



Professional Sound Products

Set Up Procedure

DJ-4139

PRECISION AUDIO SIGNAL DELAY

Refer to back page for Control Record.

Refer to *SYSTEM 41 Installation Manual* for general instructions on module installation and wiring.

Refer to **DJ-4139 Data Sheet** for product specifications and functional diagram.

LEVEL CONTROLS

1. Set INPUT and OUTPUT level controls to "N" (Normal). The INPUT control should be mid-range and the OUTPUT control should be full clockwise. Gain will be unity (0dB) input to output.
2. Input sensitivity may be increased by clockwise rotation of INPUT control with a maximum of 10dB gain. If red CLIP LED flashes, reduce input sensitivity.
3. Rotate the OUTPUT control counterclockwise to reduce output level as required. Note: Best signal quality results when input clipping occurs simultaneously with maximum signal level of the sound system. Full dynamic range of the DJ-4139 is then utilized.

DELAY CONTROLS AND PRESETS

1. The Delay is set in COARSE (16 millisecond), FINE (1 millisecond), X fine (62.5 microseconds), and XX fine (3.9 microsecond) increments. Total delay is the sum of all four settings, plus a fixed 24.0 μ s internal A/D/A conversion delay.
2. Record switch and control settings in the Control Record section, and on the documentation panel.

COARSE		FINE		X FINE		XX FINE	
SETTING	DELAY, ms	SETTING	DELAY, ms	SETTING	DELAY, μ s	SETTING	DELAY, μ s
0	0ms	0	0ms	0	0 μ s	0	0 μ s
1	16	1	1	1	62.5	1	3.9
2	32	2	2	2	125.0	2	7.8
3	48	3	3	3	187.5	3	11.7
4	64	4	4	4	250.0	4	15.6
5	80	5	5	5	312.5	5	19.5
6	96	6	6	6	375.0	6	23.4
7	112	7	7	7	437.5	7	27.3
8	128	8	8	8	500.0	8	31.2
9	144	9	9	9	562.5	9	35.1
A	160	A	10	A	625.0	A	39.0
B	176	B	11	B	687.5	B	42.9
C	192	C	12	C	750.0	C	46.8
D	208	D	13	D	812.5	D	50.7
E	224	E	14	E	875.0	E	54.6
F	240	F	15	F	937.5	F	58.5

INPUT GAIN PROGRAMMING

The DJ-4139 module comes pre-programmed from the factory to have unity gain with the INPUT control in the Normal position (50% rotation) and the OUTPUT control at full clockwise rotation. Full clockwise rotation of the INPUT control increases the input sensitivity by 10dB. Input sensitivity may be modified on the DJ-4139 by replacing the factory supplied resistor. The table below shows the acceptable resistor values to alter the "Normal" gain setting.

