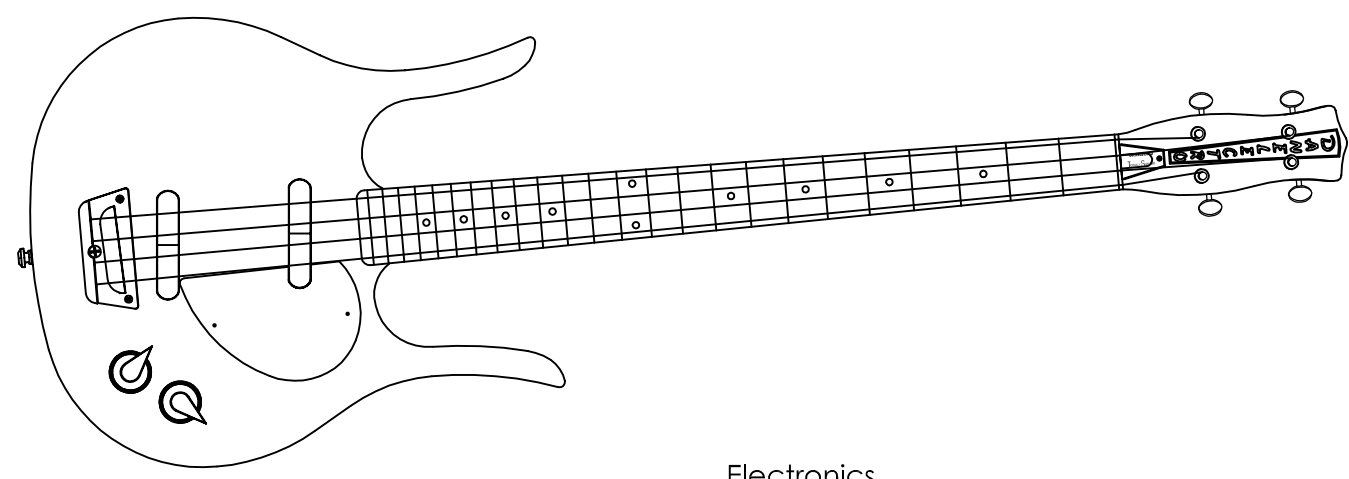


# DANELECTRO

## "Dead on '58" Longhorn



The original Danelectro Longhorn series were produced between 1958 and 1968. Three models were issued: a four string bass (#4423); a six string bass (#4623) and a guitarlin (#4123). This Danelectro "Dead on '58" Longhorn is a free interpretation of the #4423.

**The Body**  
Original Longhorns where constructed by gluing two plates of Masonite over a pine frame. This resulted in a lightweight, strong, but quite resonant body, which was very cheap to produce. In the old catalogues there is specially stated that aliphatic resin glue was used. This yellow glue is most famous in the version of Tilebond Original. Modern Longhorns are constructed using two plates of hardboard plate (or is it MFR) glued over a CNC-routed multiplex frame.

**The Bridge**  
Like the originals the "Dead on '58" has a "4-way adjustable bridge" with rosewood saddle. The earliest examples of this bridge where made of aluminum, but later we also find examples of stainless steel (1956-1960) and chromed brass (after 1960). Although not perfectly adjustable and sustainable -they tend to bend down in the middle-, this bridge is a beautiful example of well-thought simplicity. It's cheap to produce, light and adjustable over quite a long range, in all directions you'll need. Modern versions of this bridge tend to be more complex, featuring a block to hold the strings and even individual metal saddles. I suggest to make your own bridge. Simply cut it out of a strip of aluminum stock and put it on your body using a couple of simple chromed Philips screws (neck attachment screws would be fine). The rosewood saddle is secured by a small screw through the underside of the bridge. To make the intonation more adjustable I would use two small rosewood saddles instead of one large piece. This opens the possibility to adjust the intonation of every string individually.

**The Neck**  
Danelectro instruments had necks made of Poplar, a quite light and soft wood. This was reinforced with two steel I beams, to insure a never-warp neck. This example is made of maple and features a dual action trussrod (left out in the drawing). The original necks had Rio (!) Rosewood fretboards. Genuine plastic position markers where not glued but force fitted. The whole was attached to the body by three screws in a line or later a triangular pattern. The "Dead on '58" neck is made of Maple. It's mother of pearl dots are glued into the 12" radius Indian Rosewood fretboard. On this example it's attached to the body by four screws. Instead of the two steel strips we find a double action trussrod dealing with the stress put on by the strings. The frets are medium sized.

The headstock is placed under a five degree angle and profiled in the characteristic Danelectro "coke bottle" shape. Instead of a glued on transfer the logo on the originals was silkscreened. Nice touch is the trussrod cover: it commemorates the Totally Shielded, sticker often found on old Danelectros. Kluson style tuners with plastic buttons add to the vintage appeal of the bass, although metal ones would be more traditional.

### Electronics

Key ingredient to the sound of the Danelectro are the "lipstick" pickups. Unlike other guitars they're held in place by screws from the back. They are quite low in resistance, but when both on they are wired in series for extra pressure. This wasn't intended, but the parallel wiring would have required a slightly more expensive switch! On the earliest models the pickups are placed more closely to the neck, like an early violin-basses or the guitarlin model. The controls are two concentric knobs, volume and tone per element; a brown plastic ring and a white painted wooden pointer (on the new model also in plastic). There's a wire connected to the screw on the treble side of the bridge in order to ground the strings.

The output jack is a simple switchcraft style model fitted on a small metal plate on the side of the guitar. On originals everything was shielded. Even the jack was fitted in a small metal container.

### Finish

Longhorns where finished in a two tone white-copper sunburst. The new model has a small band of red between these two, thus resulting in a warm three tone sunburst. The pine frame is concealed by a glued on band of textured vinyl tape.

### Strings

The bass is factory fitted with flatwounds:  
E - 2.45mm ~ .096  
A - 2.10mm ~ .078  
D - 1.55mm ~ .061  
G - 1.20mm ~ .047

It seems the Danelectros where originally equipped with a set of flatwounds like the La Bella "Deep Talkin' bass 760 FD" (J42-079). If you like roundwounds it's suggested to find a set of d'Addario "XL 155 Guitar/Bass Jerry Jones 24-84" strings. This is a baritone set, but if you just throw away the two highest strings you'll have a new set for just under thirteen euro's!

### Disclaimer

I've drawn this plan out of enthusiasm and appreciation for the original Danelectro instruments. To me these masonite guitars represent a category in their own right. Plain and simple, but also light and innovative. With a body of cheap masonite and pine they go against a lot of conventions in lutherie. They prove that you don't need to have expensive high-quality woods to build great sounding instruments. And although they're not the best instruments you've ever come across, you will sure enjoy building and/or playing them.

It's not my intention to make money (it's not for sale or resale), violate copyrights, offend or discriminate people with this plan. Like I said, it's made out of appreciation for Nat Daniels work and to encourage people to build unconventional, innovative instruments. I've found a lot of valuable information on the net and in Doug Tulloch's book "Neptune Bound". Special thanks to Chris P. Dekker, for lending me this instrument. No animals were harmed in the making of this plan, although my two cats were seriously confused.

If you want to know more, or have pictures of your instrument build after this plan, please contact me at: janinvaanderen@hotmail.com

Yours,

Jan van Coppelle

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