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Magic Box

For Seeburg “Microlog” 160-Selection Jukebox Models LS3 Though STD4

Congratulations on purchasing this Victory Glass “Magic Box” for your Seeburg Microlog-based jukebox! This unit replaces the original DTP1 (aka “Black Box”) in your machine, which is responsible for reading selections entered on the keypad and then sending them to the DRD1 (aka “Grey Box”).

The Magic Box not only performs the same functions as the original Black Box, but also adds many more exciting features to make your Seeburg more functional and enjoyable, such as:

- Bluetooth Audio Streaming
- JukeTalk App for iPhone and Android (Allows for remote selections, volume control, record cancel, random selections, top tunes, bass and treble adjustments, and remote power control (with optional relay box).
- Additional functions via keypad, such as cancel, random selections, top tunes, and bass/treble controls.
- Free Play operation (there are no provisions for coin operation at this time.)

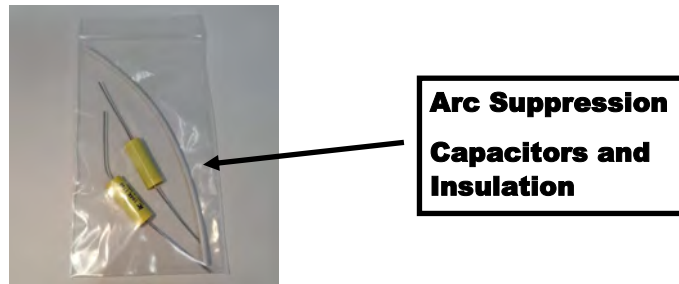
The Magic Box can be used with your jukebox’s original TSA10, SHP1, SHP2, or SHP3 amplifier (except on model LS3 - Model LS3 jukeboxes will require either a TSA10, SHP1-3, or SHP4-LITE amplifier, as the original TSA8 amplifier has no provisions for an external volume control).

The Magic Box bypasses the preamp, bass/treble controls, and rotary volume control of the original amplifier, eliminating these common trouble points. (Consider our SHP4-LITE amplifier as a replacement if your original amplifier is experiencing issues.)

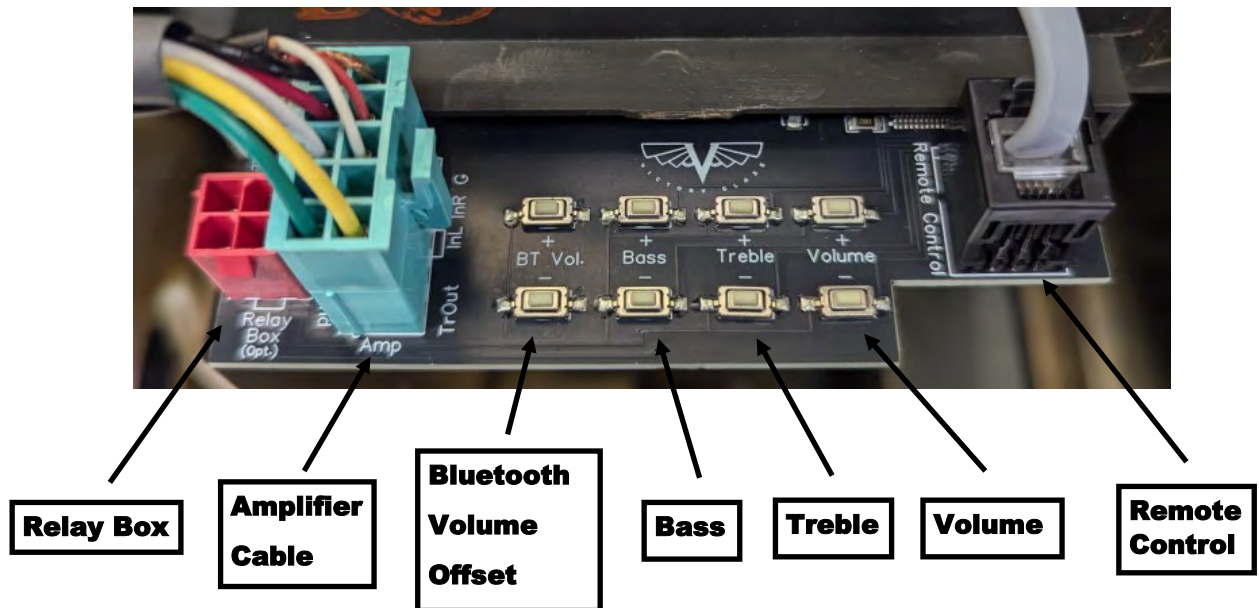
If you also wish to be able to control the power of your jukebox from the wired remote control or JukeTalk app, you will need the Victory Glass Relay Box part number 63-7232.

CAUTION! High voltage is present inside jukebox when AC power is connected!!!

Magic Box Overview



Connections and Adjustments



Adjustment Descriptions

The following is a description of the adjustment buttons and their purposes. These settings are stored in memory so you do not have to set them every time.

Bluetooth Volume Offset: Since the volume level of the phonograph can vary depending on needles and cartridges, this adjustment allows you to lower the Bluetooth volume to closer match the level of your phonograph. By default, the offset level is zero (meaning Bluetooth is at full volume).

Bass and Treble: Adjusts the bass and treble, respectively. Note that the Magic Box stores separate bass and treble levels for phonograph and Bluetooth playback modes. For example, this allows you to have a slightly lower bass level if your phonograph has feedback issues while playing 45's, which of course is not an issue when playing Bluetooth.

Volume: These buttons are provided as a convenience to adjust the volume while you are setting up your Magic Box.

Keypad Functions

We have added the following functions to the keypad for your convenience. Note that for bass and treble adjustments, the "Reset and Reselect" light will flash if you've reached the maximum or minimum levels.

333 - Rejects the currently playing record on the phonograph.

555 - Decreases the bass level by one increment.

666 - Increases the bass level by one increment.

777 - Enters one random selection.

888 - Decreases the treble level by one increment.

999 - Increases the treble level by one increment.

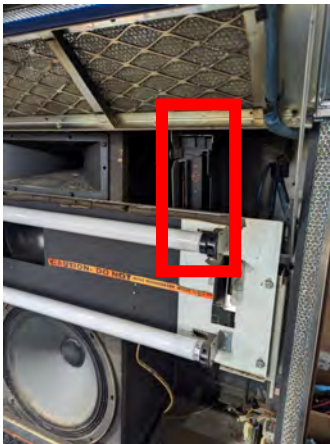
000 - Plays the 8 "Top Tunes" on the jukebox. (i.e., 100, 110, 120, 130, etc.)

Installation Steps

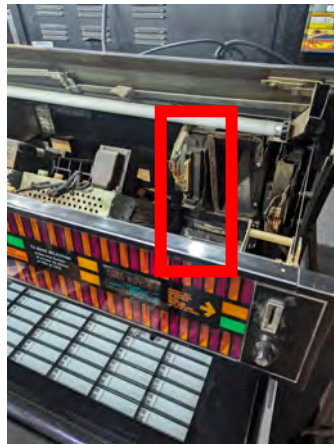
⚠ CAUTION ⚠

High voltage is present inside jukebox when AC power is connected!!!

1. Make sure the jukebox is powered off.
2. Locate and remove the existing Black Box from your jukebox. There will be two edge connectors on one end, and there may be 3rd connector present on the opposite end if your jukebox was equipped with an Income Totalizer unit. (See Black Box location photos below.) Note: Quadraphonic variants are not mentioned but are supported.



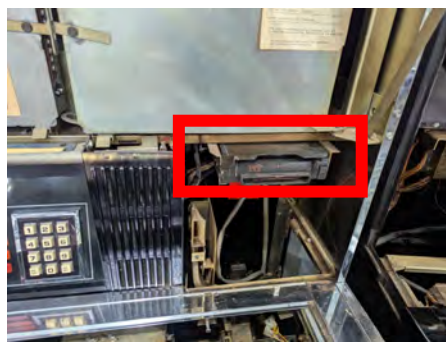
LS3



USC1 and USC2



SPS160 / SPS2



STD160, STD2, STD3, STD4



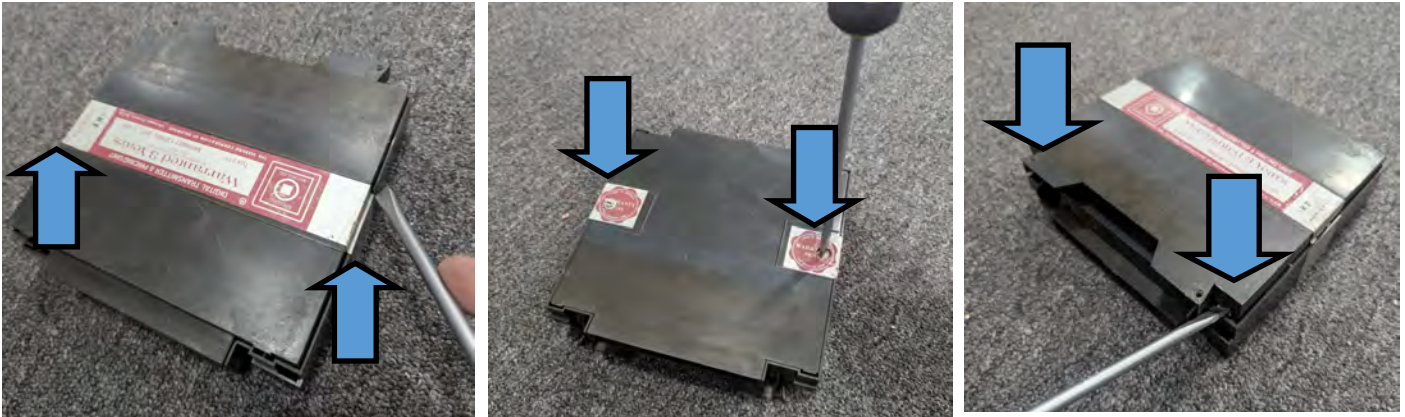
FC1 / FC2

If You've Purchased The Pre-Assembled Version of the Magic Box, Proceed To Step 14

3. Slice the factory seal on both upper edges, and then on both sides of the bottom to reveal the two screws, as shown below-left and below-center. Remove both screws.

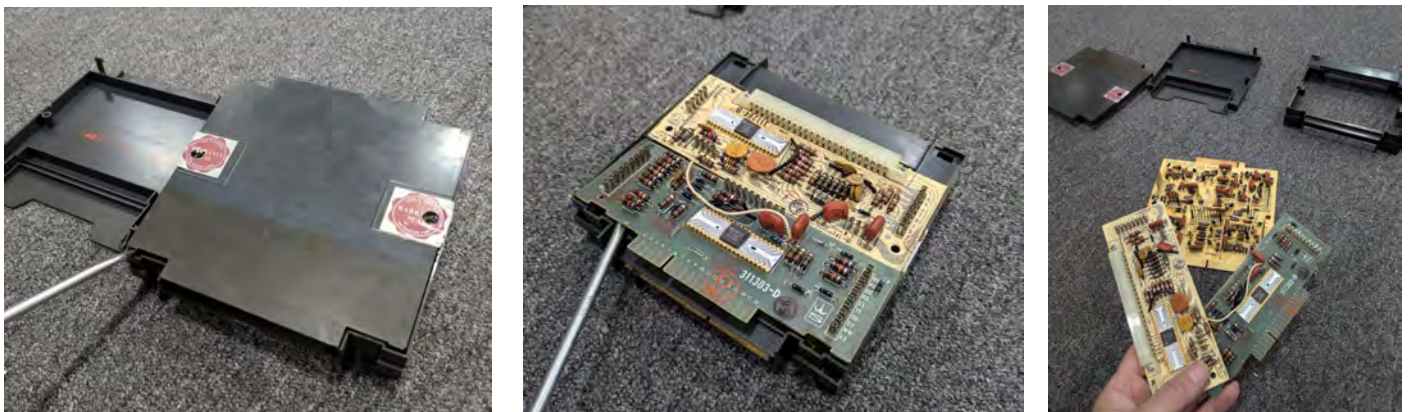
4. If present, remove the Pricing Card from the black box by removing the two screws that secure it to the plastic housing, and pull outwards.

5. Using a straight blade screwdriver, pry the upper cover up by pressing on the tabs in the front corners (near the pricing card mounting holes) of the upper cover. (Note that if any mounting tabs break while removing the covers, it is not a big deal.)



6. Turn the box over and remove the lower cover by prying the tabs with the straight blade screwdriver.

7. Separate the 3 circuit boards inside by prying them apart. Once removed, they can be put aside or discarded, as they will not be re-used.



8. Place the new lower Magic Box board into the lower plastic cover, making sure the holes in the board line up with the holes in the cover. (Note: the ribbon cable and upper board will remain attached to the lower board.)

9. Place the center frame of the box onto the lower board and cover, with the upper board and cable going through the center. Snap the frame and lower cover together.

10. Place the upper board into the frame, aligning the two slots in the board with the frame.



11. Reinstall the upper cover and snap into place

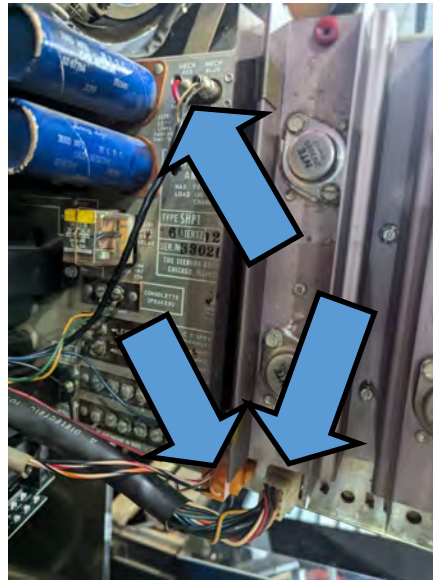
12. Reinstall the two screws in the lower cover

13. Install the sticker on the top cover.



14. Connect the two edge connectors to the Magic Box. Note that these are keyed and cannot be installed backwards. (If your jukebox previously had the 3rd cable connected for the Income Totalizer, that cable will not be reconnected.)

