IRP®

Professional Sound Products

Set Up Procedure

VOICE-MATIC® MICROPHONE INPUT MODULE

DJ-4114A

Refer to back page for Control Record.

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

Refer to **DJ-4114A Data Sheet** for product specifications.

INTRODUCTION

The DJ-4114A input module is part of a modular and expandable automatic mixing system designed for use in the IRP ***SYSTEM* 41** mainframe. The DJ-4114A input module is responsible for the amplification, gating, and routing of the audio input signals. To create a complete and functional automatic mixer, a DJ-4115A or DJ-4115A-1 Master Module must also be installed into the system. The Master Module will provide the mixing system with the necessary outputs to interface with the rest of your audio system. Being modular in design, the number of input channels in your automatic mixing system can be expanded in increments of four by installing additional DJ-4114A modules into the mainframe. The following documentation is designed to assist you in obtaining the greatest performance from your automatic mixing system by instructing you on how to properly assign and configure the input channels and properly install and terminate the input module. Since the DJ-4114A is only one part of the automatic mixing system, it is recommended that you also keep the associated manuals for the Master Module, the Linking Module, and ***SYSTEM* 41** Installation Manual close at hand for easy reference.

CONFIGURING THE MODULE

Only under rare circumstances are any two installations ever the same, even if they are from the same contractor. It is with this understanding that the DJ-4114A module was designed to be as flexible and adaptable as possible. To accomplish this task, the DJ-4114A input module incorporates the use of configuration jumpers which select numerous features and functions and route the input signals to various outputs. The following configuration jumpers are described on a function by function basis. There is one set of jumpers per channel on each module.

Before you get involved with setting up your system, make sure you understand what you are trying to put together! Review your design documentation and learn as much as you can about the system sources, loads and the signal routing. Read through this manual completely and use the control record in the back of this manual to document what you want the configuration settings for the modules to be. Then start configuring your module based on the documentation you have created.

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1. **MIC/LINE LEVEL INPUT.** Located near each input channel transformer in a group of 3 jumpers is a pair of jumpers for configuring the input impedance and gain for microphone or line level sources. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. The correct position for the jumper can be determined by observing the "M" (Microphone Level) or "L" (Line Level) lettering on the circuit board.

Important! Both jumpers on the input channel must be moved together for the input circuitry to operate correctly! If the 2 jumpers are located diagonally from each other they are not configured correctly!

2. **PHANTOM POWER ON/OFF.** Located near each input channel transformer in a group of 3 jumpers is a jumper to activate phantom power for electret condenser microphone sources. If you are using a dynamic microphone or an active line level source (such as a cassette deck or CD player) be sure phantom power is disabled on each relevant input channel. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. The phantom power jumper is located in between the mic/line configuration jumpers on each channel. The correct position for the jumper can be determined by observing the "PHTM/OFF" lettering on the circuit board.

3. **PREAMP GAIN +20dB/+40dB.** Located near each input channel transformer is a jumper to set the amplifier gain for high output and standard gain microphone sources. For dynamic microphones the jumper should normally be set to the +40dB position. If you are using electret condenser microphones or if you are configuring the input channel for line level applications, the jumper setting is usually the +20dB position. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. The correct position for each jumper can be determined by observing the "+20dB/+40dB" lettering on the circuit board.

4. **REMOTE LEVEL CONTROL BYPASS.** Located near the front of the module and behind each input sensitivity potentiometer are the remote level bypass jumpers. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. Position each jumper in the bypass position where remote level control is **not** required. The correct position for each jumper can be determined by observing the "RMT LVL BYPASS" lettering on the circuit board by the jumper.

The jumpers for the remote level controls are factory set in the bypass position. If the jumpers are moved to the remote level control position, the input channel will be normally attenuated when the remote level control connector is unterminated.

5. **INPUT SWITCH ENABLE/DISABLE.** Located near the bottom center of the module in a group of 4 jumpers are the switch Enable/Disable jumpers. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. When placing the jumper in the "Gate Only" position, the input channel will be attenuated by the preset 30dB or 15dB of the gate when activated through the remote connector. If the jumper is in the "Gate and Switch" position, the input channel will be attenuated by 100dB when activated through the remote connector. The correct position for the jumper can be determined by observing the "GATE ONLY" or "GATE AND SWITCH" lettering on the circuit board by the jumper.

6. **HIGH-PASS FILTER 20 Hz/100 Hz**. Located near the front of the module are the high-pass filter bypass jumpers. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. Position the jumper in the bypass ("20 Hz") position when full range reproduction is required. The high-pass ("100 Hz") position is recommended for most speech applications. The correct position for each jumper can be determined by observing the "20 Hz/100 Hz" lettering on the circuit board by the jumper.

7. **CHANNEL GATE ATTENUATION -15dB/-30dB.** Located near the front of the module, near the first row of integrated circuits, are the gate attenuation jumpers. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. The jumpers are factory set for 30dB of attenuation when the channel is inactive. If less attenuation is desired, it can be reduced to -15dB by changing the jumper position. The correct position for the jumper can be determined by observing the "GATE 15dB" lettering on the circuit board by the jumper.

