Make a Smart Mirror With Alexa in 10 Minutes

by mangodisplay

Here's what you'll need to build your Alexa enabled smart mirror.

Materials:

Two-way glass mirror(use a size of your preference, making sure it is larger than the tablet)

Black Vinyl Wrap air release adhesive film roll (ideally 12" width by 60" length)

Picture frame (same size as the mirror, must be able to fit the mirror within this frame)

Amazon Fire 7 Tablet (black is ideal) Mango display app (already installed on the amazon fire 7, can be downloaded from play store as well)

Apps:

Mango Display App installed on your Fire Tablet

Mango Mirror app on your phone/computer (allows you to control the mango display app)

https://youtu.be/hTc52mh7tYs

Step 1: Place Mirror With the Back Facing Up

Place the mirror so that the back side is facing upwards. The back side is basically the least reflective side of the two. This is the side that will let the light go through, making it possible to see the display on the tablet.

Step 2: Measure and Cut the Vinyl Backing

Roll out the vinyl and measure it to the size of the mirror and cut accordingly. Using the black vinyl will stop the light, allowing you to see your reflection.

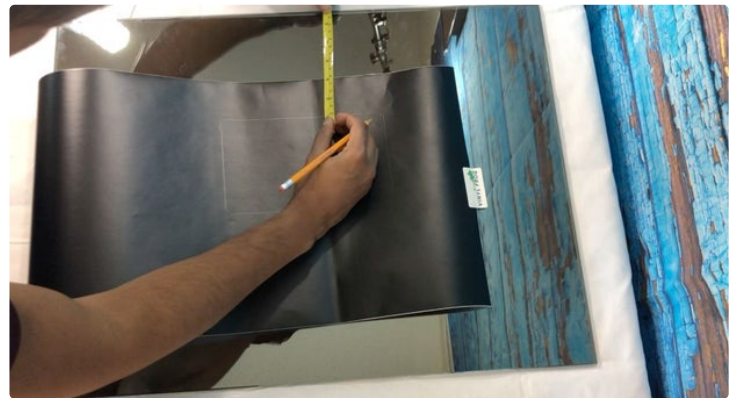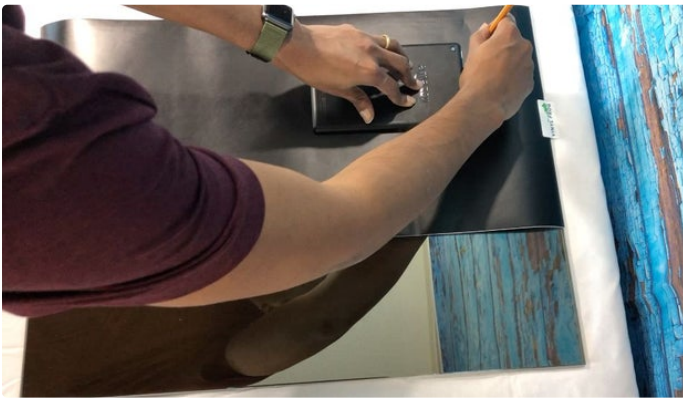## Step 3: Mark Out the Area Where the Tablet Will Go

Put the tablet, with the screen facing down, on top of the vinyl. The preferable height from the top and the width from the side are 4" and 2" respectively.

Step 4: Cut Out a Window in the Vinyl for the Tablet

Once positioned properly, draw the outline of the tablet onto the vinyl. Draw another outline that is offset about ¼" inside the original outline. Cut the vinyl with reference to the inner outline. This is to prevent any gaps be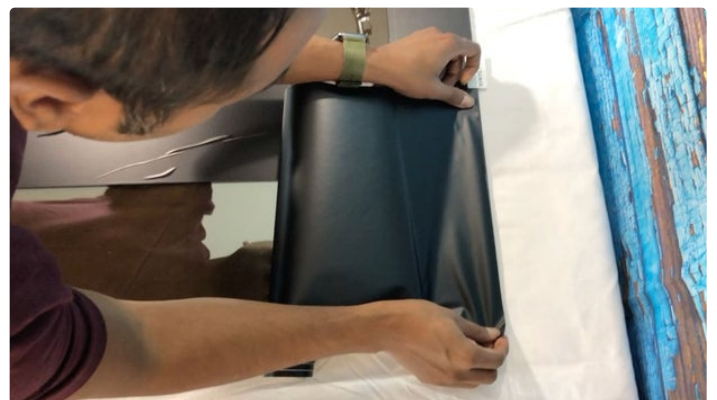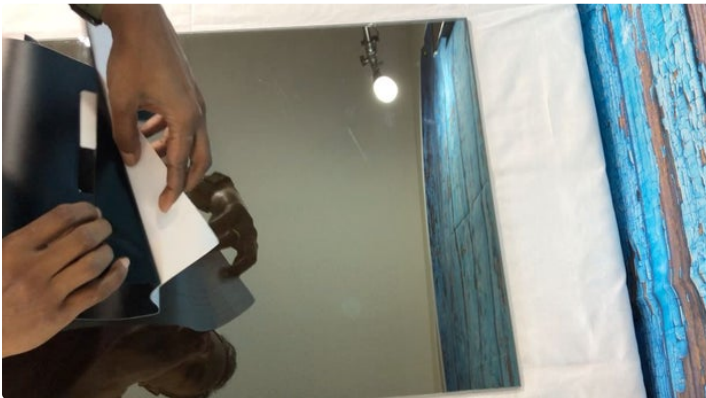tween where the tablet starts and the vinyl ends. Any gaps will allow light to pass through. Another important thing is to make sure the camera is covered. After it is cut, make sure the cut surface aligns with the screen border and is straight.

Step 5: Stick the Vinyl Onto the Mirror

Paste the vinyl onto the mirror. Make sure it lines up with the corners it was measured against. No need to worry about creases or bubbles. Cover the remaining part of the glass with vinyl. Cut off the excess with a knife.

Step 6: Attach the Tablet to the Glass

Cut 2 strips from the remaining vinyl. Place the tablet onto the vinyl pasted glass, **making sure the charging port is facing downwards** (the bottom of the mirror). Use the vinyl strips to stick it in place. Be careful not to cover the speakers.

Important Notes for your tablet before attaching it:

1. Install & set up the Mango display App - for more details on the App, including setup and available smart mirror widgets visit the Smart Mirror with Alexa DIY page.

2. Make sure you have hands free Alexa enabled. This is how you will be interacting with the tablet after this.

3. Make sure your tablet can be removed if needed - software updates, etc. This vinyl strips allows for removing the tablet when required.

Tip: During your normal use of Alexa, the Mango Display App may be covered over by Alexa generated screens- example Album art, when you are playing songs. So when you want to see your Mango display again, simply say 'Alexa, Open Mango Display App'. If you want to close the app, say 'Alexa, Close Mango Display App'.

Step 7: Attach the Power Cable to the Tablet

Insert the power cable into the tablet and use another piece of vinyl to stick it in place. This is important as it will prevent the tablet from being moved in case the power chord is tugged on or pulled lightly.

Step 8: Place the Mirror in the Frame

Place the mirror, faced down, inside the frame and secure it in its position. Make sure the clips are enclosed to prevent the glass from falling out.

Step 9: Prepare the Hanging Wire & Hang Up Your Smart Mirror

Cut out a hanging wire to a measure length and loop it around the hooks of the frame. Twist the edges to make it secure.

Make sure you have a wall hook or screw that is secure enough for the weight of the mirror.

Hang the mirror on a wall and that's it!

You now have a smart mirror with Alexa. Simple and easy!