



INFINITY

LIGHTING™

BY SEASONAL SOURCE



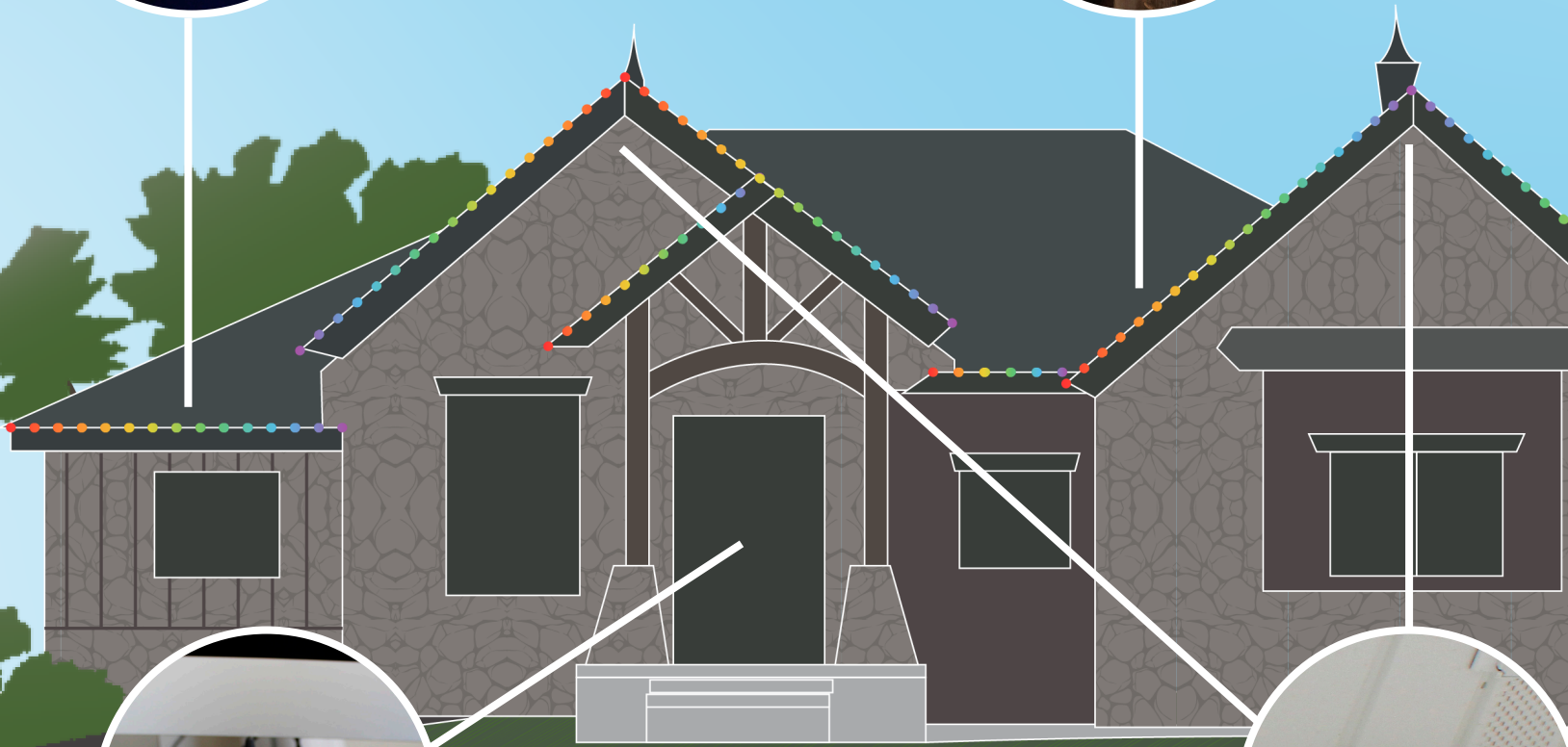
INFINITY LIGHTING SYSTEM

COMPLETE INSTALLATION GUIDE

A. COLOR CHANGING LIGHTS

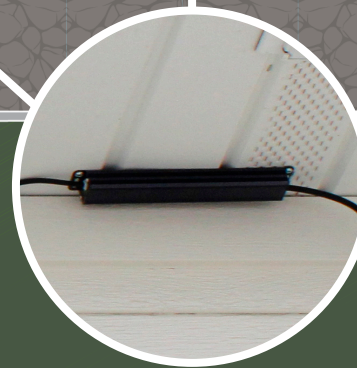


B. CUSTOM CHANNELS



D. NETWORK BRIDGE

* LOCATED INSIDE THE HOME



E. 5V POWER BOOST

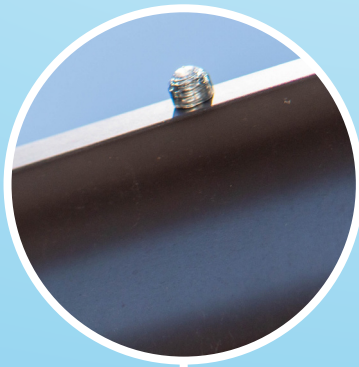
* USE 1 FOR EVERY 75' OF LIGHTS

75 FEET

75 FEET

INSTALLATION OVERVIEW

C. LIGHT CAPS



A. RGB COLOR CHANGING LIGHTS

The patented design allows for installation directly into gutter or drip edge. These lights are invisible during the day & shine their brightest at night!

B. CUSTOM CHANNELS

Designed to be installed in the absence of gutters or drip edge flashing. Channels come predrilled in a variety of colors to match your home's trim.

C. LIGHT CAPS

The caps are used to hold the lights in place along the roofline. Once the light is in place screw on the cap tightly to secure the light. Available in 3 colors: Clear, Brown, and Grey. Match the light caps to existing gutter, drip edge or channel.

D. NETWORK BRIDGE

The Network Bridge is the driver of the entire Infinity Lighting system. It uses low frequency radio waves to communicate to the rest of the system. Plug into the router and wirelessly control up to 20 different zones within a 1/4 mile radius.

E. 5V POWER BOOSTER

This part of the system sends additional power to keep our Infinity Lighting colors consistent & bright. You'll need one of these at least every 75 feet of an installation. IP68 water-proof for outdoor use.

F. WIRELESS RECEIVER

Want to add another zone to your system? Get a wireless receiver and add another building, an independent section, etc. Connects directly to the lights and tells them what to do by receiving a low frequency radio signal from the Network Bridge. Requires a Network Bridge to function with the app.

OSTER
OF LIGHTS

F. WIRELESS RECEIVER

75 FEET

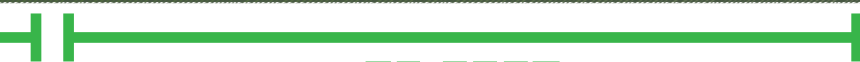


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INTRODUCTION

This planning and installation guide is intended to walk you through the process of preparing for and doing a professional installation of the Infinity Lighting system. The Infinity Lighting system is designed to be simple and customizable, allowing one to quickly learn how to install and operate this lighting system and make it a profitable part of any lighting installation business.

With reliable support and product, you will be amazed at how easy it is to succeed with Infinity Lighting permanent roofline lights.

PLANNING AND PREPARATION

The first step in doing a successful Infinity Lighting installation is to get yourself familiar with the system components. Page 4 has a complete list of the components used in an Infinity Lighting system. Check out our component specific installation details in this guide for additional information.

REQUIRED COMPONENTS

NETWORK BRIDGE



The Network Bridge connects to the router and receives updates from the servers.

WIRELESS RECEIVER



The Wireless Receiver receives the radio wave signal from bridge and tells the lights what function to perform.

POWER BOOSTER



The power booster provides power to the wireless receiver as well as feeds power to the lighting wire.

COLOR CHANGING LIGHTS (50')



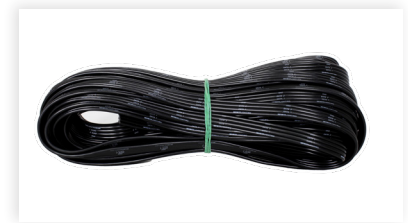
RGB lighting that comes in lengths of 50'. This lighting wire can be custom cut to fit any desired length.

LIGHT CAPS



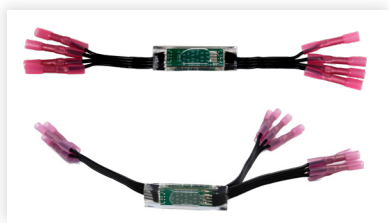
Light Caps hold the lights in place by securing the lights through the holes and help project the light colors. Caps come in clear, brown or grey.

UNLIT WIRE



Unlit Wire is used for running power and data over longer jumps between sections where lights are not needed.

DATA BUFFER



Data Buffers keep the data signal strong over sections of unlit wire.

WATERPROOF CONNECTORS



The heat shrink waterproof connectors are used to make secure, waterproof wire connections.