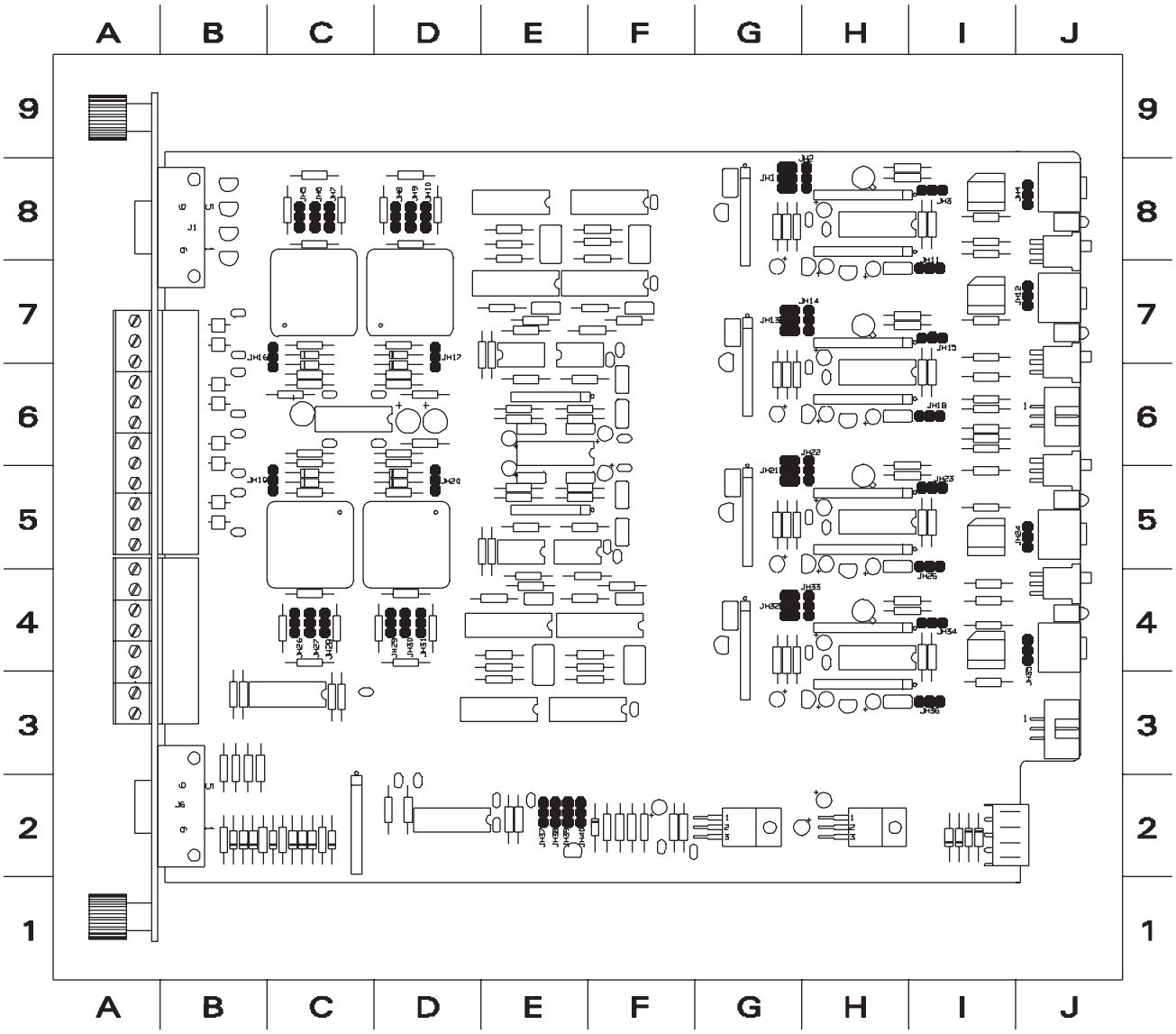
The remote mute attenuation is directly affected by the settings of the preamp gate attenuation jumper. Unless the preamp remote switch is enabled, providing 100dB of attenuation, the mute will attenuate the input channel by 15dB or 30dB based on the setting of this jumper.

8. **AUXILIARY BUS ASSIGNMENT PRE/POST GATE.** Located near the front of the module is the auxiliary mix bus configuration jumper. The auxiliary output of the DJ-4115A can be configured pre-gate or post gate on a channel by channel basis. In the pre-gate position, the aux bus receives the signal from the input channel after it has been influenced by the input sensitivity control, the remote level control, the high pass filter and the channel switch. In the post-gate position, the aux bus receives the signal from the input channel after it has been influenced by all the input channel functions including the gate. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel. The correct position for each jumper can be determined by observing the "GATED/ UNGATED" lettering on the circuit board by the jumper.

If it is desired to exclude the input channel from the DJ-4115A auxiliary output the jumper can be removed and rotated to the right in the horizontal position. Always keep the jumper installed on the header so that it will not be lost if needed at a later time.

9. **PREAMP OUTPUT ASSIGNMENT PRE-LEVEL/PRE-GATE/POST-GATE.** Located near the front of the module are the preamp output jumpers. The preamp output can be configured for pre-level, pre-gate or post gate operation on a channel by channel basis. In the pre-level position, the preamp output is unaffected by the settings of the input sensitivity control, the remote level control, the high pass filter, the channel switch and the channel gate. In the pre-gate position, the preamp output is affected by the input sensitivity control, the remote level control, the high pass filter and the channel switch. In the post-gate position, the preamp out is affected by all the input channel functions including the gate. Please refer to the Jumper Position Chart and Module Detail for the correct jumper numbers and locations to configure each input channel.The correct position for the jumper can be determined by observing the "PST-GATE/PRE-GATE/PRE-LVL" lettering on the circuit board by the jumper.

Be aware that the jumper for this circuit can be inserted in the horizontal or the vertical position! The proper orientation for this jumper is always horizontal. Orienting the jumper in the vertical position will disable the preamp output circuit and can damage the input channel preamp circuitry!



MODULE DETAIL

FUNCTION	CH1	CH2	CH3	CH4	FACTORY SETTING
Mic/Line Level Input Location	JH8, JH10 D-8	JH5, JH7 C-8	JH26, JH28 C-4	JH29, JH31 D-4	Microphone
Phantom Power ON/OFF Location	JH9 D-8	JH6 C-8	JH27 C-4	JH30 D-4	Phantom ON
Preamp Gain +20dB/+40dB Location	JH17 D-6/7	JH16 C-6/7	JH19 C-5	JH20 D-5	+40dB
Remote Level Control Bypass Location	JH4 J-8	JH12 J-7	JH24 J-5	JH35 J-4	Bypass
Input Switch Enable/Disable Location	JH37 E-2	JH38 E-2	JH39 E-2	JH40 E-2	Gate Only (Switch Disable)
High-Pass Filter 20 Hz/100 Hz Location	JH11 I-7	JH18 I-6	JH25 I-4/5	JH36 I-3	20 Hz
Channel Gate Attenuation -15dB/-30dB Location	JH3 I-8	JH15 I-7	JH23 I-5	JH34 I-4	-30dB
Auxiliary Bus Assignment Pre/Post Gate Location	JH2 H-8	JH14 H-7	JH22 H-5/6	JH33 H-4	Pre-Gate (Ungated)
Preamp Output Assignment Pre-Level/Pre-Gate/Post Gate Location	JH1 G-8	JH13 G-7	JH21 G-5/6	JH32 G-4	Pre-Level
Auto/Direct Mode Switch Location	SW1 J-7/8	SW2 J-6/7	SW3 J-5/6	SW4 J-4	Direct
Input Sensitivity Control Location	R14 J-8	R28 J-7	R88 J-5	R106 J-4	Nominal (50% Rotation)

