

Using the Y56K in the AW2816



Read Me First

This document accompanies the Y56K User Manual. It contains corrections and page references to the manual where AW2816 behavior is different from the AW4416 in regard to using the Y56K card.

AW2816 firmware requirements

Y56K requires the AW2816 OS version 1.1 or later to operate.

Please check your AW2816'S OS before installing the Y56K.

To check the AW2816's OS, turn the unit on while holding down the [UTILITY] key. During startup, the version number appears, as shown below, on the top line of the two-line display.

"Mix CPU version: 1.10"

Once you have checked the version, release the [UTILITY] key to allow the AW2816 to continue its start-up sequence normally.

Page Corrections

General Notes

One of the differences between the AW4416 and the AW2816 is that the latter does not have a mouse for on-screen navigation. All reference to mouse actions should be ignored. All operations are possible using the [DATA/JOG] dial, [←]/[→]/[↑]/[↓] CURSOR keys, and [ENTER] key.

Page 11 - Option Slot

A Y56K card installed in the OPTION slot accesses its screens/pages by pressing [PATCH]→[F4]. Once installed, the Y56K's effect chains are identified by the AW2816 as the slot (SLT) and the chain number (1, 2, ..., 8).

Routing audio signals to and from the card's effect chains is done through:

SLT-1 = effect chain 1

SLT-2 = effect chain 2

SLT-3 = effect chain 3

SLT-4 = effect chain 4

SLT-5 = effect chain 5

SLT-6 = effect chain 6

SLT-7 = effect chain 7

SLT-8 = effect chain 8

Page 12 - Accessing the Y56K for the first time

To access your Y56K first select [PATCH]->[F4].

This will bring up the Y56K splash screen the first time the unit is accessed. Press the [ENTER] key to close the splash screen and display Y56K Main page.

Note! It might take a few seconds for the Y56K to initialize itself and display its Main page.

Page 13 - Viewing The Y56K Interface

To view the Y56K interface select [PATCH]->[F4].

This will bring up the Y56K splash screen the first time the unit is accessed. Press the [ENTER] key to close the splash screen and display Y56K Main page.

Note! It might take a few seconds for the Y56K to initialize itself and display its Main page.

Page 16 - Accessing Y56K pages

Press the [PATCH] key → [F4] (PLUG-IN) key to access the Y56K's pages. After exiting and re-entering the Y56K in the same work session, the last page from the previous session is displayed.

Note! The first time you access the card after the AW2816 has been turned on, the card takes a few seconds to initialize, load, and display its About splash screen. Press [ENTER] to display the Y56K Main page.

Page 17 - Pointer – Using the mouse

The AW2816 doesn't support a serial mouse. All reference to mouse actions should be ignored. All operations are possible using the [DATA/JOG] dial, [←]/[→]/[↑]/[↓] CURSOR keys, and [ENTER] key.

Chapter 3: Patching audio to the Y56K

This chapter explains how to patch the Y56K in several common configurations.

General

The Y56K transparently supports all of the AW2816's routing/patching schemes. Any effect chain can be independently routed into a channel insert, auxiliary, bus, or ADAT I/O processor. The Y56K channels are identified by the AW2816 by the Y56K's channel number.

See the "OPTION Slot" section above for more information.

Using an effect chain as a mono channel insert

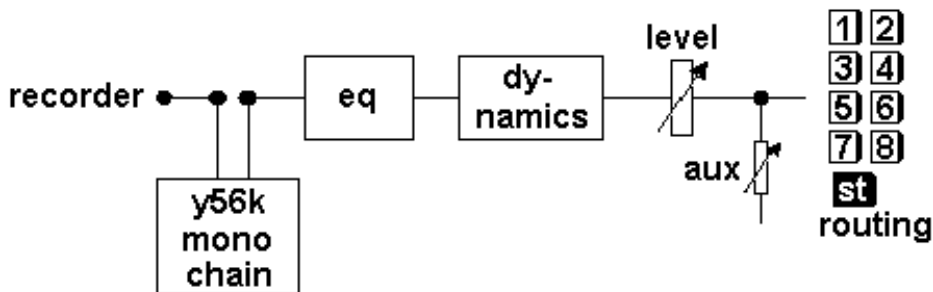
Follow these steps to use effect chain 1 as a channel insert:

1. Verify that the effect chain's SRC is set to AW.
2. Go to the channel's CH View page and click the ASSIGN button to enter the EFF. INSERT SETTING page.
3. Turn the EXTERNAL button on.
4. Move the CURSOR to the SEND/RTN area and rotate the [DATA/JOG] dial to select SLT-1 as both SEND and RTN.
5. Click OK.

