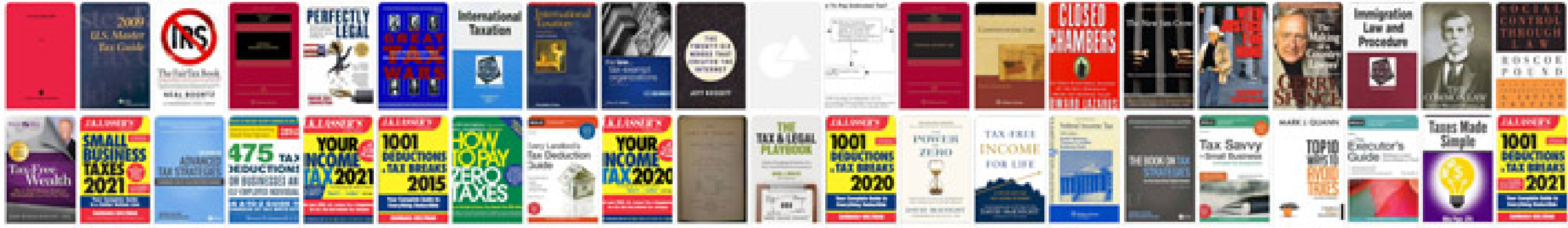

Painless wiring install video

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Follow the next guides:. In a traditional Wi-Fi network architecture, a single node access point â€" usually the router is connected to all other nodes stations. Each node can communicate with each other using the access point. However, this is limited to the access point wi-fi coverage. Every station must be in the range to connect directly to the access point. Nodes are responsible for relaying each others transmissions. This allows multiple devices to spread over a large physical area. The Nodes can self-organize and dynamically talk to each other to ensure that the packet reaches its final node destination. If any node is removed from the network, it is able to self-organize to make sure that the packets reach their destination. Any system of 1 or more nodes will self-organize into fully functional mesh. The maximum size of the mesh is limited we think by the amount of memory in the heap that can be allocated to the sub-connections buffer and so should be really quite high. You can install painlessMesh through the Arduino Library manager. The Library Manager should open. This library needs some other library dependencies. A new window should pop up asking you to install any missing dependencies. This example creates a mesh network in which all boards broadcast messages to all the other boards. You can add or remove boards. Copy the following code to your Arduino IDE code from the library examples. View raw code. Then, we recommend that you change the following line for each board to easily identify the node that sent the message. For example, for node 1, change the message as follows:. Then, add the mesh details. You can change it to whatever you like. The default is It is recommended to avoid using delay in the mesh network code. To maintain the mesh, some tasks need to be performed in the background. Instead, it is recommended to use TaskScheduler to run your tasks which is used in painlessMesh itself. The following line creates a new Scheduler called userScheduler. Create a painlessMesh object called mesh to handle the mesh network. Create a task called taskSendMessage responsible for calling the sendMessage function every second as long as the program is running. The sendMessage function sends a message to all nodes in the message network broadcast. To broadcast a message, simply use the sendBroadcast method on the mesh object and pass as argument the message msg you want to send. Every time a new message is sent, the code changes the interval between messages one to five seconds. Next, several callback functions are created that will be called when specific events happen on the mesh. The receivedCallback function prints the message sender from and the content of the message msg. The newConnectionCallback function runs whenever a new node joins the network. This function simply prints the chip ID of the new node. You can modify the function to do any other task. The changedConnectionCallback function runs whenever a connection changes on the network when a node joins or leaves the network. The nodeTimeAdjustedCallback function runs when the network adjusts the time, so that all nodes are synchronized. It prints the offset. Finally, add the taskSendMessage function to the userScheduler. The scheduler is responsible for handling and running the tasks at the right time. Finally, enable the taskSendMessage , so that the program starts sending the messages to the mesh. To keep the mesh running, add mesh. Upload the code provided to all your boards. With the boards connected to your computer, open a serial connection with each board. You should see that all boards receive each others messages. For example, these are the messages received by Node 1. It receives the messages from Node 2, 3 and 4. You should also see other messages when there are changes on the mesh: when a board leaves or joins the network. Upload the following code to each of your boards. This code reads and broadcasts the current temperature, humidity and pressure readings to all boards on the mesh network. The readings are sent as a JSON string that also contains the node number to identify the sender board. In the nodeNumber variable insert the node number for your board. It must be a different number for each board. The readings variable will be used to save the readings to be sent to the other boards. Create a task called taskSendMessage responsible for calling the sendMessage function every five seconds as long as the program is running. The getReadings function gets temperature, humidity and pressure readings from the BME sensor and concatenates all the information, including the node number on a JSON variable called jsonReadings. The following line shows the structure of the jsonReadings variable with arbitrary values. The jsonReadings variable is then converted into a JSON string using the stringify method and saved on the readings variable. The sendMessage function sends the JSON string with the readings and node number getReadings to all nodes in the