

Dirac Live for Emotiva™

Frequently Asked Questions (FAQ)

IMPORTANT INSTALLATION NOTES!

1) When the Dirac Live software is run for the first time on a Windows computer, Windows Firewall will usually prompt whether it should be allowed to access the Internet. You may be asked whether “DLCT.EXE” or “Dirac Live” should be allowed to access the Internet; and you may be asked to specify this permission separately for “Public Networks” and “Private Networks” or “Home Networks” and “Work Networks”. You MUST answer YES to any such prompts and, if multiple options (like Public and Private) are offered, select all of them. If you later have trouble running the Dirac software, you should verify that Windows Firewall hasn’t blocked it from reaching the Internet and delete any such blocking instructions if they exist.

(If you accidentally answer NO, or hit the button by mistake, Windows will NOT ask again, and the Dirac software will not work until the instruction to block it is manually removed.)

Note: *Many security programs include separate firewalls that either replace the Windows Firewall or operate in addition to it. If so, then these must also be instructed to allow the Dirac software to access the Internet, and, if a problem occurs later, you may need to confirm that they haven’t “decided” to block it.*

2) If the Dirac Live software fails to locate your XMC-1, or you know that your XMC-1 has failed to acquire a valid network address, the cause may be a simple routing “glitch”. Before doing more extensive troubleshooting, first turn Off your XMC-1 (using the rear panel power switch), shut down your computer, and turn off or unplug your cable modem or WiFi router, allow them all to remain Off for at least THIRTY SECONDS, and then turn them all back On. It is important that you turn all devices Off before turning any back On – they must all be Off for at least thirty seconds AT THE SAME TIME. This will cause the routing tables and address information in the various devices to “clear and re-synchronize” to each other, which will often restore faulty routing functionality to normal.

3) Windows has an audio AGC (automatic gain control) function which may be enabled for your calibrated microphone by default. To get the most accurate measurements, and so the best results, this must be DISABLED. The section Disabling AGC In Microsoft Windows (at the end of this document) describes how to do so in several versions of Windows.

INSTALLATION

Q: Are there any special settings I need to make when installing or running Dirac Live for Emotiva?

A: When you are installing the Dirac Live software on a PC, Windows MAY prompt you with a security message like: "Windows firewall has blocked some features of this program; what do you want to do?". You must ALWAYS tell Windows to allow the Dirac Live software to contact the Internet. (If Windows asks about Home, Work, or Public networks separately, it is best to allow access from all of them. This is not a security risk because the Dirac Live software only runs when YOU run it.) When you run the Dirac Live software, if Windows firewall, or one of your other antivirus or security programs, asks whether to allow it to access the Internet, you MUST respond YES (or "always").

Q: Do I need to remember my Activation Key once I've registered and installed Dirac Live for Emotiva?

A: You should be sure to write down your Activation Key, your User Name (the e-mail address you used to create the account), and your Password, and keep them in a safe place. You will need your Activation Key if you ever need to download another copy of Dirac Live; and your Dirac Live account is linked to the e-mail address you used to create it (it is your User Name).

Q: What kind of computer do I need to run the Dirac Live for Emotiva software?

A: The Dirac Live DLCT software has been designed to run on most modern personal computers, and we will be adding support for specific versions of Windows and Apple operating systems as we go along. Please check back for updated versions of this FAQ for an up-to-date list of computer hardware and software requirements and configuration suggestions.

Q: Will Dirac Live for Emotiva run on Linux.... or Windows RT.... or Android?

A: At this time we ONLY plan to support Microsoft Windows and Apple computers.

Q: What equipment do I need to run Dirac Live for Emotiva?

A: To use Dirac Live for Emotiva™ you will need your XMC-1, the calibrated test microphone and digitizer cable we provide, the Dirac Live for Emotiva software - which you need to run on your computer, and a network you can use to connect your XMC-1 to your computer and the Internet. (The original purchaser of the XMC-1 receives a single-user non-transferable license to the Dirac Live LE for Emotiva software.) To download the software, you will register on the Dirac website, and enter your activation key. If you purchase Dirac Live Full for Emotiva, you will be able to use either the calibrated microphone we provided or your own third-party calibrated microphone.

To measure your room and speakers, and calculate the Dirac Live Correction Filters, you will have to connect your XMC-1 and your computer to a network which has access to the Internet, connect the calibrated test microphone to your computer using the digitizer cable, and run the Dirac DLCT software on your computer. Once the measurements and calculations are completed, the DLCT software will transfer the Correction Filters to your XMC-1 over the network; at that point you can disconnect the XMC-1 and computer from your network if you like. Once the Correction Filters have been transferred to the XMC-1, you can activate the Dirac Live for Emotiva room correction on your XMC-1 simply by selecting the Dirac Speaker Preset (you can do that from the Setup Menu, or from the remote control, and you can assign that preset to specific inputs on the XMC-1).

Q: Do I need to run network cables from my router to my XMC-1 and my computer, or can I use WiFi?

