



Launch Pad

Purchase and gather all the material and tools required. See attached "Parts List – Launch Pad" (*Appendix A*)





SAFETY NOTE: Always know, read and follow the safety directions that come with your power or hand tools, and **most importantly**, **always** wear safety glasses or safety goggles while working on this or any shop project.

DANGER! Paint Thinner, PVC Cement and Plastic Paints are **EXTREMELY** Flammable. The VAPORS are harmful **DO NOT** breathe. Vapors may cause flash fire. Use only in a well ventilated area. Read, understand and follow all product directions and precautions before using.

Begin by looking over all the parts that you will need. Several items are optional. Select the options that will work best for your unique situation.

Start with the rolling cart. For illustration purposes only, we used a Rubbermaid_® cart. Select the cart option that will best fulfill your needs or you can build one, size is the only requirement. It should be at least 30" long and 20" wide.

Begin assembly by cutting the sides of the "Poof Cannon" rack. Remember these two plywood pieces will be placed together with the finished surfaces facing out. Therefore, mark the *same* outline on the **good or finished** side of one piece of plywood and on the **rough or unfinished** side of the other piece. You can use a piece of the 2" PVC pipe to mark the semi circle that the "Poof Cannon" will set in. **See Appendix B & C for more detail.**





Using a 1 ¼" bit, drill the 4 holes used for distance adjustments.



Cut the 2x4 parts. You will need one piece 15" long and one 21" long. The 15" mounts vertically between the 2 sides in front. Drill a 1 ¼" hole in the center of the vertical piece, to accommodate the Red Disco Light power cord. The 21" piece is the Base mounting between the 2 side panels.

Cut 4 pieces 7" long. These will be the footings to mounting the PVC floor drain fittings. NOTE: If your cart is a different size than ours, you will need to adjust the lengths of the footings to accommodate your cart size.

2x4 Cut Layout						
21"	15"	7"	7"	7"	7"	
Base	Vertical	Footings				

Adjust length of Footing members to accommodate your cart

Before Assembly: Sand, Prime and Paint all wood parts. Note: After assembly it will be difficult to paint the inside of the "Poof Cannon" rack.

Assemble the "Poof Cannon" rack by attaching one side to the base 2x4 using 1 1/4" decking screws. Make sure that the good side of the plywood is facing out.

Next attach the vertical 2x4 using 1 1/4" decking screws.

Next attach the other side. Making sure that the good side of the plywood is facing out.

Now assemble the PVC pedestal for the red spinning disco light. Cut the 3" PVC to length, 6 ½" for our Launch Pad, your length may be different. Dry fit the pedestal first to making sure the height is correct. **Do Not** glue parts together until dry fitting on your cart.



Place the "Poof Cannon" rack and the PVC pedestal with the Red Disco Light on your cart. Adjust the distances so that they are **centered** on the cart and everything fits with clearance. See attached "Cart Layout" for more detail.

Place the "Poof Cannon" on the rack to test and make sure the cannon can be mounted and move freely up and down. You will need to make sure that the cannon at its lowest position will not hit the Red Disco Light.

When you are satisfied with your distances, glue the PVC pedestal together.

Fasten the "Poof Cannon" rack to your cart base with 2 ½" screws or ¼" bolts. Mount the (4) 2x4 footing pieces on the cart. The footing pieces are located 3" from the rear edge of the cart and fit snug against the side of the Poof Cannon rack. Added support may be needed for the Poof Cannon, attach (2) 5" or 6" L brackets near the front of the rack.

See Appendix D for more detail.





Fasten the PVC pedestal to the cart using screws or small bolts.

Glue or bolt the Red Disco Light to the PVC pedestal. Thread the power cord from the Disco Light through the hole in the vertical of the Poof Cannon rack.



Example: To assemble this, you will need the following parts:

PVC 2" Pipe: (2) 33", (2) 14", (1) 19", (2) 2 1/4"

PVC 2" Fitting: (6) 90° Elbow, (2) 2" Floor Drain (bell shape)

Dry fit the sign marquis making sure the pieces fit and that it will **stand level** on the cart when it's put together. Adjust legs as needed. Dry fit the Marquis on the cart footings. The Floor Drain parts should be located in the center of the 2 - 7" footing mounting boards.



Before mounting on the cart, paint with your choice of design and colors. BE CREATIVE.

Remove the 2" Floor Drain parts. Start the gluing process, beginning with the top parts and working your way down, checking frequently that the parts remain square to one another. Working on a flat surface assures that the Sign Marquis is flat and level when complete.



Mount the "Poof Cannon" in the rack before you mount the sign marquis, and make sure that you can easily mount and un-mount the "Poof Cannon" from the cart. Mount the sign marquis to the cart using 2 ½" screws or small bolts.

Attach the retractable extension cord, using small pipe clamps.



