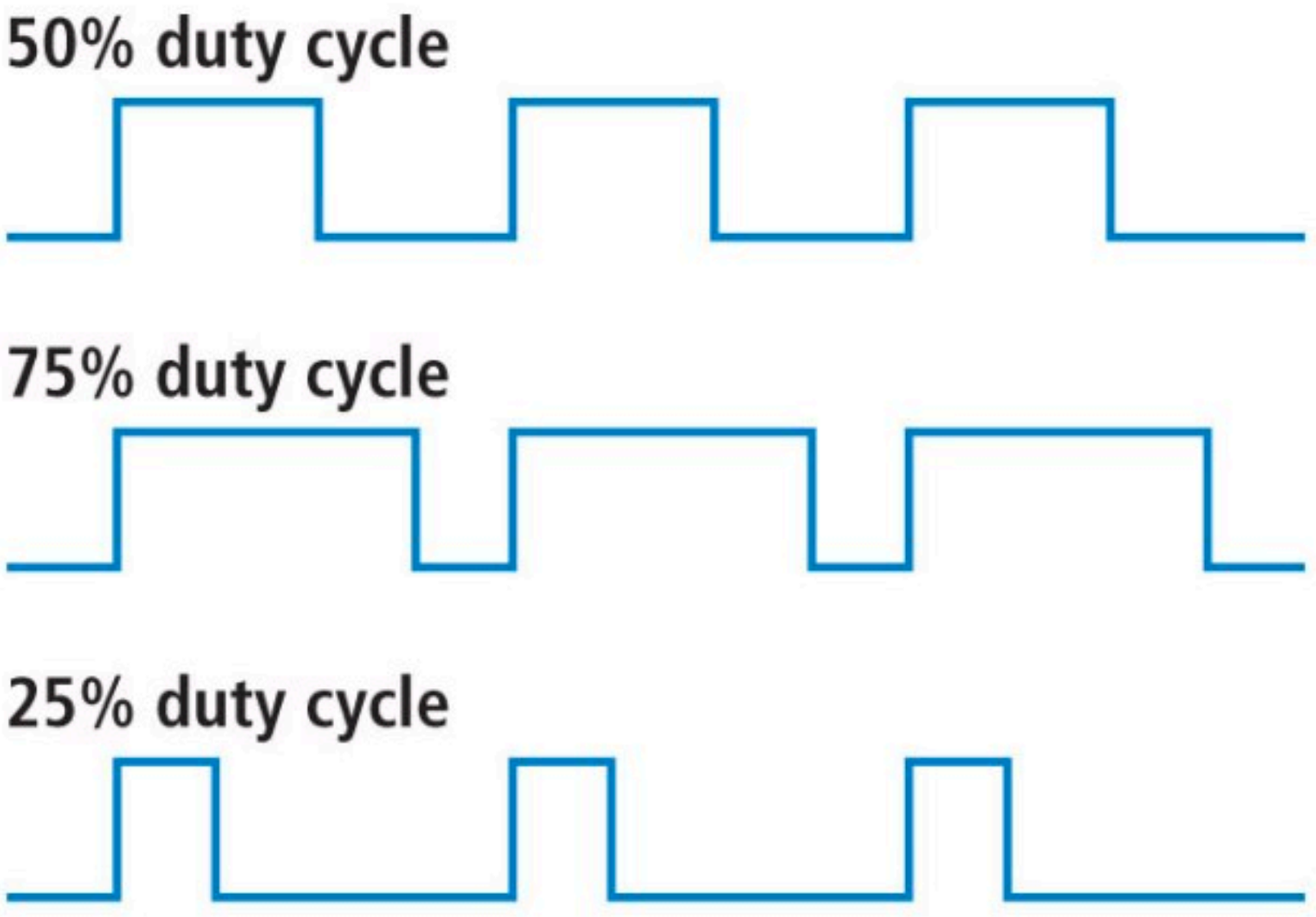
Sound

Pulse-Width Modulation (PWM)



pwm_clock, pwm_range, pwm_width

pwm.c

	PWM0	PWM1
GPIO 12	Alt Fun 0	-
GPIO 13	-	Alt Fun 0
GPIO 18	Alt Fun 5	-
GPIO 19	-	Alt Fun 5
GPIO 40	Alt Fun 0	-
GPIO 41	-	Alt Fun 0
GPIO 45	-	Alt Fun 0
GPIO 52	Alt Fun 1	-
GPIO 53	-	Alt Fun 1

