



# **USER'S MANUAL**

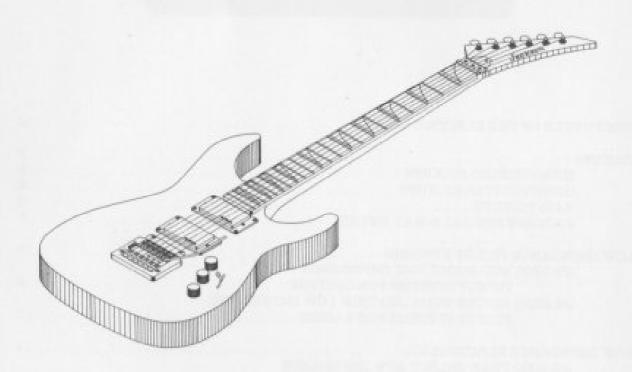
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### THE FUTURE OF THE ELECTRIC GUITAR

Ever since the guitar went electric, guitarists from all fields have sought to "personalize" the sound of their instruments by changing everything from strings and pickups to bridges and cables.

For many the search is for just that right "crunch" while others seek the perfect "grind" or a classic "sweet, round distortion".



Whatever the sound you are looking for, we can help you find it. This illustrated guide to Jackson Electronics is designed to answer your questions about the world of guitar and bass electronics.

In addition to informing you about our full line of High and Low Impedance Pickups, you will find information in these pages that describes some of the new systems and electronics our engineers have developed over the past few years.

From our Low Impedance Electronics to our full blown Low Impedance Pickup Systems for Guitars and Basses, Jackson Electronics is preparing the guitar for the 21st century.

#### PICKUPS

Traditionally, the ordeal of chosing a replacement guitar or bass pickup has only been made further complicated by the voo doo and mumbo jumbo pickup companies have employed for years to promote their products.

Here at Jackson, we learned the hard way. In the early days of production, problems with the performance and consistency of major name pickups made us determined to de-mystify the entire process and develop our own line of pickups.

We gave our specialists free rein to experiment, together with our artists, and to come up with a specific range of pickups to satisfy our very specific range of sonic requirements.

Then, with state of the art winding machines and precision tooling, we set up America's newest pickup assembly lines. Our goal was to build perfect pickups without cutting corners -- pickups of high enough quality to be made standard equipment on every Jackson guitar and bass sold.

All Jackson pickups are constructed with the highest quality materials available. As mechanical specifications are of the utmost importance, we hold the tightest tolerances possible. These mechanical specifications apply to both the manufacturing of the components and the assembly process. Each pickup is firmly wax potted to eliminate unnecessary feedback and all pickups undergo 7 individual electronic tests during the assembly process to ensure quality and uniformity.

The majority of our pickups use Alnico magnets. The name "Alnico" is derived from ALuminum, NIckle and CObalt; the three main elements in its composition. The high metalic content of the Alnico magnets produces more energy in the lower frequency region which translates into a "warmer" sound.

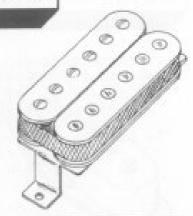
Some of our pickups incorporate ceramic magnets into their design. Ceramic magnets provide increased output of higher frequencies. This tends to accentuate upper harmonics and translates into a "brighter" sound.

Use the following four pages to help you find the pickup that will best satisfy your needs.

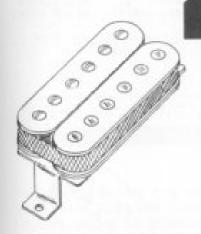
J-80C HIGH OUTPUT CERAMIC HUMBUCKING

The J-80C delivers that gritty "crunch" that so many are looking for. By replacing the Alnico magnet in our J-80 humbucker with a Ceramic magnet, we have combined that full-bodied, high output signal with accentuated high frequency response. The result is a smooth overdriven sound with a distinctive, crisp edge.

INDUCTANCE (In K Ohms) (In K Hz) (@ Sr in M Ohms) (In Henries) (0ST) 19.1 13.00 7.3



### J-90 ULTRA-HIGH OUTPUT HUMBUCKING



4.7

5.40

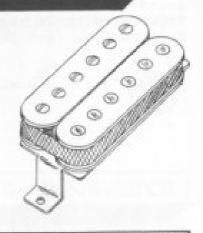
Our J-90 humbucking pickup features even more turns of magnet wire to give you an even higher output voltage and a nice, fat mid-range sound. This pickup is ideally suited to guitars made of heavy woods. Its big signal and sensitivity to mid-range harmonics makes it perfect for tight, chunky rhythm playing.