JUMPER POSITION CHART

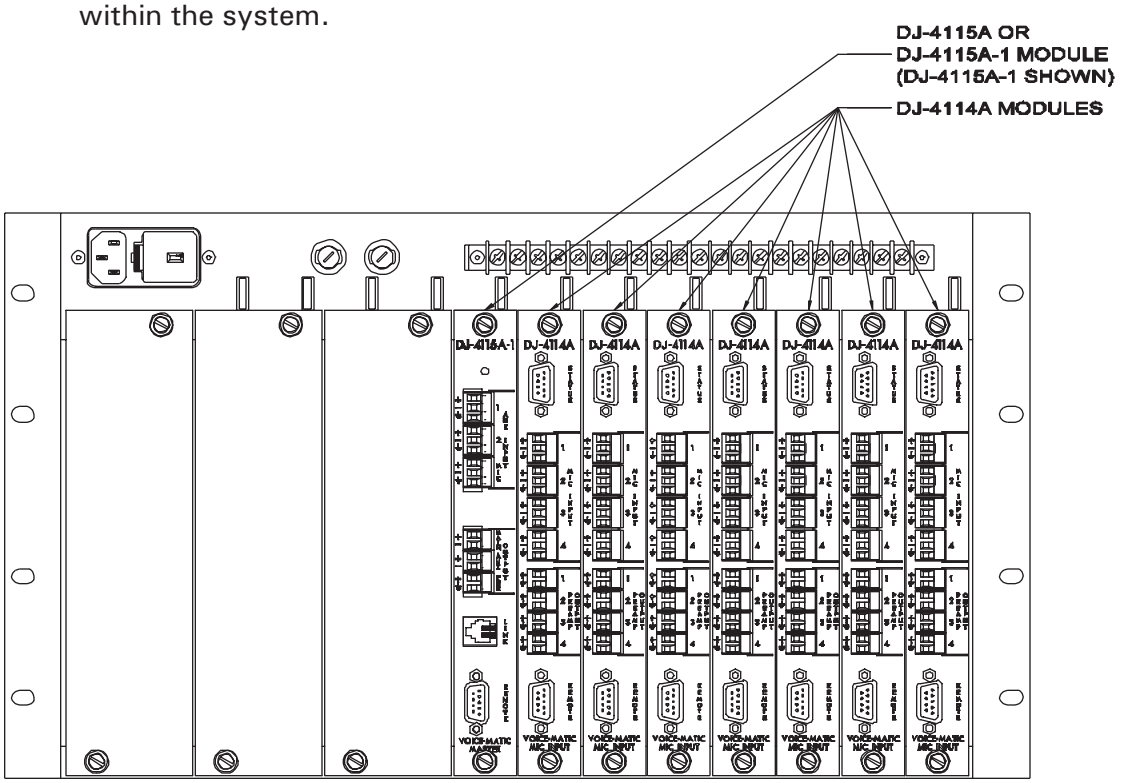
MODULE INSTALLATION

1. Before you proceed any further, verify that the mainframe is properly operating! Power up the empty mainframe and observe the Front Panel "DC Normal" LED illuminated. If it is not, the mainframe has a malfunction which must be corrected before installation of the modules. Once proper operation of the mainframe is verified, power it down before installing the modules. Make sure all modules have been correctly configured before installing them in the mainframe.

2. Viewing the mainframe from the rear, begin placing the DJ-4114A modules into the mainframe starting at the far right, filling the mainframe towards the left. Align the edges of the module into the guides and insert fully by applying inward pressure along the bottom of the rear panel. Tighten the captive screws to fully secure the module to the mainframe. Install the DJ-4115A or DJ-4115A-1 Master Module immediately adjacent to the last DJ-4114A module. If there are more than thirteen DJ-4114A modules in the system, place a DJ-4131A Linking Module instead of a DJ-4115A or DJ-4115A-1 Master Module in the last remaining slot of the mainframe. Continue filling the following expansion mainframe(s) with DJ-4114A modules and a DJ-4131A module. Add aÊmainframe and a DJ-4131A Linking Module for every thirteen DJ-4114A modules installed. The final mainframe will require a DJ-4131A Linking Module and a DJ-4115A or DJ-4115A-1 Master Module to complete the basic system. Fill any open module spaces with single or double width blank panels (DJ-4140 or DJ-4141).

