

The Maker Kit cardboard case is an optional enclosure for your Raspberry Pi, Coral USB Accelerator, camera and microphone.

To build this case, print the two **Templates** pages and follow the assembly steps below (printing the **Instructions** is optional).

Before you begin, gather the materials on the right and prepare a protected cutting surface (a cutting mat or some thick cardboard).

MATERIAL & TOOLS:

- ☒ Box from the Coral USB Accelerator
- ☒ Cardstock paper (or a cereal box)
- ☒ Scissors
- ☒ Craft knife (hobby knife)
- ☒ Glue stick

HARDWARE:

- ☒ Coral USB Accelerator with USB cable
- ☒ Raspberry Pi 3 or 4
- ☒ Raspberry Pi Camera
- ☒ USB microphone

TIME:

- 45 - 60 minutes

ASSEMBLY STEPS:

- 1 Cut out the Box Wrapper Template and SD Card Template along the dotted lines. Put the SD Card Template in a safe place for later.
- 2 Apply glue everywhere on the bottom of the Box Wrapper Template, and then paste it onto the Coral USB Accelerator box so the AIY logo is on the front flap, as shown in figure 1.

TIP: First align the edge of the wrapper with the AIY logo with the edge of the box flap. Then slowly work towards the other end to be sure the paper is glued on straight.

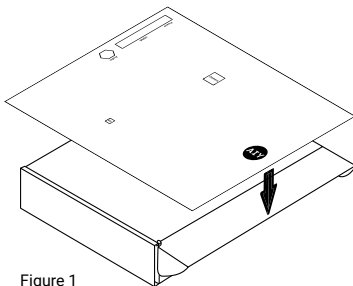


Figure 1

- 3 Close the box so the glue dries while the corners are bent.
- 4 Empty the box, unfold it, and lay it flat, as shown in figure 2.

TIP: To unfold the box, use a fingernail to push and release the tabs set into the slits on the bottom of the box. As it unfolds, notice how each tab holds two flaps, so you know how to refold the box later.

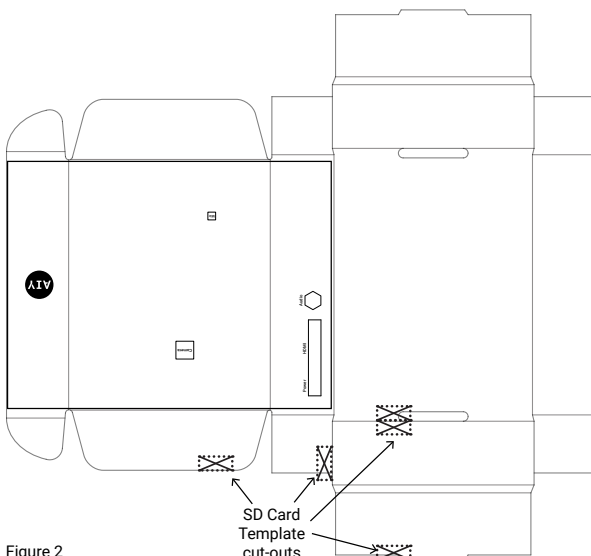


Figure 2

- 5 Grab the SD Card Template you already cut out and use it to trace and then cut away the five areas indicated in figure 2. The placement does not need to be exact. This will allow

- 6 Use your craft knife to cut holes for the Power, HDMI, Audio, Camera, and Mic.
- 7 Re-fold the box to its original form and set it aside for now.
- 8 Cut out the Internal Frame Template along the dotted perimeter.
- 9 Glue the template to your cardstock paper (or unfolded cereal box). Apply glue everywhere, especially below the solid and dashed lines.
- 10 Cut the cardstock along the solid line perimeter. Also cut the short line near the middle (labeled "one cut here").
- 11 Use your craft knife to cut out all the remaining solid lines, such as for the camera and SD card.
- 12 Prepare to fold each dashed line labeled A to F by creasing them. Either press into each line with a ruler or firmly trace the line with a blunt edge, such as a ballpoint pen.
- 13 Fold each dashed line so the paper turns up, except for line E, which folds down to form a vertical divider, as shown in figure 3.

