

INSTRUCTIONS FOR BUILDING MLX ENCLOSURE

Required parts:

Parts Name	Where to Buy
½ - Inch PVC Transition (Type T conduit)	https://www.lowes.com/pd/CARLON-1-2-in-PVC-Transition/1005295
½ - Inch Schedule PVC elbow (90 degree)	https://www.lowes.com/pd/CARLON-1-2-in-Schedule-40-PVC-Elbow/1091493
½ - Inch Dia 90 degree PVC sch Tee	https://www.lowes.com/pd/LASCO-1-2-in-Dia-90-Degree-PVC-Sch-40-Tee/1067651
Brass craft faucet repair kit	https://www.lowes.com/pd/BrassCraft-Faucet-Repair-Kit/4778474
½ - Inch coupling CPVC fittings	https://www.lowes.com/pd/Genova-1-2-in-Dia-Coupling-CPVC-Fittings/3425382
Rubber flat washer	https://www.lowes.com/pd/The-Hillman-Group-2-Count-5-16-in-x-1-1-4-in-Rubber-Standard-SAE-Flat-Washers/4582595
Zinc plated fender washer	https://www.lowes.com/pd/The-Hillman-Group-4-Count-1-4-in-x-1-in-Zinc-Plated-Standard-SAE-Fender-Washers/3012355
Steel clamp (10 -pack)	https://www.lowes.com/pd/10-Pack-1-5-16-in-to-2-1-4-in-dia-Stainless-Steel-Adjustable-Clamps/3878586
Steel clamp (2-pack)	https://www.lowes.com/pd/2-Pack-1-5-16-in-2-1-4-in-dia-Stainless-Steel-Adjustable-Clamps/3878532
8 inch Nylon cable ties (100 - pack)	https://www.lowes.com/pd/Utilitech-100-Pack-8-in-Nylon-Cable-Ties/50005722

Wing Nut	http://www.homedepot.com/p/Everbilt-8-32-tpi-Zinc-Plated-Wing-Nut-6-Piece-802341/204274197?keyword=887480023411

Assembly

Step 1:

Glue the faucet repair kit together, and then glue the washer to the smooth rim of the coupler as shown in the picture (top -left). After letting it dry, insert the 1st assembly into ½ inch Tee PVC so that the screen remains inside and make sure it's a tight fit as shown in the picture at the bottom.



Step 2:

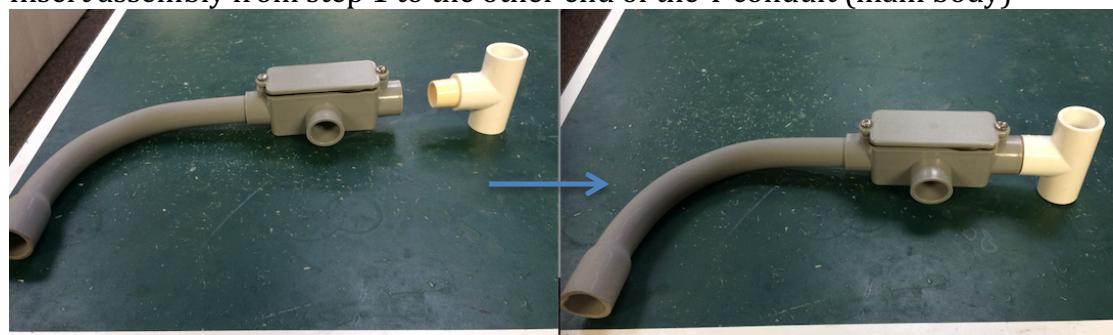
Unscrew the lid of ½ - inch PVC T conduit and then glue zinc plated fender washer so that the hole is in centre to insert the wire through it. After that insert

$\frac{1}{2}$ - inch PVC 90 degree elbow from one end and should aligned properly as shown in picture at the bottom.



Step 3:

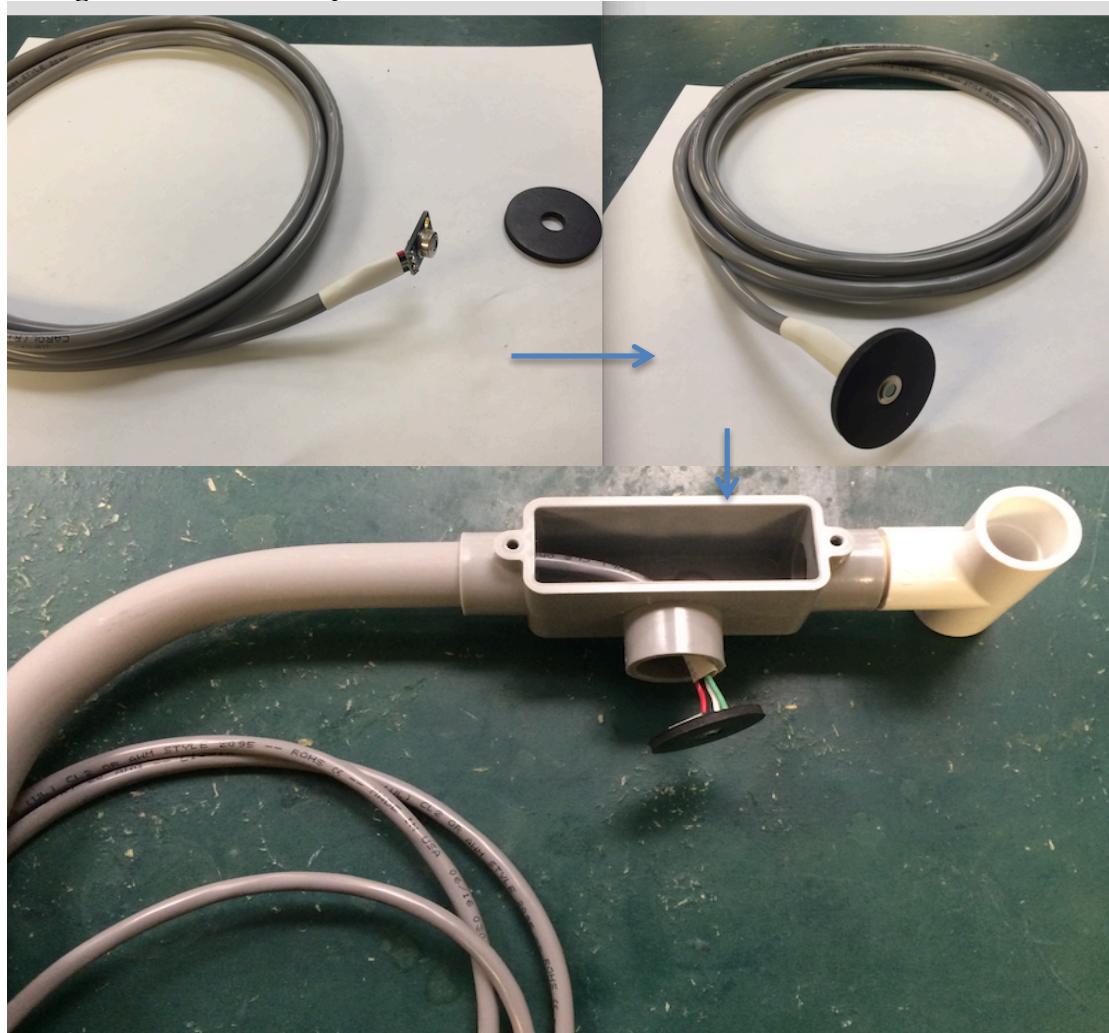
Insert assembly from step 1 to the other end of the T conduit (main body)



Step 4:

Solder the IR sensor to wire and then attach the rubber washer to the sensor making sure the lens is sticking out a little form the washer hole to avoid interference with the inner edges of the washer. After that insert the free end of soldered wire from the opening at the bottom of T conduit through the zinc

plated washer (from step 2) and through the 90 degree elbow PVC as configuration shown in picture at the bottom.



Step 5:

This is the final step. Glue the washer with sensor to the T conduit and tie the wire with zip tie as shown for strain relief. After completion it should look like this



Cost and Quantity Details:

Qty	Part #	Description	Cost - Each	Line Total
23	115991	½ - in PVC Transition (Type T conduit) model(E983D)	2.49	57.27
23	50916	½- in Schedule PVC elbow (90 degree) model(UA9ADB)	0.61	14.03
23	23873	½- in Dia 90 degree PVC sch Tee model(401105RMC)	0.33	7.59
23	502098	Brass Craft Faucet Repair kit model(SF0097X)	0.99	22.77
24	23761	½ - in Coupling CPVC fittings model (50105Y)	0.33	7.92

Qty	Part #	Description	Cost - Each	Line Total
13	423565	5/16 in x 1-¼ in x ⅛ in Rubber Flat washer model (884635)	1.07	13.91
6	136616	¼ in x 1 in Zinc plated fender washer model(880342)	1.15	6.9
4	94579	Stainless Steel Adjustable Clamps (10-pack) model(CL28PK10)	10.22	40.88
2	48536	Stainless Steel Adjustable Clamps (2-pack) model(CL28PK10)	2.27	4.54
1	76023	Utilities 100 -pack 8 in Nylon cable ties model(SGY-CT15)	6.98	6.98
4	204274197	8-32 zinc plated wing nut (6-pak)	1.18	4.72