

Refer to back page for Control Record.

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

Refer to **DJ-4116A Data Sheet** for product specifications.

Refer to the Module Detail located on page 3 for all jumper locations.

1. **PHANTOM POWERING.** For phantom-powered microphones, check to make sure the corresponding phantom pin-jumper is in the PHTM position. In this position, the center-tap on the transformer input connects to $15V_{DC}$ through a $1.5k\Omega$ current-limiting resistor. Move the phantom power pin-jumper to the OFF position for all other signal sources. Failure to do so can result in improper frequency response or poor common mode rejection.

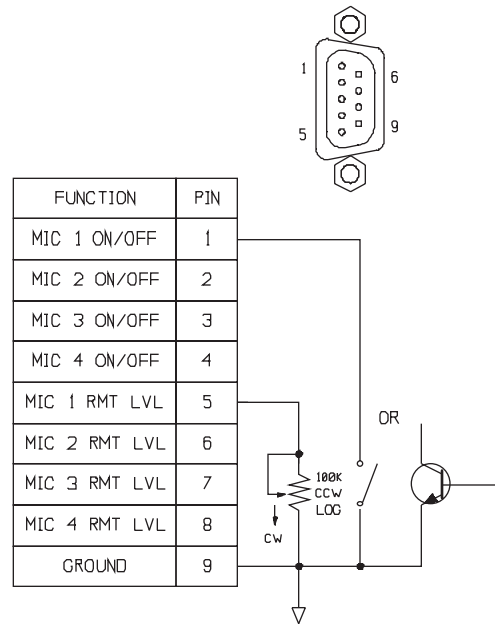


Note: Some powered microphones may require reducing the value of the $1.5k\Omega$ feed resistor to maintain sufficient microphone voltage. Consult the factory if your microphone has a current requirement greater than 6mA.

2. **MICROPHONE-TO-LINE CONVERSION.** Two pin-jumpers are used for the line-level conversion of each input channel. When the pair of jumpers are moved to the "L" (line) position, a balanced 30dB input attenuator is inserted before the transformer. In addition, the input impedance of the channel is raised to $20.5k\Omega$. If additional attenuation is necessary, the microphone preamp gain can be reduced (see step 3, below).
3. **PRE-AMPLIFIER GAIN SETTING.** The standard preamplifier gain setting is +40dB, for use with a dynamic microphone. If a high-output condenser microphone is used, the preamplifier gain should be reduced to prevent preamplifier output clipping. Reduce the channel gain by moving the preamplifier gain jumper from the +40dB position to the +20dB position. Channel gain reduction may also be performed if additional line-level attenuation is needed, as described in step number 2.
4. **100 Hz FILTERS.** High-pass filters are provided to remove the effects of microphone handling noises and reduce the proximity effect present in cardioid pattern microphones. In the 100 Hz position, a 6dB/octave high-pass filter is inserted in the microphone channel signal path. In the 20 Hz position, response is flat down to 20 Hz.

5. **REMOTE INPUT LEVEL CONTROL.** As shipped, the remote level controls are bypassed by pin-jumpers. To remotely control the level of an individual channel, move the RMT LVL pin-jumper from the BYP (bypass) position to the RMT LVL position. Connect a 100k_{CCW} log potentiometer (available as IRP P/N 105-0521) to the corresponding pins of the remote connector (see the figure to the right). The remote potentiometer will provide approximately 60dB of control range.

Note: There is typically 3dB minimum loss whenever the remote level control is enabled. This may be compensated by increasing the input sensitivity and/or TEQ settings by 3dB.

