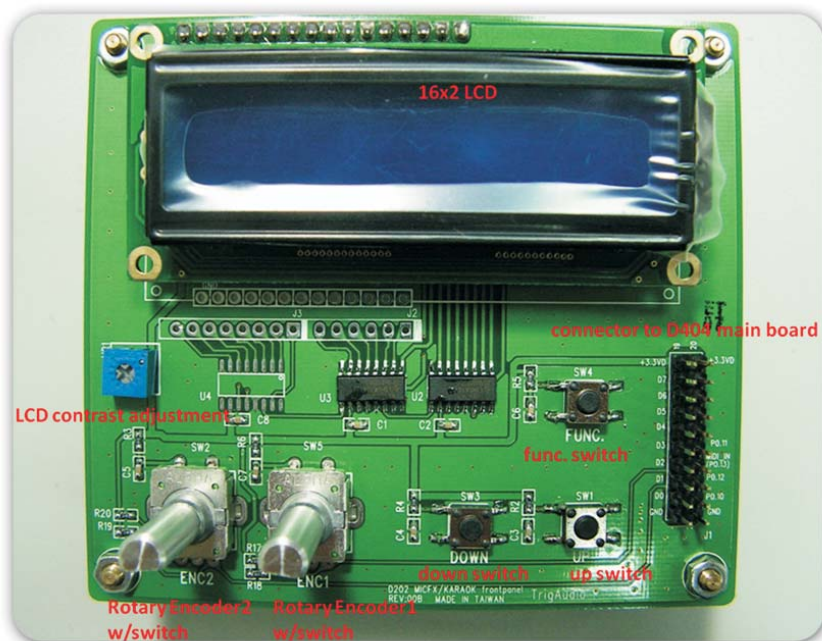


D202/D404 for KTV application

Panel view:



Encoder & Switch Functions:

- **Up & Down SW:** select main functions (input level, 3-band PEQ, Echo, Reverb, Feedback cancel for App.A and input level, 3-band PEQ, Echo, Reverb, Music Pitch Shifter for App.B)
- **Func. Switch:** on/off switching for PEQ, echo, reverb, and FBC
Ex: switch the echo effect on will show:

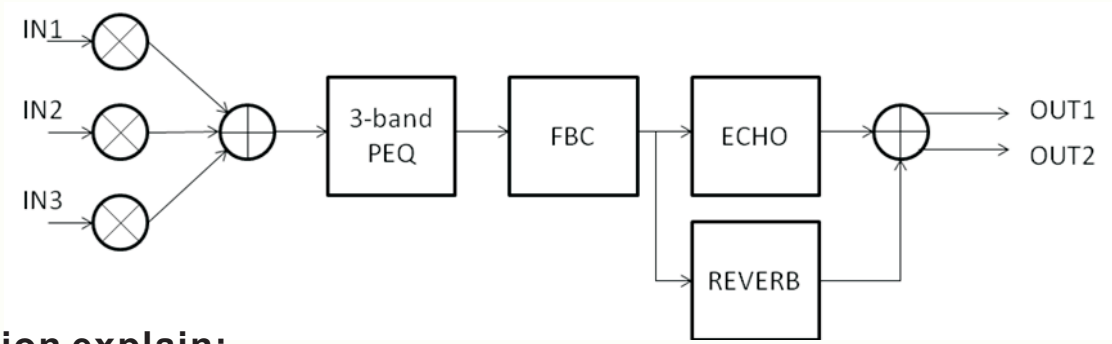


- Rotary Encoder1 w/ switch: parameter adjustment
- Rotary Encoder2 w/switch: not used



【A】 Echo+Reverb+FBC:

1.Signal Processing block



2.Function explain:

(a) MIC LEVEL:



Use switch on Rotary encoder to select input channel and adjust the level by rotating the encoder

(b) 3-band PEQ:



Use switch on Rotary encoder to select PEQ band (L: Low , M: Mid, H: High)channel and adjust the gain on each band by rotating the encoder.

H: 200Hz, M: 800, H: 2.5kHz

Gain: +-12dB, 1dB step

Turn PEQ off by push the func. Switch.



(c)Echo:


ECHO ON
TIME: 085 REPT: 088

Use switch on Rotary encoder to select parameter time and repeat and adjust the parameter value by rotating the encoder.

TIME: echo delay time

REPT: echo repeats

Turn Echo off by push the func. Switch.

(d)Reverb


REVERB ON
TIME: 080 LEVL: 093

Use switch on Rotary encoder to select parameter time and level and adjust the parameter value by rotating the encoder.