network broadcast. Next, several callback functions are created that will be called when some event on the mesh happens. The following screenshot shows the messages received by node 1. It receives the sensor readings from node 2, 3 and 4. You can take a look at the painlessMesh library for more examples. We intend to create more tutorials about this subject on a near future. I think it would be better to have one ESP to upload to the database. But it will depend on your project requirements. I still need to do some more research on this topic to see how to handle different network topologies and requirements. Regards, Sara. But indeed, these are other project requirements than initially drawn, but with this mesh, I can try to link to my water well sensor! I did some further reading on this requirement. I found an android app which had a working painlessmesh, however it seems to be broken with the releases. Very interesting simple mesh. I would also like to know how to get the data out of the mesh and into MQTT running on another computer, such as a R-pi. I would guess that one of the nodes would be dedicated to that function, but I cannot visualize how to prevent duplicate messagesâ€¦. Hi Dave. So I am thinking about a project to attempt, I have a rather long driveway and would like to build a detector. I know I could easily find purchase one but what fun would that be? Great project, could be really useful for me. Would you consider expanding this project to include displaying the readings on a web page running on one of the boards accessible on my home wifi? Thanks and please keep up the good work. Thanks for the suggestion. I have tried painless mesh number of times in the past and recently. I would also love to use a reliable mesh-networking. Painless mesh sounds impressive, but I and some others have found it unreliable after running from few hours to few days, even with very few less than 6 nodes, tried with both ESP and ESP32 and combination. All nodes are within RF range of each other within m. It generally starts OK but after some random time nodes start dropping off from the network and take very long time minutes or never to reconnect. This is unreliable and unacceptable. I suggest that you set up a reasonable size more than 6 nodes painless mesh network for number of days or longer and then report how reliable it is. I enjoy your tutorials, have purchased previous courses and use lot of your tutorials as reference. Hi Jack. Thanks for sharing your knowledge about this subject. To get started, we experimented with 4 nodes and everything seemed to work fine. Did you experiment with any other library that supports mesh networking? Thank you so much for sharing your thoughts about this. Awesome post! The range of the MESH network is really good. Everything working like a charm! Hi Nuno. That is a great topic that many of you might be interested in. It is already in my to-do list. The documentation on TaskScheduler is very good and with lots of examples. The basics are pretty simple. I use it in all my projects, have you taken a look at the documentation? A simple question. Is it possible to automatically number each node? Hi Manuel. The mesh recognizes the nodes by the board chip ID. I have a couple of ESP32 scattered around, all linked via my local router and my home network. Each has a fixed IP. I have them talking directly to each other, no problem. I cannot see how this protocol would work if these ESPs cannot directly contact each other â€" your comments? Instead of broadcasting, you can send messages to specific boards. Hello Sara and Rui. How do I only get the message text in the serial monitor? Without further information. Please give me a hint Greetings from the old man in the Netherlands. How do I change this rule. And not any other info. Thanks for your understanding. Sorry google translate is killing me and me text. Did you upload your code to another ESP device and configure it as node 2? If you only get messages from Node1, you only have 1 node in your mesh. Hello Thanks again, Sara and Rui. Do you know if there is any limitations about the number of nodes? At the moment, we only experimented with 4 nodes. In the depths of the internet it is said that the number depends only on the RAM and you will probably reach the end at 50â€¦ Thanks for pointing that out. I salute you, I especially wish you health and thank you for the additional study material, but also another problem in my :. But you continue to move on successfully. A lot of good. But I have another problem. If anyone can advise me. Not from a flash disc not an SD card. I split the SSD disk, modified the config and another file, but the system does not load. In Raspbian, it can be copied to disk, so it works. Unfortunately I have no real success with this example. I use ESP modules myself, because every chip has its own number anyway, I use this one too â€" every node has the exact same code. I also added an output to the terminal, that 5 seconds after the last output a dot is sent and after 80 the line is wrapped â€" so I can at least see that the node hanging on the PC is still