding “Evening”&lt;br&gt;• Editing the presets is not supported on any models&lt;br&gt;• DHC-80.1 and DTR-70.1/80.1 preamp-outputs support only wide OR height channels.&lt;br&gt;• DTR-70.1/80.1 support calibration of wide and height, but only wide OR height channels may be enabled for listening.</td>
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### NAD

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<th>Product</th>
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<tbody>
<tr>
<td>T175 (pre/pro)</td>
<td>• MultEQ XT</td>
<td>NAD Electronics International, A division of Lenbrook</td>
</tr>
<tr>
<td>T775 (receiver)</td>
<td>• ALFC</td>
<td>Industries Limited</td>
</tr>
<tr>
<td>T785 (receiver)</td>
<td></td>
<td>633 Granite Court</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pickering, Ontario L1W 3K1 Canada</td>
</tr>
<tr>
<td>M15HD (pre/pro)</td>
<td>• MultEQ XT</td>
<td><a href="http://www.nadelectronics.com">www.nadelectronics.com</a></td>
</tr>
<tr>
<td>T175HD (pre/pro)</td>
<td>• ALFC</td>
<td>Technical Contact, Meegan Gerard:</td>
</tr>
<tr>
<td>T765HD (receiver)</td>
<td>• Dynamic EQ</td>
<td>Tel: (905) 831-6555</td>
</tr>
<tr>
<td>T775HD (receiver)</td>
<td>• Dynamic Volume</td>
<td>Fax: (905) 837-6357</td>
</tr>
<tr>
<td>T785HD (receiver)</td>
<td></td>
<td>E-mail: <a href="mailto:Mgerard@lenbrook.com">Mgerard@lenbrook.com</a></td>
</tr>
</tbody>
</table>

### Onkyo Corporation

**NOTE** – Please ensure firmware is up to date before attempting calibration.

<table>
<thead>
<tr>
<th>Product</th>
<th>Supported Features</th>
<th>Technical Support</th>
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</thead>
<tbody>
<tr>
<td>PR-SC5509</td>
<td>• MultEQ XT</td>
<td>ONKYO U.S.A. CORPORATION</td>
</tr>
<tr>
<td>TX-NR5009 (EU,Asia Only)</td>
<td>• ALFC</td>
<td>18 Park Way, Upper Saddle River, New Jersey 07458</td>
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<tr>
<td>TX-NR3009 (EU, Asia Only)</td>
<td>• Dynamic EQ</td>
<td>Onkyo provides free technical support to Audyssey</td>
</tr>
<tr>
<td>TX-NR5010 (EU Only)</td>
<td>• Dynamic Volume</td>
<td>installers. Technical support by phone is available</td>
</tr>
<tr>
<td>TX-NR3010 (EU Only)</td>
<td>• AUDYSSEY DSX</td>
<td>from 9:00 A.M. to 5:00 P.M. (Eastern Standard Time).</td>
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<tr>
<td>TX-NR906</td>
<td>• MultEQ XT</td>
<td>Onkyo Customer Support</td>
</tr>
<tr>
<td>TX-NA906</td>
<td>• ALFC</td>
<td>Toll Free: 800-225-1946</td>
</tr>
<tr>
<td>TX-NA906X</td>
<td>• Dynamic EQ</td>
<td>Tel: 201-785-2600</td>
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<tr>
<td>PR-SC886</td>
<td>• Dynamic Volume</td>
<td>Fax: 201-785-2650</td>
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<td>TX-NR905</td>
<td>• MultEQ XT</td>
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<td>PR-SC885</td>
<td>• ALFC</td>
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<td>PR-SC5508</td>
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Notes
**NOTE** – Please ensure firmware is up to date before attempting calibration.

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<tr>
<td>AV - 7005</td>
<td>• MultEQ XT</td>
<td>Marantz America, Inc</td>
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<td>AV - SR7005</td>
<td>• ALFC</td>
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<td>• Dynamic EQ</td>
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<td>AVR-SR6006</td>
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<td>Marantz provides free</td>
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<td>AVR-SR6007 (No</td>
<td>• ALFC</td>
<td>technical support to Audyssey</td>
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<tr>
<td>A-DSX)</td>
<td>• Dynamic EQ (w/ reference level)</td>
<td>installers. Technical support</td>
</tr>
<tr>
<td>AVR-SR7007</td>
<td>• Dynamic Volume (w/ preset controls)</td>
<td>by phone is available from</td>
</tr>
<tr>
<td>AV-7701</td>
<td>• AUDYSSEY DSX – no software control</td>
<td>9:00 A.M. to 5:00 P.M. (Eastern</td>
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<td>Standard Time M-F).</td>
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<td>Notes</td>
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</table>
Audyssey Recommended Demos

Open Range
Scene 7: “A Storm is Brewin’”

*MultEQ Instructions:* This scene illustrates the improved timbre matching of speakers and the overall improvement in envelopment. Start with MultEQ Enabled, then listen approximately one minute into this scene until the first thunderclap and the intensifying rainfall. Leave MultEQ on for another 5-10 seconds, then turn MultEQ off and on a few times, alternating every 5-10 seconds. The improved timbre matching typically results in a more seamless sound to the rain-fall, and the rain itself may sound more coherent, as if each individual drop can be heard distinctly.