INDUCTANCE (@ Sr in M Ohms) (In Henries) (In K Ohms) (@Sr) (In K Hz) 19.6 15.93 6.1 10.5 4.70

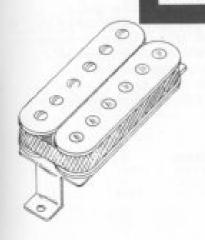
### J-90C ULTRA-HIGH OUTPUT CERAMIC HUMBUCKING

If you are looking for that perfect heavy metal grind, then the J-90C is your pickup. This is, without a doubt, our highest output pickup -perfect for heavy weight bodies. Its Ceramic magnet takes the fat mid-range sound of the J-90 and accentuates the upper harmonics to give you a finer balance between the low-mids and highs.

RESISTANCE INDUCTANCE (In K Ohms) (In K Hz) (0 Sr in M Ohms) (In Henries) (\$ST) 18.8 15.93 9.8 4.88 5.6



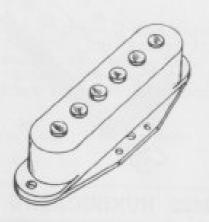
#### HUMBUCKING J-95 HIGH OUTPUT WIDE-BAND



The J-95 combines high output voltage with wide band response to give you a sweet, round kind of distortion. By making this humbucking pickup sensitive to the broadest spectrum of frequencies possible without over-accentuating any of them, the J-95 delivers both chunky rhythm textures and a rich, round lead voice.

INDUCTANCE (In K Hz) (8 Sr in M Ohms) (In Henries) (8Sr) 9.2 16.6 5.00 4.8

# J-100 VINTAGE SINGLE COIL

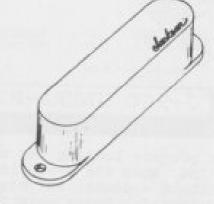


Modeled after the authentic vintage single coil pickups used by Fender in the late 50's and early 60's, our J-100 gives you a higher output and warmer tone than the bright, thin sound of post '62 Strats. Furthermore, we have modified the staggering of the pole pieces to conform to contemporary neck shapes and the more popular string guages of today. In addition, this pickup is copper shielded to greatly reduce the electromagnetic interference normally associated with single coil pickups.

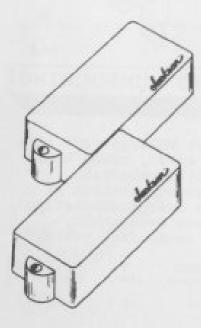
(In K Hz)	(0 Sr in M Ohms)	INDUCTANCE (In Henries)	Q (@Sr)	RESISTANCE (In K Ohms)
6.10	1.7	2.6	16.7	6.10

### J-200 BI-LEVEL LOW IMPEDANCE

We designed the J-200 as the perfect low impedance counterpart to our J-100 Vintage Single Coil. Its special Bi-Level construction with two wound bobbins stacked on top of each other creates a humbucking effect that completely eliminates the noise characteristic of a single coil pickup. Meanwhile, you get that traditional vintage sound and more. Use this pickup only together with Jackson Low Impedance Electronics. (see page 10)



(In K Hz)	(0 Sr in M Ohms)	INDUCTANCE (In Henries)	(esr)	RESISTANCE (In K Ohms)
9.80	1.8	2.4	12.6	11.6

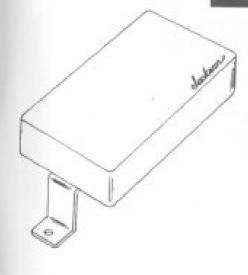


### J-20 SPLIT COIL P-BASS

The J-20 is our version of the original late fifties P-Bass pickup with double pole pieces and split coil construction. The J-20 features more turns of magnet wire than P-Bass pickups of the last twenty years to increase output and the essential mid-range punch. This P-Bass pickup is perfect for the rhythm position with a humbucking effect that greatly reduces unwanted noise.

