

## Volumite Controller for Buffalo – Volume Only Firmware Twisted Pear Audio

The “Volumite” is a simple AVR ATiny microcontroller application intended to control volume and other simple functions. It adjusts the volume of the Buffalo DAC via I2C using an ADC to read the position of the potentiometer on the board.

A 2.7-5.5VDC power supply is required. Included is an optional on-board LDO 3.3V regulator. If you use the on-board LDO voltage regulator then you can wire the Volumite VCC to any 3.5VDC to 20VDC supply such as the VD supply used by the buffalo. It is safe to use a 3.3V supply for all TPA modules which can use Volumite.

Version 1.2+ Buffalo DAC PCBs have a 4 pin header at the I2C input which includes a terminal for 3.3V from the VDD regulator on the DAC. For this version of Buffalo it is convenient to omit the on-board LDO of the Volumite and add the jumper.

When wiring to the Buffalo observe the order of the SDA/SCL lines is not the same on the Buffalo header as it is on the Volumite. Keep this in mind if you are using ribbon cable. Also note that AVR chip should be oriented as shown in the photo. The two resistors on the Volumite are not necessary for Buffalo, but will not cause any harm if they are in place. PB1 and PB3 are not used.