NOTE

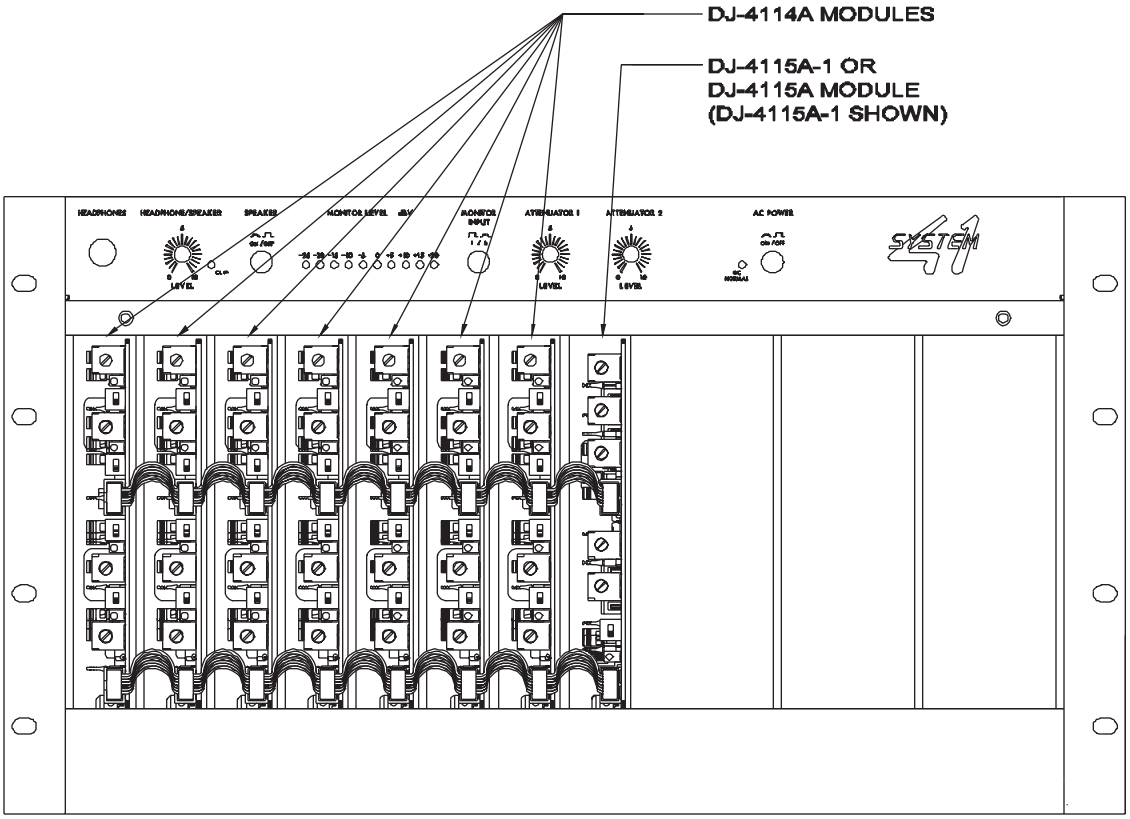
While it may be convenient in certain applications, it is not recommended that other ***SYSTEM*41** modules be physically inserted between DJ-4114A modules. Doing so increases the possibility of RF and noise problems within the system.



MAINFRAME REAR VIEW

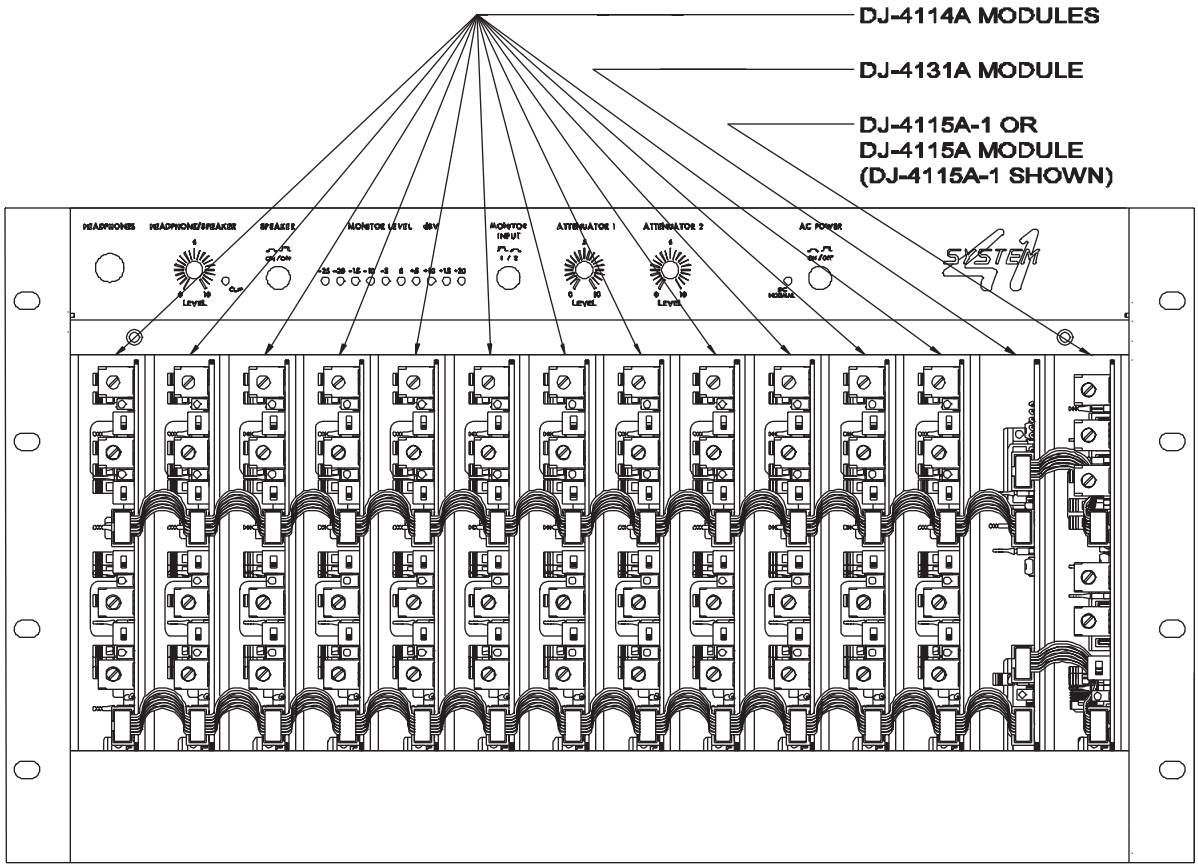
3. There are 2 parallel runs of ribbon cable that need to be installed to interconnect the modules in the mainframe. Packed with each DJ-4115A or DJ-4115A-1 Master Module or DJ-4131A Linking Module is a pair of ribbon cables to accomplish this. Stretch out the ribbon cables and observe that the spacing between the last two connectors is greater on one end than the other. Note also that there are 15 connectors provided on each of the cables. Starting with the end of the ribbon cable that does **not** have the greater spacing and viewing the mainframe from the front, connect the flat ribbon cables from the leftmost DJ-4114A module sequentially (daisy chain) across each DJ-4114A module ending at the DJ-4115A series Master Module or the DJ-4131A Linking Module. If the mainframe has both a linking module and a master module installed, cut the section of ribbon cable with the greater spacing (with both connectors attached) and use it to link the DJ-4115A series module and the DJ-4131A module together. Note that this interconnection is not directly across from each other as the DJ-4114A cards were but is diagonally orientated which requires the increased ribbon cable spacing. Repeat this procedure for the second ribbon cable (see Mainframe Front View with linking module on the following page).