The procedure above also applies to the other chains.

Let's try it. In the following example we'll insert L1 Limiter on channel 1:

1. Load a song to the AW2816.
2. Go to the Y56K Main page by pressing [PATCH]->[F4].
3. If the Y56K splash screen is visible, press [ENTER] to access the Y56K Main page. Otherwise proceed to step 4.
4. Go to the SRC column of effect chains 1/2 and verify it's set to AW. If not, click on the button and select AW from the popup menu.
5. Go to the GRP column of effect chains 1/2 and verify it's set to Mono. If not, click on the button and select Mono from the popup menu.
6. Go to the one of the empty effect blocks on effect chain 1 and press [ENTER] to open the New Effect Menu.
7. Select L1. L1 is now inserted in effect chain 1.
8. Go to the AW2816 channel 1 CH View page (press [RECORDER 1-8]->[VIEW] and the channel 1 [SEL] button) and click the ASSIGN button to enter the EFF. INSERT SETTING page.
9. Press the [EXTERNAL] button to turn it on.
10. Move the CURSOR to the SEND/RTN area and rotate the [DATA/JOG] dial to select SLT-1 as both SEND and RTN.
11. Click OK. Y56K mono effect chain 1 is now inserted on AW2816 channel 1.



Using an effect chain as a stereo channel insert

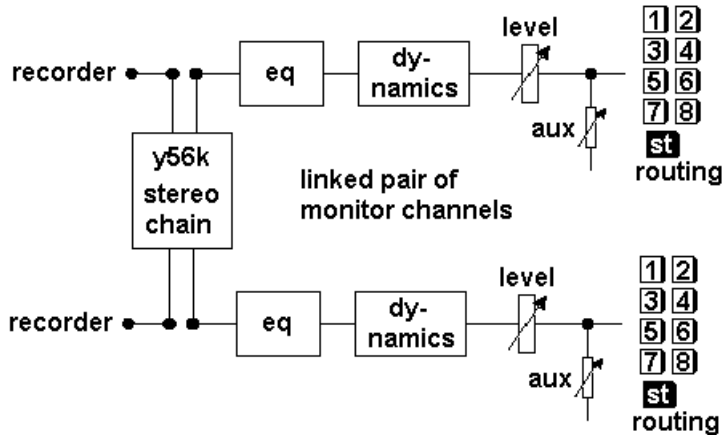
This is the simplest way to patch a chain with one or more stereo effects into a stereo channel pair.

In the following example we'll insert the Renaissance EQ on two linked (stereo paired) AW2816 channels, for instance a stereo piano track. Follow these steps to use Y56K effect chain 1/2 as a stereo channel insert for AW2816 channels 1&2:

1. Load a song to the AW.
2. Go to the Y56K Main page by pressing [PATCH]->[F4].
3. If the Y56K splash screen is visible, press [ENTER] to access the Y56K Main page. Otherwise proceed to step 4.
4. Go to the SRC column of effect chains 1/2 and verify it's set to AW. If not, click on the button and select AW from the popup menu.
5. Go to the GRP column of effect chains 1/2 and verify it's set to Stereo. If not, click on the button and select Stereo from the popup menu.
6. Go to one of the empty effect blocks on stereo effect chain 1/2 and press [ENTER] to open the New Effect Menu.
7. Select REQ (Renaissance EQ). REQ is now inserted in effect chain 1/2.
8. Go to AW2816 channel 1 CH View page (press [RECORDER 1-8]->[VIEW] and channel 1 [SEL] button). Channel 1 is the odd channel of the pair. Click the ASSIGN button to enter the EFF. INSERT SETTING page.
9. Press the [EXTERNAL] button to turn it on.
10. Move the CURSOR to the SEND/RTN area and rotate the [DATA/JOG] dial to select SLT-1 as both SEND and RTN. Click [OK].
11. Go to AW2816 channel 2 CH View page (press [RECORDER 1-8]->[VIEW] and channel 2 [SEL] button). Channel 2 is the even channel of the pair. Click the ASSIGN button to enter the EFF. INSERT SETTING page.
12. Press the [EXTERNAL] button to turn it on.
13. Move the CURSOR to the SEND/RTN area and rotate the [DATA/JOG] dial to select SLT-2 as both SEND and RTN. Click OK.

