

# HOWTO: Compression Connectors

by [computerwiz\\_222](#) on February 23, 2008

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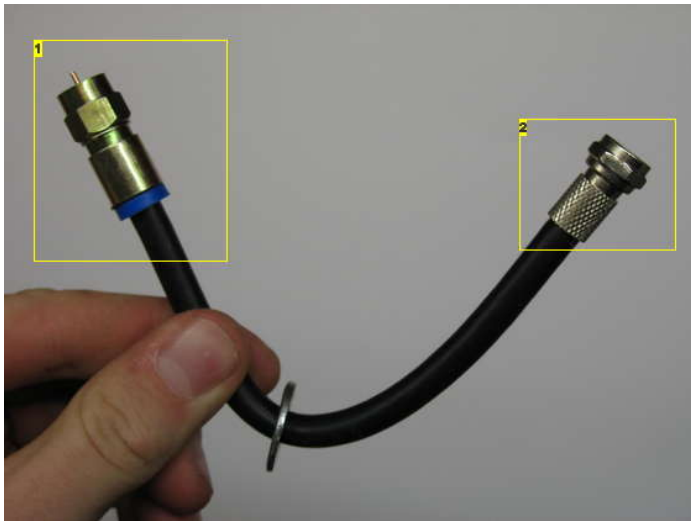
## intro: HOWTO: Compression Connectors

If you know anything about satellite, cable or antenna installations, you know about F connectors and how much of a pain they can be to crimp. Recently, a new type of connector has become popular. They are called compression connectors. The connectors are relatively cheap, but the tool used to crimp them costs quite a bit. In this video, I will show you how to build a jig to crimp these for free!

Water proofing is a very important asset to have when making RG-6 cables because if water gets into the braided shield and it rusts, your whole cable could go to waste.

Sometimes, I even use an RTV silicon with the waterproof connectors.

This video pretty much sums up this instructable.



### Image Notes

1. The compression connector. This type of connector is waterproof and provides an excellent connection.
2. A lossy twist-on connector. This type of connector is cheaper, but is NOT waterproof.

## step 1: Supplies

For this project, you will need:

- a drill with a 9/32 or similar bit. The hole you will drill will accept RG-6 so make it close.
- two 1 inch square pieces of plywood. Thickness is no issue.
- a vice or c-clamp for portable crimping
- the connectors

Snap-N-Seal connectors come in F, RCA, BNC and others that I have not heard of yet. They are the greatest thing to grace the face of the earth when installing an antenna on the roof and you need to crimp. If you decide to use my method to crimp it cheap then it tends to be harder, but if you have the official crimper, it works GREAT!

If you only do a couple of connectors a year for personal use, I would recommend the method outlined in this instructable. If you do hundreds of them, shell out 25 bucks for the economy crimper. I have personally used the economy crimper to do HUNDREDS of connectors and it has worked great EVERY time. I work in an electronics shop and we make custom length RG6 cables for customers while they wait or shop around. When it gets busy, the crimper is a great thing!



#### Image Notes

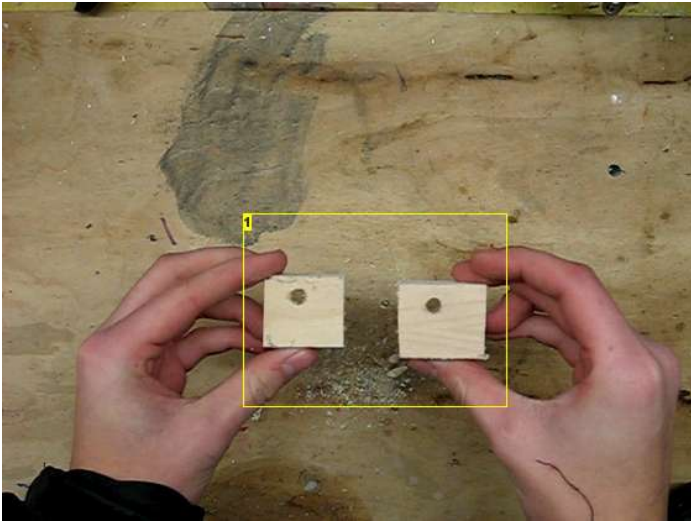
1. 1 inch square. You could use any size, as long as it fits in your vice.
2. 9/32
3. C-Clamp from the dollar store. (lol)
4. A gift from technology gods...
5. An awesome drill once used to finish my basement (battery = NICD, you do the math)

### step 2: Start Your Engines!! (your electric drill that is...)

This step is very simple. Simple line up the two squares of plywood and drill through both of them! Can you handle it?