Leaving any unused length of ribbon cable inside the mainframe for future expansion is strongly discouraged. Doing so creates an unterminated line and could contribute to unnecessary RF interference. If in the future the system is expanded and new ribbon cables are needed, contact us and we will gladly supply new ribbon cables at no charge with your order.



MAINFRAME FRONT VIEW

MAINFRAME FRONT VIEW WITH LINKING MODULE



SYSTEM WIRING CONNECTIONS

1. **MIC/LINE INPUT CONNECTIONS**. Each of the four inputs on the DJ-4114A is a 1100_ transformer balanced microphone level (20.5k_ line level) circuit. The input circuitry is capable of accepting signal levels up to -10dBV in mic level configuration and +20dBV in line level configuration. Each input is provided with a three position removable screw-clamp connector block for interconnection to external sources. With this connector there is no numerical pin designation as there are on XLR style connectors. Connections can be made as they are represented on the rear panel. The (+) symbol designates the non-inverting signal connection, the (-) symbol represents the inverting signal connection and the (⏚) symbol represents the shield or ground connection.

For use with an unbalanced source, tie the signal hot to the non-inverting (+) connection and the signal ground to the inverting (-) connection and verify that the Phantom Power jumper to the OFF position. For additional information, refer to the ***SYSTEM* 41** Installation Manual for proper wiring techniques.

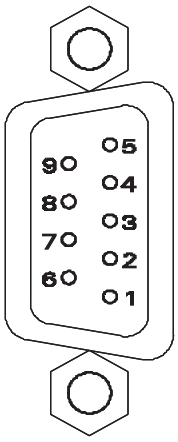
2. **PREAMP OUTPUT CONNECTIONS.** There are four discreet outputs, one for each input channel, provided on the DJ-4114A module. Each output is a single ended, low impedance driver suitable for driving loads of 2kΩ or more. Each output is provided with a two position removable screw-clamp connector. The (+) symbol designates the non-inverting signal and the (⏚) symbol represents the shield or ground connection.

The removable screw clamp connector is designed to accept either solid or stranded wire up to 12 gage in size. If necessary, multiple conductors may be terminated together if the 12 AWG equivalent is not exceeded. It is recommended that if you are using multiple conductors they should be the same AWG size. For the most reliable connection, the wires must be twisted tightly together, especially if you are mixing AWG sizes.

Removable Screw Clamp Connector Termination

Strip back 5/16" of wire insulation and then insert the bare wire into the screw clamp opening. Tighten the screw clamp down firmly onto the wire. DO NOT TIN THE WIRE WITH SOLDER !!! The cold flow of solder will loosen the connection of tinned wires.

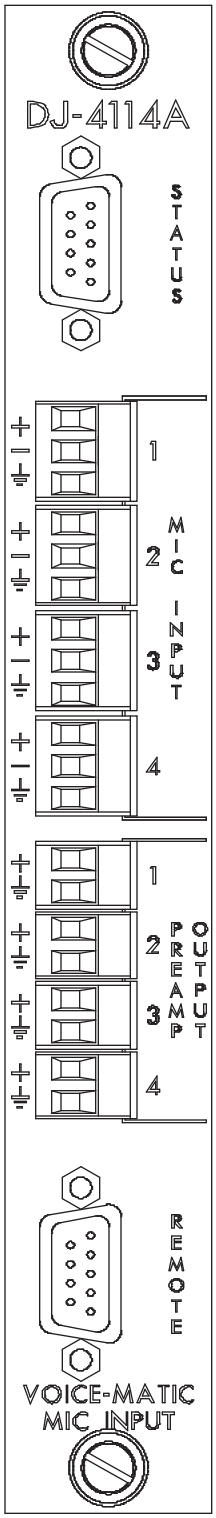
3. **STATUS OUTPUT CONNECTIONS.** Microphone status outputs are available on the rear panel of the DJ-4114A module through a 9 position D-Subminiature connector. The nine position connector pin functions are shown in the Status Pin Function Chart below. The status output is a 50 mA rated open collector circuit. The output is "low" (transistor conducting to ground) when the corresponding input channel is activated. Loads driven by the status output must provide a pull up resistor to a DC voltage between 5 and 35 volts.



PIN	FUNCTION
1	Input 1 Status
2	Input 2 Status
3	Input 3 Status
4	Input 4 Status
5	Input 1 Status
6	Input 2 Status
7	Input 3 Status
8	Input 4 Status
9	Ground

STATUS PIN LOCATION DIAGRAM

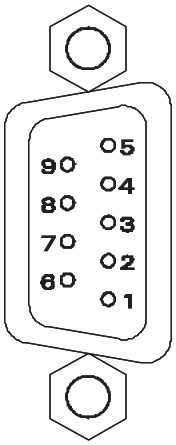
STATUS PIN FUNCTION CHART



4. **REMOTE INPUT SWITCH CONTROL.** Each microphone may be muted or switched by grounding its corresponding control pin on the rear panel nine position D-Subminiature connector on the DJ-4114A module. The nine position connector pin functions are shown in the Remote Pin Function Chart below. The corresponding control pins may be connected in parallel such that a single connection to ground will switch or mute all microphone inputs. Refer to Configuring the Module section step #5 and #7 on Input Switch Enable/Disable and Channel/Mute Attenuation -15dB/-30dB to configure the depth of attenuation when activated.

