### Wood Post System Receivers: Swivel + Swivel Installation Instructions/Information

These installation steps are for systems using 4"x4" wood posts or larger.

Supplies needed:

- Drill
- Tape measurer
- Marker
- 20 Torx bit (3" or longer)
- 10mm wrench
- 1/8" bit (3" or longer)
  - If using hardwood such as Ipe or mahogany, use #20 bit instead
- Safety glasses
- Vice grips
- Wire cutters
- Large C-clamps (if using our drill guides)
- Swager (battery or hand operated)

Optional items available for rent or purchase:

- Hand or battery swager
- Drill guide for stairs or flat runs
- Drill stops
- Custom Swivel 10mm wrench

#### Some notes before installation

#### **Tropical Hardwoods**

If using harder woods such as mahoghany or Ipe, drill pilot holes with a #20 bit instead of an 1/8'' bit.

#### **Stair Installation**

-it doesn't matter if it is a flat run or a angle run; you can use the same fittings for both. Our fittings are designed with 10 degrees of adjustability. That in conjunction with our drill templates ensures a consistent and smooth installation. All of the installation steps are identical for both flat and angled runs as well, which the exception of drilling the holes at an angle for angled runs.

#### **Duel Sided Posts**

-For posts where opposite sides will both need fittings where you wish to seat the fittings deep, you will need to offset the pilot holes around 1/8'' to the right or left on one of the sides so that the threads do not hit.

#### **Corner Posts**

-For corner posts where the fittings are buried deep, you will need to offset the pilot holes 1/8" below or above the holes you drilled on the other side of the post. This will ensure the threads of the fittings will not hit on the interior of the post.

#### **Equipment Rentals**

We offer drill guides for rent or purchase to use when making your pilot and counter holes. We also have wire rope cutters, drill stops, and hand swagers. These are all optional.



#### Step 1. Make your pilot holes.

First, plan how your cables will be spaced. Standard cable spacing is 3". You can measure and mark where you would like your cables to be by hand, or you can use our drill template.

Drill your counter holes with a  $\frac{1}{2}$ " brad point. Remember, however deep you make this hole is how deep your fitting will sit inside your post.



The max depth you can make your counter hole is 1.5''. We highly recommend setting a drill stop in order to make these holes identical from one another. If they are not the same depth, your fittings will stick out at different lengths from strand to strand. For your mid posts, you will need to drill the entire way through the post using a bit larger than the 1/8'' cable. We recommend using an 11/32'' bit.

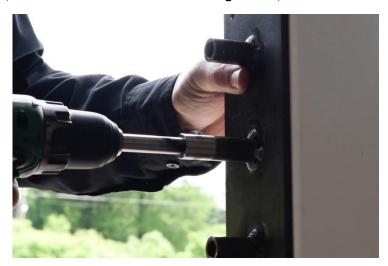


Photo shows drilling counter holes using our drill template and our drill stop.

Next, you will drill your pilot holes using an 1/8" drill bit. The depth you will drill the holes will be dependent on how deep you choose to bury your fittings into your post. To decide how deep to make you pilot holes, measure the length of the fitting you would like to have buried in the post and add 1.5".

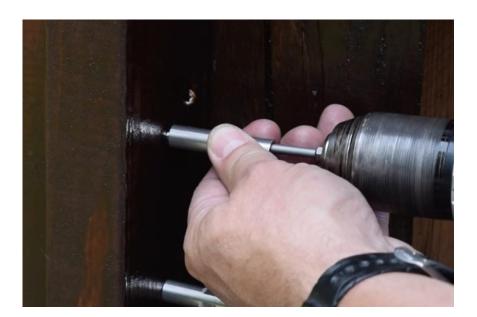
For example, if you would like to expose the entire fitting, 0" will be buried, so you will need to drill your pilot hole 1.5" into the post. If you are seating your fitting in as deep as possible, the length of the fitting to be buried is 1.5". 1.5"+1.5"=3", so 3" is the depth you will need to drill your pilot holes. We recommend using a drill stop or some sort of indicator on your drill bit to make each hole the same depth.

Below photos show making pilot holes using our drill template and corresponding bushing for 1/8" bit.



#### Step 2: Drill in your fittings.

Drill in all of your Swivel receivers to each hole you created using a 20 torx going down through the body of the receiver as shown below. Drill until the fitting is tight, then back the fitting out half a turn to ensure the fitting spins freely.



#### Step 3: Install your wire rope

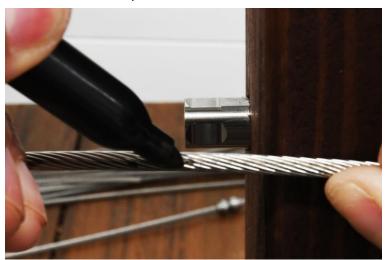
Taking the corresponding wire rope for your run (these will be labeled), insert the swaged end of the wire rope into the Swivel receiver and turn the receiver clockwise. Turn until the stud is flush with the end of the receiver as pictured below. Do this for each of the cables in your system.



Before proceeding, make sure the cap in on your wire rope (shown in first picture above). Next, if you have mid posts, feed each cable through the corresponding mid post holes starting from the top down.

#### Step 4: Cut the Wire rope

Pull the cable tight and put a mark on the wire rope where the receiver on your opposite end post begins. Measure past that mark  $\frac{1}{2}$ " and put another mark. Cut the wire rope on that second mark created.





Before proceeding, place one of the caps on your wire rope as shown below:



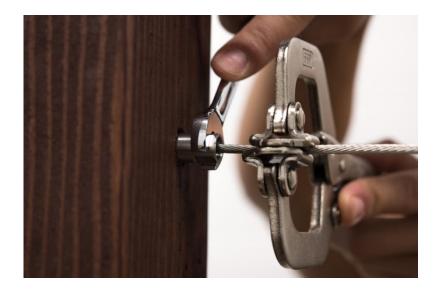
Place one of the included swage studs onto the end of the wire rope with the studs facing down as pictured below. The wire rope should go through the entire length of the body until 1/16" of the wire rope is showing through the other side. Using a hand swager or battery powered swager, swage the stud on. Be sure not to get any of the threads in the swager. The image below shows the area that will be swaged.







Place the stud into the receiver and turn the receiver clockwise until the stud is 1/4" down into the fitting. Go back to the first post and starting with the middle wire rope and working your way out, grip the wire rope before the stud with a pair of vise grips and turn the receiver clockwise until desired tension is reached. **PLEASE NOTE**: Do NOT let the rope spin while turning the receiver.



To finish, snap the caps into the end of the receivers.



## Troubleshooting

# The Swivel receiver is bottomed out and your wire rope is still not fully tensioned.

- Take the cap off of one of the swivel receivers and turn the receiver counterclockwise while holding the wire rope still with a pair of vise grips. Once the stud is completely out of the receiver, cut the stud off as close to the end as possible. Swage on a new stud following the same procedure as you did previously. Put the stud back into the receiver and tension the wire rope.

#### You tensioned the wire rope but the stud is not deep enough to fit the cap.

- We recommend contacting us for a new wire rope for that particular strand. Call us at (833)-PARALUX or shoot us an email at <u>info@paraluxcable.com</u>.