When you are done, you will have two squares of wood with a hole in almost the same place. Measurements are not necessary.

When you drill the hole, drill it somewhat close to the edge of the wood to make the next step easier.



#### Image Notes

1. Eye see you!

### step 3: Cut

This step is a little trickier than the last.

Take a saw of choice and cut a notch down into the hole you drilled on one of the pieces of wood. You want to be able to get the cable down into the hole, so cut the notch big enough to accept the RG6.



**Image Notes**

1. You want a notch similar to this.

**step 4: Crimp!**

Now you are ready to crimp the connector. This is pretty straight forward.

Optional Step 1:

Slide a washer onto the cable to make the crimp come out cleaner. Do this before you slide on the connector. This step is strongly recommended because without it, the crimp is VERY difficult to do. The only problem with this step is that you are left with a washer on your cable when you are finished.

Step 2:

Strip off 1/2 inch of the cable down to the solid copper core.

Step 3:

Remove 1/4 inches of the black cover and shield. Leave the white internal core intact.

Step 4:

Slide on the connector.

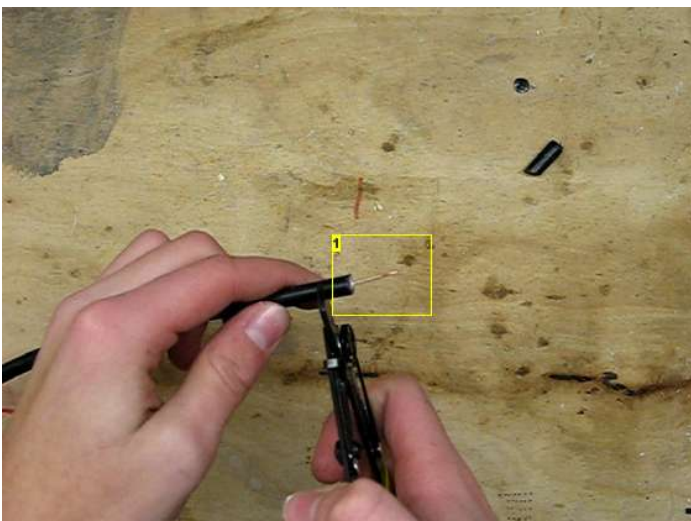
Step 5:

Put the cable into the jig. Refer to the picture for help with this. It is difficult to explain.

Step 6:

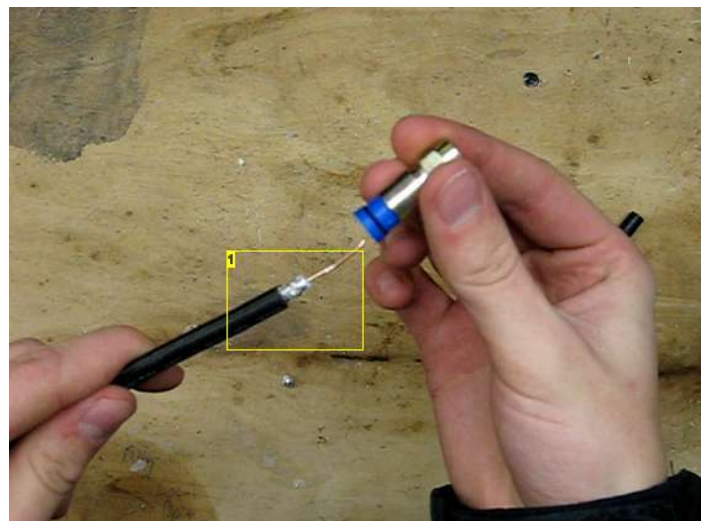
Tighten the vice!

You should have a nice crimp on the end of your cable. If you don't get it the first time, try again. It takes 1 or 2 to get it right.