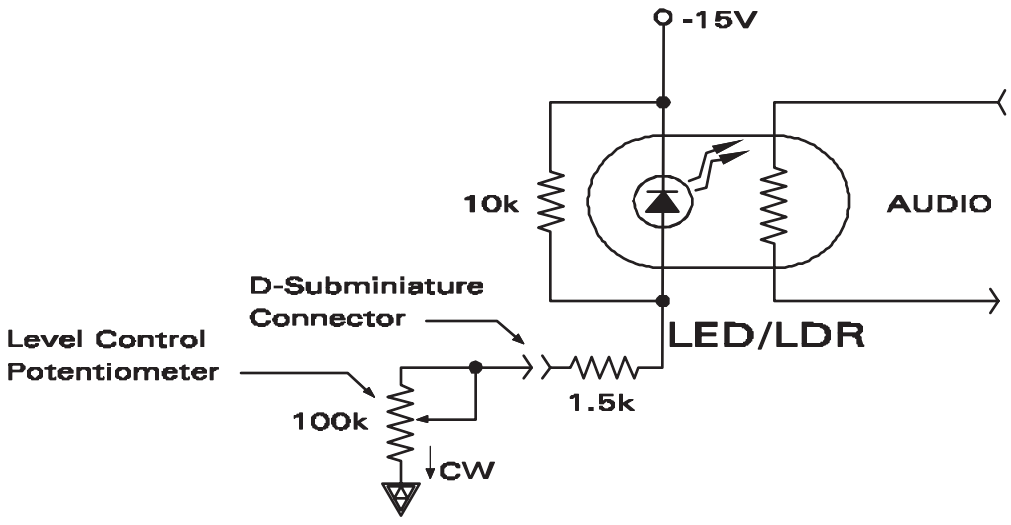
5. **REMOTE INPUT LEVEL CONTROL.** Each microphone may have its input level remotely controlled by wiring a potentiometer to itsÊcorresponding control pin of the rear panel nine position D-Subminiature connector. The nine position connector pin functions are shown in the Remote Pin Function Chart below. An illustration showing a typical wiring schematic for an input channel is shown below. Please note that a 100k_ counter clockwise log taper potentiometer is required to properly operate the level control. If desired, the potentiometer and knob can be purchased from IRP as part #105-0521 and #603-0303.

REMOTE
PIN LOCATION DIAGRAM



REMOTE
PIN FUNCTION CHART

PIN	FUNCTION
1	Input 1 Switch/Mute
2	Input 2 Switch/Mute
3	Input 3 Switch/Mute
4	Input 4 Switch/Mute
5	Input 1 Level Control
6	Input 2 Level Control
7	Input 3 Level Control
8	Input 4 Level Control
9	Ground



REMOTE LEVEL CONTROL CIRCUIT

FRONT EDGE CONTROLS

1. **INPUT SENSITIVITY CONTROL.** This potentiometer provides a 20dB usable control range of the overall channel input sensitivity.

2. **STATUS LED.** This red LED provides a visual indication of when the channel is active. When this LED is lit the channel is ON.

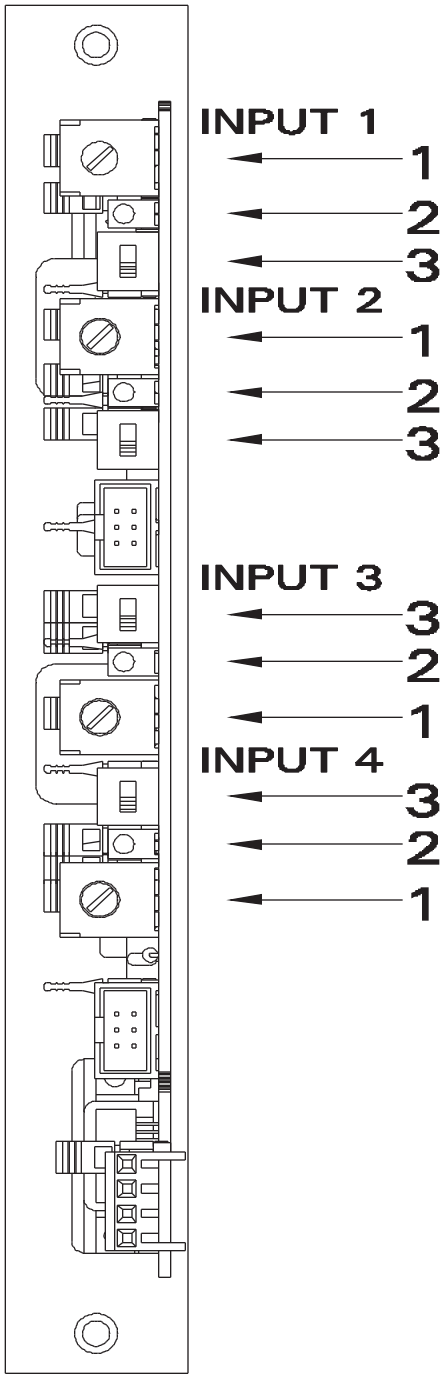
3. **AUTO/DIRECT MODE SWITCH.** This switch controls the operating mode of the input channel, either automatic (gated) or direct (always on). If the switch is in the up position it is in the automatic mode of operation. If the switch is in the down position it is in the direct mode of operation.

INITIAL CONTROL SETTINGS

1. Locate the input sensitivity controls for the channel preamps along the front edge of the DJ-4114A module. Set the input sensitivity controls to the nominal level (50% rotation). This setting is optimal for -55dB sensitivity microphones in a typical acoustic environment. Variations in microphone sensitivity, talker levels and background noise may be accommodated by adjustment of these controls. Too low a setting may result in quiet talkers being "chopped" while too high a setting may result in excessive sensitivity to room noise. If the channel is unused, set the input sensitivity control fully counterclockwise to minimize hum and noise.

2. For each microphone channel to be "on" continuously and not under Voice-Matic control, set the front mounted switch to the "DIRECT" (down) position.

