

**Cable Handling** 

Managing cables around a computer desk is difficult and must be considered in the design and construction of the desk itself. The cables must not trail over the back of the desk were they will be crushed against the wall. The cables must not form a visible mess that detracts from the beauty of the desk.

Computer cables can be handled if planned for in the design of the desk. This requires three things: interior compartments for the cables or cable ways, good looking holes through the desk top or grommets, and mounts to secure the cables. Woodware Computer Furniture Designs include all three.

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# 1. Cable Ways

In most of our designs the cable way is an compartment under the desk top at the back. Usually frame members cross this area, so they are cut through with holes specifically for the cables.

It is not the size of cable but the size of the connectors that determines the necessary size of the hole. The largest commonly used computer connector is for the printer. These will just pass through a hole 2.25 inches in diameter.

In tight areas you may wish to cut two 1.25 inch holes and cut out the material between. Be sure that the resulting oval hole is big enough for the printer connector.

Round all edges in the cable way with rasps and sandpaper.

Sometimes the cable way is enclosed. Be sure that you do not glue it up completely. At least a few boards must be easily removed with a screw driver.

## 2. Cable Managements Grommets

To install a computer you need holes through the desk top large enough to pass the cable connectors. Once installed only a small hole is needed for the actual cables. Whatever you do, the finished treatment must look good for it will be in plain site.

The cable management grommet is the speciality piece of hardware designed just to do this job. The cable holes may either be round or rectangular with rounded corners. A plug covers most of the hole after the cables are installed.

Cable management grommets are available from speciality mail-order woodworker's supply houses. Most are made of plastic and are just plain ugly. A few are made of metal, look great, and are just plain expensive.

Figure #5 shows a cable management grommet you can make. It consist of a hardwood plug to match the desk top and a piece of plywood. Two or three of these go along the back of the desk and provide a way to drop the cables out of sight quickly. With the plug removed the hole is large enough for big connectors. With the plug installed there is only enough room for the wires.

These plugs look best if turned on a lath. If you do not have a lath, you can make the grommets with a hole saw. The type of saw with cup shaped blades and a separate mandrel work best.

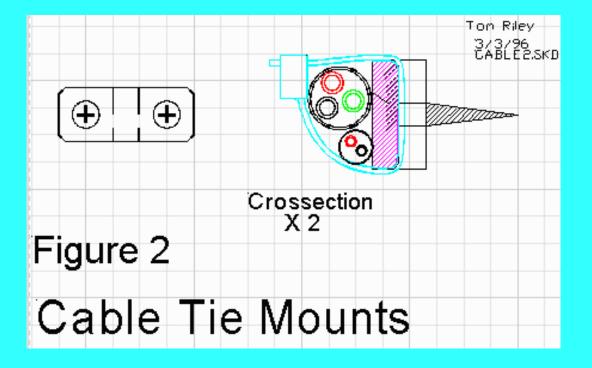
The plywood support is cut out to a low a 2.25 inch connector to pass through yet to provide support for the plug. It is attached up under the desk top with glue and small brads.

The top part of the plug has a portion cut away for the cables to pass. The lower part of the plug

helps keep it in place.

If you cut the plugs out with a hole saw you will have to go back and plug the center drill hole. You need a hole cutter one size larger then the one used to actually cut the hole in the desk top. Sand the plug to fit.

Thoroughly sand all parts to remove sharp edges. The cables must not pass over sharp edges. You will need to relieve the edge on only a portion of the back of the holes through the desk top.



### 3. Cable Tie Mounts

Figure #6 shows a cable tie mount. These provide a secure mount for bundles of cables up under the desk top and down the legs. The ties are screwed to the desk and cables are held to the mounts with a plastic cable tie.

Cable tie mounts can be bought from an electronics store but are not usually available to woodworkers. Fortunately, they are easily cut from scrap hardwood.

Wooden cable tie mounts need to be about 1.25 inch by .25 inches by .5 inch. They have a .25 inch slot cut across there bottom for the cable tie and are drilled for two number six screws. They should be made of strong straight grained wood.

They are easiest to make in long strips. Cut the stock long and lay out a dozen or so at time. Be sure to allow room for the saw cleft.

Drill the screw holes with a Screw Mate drill with the stock clamped in a vise. Then sand the

sticks be sure to thoroughly round all edges.

Finally cut the strips into individual die wrap mounts and sand the ends.

You will need about two dozen cable tie mounts for a computer desk. Each held in place with two 5/8 inch #6 screws.

The tie wraps are easy to obtain in most hardware and automotive stories. You need ties .25 inches or less wide. Black ones last must better than white ones.

### 4. Closing

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