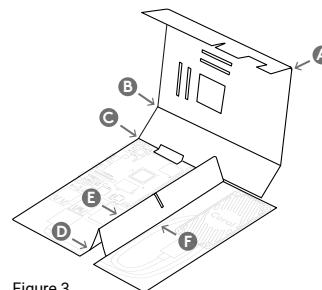


Figure 3

- 14 Pick up your Pi Camera and weave the flat cable down the camera hole, up the nearest slit, and back down, as shown in figure 4. Pull the cable until the camera is flat on the cardboard, facing up.

NOTE: You can orient the camera vertically or horizontally, based on which pair of cable slits you use. (Figure 4 shows it as vertical.)

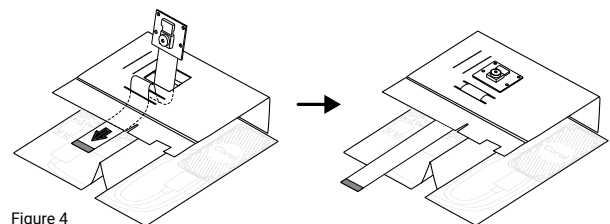


Figure 4

Continue on page 2...

ASSEMBLY STEPS (continued):

- 15 On your Raspberry Pi, unlock the camera connector by lifting the thin plastic latch, as shown in figure 5. Place a fingernail under each end and lift. It doesn't go far.

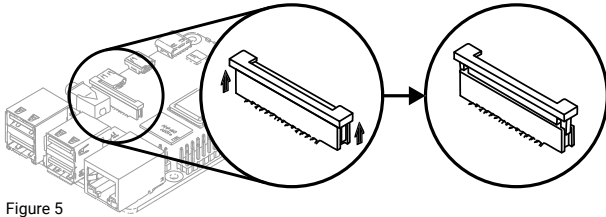


Figure 5

- 16 Set the Raspberry Pi in the internal frame and insert the camera cable straight down into the camera connector so the blue strip is facing the latch, as shown in figure 6. Then press the latch back down to lock the cable in place.

TIP: To be sure the cable is connected well, gently press it downward while you press down the latch.

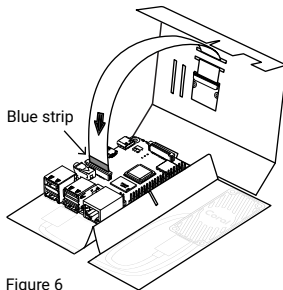


Figure 6

- 17 Connect the USB cable (that came with the USB Accelerator) to one of the lower USB plugs on the Raspberry Pi. If you have a Raspberry Pi 4, connect it to the lower blue USB port. (The blue ports are USB3, so they're faster than the other USB2 ports.)
- 18 Connect the USB microphone above the USB cable.
- 19 Carefully lift the internal frame along with the Raspberry Pi and place it into the box so the board's plugs poke through the side slots. Pinch the middle divider so it's upright and bend the USB cable to the right, as shown in figure 7 (it is a very tight fit).

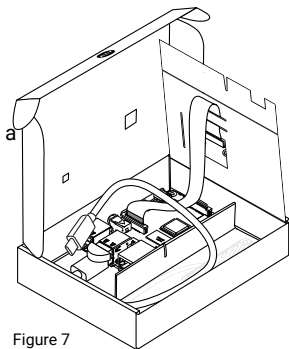


Figure 7

- 20 Grab your Coral USB Accelerator and plug it into the USB cable. Then lay the USB Accelerator in the box by wrapping the cable in a loop underneath it, as illustrated on the Internal Frame Template.

TIP: If the USB Accelerator does not lie facing up, straighten the cable, twist the cable along its axis and loop it into the box again. Repeat with more twists until it lies flat. A little crooked is okay because the top flap of the frame will hold it in place when closed.

- 21 Close the internal frame by interlocking the two slots labeled X, and it should appear as shown in figure 8.

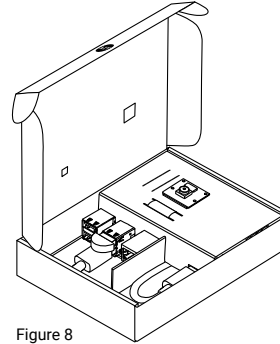


Figure 8

- 22 Finally, close the box so the camera pokes through, and you're done!

