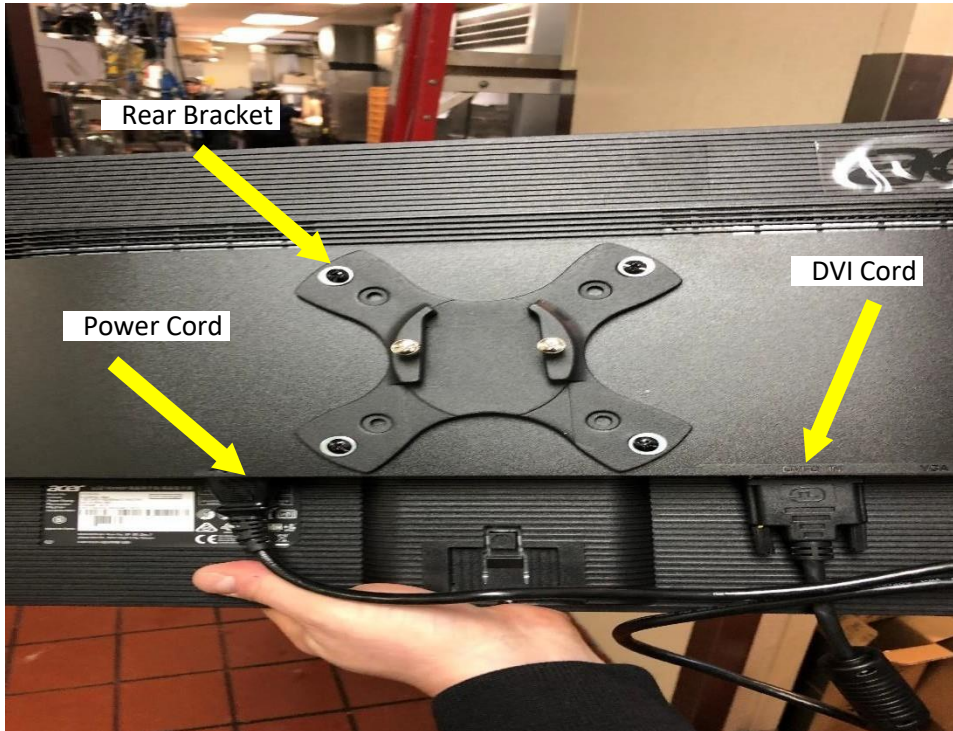


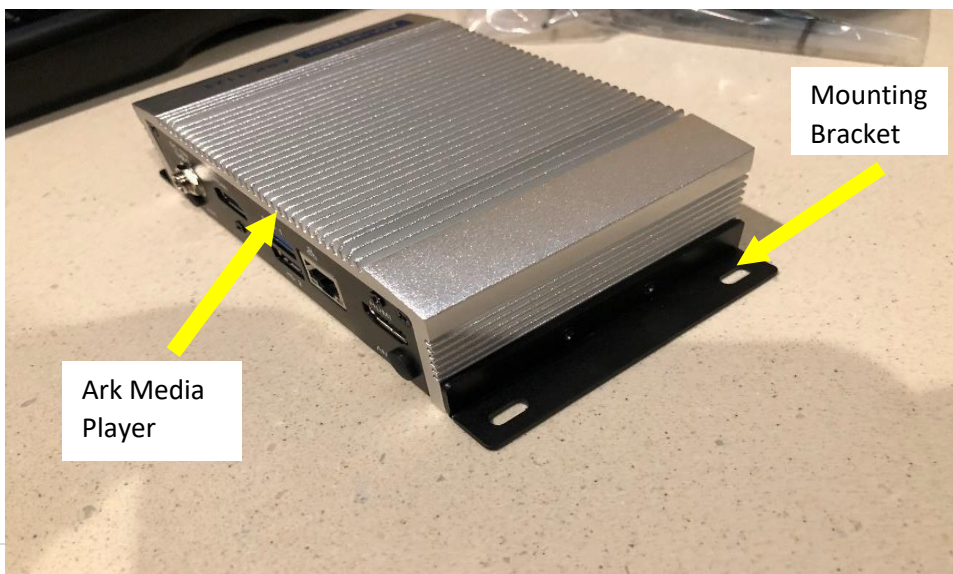
## Installation of Wall Mount Equipment

**Step 1.** Unbox the Wall Mount Arms and remove the rear brackets from the swivel arms.

**Step 2.** Install the rear bracket to the back of the monitors and connect the DVI video cables and power cords.



**Step 3.** Install the (2) mounting mount brackets to the Ark Media Player using the provided screws.



**Step 4.** Take the Wall Mount arms, Loop Detectors and Ark Media Player and mount to the wall. The example below is the side-by-side dual monitor installation. However, if there are wall space limitations, the monitors may also be stacked vertically.