(In K Hz)	(8 Sr in M Ohms)	INDUCTANCE (In Henries)	Q (@Sr)	RESISTANCE (In K Ohms)
9.45	13.7	6.7	34.6	11.5

### J-40 HIGH OUTPUT BASS HUMBUCKING



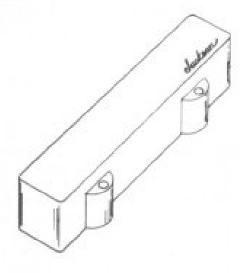
For those who like a loud and hot bass sound, we recommend the J-40 high output humbucker for bass. By incorporating a ceramic magnet we've eliminated the muddy rumble of typical bass humbuckers and accentuated the mid-range frequencies to give big bass notes a clarity of pitch that is too often lost in live performance. The result is a distinct mid-range wallop.

(In K Hz)	(0 Sr in M Ohns)	INDUCTANCE (In Henries)	(esr)	RESISTANCE (In K Ohns)
5.32	4.5	7.9	17.0	15.5

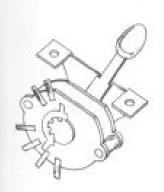
#### J-150 SINGLE COIL JAZZ BASS

Our version of the original Fender design of the late fifties incorporates more turns of magnet wire to produce a stronger mid-range and a tighter bottom end. We've also added wraps of copper tape to sheild this big single coil pickup from electromagnetic interference and greatly reduce unwanted noise.

(In K Hz)	(0 Sr in M Ohns)	INDUCTANCE (In Henries)	Q (@Sr)	RESISTANCE (In K Ohms)
5.61	1.6	3.2	14.1	8.0



### JE-0005 JACKSON SPECIAL 5-WAY SWITCH



We believe this to be the most revolutionary innovation in pickup switching in years for guitars with two humbucking pickups. In addition to getting Front, Back, and Front & Back switching capabilities the Jackson 5-Way switch gives you sounds usually associated with Strat pickup configurations. For instance, position #3 splits your humbuckers and gives you the two inside coils and a sound that duplicates the middle and bridge pickups on a Strat. Meanwhile, position #4 gives you the outside coils and the sonic equivalent of a Strat's neck and bridge pickups -- a sound that conventional Strats can't even give you.

#### LOW IMPEDANCE PICKUP SYSTEMS FOR GUITARS AND BASSES

For years we have done research and development in the field of pickups and guitar electronics in an effort to come up with the "ultimate" systems for guitars and basses.

Now, for those of you who are considering completely updating an instrument we offer you four new systems for guitars and four new systems for basses (including our revolutionary new Piezo Bass System).

All of our systems take the proven quality and characteristic sounds of our Jackson pickups and combine them with our new Jackson Low Impedance Electronics. The results are perfectly matched pickup and electronics combinations that give you all the advantages of low impedance with a full range of sounds from vintage to raw to hi-tech.

Jackson Low Impedance Systems give you the essential "buffering" that is so important to modern guitarists and bassists. Never again will the sound of your instrument be affected by the tone coloring properties of different length chords, pedals or effects. Jackson Low Impedance Systems preserve the integrity of your instrument's sound.

Too many players have been terrorized too often by unwanted buzzes and hums that can create chaos in a recording session. Jackson Low Impedance Systems are resistant to the disturbing effects of florescent lights and radio signals. And the low impedance output signal means that you can plug directly into a mixer board without going through a direct box.

Our JE-1200 Mid-Boost Low Impedance Pickup Systems For Guitars feature our special Mid-Boost control for variable control of the warm low-mids of your sound.

The JE-2000 Active Equalization Low Impedance Pickup Systems For Bass give you incredible tone control with +12 dB boost or -12 dB cut at 40 Hz and 2,500 Hz.

All of our Systems feature the latest in I.C. circuitry with extremely low power requirements. This means that one 9 volt Alkaline battery can give you up to one year of trouble free performance.

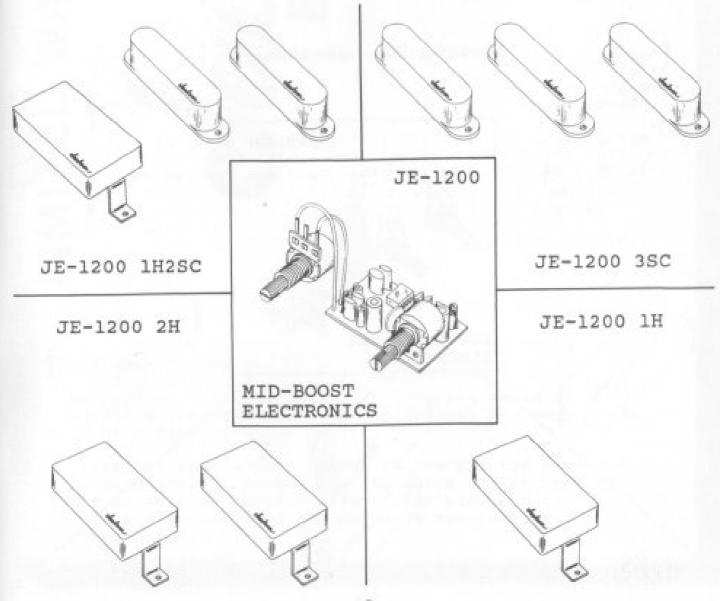
Each System includes matched pickups and electronics, and all of the hardware necessary for installation.

