Mi-Si Align XT

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- L.R. Baggs undersaddle pickup
- Power Charger

OVERVIEW

The Mi-Si Align XT is a direct replacement for the Taylor Expression System. It features an active, battery-free preamp designed specifically to work with the L.R. Baggs Element undersaddle acoustic guitar pickup. This enables Taylor fans to take advantage of Mi-Si's innovative battery-free technology.

The Align XT comes standard with volume and active bass and treble controls that fit the exact spacing of your Taylor's existing Expression preamp. You can also use the same knobs from the Expression System, so the appearance of your instrument remains unchanged.

The Align XT preamp uses Mi-Si's custom piezo linearization scheme - allowing for the most truthful and accurate sound from the pickup. The battery-free design is a benefit for both the stage performer and the environment. All you have to do is power up for 60 seconds using the Mi-Si Power Charger, providing you with up to 8 hours of performance time.

CAUTION

- Mi-Si strongly recommends professional installation of your Align XT pickup / preamp system.
- Please read the installation instructions before proceeding.
- Mi-Si will not be responsible for any damage to your instrument or personal injury resulting from installation, improper installation or any misuse of the product.
- Use only the Power Charger provided with this package to power up this product.
- Use of any other power supply or modification of an existing power supply may cause permanent damage to the system and will not be covered under the warranty.

PICKUP INSTALLATION

The Mi-Si Align XT System includes the L.R. Baggs Element Pickup. This flexible under-saddle piezo pickup provides superb response and is easy to install.

Note: For optimum performance of the Element pickup, the bridge slot must have a clean, flat surface free of any debris or over-spray from the finish.

The slot must be a minimum of .125" (1/8") deep, but we suggest a depth of at least .187" (3/16") to avoid excessive saddle tilt.

Follow the 50/50 Rule: The amount of saddle visible above the bridge surface (with the pickup installed) should be no greater than the amount of saddle in the slot beneath the bridge surface; otherwise the balance and output of the pickup may suffer.

Inspect the inside of the guitar and note the position of the braces and the pickup in relation to the saddle slot. Drill at the end of the slot on the side that will enable you to avoid all braces as you penetrate the top **(FIGURE 4)**. Blow out the slot with compressed air and check for remaining debris.

Important: Round out the inside of the hole where it meets the bottom of the slot with a small, sharp knife or a small file to avoid pinching the pickup as the saddle sits on it.

Figure 1

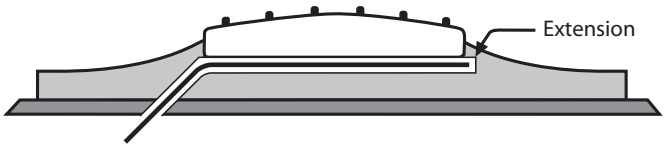


Figure 2

Normal Saddle: Drill Floor

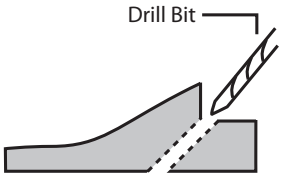


Figure 3

Short Saddle: Drill Side Wall

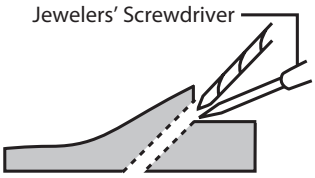


Figure 4

This view depicts the bridge at an angle level with the guitar top and perpendicular to the saddle slot. Note the rounded edge where the hole has been drilled.

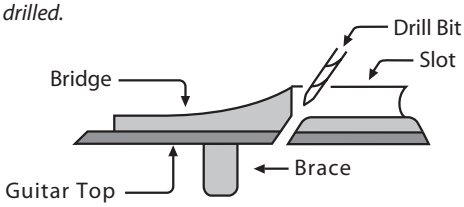
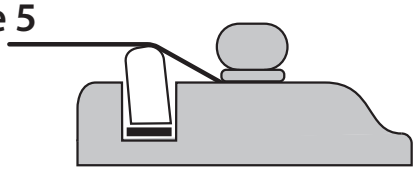


Figure 5



Proper saddle / pickup contact
(exaggerated saddle lean)

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Mi-Si Align XT Cont'd

Feed the pickup into the slot from inside the guitar with either side up. Inserting a toothpick or similar object through the hole from the outside is helpful in finding the location of the hole inside the guitar.

Important: The fit of the saddle in the slot is the single most important factor in this installation. It is crucial that the bottom of the slot and the lower surface of the saddle be flat and make even contact with the pickup. The saddle should fit loosely enough so that it can be pulled out with your fingertips.

The saddle will then have a slight forward lean when the strings are under tension. It is absolutely necessary to compensate for this slight lean by sanding a tilt in the bottom of the saddle so it still sits flat on the pickup when the strings are at tension **(FIGURE 5)**.

If the saddle is too tight, binds at all, or is too loose, this will have a negative effect on the string balance and output. Set the saddle in the slot, noting how much material must be removed to compensate for the thickness of the pickup. Sand the bottom surface of the saddle on a belt sander until the scribe line is just above the bridge top. Finish sanding the bottom by hand. It is best to do this against a machined flat surface with fine sandpaper. Use a straightedge with a strong light source to inspect the flatness of your saddle.

Insert the pickup all the way into the slot, place the saddle on top of it, and temporarily secure it with a piece of tape. Secure the wire with a wire clip as close to the exit hole as is practical, with a one- to two-inch service loop.

Failure to secure the wire may produce boominess and feedback. Restring the guitar, and plug into your amp or PA. Confirm that the EQ controls are at their default positions and test the Element, paying careful attention to string balance. If the sound is satisfactory, proceed to the next section. If not, read on.