*Dynamic EQ Instructions:* During the intense rainfall, play the scene at a loud listening level for 15 seconds. Turn down the volume to -30dB, leaving Dynamic EQ on for about 10 seconds. Then, turn off Dynamic EQ, and repeat the process several times at this volume. This will demonstrate how Dynamic EQ maintains tonal balance and surround imaging at lower volume levels.

Almost Famous

Scene 7: “Fever Dog”

*MultEQ Instructions:* Wait until the band begins to perform, then switch MultEQ on and off every 10 seconds. In many rooms, you will notice improvements in the clarity of the lead singer’s voice and the imaging of the background instruments.

*Dynamic EQ Instructions:* Once the band begins playing, make sure the volume is set at a moderately loud level, then turn down the volume to around -30dB and leave it there for 10 seconds. Then, turn Dynamic EQ off, and repeat the process a few times. This will demonstrate how Dynamic EQ maintains bass response and surround imaging at lower volume levels.

The Patriot

Scene 2: “We Are At War”

*MultEQ Instructions:* This demo illustrates the improvement MultEQ makes to dialogue intelligibility, a common problem especially with older listeners. Wait until the general starts his speech, beginning at: “You all know why I’m here.” After a very brief pause, he’ll then say, “I’m not an orator, and I would not try to convince you of the worthiness of our cause.” Turn MultEQ off once he begins speaking after the word “orator”.

The Eagles – Hell Freezes Over

Scene 5: “Hotel California”

*MultEQ Instructions:* Start with MultEQ enabled. Wait until one minute into the performance, then turn MultEQ off and on as the music is playing.

*Dynamic EQ Instructions:* Begin the track with the volume near reference level. Wait until one minute into the performance, then point out that this is what the mix sounds like at near reference level. Drop the master volume to -30 dB, then turn Dynamic EQ on and off as the music is playing. Point out the change in balance when Dynamic EQ is disengaged—bass disappears, the soundstage collapses, and the higher frequencies change as well.

Standing in the Shadows of Motown
Scene 2: “Gerald Levert: Reach Out (I’ll Be There)”
Scene 4: “Joan Osborne: (Love Is Like A) Heat Wave”

*MultEQ Instructions:* Let the music play for 20 or 30 seconds to let the customer get used to the equalized sound before turning MultEQ off.

*Dynamic EQ Instructions:* Let the music play at a louder volume level for about 30 seconds, then turn it down to around -30dB. Let the music play for about 15 seconds, then turn Dynamic EQ off. Repeat the process several times.
Error Messages
The error windows in this section may appear while using MultEQ Pro. Please contact Audyssey Technical Support if you request additional troubleshooting assistance.

Device Not Connected Error
This error message appears when MultEQ Pro does not detect a connection between the product and your laptop. Make sure the USB cable is securely connected.

Input Signal Too Low
This window appears when MultEQ Pro does not detect a strong enough input signal to record a measurement. Check that the microphone is connected to the selected input. The preamp gain of the most recent installer kits are fixed and never require adjustment.

USB Connection Failure (Connection Time Out)
This message appears when MultEQ Pro does not detect a connection to the product. Check the USB to RS232 connection and try again.

Note: 2 Way Remote setting can cause USB Connection Timeout

When MultEQ Pro is connected using the RS232 to USB cable, 2 Way remote should be set to “Not Used” in the Denon receiver front panel menu. If it is set to “Used,” a connection time out error will result and calibration will not begin.

To check this setting on the Denon receiver, follow these instructions:

Open the front flip cover and press the “MENU” button (to the lower left of the circular pad). Use the controls to scroll the menu up or down to highlight, “Manual Setup.” Press the Right directional or Enter button.

Scroll up or down to highlight, “Option” and click the Right directional button to select it. Press the up or down buttons to highlight, “2Way Remote” and click the Right directional or Enter button to select it.
Make sure this is set to “Not Used.” While highlighting “Not Used,” press the Enter button to confirm “Not Used.” Press the “MENU” button to exit.

Connect again with MultEQ Pro.

**Polarity Errors**
In the case of polarity errors it is acceptable to continue with the MultEQ Pro application by clicking “No.” However, it is highly recommended that the validity of each warning be checked before continuing. Clicking “No,” finishing the calibration and later correcting for the problems listed in the window is not recommended.

**Disconnect Microphone**
An error message appears when exiting the MultEQ Pro application while the product is in calibration mode. Please make sure the microphone is disconnected, as not doing so could cause feedback at levels that will damage the speakers.
Technical Support
Audyssey Laboratories, Inc

Audyssey provides free technical support to Audyssey installers. Technical support by phone is available from 9:00 A.M. to 5:00 P.M. (Pacific Standard Time). Product-specific questions should be addressed to the manufacturer’s technical support contacts listed in the section Installer-Ready Product Features (Page 39).

Audyssey Installer Technical Support
Tel: (213) 625-4300 x0
Fax: (213) 625-4383
E-mail: techsupport@audyssey.com

Warranties

Audyssey Installer Kit
Audyssey Laboratories warrants that all the accessories in each Audyssey Installer Kit are free from defects in workmanship and materials and will perform in accordance with their published specifications for a period of one year from the date of purchase. Any necessary adjustments or repairs will be provided at no cost to the purchaser. The warranty covers parts, labor, shipping cost from the service center to the purchaser and, if necessary, packing materials. The warranty is not transferable. The purchaser’s responsibilities are to use the accessories in the Installer Kit in accordance with its written instructions and to activate the warranty by registering on the Audyssey Installer Website.

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