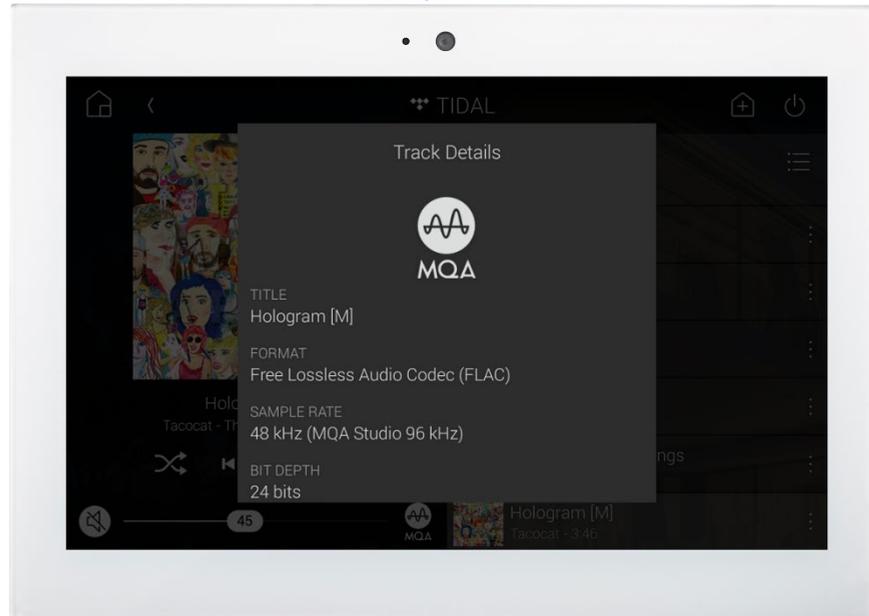




Control4 MQA Audio Setup Guide

What is MQA?

MQA enables high-resolution audio streaming using a small FLAC file (typically 44.1 - 48 kHz). Due to the small file size, MQA-enabled FLAC files minimize bandwidth during playback compared to standard high resolution 192/24-bit FLAC files—an ideal solution for high-resolution audio streaming. When played back on EA controllers, Triad One, and MQA-compatible players, the MQA process un-folds the FLAC file to play at full resolution. To learn more about MQA, visit www.mqa.co.uk/



Why MQA?

Discriminating listeners demand the best in audio quality and MQA is one of the most requested Control4 feature from audiophile customers. With additional MQA-enabled devices and content becoming available every day, more homeowners than ever can enjoy the best that high-resolution audio can offer.

Where to find MQA content:

1. **TIDAL**— The best way to enjoy MQA on Control4 is with a TIDAL Hi-Fi subscription. With a selection of over 165,000 TIDAL Master tracks (and growing), including albums and playlists, enjoying high-resolution music is easier than ever. A new TIDAL Masters section is available on Control4 user interfaces (T3, On-Screen Display, and mobile apps) using the latest TIDAL driver, available on the online driver database. To learn more about TIDAL Masters, visit <https://support.tidal.com/hc/en-us/articles/115000397069-TIDAL-MASTERS>

Control4 MQA Audio Setup Guide



2. **High-Resolution Audio Sites**—MQA content can be downloaded from high-resolution audio sites such as highresaudio.com and onkyomusic.com. Content should be downloaded to a NAS or USB drive, scanned by Composer Pro, and played back through Control4 using MyMusic.

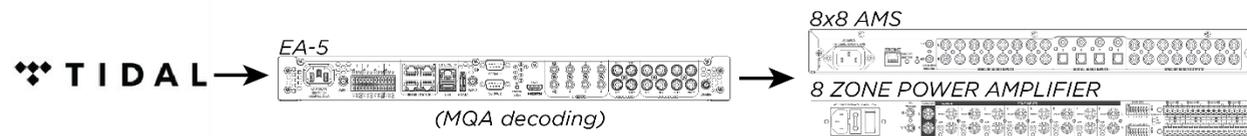
Note: Due to territorial constraints, content downloads can be limited depending on your country.

Also, see ctrl4.co/mqa to download test MQA audio files.

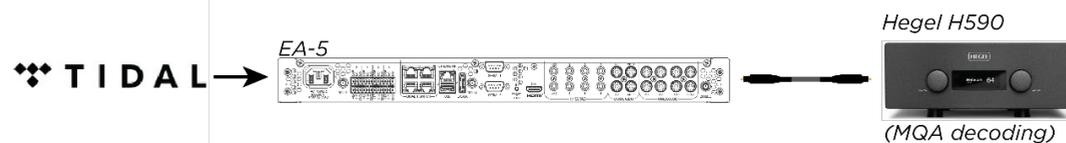
MQA Playback Options

There are two ways to enjoy MQA audio with Control4:

1. **Native Playback**—Native playback is the easiest way to enjoy MQA audio with Control4 using the built-in streaming capabilities of the EA controllers and the Triad One. With native playback, all MQA decoding is processed internally through the EA controllers and Triad One and can be routed through additional audio devices (Triad AMS8, AMS24, power amplifiers, AVRs, etc.) as with any other native streaming service.