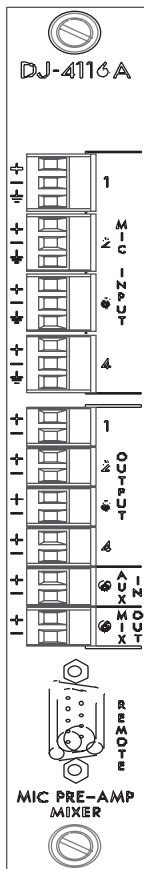
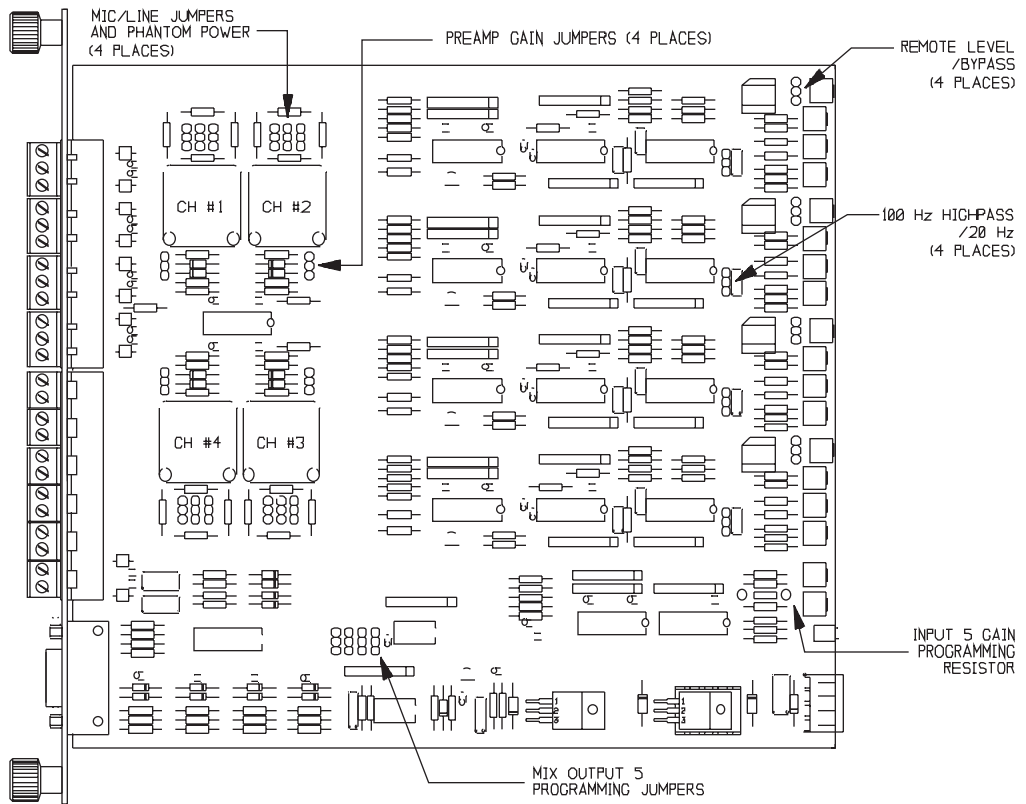


6. **REMOTE INPUT SWITCHING.** The mic/line channels may be individually muted by providing a contact closure to ground on the remote connector (see figure to the right). Channel muting will be greater than 100dB at 1kHz, for the duration of the contact closure.
7. **PROGRAMMING MIX OUTPUT (#5).** Locate the four pin jumpers labelled MIX JUMPERS FOR OUTPUT 5. Jumpers moved to the IN position mix the corresponding channel to output 5. Channels in the OUT position do not mix to output 5. Note: The AUX line input (input 5) is always connected to the mix output (output 5).

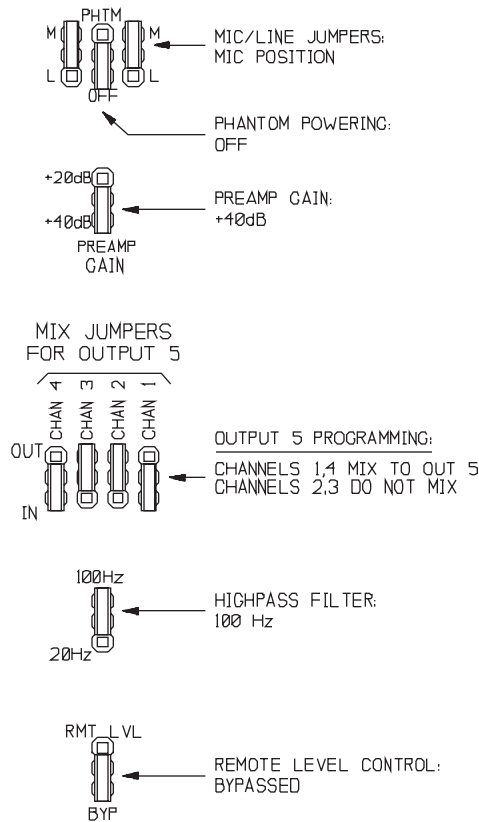
8. **LINE INPUT GAIN.** Auxiliary input 5 comes factory programmed to have unity gain at the normal position. A gain programming resistor has been supplied to accommodate changes in the factory setting. Refer to the table to the right to determine the acceptable value for your application.