TIME: Reverb time

LEVL: Reverb level

Turn Reverb off by push the func. Switch.

(e)FBC:


FBC ON
Notch01 449 Hz

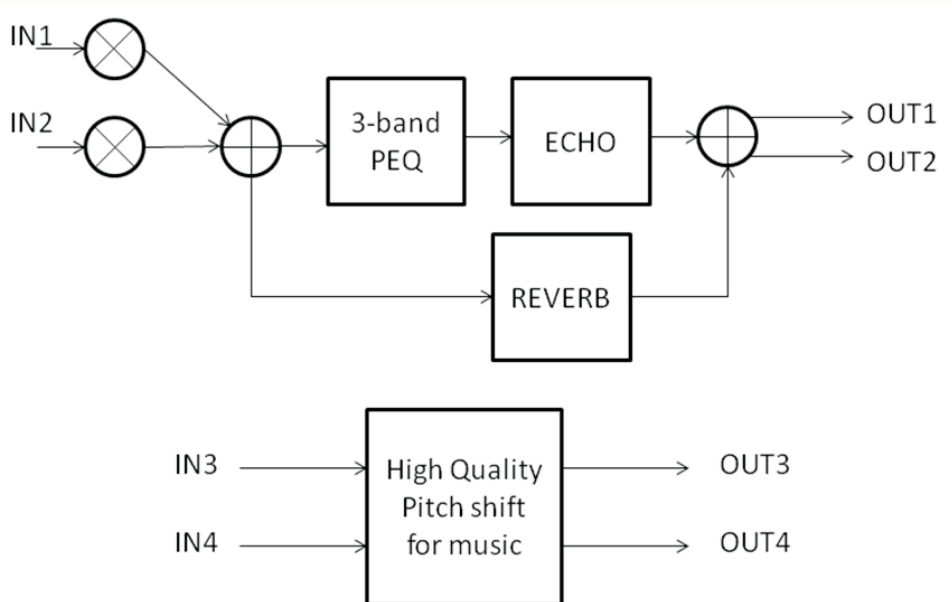
By rotating the encoder to view the status of FBC notch filter 1~12. The FBC is auto loaded when boot up.

Turn FBC off by push the func. Switch.



【B】 Echo+Reverb+HQ Pitch Shift for music

1.Signal Processing block



3.Function explain:

(a) MIC LEVEL:



Use switch on Rotary encoder to select input channel and adjust the level by rotating the encoder

(b) 3-band PEQ:



TRIGAUDIO

Use switch on Rotary encoder to select PEQ band (L: Low , M: Mid, H: High)channel and adjust the gain on each band by rotating the encoder.

H: 200Hz, M: 800, H: 2.5kHz

Gain: +-12dB, 1dB step

Turn PEQ off by push the func. Switch.

(c)Echo:



Use switch on Rotary encoder to select parameter time and repeat and adjust the parameter value by rotating the encoder.

TIME: echo delay time

REPT: echo repeats

Turn Echo off by push the func. Switch.

(d)Reverb



Use switch on Rotary encoder to select parameter time and level and adjust the parameter value by rotating the encoder.

TIME: Reverb time

LEVL: Reverb level

Turn Reverb off by push the func. Switch.

(e)Music Pitch Shifter: (on ch3 & ch4)