### JE-1200 MID-BOOST LOW IMPEDANCE PICKUP SYSTEMS FOR GUITAR

Our JE-1200 Low Impedance Pickup Systems make it possible for you to totally update and upgrade your guitar with the same perfectly matched pickups and electronics used in our top-of-the-line Jackson guitars.

Available with four different pickup configurations for the widest range of sonic options, the JE-1200 Systems all feature our Mid-Boost control making it possible for you to radically modify your sound in performance. Use the Mid-Boost knob to warm up a cutting lead voice or "fatten" a chunky rhythm sound.

Each System comes with a volume control, a tone control, a Mid-Boost control, our JE-1200 Low Impedance Electronics, your choice of Jackson humbuckers and/or our new J-200 Bi-Level Low Impedance Pickups and all of the hardware necessary for installation.



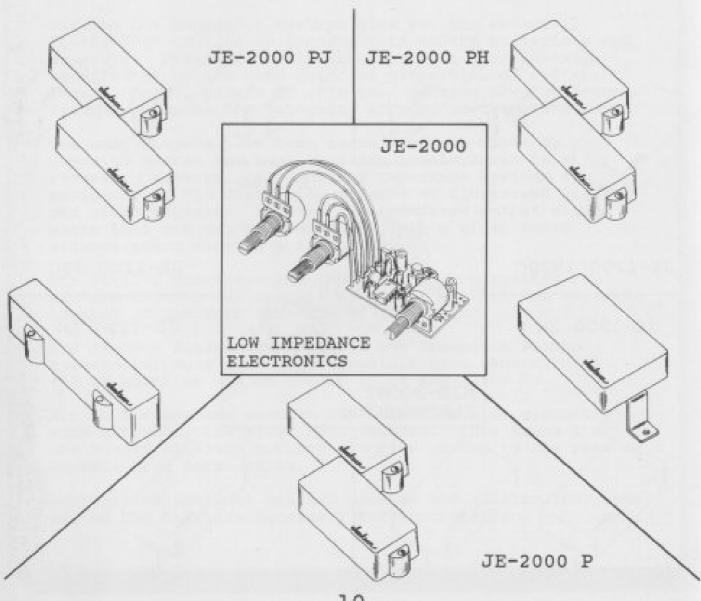
#### JE-2000 ACTIVE EQUALIZATION LOW IMPEDANCE PICKUP SYSTEMS FOR BASSES

Jackson's JE-2000 Bass Systems are the ideal means of completely modernizing your bass. Our perfectly matched pickup and electronics combinations give you all of the advantages of low impedance with the incredible tone control afforded by the JE-2000's active e.q. controls.

Bass and Treble controls give you +12 dB of boost and -12 dB of cut at 40 Hz and 2,500 Hz for incomparable sonic control. And the JE-2000's low impedance output allows you to plug directly into a mixer without having to go through a direct box.

By incorporating the latest I.C. circuitry with very low power requirements, you get up to one year of trouble free performance out of a single 9 volt alkaline battery.

The Jackson JE-2000 Bass Systems come with our J-20 P-Bass pickup alone or together with either our J-150 Jazz Bass pickup or our J-40 High Output Bass Humbucker. All systems include the necessary hardware for installation.