alive. One should be connected to the router and another one should be connected to esp which is connected to router through serial communication protocol. Can each of the boards act as router so that in case the fourth is out of range of the first but within the range of the others, the first can still communicate with the fourth? You can do that. However that is not implemented in this tutorial yet. This tutorial only shows broadcast mode. Hello, I got the following error. Please help. The payload is not big but one node will need to be battery solar charged powered so obviously low power and sleep mode for that node is important. Have you done any tests with this in mind with the painlessMESH library? Thanks for you comment. The weather sensor could wake more often, save readings and report every hour. It can still take some time for the mesh to form, so might take a minute. You could divide your nodes into leaf nodes that sleep and always-on intermediate nodes that route packets further than the root router. Then nodes could wake any time, e. Mesh is simpler if you preprogram which nodes can pair and which must forward. Nodes can sleep until some time, for leaf nodes send a packet and

wait for reply, repeat on timeout for some retries. For forwarding nodes, wake and listen for some interval. If no message from a leaf, forward a no-response message. The root node can send a time-sync packet that gets forwarded so nodes can wake within the same second. Thank you for this detailed response Carl. No distances are big and all have unobstructed line of sight. Having an always on hub connected to the weather sensors is a good idea. You can just add a bigger solar cell and LiPo in case of rainy days. I forgot to mention the voltage regulator chips have varying quiescent current and can make a big difference. You can use google to search for current consumption of various boards. After a bit more reading a lot more actually I now see you are referring to two different mesh libraries that approach the mesh topology differently. In fact this topology is how the military, SWAT and other emergency services do front line comms and video back to command centers. If you are interested have a look at Silvus Technologies. We loved this project so much that we featured it in this weeks episode of The Electromaker Show! Thank you so much. And thank you for sharing. We intend to create more tutorials about this subject. Stay tuned. Keep up the good work. Is there a way to set the number of layers with the painlessMesh library. I am looking to construct a control system for a large number of PWM outputs. The ESP32 seems an ideal, low cost solution. But, I advise you to take a look at the examples provided in the painlessmesh library and see if there is any clue for what you want to do. Rui and Sara I just want to repeat my congratulations on your work. Thank you, thank you! It would be interesting to have some mesh points to store and send data voltage, GPS information, etc. Greetings Manuel. Mesh network connected to wi-fi is in our big to-do list. Then I found a library that makes it simple. Multiple formats supported. I tested using software serial both ends and it works a treat. Philip, I used software serial and just random digital pins. Just change it to what you want. Good luck. Thank you for the great tutorial. I would like to implement the same concept. I have multiple ESP and each has one sensor. I want to create a mesh network to be able to cover a bigger range, then allow one main ESP to connect to a router so that I can send the data from the rest of the ESPs to a website. How can I have one ESP connect to the mesh and the internet at the same time? So that it can receive data from other nodes and send it to a website. Hi Thx for this great job I have experiment myself and works fine I have a problem with the wifi band because all nodes act as AP and the band will be saturate. This is amplified by the use off 40Mhz wide. I have not found how to define 20Mhz and change the channel. I have 2 questions to go further â€" do you know if an equivalent library exist based on espnow? I will try a base structure network with painlessmesh and espnow connections between the base structure and dedicated sensors. Thank you for this tutorial. It inspired me to do some further research and to build opon this demonstration example. It will be used in one of my college classes on Mesh networking. Currently my setup is as follows. Everything works fine. Too often things went wrong. The distance between the farthest Node was 10 meters with a wall in between. It remained mutually unstable in terms of receipt contunity. Because I suspected that the signals were distorted or too weak. I work with 4 times Wemos D1 Mini. Now after installing the Node, s with external antennas, it has been completely flawless for a few days. I do not know how many Node, s maximum in a group can work together, I know that? Greetings the old man Bert. Many thanks for all these great and comprehensive tutorials Sara and Rui, they have been a really great anti-dote to lockdown isolation over ther last 