A: Dirac Live for Emotiva can be run over either a wired or WiFi connection on the computer. The XMC-1 has a 10/100-base-t Ethernet port, which can be connected directly to your router or cable modem with an inexpensive network cable, and will automatically configure itself to most networks using DHCP; the computer simply needs to be connected to the same network as the XMC-1 and have a valid network address. If your router supports WiFi, then a laptop computer with a WiFi connection is probably the most convenient solution. You may connect the XMC-1 to your network through a wireless access point, and the network parameters on the XMC-1 can also be configured manually, but if you do that it will be up to you to make sure you configure things correctly. We have seen a few situations where a weak WiFi connection caused Dirac to get a lot of errors, or even to not work at all; if that happens, then you'll need to relocate your laptop for better reception, or use a wired Ethernet connection.

Q: Will the Dirac Live DLCT software and the XMC-1 run from behind a firewall?

Q: Do I need to make any special settings on my router to run Dirac Live for Emotiva?

A: The Dirac Live DLCT software needs to be able to connect with the servers at Dirac, but it uses standard web browser protocols, and will work from behind most firewalls. The communication between the XMC-1 and the DLCT software is somewhat more complex, so both the computer and the XMC-1 should be on the same side of your firewall. (If you have a cable modem or router, connecting both the XMC-1 and computer to the Ethernet ports on your cable modem, or connecting the XMC-1 to one of the wired ports, and the computer to the WiFi on your router, should work fine.)

Q: Can I install the Dirac Live for Emotiva software on more than one computer?

A: Your XMC-1 comes with a single-user non-transferable license to Dirac Live LE for Emotiva; if you purchase Dirac Live Full for Emotiva, you will receive a single-user non-transferable license to Dirac Live Full for Emotiva. You may install each on a separate computer (you may also install both on the same computer, although there is no reason to do so). Each license only entitles you to run the software on a single computer at any given time.

Q: If I sell my XMC-1, can I transfer my Dirac Live for Emotiva license to the new owner?

Q: If I buy a used XMC-1, do I get the Dirac license that came with it?

A: The license for the Dirac Live LE for Emotiva software is separate from the XMC-1 itself, and is issued to the original purchaser of the XMC-1; it is NOT transferable. The license for the Dirac Live Full for Emotiva software is also issued to the XMC-1 owner who purchases it, and is also NOT transferable. Dirac Live LE for Emotiva is only available with the new purchase of an XMC-1 from Emotiva; however, if you purchase an XMC-1 on the used market, you may purchase your own license to Dirac Live Full for Emotiva.

Note: If someone is purchasing your XMC-1 for you, or if it is part of a group or club buy, the person who will end up owning the XMC-1 must register the Dirac Live for Emotiva license that comes with the XMC-1 in their name AFTER they transfer ownership (and the warranty) into their name. Once the software license is registered in the owner's name, it cannot be transferred; if the XMC-1 is sold, the new owner must purchase their own license for Dirac Live for Emotiva.

Note: The calibrated test microphone, digitizer cable, and microphone stand are considered to be part of the XMC-1 hardware. If you purchase a used XMC-1, it should include the original accessories that were sold with it. If you purchase a license for Dirac Live Full for Emotiva to go with your XMC-1, and do not have the original microphone and digitizer cable, you will have to purchase new ones separately.

Q: What are the differences between Dirac Live LE for Emotiva and Dirac Live Full for Emotiva?

A: Dirac Live LE for Emotiva (the version that you get with your XMC-1) automatically chooses the optimum frequency limits for your Correction Filters, and the optimum Target Curve for its frequency response adjustments, based on the measurements it makes of your room and system. Dirac Live Full for Emotiva (the upgraded version) lets you customize the frequency limits for the Correction Filters, lets you create and use custom Target Curves, lets you assign different limits and Correction Curves to different groups of speakers, and lets you use different calibrated measurement microphones. It also adds the ability to adjust the test levels individually for each channel, which can simplify the level adjustments if your speakers or amplifiers vary widely in efficiency.

Q: How do I purchase Dirac Live Full for Emotiva (the Full version)?

Q: Can I buy Dirac Live Full for Emotiva instead of the LE version when I buy my XMC-1?

A: You will be able to purchase Dirac Live Full for Emotiva from our website at any time. There is also an option to purchase it at the same time you buy your XMC-1. (Either way, you still get the free Dirac Live LE for Emotiva license that comes with the XMC-1.)

Q: How is Dirac Live for Emotiva different from the software version of the Dirac Live Room Correction Suite sold on the Dirac website?

A: The software-only version of Dirac Live uses a software module running on the computer where it is installed to apply the Correction Filters to your music; therefore it is limited to being used with audio that is being played on or through that computer. With Dirac Live for Emotiva, the engine that applies the Correction Filters is integrated into the XMC-1 firmware, and runs on the XMC-1 hardware platform. Dirac Live for Emotiva can be used with any source connected to any input on your XMC-1, including analog sources like phono preamps, or the analog outputs of your favorite SACD player, and HDMI sources like Blu-Ray discs and cable programs. With Dirac Live for Emotiva, since the correction engine is running on your XMC-1, you can disconnect your computer once the Correction Filters have been calculated and downloaded. The engine for the software only version has slots for four separate sets of Correction Filters; while you can transfer as many sets of filters to the XMC-1 as you like, as often as you like, it only has one Dirac Preset and so can only “hold” one set of filters at once.

Q: Can I use the software version of Dirac Live (purchased from Dirac) with my XMC-1?