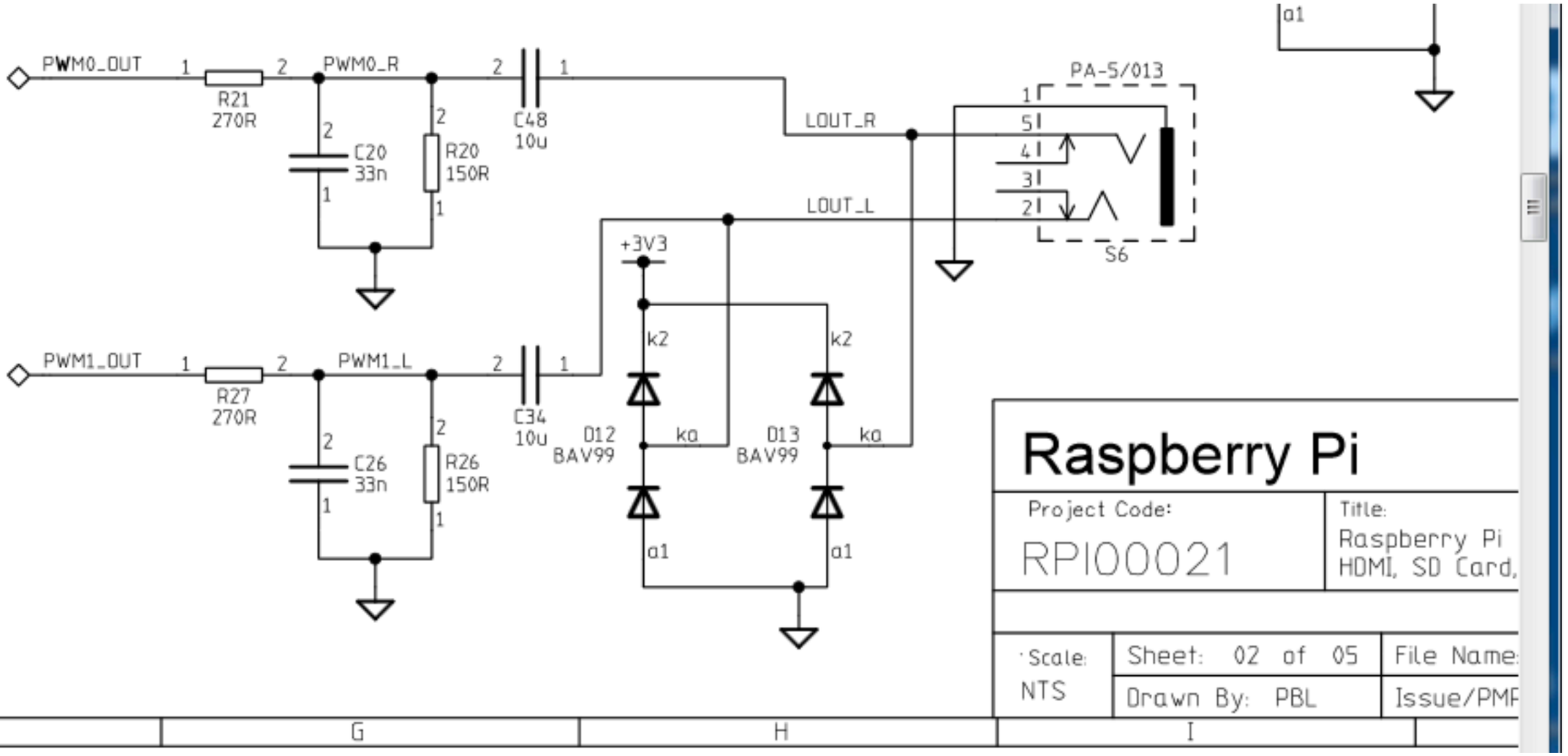
PWM0 is output on GPIO_PIN18 ALT_FUN5

pwm.c

tone.c

melody.c

Raspberry Pi Stereo Jack



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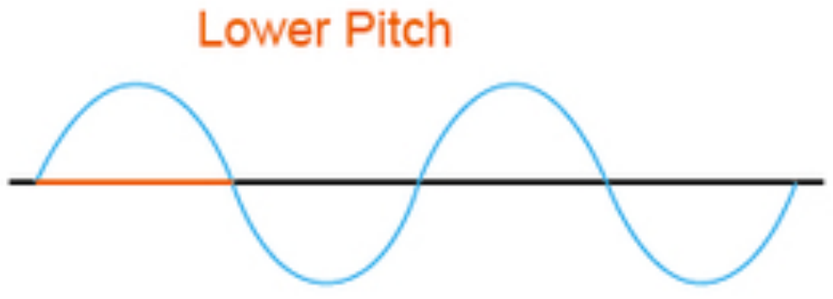
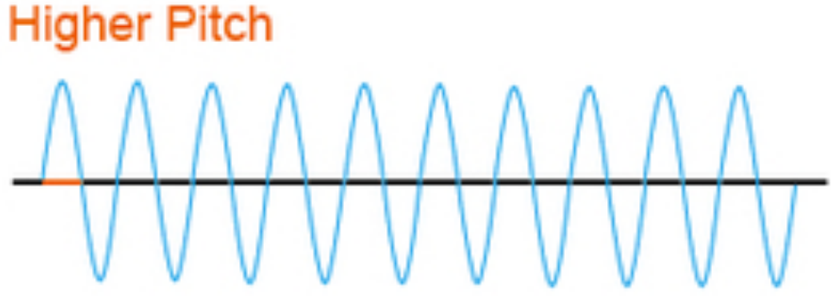
GPIO 41	-	Alt Fun 0
GPIO 45	-	Alt Fun 0
GPIO 52	Alt Fun 1	-
GPIO 53	-	Alt Fun 1