6 or 8 months for me! Do you have more instructions on how to do this? How do I get to see messages from both boards on the same serial monitor window? Thanks Sara. Thanks for the Putty link. Regards, John. Notify me of follow-up comments by email. Notify me of new posts by email. Recommended Resources. What to Read Nextâ€¦. Enjoyed this project? Stay updated by subscribing our weekly newsletter! Thanks for sharing your thoughts! Regards, Sara Reply. Hi Sara, thank you for your suggestion! Thank you and have a nice day! Hi Sara, I did some further reading on this requirement. Thanks, Dave K. Yes, we are thinking about writing a tutorial about that. Great Tutorial, any way future examples can be done in micropython? Best Regards Reply. Thank you very much for this great post! Hi there. Great post! Maybe you can post an article about TaskScheduler? Seems a great tool. Thanks Reply. The temp shows up twice in the printout sample above. You guys are awesome! Helping us inch into the IoT world! Thank you for the reply. One should be connected to the router and another one should be connected to esp which is connected to router through serial communication protocol Reply. Great work Can this mesh protocol coexist with wifi for at least one esp32? Thanks for a great tutorial. Thank you for that. Thank you. Greetings Manuel Reply. Ralph I want to test this library using serial 2 or serial 3 with esp32 boards. Which pair of files I should use? There is not enogh information in the read me file but I see three pairs datum, i2c, and spi Thanks Reply. Many thanks Ralph I will give it a shot Philip Reply. So that it can receive data from other nodes and send it to a website Reply. Regards, John Reply. Download our Free eBooks and Resources. Your question might be answered by sellers, manufacturers, or

customers who bought this product. Please make sure that you are posting in the form of a question. Please enter a question. Note: Please finish the installation by professionals or install the wiring harness under the guidance of professional. The switch is very flexible for turning on or off. It can stand up to 10, times pressing under normal use. This is a heavy duty wiring harness with wire gauge of 14 AWG, which can be used to connect a light bar within W. Three extra blade fuses for you to choose, which is more scientific and reasonable. Four wire connectors are included for safer connection. The wiring harness is a good accessory for off-road vehicles, automobiles and boat that use a 12V DC power source. Dedicated to communicate with our customers, we provide the superior-quality products and best service for each customer. The products have been passed through rigorous testing to ensure 10, times pressing under normal use. We provide 2-Year Limited Warranty for the high-quality product so you can purchase with confidence and satisfaction. Staffs in our customer service team have rich experience in after-sales service. E-mails will be quickly responded within 24 hours. Skip to main content. You can return the item for any reason in new and unused condition: no shipping charges Learn more about free returns. How to return the item? Go to your orders and start the return Select the return method Ship it! FREE delivery: Get free shipping. Free day shipping within the U. Prices may vary for AK and HI. Fastest delivery: Saturday, Feb 27 Order within 20 hrs and 34 mins Details. In Stock. Add to Cart. Secure transaction. Your transaction is secure. We work hard to protect your security and privacy. Our payment security system encrypts your information during transmission. Learn more. Ships from Amazon. To hide it, choose Ship in Amazon Packaging at Checkout. Ships from. Sold by. Add a gift receipt for easy returns. Visit the Nilight Store. Amazon's Choice recommends highly rated and well-priced products. This fits your. Frequently bought together. Add all three to Cart Add all three to List. Ships from and sold by Amazon. FREE Shipping. Customers who viewed this item also viewed. Page 1 of 1 Start over Page 1 of 1. Previous page. Next page. Featured items you may like. Compare with similar items. Register a free business account. Have a question? There was a problem completing your request. Please try your search again later. Product information Technical Details. Click here to make a request to customer service. Would you like to tell us about a lower price? From the manufacturer. Product Size: 1. Mounting Hole Size: 1. Premium Wire This is a heavy duty wiring harness with wire gauge of 14 AWG, which can be used to connect a light bar within W. Safety Protection Three extra blade fuses for you to choose, which is more scientific and reasonable. Application: The wiring harness is a good accessory for off-road vehicles, automobiles and boat that use a 12V DC power source. Why Choose Us. Longer Lifespan. Quick Reply. More items to explore. See questions and answers. Customer reviews. How are ratings calculated? Instead, our system considers things like how recent a review is and if the reviewer bought the item on Amazon. It also analyzes reviews to verify trustworthiness. Customer