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On the Face of It, A Good Idea

How to ace those finishing touches on your home-brewed pride-and-joys.

Sometimes all the hard work and technical expertise that goes into creating your own home-brewed equipment can be for naught if the finishing touches of the unit are less professional-looking than the remainder of it. Some prior planning and carefully applied labels can be the difference, producing a piece that works and looks great.

hen deciding to make a particular unit - let's just suppose the project is to be a QRP receiver - take a good look at the schematic and identify all of the variable controls, e.g., RIT, VOLUME CONTROL, TUNING CONTROL, AUDIO FILTER CONTROL, etc. Next, lay out the controls according to their usage. For a right-handed operator this usually means placing the tuning control either in the center of the front panel or to the extreme far right side of the front panel. Other controls are placed from the left edge of the panel. Placing the tuning control on the right side or center of the panel creates an easier, more comfortable operating position for the operator. Avoid placing the headphone jack near the tuning control. The plug and wire protruding from the panel often interfere with the operator's hand motion during tuning, and can be avoided by placing this jack as far away as possible.

in the area to the right provided there is ample room. Use your own judgment here. See Photo A.

knobs you intend to place on the controls, ensure that the outer edge or "skirt" of each knob clears the bottom edge. Knobs having a flare or "skirt" on their outer edge call for more room at the bottom of the panel for clearance. Lettering to be placed below a control also requires additional space. Large knobs block the operator's view of the lettering, especially on smaller pieces of equipment. The identity of controls not easily visible to the operator can be confusing during operation and detract

The "key" jack can be placed immediately above or below or alongside the "phone" jack if the tuning control is on the right side. If the tuning control is in the center, other jacks can be mounted

Before drilling holes to mount front panel controls, measure the needed height from the bottom of the panel to ensure that variously sized controls will "fit" above the bottom edge of the front panel.

Once you are satisfied that all the controls will fit acceptably, measure how far up the panel the mounting holes will have to be placed. Now, using the



Photo A. Finished project with tuning control in the center.

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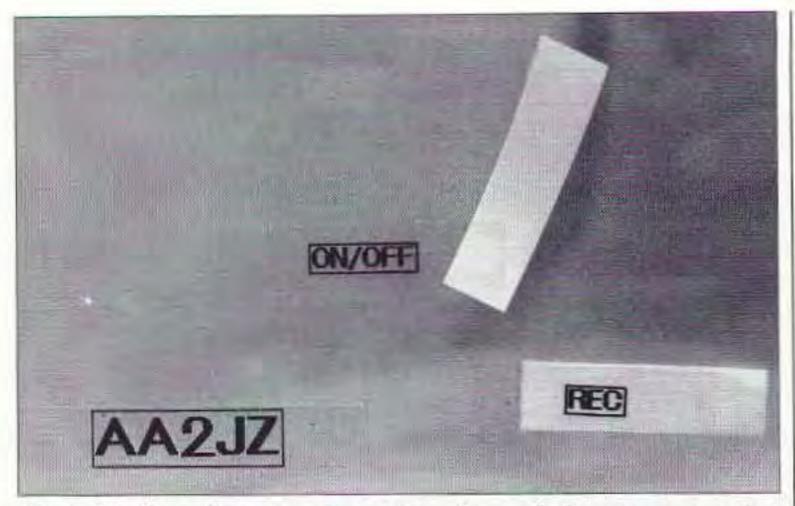


Photo B. Place lettering on a clean sheet of glass to ensure that you can make straight cuts when you remove the excess backing material.



Photo C. Painter's tape is used to guide lettering into perfect alignment.

from the "professional" appearance desired in a finished project. This also applies to multiple rows of controls. Allow additional space between rows for lettering if needed.

Lettering the project requires some prior planning. I use a "tape writing machine," a device which uses clear tape with white or black lettering imposed on it. With this device I can select a type size or style that pleases me and fits the area available on the front panel. Computer-printed lettering can be used. Experiment with various gummed labels, paper, and adhesivebacked tape on label sheet backings to see what is acceptable to you.

After typing and printing the required data, I peel the backing and adhere the tape or label to a clean sheet of glass. Avoid putting finger prints in the adhesive material. They are often impossible to remove, and are readily visible forever. Use the tip of an object (knife, razor blade, screwdriver, etc.) to pick up the label and place it on the glass. Once applied to the glass, using a straight edge and razor, cut away the excess backing material and leave only the desired lettering. I usually cut away the bottom excess material in a straight line. Doing this will enable me to evenly place lettering along a straight edge later. See Photo B. With the front panel removed from the project, without knobs or jacks attached, use painter's masking tape to create a straight line for placement of lettering. Painter's tape is an adhesive-backed paper tape used for masking during painting and is easily removed without leaving a residue. Office "clear tape" and other tapes I have tried sometimes peel paint finish from the freshly painted panel. This can be very disconcerting. Painter's masking tape is available at most hardware or home improvement stores and is very inexpensive. This also provides a resting surface for your fingers that will protect the surface of the panel from scratches and contaminants. With the tape in place providing a straight edge, pick the needed label up from the glass using the tip/point of a razor knife or tweezers. Moving them in this manner avoids placing unwanted fingerprints in the adhesive on the back of the label. Carefully place the label where desired, ensuring that the edge of the label is parallel with the straight line provided by the painter's tape. When all labels to be placed along the line have been applied, remove the painter's tape. Rub down labels to ensure total adhesion and removal of air pockets, etc. Once all labels have been applied, carefully place knobs on the panel to prove to yourself that adequate clearance has been allowed and that lettering is aligned correctly, and that you haven't misspelled any words. See Photo C. Once you're satisfied with your front panel, it can be clear-coated with clear spray, which will protect the lettering from wear and effectively make the clear backing disappear if you are using a clear tape method. When creating your front panel, paint a scrap piece of the material with the paint you intend to use. Apply "practice" lettering to it, and then spray it with the clear coat you plan to use. Different types of sprays from different manufacturers are often not interchangeable. The resulting piece using the wrong products produces a slimy, wrinkled mess which is very disconcerting following all of your careful planning and work. I cannot over emphasize this careful selection of products prior to doing all this work. The "masterpiece" you have labored lovingly over now has a more professional appearance, using materials easily available. The keys to a clean look are planning, patience, and care.

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Good luck! And enjoy showing off your latest creation!

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