Y-SPLITS



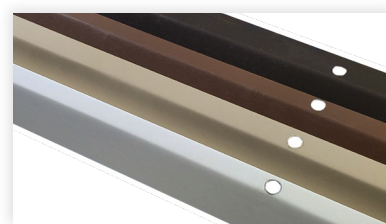
The Y-split waterproof connectors are used for teeing off light sections and for adding additional power with the power boosters.

LAYOUT TAPE (180')



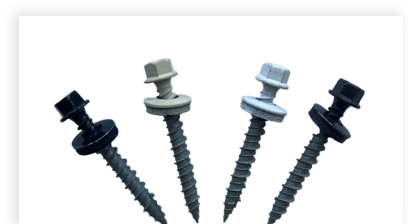
Use the Layout Tape for accurate marking and drilling of light holes in gutters and drip edges.

LIGHTING CHANNELS



Lighting Channels are pre-drilled for quick light installation. Check out our guide on the different ways channel can be used. Each channel covers approximately 4' of lit distance.

CHANNEL FASTENERS



Use these painted galvanized zinc channel fasteners to easily and securely install the lighting channel.

REQUIRED TOOLS



DRILL



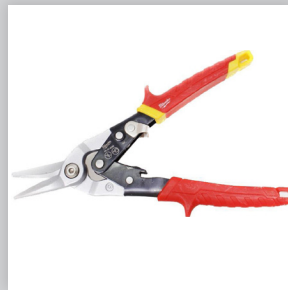
INFINITY LIGHTING DRILL BITS
Carbide steel for clean drilled hole



TAPE MEASURE



**PINCHER/
HAND SEAMER**



TIN SNIPS



**WIRE STRIPPERS/
CRIMPERS**



**HEAT GUN /
BUTANE TORCH**



**LIQUID
ELECTRICAL TAPE**



**SILICONE
AND GUN**



ELECTRICAL TAPE

OTHER THINGS TO CONSIDER

- Heat-shrink tubing with adhesive for ending light runs
- Self-Piercing/tapping screws for lighting channels with matching color heads
- Special tools/gear – tool belt/vest
- Ladders with gutter guards
- Brackets to help hold blank wire in place & hide against roofline



DESIGNING AND QUOTING

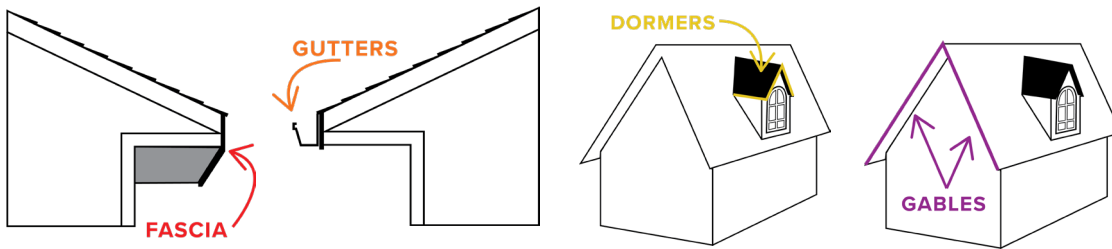
Follow these steps to successfully quote an Infinity Lighting project.

1. Schedule appointment with potential customer. Prepare sales kit, including samples of the product and images/video to show examples of what they can expect.

2. Arrive to scheduled appointment on time.

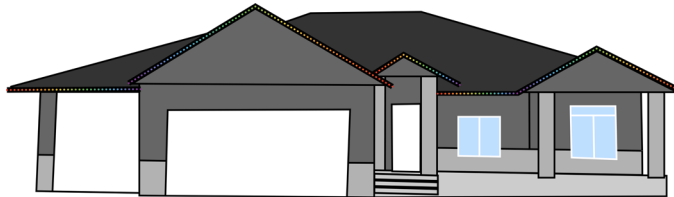
3. Before looking at the roofline, show the customer the product and explain the methods of installation such as in the gutter, behind the drip edges on the gables, or in pre-formed lighting channels. Demonstrate App using your own device if possible.

4. With the customer having an understanding of the product, look at the home and discuss with them the areas that they would like to have the lighting installed. Focus on the areas of the roofline that are the most visible such as:

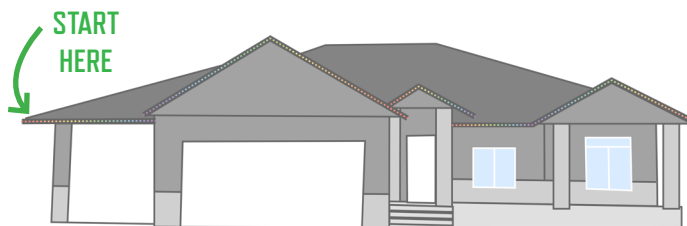


Then, based on the customer's roofline sections, discuss the details of how the lighting would be installed to get approval. Review all variations or options discussed earlier (drill holes in gutter, drip edge, channel, etc.).

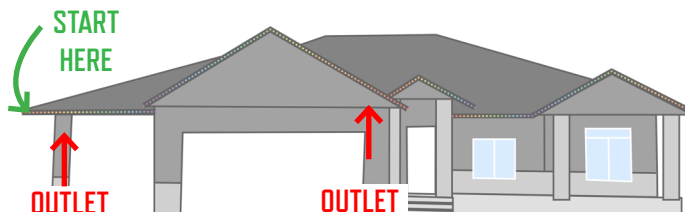
5. After agreeing upon the desired sections to be lit up, make a sketch of the building showing the rooflines.



6. Mark on the sketch where the lighting will start. This is where the starting power supply and wireless receiver will be installed.



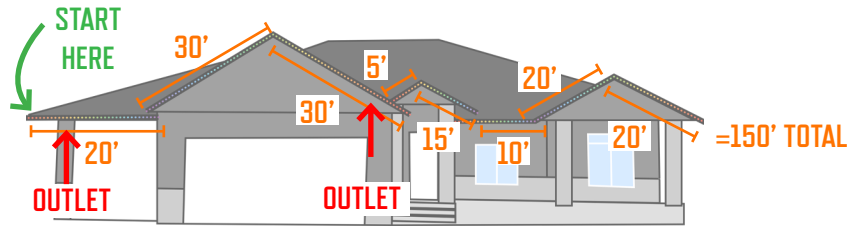
7. Find all power supply sources that are available (under fascia, by doorways, in the garage, etc.) and mark these on the sketch.



 **TIP!**
Google the address to get an image of the home before you go. This will help you know what to expect.

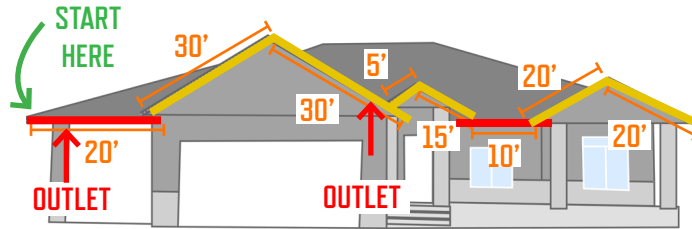
8. On the sketch, mark all the sections that will be lit up. Measure those lengths and mark on the sketch. To calculate the length of lighting wire required: Simply measure the length of the areas where lighting will be installed. It is always best to overestimate a little to avoid shortages. For example, if you have a 175' roofline, make sure you estimate 200' of lighting.

TIP!
An easy way to measure the gables on a roofline is to measure the distance straight across the bottom of the gable and times that number by 2.

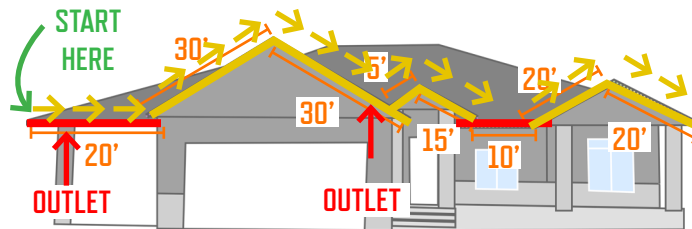


9. Next, mark each section as either gutter or channel.

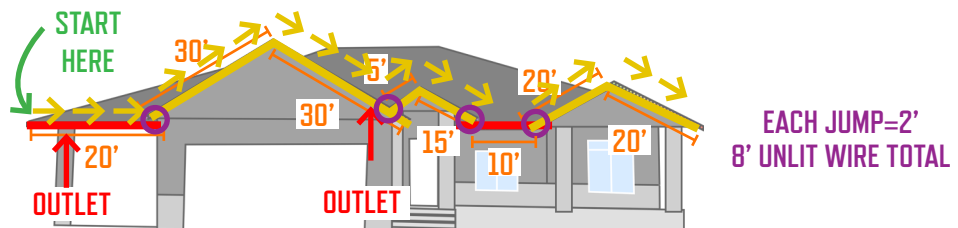
Tip: Mark each type of section in a different color: Ex. Gutter (red) & channel (yellow).