Q: Can I use Dirac Live for Emotiva (either version) for playing audio directly on my computer, or with products other than my XMC-1?

A: No. For purposes of ownership, Dirac Live for Emotiva is an entirely different product. Dirac Live for Emotiva can ONLY be used with your XMC-1, and the computer software version of Dirac Live, purchased directly from Dirac, CAN NOT be used to configure the Dirac Live Correction Filters in your XMC-1.

(Technically there is no reason why you couldn't connect a computer, using the software version of Dirac Live purchased directly from Dirac, to an Emotiva XMC-1. However, if you do, it would be working independently of your XMC-1, just as if you had that computer connected to a different DAC or pre/pro, and could NOT be used to configure the "Dirac Live engine" in the XMC-1.)

Q: Can I use Dirac Live for Emotiva with my other calibrated microphones?

A: Dirac Live LE for Emotiva has been customized to work with the calibrated test microphone and digitizer we provide, and the software won't recognize an input from a different USB microphone. (While you could plug a different analog microphone into our digitizer cable, since highly accurate correction tables for our microphone are also coded into the software, you won't get accurate results with a different microphone.) Dirac Live Full for Emotiva will allow you to use different microphones – as long as they include calibration files in the standard format.

Q: Will Dirac Live for Emotiva work with my sound card?

A: Dirac Live for Emotiva doesn't use the sound card in your computer. When you use the microphone and digitizer cable we provided, the digitizer built into the USB cable completely replaces your sound card as the digital input device, and the test tones are produced directly by your XMC-1, under control of the DLCT software. Both should work fine no matter what sound card you have in your computer – or even if you have none.

Q: If I purchase the \$99 license for Dirac Live Full for Emotiva, do I get another test microphone?

A: No. The microphone is part of the package that comes with your XMC-1, which also includes the single-user license to Dirac Live LE for Emotiva. When you purchase a license for Dirac Live Full for Emotiva, you are only purchasing a license for the software. However, if your microphone becomes lost or damaged, you may purchase a replacement directly from Emotiva.

Q: I'm installing the Dirac Live for Emotiva software, and the program seems to be hung up?

A: When you first install the software, a pop-up dialog box will appear asking for your user name and license code; it will wait until you reply and then exchange that information over the internet with the Dirac servers. Close or move any other windows you have open on your desktop and confirm that this dialog box isn't hiding behind one of them waiting for an answer. Every time you run Dirac Live for Emotiva, the software authenticates with the Dirac servers. If your computer isn't connected to the Internet, this authentication won't work, and that dialog box may pop up. If you see that dialog box after you've already licensed your copy of Dirac Live, make sure your computer has access to the Internet, and that your Internet connection isn't temporarily down, and then close and reopen Dirac Live.

Q: What version of XMC-1 Firmware do I need to run Dirac Live?

Q: Do I need to update my XMC-1 to use it with Dirac Live?

Q: Is the Dirac Live software already installed on my XMC-1?

A: The engine that applies the Correction Filters to your audio is part of the XMC-1 firmware. We strongly recommend that you update your XMC-1 to the current version of the XMC-1 firmware before running Dirac Live for Emotiva (if you haven't already).

Q: How does the Dirac Live for Emotiva registration and license process work?

Q: I received an “Activation Key” in my e-mail; what do I do with it?

Q: I didn’t receive any Dirac Software; how do I get it?

A: To activate your license to Dirac Live for Emotiva, go to the activation page here:

<https://emotiva.com/xmc-1-dirac-live-download> .

When you do so, you will be asked to enter your activation key, enter your e-mail address, and choose a password for yourself (your password must include a combination of upper and lower case letters and numbers). This information will be used to create your Dirac account. Once you do that, you will be given a link where you can download the software, at which point you will also be offered the choice between downloading the PC or Apple version of the software. When you install the software on your computer, you will be asked to enter the credentials from your Dirac account (the e-mail and password you entered). Whenever you run the Dirac Live software on your computer, it will use this information to confirm that you are a licensed user. DO NOT share this information with other users. You should keep a copy of your e-mail address, password, and activation key in a safe place. If you ever need to download a new copy of the software, you will need to log in to your account with your e-mail address and password, and you will be asked for your activation key (think of the activation key like a receipt that you can use to prove that you are a licensed owner of the software).

Note: If you are activating a license to Dirac Live Full for Emotiva (the Full version) which you have purchased after activating a copy of Dirac Live LE for Emotiva (the free version), or if you have previously activated a Trial copy of the software-only version of Dirac Live, and you wish to add your new activation key and license to your existing account, use the Existing User link on the activation page. You may also create a completely new account using a different e-mail address.

Q: I’ve been using the Windows version of Dirac Live LE for Emotiva (or Dirac Live Full for Emotiva), but I’d like to switch to the Apple version now that it’s available. How do I go about this?

Q: I’ve been using the Apple version of Dirac Live LE for Emotiva (or Dirac Live Full for Emotiva), but I’d like to switch to the Windows version. How do I go about this?