images. See all customer images. Top reviews Most recent Top reviews. Top reviews from the United States. There was a problem filtering reviews right now. Please try again later. Verified Purchase. The harness is quality and lengths were long enough for my Toyota Tacoma. Changes I made included at least 2 things The relay seems to be a quality product. The pins on the 3-pin molex blug between harness and switch were easy enough to push out of connector in order to pull the harness through the firewall and then to reinsert back into the connector once cable is run into the cab under dash. I mounted the relay onto the driver side bulkhead using the existing factory ground clip which is located directly adjacent to the battery. In that location, the cable from relay to molex connetor for the switch at dash was just long enough. But there wasn't much room to move if I had to, and so I recommend they add a foot more of cable to the switch side and a foot less from the light bar side which had PLENTY of extra cable length. The other cable run from relay to the light bar is what you will have plenty of left over cable for. Since I was snipping off the pre-installed spade connectors to replace with a waterproof connector, that gave me opportunity to also trim some of the excess cable up at the light bar at the bumper. The ring terminals on the cable of the harness for pos and neg at batter are way oversized, especially for a typical bolt of the negative terminal but of course it still works once you clamp at least part of the ring. I considered snipping the ring terminal off and recrimping one of correct size onto the cable but this still works so I left it alone. Can't buy wire for this cheap and get this good of quality. The relay alone is worth 16 bucks at a automotive store. Came with easy to read instructions. You will need to unscrew the screw which holds the accessory block and pin the ground wire there. Also, the ends on this harness are for a automotive battery, you will need to change those out for smaller rings. Has worked fine since December with the light being on in minute intervals until it was used for nearly an hour June Was shocked to see the harness melting where it connects into the supplied relay. The light was still on and the inline fuse never blew. Also, the engine was not running I checked all along the harness to see if there was a wear point that could cause a short which would have blown the inline fuse and found none. This is clearly a scary hazard. By Amazon Customer on June 15, Images in this review. It was a really simple setup with most of the connections made for you. I had two problems with the harness. The first was the the connector between the switch and the relay. I couldn't fit it through my firewall so I had to cut it off and rewire on the inside. The other problem I had was that despite checking dimensions this switch doesn't fit in the stock switch slots on my Tacoma. I ended up filling away a lot of material from the sides of the mounting hole but also from the top and bottom as well. I would say the switch is probably close to 40 x 22 mm. One person found this helpful. Very happy with how heavy the wire was. Was a little disappointed with how how short the wire was for the switch, definitely was tight getting it into place for the switch. Wiring is pretty straight forward, if you have a side post battery setup it might be easier if you ground out the negative cable against the fender. If you don't want the letters to light up when the switchis off, remove the 6 terminal on the back of the switch. It is numbered on the back of the switch. I installed it into a 97 chevy truck. Overall, this seems to work great so far. I use it to power a light bar behind the grille of a 4Runner. The switch can be wired two ways The negatives with this are that ends are a little bulky so getting it through the firewall was a bit tedious. This seems to be a solid build. The switch is a nice rocker. Could use longer wire I was fortunate that my battery is on the driver side on my tundra I was able to run the wire up and through the hood and insert it there. The relay is in the corner between the fender and core support I had just enough to run the switch to the right side of steering wheel. All the items are very heavy duty and everything you need to install it is in this kit. Proper fuses are provided for maximum safety. Will last a long time because of the quality of the materials provided. See all reviews. Top reviews from other countries. Translate all reviews to English. Report abuse Translate review to English. Report abuse. L'interrupteur ne convient pas pour un Tacoma. Translate review to English. Nous faisons des jaloux! Pages with related products. See and discover other items: led wiring , acura tl performance parts , ls1 camaro parts , police led lights , f step bars , bear tracker parts. There's a problem loading this menu right now. Learn more about Amazon Prime. Get free delivery with Amazon Prime. Back to top. Get to Know Us. Amazon Payment Products. English Choose a language for shopping. Amazon Music Stream millions