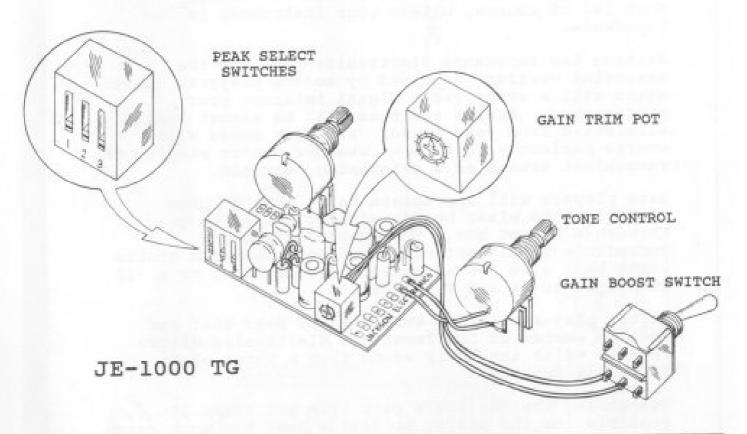


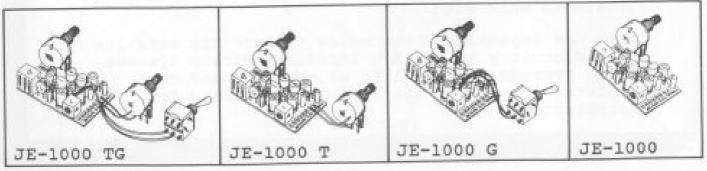
#### JE-1000 PEAK SELECT LOW IMPEDANCE ELECTRONICS FOR GUITAR

The JE-1000 Series is for those musicians who want the advantages of low impedance without the cost of replacing their existing high impedance pickups.

The JE-1000 board features our 8 position Peak Select function which allows you to "dial in" your sound by selectively loading your pickup(s). Three micro switches built into the circuitry make it easy to shift your pickup's resonant frequency to capture the desired tone -- a tone that won't be affected by switching cables or effect boxes.

Your choice of the optional Tone Control and/or Gain Boost Switch make the JE-1000 Series the ideal way to update your guitar.





#### JE-1500 PARA-MID E.Q. LOW IMPEDANCE ELECTRONICS FOR GUITAR

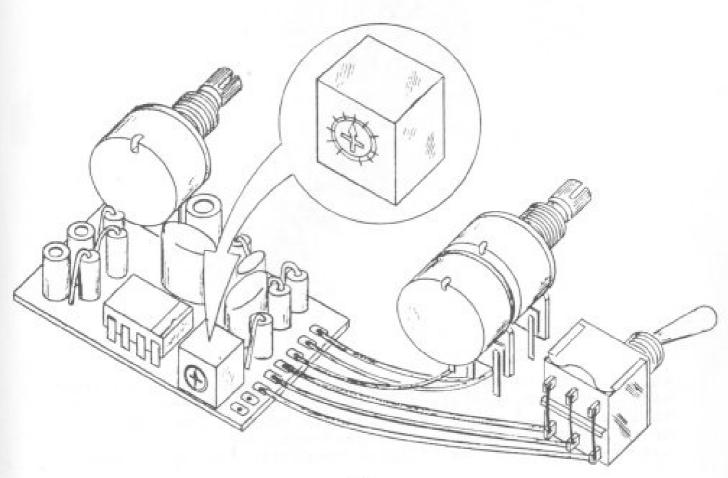
The JE-1500 gives you incredible tone control of both clean and distorted signals.

Use the Frequency Control Knob to select the center of any group of frequencies from 450 Hz to 4,500 Hz and then hit the mini-switch to boost those frequencies as desired. The JE-1500's on-board trim-pot allows the user to simultaneously adjust the intensity and "Q" Factor of the "boost" according to his own taste.

Use these controls to dial in a shimmering transparency or a gritty "crunch". Adjust the Frequency Control Knob during solos to change from a "nasal" sounding distortion to a wide open "wail".

In addition, the JE-1500 "buffers" your instrument from the variable pickup loading and tone coloring effects of everything conncected to your guitar, from different length cords to wireless systems to signal processors.

The JE-1500 also incorporates our R.F. Suppression Circuit and low power I.C. circuitry for longer battery life. The System comes with all of the hardware necessary for installation.

