

McIntosh®

LEGENDARY PERFORMANCE®

DA2 Digital Audio Module Owner's Guide



DA2 Owner's Guide is for end user reference after DA2 has been professionally installed by Authorized McIntosh Dealer or Authorized McIntosh Service Agency.

1. Is it in yet?

Due to the technical nature of the DA2 upgrade, the upgrade must be performed by a qualified trained professional at an Authorized McIntosh Dealer or Authorized McIntosh Service Agency. Please note that if the upgrade is performed by anyone other than an Authorized McIntosh Dealer or Authorized McIntosh Service Agency, under the terms of your McIntosh Limited Warranty any resulting damage or failure of your unit will be excluded from warranty coverage. Contact your local Authorized McIntosh Dealer or Authorized McIntosh Service Agency today to schedule your upgrade.

2. Orientation

Depending on which unit the DA2 is installed, it can be oriented 180 degrees so the inputs will appear like either *Figure 1* or *Figure 2*.



Figure 1: Lower Chassis Installation

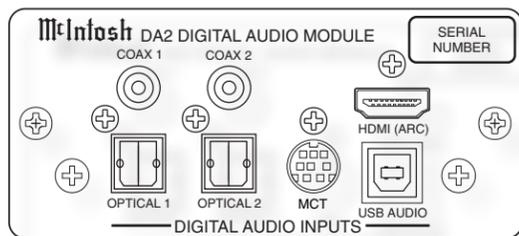


Figure 2: Upper Chassis Installation

3. Connections

The DA2 has the following connections:

- two digital coax
- two digital optical
- one HDMI (ARC)
- one MCT
- one USB audio

Connections that were previously in the DA1 module will

appear in the menus as they previously have.

When using USB Audio the DSD capability increases from 256k to 512k. Connect USB Audio with a USB Type B connector. *See Figure 3.*



Figure 3: USB Type B connector

The DA2 adds an HDMI ARC connection. Your unit can now receive audio via an HDMI cable from ARC enabled televisions. Audio Return Channel (ARC) can provide two-way communication between units allowing for volume control and lip-syncing functions to ensure audio and video are perfectly matched. This allows for more intelligent operation between components as well as less cable clutter. Make sure this feature is enabled in your TV's setup menu.

The Lip Sync function is automatic with an ARC CEC connection. Lip Sync can also be controlled with your unit's trim function allowing adjustments of audio to sync with accompanying video when CEC is defeated or with the optical input.

The HDMI ARC input is designed to be used exclusively with ARC compliant televisions. If the source is not ARC compliant, use the optical connection for digital sources.

4. Menus

The DA2 module is designed to work with firmware version 2.0 or higher. With the appropriate firmware your unit's menus will automatically update to work with the DA2's new features.

New Input

HDMI ARC

HDMI (ARC) will be an option when selecting an input. It can be renamed and enabled/disabled in the same manner as all other inputs.

New Setup Options

Digital Gain

Many video sources such as broadcast video to television

sets have sound levels that are lower than typical music sources. Because of this, a volume boost has been added to the HDMI input making it louder. Since not every TV follows the same standard, the ability to adjust the default volume boost for HDMI is available in the SETUP menu. The ability to add and adjust a volume boost has also been provided for the two Optical inputs so that the Optical inputs' gains can be adjusted as needed.

To adjust Digital Gain, enter the SETUP menu. Scroll to Digital Gain. Press and hold the INPUT knob to enter the sub-menu. Use the INPUT knob to choose the option to adjust- HDMI Gain, OPTI 1 Gain or OPTI 2 Gain. The VOLUME knob can be used to select a value between 0dB and +15dB.

HDMI CEC

Consumer Electronics Control (CEC) is a feature of HDMI that theoretically allows users to control multiple connected devices through one Remote Control. This can work fine in some cases when you want to turn on the television and also power on other related devices, but there may be times when you do not want this or other connected events to happen. To defeat CEC, enter the SETUP menu using the INPUT knob as you normally would. Scroll to HDMI CEC. Use the VOLUME knob to toggle ON/OFF. If you have a control system for your devices, you will want CEC defeated (OFF).

HDMI CEC PWR

With CEC enabled, your unit can control a television's volume, mute and unmute with compatible televisions. Your compatible television can also power on your McIntosh unit. CEC will also ensure correct decoding and lip syncing automatically. You can defeat your unit's power control while keeping the other benefits of CEC by using the SETUP option called HDMI CEC PWR. Enter the SETUP menu, scroll to HDMI CEC PWR. You can toggle the setting ON/OFF using the VOLUME knob. If HDMI CEC is off, this setting will have no effect.

Lip Sync Mode

The Lip Sync Mode setup option enables the Lip Sync Mode to be toggled between AUTO

(automatic) and Manual. In the AUTO mode, lip syncing functions for a connected HDMI ARC connected television will be handled by CEC.

Changing the Lip Sync Mode to manual will enable a TRIM option called HDMI LIP SYNC DELAY.

New Trim Options

HDMI LIP SYNC DELAY

When the SETUP option Lip Sync Mode is set to Manual, the HDMI LIP SYNC DELAY option will be available in the TRIM menu. Choosing this TRIM option will allow a lip sync delay of between 0 milliseconds (ms) and 150 ms to be set in 10 ms increments. The lip sync delay will apply to HDMI, Optical and Coax inputs.

5. New Processing Power

In addition to standard format SPDIF PCM signals, your unit is now capable of processing Dolby Digital and DTS encoded multi-channel bitstreams through the Optical, COAX and HDMI inputs.

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Shipping Dimensions

Boxed Weight

13.76 Ounces (0.39Kg)

Shipping Carton Dimensions

Length 10 inches (25.4cm)

Width 6 1/4 inches (15.875cm)

Height 3 3/8 inches (8.5725cm)



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