A: While each Dirac Live for Emotiva license entitles you to install and use the software on a single computer, the licensing mechanism will physically allow you to install it on two computers. If you have already activated your Apple or Windows copy of Dirac Live for Emotiva, and have downloaded it, but now wish to switch to the OTHER version, you must do the following:

- 1) Go back to the Activation Page
- 2) Select the Existing User option
- 3) Enter your Activation Key and the User Name and Password you used when you created your account

After you do this you will again be offered the option of downloading either the Apple or Windows version. The same User Name and Password work for both the Apple and Windows version of the Dirac software. If you have also purchased Dirac Live Full for Emotiva, and added that activation code to your original Dirac account, the same User Name and Password will also work for both the Apple and Windows versions of that software as well.

The Dirac license server independently keeps track of how many copies of each version of Dirac Live you have installed. Your Dirac Live LE license will allow you to install two copies of Dirac Live LE on any combination of Windows and Apple computers. Your Dirac Live Full license will allow you to install two copies of Dirac Live Full on any combination of Windows and Apple computers.

Q: I downloaded a new version of Dirac Live for Emotiva but, when I try to install it, I get a message that my license count has been exceeded. What should I do?

Q: I just tried to install Dirac Live for Emotiva on a new computer but, when I try to install it, I get a message that my license count has been exceeded. What should I do?

A: The licenses to Dirac Live LE for Emotiva and Dirac Live Full for Emotiva each entitle you to install and run Dirac Live for Emotiva on a single computer. However, since many people have multiple computers, or may need to reinstall the software for various reasons, the license verification mechanism actually allows you to install the software twice.

Note: *The license activation counter tracks THE NUMBER OF TIMES YOU HAVE INSTALLED THE SOFTWARE; and NOT the number of copies you CURRENTLY have installed. If you install a new copy over a previous one, it will usually not be counted as another install; if you delete a copy from a specific computer, then install a new copy on that same machine, it may or may not count as a new install. If you delete or uninstall a copy of the Dirac software from one computer, the license activation counter will NOT automatically recognize that it is no longer installed, and will NOT automatically allow you to install an additional copy on another computer.*

Don't worry. Each license entitles you to install and run the software on one computer. If your counter gets "used up" because you've tried the Dirac Live software on several computers, simply call Emotiva and we will reset the license counter for you. (Since we do this by deactivating old licenses, be prepared to tell us which computers you want us to delete from the list of licensed computers.)

Q: I installed the Dirac Live software on my Windows PC, and it worked fine right after I installed it, but it wouldn't work the next time I tried to use it (and I haven't been able to get it to work since).

A: Depending on how your computer and security software are configured, you may have to run the Dirac Live software as administrator, and your computer may not be doing this by default. You can do this by setting the computer to always run DLCT as administrator, or by selecting the "run as administrator" option each time you use it. How you do this will depend on which version of Windows you have and how it is configured.

Q: I noticed that some of the controls on the Dirac software screen seem to be cut off.

Q: When I get to the screen with the couch, there's no Start Button to start the tests.

A: This can happen if the resolution on your computer screen is set too low. (Even if you have an HD screen, some people set the resolution lower to make the icons and text bigger and easier to read, and the resolution of the video output on many older laptops is lower than their internal screen resolution. If the couch looks huge, and occupies most of the screen, then this is probably what's happening.) Make sure that the *SCREEN RESOLUTION* on your computer is set to at least 1024 x 768 or higher.

Q: Now that I've installed it, the Dirac Live software refuses to run.

Q: I can't even get the Dirac Live software to install; I keep getting "security warnings" about "unauthorized programs" and "programs trying to access the Internet".

A: The Dirac Live software must be "authorized" to run on your computer, and must be able to access the Internet. Windows Firewall, or some other security or antivirus software you have running, may be preventing it from doing this. If any of these programs asks, you *MUST* tell it to allow DLCT to access the Internet. Many security programs remember what you tell them (so, if you said "don't allow" once by mistake, they will assume you mean it forever, and not ask again). Therefore, you may have to manually tell Windows Firewall or some other security program to "trust" DLCT (which may mean adding it to a "trusted" list, or removing it from a "block" list). You'll have to consult the documentation or help line for your software for the details of how to do this; the details are different for each one.

Note: *This has nothing to do with how the Dirac Live software itself is configured – it is part of how your computer is configured to treat the Dirac Live software (or programs in general). However, if the Dirac software cannot access the Internet because it is blocked from doing so, then it may repeatedly prompt you to re-enter your Account Name and Password (because it cannot contact the Dirac servers to authenticate itself). If this happens, the Dirac Live software will stop prompting you to re-enter your information once you fix the access issue and it is again able to authenticate itself with its servers.*

Q: I'm trying to install the Dirac software, but the dialog box keeps going away before I get a chance to enter my information. What can I do?

A: The software normally allows you about a minute to enter your information before it times out. If you've chosen an especially complicated password, it might help to use the Windows cut and paste function. We also suggest that you have your microphone and XMC-1 connected at this point (the software allows a somewhat longer timeout if it's not scanning for connected devices while the authentication process is running).

Q: I purchased Dirac Live Full for Emotiva at the same time as I bought my XMC-1, or right afterwards, but the XMC-1 just isn't for me, and I'm planning to return it under my 30 day money back guarantee. Can I get a refund for the \$99 I paid for my Dirac Live Full for Emotiva license?

A: Sorry, but all purchases of software licenses are final, so we can't give you a refund for that. (It's a condition from the guys at Dirac who we license the software from.)