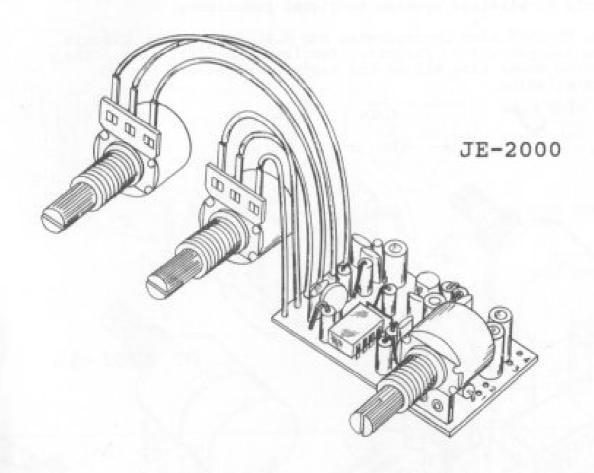


#### JE-2000 ACTIVE EQUALIZATION LOW IMPEDANCE ELECTRONICS FOR BASSES

Our JE-2000 Low Impedance Electronics for basses make it possible for you to update and upgrade your instrument without replacing your existing pickup configuration. The JE-2000 will pump new life into your bass, giving you tremendous control over a wide tonal range as well as all of the advantages of low impedance.

Bass and Treble controls give you +12 dB of boost and -12 dB of cut at 40 Hz and 2,500 Hz for incomparable sonic control. And the unit's low impedance output eliminates the usual hassle with direct boxes.

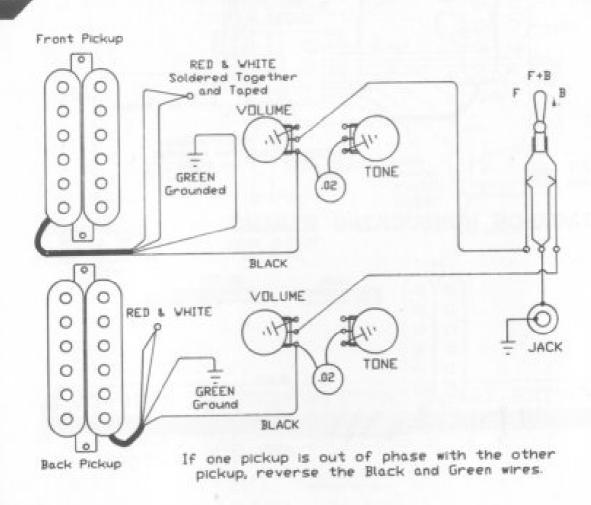
The JE-2000 also provides the essential "buffering" that is so important to modern bassists. This means that you need no longer be concerned with the variable pickup loading effects of everything connected to your bass from different cables to effect boxes. The JE-2000 will preserve your instrument's integral sound.



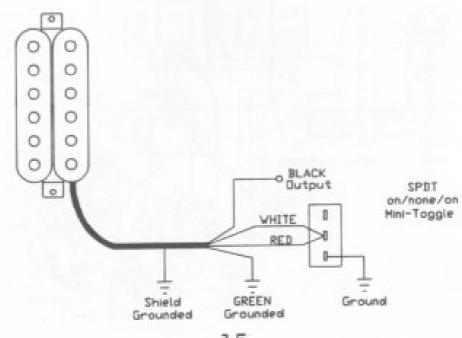
The JE-2000 incorporates the same low power I.C. circuitry used in all Jackson Electronics for extended battery life. This means that one 9 volt Alkaline battery can give you up to a year of trouble free performance. The JE-2000 comes with all of the hardware necessary for installation.

# WIRING DIAGRAMS

# STANDARD HUMBUCKING OPERATION



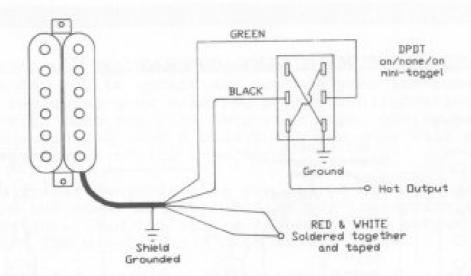
SPLITTING - WHEN PICKUP IS USED BY ITSELF



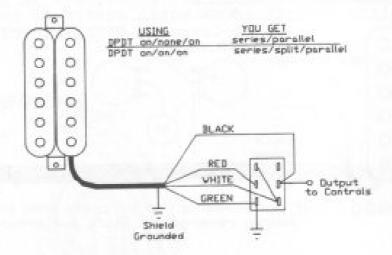
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### PHASING - WHEN USED WITH ANOTHER PICKUP