of songs. Amazon Advertising Find, attract, and engage customers. Amazon Drive Cloud storage from Amazon. Alexa Actionable Analytics for the Web. Sell on Amazon Start a Selling Account. AmazonGlobal Ship Orders Internationally. Amazon Rapids Fun stories for kids on the go. ComiXology Thousands of Digital Comics. DPReview Digital Photography. East Dane Designer Men's Fashion. Shopbop Designer Fashion Brands. Deals and Shenanigans. Ring Smart Home Security Systems. PillPack Pharmacy Simplified. Amazon Renewed Like-new products you can trust. Amazon Second Chance Pass it on, trade it in, give it a second life. Your question might be answered by sellers, manufacturers, or customers who bought this product. Please make sure that you are posting in the form of a question. Please enter a question. More durable and Efficiently extract more heat away, extend the life of your LED floodlight. The lamp head can be adjusted to any angle to get the best lighting direction that meets your needs. Skip to main content. Buy new:. Ships from: Amazon. Sold by: Onforu. You can return the item for any reason in new and unused condition: no shipping charges Learn more about free returns. How to return the item? Go to your orders and start the return Select the return method Ship it! Fastest delivery: Saturday, Feb 27 Order within 20 hrs and 34 mins Details. In Stock. Add to Cart. Secure transaction. Your transaction is secure. We work hard to protect your security and privacy. Our payment security system encrypts your information during transmission. Learn more. Ships from Amazon Sold by Onforu Details. Ships from. Sold by. Include Add a Protection Plan:. Drops, spills and cracked screens due to normal use covered for portable products and power surges covered from day one. Malfunctions covered after the manufacturer's warranty. Most claims approved within minutes. We will send you an Amazon e-gift card for the purchase price of your covered product. In some cases, we will replace or repair it. Add No Thanks. Add a gift receipt for easy returns. Save with Used - Like New. Sold by: Amazon Warehouse. Item will come in original packaging. See more. Fastest delivery: Saturday, Feb 27 Order within 17 hrs and 19 mins Details. Only 6 left in stock - order soon. Sold by Amazon Warehouse and Fulfilled by Amazon. Image Unavailable Image not available for Color:. Visit the Onforu Store. Color: Black. About this item This fits your. Similar item from our brands. Frequently bought together. Add all three to Cart Add all three to List. These items are shipped from and sold by different sellers. Show details. Sold by Onforu and ships from Amazon Fulfillment. FREE Shipping. Ships from and sold by Amazon. Featured items you may like. Page 1 of 1 Start over Page 1 of 1. Previous page. Next page. Customers who viewed this item also viewed. Register a free business account. Have a question? There was a problem completing your request. Please try your search again later. Product Description. Compare with similar items. Product information Color: Black Technical Details. Would you like to tell us about a lower price? Important information Wattage 50 watts. Bulb Voltage volts. See questions and answers. Customer reviews. How are ratings calculated? Instead, our system considers things like how recent a review is and if the reviewer bought the item on Amazon. It also analyzes reviews to verify trustworthiness. Customer images. See all customer images. Top reviews Most recent Top reviews. Top reviews from the United States. There was a problem filtering reviews right now. Please try again later. Color: Black Verified Purchase. Your browser does not support HTML5 video. Really impressed with how bright this flood light is. The unit itself isn't very big, but it packs a punch when it comes to brightness. Install was pretty straight forward. There's not much to review here, it's a floodlight, that is just as bright as advertised, made of what seems to be durable material. LED is a plus for energy efficiency. Definitely recommend this fixture for large back yards! Images in this review. I bought 4 of these lights and love them! I got them put up this weekend and i cant believe how bright they are and how far the light covers. I live in the country and the tree line is about 40 feet from my back door. With my old lights the light would just reach the trees but not penetrate into the woods. These new light go at least 20 to 30 feet into the woods now. Now a word about the waterproof aspect the light them self are waterproof the mount where you attach it to the building is not. I ended up getting some silicone and running a bead around the outside of the base where it attaches to the wall. Overall these are great bright lights. Great light. Very bright. Smaller side lights are bright and offer a good coverage for corner lights. By Heather Pribyl on February 17, I bought these to replace my old 2x watt PAR spotlight fixtures that illuminate my yard. These include a new mounting bar for a 3" round box and installation was pretty painless. The only gripe I have is that the kit doesn't include any sort of