

DSP MODULE (BTSE-99FX)

General Specification of Sound Effector



Overview

The BTSE-99FX Effect board provides 99 different digital audio effects to be used for mixers or other audio application that require sound enhancement. Equipped superb quality digital effects processing engine which it adds that extra punch needed to make audio presentation truly stand out.

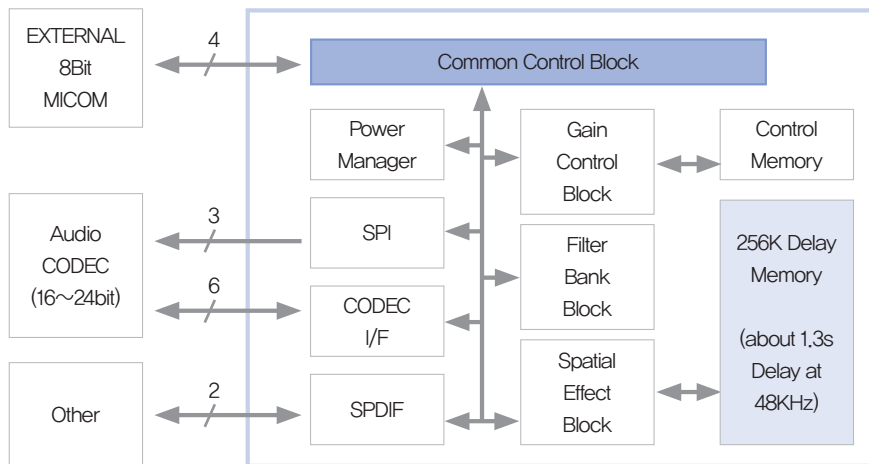
Specifications

FX Presets	99	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	2.0 sec	38	Echo	100 ms	+Room	1.0 sec	70	Chorus	fast
02	Hall	2.5 sec	39	Echo	150 ms	+Room	1.5 sec	71	Chorus	fast +Echo 100 ms
03	Hall	3.0 sec	40	Echo	200 ms	+Hall	2.0 sec	72	Chorus	fast +Room 1.0 sec
04	Hall	4.0 sec	41	Echo	250 ms	+Hall	2.5 sec	73	Chorus	medium
05	Hall	5.0 sec	42	Echo	300 ms	+Hall	3.0 sec	74	Chorus	medium +Echo 200 ms
06	Hall	6.0 sec	43	Echo	350 ms	+Hall	3.5 sec	75	Chorus	medium +Hall 2.0 sec
07	Hall	8.0 sec	44	Echo	400 ms	+Hall	4.0 sec	76	Chorus	slow
08	Hall	10.0 sec	45	Echo	500 ms	+Hall	5.0 sec	77	Chorus	slow +Echo 300 ms
09	Room	1.0 sec	46	Voice Doubler	60 ms			78	Chorus	slow +Hall 4.0 sec
10	Room	1.5 sec	47	Voice Doubler	80 ms				Flanger	
11	Room	2.0 sec	48	Voice Doubler	100 ms			79	Flanger	fast
12	Room	2.5 sec	49	Voice Doubler	120 ms			80	Flanger	fast +Echo 100 ms
13	Room	3.0 sec	50	Voice Doubler	140 ms			81	Flanger	fast +Room 1.0 sec
14	Room	4.0 sec	51	Signal Delay	50 ms			82	Flanger	medium
15	Plate	1.0 sec	52	Signal Delay	100 ms			83	Flanger	medium +Echo 200 ms
16	Plate	1.5 sec	53	Signal Delay	150 ms			84	Flanger	medium +Hall 2.0 sec
17	Plate	2.0 sec	54	Signal Delay	200 ms			85	Flanger	slow
18	Plate	2.5 sec	55	Signal Delay	250 ms			86	Flanger	slow +Echo 300 ms
19	Plate	3.0 sec	56	Signal Delay	300 ms			87	Flanger	slow +Hall 4.0 sec
20	Plate	4.0 sec	57	Signal Delay	400 ms				Tremolo	
21	Ambient	0.5 sec	58	Signal Delay	500 ms			88	Tremolo	fast
22	Ambient	0.7 sec	59	Echo	50%	+F.B	100 ms	89	Tremolo	fast +Room 1.0 sec
23	Ambient	1.0 sec	60	Echo	50%	+F.B	125 ms	90	Tremolo	medium
24	Ambient	1.3 sec	61	Echo	50%	+F.B	150 ms	91	Tremolo	medium +Hall 2.0 sec
25	Ambient	1.6 sec	62	Echo	50%	+F.B	200 ms	92	Tremolo	slow
26	Gated	75 ms	63	Echo	50%	+F.B	250 ms	93	Tremolo	slow +Hall 4.0 sec
27	Gated	100 ms	64	Echo	50%	+F.B	300 ms		Wah Wah	
28	Gated	125 ms	65	Echo	50%	+F.B	350 ms	94	Wah Wah	fast
29	Gated	150 ms	66	Echo	50%	+F.B	400 ms	95	Wah Wah	fast +Room 1.0 sec
30	Gated	200 ms	67	Echo	50%	+F.B	500 ms	96	Wah Wah	medium
31	Gated	300 ms	68	Echo	50%	+F.B	350 ms	97	Wah Wah	medium +Hall 2.0 sec
32	Reverse	75 ms	69	Echo	50%	+F.B	800 ms	98	Wah Wah	slow
33	Reverse	100 ms						99	Wah Wah	slow +Hall 4.0 sec
34	Reverse	125 ms								
35	Reverse	150 ms								
36	Reverse	200 ms								
37	Reverse	300 ms								

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Pin Descriptions

Part	Pin	Case	PIN 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	FND-STB	FND strobe
	8	8	N,C	(not used)
CN3	1	9	JOG-A	Encoder A
	2	10	JOG-B	Encoder B
	3	11	JOG-MUTE	Encoder Push S/W
	4	12	FND-DATA	FND Data out
	5	13	FND-CLK	FND clock out
	6	14	DGND	Digital Ground
	7	15	N,C	(not used)
	8	16	5V	+5V power supply

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Schematic