Y56K stereo effect chain 1/2 is now inserted on the channel pair.

The above method similarly works for the master stereo channel. The difference is that steps 8-13 are not done individually for each channel but are done once on the master channel, which is stereo by definition. Inserting a Y56K stereo effect chain on the AW2816's stereo master channel is perfect for mastering, using the REQ, RCL, and L1+ for final EQ and level adjustments as well as dithering to 16 bit for CD printing.



Using an effect chain as an auxiliary send/return

The following explains how to use effect chain 1 via auxiliary send/return on Auxiliary 1.

This method echoes the way the internal AW2816 effects are used.

Sending audio signals through an auxiliary allows you to send one or more channels through the Y56K's effects.

All of the AW2816's auxiliaries (AUX 1-6) can be used with the Y56K, although we recommend using auxiliaries 1-4 only, as AUX5 and AUX6 better stay reserved for the AW2816's internal effects.

In the following example we'll load TrueVerb to the Y56K stereo effect chain 1/2, set this chain to receive audio signals from AUX1, and return the reverb on AW2816 channels 7&8.

This type of patching reflects a standard use of a reverb. Please note that TrueVerb can be used as a standard reverb or as an acoustic space simulator in Thru mode. Refer to the TrueVerb section in the Y56K Effects chapter for more information.

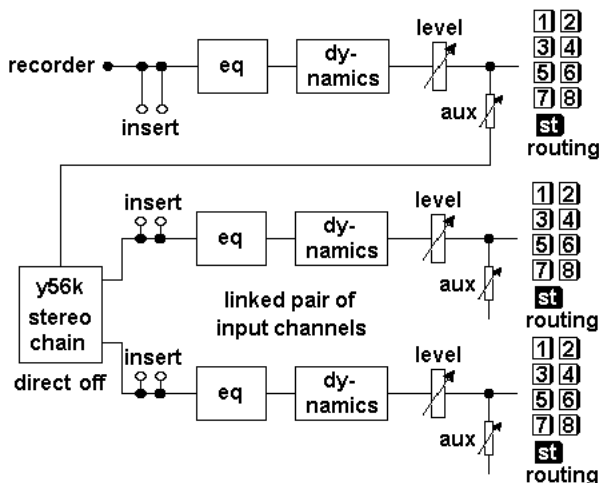
First, let's load TrueVerb to an effect chain.

1. Load a song to the AW2816.
2. Go to the Y56K Main page by pressing [PATCH]->[F4].
3. If the Y56K splash screen is visible, press [ENTER] to access the Y56K Main page. Otherwise proceed to step 4.
4. Go to the SRC column of effect chains 1/2 and verify it's set to AW. If not, click on the button and select AW from the popup menu.
5. Go to the GRP column of effect chains 1/2 and verify it's set to Stereo. If not, click on the button and select Stereo from the popup menu.
6. Go to the one of the empty effect blocks on effect chain 1/2 and press [ENTER] to open the New Effect Menu.

7. Select TrueVerb. The TrueVerb is now inserted in stereo effect chain 1/2.
8. Go to the TrueVerb effect block on effect chain 1/2. Press [ENTER] and select Properties to open TrueVerb's Properties page. Turn off the DIR (direct) signal to set the effect mix to 100% "wet". Refer to the TrueVerb section in the Y56K Effects chapter for more information.

Now, let's send an audio signal to TrueVerb (Y56K effect chain 1/2) through AUX1.