3. Refer to the set up procedure manual for the DJ-4115A or DJ-4115A-1 Master Module or the DJ-4131A Linking Module for instructions on initial gain and control settings before continuing.



FRONT EDGE CONTROLS

POWER UP AND FINAL ADJUSTMENTS

1. Before starting the final adjustment procedure, verify that the room(s) in which the system is to operate is physically ready. If construction is incomplete or there are other forms of chaos occurring in the room, it will be impossible for you to perform the adjustment procedure to the level necessary to insure proper operation.

2. Before proceeding with the adjustment procedure, double check all your wiring connections for any obvious errors. This will reduce the possibility of damage to any IRP products or other components that are connected to the audio system.

3. When ready to power up the mainframe, verify that any power amplifier connected to the system is turned off to prevent the possibility of any speaker damage. If using remote level controls, set them to 60% of the available range. If using remote channel muting/switching, verify that the controls are not in the mute position.

4. With the front cover of the mainframe open, verify that the Last Mic Hold jumper on the DJ-4115A or DJ-4115A-1 Master Module is in the Standard (STD) position. If not, refer to the manual for the DJ-4115A or DJ-4115A-1 Master Module and reset the jumper.

5. Turn the mainframe on, observe the modules for any unusual activity, such as all mic channels turning on, etc.

6. Systematically have an assistant talk into each microphone in a manner duplicating conditions in which the system will commonly be used. As the test talker is talking into the microphone observe the channel status LED activity. Does the LED turn on when the test talker starts talking? Does the LED turn off when the test talker stops? If not, adjust the channel input sensitivity accordingly. Once you have adjusted the input channel sensitivity, listen to the channel using headphones or a monitor speaker. Is the test talkers voice being upcut or chopped off? If so, increase the channel input sensitivity. If the channel sounds distorted, or if it will not turn off, turn the input sensitivity down. Next, look at your settings for the channel input sensitivity. Are you at either of the extremes of the adjustment range of the channel input sensitivity control? If so, it might be worth investigating changing the gain of the channel preamplifier by resetting the gain jumper. If for some reason you still cannot get acceptable performance from the input channel, review the troubleshooting tips or call the factory for technical assistance.

7. At this point you may turn on the sound system power amplifier(s) to finish adjustment of the rest of the system. It is best for the master module to be running at near nominal level and, if necessary, to reduce the system gain at the power amplifier to the desired operating levels. If utilizing the remote level control function, turn up the remote controls to maximum gain and verify that the system does not go into feedback. If it does, reduce the gain of the power amplifier(s) until the system is stable.

8. Set the Last Mic Hold jumper on the DJ-4115A or DJ-4115A-1 Master Module to the desired setting (Last ON or STD).

9. Once your adjustments have been finalized, document them on the supplied control record. Duplicate the input sensitivity control settings and the input channel mode switch positions on the Documentation Panel and close up the mainframe. It is recommended that you photocopy the control records, keep a copy in-house and keep a copy in the rack where the mainframe is located. This will become a convenient reference during any needed future service.

TROUBLESHOOTING TIPS

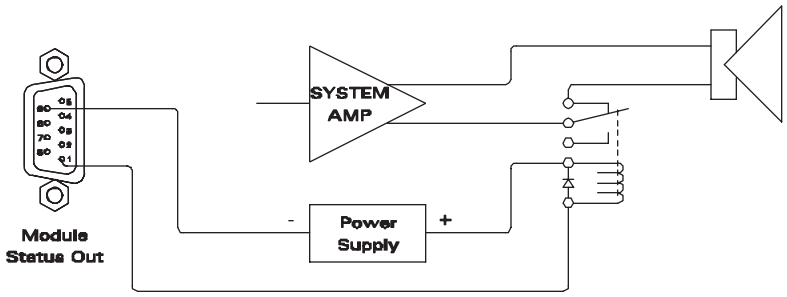
PROBLEM	CAUSE	CORRECTION
No signal activity	Module not fully inserted	Insert module completely into mainframe and secure it
	Incorrect or defective input wiring	Verify all input wiring and connections
	Source requires phantom power	Reset jumpers on module for phantom power
	Module configured for remote level control with no external connections	Reset remote configuration jumpers to bypass mode or complete connections for external remote control
	Channel input sensitivity control set to full attenuation	Rotate potentiometer to nominal (50%) position
	Channel configured for line level applications when using microphone level source	Reset jumpers on channel input for mic level input signals
	Channel remote mute function is active	Disable mute function at remote control location
	Lower ribbon cable not properly installed or damaged	Verify ribbon cable wiring and inspect for possible damage
Signal activity but no output	Upper ribbon cable not properly installed or damaged	Verify ribbon cable wiring and inspect for possible damage
	Master module not properly configured	Refer to master module installation manual
Signal sounds "thin" or "tinny"	High-pass filter is active	Reset jumpers to "20 Hz" to bypass high-pass filter
Channel will not turn off	Channel set in "direct" mode	Set mode switch on front panel up to automatic operation
	Last mic hold circuit is active	Refer to master module installation manual
Channel will not turn off on aux output	Aux bus setting on channel is configured for pre-gate operation	Reset jumper to post gate configuration
Distorted signal	Source signal excessive for input channel configuration	Reset jumper on channel to reduce gain or set jumper for line level inputs
	Source signal exceeds maximum allowable levels	Verify source signal levels and reduce to within specifications
When speaking into one channel the adjacent channels are activated	Channel Input Sensitivity controls are set too high	Reduce channel input sensitivity on adjacent channels
	Microphone directivity patterns overlap	Review microphone placement, microphone polar response, and alter placement or change out microphones for one with a tighter directivity pattern

STATUS OUT APPLICATIONS

On the back of the DJ-4114A input module is a 9 position D-subminiature connector provided with a set of status out connections from each input channel. The status out connections are designed for use in applications where external switching based on the state of the input channel is needed. Since the status out is an open collector circuit and does not provide power, loads connected to it must be provided with an externally supplied power source of 5 to 35 volts.