Next you need to attach the electrical equipment that you have selected. This may be remote control devices and/or running lights, the Red Disco Light and sound system. There should be ample room to neatly fold the electrical





cords inside the "Poof Cannon" rack. Additional remote devices can be added for even more variety. Our remote, hangs off of the "Poof Cannon" and controls the lights and sound system (siren).

Wind running lights around the sign marquis and attach with plastic ties.

Another short extension cord goes from the power strip directly to the "Poof Cannon".

The power strip cord can be the only plug that attaches directly to the Wind-Up Extension cord.





Finish the Launch Pad by inserting the range adjustment tube. This tube will allow you to change the pitch of the "Poof Cannon" and determine the distance that it will launch a ping pong ball. This is a $\frac{1}{2}$ " pipe 6" long that slides into the side holes of the "Poof Cannon" rack. It is held in place by $\frac{1}{2}$ " caps. **One** cap should be glued on.



Finish by removing all loose parts and painting the entire cart.

Remember to touchup any parts that may have gotten nicked or marked up in the building process.

Optional equipment can be added:

Additional Ping Pong Cartridges holds And Carburetor optional parts



"We Prize Friends" sign









Safety and Security: Safety and security procedures are important for each church to carefully define and implement according to their unique needs. The security, safety, illness and accident procedures described in this curriculum are provided for example purposes only and may not be appropriate, applicable or adequate for every situation. Each church is responsible for determining whether any security, safety, illness and accident procedures contained in the curriculum are appropriate, applicable or adequate for its unique situation. The activities described in this curriculum require adult supervision and may not be suitable for each child and each situation. Each church is responsible for ensuring that adequate adult supervision is provided for all activities and for determining whether an activity is appropriate for each child and each situation. Kids Kount Publishing disclaims all liability for the implementation of any procedures or the performance of any activities described in this curriculum.

Parts List for The Launch Pad

Rolling Cart

Rolling Cart (1). Select your own option or build one inexpensively with plywood and four wheels. A handle for pushing may not be necessary. For illustration purposes only, we used a Rubbermaid® cart. Select the cart option that will best fulfill your needs or you can build one, size is the only requirement. It should be at least 30" long and 20" wide.

Wood

1/2" plywood – 4'x2' 2x4 stud – 21" long 15" long

Four footings 7" long each or cut to match your cart.

Hardware

1 ¼" decking screws—20 2 ½" decking screws – 20 L Brackets – 5 or 6" – 2 Glue for attaching Red Disco Light 10" locking ties for attaching chasing lights

Electrical

Power strip – (1) Short extension cord from blower to power strip – (1) Extension cord up to 25' on wind up reel – (1)

PVC

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2" pipe – 2 –33" pieces 2-- 2 ¼" pieces, 2 --14" pieces, 1-- 19" piece, --71 ¼" total 3" pipe – 6 ½" needed 1" pipe – 6" needed 2" 90 degree elbow – (6) 2" floor drain (bell shape) – (2) (Check plumbing section for shower and drains) 3" water closet flanges – (2) PVC glue
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Paint

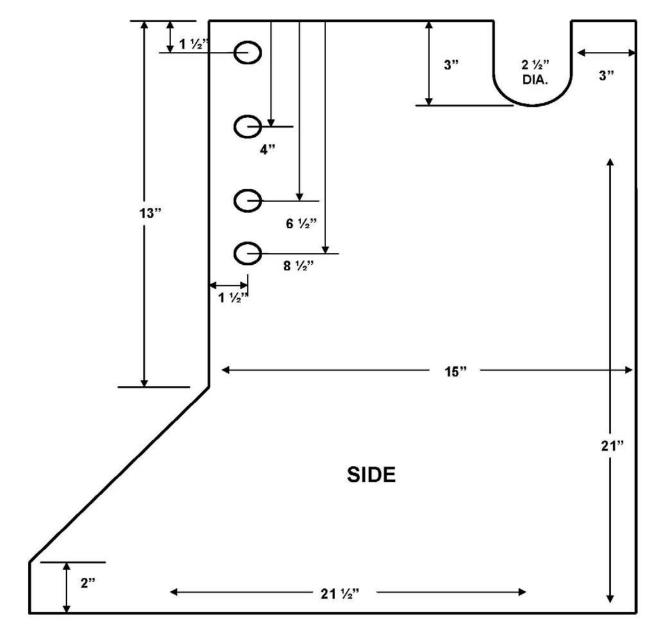
Your options for color and design

Novelty Store

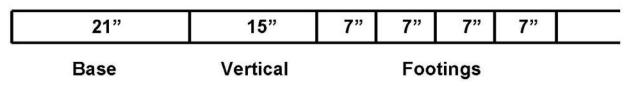
Rotating Red Disco Light Chasing lights (Noveltylights.com) (optional) Christmas Lights (another option)

Electronic Gadgetry (optional but recommended)

Remote controls for Red Disco Light Sound device...siren or recorded tape player



2x4 Cut Layout



Adjust length of Footing members to accommodate your cart size