Q: I purchased Dirac Live Full for Emotiva to go with my XMC-1, and now I've decided to sell my XMC-1. Since I bought it separately, can I sell my Dirac Live Full for Emotiva license to whoever purchases my XMC-1, or keep it myself to use with another pre/pro?

A: Sorry, but Dirac Live for Emotiva was specifically customized to work with our XMC-1, and the software licenses for both versions are non-transferable.

OPERATION

Q: I just ran Dirac Live for Emotiva, and it transferred its Correction Filters to my XMC-1, and the all of my presets now seem to default to Dirac; why?

A: The Correction Filters created by Dirac Live for Emotiva are automatically transferred to your XMC-1 at the end of the calibration process, and the default Preset is set to Dirac. If you don't want to use Dirac for a particular Input, then just change that one back to Preset 1 or Preset 2.

Q: How many different sets of Correction Filters can I use with Dirac Live for Emotiva?

A: The Dirac Live software can store an unlimited number of sets of measurements on your computer, and you can transfer new sets of Correction Filters to the XMC-1 as often as you like, but the XMC-1 itself only has one Dirac Speaker Preset, which stores a single set of Correction Filters at a time.

Q: What should I do if my listening position isn't in the center of the room?

Q: Do I really need to run the full test with nine different microphone positions even if I always sit in one single spot?

A: Dirac Live for Emotiva uses the information from several measurements, taken at multiple locations, to accurately characterize the acoustic properties of your room; Dirac Live will give you the best results if you let it take the full set of measurements. Dirac Live bases its calculations on the assumption that the first measurement will be taken at your preferred listening position and, after the corrections are applied, imaging and sound stage will be optimized for a listener located at this position. **IT IS CRITICAL THAT THE FIRST SET OF MEASUREMENTS BE TAKEN AT YOUR PREFERRED LISTENING POSITION - AND AT ABOUT THE HEIGHT WHERE YOUR EARS NORMALLY ARE WHEN YOU LISTEN TO MUSIC.**

Each of the remaining eight measurements should then be taken at different locations, following the pattern recommended by the DLCT software. If you have a smaller listening area than the couch shown in the pictures, then follow the pattern, and move the microphone between each measurement, but reduce the spacing between the measurement locations. (You'll note that the suggested pattern covers a range of locations in each of the three dimensions; you should change the views in the positioning illustration to get a more accurate idea of the suggested locations).

The only exception to this is if you wish to optimize the corrections for a large seating area, and your personal preferred listening position is towards one edge of the overall seating area. In that situation, you may get better overall results for the entire listening area by using the center of the seating area as your first measurement "listening position" (you WILL be sacrificing the best possible results at your one listening position in return for better results – on average – for everyone everywhere in the seating area).

Note: DO NOT simply leave the microphone in your listening position and run the same measurement nine times. Dirac Live relies on having different measurements, taken at different locations, to produce optimum results.

Q: I'm not sure I can cover all the recommended measurement positions using the little tabletop microphone stand you provided; what should I do? Should I hold the microphone by hand?

A: You will not be able to hold the microphone steady enough by hand. If you need to be able to position the microphone more widely than you can with the little stand, we recommend purchasing a full-sized microphone stand. (They can be obtained from a wide variety of sources for as little as \$20.)

Q: Will I get better results if I hold the microphone and point it towards each speaker?

A: Absolutely not! The test microphone is calibrated to be positioned vertically, with the SIDES of the microphone towards the speakers. His orientation will give the most accurate results.

Q: I have ceiling speakers, or wall mounted speakers, and I seem to be getting odd results; what should I do?

A: Ceiling and wall mounted speakers present an unusual acoustic "challenge". Your best bet for a good result would be to position the microphone where your head would be (and at head height) for the first reading, then choose a good mix of positions for the remaining readings. If you have ceiling speakers, you might get a more even overall room response if you avoid taking any readings with the microphone positioned directly under one of them.

Q: Do I have to repeat the entire process if I move my speakers, or buy a new couch, or change the drapes?

A: Yes. Dirac Live's Correction Filters are calculated based on a careful analysis of the acoustic properties of your system and room. Anything that significantly changes the way your room or system sounds will necessitate new measurements and new calculations. Even something as simple as changing the toe-in on your speakers, or moving your couch a few feet, is sufficient reason to re-run the Dirac Live calibration. If the change to your room or system makes a difference you can hear, then it has changed the acoustics of your listening space, and your listening room should be recalibrated.

Q: My buddy's room sounded great after he ran Dirac. Can I use his settings on my XMC-1? (And how would I do that?)

A: Don't do it! Your buddy's Correction Filters were calculated based on a careful analysis of HIS room and HIS system; your room and system are different, so his Correction Filters probably won't work well at all for you.

Q: Can I use the Tone Controls or Parametric EQs in my XMC-1 with Dirac Live for Emotiva?

A: The Dirac Live Correction Filters are treated as a Speaker Preset by your XMC-1. Since the Parametric EQ settings on the XMC-1 are PART OF Speaker Preset 1 and Speaker Preset 2, you can only use them when one of those presets is selected; there are no Parametric EQ settings in the Dirac Speaker Preset. Likewise, you will not be able to use the System EQ settings that exist in the other Speaker Presets unless those presets are selected. However, any controls that are accessed outside of the Speaker Presets (including the Tone Trims and options like Loudness) can be used with Dirac Live, and there are level settings in the Dirac Preset.