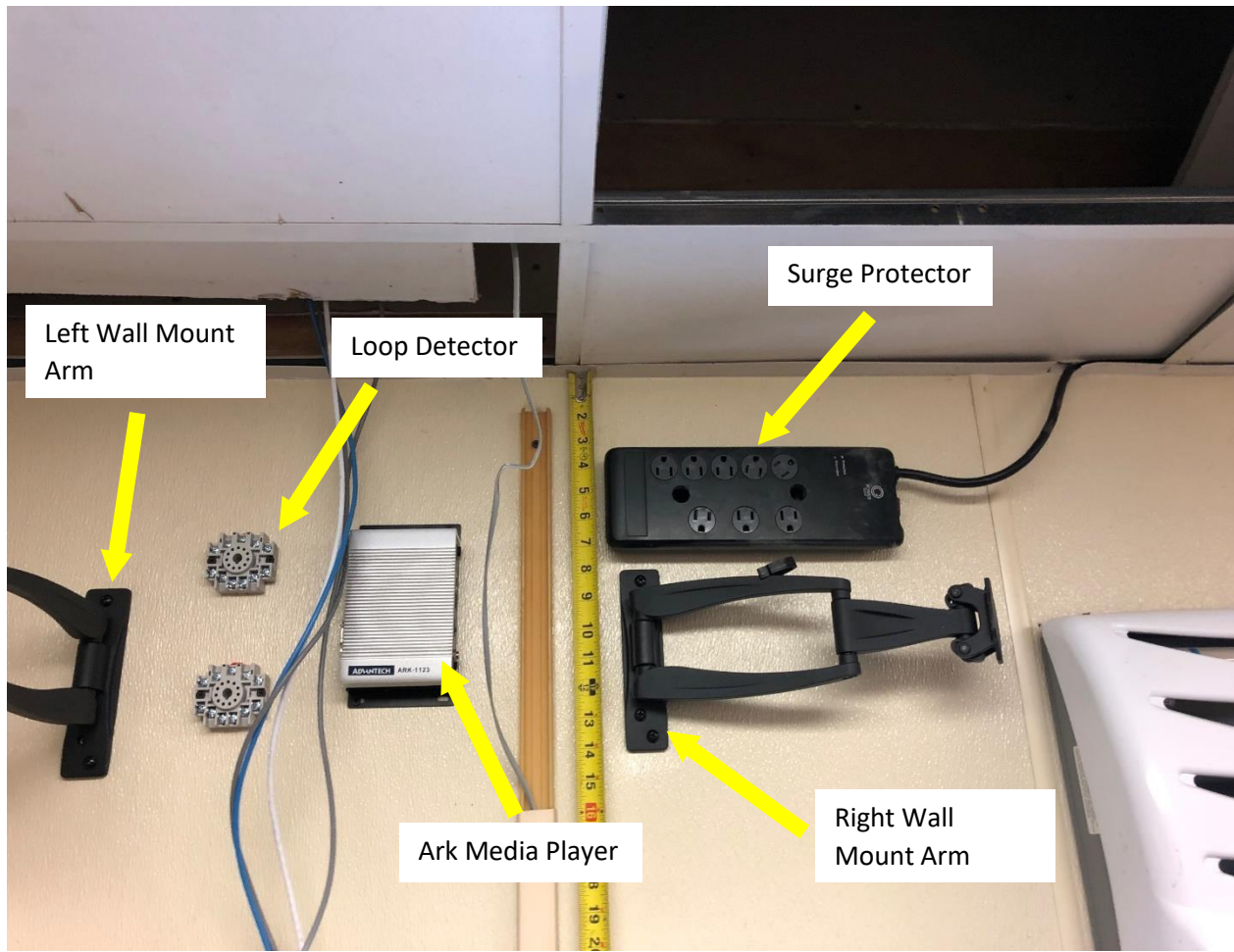
**In this example:**



- 1. To install left Wall Mount Arm:** measure 8" from the drop ceiling to the top of the left Wall Mount arm
- 2. To install right Wall Mount Arm:** measure 19" (center to center) between Wall Mount arms
- 3. To install Ark Media Player:** measure 6" from drop ceiling to top of Ark Media Player & 9" from center of left Wall Mount Arm
- 4. To install Top Loop Detector:** measure 6" from drop ceiling to top of Primary Loop Detector & 4" from center of left Wall Mount Arm
- 5. To install bottom Loop Detector:** measure 11" from drop ceiling to top of Secondary Loop Detector & 4" from center of left Wall Mount Arm
- 6. To install Surge Protector:** measure 3" from drop ceiling to top of Surge Protector & 18" from center of left Wall Mount Arm

**Make sure you to use a torpedo level to assure the Wall Mount arms and Ark Media Player are plum and level.**





### **Cable Runs:**

**Step 5.** From the Ark Media Player to the Back Office Switch, run the Ethernet cable.

**Step 6.** From the Headset Base station, run (2) 14 awg stranded single pair cable runs to the Ark controller SDAC cables.

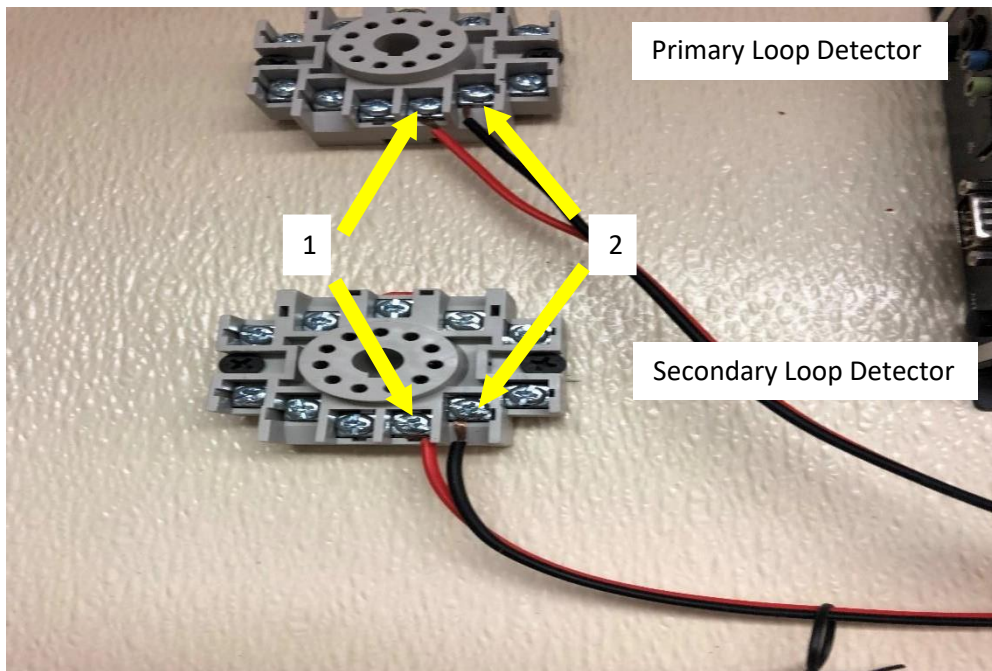
**NOTE**

1. If the cable for the Cash Window ground loop is not in place, run (1) 14 awg stranded single pair cable between the primary Loop Detector (LMA-1250) and the Cash Window – look for coiled cable near the floor coming from the outside.
2. Depending on the physical route, you may be able to run all (4) cables at once:
  - (1) Ethernet Cable drop
  - (2) Headset Station cable runs
  - (1) Cash Window Ground Loop run