10. Determine how the lighting will run from the starting point, considering all the sections and jumps. Mark the direction of light flow on the sketch with arrows to show how the different sections will be connected inline.



11. Identify where jumps will be required and estimate the lengths of these jumps. Mark these on the sketch along with the measurements. Add up the total jump lengths to determine how many feet of unlit wire will be required.



12. Determine any locations of splitting the lighting line: Where and how many splits will there be? Examples are a peak that is set back behind a front peak or a section that is separate from the main roofline, such as a dormer. Anywhere that the lights will split off the main run. Count the splits to determine the number of Y-Splits needed. Use a Y-split Data Buffer for splitting lights into two different directions. Y-split Data Buffers will ensure a clean data flow to each line.



13. Determining quantity of data buffers: Data buffers are needed on unlit wire runs over 5'. Runs 40'-50' long will need a second one in the middle. No runs over 50'. Get a total count required.



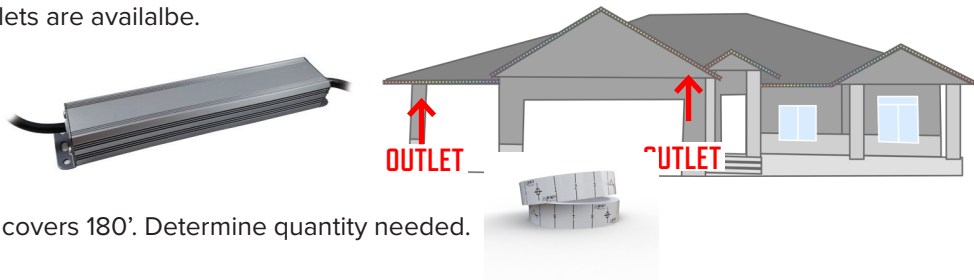
TIP!
Divide the total length of the roofline by 75 and round up. For example, 175' of roofline, divided by 75, equals 2.3. Round up to get 3 power supplies needed for the project. Note - Unusual layouts may require additional power supplies.

14. Identify the number and locations of power boosters that will be required. One is installed at the beginning of the lighting run along with the wireless receiver, then at least every 75' of lighting. If a total length of 130' is being installed, a power booster may be installed at each end.

Note - a power booster will only supply enough power for 75' total, and not 75' in 2 different directions.

Mark each of the locations along the roofline that would be 75' apart of total lighting run, including where it may tee off.

Then mark the sketch with which power sources can be used for the power boosters at these locations. Power may be injected along the lighting line at points closer together but some of the power negates itself to some extent if Power Boosters are installed closer together than 75'. Use discretion based on the power required to operate the lights and considering the locations where the power outlets are available.



15. Layout tape: 1 roll covers 180'. Determine quantity needed.

16. Waterproof connectors: 4 connectors per connection. Determine the number of connections needed.

Best to have extras on hand.



17. With these details and all components identified, mark down the quantity of components that will be necessary. Use the following product checklist to record the quantities of components required.

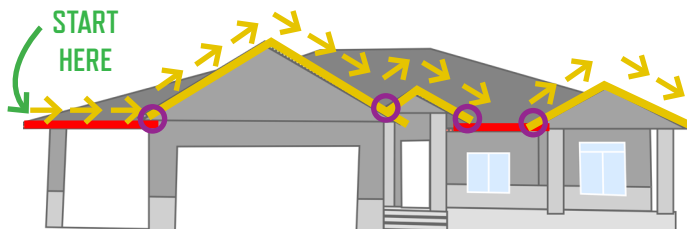
ITEM	QTY.	ITEM	QTY.
Network Bridge (440085)		Unlit Wire (440050)	
Wireless Receiver (440100)		Data Buffer (440000)	
Power Booster (440095)		Waterproof Connectors (440015)	
RGB Lighting-50' spool (440090)		Y-Split Connectors (440010)	
Light Caps (440050, 440051, 440052)		Drill Bits (440055)	
Channel-4' (Various Colors)		Channel Fasteners (3 per Channel)	
Layout Tape-180' (440040)		Y-split Data Buffer	

Don't forget to consider the following items to be sure those costs are covered, if necessary.

- Lifts, rentals etc.
- Electrical work to be done if any (power outlets, etc.)
- Any additional overhead

18. Calculate the total cost of materials, labor, and any additional overhead for the project. Put together the quote and present to the customer. [Watch our Planning & Quoting video for extra help!](#)

19. If customer accepts the proposal, review the sketch and any notes to be sure everything is clear and laid out properly for the installation crew. It may be helpful to draw up a new sketch that would be clearer.



20. Schedule installation date. Schedule with electrician to have power sources installed, if necessary, before the installation date.

21. Order the Infinity Lighting product and confirm with distributor that the product will be available before that date.

INSTALLATION



IMPORTANT RULES TO FOLLOW



1. Never cut any wires while the lights are powered. Unplug all power boosters before cutting any wires.

2. Connect like wires to like wires. Power and data wires must line up properly. EX. GND to GND; DATA 1 to DATA 1; etc.



3. Keep the direction constant following the arrow markings on the light strands. Ensure that the lights are connected in the right direction during installation.

PART 1: UNDERSTANDING AND SETTING UP EACH COMPONENT

WIRING AND SYSTEM BASICS

Infinity Lighting light strands are directional, and all arrows must be pointing in the same direction away from the wireless receiver. Infinity Lighting utilizes a 4-wire cable. Each wire is uniquely labeled to designate what it is for:

GND = GROUND WIRE

DATA 2 = BACKUP DATA LINE

DATA 1 = MAIN DATA LINE

INFINITY LIGHTING = +5V POSITIVE WIRE



AT CONNECTION POINTS, ALWAYS ATTACH LIKE WIRE TO LIKE WIRE.

You can trace any cut wires back to the wording printed on the wire or to a light shell to verify the Infinity Lighting wire is connected to the +5v portion of the PCB.

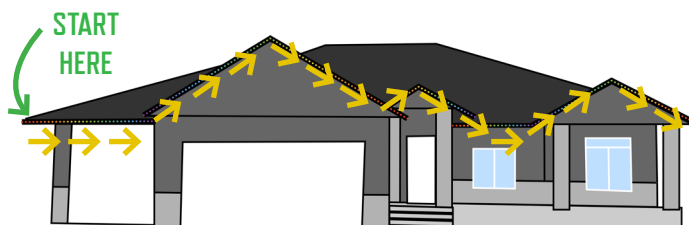
Important - Infinity Lighting can be cut and customized at any point if the power is unplugged. Simply having the lights turned off in the app is not sufficient, they must be completely powered down. With power disconnected, cut and splice at any point to tailor the lights to your unique roofline. Y-splits can be inserted at any point to carry the lights on in two directions. Use Y-split Data Buffer any time you split the lights to go in two directions. Unlit wire can then be run from the output side of the Y-split Data Buffer and run to the start of the next section(s) of lights.



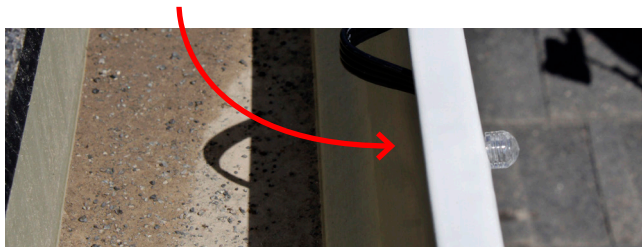
To avoid frustration and fixes later, always double check that you are connecting the correct wires before crimping.

INSTALLING THE LIGHTS IN A GUTTER

Refer to the design sketch when starting the installation. Begin at the starting point (wireless receiver – location identified in planning phase) and work your way across the house. Doing this will help ensure that all the lights are run in the proper direction (by following the arrows on the back of the lights).



Infinity Lighting is designed to fit into the top attachment lip of gutters.

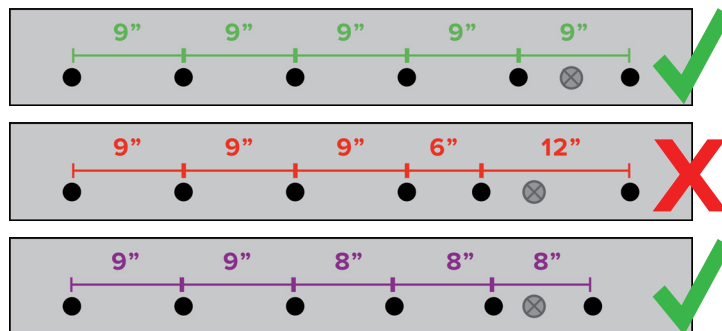


Simply apply the layout tape along the gutter and drill through the bullseyes to position your lights perfectly.



It is a good idea to roll out as much tape as you can safely reach in each position to look for any obstacles ahead such as gutter hangers, gutter nails, corners, or the end of the gutter section, so that spacing can be kept even. If the gutters are attached with gutter hangers, you can generally move the clips without too much difficulty using a 1/4" hex bit whenever there is a conflict, although you do not want to move very many if possible. However, when gutters are attached with gutter nails you do not want to come within an inch of a nail or try to move one. It is okay to cheat the lights closer together if needed.