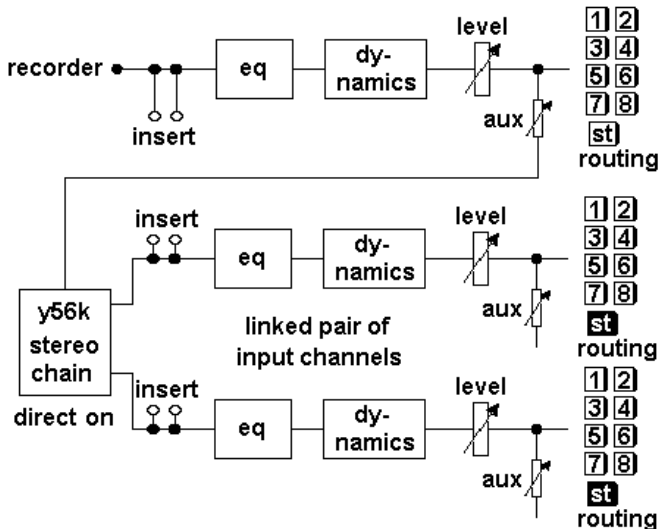
9. Press the [PATCH]->[F2] key in the Unit section to enter the AW2816's Patch OUT page.
 10. Go to the OPTION I/O SLOT OUT ASSIGN section on the Patch OUT page.
 11. Move the CURSOR Channel 1.
 12. Use the [DATA/JOG] dial to select AUX1 as the input to channel 1.
 13. Set AUX1 as the input to channel 2 as well by repeating steps 3 and 4 for channel 2.
 14. Go to the AUX1 fader of any AW2816 channel you wish to route to AUX1 and adjust the fader to the desired Send level.
 15. You're now sending this channel 1 to Aux1 and processing it through Y56K's effect chain 1/2.
- The last thing to do is to return the audio signal to AW2816 channels 7 and 8.
16. Press the [PATCH]->[F1] key in the Unit section to enter the AW2816's Patch IN page.
 17. Go to the MIXER CHANNEL INPUT ASSIGN section on the Patch IN page.
 18. Move the CURSOR to channel 7.
 19. Rotate the [DATA/JOG] dial to select SLT-1 as the input source for channel 7.
 20. Move the CURSOR to channel 8.
 21. Rotate the [DATA/JOG] dial to select SLT-2 as the input source for channel 8.
 22. Go to AW2816 channel 7 CH View page (press [INPUT]->[VIEW] and channel 7 [SEL] button).
 23. Go to AW2816 channel 8 CH View page (press [INPUT]->[VIEW] and channel 8 [SEL] button). Link channel 7 and 8 to a stereo pair. Pairing these channels will simplify controlling the return gain of the reverb.
 24. In the same page, pan channel 7 left and channel 8 right and route them both to the stereo master channel by selecting ST in the PAN/ROUT section.
 25. Bring up the faders of channels 7 and 8. These channels are now set as your stereo effect return channel.



There are several varieties to the above patching scheme you can explore.

- You can use the above patching scheme to insert a stereo effect on a mono AW2816 channel. To do this, while performing step 14 turn the AUX1 to pre-fader mode. In addition, switch off this channel's routing to the stereo master channel. This patching type allows you to use TrueVerb in Thru mode, for example. Refer to the TrueVerb section in the Y56K Effects chapter for more information.

The patching scheme in this case will look like this:



- Insert a mono De-Esser, REQ and L1 Limiter on a vocal track as described in the "Using an effect chain as a mono channel insert" section, and then use an auxiliary to insert a stereo TrueVerb as described above. This will sound close to using all these effects in stereo, but will use less DSP resources.
- Try using the AW2816's buses to route several channels to one Y56K effect chain. This is a great way to send drum tracks through TrueVerb to "put them in a room".

Using the Y56K's lightpipe I/O

The Y56K can act as a lightpipe (or ADAT) I/O card for the AW2816's channels and also apply its effects to audio arriving over the Y56K's lightpipe from the ADAT or to audio sent over its lightpipe to ADAT. In the effect chain, select ADAT as the audio source from the Y56K Main SRC column to direct the specific effect chain pair to "listen" for audio on the Y56K's lightpipe input. All audio received by the Y56K is echoed (post the effect chains) to the card's lightpipe output.

Patching lightpipe input

Verify that the Y56K effect chain's SRC is set to ADAT so the effect chain processes audio from the Y56K's ADAT input.

Go to the D.in Setup page ([SETUP]->[F1]). The Y56K's installation slot displays "Y56K."

Synching ADAT to the AW2816

1. Make sure the Y56K's ADAT output is connected to the ADAT machine.
2. Go to the AW2816's D.in page ([SETUP]->[F1]), which allows selection of the sync type used by the Y56K, AW2816, and ADAT.
3. Click INT to select the AW2816 as the clock master.

Note! We do not recommend selecting ADAT as the clock master because it may cause noise in the signal chain.

Patching the audio signal to an AW2816 channel

The following procedure assumes effect chains 1 and 2 have been set to receive audio from the ADAT.

- Go to the MIXER CHANNEL INPUT ASSIGN section on the Patch IN page ([PATCH]->[F1]).
- Move the CURSOR to the desired channel on which to receive an ADAT signal.
- Rotate the [DATA/JOG] dial to select SLT-1.
- This outputs audio from effect chain 1 to the selected AW2816 channel.
- Since ADAT channels are received in stereo pairs, repeat the previous steps to patch the second ADAT channel.