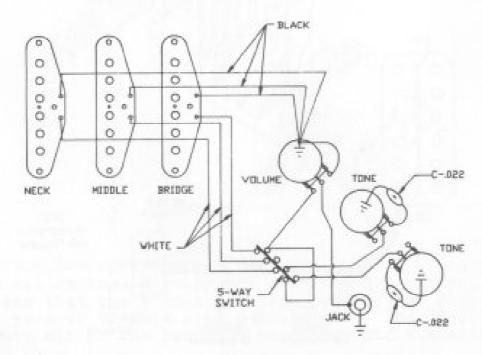




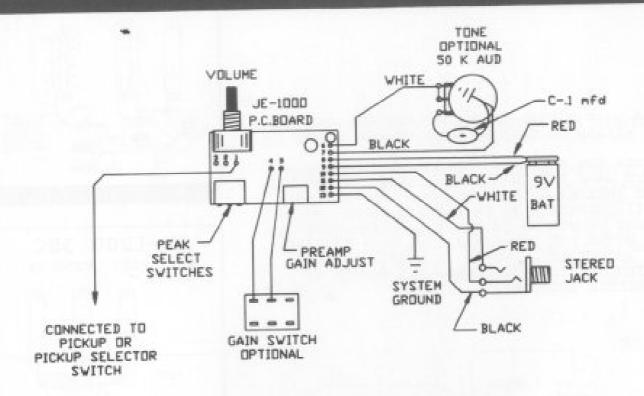
### 4. JACKSON HUMBUCKING WIRING



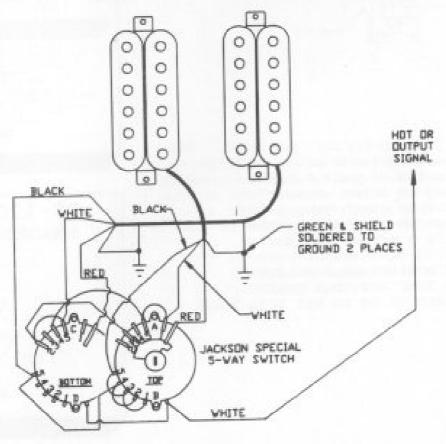
### SINGLE COIL HOOKUP



# JE-1000 LOW IMPEDANCE ELECTRONICS FOR GUITARS



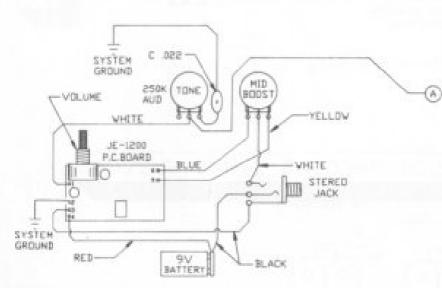
### JE-0005 JACKSON SPECIAL 5-WAY SWITCH



#### JE-1200 INSTALLATION

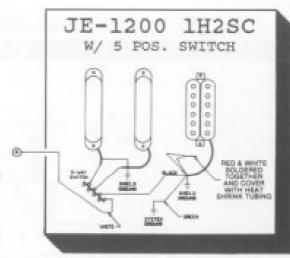
Find your pickup configuration and complete the wiring of your pickups as indicated.

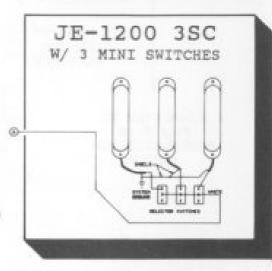
Locate the 6 numbered pinholes on the p.c. board used for this installation: #1 to hot lead (either with or without the tone pot) as illustrated; #2 to system ground; #3 to ground on stereo jack; #4 to battery; #5 to Mid Boost pot (prewired); #6 to Mid Boost pot (prewired). NOTE: ALL GROUNDS AND SYSTEM GROUNDS ARE COMMON AND SHOULD BE CONNECTED TOGETHER.

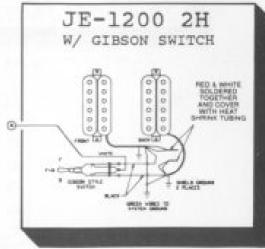


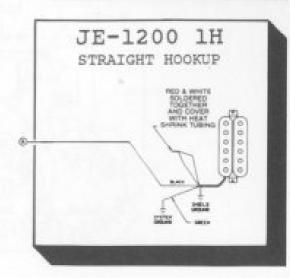
NOTE: Care must be taken when soldering connections to the circuit board to prevent solder bridging to other connections in the proximity. Double check your solder joints, both on the top and bottom of the board to verify a proper connection.