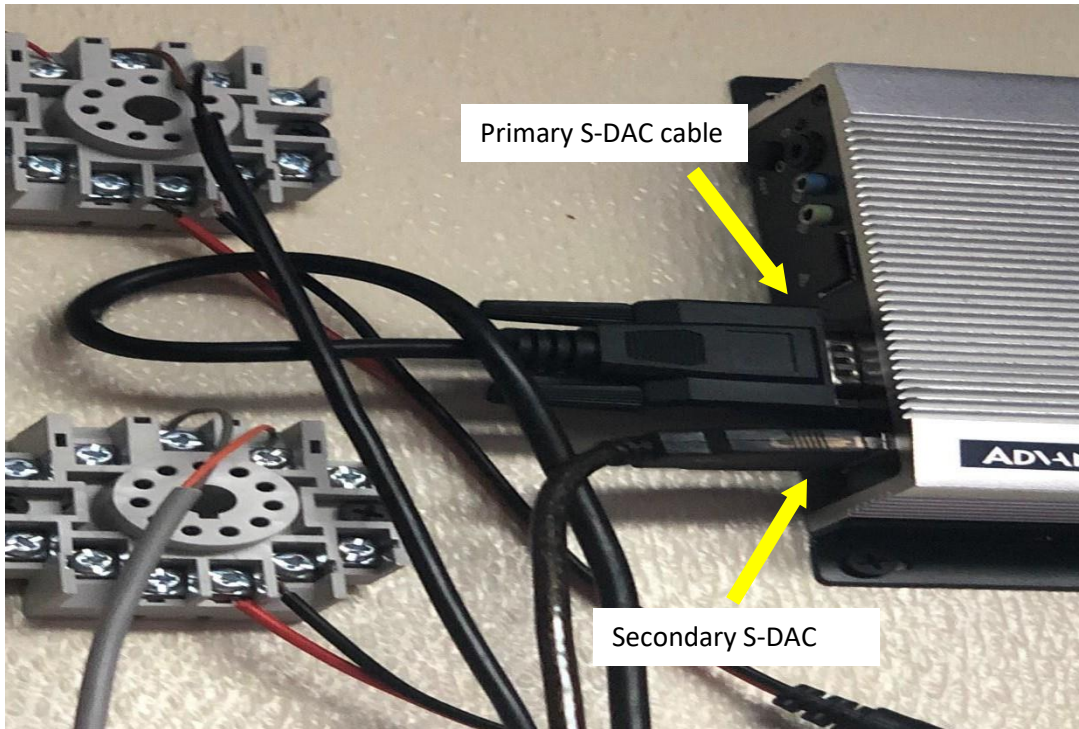
3. If the cable for the Pick-up window ground loop is not in place, run (1) 14 awg stranded single pair cable between the secondary Loop Detector (LMA-1250) and the Pick-up Window – look for coiled cable near the floor coming from the outside.

**Connections:**

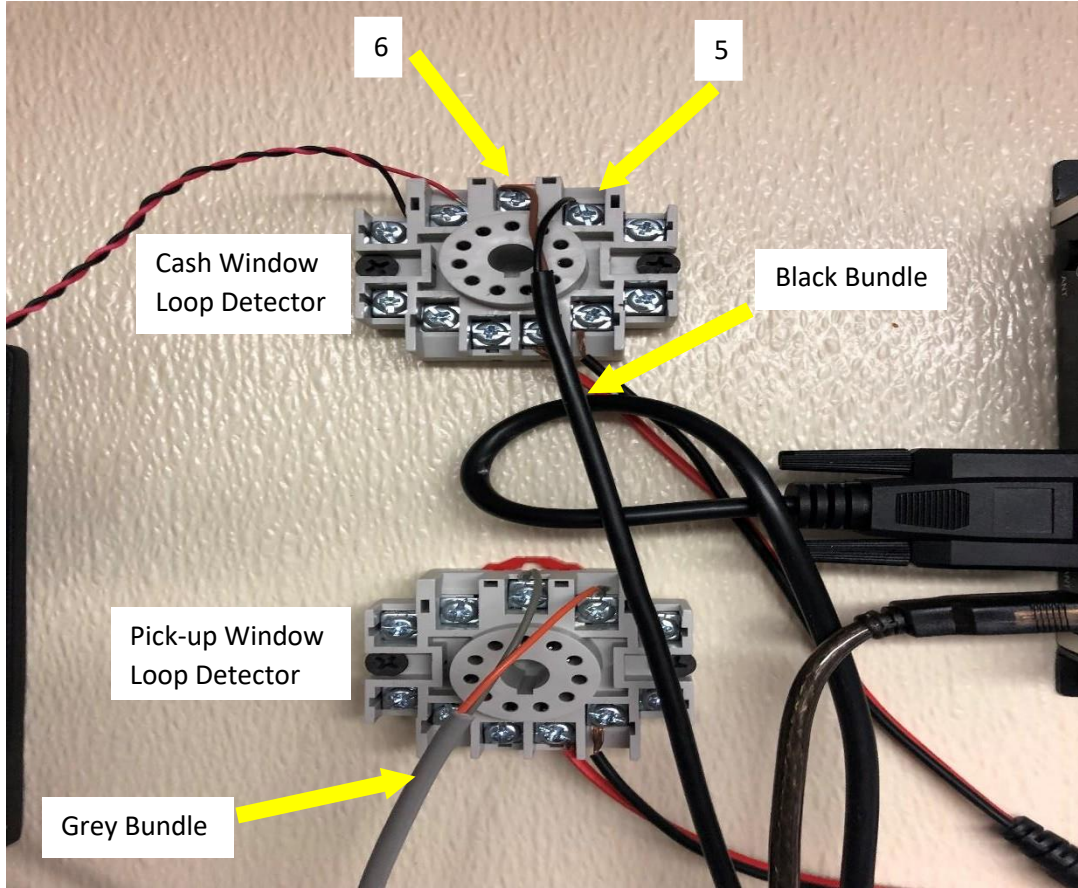
**Step 7.** Connect the primary Loop Detector (LMA-1250) Power Supply to one of the outlets on the Surge Protector. Run the open-ended wires to Position 1 & 2 of the primary Loop Detector (top) – Positive wire to Pin 1 and Negative wire to Pin 2. Repeat this step for the secondary Loop Detector (bottom).



**Step 8.** Connect the Primary S-DAC cable to the COM port on the Ark Media Player and the secondary S-DAC cable to the USB port on the Ark Media Player using the supplied USB to Serial adapter.

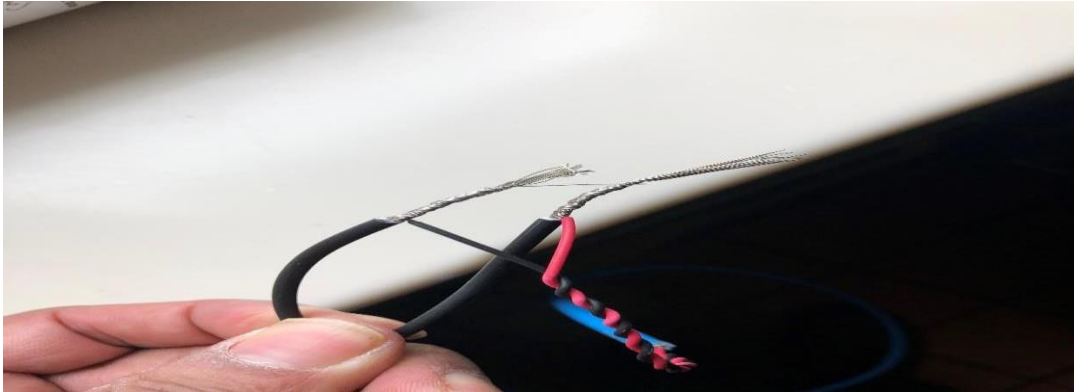


**Step 9.** Cut off excess cable from Primary S-DAC cable and connect the Black bundle to pins 5 & 6 on Primary Loop Detector (top). Then, connect Grey bundle cable to pins 5 & 6 on Secondary Loop Detector (bottom).