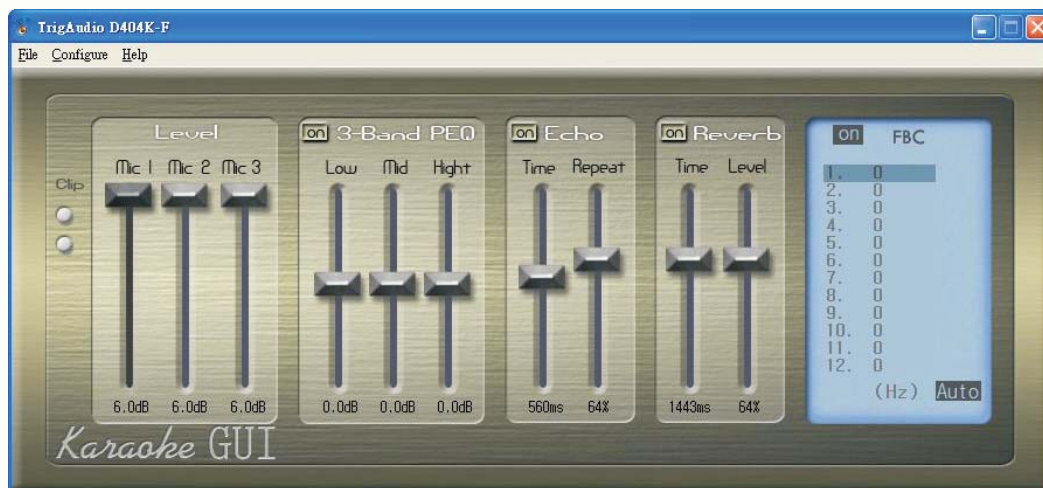
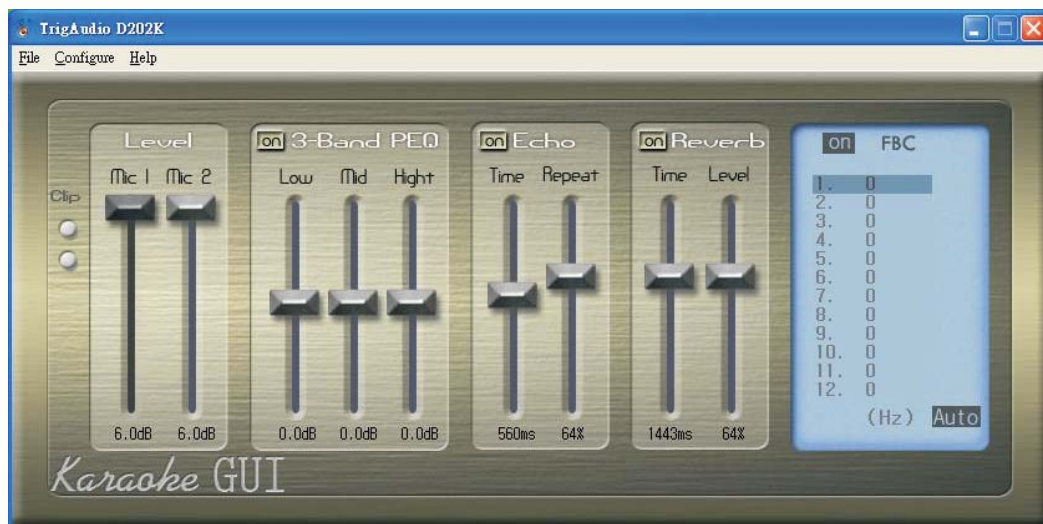


By rotating the encoder to adjust the pitch shift amount.

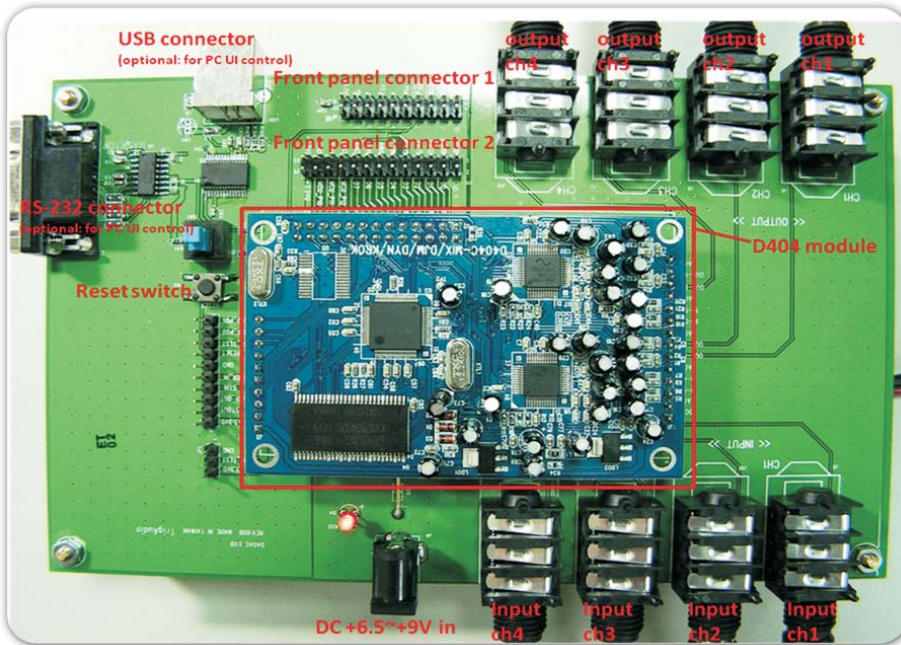
Pitch shift amount : +-12 (+- 1octave)



4. Karaoke GUI



5. Appendix : Main board view:



6. Front panel schematic:

