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Take your time, follow the instructions, relax, and enjoy yourself!

WARNINGS: Perform installation with your pinball machine turned off and unplugged from AC power.



PixlWav Spike-3 Expression Speaker Light Upgrade Kit Instructions

Kit Components

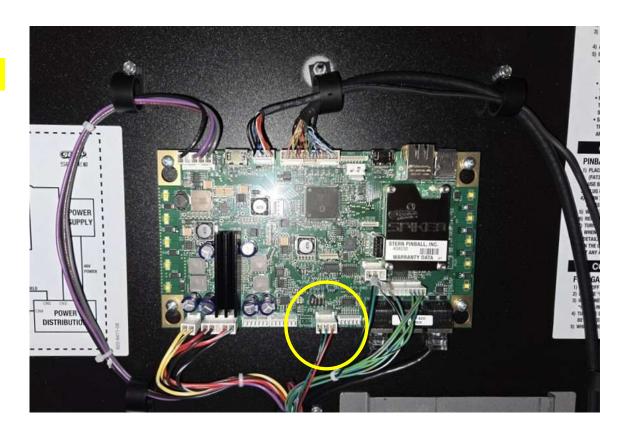
- 1. 1ft Ethernet Cable
- 2. Spike-3 CN23 PixlWav Expression Pickup Board
- 3. 5V DC Power Adapter
- 4. 110AC Bill Validator Adapter Cable
- 5. 4in Cable Ties
- 6. Adhesive Pad Adapter
- 7. Adhesive Pad Hub
- 8. PixlWav Hub
- Left and Right LED Panels (both identical and interchangeable)





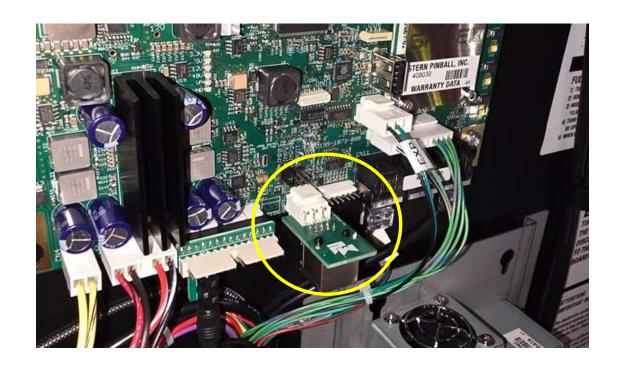
Your pinball machine must be turned off and unplugged from AC power before proceeding!

- 1. In the backbox, locate CN23 on the CPU Node Board as indicated by the yellow circle.
- 2. Un-plug the 3-wire factory wiring harness from header CN23.



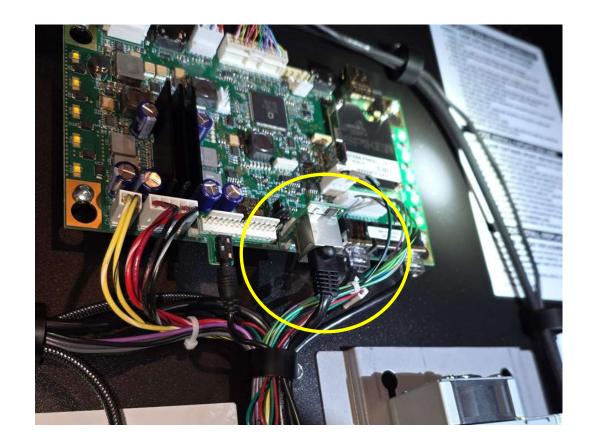


1. Plug the PixlWav Expression Pickup Board to header CN23 as indicated by the yellow circle.



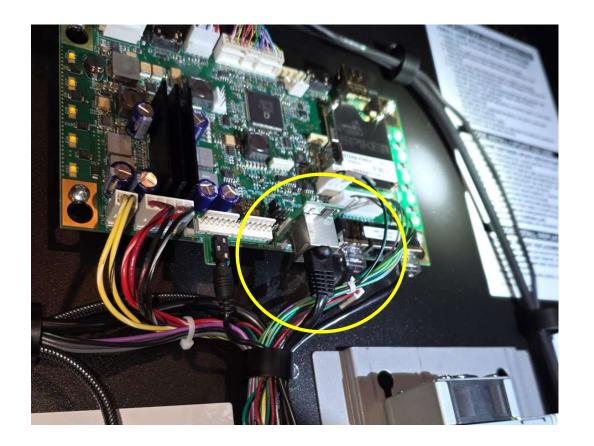


 Plug one end of the 1ft Ethernet Cable to the Pickup Board as indicated by the yellow circle.





 Plug one end of the 1ft Ethernet Cable to the Pickup Board as indicated by the yellow circle.





Your pinball machine must be turned off and unplugged from AC power before proceeding!

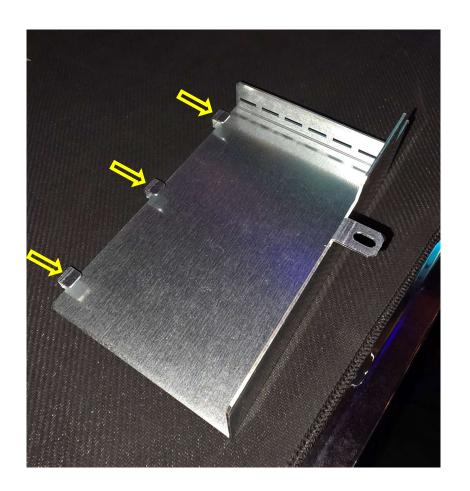
- 1. Locate the Power Box Cover as indicated by the yellow arrow in the image to the right.
- 2. Remove the screw shown in the image below using a Phillips Head Screwdriver.
- Proceed to next slide for additional details.







1. Note that the Power Box Cover is hinged as indicated by the yellow arrows in the image to the right.



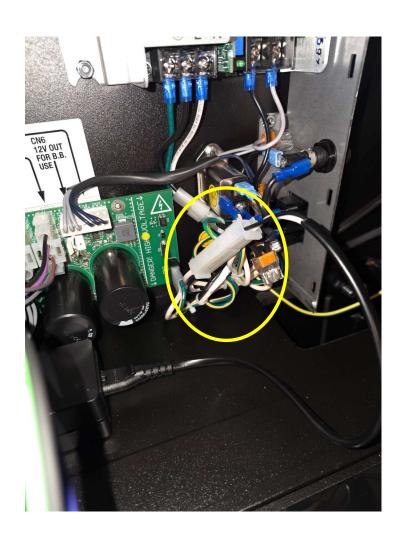


- 1. Locate the Bill Validator power connector as shown to the right and indicated by the yellow oval.
- 2. You may need to search for this connector in the wire bundle.
- 3. This connector typically has an orange dummy plug inserted for safety and high visibility.
- 4. Remove the orange dummy plug to expose the AC power connector.





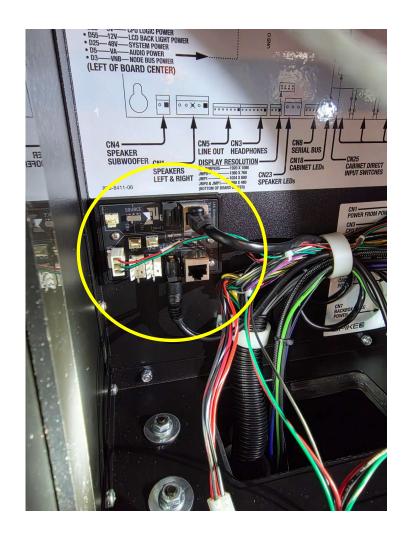
- 1. Plug the matching end of the 110AC Bill Validator Adapter Cable to the connector discussed in the last step as indicated by the yellow oval.
- 2. Replace the Power Box Cover now, routing the 110AC Bill Validator Adapter Cable through the bottom opening of the Power Box Cover.
- 3. After you test your setup, utilize the Adhesive Pad for the AC Power Adapter Box and affix it to the bottom edge of the backbox in an appropriate location.