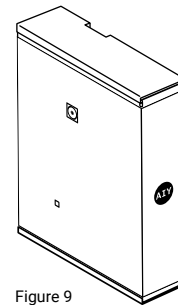
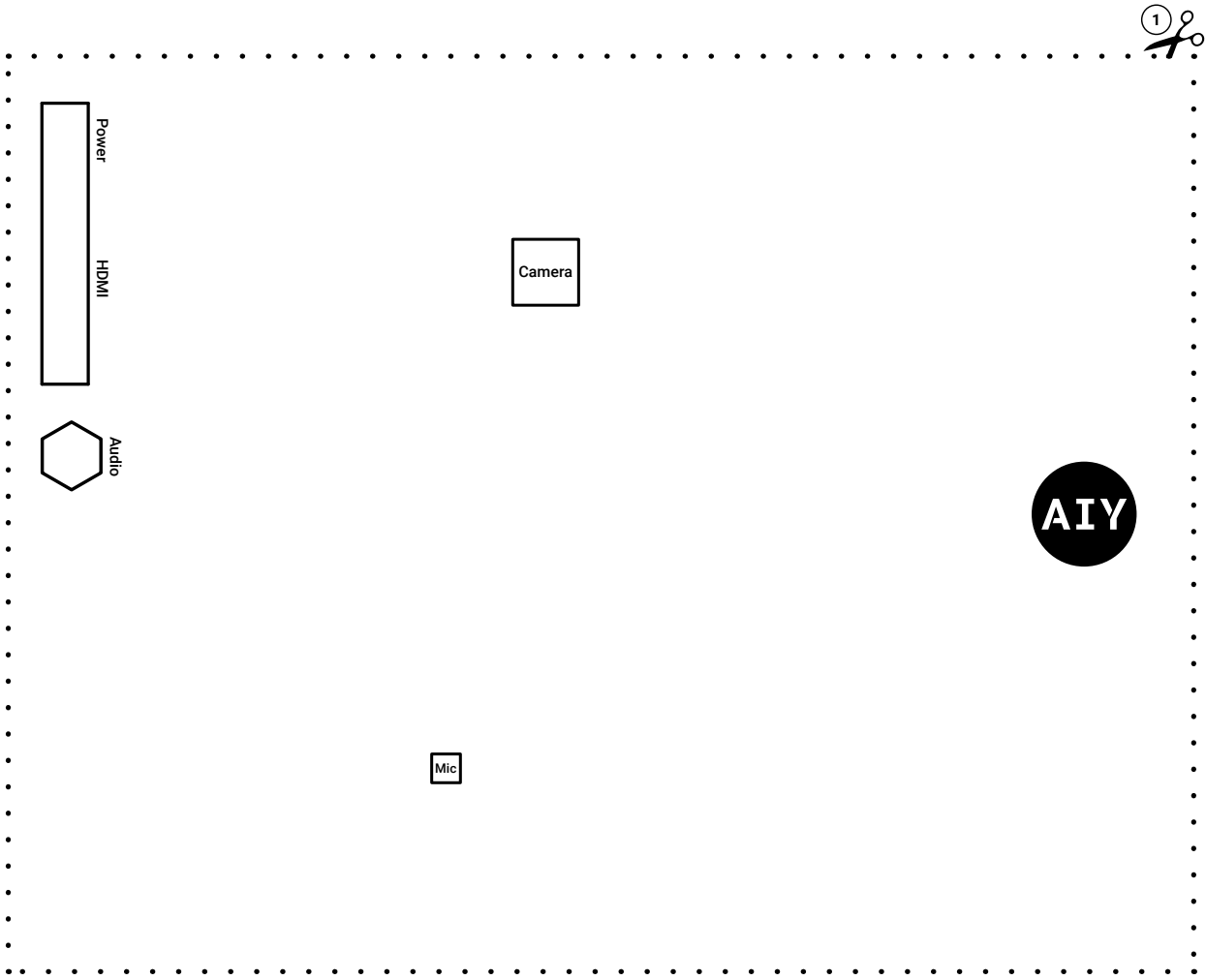
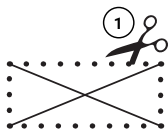


Figure 9

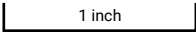
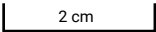
- Now continue with the setup instructions at g.co/aiy/maker.



Box Wrapper Template



SD Card Template



Measure these lines with a ruler to be sure your printout is the correct size.