Generally cheating the lights 1/2" to 1" closer together will not be noticeable but closer spacing would be noticed. Do your best to keep light spacing consistent on corners.



You may run into some challenging situations depending on the type of gutter, the return lip on the inside of the gutter may be too tight to fit the shell of the light into. In this scenario, take some smooth pliers or sheet metal seamers to pinch that lip tight on the backside to allow the shell of the light to fit into the gutter lip. Use protection (duct/electrical tape, etc.) on the tool to avoid scratching up the gutter. Also, be careful not to pull up and out, otherwise you may end up with visible waves in the top lip of the gutter around each light.

Tip: Do not press the tape on too hard or it may be harder to pull off, especially when it's hot.

Tip: Some gutters have a thick or rounded top edge and may require a hand seamer to pinch the gutter lip to make room for the lights.

Tip: If drilling from on the roof, the tape can be run along the top of the gutter to easily see where the bullseye lines up. Drill the holes through the front edge as normal.

INSTALLING WITH CHANNEL



For a clean look on gables we recommend you using channel to install the lights. Having channel will also help if the location does not have gutters. For the smoothest installation process, install one piece at a time. Start by putting the lights into the channel except for the last light in the segment.



The next channel piece will overlap at this light, so it works best to leave the overlapping light out initially. Mount the channel with a screw. For the cleanest look, leave a small gap just wide enough for the screw to fit between the drip edge and the jutting out point of the channel so the screws are hidden. Once the first channel piece is up, insert the lights into the second piece of channel except for the first and last light. Next use the overlapping light to connect the two pieces of channel and secure to the building with a screw. The top flat part of the channel can slide up under the drip edge or if installing under tile or wrapped shingles, secure channel just under the tile/shingles leaving just enough room to screw the channel into place. Securing the channel in place with a screw every 2-3' is usually sufficient.

EDGE MOUNT CHANNEL

Designed for flat rooflines which are typically common with commercial buildings. Fits on top of flat building. Same process – insert lights before installing channel. Overlap last and first holes to connect pieces of channel. Secure to the building by placing screws on the top.

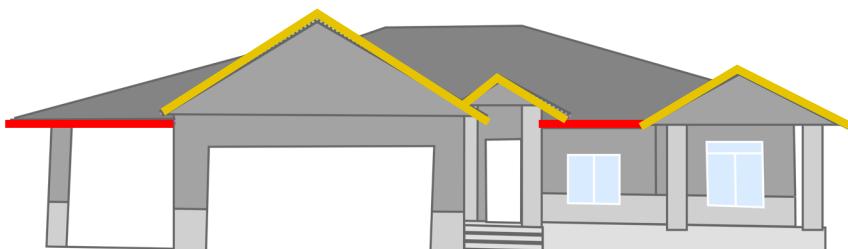


SUMMARY

1. Beginning on the identified starting end of the roofline, install the lighting in each of the gutter or channel sections by:

A) Run across the gutters and drip edge using the layout tape, watching for gutter anchors/nails that could be in the way. Adjust the tape bullseye markings or anchors as needed.

B) Drill holes through the layout tapes bullseye markers on the front lip of the gutter, or where it lines up if the tape was run across the top of the gutter.



TIP!

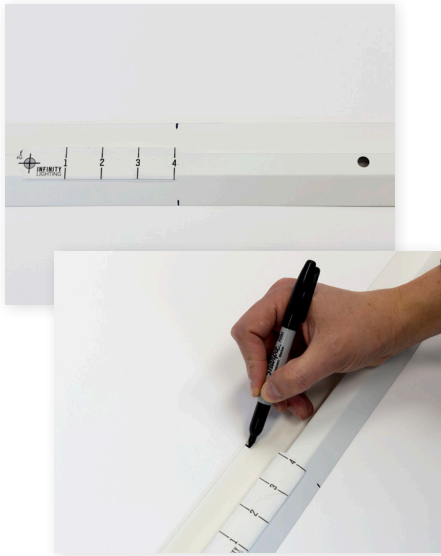
If there are obstacles in the gutter, such as gutter nails or anchors, holes can be drilled slightly closer together, but never further apart. It is better to adjust 3 light holes 1 inch each versus one light 3".

CUTTING CHANNEL

INSTALLING LIGHT AROUND A PEAK

When installing channel at a peak, you will need to have each light head four inches below on both sides of the peak. In order to keep a clean install follow the step by step directions below.

1. Use the Infinity Layout Tape to mark 4" from the light hole. Draw a line on the top and bottom of the channel to mark the length



2. Use the tinsnips to make a cut at the mark drawn on the top. Then cut out a triangle on the bottom half where the point matches the peak.



3. You will know the channel is cut correctly when it naturally bends, making a clean point to match the peak. Here, you can continue the channel install as usual.

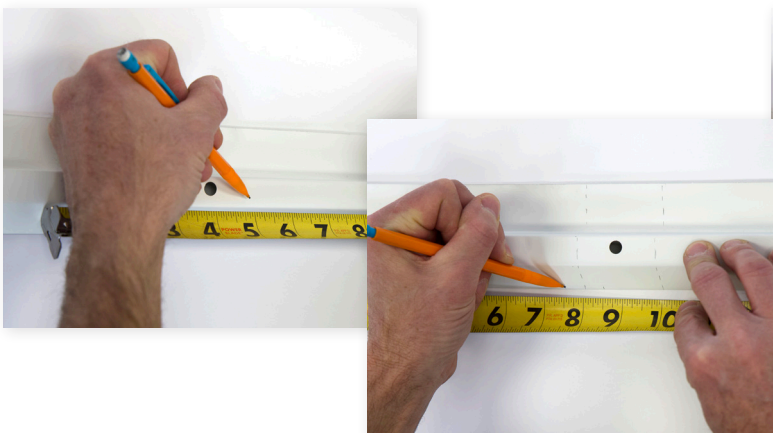


INSTALLING A PEAK LIGHT

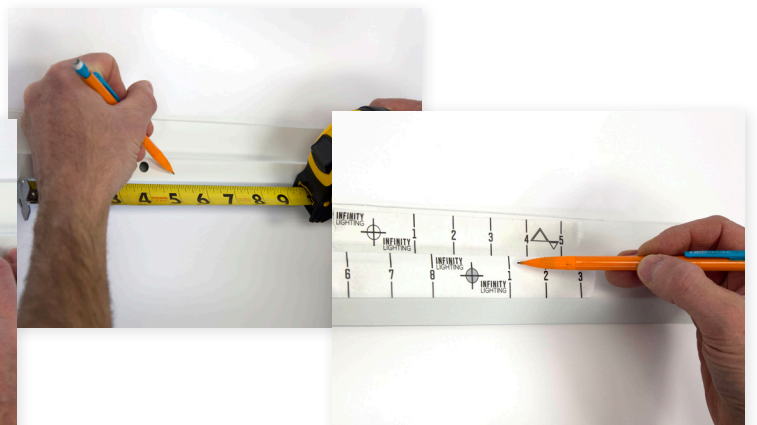
STEP 1: MEASURE & MARK

- Select hole for peak light.
- Measure and mark 1" from center on each side of hole or use the guide tape.
- Lightly mark lines from top to bottom on each 1" mark

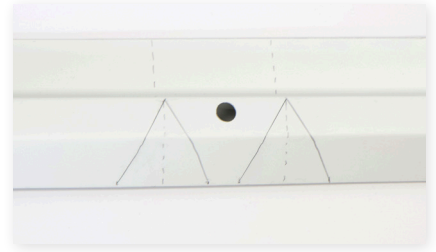
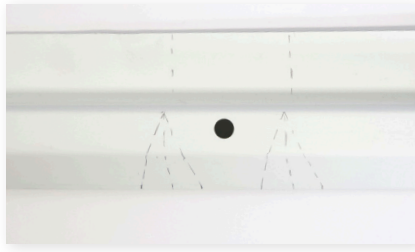
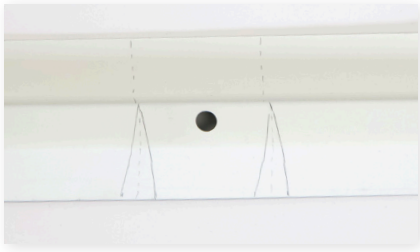
Using a measuring tape:



Using the guide tape:



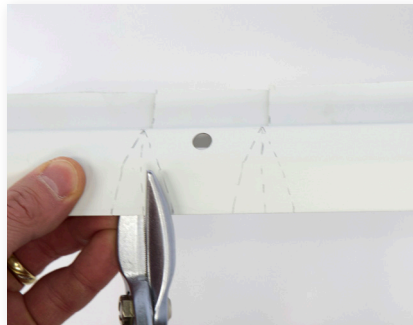
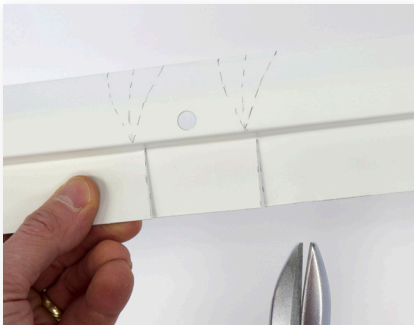
- For gentle slopes, measure $\frac{1}{4}$ " out from each side of the lines and make marks on the bottom.
- For medium slopes, measure $\frac{1}{2}$ " out from each side of the lines and make marks on the bottom.
- For steeper slopes, measure $\frac{3}{4}$ " out from each side of the lines and make marks on the bottom.
- Mark Angled lines from those marks to the top of the front facing section of the channel.