**Step 10.** From the Primary S-DAC cable, cut excess cable from the blue bundle and cable #1 from the Headset Base station, solder both pairs together to complete the path and cap with 14 awg wing nuts. Do the same for the Secondary S-DAC blue bundle and cable #2 from the Headset Base station.

**NOTE** These wires do not connect to the Loop Detectors; the other ends connect to the Headset Base Station relay contacts.



#### S-DAC Wiring Summary:

##### Primary S-DAC

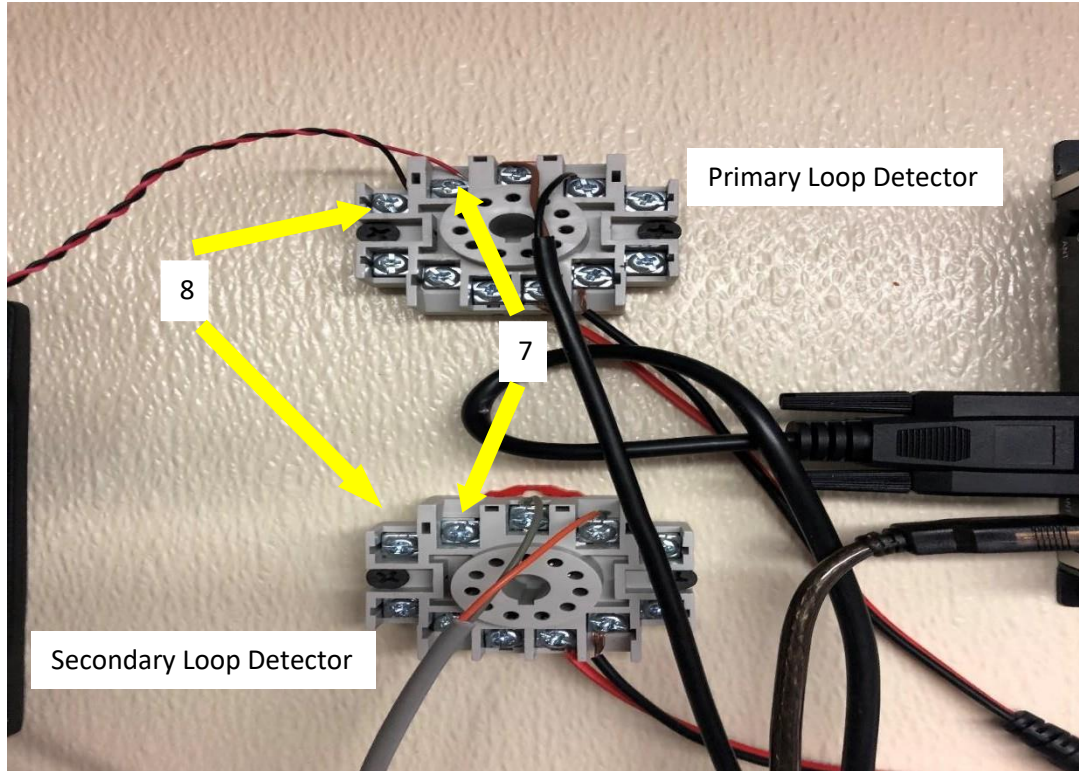
- Serial Connector plugs to COM port on Ark Media Player
- Blue bundle connects to Headset Base Station relay for Lane 1 Left Menu Board
- Black bundle connects to Pins 5 & 6 Primary Loop Detector (LMA 1250) for Cash Window
- Grey bundle connects to Pins 5 & 6 Secondary Loop Detector (LMA 1250) for Pick up Window, if applicable

##### Secondary S-DAC

- USB Connector plugs to USB port on the Ark Media Player
- Blue bundle connects to Headset Base Station relay for Lane 2 Right Menu Board
- Grey bundle to 3<sup>rd</sup> Loop Detector for Pull up Window, if applicable

**Step 11.** At the Cash Window, connect the Cash Window Ground Loop wires coming from the outside to the cable going back to the Primary Loop Detector – makes sure to solder both pairs together to complete the path and cap with 14 awg wing nuts. Then connect to Pins 7 & 8 on the Primary Loop Detector.

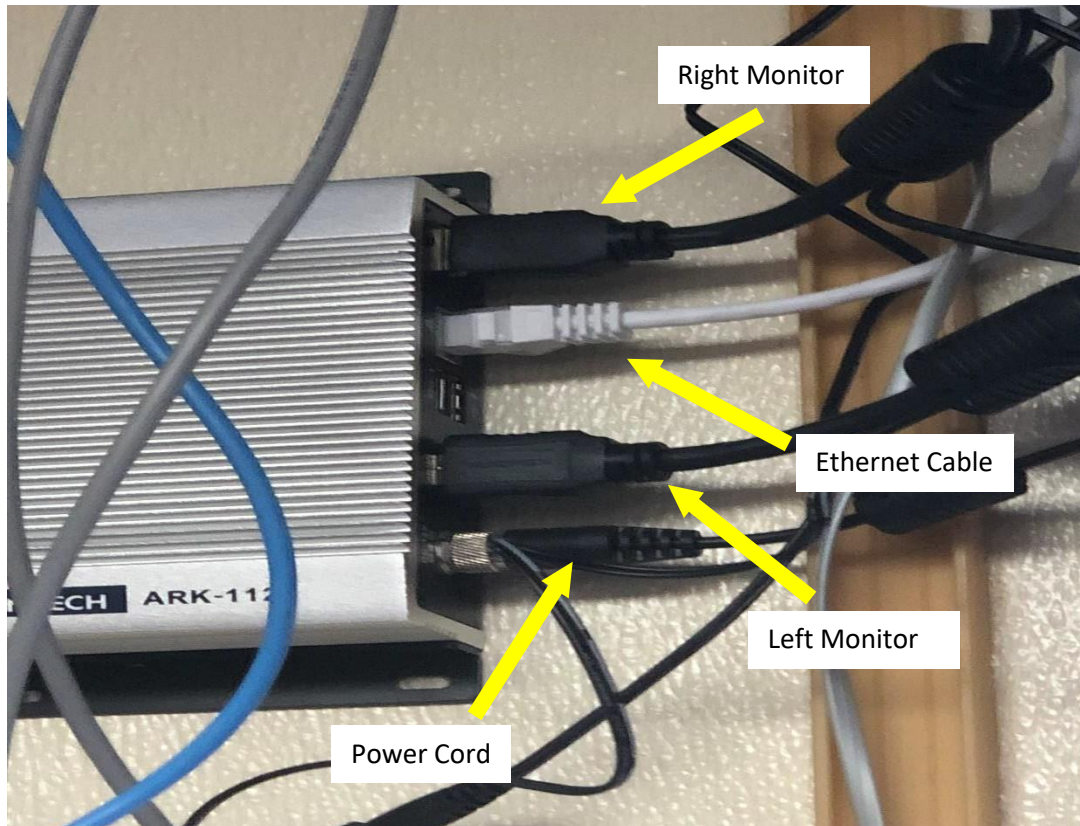
**Step 12.** At the Pick-up Window, connect the Pick-up Ground Loop wires coming from the outside to the cable going back to the Secondary Loop Detector – makes sure to solder both pairs together to complete the path and cap with 14 awg wing nuts. Then connect to Pins 7 & 8 on the Secondary Loop Detector.