GAIN PROGRAMMING

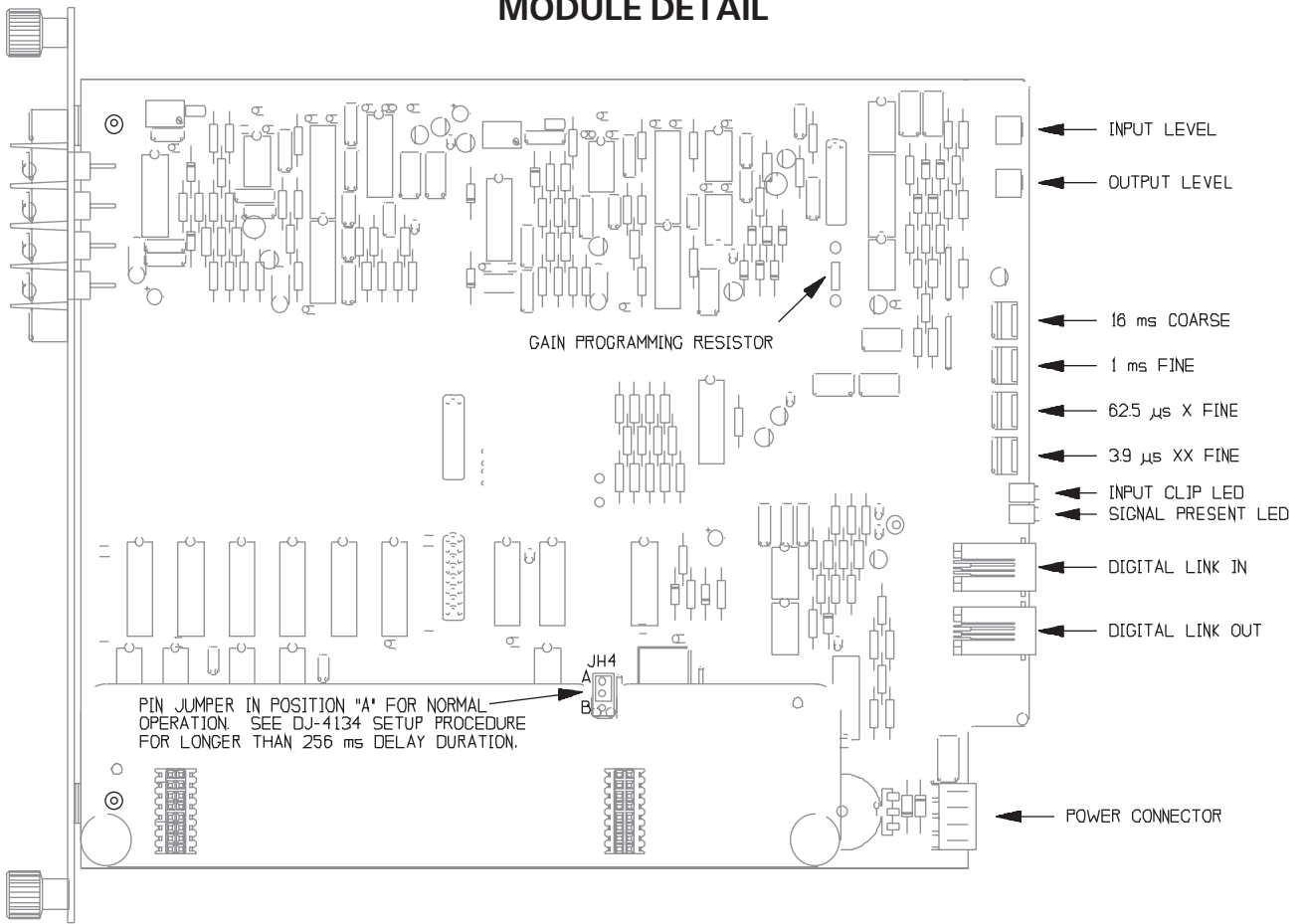
GAIN PROGRAMMING RESISTOR	NOMINAL GAIN (dB)	MAXIMUM GAIN (dB)
NONE	-10	0
12k Ω	-5	5
4.7k Ω *	0	10
2.2k Ω	5	15
1k Ω	10	20

* Denotes factory supplied value

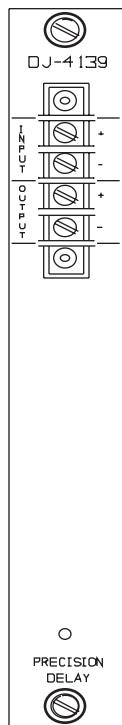


Caution: Always reduce the output level to all corresponding power amplifiers when adjusting the delay values during setup. Whenever delay values are changed, existing information in the digital bit-stream must pass through the Digital-to-Analog converter before any new delay value is correctly synchronized. Unsynchronized (old) digital information can create unpleasant, unpredictable output noise.

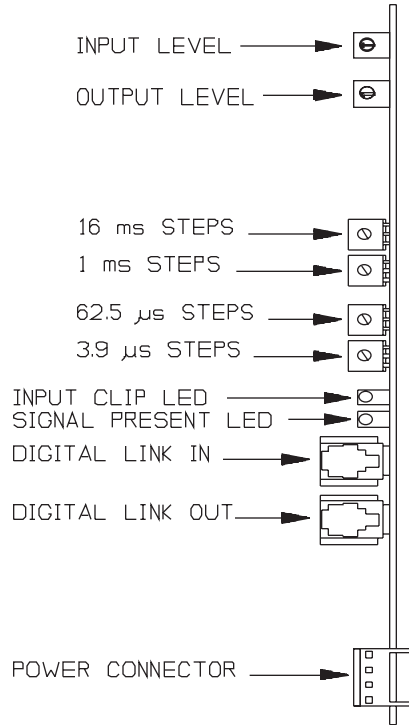
MODULE DETAIL



REAR PANEL



FRONT EDGE CONTROLS



Control Record

DJ-4139

PRECISION AUDIO SIGNAL DELAY

Record all control settings on the Documentation Panel pictorial to the right. This should match the Documentation Panel in the mainframe.

DELAY SETTING

Coarse + Fine + X Fine + XX Fine + 24.0_s = Total

Mainframe # _____



Module Position # _____

Contractor _____

Installer _____

Job _____

Date _____

INPUT	
OUTPUT	
DELAY SETTINGS	
milliseconds	<input type="text"/>
	16
	<input type="text"/>
	1
microseconds	<input type="text"/>
	62.5
	<input type="text"/>
	3.9
TOTAL	
CLIP	<input type="radio"/>
SIG.	<input type="radio"/>
LINK IN	<input type="checkbox"/>
LINK OUT	<input type="checkbox"/>
DJ-4139 PRECISION DELAY	