STEP 2: CUT

- Make the straight cuts.
- Make the two angled cuts on the left of the hole.
- Make the two angled cuts on the right of the hole.

Note- Depending on the angle, additional trimming might be necessary. Cut accordingly.



STEP 3: BEND

- Bend each longer section behind the small center section to fit the peak angle.

Caution- Bending the channel back and forth too much will cause it to break.



CORNER CUTTING

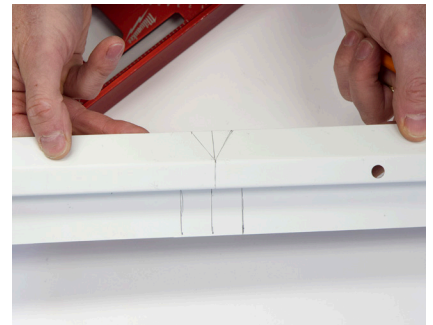
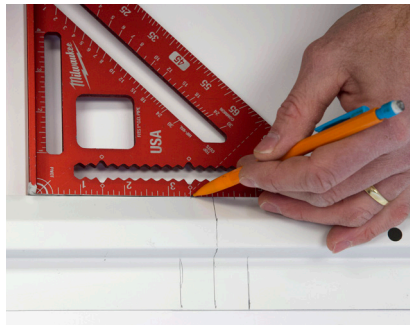
*For cleaner, simpler cuts it is recommended to use both left and right-handed tin (Aviation) snips.

*When using tin snips, be sure the under part of the snips are flush with the surface to be cut for a proper clean cut.

Outside Corner:

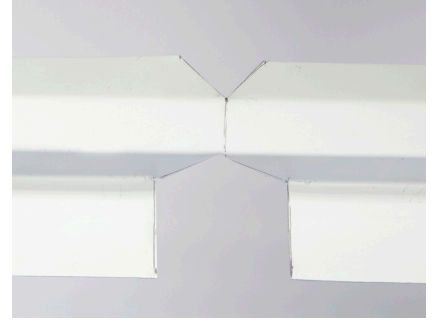
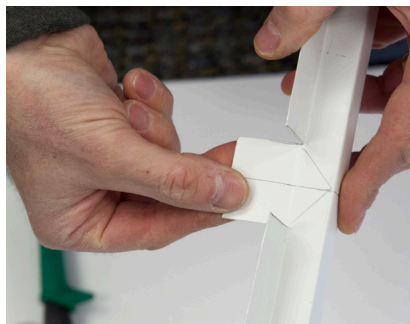
STEP 1: MEASURE & MARK

- Using a pencil, mark the channel where it comes to the corner of the fascia.
- Draw a line on the vertical surface down to the inside corner of the channel.
- Measure over from that line to the right or left (depending on which way you are running the lights) and make a mark just inside 3/4" and lightly draw a line all the way across the front face of the channel from the top to bottom.
- Mark and draw a line just inside the 1 1/2" measurement, just on the upper vertical section.
- From the center line draw an angle from the center of the horizontal part to the bottom of the lines on the top vertical section.
- Measure out 1/2" from the center mark on each side at the bottom of the channel.
- Draw an angle line from the 1/2" marks to where the channel slope ends and meets the front face.



STEP 2: CUT

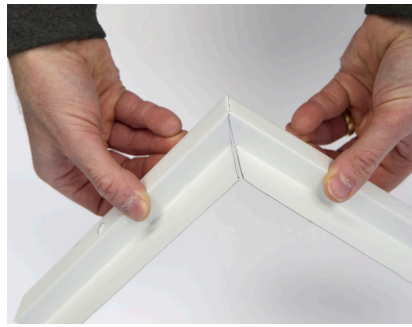
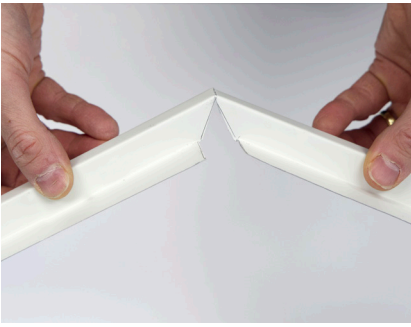
- Cut on the upper lines that are 1 1/2" apart to the inside corner.
- Bend the section back to be flat.
- Cut on the angled lines to the center point.
- Remove section.
- Cut on the angled lines on the slanted section of the channel cutting out the triangle piece.



STEP 3: BEND

- Bend channel into a 90 angle.

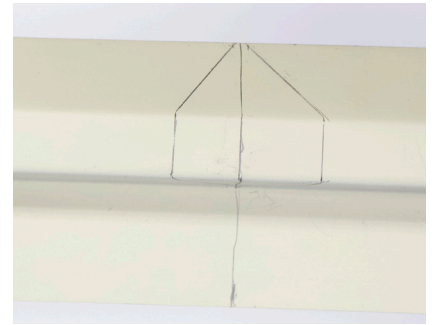
Note - Make any minor adjustments as necessary with cutting or bending.



Inside Corner:

STEP 1: MEASURE & MARK

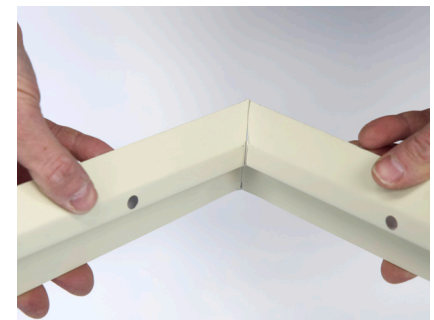
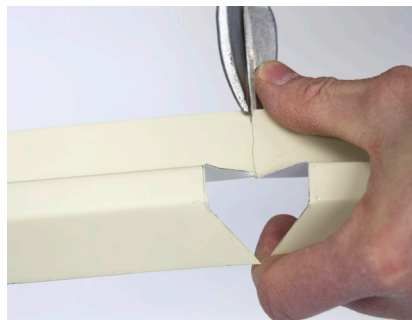
- Using a pencil, mark the channel where it reaches the corner.
- Draw a line lightly from top to bottom at this point.
- On the front facing surface, measure out to the left of the line $\frac{3}{4}$ " and lightly draw a line on the front facing section.
- On the right side of the center line, measure out $\frac{5}{8}$ " and lightly draw a line.
- On the top horizontal surface, mark an angled line from the front surface marks to the center line.
- On the sloped part of the channel, make a mark $\frac{1}{16}$ " on each side of the center line.
- Then draw a line from those marks to the bottom of the lines on the front facing surface.



STEP 2: CUT & BEND

- Begin cutting along the lines starting at the bottom of the channel.
- Make the first cuts, one with a left-handed tin snip and the other with the right-handed tin snip.
- Bend slope section up to make room for the next cuts.
- Make second cuts.
- Bend section up.
- Make final cuts on top surface and remove the cut section of channel.
- Make a tiny snip at the top and bottom of the vertical section on center.
- Using a support, bend the channel along the line on the larger flat section that goes behind the drip edge.

Note - Make any minor adjustments as necessary with cutting or bending.



PART 2: MAKING WIRE CONNECTIONS

1. STRIP

Cut wire to proper length, separate wires and strip jackets 1/4".



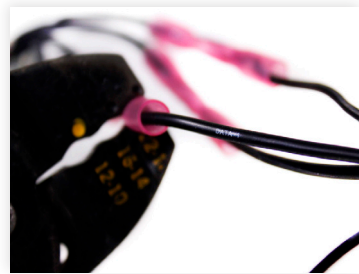
2. TWIST

Twist wire ends and insert into connector.



3. CRIMP

Crimp connector onto wire to secure into place



4. REPEAT

Repeat on connecting wire being careful to match wires- **INFINITY w/INFINITY, DATA1 w/DATA1, DATA2 w/DATA2 and GND w/GND**



5. HEAT SHRINK

Heat shrink the connector(s) for the waterproof connection. A 'cooking' torch works best for heat shrinking the connectors. Wrap with electrical tape once cool to the touch.