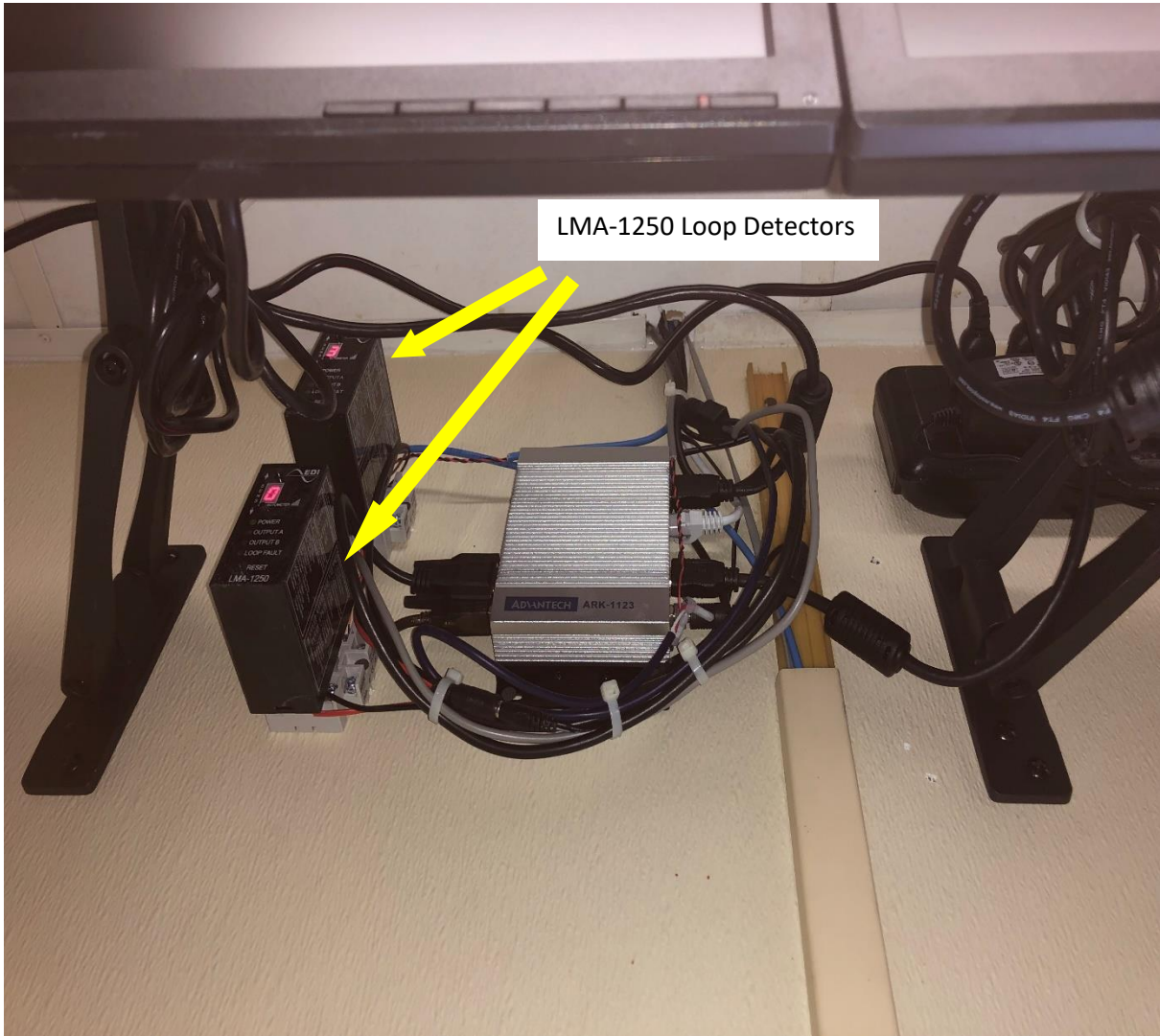
**Step 13.** Connect the Ethernet cable drop and Power Cord to the Ark Media Player **but do not power on.**



**Step 14.** Mount the Monitors and connect the HDMI ends to the Ark Media Player. The top HDMI to Right Monitor and bottom HDMI to Left Monitor.



**Step 15.** Insert LMA 1250 Loop Detector to the blocks and provide neat cable management – use Velcro or Zip Ties.



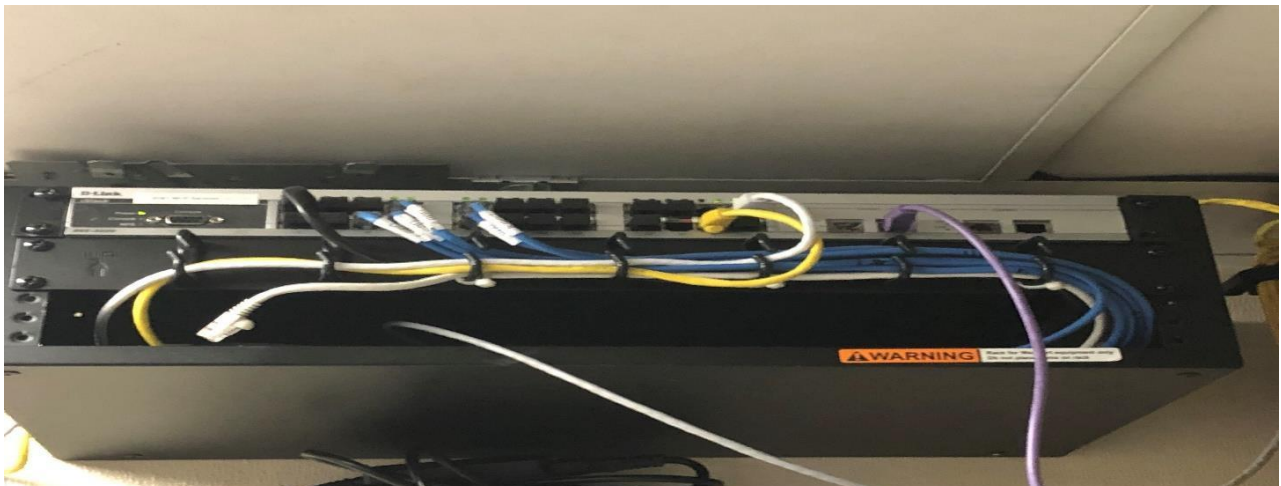
**Step 16.** Adjust Monitors and tighten swivel arms.