PixlWav Hub - 1

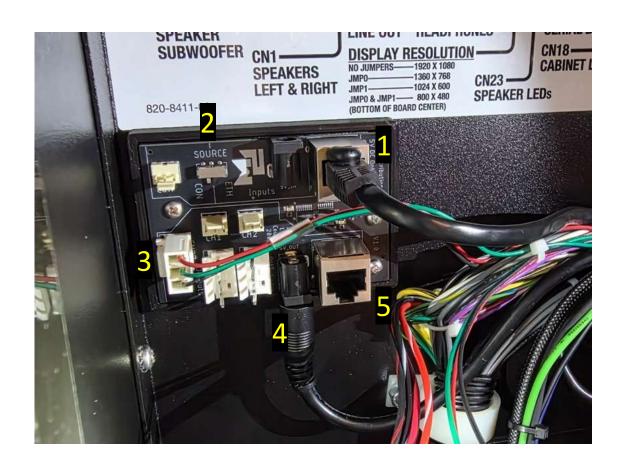
- 1. The PixlWav Hub is shown in the yellow circle to the right.
- 2. This is an approximate final mounting location near the left-side interior of the backbox and based on wire length limitations.
- 3. After you test your setup, utilize the Adhesive Pad for the PixlWav Hub and affix it to the approximate location shown, limited by wire lengths and care not to put tension on any wires.
- 4. The adhesive pad must be "massaged" into the 3D printed carrier well to get good adhesion. Do this carefully so as not to damage the hub components or connectors.





PixlWav Hub - 2

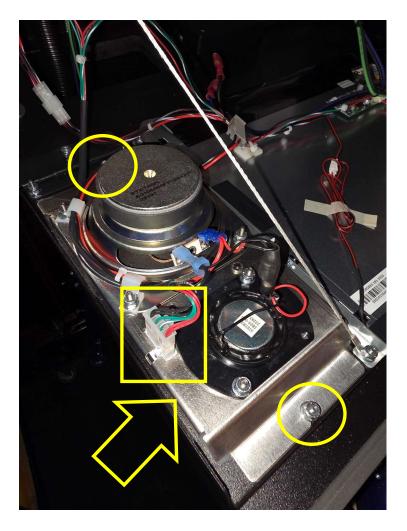
- 1. Plug the 1ft Ethernet Cable as shown.
- 2. Ensure the "SOURCE" Switch is set to the "ETH" position.
- 3. Plug the original CN23 factory wire connector as shown.
- 4. Plug the Power Adapter 5V DC output Plug to either the "5V_In" or "5V_Out" Hub Power Jack as shown. The "5V_Out" jack is likely more convenient as shown.
- 5. The Output Ethernet Jack can be used for extended lighting applications utilizing additional PixlWav cabinet lighting accessory kits, etc.





- 1. The Left-Hand Speaker Plate is shown, indicated by the yellow arrow.
- 2. Disconnect the connector shown in the yellow square. (Image below.)
- 3. Remove the nuts and washers shown in the yellow circles. Save them as they will be re-used later.
- 4. Liberate the speaker plate for the next step.







- 1. The liberated Speaker Plate is shown to the right.
- 2. Remove the two Phillips Head Screws indicated by the yellow circles. These screws will be re-used later.





- 1. After the factory LED Panel is removed, there will be a grey paper cutout as indicated by the yellow "*" symbol.
- 2. This paper is critical, leave it in place.





1. Install one of the two new LED panels, replacing the screws as shown.





- 1. Replace the Speaker Panel, securing the nuts and washers retained from a previous step.
- 2. Re-plug the LED harness.
- 3. Repeat the installation process on the Right-Hand Speaker Panel.
- 4. Test your setup.
- 5. Secure the hub and Adapter using the Adhesive Squares as previously described.







You Have Installed your LED Speaker Lights