Y-SPLIT CONNECTORS

These are used when you have one incoming line/run and two out-going runs. Maybe you're running along a main roofline and continuing on the main run and then jumping up to a peak as well. Look closely at the y-split connector. One end is slightly fatter than another. This is the side that will have two wires in. To make the connection, first start with the one wire side. Make the connection like usual (strip the jacket, twist the wire, insert the wire, and crimp). Repeat for the three remaining wires. Then move onto the two wire side. Find the first set of like wires. Strip the jacket like usual. Then take both wires and twist the wire together. Once twisted, insert both wires, then crimp. Repeat for the three remaining wires. You'll see now why we call it a Y-Split. Creates a Y-shape and allows you to go in two different directions off of one line. Heat shrink all the connectors (easier to do it all at once). Inspect. Use electrical tape to cover the connections.



DATA BUFFERS

As a rule of thumb, **any section of unlit wire greater than 5' needs a data buffer installed before the jump, 3' on Y-splits.** Every light receives the data signal, takes

the information it needs, then sends a signal to the next light. While each light can send

a reliable signal at short distances, a data buffer must be inserted before longer jumps of wire to send a strong signal. This data buffer will take the weak signal from the light before and send out a strong signal capable of going up to 50 feet. It is easiest and best to use a Y-Split Data Buffer for any splits in the lighting run, no matter the length of unlit wire following it.



This rule applies to the data signal coming out of the wireless receiver as well. It is very rare and should be avoided whenever possible, but if a jump of more than 50 feet is ever required, you must insert a data buffer before the long jump, as well as a second data buffer in the middle of that jump wire.

SPLIT DATA BUFFER



Split Data Buffers are used in the same situations you will use Y-split connectors. However, you may have blank wire that is running after the split. **Instead of making Y-split connections and then installing two data buffers on either side, you can just use one Y-split data buffer.**

You'll see there's one side for the incoming wire and the other side has two sets of connections for the outgoing side. Connections are similar to a regular Data Buffer, just make sure to connect like wires to like wires!



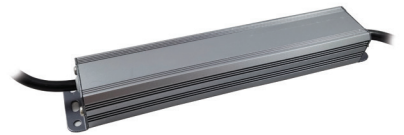
POWER BOOSTER

Infinity Lighting is a 5-volt system. As lights draw on the initial power supply, the system needs to receive additional power, through a Power Booster, to keep consistent color and brightness

across the lights. There is no perfect calculation as every roofline is different, but **as a rule of thumb a power booster is required every 75 feet of lighting.** However, power is not directional so you can add a power supply at the beginning and end of a 130-foot run. This would provide ample power across the run. Optionally, the second a power supply can be installed anywhere between the 25' and 100' points along a 100' run all depending on power outlet locations and your layout. To calculate the number of Power Boosters needed, divide the total length of lighting by 75 & round up.

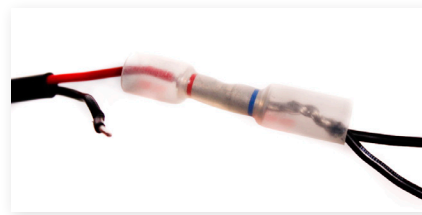
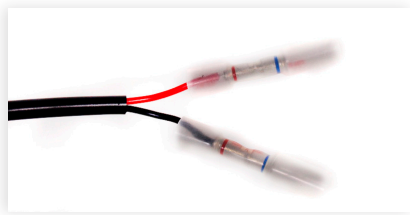
Ex. 175' divided by 75 equals 2.33, which means 3 power boosters are required for the project.

Each Power Booster is only good for 75 total feet of lights, so **DO NOT** expect to put a booster in the middle of a run of lights and get 75 feet in both directions. Putting a power supply as close to the location power is needed in the system is the best option. It is best to avoid any long runs of blank wire, or the output will not benefit the intended power boost. Mount the starting Power Booster near the power outlet along with the Wireless Receiver.



INJECTING POWER MID-RUN

So how do you inject power mid-run if there's only two wires and the lighting wire has four wires? Use Y-Split Connectors to connect the Infinity/Positive & Ground wires of the lights to the positive & ground wires of the Power Booster. Keep the Data 1 and Data 2 wires connected and running - **we don't want to interrupt the flow and communication of data - all we're doing is injecting more power.** On the Power Booster, the red wire is positive, the black is ground. When in doubt, there's a cheat sheet on the label on the back of the Power Booster. You will use Y-Split connectors for this installation. Refer to the Y-Split Connectors explained earlier for further understanding. Connect the Infinity/Positive wires to the Y-Split. Do the same for the for the ground wires on a separate Y-Split. Then, connect the red/positive wire run. Repeat that step by connecting the black/ground wire on the booster to the two wire end of the ground run. Make sure to heat shrink the connectors and cover with electrical tape.



INJECTING POWER AT THE END



Depending on the specific job you may want to add a Power Booster at the very end of the run pushing power in the opposite direction – which as a reminder, you can do since power is not directional. Doing this is simple...terminate the Data 1 and Data 2 wires by following the instructions below on how to properly terminate wire runs. Connect the Infinity/positive wire with the red/positive wire on the Power Booster using the regular connector. Repeat the same process with the ground wire of the lights and the black/ground wire of the Power Booster. Heat shrink, inspect, & wrap the entire connection with electrical tape.

TERMINATING WIRE RUNS

Terminating a wire run is done when you come to the end of the run and you're not connecting the lights to anything else. It is very important to terminate the wire run correctly, making them waterproof, to prevent them from shorting, functioning improperly, and causing potential damage to the lights themselves. To terminate a wire run, first separate the wire labeled Infinity, which is the positive wire. Cut the Infinity wire about a half inch shorter than the other three. Wrap or coat the infinity wire with electric tape then wrap or coat all four wires.

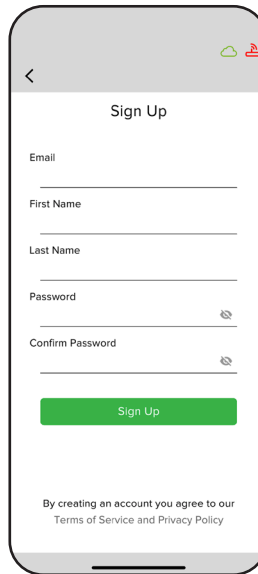
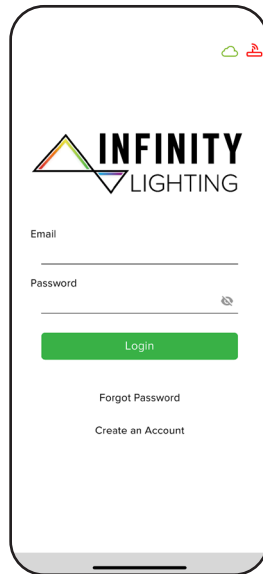


PART 3: PAIR AND CONNECT

Setting up the Network Bridge and Wireless Receiver - **DO NOT** install any wireless receivers before first pairing them with the Bridge. Have the customer download the Infinity Lighting App (Android or Apple) onto their smart phone or Tablet and create an Infinity Lighting Account. Once this is done, then the Network Bridge can be connected.

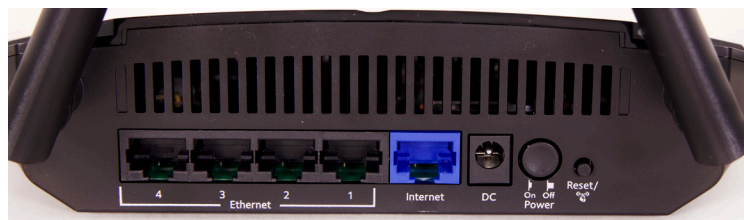
TIP!

Do This when you first arrive at the job! It takes time to boot up and update for the first time so plug it in, let it sit & boot up while you install, then come back to it to pair when you're done installing lights.