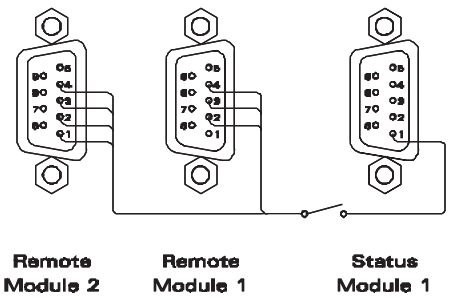
1. **SPEAKER SWITCHING.** In some applications loudspeaker placement is required in close proximity to a microphone. Such a situation is prone to creating feedback in the audio system. One solution to this problem is to use the status output to drive an external relay to interrupt the loudspeaker when the microphone is active. Below is an illustration which depicts a typical wiring scheme for a speaker switching circuit.

When driving relays or any other inductive load, be sure to include reverse biased diodes across the load to prevent damage to the status outputs during switching.



2. **PRIORITY OVERRIDE.** A common function utilized in courtrooms, council chambers or board rooms is referred to as a chairman or priority override. The purpose of this function is to allow a person to take command of a meeting by overriding the automatic mixing functions of the audio system. In this situation all microphones are muted except for the priority microphone. This feature can easily be implemented by using the status output of the priority microphone to control the mute functions of the remaining microphones. A single status output has the capability to safely mute up to 100 input channels. The diagram below shows a typical wiring diagram for the override function.

It is important to take into account that there are times when the priority overide function is not desirable. Since the priority microphone is unable to discriminate between an intended signal (such as the speakers voice) from an unintended one (such as a cough or a door slam) the priority microphone can sieze control of the audio system at inappropriate moments. It is strongly recommended that the momentary switch shown in the illustration be utilized.



FIVE YEAR LIMITED WARRANTY

Five Year Limited Warranty: IRP warrants to the original purchaser each product manufactured by it to be free from defect in material and workmanship for a period of five years from date of sale to original purchaser, and agrees to remedy any such defect, or to furnish a new part in exchange for any part of any product of its manufacture which, under normal installation, use and service, discloses such defect provided such part or product is returned by the original purchaser to the IRP factory within five years from the date of sale, with all transportation charges prepaid, and provided that IRP examination discloses that it is defective.

This warranty does not extend to any IRP product which has been subject to misuse, neglect, accident, incorrect wiring by others, improper installation, or to use in violation of instructions furnished by IRP, nor to products on which the serial or identifying numbers have been removed, defaced or changed, nor to accessories used therewith not of IRP manufacture.

IRP's obligation under this warranty as to any products or parts approved by IRP for remedy or exchange is limited, at its option, to replacing such products or parts in kind without charge to the original purchaser, or to crediting the original purchaser with the purchase price of the returned defective products.

This warranty is in lieu of all other warranties, express or implied, and no representative of IRP or any other person is authorized to assume for IRP any other liability in connection with the sales of its product.

Should you encounter any problems with your IRP product, be sure to contact either your local authorized IRP dealer or the IRP factory before taking it anywhere for repairs. We will help you to identify and locate any specific malfunctions, possibly avoid needless shipment, or instruct you as to the speediest method for authorized repair.

If you must send your IRP product to the factory for repair, be sure to contact the IRP Sales Department for a Return Authorization Number.

Include the following information with the returned product.

1. Your complete name and return shipping address.
2. The model number, serial number and the Return Authorization Number.
3. A complete and detailed description of any and all problems you are experiencing with the product.

Never ship the unit in any shipping carton other than the original or a replacement supplied by IRP! Ship to us only by a reputable carrier. Be sure to insure the package for the full replacement value. IRP cannot be held responsible for any damage incurred during shipping.

If for some reason you need further assistance concerning the installation, operation or repair of your IRP product, please feel free to contact our office at (800) 255-6993 or fax us at (708) 860-1997.

Control Record

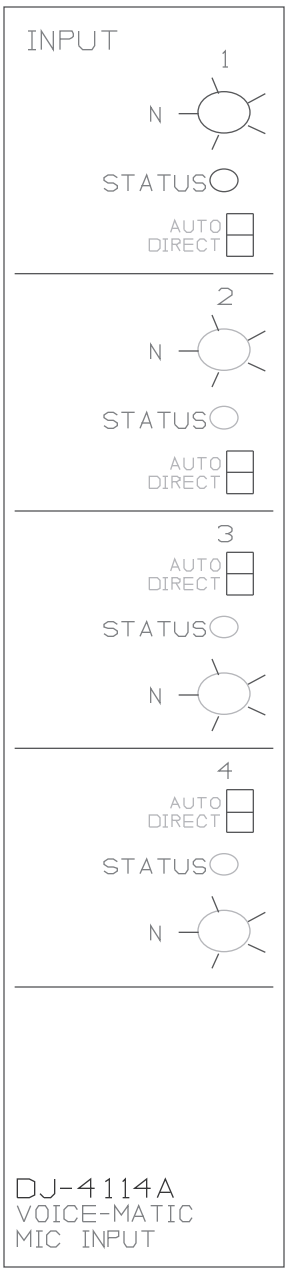
DJ-4114A
VOICE-MATIC® MICROPHONE INPUT MODULE

Record on the Documentation Panel pictorial to the right all front panel control settings. This must match the Documentation Panel in the mainframe. Record on the jumper configuration chart below all jumper settings for this input module.

JUMPER CONFIGURATION CHART

FUNCTION		CH1	CH2	CH3	CH4
Mic/Line Level Input	*Mic				
	Line				
Phantom Power	*ON				
	OFF				
Preamp Gain	* +40dB				
	+20dB				
Remote Level Control Bypass	*Bypass				
	Remote Level				
Input Switch	*Disable				
	Enable				
High-Pass Filter	*20 Hz				
	100 Hz				
Channel Gate Attenuation	*-30dB				
	-15dB				
Auxiliary Bus Assignment	*Pre-Gate				
	Post-Gate				
Preamp Output Assignment	*Pre-Level				
	Pre-Gate				
	Post-Gate				

* Factory Setting



Mainframe # _____

Module Position # _____

Contractor _____

Installer _____

Job _____

Date _____