

# DSP MODULE (BTSE-32FX)

## General Specification of Sound Effector



### Overview

The BTSE-32FX Effect board provides 32 different digital audio effects to be used for mixers or other audio applications that require sound enhancement. Equipped superb quality digital effects processing engine which is adds that extra punch needed to make audio presentations truly stand out.

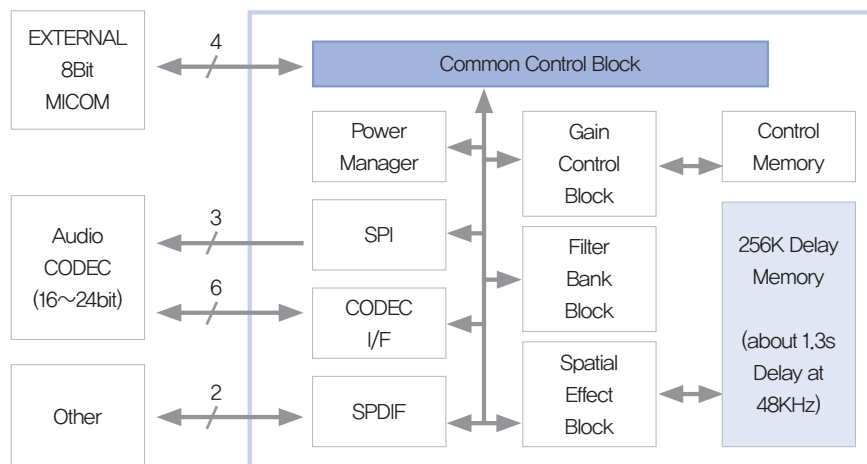
### Specifications

FX Presets	32	S/N(A-weighted)	90 dB	Power Supply	DC 5V
Passband Frequency	20hz~20khz	Dynamic Range	90 dB	RoHs(PB free)	0
DSP arithmetic	32 bit	Sampling Rate	48 khz		

### Applications

- Guitar and keyboard Amplifiers / Combos
- Audio mixing consoles / Powered Mixing Console
- Karaoke systems
- Stand-alone stereo Effect units for studio and PA usage

### Block Diagram



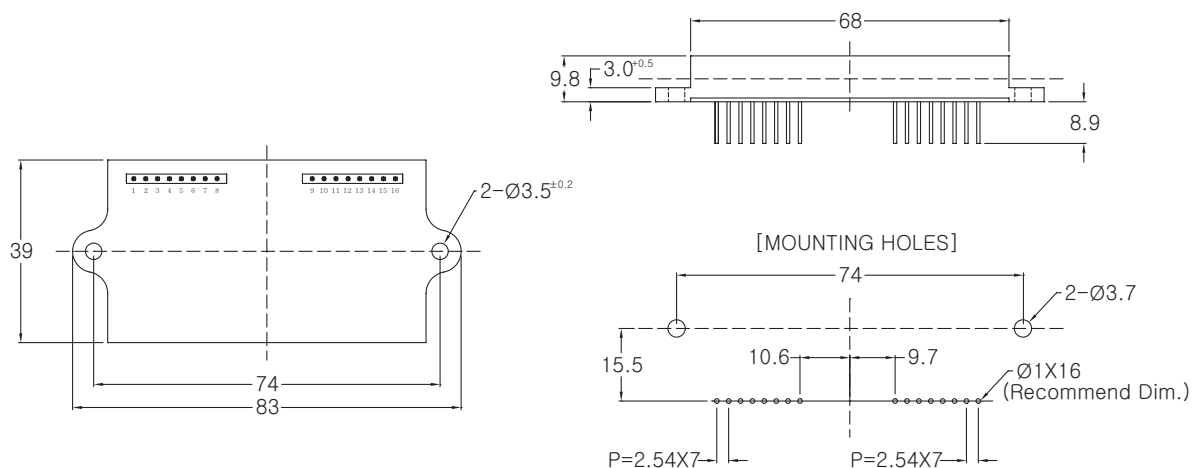
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## Effects Program Chart

Reverb			Delay			Chorus		
01	Hall	6.0 sec	14	Delay 50%	400ms	23	Chorus&Hall slow	4.0 sec
02	Hall	4.5 sec	15	Delay 50%	500ms	24	Chorus&Delay medium	0.15 sec
03	Hall	3.0 sec	16	Delay 50%	800ms	25	Chorus&Delay slow	0.3 sec
04	Hall	1.6 sec	17	Voice Doubler	60ms	Flanger		
05	Room	1.6 sec	18	Voice Doubler	120ms			
06	Room	1.0 sec	19	Chorus slow				
07	Plate	3.0 sec	20	Chorus medium		27	Flanger medium	
08	Plate	1.6 sec	21	Chorus fast		28	Flanger fast	
09	Ambient	1.6 sec	22	Chorus & Hall medium 2.0 sec		29	Gated Reverb	125 ms
10	Delay&Room	1.6 sec				30	Gated Reverb	200 ms
11	Delay 50%	100ms				31	Reverse Reverb	150 ms
12	Delay 50%	200ms				32	Reverse Reverb	250 ms
13	Delay 50%	300ms						

## Schematic Drawings

BTSE-16FX / BTSE-32FX / BTSE-99FX



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## Pin Descriptions

Part	Pin	Case	Name	Function
CN1	1	1	L-Out	Audio Out Left
	2	2	R-Out	Audio Out Right
	3	3	AGND	Analog Ground
	4	4	IN	Audio Input
	5	5	3.6V	+3.6V Out
	6	6	AGND	Analog Ground
	7	7	MUTE	Mute (SW 5 bit)
	8	8	FND-DATA	FND Data out
CN3	1	9	SW1	SW 0 bit
	2	10	SW2	SW 1 bit
	3	11	SW3	SW 2 bit
	4	12	SW4	SW 3 bit
	5	13	BANK	SW 4 bit
	6	14	DGND	Digital Ground
	7	15	FND-CLK	FND clock out
	8	16	5V	+5V power supply

• Suggestion for control : Binary code (Positive) switch (BTDS20V-116 : BELTON S/W SPEC)

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## Schematic