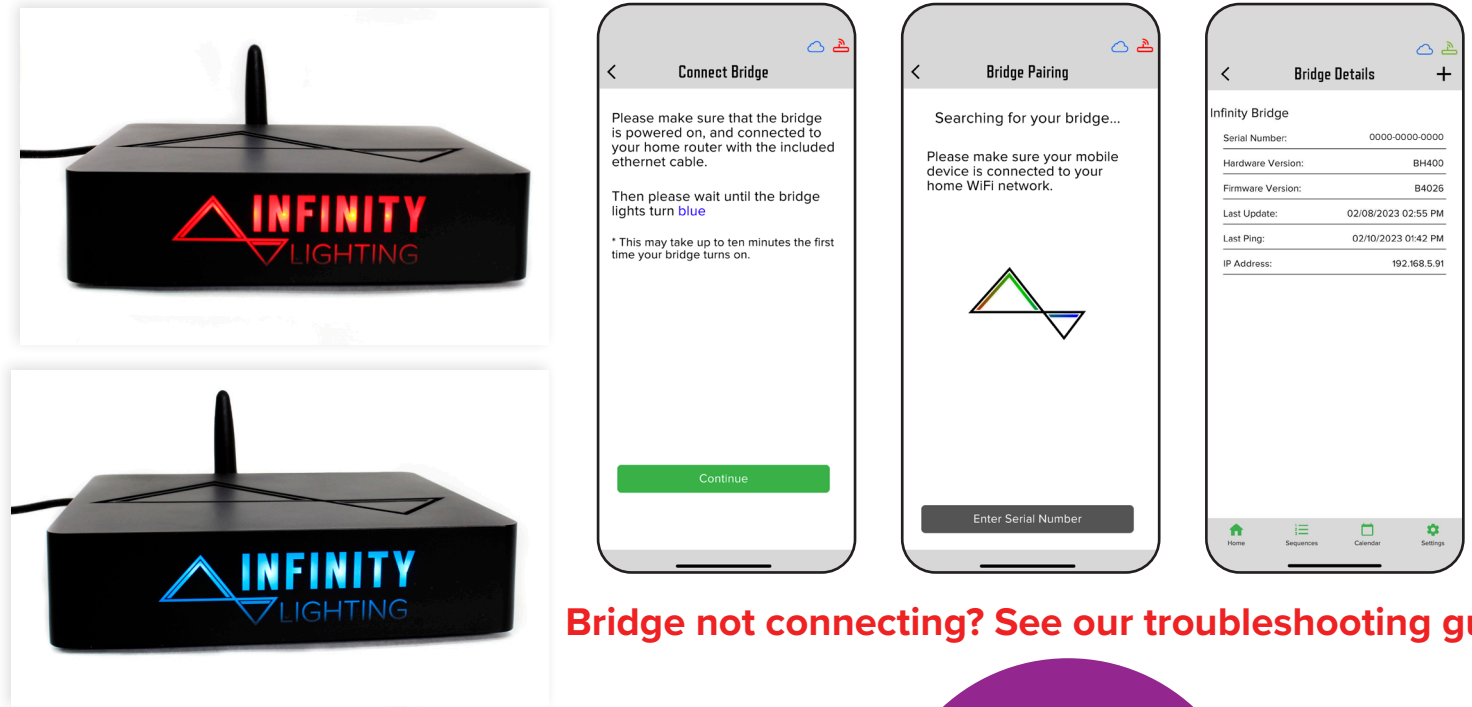
PAIRING THE NETWORK BRIDGE

The Infinity Lighting Network Bridge is the smarts of the lighting system. First, connect the Network Bridge to your wireless router using the included ethernet cord, then plug the micro-USB power cable in to a power outlet to light up the Bridge. If you do not have any ethernet ports available, one will need to be freed up or get a network switch from an electronics retailer.



When first plugging in the bridge, the Infinity Lighting wording on the front of the Bridge will glow red until it boots up, (it may be yellow for a bit as well while it connects to the local network) at which point it will turn blue. The boot process usually takes about a minute. If an update is needed it could take as long as ten minutes. Once the Bridge glows blue, open the Infinity Lighting app and navigate to Menu/Settings/Bridge, hit "Pair Bridge" and follow the instructions on the screen. You can enter the serial number if it needs a little bit of help.

Once the Bridge glows blue, open the Infinity Lighting app and navigate to Menu/Settings/Bridge, hit “Pair Bridge” and follow the instructions on the screen. You can enter the serial number if it needs a little bit of help.



Bridge not connecting? See our troubleshooting guide

Make sure you register the Network Bridge on our website. Scan the QR to access the registration.



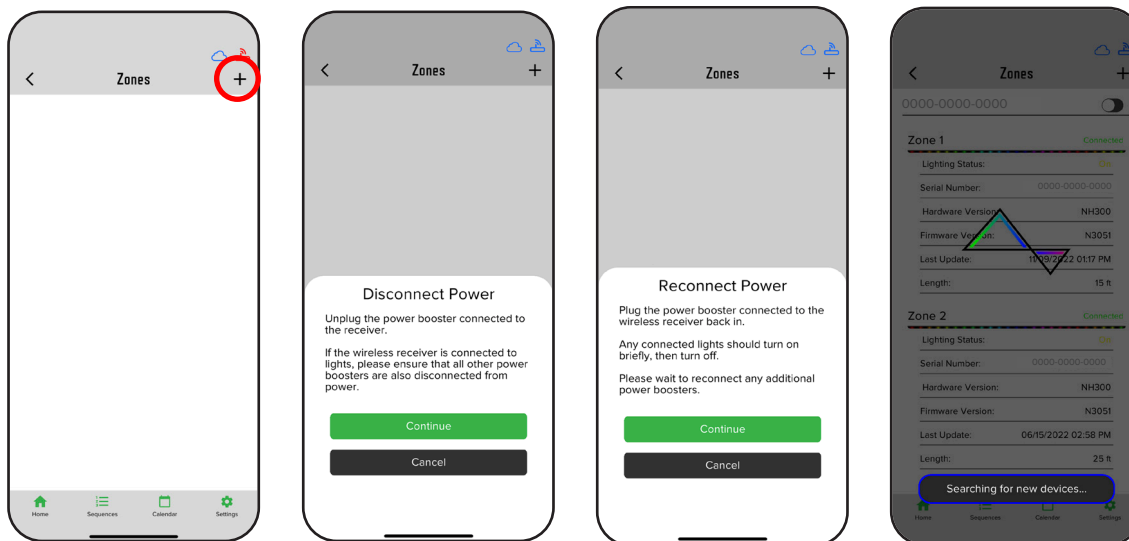
PAIRING THE WIRELESS RECEIVERS

With the Bridge identified and connected, you now need to pair any wireless receivers you have. Connect only one receiver to power at a time and then just sync one receiver at a time. Be sure to have the receiver close to the Bridge to ensure a simple connection. Do not install the wireless receiver(s) outside before pairing with the Bridge.



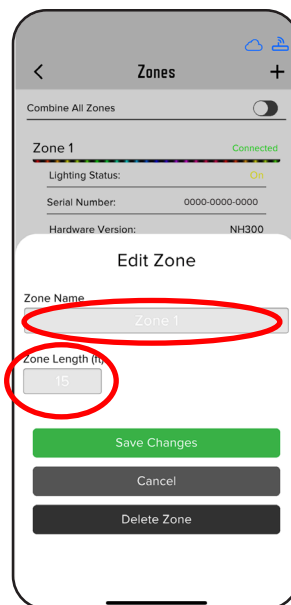
To put the wireless receiver in pairing mode, use the wire-nuts to attach a power supply to the power-in side of the wireless receiver. The red wire on the power supply should connect to the 'POSITIVE' wire on the receiver and the black wire on the power supply should connect to the 'GND' wire on the receiver. Using 4 wire nuts, splice a small section of lights (if available) to the output end of the receiver, matching like wires. Then plug the power supply into an outlet. If syncing multiple receivers, connect only one receiver to power at a time and sync one receiver at a time. Plugging the wireless receiver into power will put it into pairing mode for two minutes (like the Bridge). It does not matter what order you do this in, it only matters that both units are in pairing mode at the same time.

Now go into the Infinity Lighting app and navigate to Menu/Settings/Zones and click the plus icon (+) in the top right corner. Follow the instructions on the screen to pair your zone(s). When going through this process, the lights on the Bridge should turn green and be moving, showing it is in pairing mode. Once paired up, you can test the lights by turning on a sequence. This moment can be used to instruct the end-user on how to operate the lights through the app.



TIP!

Don't forget to fill in the Zone length to ensure the proper data is running through. You can also name each Zone to keep them organized.



SUMMARY

1. Have the customer download the Infinity Lighting App onto their smart phone or Tablet.
2. Customer creates an Infinity Lighting account on the app.
3. Plug the Network Bridge into power, then to the wifi router using the provided ethernet cord.
4. To register the bridge, open the Infinity App and go to settings Bridge and Press the + Button. Follow the instructions on the screen to register the Bridge.
5. Working near the Network Bridge, connect the Wireless Receiver to a power booster using wire-nuts. Plug in the Power Booster- this automatically puts the receiver into pairing mode for 2 minutes.
6. Using the infinity Lighting App, go to Settings Zones and Press the + Button. Follow the instructions on the screen to pair. The Bridge lights should turn green and be moving when it is in pairing mode.
7. If necessary, press the black button on the back of the bridge to put the Network Bridge into pairing mode.
8. Once paired, click on the Zone information, name the Zone and then enter in the length of the run of lights. If the length is too short some lights will not turn on. In this case, simply increase the overall length in the Zone setting.



MOUNTING WIRELESS RECEIVER

After pairing the Wireless Receiver with the Bridge, remove the short section of lights from the receiver, if used, and take the Power Booster and Wireless Receiver outside to be mounted at the beginning of the lighting run. The Wireless Receiver communicates with the lights, telling them what to do by receiving a low frequency radio signal from the bridge at distances of up to half a mile. It is always best to install the wireless receiver on one end of the building or another. If you install the Wireless Receiver in a central location with lights going out in two or more directions, any patterns and animations will not look their best as they will begin or end from that point. In the ideal situation, an eave outlet or other power source will be available on one end of the house. If no power is readily available, the garage is typically the best location for the Wireless Receiver. Make sure the Wireless Receiver is installed in a dry location as it is splash resistant but not waterproof. Also ensure the wire connecting the lights to the Wireless Receiver has a drip loop to prevent water from running down the line and directly into the Wireless Receiver. Make sure the Wireless Receiver is connected directly to the power supply with two of the included Waterproof connectors.