Q: Are the Dirac Live Correction Filters that I transferred to my XMC-1 saved when I do a Backup Config on my XMC-1?

A: The Dirac Live Correction Filters are separate from your XMC-1's configuration files, and are not saved as part of your Backup Configuration. However, if you have Correction Filters on your XMC-1, they will NOT be deleted by doing a Factory Reset or a firmware update.

Note: IT IS A GOOD IDEA TO SAVE THE MEASUREMENT SETS ON YOUR COMPUTER WHEN YOU RUN DLCT. The Dirac software will allow you to save an unlimited number of measurement results on your computer as "projects", each of which can be loaded again later. That way, if you ever run a new calibration and aren't pleased with the results, or if your XMC-1 requires factory service and ends up being replaced, you can easily reload your previous Dirac Live Correction Filters from your computer.

Q: The instructions say to set my Speaker Sizes in the Dirac Speaker Preset on my XMC-1 before running the Dirac Live DLCT software. What if I forgot to set them, or want to change them after I've run Dirac?

A: The Dirac Live software reads the speaker configuration from your XMC-1 before it makes its measurements, so changing the speaker settings from None to Small or Large after the Correction Filters have been calculated can cause problems. (If a speaker is set to Size None when your Correction Filters are calculated, no Correction Filters will be calculated for that speaker; if you then set that speaker to Small or Large, it will be assigned a stale or nonexistent Correction Filter, which will be incorrect.) You should be especially careful to make sure that your subs and rears are set correctly before running Dirac Live. Since Dirac Live calibrates each channel independently

Q: What should I do if I have more than two subs, or if I have several subs that are EQed by their own MiniDSP or other subwoofer equalizer or controller?

A: Your subs should be positioned in their "final" locations, and any adjustments that you plan to make on the subs themselves, or to any EQ or correction hardware specific to them, should all be done BEFORE running the Dirac Live for Emotiva calibration process.

Q: I noticed that, every time Dirac Live does the test tones, it seems to test my Front Left speaker twice; is that normal or is something wrong?

A: It's perfectly normal. Dirac tests the Front Left speaker a second time to confirm that conditions in the room haven't changed since the test started, and to double check some timing measurements.

Q: I have the LE version of Dirac Live for Emotiva, and the Dirac Live seems to have chosen frequency limits (those "curtains" on the left and right ends of the frequency response graph) that are narrower than I would have liked. For example, Dirac seems to have decided to only correct my huge front speaker towers from 65 Hz to 15 kHz; what's going on?

A: The limits chosen by Dirac Live are based on the results of its measurements. In your example, based on the measurements you've taken, Dirac Live has determined that your speakers would require too much correction outside of the frequency limits it has chosen, and so has decided to avoid trying to make corrections outside those limits. (Trying to force your speakers to produce output at frequencies where they operate poorly could result in excessive distortion or poor sound quality, and could even risk damaging your speakers.)

Q: I noticed that the Target Curves chosen by Dirac Live seem to look odd near the ends (specifically, they tend to bend sharply up or down near the ends). Isn't Dirac Live supposed to make my speakers ruler flat over its adjustment range?

A: The Target Curves used by Dirac Live, inside the range of frequencies it will be adjusting, must "line up" at the ends with the measured frequency response of the ranges that won't be adjusted; you cannot have a sudden jump between them. Therefore, Dirac Live has created a Target Curve that includes smooth transitions between them.

Q: I've got Dirac Live Full for Emotiva, and it won't let me move the frequency range "curtains" in to where I want them; what gives?.

A: If there are adjustment points on your Target Curves (those little orange balls), Dirac Live won't let you move the "curtains" past them. If there are any adjustment points blocking where you want to position your curtains, you must either delete them or move them out of the way (towards the center).

Q: What are "groups"?

A: Because you normally want speakers that are considered sets, like both of your fronts, or both of your surrounds, to have similar Target Curves, the Dirac Live software treats such speaker sets as what we call groups. If you look at the tabs (top right corner) for each individual speaker channel, you'll notice that some are touching, while others have spaces between them. The ones that are touching are grouped together, and share a common Target Curve.

With Dirac Live LE for Emotiva, these groups are chosen by the Dirac software and cannot be changed. In Dirac Live Full for Emotiva, you can change the grouping choices made by Dirac Live. You may add a channel to a group by first selecting (highlighting) that group, and then dragging the tab for the channel you wish to add, and dropping it "onto" the group. You may remove a channel from a group by clicking on the little picture of a chain that appears when you mouse over the tabs that are linked.

Q: I seem to be having odd problems with DHCP (which the XMC-1 uses to automatically get a network address). Sometimes my XMC-1 gets bogus addresses, or won't get one at all. What's going on?

A: DHCP is a network service that manages the IP addresses used by devices on your network; the DHCP service is normally provided by a "server" that is built into your router or cable modem. Some routers can only provide addresses to a limited number of devices; if you have too many computers or smart phones, their address list can "fill up", leaving no available address for your XMC-1. If this happens, you'll have to clear some devices out of that list or change your router; many routers also automatically clear addresses off their list after a certain number of hours or days if they aren't used. (You'll have to consult someone familiar with networks, and your equipment, to help you with this if it happens; that would be your cable company if your router is your cable box.)

