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GWNN Original Wipe-Lacquered Electronic Guitar (Patent Pending)



How can an electronic guitar or bass maximize its expressive potential? Materials, hardware, and solid technical skills and knowledge of the luthier — they are all essential, but we wanted something more. What GWNN came up with is to paint the guitar body with Japanese lacquer — the world's finest natural coating material.

High Durability Created by Tradition

Japanese lacquer or *urushi* is the purified sap of the urushi tree. It is as strong and lasting as nitrocellulose lacquer or polyester, which are common coating materials for musical instruments. In certain conditions, Japanese lacquer can even display stronger durability than these compounds. In Japan, the lacquer has long been used to coat tableware and houseware as well as, in the past, for samurai sword scabbards and armors.

At GWNN, we use this natural paint for electric guitars, but we do not spray it or simply paint the surface with a brush. We rather apply a traditional method called *fuki-urushi* or wipe-lacquering, the process in which raw urushi is rubbed on to the wood surface many times to enhance the natural beauty of the wood's grain. This is a rather time-consuming process, but the very thin lacquer film thus created on the wood surface, unlike the one thickly coated, displays totally unique appearance as well as high durability.



Incredibly Smooth and Accurate Response

Not only it offers uniquely beautiful appearance, urushi — because it is a natural material made from tree sap itself — matches so naturally with the wood body that the player can feel the smoothness and richness on the surface. The thinness of its coating film enhances the response of the guitar to the player's intention. Once combined with high-accuracy hardware and pickups, the wipe-lacquered guitar can provide superb sound that no other high-end guitars can compete with, even using the body of a mass-production model.

Process

STEP 1



First, scrape the existing paint using an electronic sander. In order to remove the polyester coat, which is almost penetrating into the wood, use force and forget about some small scars you may have to leave with the sander. Our veteran craftworkers then polish the surface carefully to erase the scars.

STEP2



Because the normal type of urushi lacquer tends to change its color to darker brown when wipe-lacquered and solidified, we use a transparent type of lacquer called *nashiji-urushi*, which is resistant to discoloration over time. Mix the lacquer with color pigment and dilute the mixture with turpentine, a distilled oil from the resin obtained from woodchips or sawdust of pine trees. Apply the liquid over the bare wood, and then wipe it with a soft cloth. This unique process, which is the distinctive feature of wipe lacquering, reinforces the wood.

STEP 3



After the first paint-and-wipe process and coloring, the body is dried in a high-humidity drying closet called *urushi-buro* or lacquer bath. The temperature inside the closet is maintained between 20-25 degrees C (68-77 degrees F) and the humidity between 75-85%. The laccase enzyme contained in urushiol, an oil content of the urushi sap, reacts with oxide and moisture content in the atmosphere to form polymer resin and solidifies urushiol.

STEP4



After another paint-and-wipe process of the nashiji-urushi solution diluted with turpentine, apply the paint-and-wipe process a few more times but this time with colored urushi. This seems similar to the see-through painting process, but the process is quite different because the wipe lacquering requires painting multiple times. These processes may be the main feature to create the beautiful texture that is unique to the wipe-lacquered guitar.

STEP5



Next, paint and wipe with nashiji-urushi only. In order not to disturb the created color, we do not add pigment here. Simply repeat this process more than a dozen times to obtain the rich aesthetic tone.

STEP6



This is how the body looks after applying the above step 5. Because we use a cloth to wipe the lacquer at this stage, the body is not yet glossy enough.

STEP7



After repeating the paint-and-wipe process for about 10 times. From this point, we use soft paper instead of cloth to have some amounts of lacquer remain on the surface to give the body a nice gloss.

STEP8



Mix a superior quality lacquer with the one we have used so far to add further paint-and-wipe applications. By gradually upgrading the quality of the lacquer and by changing the touch of the wipe, we add a glossy finish.

STEP9



Attach hardware and pickups to finish the setup. The guitar now has a unique touch and feel that the original model had never had.