### **Client POS Switch Connections:**

**Step 17.** Route the Ethernet cable to the POS Switch – normally it will be located in the Back Office or IT Closet. Provide neat cable management – use Velcro.

**Step 18.** during testing, if the network does not come up you may have to move to a different port or switch depending on the configuration.



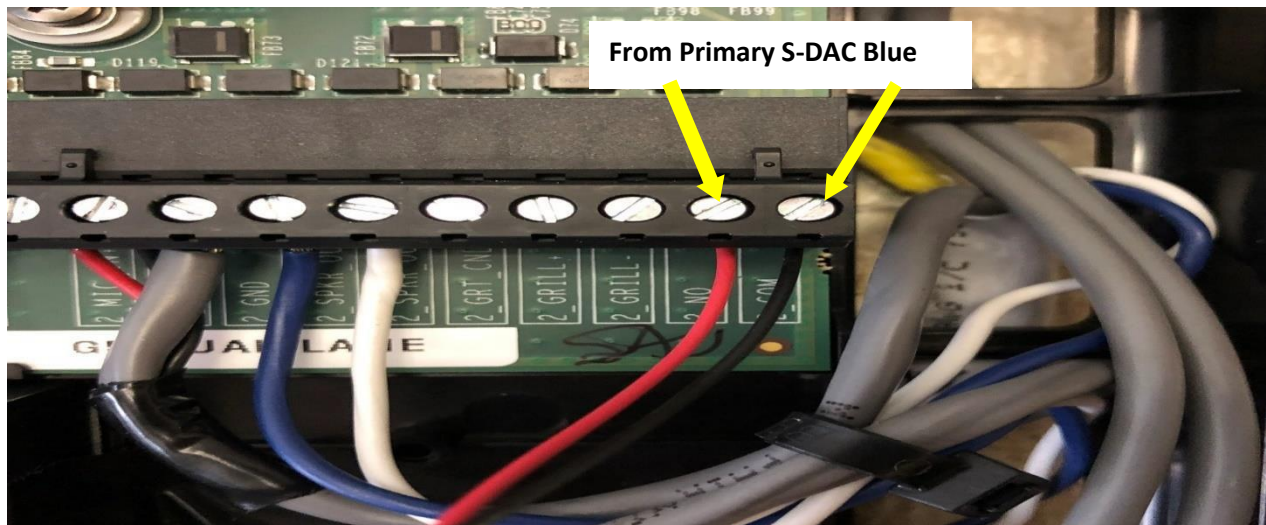
**Headset Base Station Connections:**

**Step 19.** Based on the type of Headset Base Station at the restaurant, wire to an open relay contact. These are the (2) cables from the Primary & Secondary S-DAC Blue Bundle cables (see step 10).

The example below is connecting to a **3M G5 Base Station**.

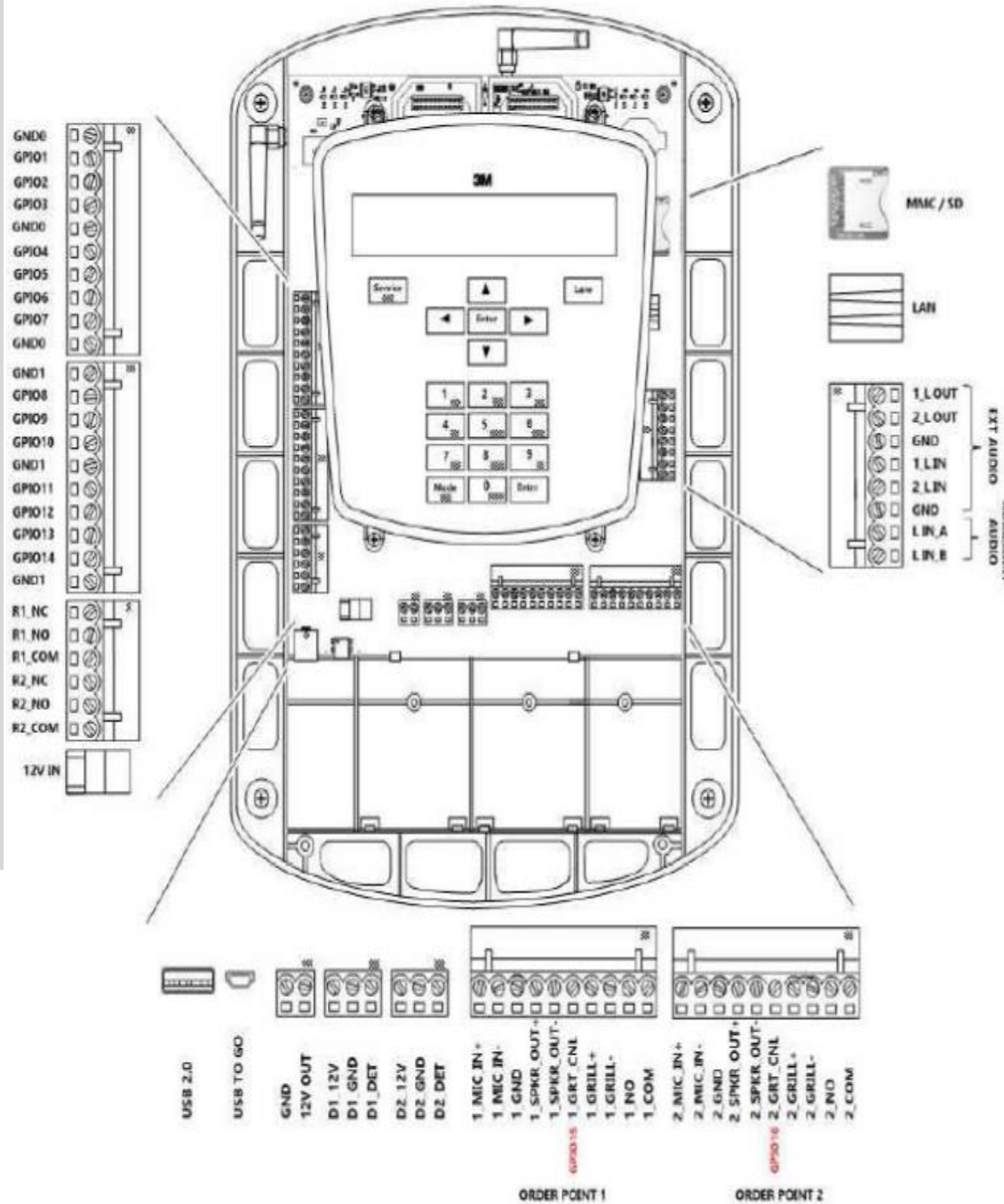


Red and Black wires connected to Relay Contacts – the second cable connects to the relay contacts to the left of this terminal.