Your XMC-1 may also fail to connect to your network, or to get a valid IP address, if you turn it Off and On again too quickly. The Ethernet chip inside the XMC-1 takes several seconds to fully reset. Therefore, if you turn your XMC-1 Off using the rear panel Power switch, or an external power strip, or switch in into Low Power Standby, you need to let it remain Off for at least ten seconds before turning it back On. (This is normal for many computers, and your XMC-1 is, among other things, a computer.)

Q: I'm running on a relatively underpowered Apple computer, and Dirac Live seems to crash a lot while I'm trying to take measurements, but it doesn't always crash, and it doesn't seem to be consistent about it. Any tips that might help prevent this?

A: After each measurement is run, the Dirac Live software runs some calculations – and it lets you go on and take the next measurement while the calculations are still in progress. Even though this normally works fine, we've noticed that, on some slower machines, the program will crash when you do this. If you notice a lot of crashes occurring at this point, try allowing the calculations for each measurement to *complete* before going on to the next measurement.

Q: I just upgraded to Dirac Live Full for Emotiva. Do I really need to worry about those extra Channel Level sliders when I'm setting the test levels?

A: The Channel Level sliders are provided for people whose speakers vary significantly in efficiency, or whose amplifiers have very different amounts of gain. As long as you can set the levels correctly using the two main sliders, you can ignore the individual channel sliders (and just leave them set at the maximum).

COMPUTER AND SOFTWARE COMPATIBILITY

The software portion of Dirac Live for Emotiva™ (DLCT) was designed to run on most modern home computer systems. This FAQ contains a current list of the specific computer hardware and operating systems that we've tested Dirac Live for Emotiva with, the minimum system requirements for each, and any special settings or options you'll need to make to get Dirac Live for Emotiva to run. Since we will be adding support for additional hardware and operating systems as we go along, please check back here often for updates and additional information. While we'll be happy to support you in any way we can, we can't promise that Dirac Live for Emotiva will run on computers and operating systems NOT listed on this page, or that we will add support in the future for any computer or operating system not listed here...

General Requirements

Dirac Live for Emotiva requires that both your XMC-1 and your computer be connected to a network which, in turn, has access to the Internet. The Dirac Live software uses standard Internet protocols to communicate with the Dirac servers, so any computer that can be used to run a web browser or play an online game should work fine (although, if your router or firewall has any unusual security restrictions, you may need to disable them temporarily).

Your XMC-1 and computer should be connected to the same network, or to network segments that can "talk" to each other. Connecting both to wired Ethernet ports on your cable modem or router should work well; connecting your XMC-1 directly to an Ethernet port on your cable modem or router, and running the Dirac Live for Emotiva software on a laptop which is connected to your network using WiFi should also work well in most cases – probably without requiring any special configuration settings. (If your WiFi connection is especially weak or slow, you may have to reposition your laptop for better reception, or you may be required to use a wired connection for your computer.)

On most networks, your XMC-1 will obtain its network address from your DHCP server automatically, and the Dirac Live software will easily find your XMC-1 and connect to it (don't worry if you don't know what that means; for most of you everything will work fine at the default settings for your XMC-1 and other equipment).

By default, the communications between your Dirac software and your XMC-1 will not be routed over the Internet, so you won't "see" your neighbor's XMC-1 and he won't see yours. This also means that you will NOT be able to connect to your XMC-1 from your neighbor's house, or from your computer at the office (and there's no reason to do so).

The requirements for Dirac Live LE for Emotiva and Dirac Live Full for Emotiva are the same.

Minimum Requirements...

(For each operating system, these are the minimum hardware and operating system requirements that are absolutely necessary to ensure that Dirac Live for Emotiva will run correctly. The requirements for Dirac Live LE for Emotiva and Dirac Live Full for Emotiva are the same.)

Note: The Dirac Live software uses a lot of processing power and other computer resources. Some slow or outdated computers, even though they may work well as music servers or players, may still be unable to provide the processing power necessary to run Dirac Live for Emotiva. If so, they may run the Dirac Live software slowly, or not at all, and may fail part-way through the calibration process. If this happens, first try disabling all antivirus and firewall software. If you still have problems, make sure there are no other programs using up computer resources (make sure there aren't any downloads or updates in progress). If it still doesn't work, then you may need a faster, more powerful computer.

Note: The Dirac Live software is a binary computer program; as long as it completes its calculations successfully, and transfers the resulting filters to your XMC-1, it will produce the same excellent results. Although the calibration process may take less time on a faster computer, your XMC-1 will not SOUND better when you're done if you use a faster or "better" computer.

Windows XP and Windows XP Pro – 32 and 64 bit versions

Dirac Live for Emotiva is *NOT* specified to run on Windows XP. While the Dirac software *may* run on some very powerful Windows XP computers, we don't recommend it, and cannot support it. Dirac Live for Emotiva will *NOT* run on older versions of Windows (Windows 2000, Windows ME, Windows NT, or Windows 98).