GAIN PROGRAMMING RESISTOR	NORMAL 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

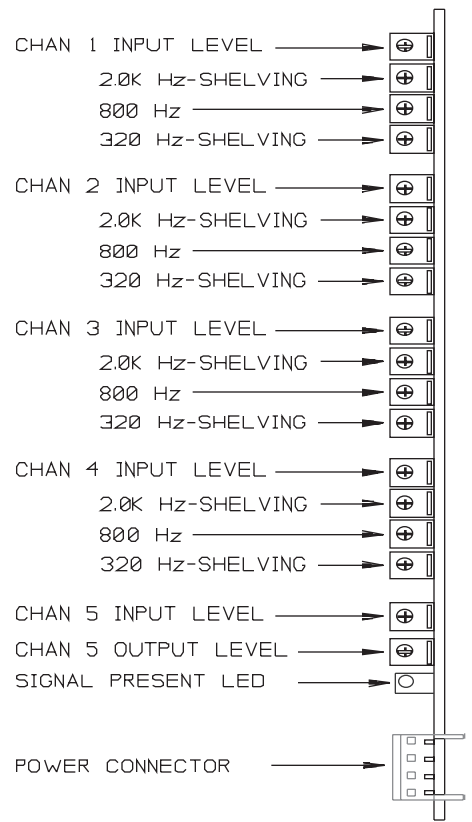
9. **REMOVEABLE CONNECTOR TERM-INATION.** Use solid or stranded wire up to #12 AWG. Multiple conductors may be terminated together whenever the #12 AWG equivalent is not exceeded. It is recommended that multiple conductors be the same AWG size. The wires must be twisted tightly together, especially when mixing AWG sizes. Strip back 5/16" of wire insulation. Wire tinning is NOT recommended and may actually reduce the reliability of the connection. DO NOT tin the wires with solder.



REAR PANEL



ENLARGED DETAIL



FRONT EDGE CONTROLS

Control Record

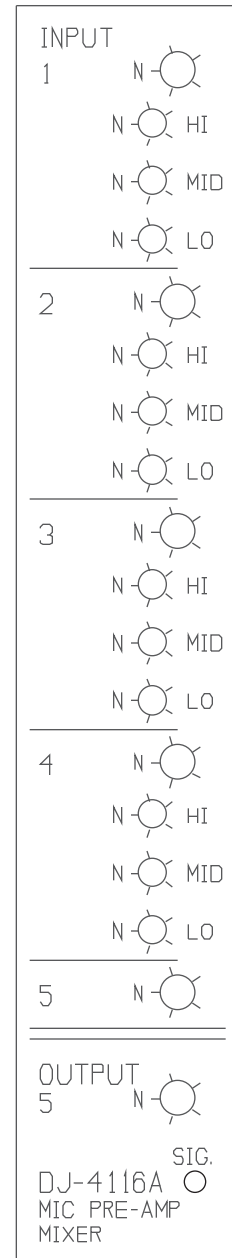
DJ-4116A

QUAD MIC PRE-AMP/MIXER

Refer to the first page for Set Up Procedure.

Record on the Documentation Panel pictorial to the right all front panel control settings. This must match the Documentation Panel in the mainframe. Mark the position of the user programmable jumpers in the table below.

FUNCTION	POSITION	MIC/LINE CHANNEL			
		1	2	3	4
PHANTOM POWER	OFF				
INPUT LEVEL	PHTM				
	LINE				
PREAMP GAIN	MIC				
	+ 20dB				
100 Hz FILTER	+ 40dB				
	100 Hz				
MIX TO OUTPUT 5	20 Hz				
	IN				
REMOTE LEVEL CONTROL	OUT				
	RMT LVL				
REMOTELY SWITCHED	BYP				



Mainframe # _____

Module Position # _____

Contractor _____

Installer _____

Job _____

Date _____