## Wiring the 3M G5 Base-station for Menu/Greet

1. Connect the white wire from the blue SDAC channel to the R1\_NO.
2. Connect the red wire from the blue SDAC channel to the R1\_COM (R1\_NC will not be used).
3. Connect the brown wire from the black SDAC channel to the R2\_NO.
4. Connect the black wire from the black SDAC channel to R2\_COM (R2\_NC will not be used).
5. Go to the menu settings of the headset base station.
  - Go to the option “Digital”
  - Scroll down to “Relay 2”
  - Change “Relay 2” from ‘Vehicle Loop Detector’ to ‘Talk 1’
  - Once this is complete, back out of the settings editor for the changes to take effect.
  - Once complete, “Relay 2” should give a positive 5 volts when the headset is turned on to talk to the customer at the speaker post.



### 3M XT-1 Headset Base-station 2 Service Point Setup

Having the greet jumper wire will give you a positive 5 volts when an employee talks to the customers through the speaker at the menu board. The jumper wire has to be connected exactly like the diagram.

Most locations use an external loop detector for window detection.

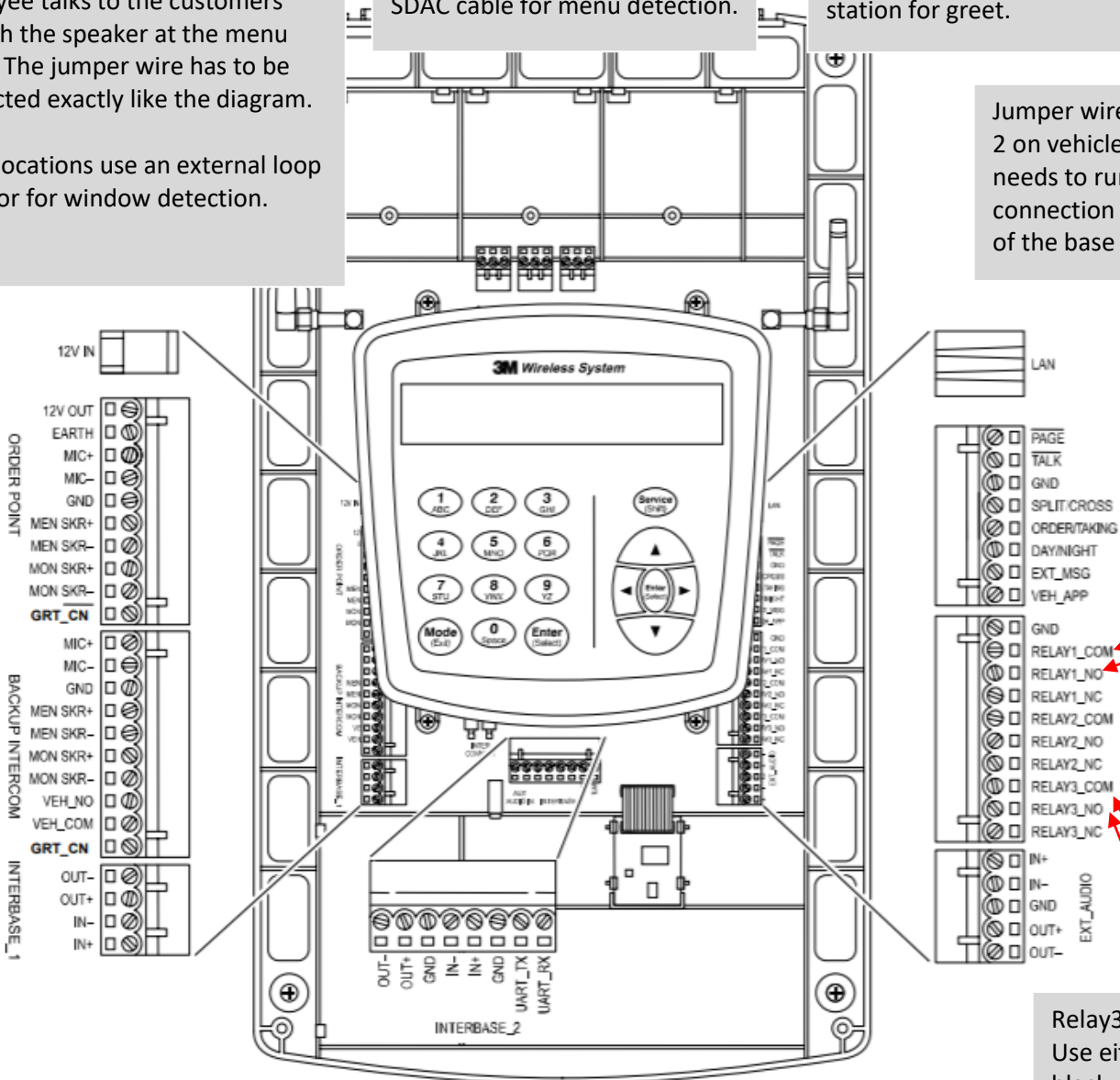
Depending on what detection slot the internal loop detector is on, the headset is going to dictate where to connect the SDAC cable for menu detection.

Jumper wire from connection 1 on vehicle detect slot 3 needs to run to the talk connection on the right side of the base station for greet.

Jumper wire from connection 2 on vehicle detect slot 3 needs to run to the ground connection on the right side of the base station for greet.