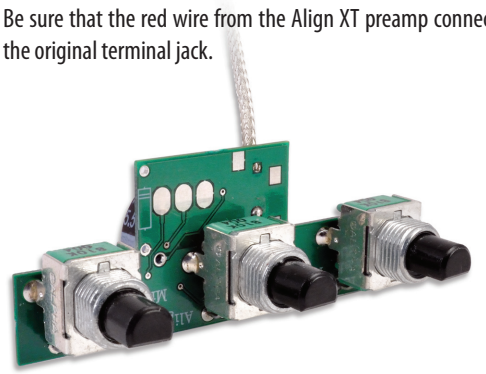
String balance problems are almost always the result of an uneven interface between the bottom of the saddle and the saddle slot. If the string balance is uneven, check these surfaces to ensure that they are both completely flat.

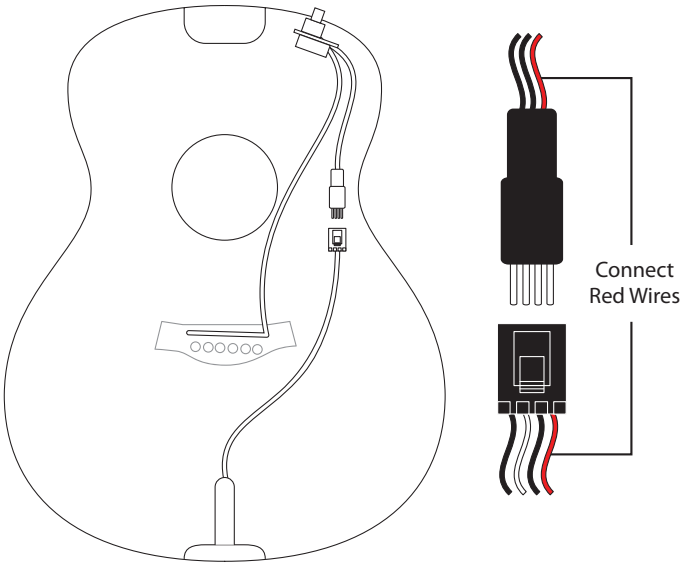
Tip: A segmented packaging knife blade is useful for determining the flatness of a saddle slot. Break off enough blade segments so as much of the blade fits into the slot as possible. Briefly use a back-and-forth scraping motion to see if the slot bottom scrapes evenly. Any high or low spots will be readily apparent. A minor low spot in the slot may be compensated for by shims under the pickup; however, for gaps over .005" or multiple gaps, we recommend rerouting the slot.

OUTPUT CONNECTION

Before installing the Align XT preamp, disconnect the terminal plug that connects the original preamp to the output jack. Then remove the original preamp and replace it with the Align XT preamp. The Align XT preamp has a 4 pin plug that connects to the original terminal jack connected to the endpin jack.

Important: Be sure that the red wire from the Align XT preamp connects to the red wire from the original terminal jack.





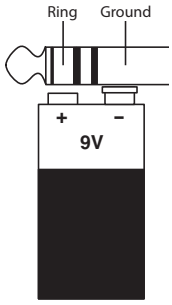
CHARGING AND PLUGGING IN

To charge the Align XT Preamp, plug the Power Charger into a 120/220 V AC outlet. Then plug in the Power Charger 1/4" stereo plug into the preamp's endpin jack and wait 60 seconds. Now you're pickup is ready for 8 hours of performance time (actual playing time may vary depending on playing style).

You can plug your instrument into ANY input of ANY system or amplifier regardless of input impedance. In the same manner, you can use ANY type of shielded MONO cable - regardless of its capacitance. Your sound will not be altered. You can enjoy the benefits of an active amplified system without worrying about batteries.

Tip: Using the Power Charger to power up your preamp is truly remarkable. But what if you forgot or lost your Power Charger? Don't worry! Although we don't promote the use of batteries, in this case all you need to power up your system is any stereo cord and a common 9V battery.

Plug the stereo cord into your instrument. Hold the 9V battery so that the positive terminal is touching the Ring of the stereo plug and the negative terminal is touching the Ground. Hold it for 60 seconds and you are ready to play for 8 hours. The system will not be damaged by accidentally connecting the battery in wrong direction.



LIMITED WARRANTY

The warranty period is one (1) year from the date of purchase. During this time, Mi-Si Electronics Design, Inc. will replace a faulty unit at their discretion. This warranty does not cover any consequential damages or damage to the unit due to misuse, accident or neglect. Mi-Si Electronics Design, Inc. retains the right to make such determination based on results of inspection performed at the factory. Products returned to Mi-Si Electronics Design, Inc. for repair or replacement must be shipped in accordance to Return Policy, as follows ...

RETURN POLICY

Mi-Si Electronics Design, Inc. will accept returns for products purchased within 30 days from receiving the goods. To return products to Mi-Si Electronics Design, Inc. you must do the following:

1. Email Mi-Si Electronics Design, Inc. at sales@mi-si.com describing the reason for the return.
2. Enclose a copy of the original Bill of Sale with the product in its original undamaged packaging. The package must be returned in damage resistant packaging stuffed with appropriate amounts of cushion.
3. Warranty repairs or replacements will be sent automatically free of charge.
4. The customer will not be refunded shipping or insurance costs. Additionally, return shipping charges, including insurance, are the sole responsibility of the customer unless the return or replacement is determined to be the fault of a Mi-Si Electronics Design, Inc.

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