weatherproof gasket between the base and the wall. I used some self-adhesive weather-stripping for that. The leads are a bit short, so take that into account when planning installation--and you should pay attention to the orientation of the lamp when installing. But the result is a very bright light and I'm very pleased with the coverage--and the best part is that they're metal and glass, not plastic. After a heavy rain one of these filled completely with water. I replaced my CFL flood lights with these and so far, they are very good. They do not have motion detectors on them, they are controlled by a switch. I have mine mounted on the eaves of my second story, and they still are very bright. Instant on with full brightness. I did not rate "Weatherproof" because I just installed them. I'm hoping they are reliable and last a while. Easy to install black wire, white wire, and a ground wire, and very adjustable. The light is bright, but i would describe it more as glare. When you look at a typical bulb, the glass has dimples and groves to focus the light. If you look at the picture of this light it is clear. The led's light up and the beam can go anywhere it wants; there is no focus. It is brighter than the light i had before, but because of the way the lights are attached I can't maneuver the lights around the downspout from the rain gutters like i was able to do with the dual head light fixture that was there before since each light was independent of the other. And it is a shotgun of brightness. You may end up lighting up your neighbors yard or house if you are close enough, whether they like it or not. This is a triple head light, but the 2 smaller outer heads hang off the middle head. Being plastic it is easily moved even when the adjustment knobs are locked down. It does have a wide sweep of adjustment, but i would have preferred each head to be independently attached to the base with a stronger arm each. I suspect a strong wind storm will just sit there wiggling or shaking it back and forth until it snaps off from the weight of 2 lights hanging off a single light on a single small plastic arm. The base - that's a whole other deal. The whole plastic unit attaches to a metal plate via a single hex screw. The plate has the typical electric light fixture holes, but the light itself attaches to the plate via a single narrow screw in the middle. So if you can imagine it, when you attach the plate to whatever wall or electrical box there is a seam there, now the light itself has to attaches to the plate with another seam. Each seam must be sealed against rain. It only comes with 2 gaskets for 2 individual lights, so you gotta come up with some way to weatherproof the additional seams. If you are replacing a light, odds are the existing seal will tear as you remove the old light. Gaskets are cheap, they should come with 4 total instead of 2 saving you the car trip to the hardware store. Another gotcha is the light base is bulky with a small pocket to fit a small amount of flexible cable with wire nuts. Solid copper cable will need to coaxed. The electronics is encased in the base. They do provide these low profile connectors, but if you have a large wad of cabling or solid copper you better get an outdoor box to mount it to, which will get you the additional gaskets. If you are going to use the plate to mount to a wall directly, you better have somewhere else for the spare cable to go and buy some silicone. See all reviews. Top reviews from other countries. Purchased 2 of these lights for lighting the driveways in front of may garages. Easy to install and plenty bright for such a small fixture but after weeks I have condensation inside the glass of all 3 lights on 1 unit! Also there's no way to tighten the side wing lights so I foresee challenges there in the future. Lastly, because it lives outside, the screws keeping the fixture together are not galvanized and are already rusting 2 weeks after install. Report abuse. These lights are bright! And very very white light as well. Great product. Customers who bought this

05 bonneville
96 gmc jimmy transmission
acura tl replacement parts

item also bought. Pages with related products. See and discover other items: Explore Flood Lights. There's a problem loading this menu right now. Learn more about Amazon Prime. Get free delivery with Amazon Prime. Back to top. Get to Know Us. Amazon Payment Products. English Choose a language for shopping. White Lightk. Aluminum, Metal. Alluminum Alloy. Amazon Music Stream millions of songs. Amazon Advertising Find, attract, and engage customers. Amazon Drive Cloud storage from Amazon. Alexa Actionable Analytics for the Web. Sell on Amazon Start a Selling Account. AmazonGlobal Ship Orders Internationally. Amazon Rapids Fun stories for kids on the go. ComiXology Thousands of Digital Comics. DPReview Digital Photography. East Dane Designer Men's Fashion. Shopbop Designer Fashion Brands. Deals and Shenanigans. Ring Smart Home Security Systems. PillPack Pharmacy Simplified. Amazon Renewed Like-new products you can trust. Amazon Second Chance Pass it on, trade it in, give it a second life.