2. **Third-Party DACs, Integrated Amplifiers, and Preamplifiers with MQA decoding**—Using a **digital audio** output on an EA-5 controller that is connected to a third-party DAC, integrated amp, or preamp, you can enable MQA playback for the ultimate two-channel listening experience. In this case, all MQA decoding occurs in the external MQA-capable device. The EA-5 simply passes the full digital signal straight through to the external device with no alterations. See below for Composer Pro setup instructions. For a full list of MQA-compatible devices, go to <https://www.mqa.co.uk/customer/our-partners>



Which playback option should I use?

Native Playback—Ideal for most multi-room audio applications. Native playback uses the MQA Core Decode process, which unfolds the MQA file once to deliver higher than CD-quality. The first unfold recovers all the direct, music-related information. Output is limited to 96kHz.

Third-Party DACs, Integrated Amplifiers, and Preamplifiers with MQA Full Decoding—Ideal for high-end two-channel listening rooms. Full decoding has three unfolds, which outputs audio at its highest possible resolution and includes precise file and platform-specific DAC compensation and management.



Control4 MQA Audio Setup Guide

For a detailed overview of MQA technology and how it works, visit <https://www.mqa.co.uk/customer/how-it-works>.

Enabling MQA in Composer Pro

To configure native playback of MQA files or a third-party device with MQA decoding, first enable MQA audio in Composer Pro 3.0 (or newer).

To enable MQA audio in the project:

1. **TIDAL driver properties**—Log into TIDAL with a HiFi account—either from the *Actions* tab within the TIDAL driver properties or from a Control4 user interface by selecting TIDAL and then the Settings tab. Next, change the **Enable MQA Audio** setting to **On**. Once you have enabled MQA in the TIDAL driver properties, a “TIDAL Masters” tab will be visible on Control4 navigators, displaying all MQA content available through TIDAL.

OR

2. **Media Scanning Options page**—In Composer, select the Media tab > Media Scanning Options, check the **Enable MQA** box, and click the **Apply** button.

For systems using Native Playback, setup is now complete. For systems using third-party DACs, integrated amplifiers, and preamplifiers, proceed to the next section.

Note: Enabling MQA forces system Audio Quality to 96 kHz/24 bit, which is required to run the MQA process. You can verify MQA is enabled in Composer Pro by viewing the Digital Media Properties page - with System Design selected, click on the Digital Media driver and verify that both Max Quality and Active Quality are set to 96 KHz/24 bit.

Configuring MQA Playback on Third-Party DACs, Integrated Amplifiers, and Preamplifiers

An EA-5 (running OS 3 or newer) digital audio output is required to pass through MQA audio to a third-party DAC, integrated amplifier, or preamplifier.

To configure the EA-5 controller to pass through MQA audio to a third-party device:

1. Make audio device connections/bindings between the EA-5 digital coax output and the third-party device digital coax input.
2. For room control connections, ensure the third-party device is both the audio end point and the volume end point.
3. On the EA-5 controller driver properties page, choose the digital output that is connected to the third-party device, then select the “Full Bypass (100% volume + DSP Off)” radio button.

Warning: Do not select Full Bypass (100% volume + DSP Off) unless the device connected to the EA-5 has volume control/attenuation. Selecting Full Bypass (100% volume + DSP Off) sets the EA-5 digital audio output to a fixed 100% volume. If the connected device does not have volume control/attenuation capabilities this could result in damage to connected speakers and/or amplifiers.

Control4 MQA Audio Setup Guide



4. Make physical connections:
 - a) Ensure all equipment is powered off.
 - b) Connect the digital coax output of the EA-5 controller to the digital coax input of the third-party device.
 - c) Assuming all audio device and room control connections have been made in Composer (as described above) you can power on all equipment and start listening.

Copyright © 2019, Control4 Corporation. All rights reserved. Control4, Pakedge, Triad and their logos are registered trademarks or trademarks of Control4 Corporation in the United States and/or other countries. 4Store, 4Sight, Control4 My Home, Mockupancy, and BakPak are also registered trademarks or trademarks of Control4 Corporation. Other names and brands may be claimed as the property of their respective owners. All specifications subject to change without notice.
DOC-00498-A DH