DAC3 DX Software Release Notes - Main Board

Production History:

First DAC3 DX ship date is 01/31/17

First production software release is Version 1.0

Second production software release is Version 2.0

Third production release is Version 2.1 - minor revision, users with 2.0 should not upgrade unless they need to use the new IR remote codes with a universal remote.

Release Dates:

Version 1.0 was released 01/31/17

Version 1.1 was a prototype version that was never released.

Version 2.0 was released 4/30/19

Version 2.1 was released 5/10/19

SPI Flash Configuration:

SPI PROM type is M25P16

VERSION 2.1 (Third Production Release):

Version 2.1 is based upon DAC3 DX Version 2.0

Added IR Hex code for D5. Allows direct selection of D5 from universal remote.

Version Identification:

M_CAL and D5 flash on power-up and power-down to indicate version 2.1

VERSION 2.0 (Second Production Release):

Version 2.0 is based upon DAC2 DX Version 2.0

This version adds the "Compatibility Mode" (for use with HPA4 and LA4)

Disabled DIM on any output that is operating in CAL mode.

Note: DAC3 uses the ES9028PRO instead of the ES9018 used in the DAC2

Version Identification:

M_CAL flashes on power-up and power-down to indicate version 2.0

VERSION 1.0 (First Production Release):

Version 1.0 is based upon DAC2 DX Version 1.2

Configured for ES9028PRO instead of the ES9018 used in the DAC2

5 ms lock time

THD compensation

Maximum output level is +28 dBu

Added AUTO ON

Added programmable calibration level

Version Identification:

A_CAL flashes on power-up and power-down to indicate version 1.0

DAC3 DX Calibration Settings:

Calibration default is +24 dBu at 0 dBFS. (all jumpers installed, or all jumpers removed). Jumpers are located on header P6. All jumpers are installed at the factory.

The chart below shows the jumpers in the following order

P6-7, P6-8, P6-9

When viewed front the front of the unit, P6-7 is on the left and P6-9 is on the right. Count the pins starting from the left side of the header. P6-7 is the 7th pair of pins. Do not install jumpers on any other pins on this header.

0 = jumper removed, 1 = jumper installed

- P6-7,P6-8, P6-9 = +XX dBu at 0 dBFS
- 000 = +24 dBu at 0 dBFS
- 001 = +20 dBu at 0 dBFS
- 010 = +21 dBu at 0 dBFS
- 011 = +22 dBu at 0 dBFS
- 100 = +23 dBu at 0 dBFS
- 101 = +26 dBu at 0 dBFS
- 110 = +28 dBu at 0 dBFS - not recommended due to loss of digital headroom in DAC IC
- 111 = +24 dBu at 0 dBFS

Examples:

To set the calibration to +22 dBu, remove jumper P6-7 and leave P6-8 and P6-9 installed.

To set the calibration to +20 dBu, remove jumpers P6-7 and P6-8 while leaving P6-9 installed.