Stereo Jack connected to GPIO_PIN40 and GPIO_PIN45

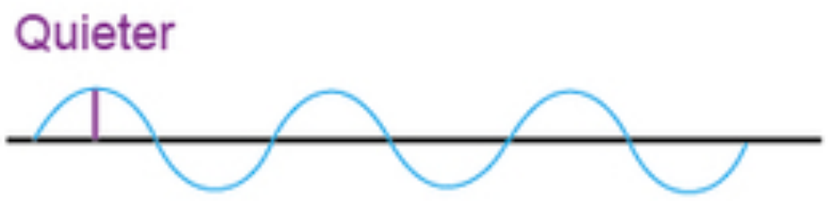
Sound Waves



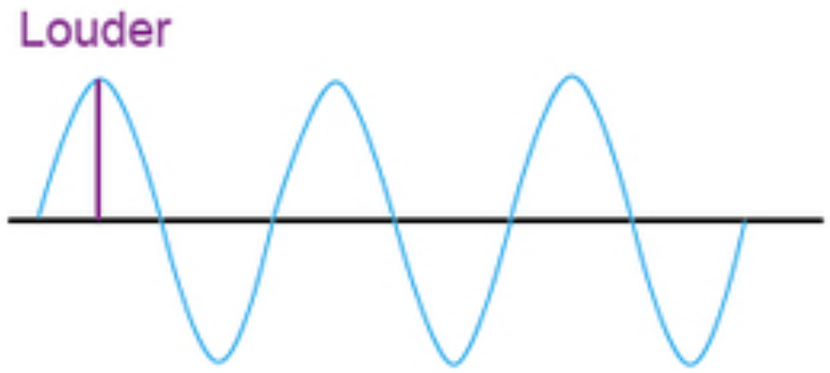
Low Frequency



High Frequency



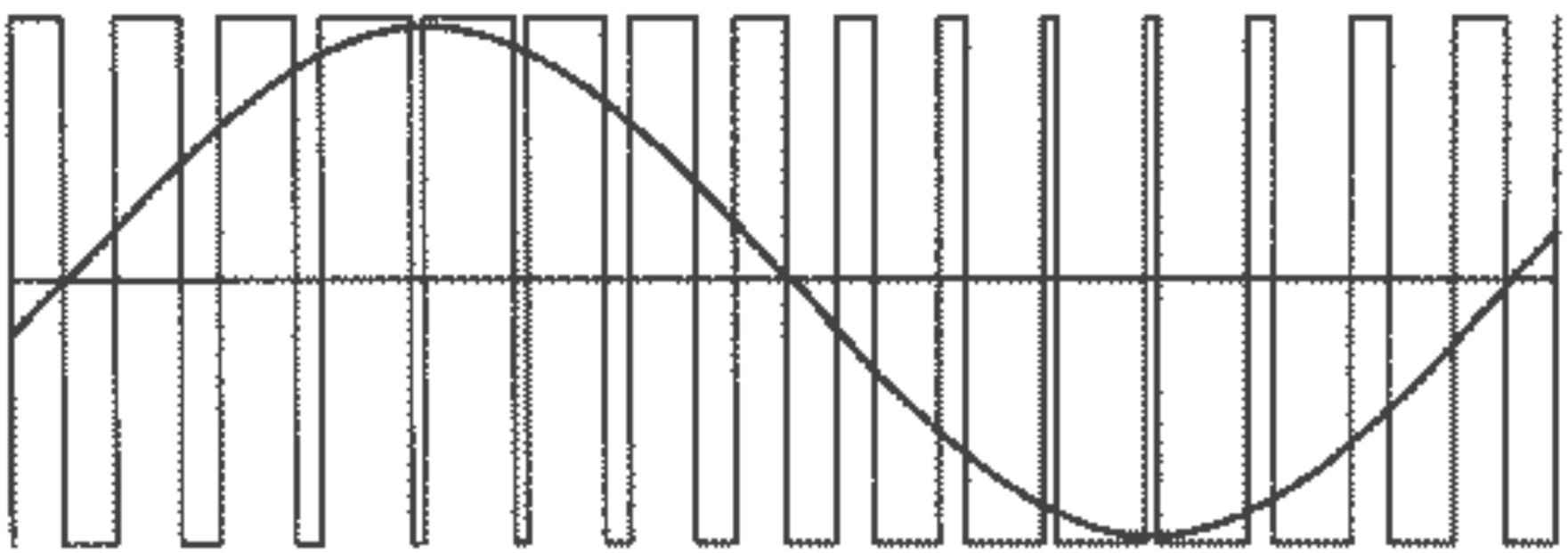
Low Amplitude



High Amplitude

Continuous Values

Can simulate continuous values with fast enough PWM clocking



Like you did to control the LED brightness

audio.c