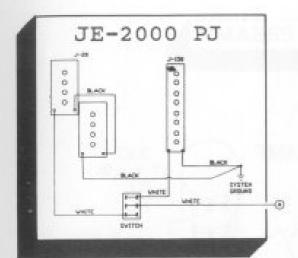
IF YOU DO NOT POSSESS GOOD SOLDERING SKILLS, REFER THIS JOB TO A QUALIFIED PERSON. FAILURE TO DO SO MAY VOID YOUR WARRANTY.







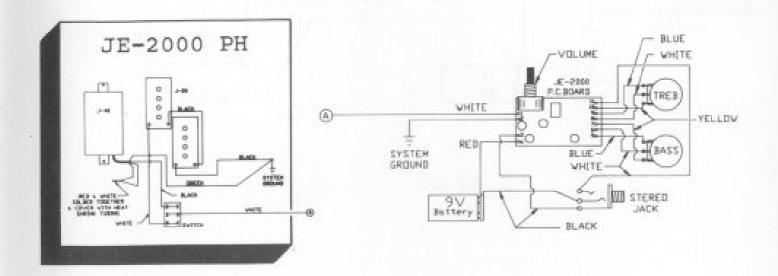


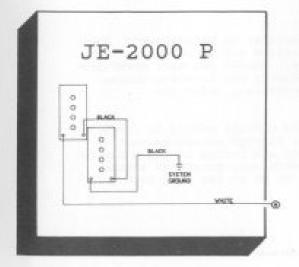


### JE-2000 INSTALLATION

Find your pickup configuration and complete the wiring of your pickups as indicated.

Locate the 11 numbered pinholes on the p.c. board. The ones used for this installation are: #1 to hot lead "A" as illustrated; #2 to system ground; #3 to ground on stereo jack; #4 to battery; #5 thru #10 to e.q. pots (prewired); #11 to tip connection on stereo jack. NOTE: ALL GROUNDS AND SYSTEM GROUNDS ARE COMMON AND SHOULD BE CONNECTED TOGETHER.

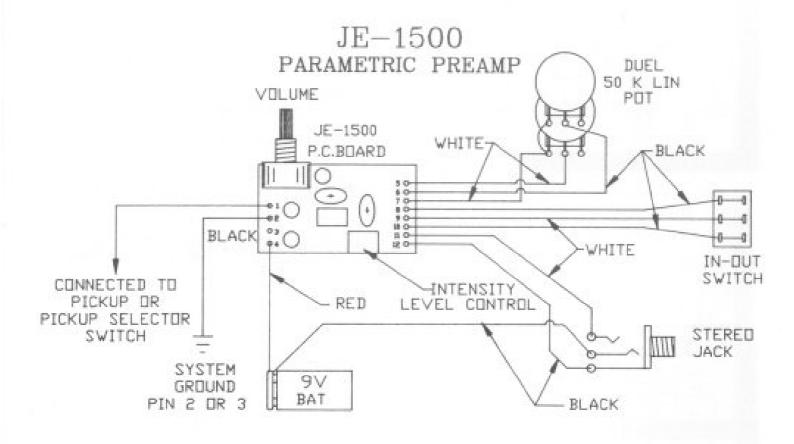




NOTE: Care must be taken when soldering connections to the circuit board to prevent solder bridging to other connections in the proximity. Double check your solder joints, both on the top and bottom of the board to verify a proper connection.

IF YOU DO NOT POSSESS GOOD SOLDERING SKILLS, REFER THIS JOB TO A QUALIFIED PERSON. FAILURE TO DO SO MAY VOID YOUR WARRANTY.

#### JE-1500 PARAMETRIC PREAMP



#### GENERAL NOTES

Whereas instrument wiring does vary from manufacturer to manufacturer, the diagrams shown on these pages are Factory Authorized wiring schemes. Failure to follow them could void your warranty. Should you have questions about your instrument's particular wiring, or should you have any doubts about your ability to install your Jackson Electronics, refer the installation to qualified service personnel.

Care must be taken when soldering connections to circuit boards to prevent solder bridging or damages to nearby components through excessive heat. Double check your solder joints, both on the top and bottom of the board to verify a proper connection. IF YOU DO NOT POSSESS GOOD SOLDERING SKILLS, REFER THIS JOB TO A QUALIFIED PERSON. FAILURE TO DO SO MAY VOID YOUR WARRANTY.