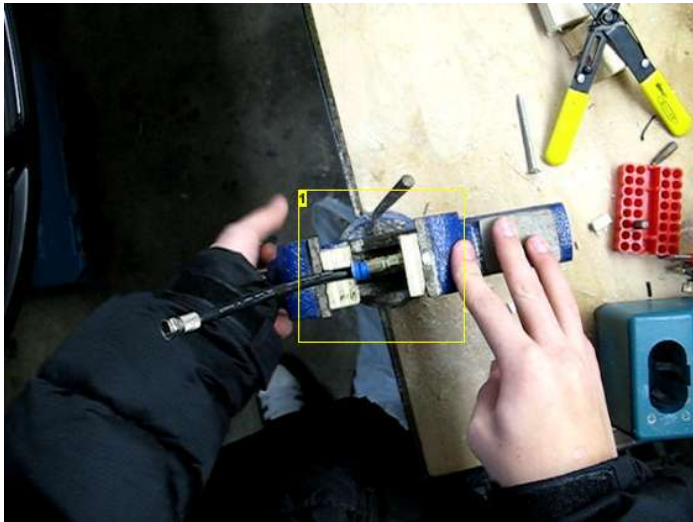
**Image Notes**

1. About 1/2 inch. This can be trimmed when the cable is done.



**Image Notes**

1. As close to 1/4 inch as possible. Don't measure, but don't go uncovering 8 feet.



**Image Notes**  
1. The jig set-up.

## Related Instructables



**Maxwell House Wireless Antenna** by burningsuntech



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**Signalboosting WLAN-antenna, cheap N'easy homebrew replacement.** by omnibot



**U-Disp - The Digg (tm) display (Open Source)** by matseng



**Homebrew WISP ( Wireless ISP)** by Talking Electronics



**Good Digital antenna cheap!** by Phil B



## Comments

14 comments [Add Comment](#)



**lonjim2** says:

Great tutorial. I love these connectors. I was doing something similar for quite some time, but got to the point where I couldn't do this everywhere in the house as my vice grips were mounted to the workbench. I hit up my local computer district here in Toronto and picked up a compression style Crimper for a mere \$10 CAD.

Oct 27, 2008. 7:01 PM [REPLY](#)



**mattdp** says:

This is a nice method.

I've found that 1 or 2 pairs of slip-joint pliers work well, too. I did a bunch of compression connectors this way.

I haven't tried it yet, but I heard that a ring of JB Weld along the rear of the connector will make it impossible to remove, and waterproof (great for outdoor connections).

Jul 29, 2008. 4:02 PM [REPLY](#)



**technodude92** says:  
where do you get these connctors?

Apr 1, 2008. 6:17 PM [REPLY](#)



**dycici** says:  
dear technoduced92 ,i can supply you these two kind connector !pls e-mail me : dy-cici@163.com my name is cici .

Apr 22, 2008. 9:46 PM [REPLY](#)



**computerwiz\_222** says:  
Any electronics retailer, I have seen them at the dollar store. I'm not sure, but Radio Shack may carry them. They are great quality!

Apr 2, 2008. 5:07 AM [REPLY](#)



**Scott\_Tx** says:  
What if you cut a notch in the washer to remove/reuse it?

Feb 24, 2008. 6:06 AM [REPLY](#)



**computerwiz\_222** says:  
You could do that... That is the way the real tool is actually made (more or less).  
The reason that I added the washer is because the connector was crumbling when I was crimping it. When I used the washer, it went on straight.

Feb 24, 2008. 8:21 AM [REPLY](#)



**broadway** says:  
A few other tips to help with cable prep-  
1. when you're done stripping the cable, fold the braided silver outer conductor back down away from the foil surrounding the white (dielectric).  
2. make sure that the copper center conductor is free of any remnants of the white dielectric, most commonly a "snakeskin" effect. fingernails are the best tool to remove this.  
3. if you have troubles getting the f-connector to slide easily over the cable, snap the plastic lower bit away from the metal and slide them correspondingly over separately. This makes it easier to line the cable up with the inner part of the metal.  
Great instructable!

Feb 24, 2008. 1:15 AM [REPLY](#)



**computerwiz\_222** says:  
I love that automatic RG6 cable stripper. Once you calibrate it, you just open it like pliers and spin it around a few times. It strips off the entire end of the cable like the way I did it manually with my trusty weller cutters.

Feb 24, 2008. 5:26 AM [REPLY](#)



**iffie** says:  
Can you replace with better picture in step-4.

Feb 24, 2008. 4:18 AM [REPLY](#)



**computerwiz\_222** says:  
The order from left to right is:  
The block with notch, washer, compression connector, the other block with hole.  
The other block is to prevent the inner core from becoming crushed when crimping.  
I don't have a better picture sorry...

Feb 24, 2008. 5:12 AM [REPLY](#)



**arnoldt** says:  
When stripping the cable down to the center conductor you need to make sure you try not to scrap it with the metal wire strippers. You can mess up some of the signal that travels close to the outside of the center conductor. Which could cause tiling with digital cable.

Feb 23, 2008. 8:04 PM [REPLY](#)



**GorillazMiko** says:  
Nice Tool-Tip!  
You did a great job, nice pictures and everything!

Feb 23, 2008. 7:04 PM [REPLY](#)



**computerwiz\_222** says:  
thanks! I was considering including pictures of the economy crimper, but I only have one at work. Since 99% of people only do 1 or 2 i though this would suffice...  
Thanks for the comment

Feb 23, 2008. 7:07 PM [REPLY](#)