If power is not where you want the Wireless Receiver to be, do not insert additional wire between the power supply and Wireless Receiver, otherwise it will run the risk of not working properly. Instead, connect the Wireless Receiver directly next to the power supply, attach a data buffer to the output wires of the Wireless Receiver, and run unlit wire to where your lights start. If the length of wire between the Wireless Receiver and first light is less than five feet, there is no need for a data buffer.

For best results, add another data buffer after 40ft. of unlit wire.

Tip: It is helpful to check the connectivity of the Wireless Receiver before making your final connections. Do this by plugging in the Power Booster connected to the Wireless Receiver and holding it up at the spot it will be mounted. Then using the app, confirm that the Bridge is 'Connected' to the Wireless Receiver. If it connects, then unplug the Power Booster, make your final connections, and then mount both into place. If it does not connect, you may have to move it around within a few feet until it makes a connection. This is rare but there is occasionally interference by a nearby object or electrical device that prevents it from connecting in that particular location.

SUMMARY

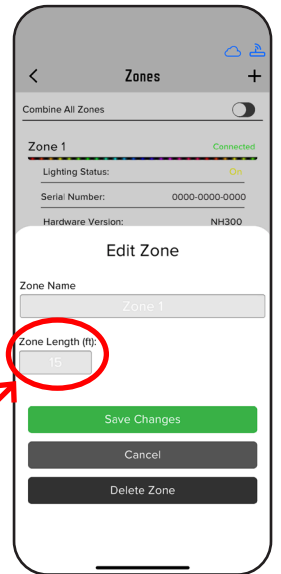
1. Take the Power Boosters and Wireless Receivers outside and install them in the designated location using screws provided.
2. Before plugging in, connect Power Boosters to receiver(s), then receiver(s) to installed light strands in each zone using the waterproof connectors.
3. Plug in Power Boosters and test controls in the Infinity App.

TURNING ON THE LIGHTS

Now that everything is installed, it is time to turn on the lights. Your Wireless Receiver should still be synced, and you can power up your lights and start playing with the different effects already built in or create your own!

If you find that your Wireless Receiver is not synced for whatever reason, do the following:

- If you have multiple power supplies, make sure all power supplies are off/unplugged including the first one connected to the wireless receiver.
- Open the app and if necessary, go through the pairing process as before.
- Once you are paired again, power up each of the additional power supplies if more than 1 were installed.
- Be sure that the number of total feet is set correctly so that all lights will come on.
- Test to make sure power supply/outlets are actually receiving power. You may need to flip on a light switch or breaker.
- Completely close out of the app & re-open.



SUMMARY

1. Test and confirm that all lighting turns on and is working properly. Be sure to test the lights on bright white to check for power drop. Also test the lights with some pre-built sequences with movement.
2. If anything is not working properly, trouble shoot the system by checking that all power sources are working, all power boosters are plugged in, and all connections are good. Contact your local distributor for additional support or refer to the Troubleshooting guide on the Infinity Lighting website – www.myinfinitylighting.com
3. Instruct the customer on the basic features of the App including on/off, selecting a sequence, creating new sequences and calendar scheduling.

NOW THE CUSTOMER IS READY TO ENJOY THEIR NEW INFINITY LIGHTING!



SUPPORT

As an Infinity Lighting installer, we make sure you have access to the very best training resources and support.



TECHNICAL SUPPORT

Call **801-326-4155** or email **cs@thesource-online.com**

between 8:00 am - 5:00 pm MST. Whether you have technical questions while you're installing or if you're trying to troubleshoot a system after installation, we're happy to help! You can also refer to the troubleshooting guide for a quick reference.



ONLINE TRAINING PORTAL

Dynamic online courses are available 24-7 so you can take training at your convenience. With quizzes to test your understanding. Free to our installers, you can learn about the opportunity of permanent lighting, how to properly bid & estimate, how to install, and how to use the mobile app.



INFINITY LIGHTING WEBINARS

Our knowledgeable and expert staff is available to schedule a live, interactive webinar. Reach out to your distributor to schedule a good time for you! You can also join our installer newsletter to be notified when group webinars are happening.



DISTRIBUTOR IN-PERSON TRAINING

Our local distributors are our valued partners who are extremely knowledgeable about permanent lighting. They are available to visit job sites with you or host a team training in-person. Visit our website to see who the closest distributor is to you.



INSTALLER NEWSLETTER

Visit our website at **www.myinfinitylighting.com** to sign up for our installer newsletter. Stay up to date on new product, training videos, webinars and events, marketing resources, and plenty of tips & tricks to make your permanent lighting business most profitable.

TRAINING

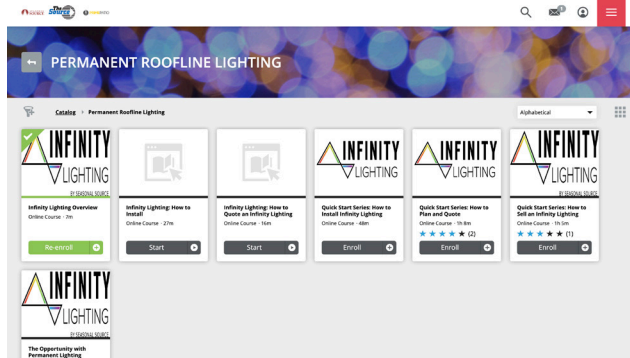
LIVE TRAINING

Join us for our online live trainings held the first Wednesday of each month! Each month we'll train you on the Infinity Lighting product line, installation, and planning & quoting so you'll be ready to go by the end of the trainings. Sign up for the next training today!



ONLINE TRAINING

Our online training portal is specially designed to help Infinity Lighting Professionals excel in all areas of their business. Each course can be taken at your convenience on ANY mobile device & includes quizzes to test your knowledge!



thesource.contractortrainingportal.com

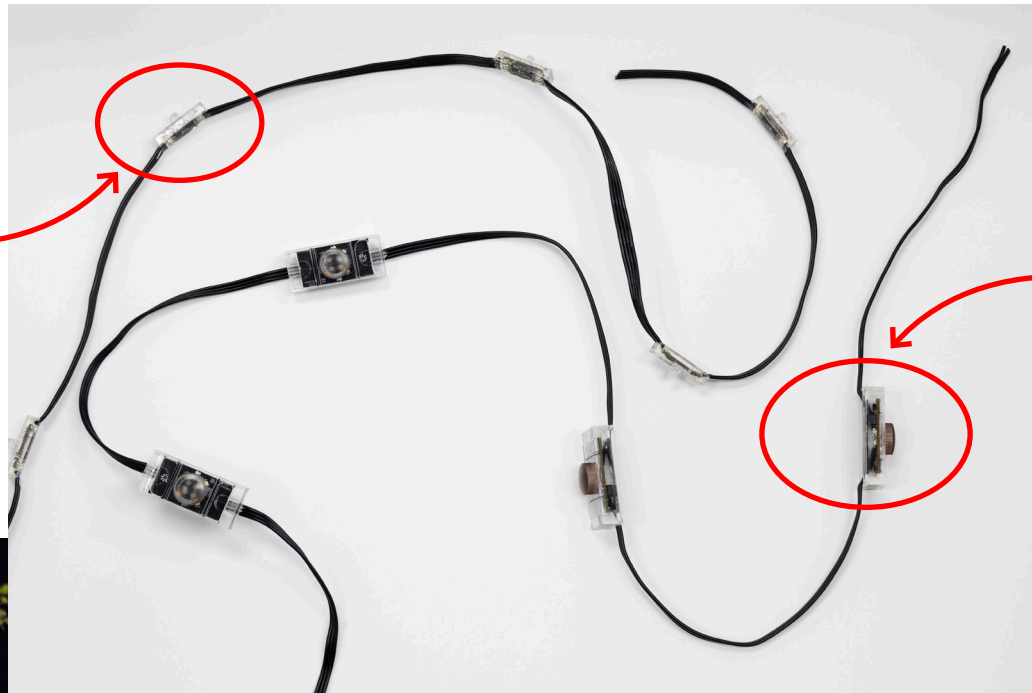
DEMO DAYS

At our Infinity Lighting Demo Days, we'll partner with our valued distributors to provide hands-on training for all in attendance. At a pre-determined installation site we'll complete a permanent lighting install from start to finish!



COMING SOON: COMMERCIAL INFINITY LIGHTING

- 24 Volt & 3 wire system
- Longer run lengths
- Bigger & brighter diode crafted for large buildings!



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