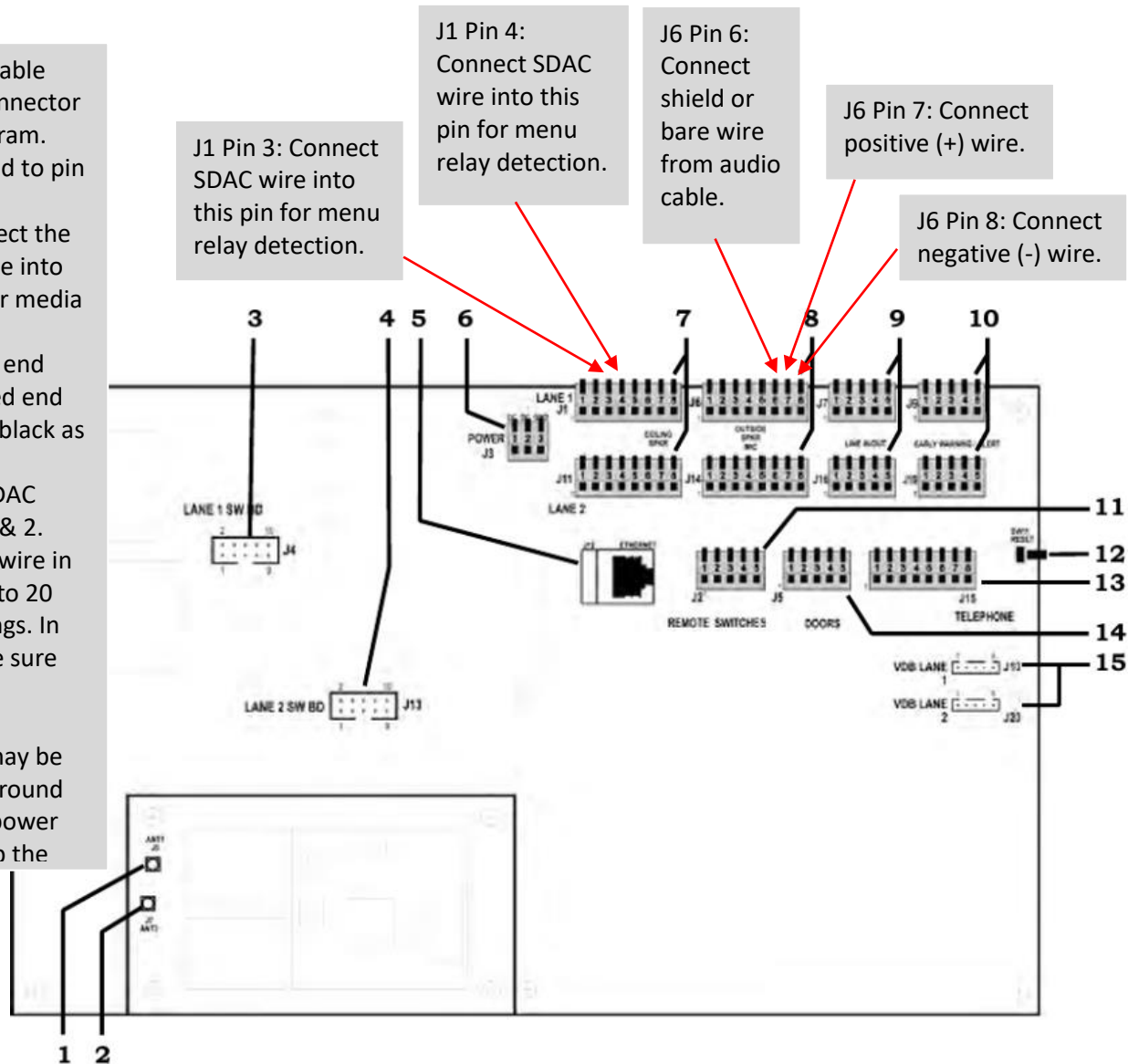
Relay1\_CO & Relay1\_NO: Use either cable from the blue pair for menu detect.

Relay3\_CO & Relay3\_NO: Use either cable on the black pair for greet.



## HME EOS/HD Wiring Diagram

1. Connect the blue SDAC cable into J1 (lane 1) phoenix connector block as shown in the diagram. White wire to pin 3 and Red to pin 4.
2. Audio cable greet, connect the male end of the audio cable into the audio port on the timer media player.
3. Cut and split the female end and connect the terminated end into J5 phoenix connector black as shown in the diagram.
4. SDAC greet, the black SDAC cable will go into J7 pins 1 & 2. Brown wire in 1 and black wire in 2. Set the line out volume to 20 inside volume adjust settings. In the installer settings, make sure line out is rerouted from outbound audio.
5. In this configuration it may be necessary to remove the ground wire from J3 pin 3 on the power connector. Be sure to wrap the



## Section 3 – Installation of Ground Loops

If the Restaurant does not have Ground Loops in place, you will need to install at the Cash Window and Pick-up Window. This work will be performed outside in the Drive-Thru lane. You will need to work with the Manager on Duty and coordinate the work without shutting down the Drive-Thru service. You can start at the Cash Window and once completed you can move on to the Pick-up Window. You will be creating an 18" x 60" x 4" deep rectangle cutout with 45 degree cuts at each corner.

**Step 1.** Cone off the Cash Window area so traffic goes around you. You can also park your truck in front of the work area to add additional safety measures for yourself.

**Step 2.** From the exterior wall and referencing the front sliding window of the Cash Window, measure 28" this will be the starting point of the cutout for the Ground Loop.





**Step 3.** From that point measure 18" towards the front and then 60" across – you will be creating a rectangle. Then, create 45 degree cuts at each corner.



**Step 4.** With a Concrete Saw Cut, carefully cut a 4" deep groove along the mark lines. In addition, you will need to make a straight cut towards the restaurant's exterior brick wall where the cable will feed into the building.





**Step 5.** Once completed, use cans of compressed air to remove any debris in the groove to allow for an easier method in inserting the loop wire.

**Step 6.** Starting at the point towards the exterior brick wall on the rectangle, using a Painters Spatula carefully insert the 14 awg black loop wire and feed it all the way around 6 times – going clock wise. Make sure you leave slack to feed into the building.



**Step 7.** Once completed with feeding the cable 6 times around the cutout, insert foam strip, apply Grey Concrete Crack Sealer and Sika Bonding Agent all the way around the rectangle.



**Step 8.** Let it dry for 1 hr.

**Step 9.** Using a Hammer Drill with ½” masonry bit, drill out the exterior wall towards the inside wall. Before drilling, make sure you assess from the inside to make sure there are no obstructions.



In this example, the hole measured 8 ½" from the floor.



**Step 10.** Feed the 14 awg black wire through the ½" hole and apply caulk on both sides to seal the hole.

**Step 11.** Go to Steps 11 & 12 in the "Connection section" to complete the wiring connections.

**Step 12.** Along the side of the Cash Window, use white wire mold and install vertically from the where the cable penetrates the building to the top of the drop ceiling - insert the cable in the wire mold.



**Step 13.** Repeat steps 1 thru 12 and do the same at the Pickup Window.

## Section 4 – Test & Turn-up

**Step 1.** Once all connections have been made, power on the Surge Protector, Ark Media Player and Monitors.

**Step 2.** Let the system boot up. Once the monitors display the Drive-Thru Lanes, Cash & Pickup Windows; call Acrelec Support Line for validation and confirmation everything is working correctly.