Windows 7 – 64 bits (all versions including Windows 7 Home and Windows 7 Pro)

System requirements:

- 2 gB memory (RAM) minimum
- 40 gB available hard disc space
- Network connection (Ethernet or WiFi)
- At least one available USB 2.0 port

Special configuration requirements:

None

Windows 8.0 – 64 bits

System requirements:

- 2 gB memory (RAM) minimum
- 40 gB available hard disc space
- Network connection (Ethernet or WiFi)
- At least one available USB 2.0 port

Special configuration requirements:

None

Windows 8.1 – 64 bits

System requirements:

- 2 gB memory (RAM) minimum
- 40 gB available hard disc space
- Network connection (Ethernet or WiFi)
- At least one available USB 2.0 port

Special configuration requirements:

None

Note: While installing Dirac Live on a Windows 8.0 or Windows 8.1 computer, or later when you run it, you may be asked whether to allow the program to access the Internet; if so, then you MUST respond YES. If the Dirac Live software stops working after you install it, you may also need to go into your Windows Firewall configuration and check all the boxes allowing the Dirac Live software to access the Internet. (Windows sometimes changes these settings “by itself” based on new information or configuration updates). When you install it, the Dirac Live software will create a tile at the far right of the “Modern” startup screen (not the desktop).

Apple Computers

System requirements:

- Mac OS X 10.7 Lion - 10.9 Mavericks
- 2 gB memory (RAM) minimum
- 40 gB available hard disc space
- Network connection (Ethernet or WiFi)
- At least one available USB 2.0 port

Tested Configurations...

(We have tested Dirac Live for Emotiva on the specific computer systems and configurations listed here, and found it to work well. These are not minimum requirements; even though we specifically tested it on the system configurations listed here, we expect that Dirac Live would run well on similar systems with similar configurations and/or less resources.)

Windows 7 Pro – 64 bits (running under Boot Camp on an Intel Apple Macintosh)

Test System:

- Mac Pro (Quad 2.2 GHz 8-core Intel Xeon processor)
- 16 gB memory (RAM)
- 500 mB available hard disc space
- Network connection (WiFi)
- 5 available USB 2.0 ports

Operating System:

- Mountain Lion (10.8)
- Boot Camp (latest version)
- Windows 7 Pro SP1 (64 bit) installed under Boot Camp

Windows 8 – 64 bits

Test System:

- Intel dual core 2.4 GHz i7
- 4 gB memory (RAM)
- 256 gB SSD hard disc with 50 gB free
- Network connection (WiFi)
- 2 available USB 2.0 ports

Operating System:

- Windows 8.0 (64 bits)

Windows 8.1 – 64 bits

Test System:

- SEVERAL systems, with various Intel dual core and quad core i5 and i7 processors
- SEVERAL systems, all with 4 gB or more of RAM
- 256 gB SSD hard disc with 50 gB free
- Network connection (WiFi)
- 2 available USB 2.0 ports

Operating System:

- Windows 8.1 (64 bits)

Apple Computers

System requirements:

- Mac OS X 10.7 Lion - 10.9 Mavericks
- 2 gB memory (RAM) minimum
- 40 gB available hard disc space

Disabling AGC in Microsoft Windows

Windows 7

- Open **Control Panel**.
- Select **Hardware and Sound**.
- Select **Sound**.
- Select **Manage Audio Devices** (the Sound tab will open).
- Select the **Recording** tab (on the Sound tab).

Note: You may ignore the settings for the **C-Media USB Headphone Set on the Playback tab**.

- Select **Microphone: C-Media USB Headphone Set** (click on it once to select it).
- Click **Properties** (the Microphone Properties tab will open).
- Select the **Custom** tab (on the Microphone Properties tab).
- Make sure that the **AGC** tab is **UNCHECKED**.
- Select the **Levels** tab (on the Microphone Properties tab).
- Set the **Level** slider all the way up (**100%**).
- Click **OK** or Apply several times to exit the various dialog boxes.
- Close **Control Panel** when you reach the main Control Panel screen.

Windows 8.1

Note: These instructions assume you're using a touch screen. If you're using a mouse instead, you can access the **Charm Bar** by placing the mouse pointer in the bottom right corner of your screen, and you should substitute clicks for taps where appropriate.

- From the **Desktop** screen, sweep in from the right edge to call the **Charm Toolbar**.

Note: You **MUST** access the **Charm Bar** from the **Desktop** screen. If you access it from the "Windows tiles" screen, the **Control Panel** option may not be available.

- Tap **Settings** (the gear icon).
- Tap **Control Panel**.
- Tap **Hardware and Sound**.
- Under Sound, tap **Manage Audio Devices** (the Sound tab will open).
- Tap the **Recording** tab (on the Sound tab).

Note: You may ignore the settings for the **C-Media USB Headphone Set on the Playback tab**.

- Tap **Microphone: C-Media USB Headphone Set** (tap once on it to select it).
- Tap **Properties** (the Microphone Properties tab will open).
- Tap the **Custom** tab (on the Microphone Properties tab).
- Make sure that the **AGC** tab is **UNCHECKED**.
- Tap the **Levels** tab (on the Microphone Properties tab).
- Set the **Level** slider all the way up (**100%**).
- Tap **OK** or Apply several times to exit the various dialog boxes.
- Close **Control Panel** when you reach the main Control Panel screen.