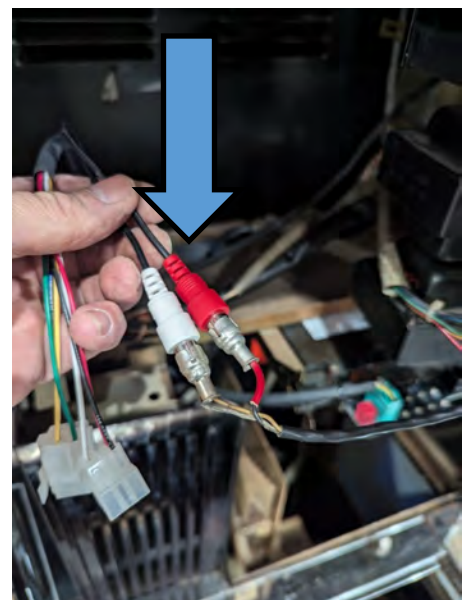
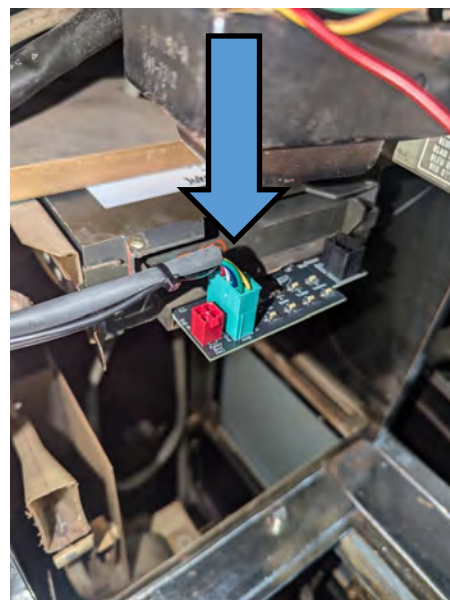
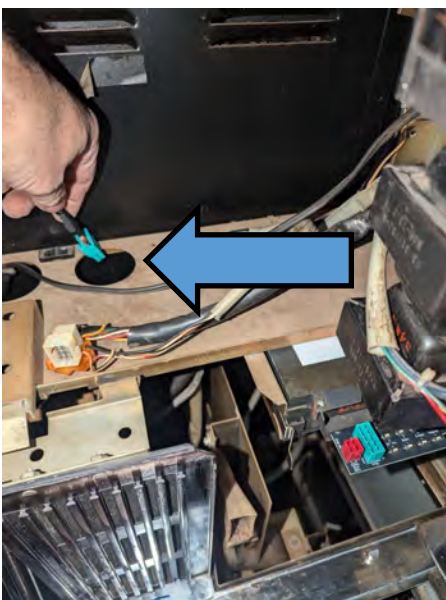
15. Locate the amplifier and unplug the RCA input cables, mechanism cable, and volume control cable from the amplifier, as shown below-center and below-right.



16. Route the new Magic Box amplifier cable from the amplifier area to the Magic Box, which will vary by model. (Example photo below-left is for models STD160 to STD4.) Some models such as SPS160 and SPS2 don't require any routing.

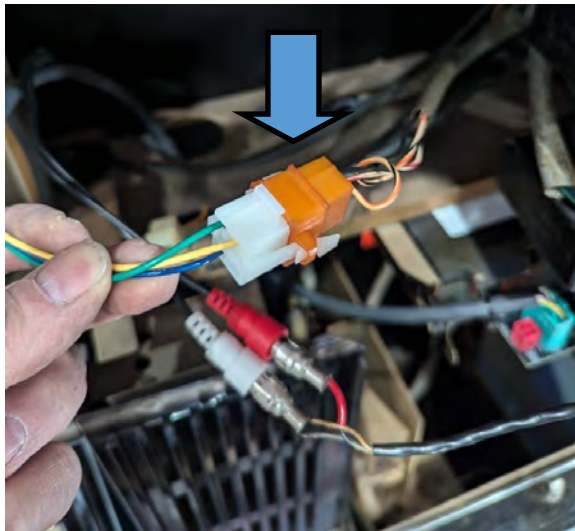
17. Connect the amplifier cable to the green connector of the Magic Box board.

18. Connect the male RCA connectors to the female RCA jacks of the amplifier cable.



19. Connect the mech connector to the amplifier cable as shown below-left.

20. Connect the remaining connector to the volume control connector of the TSA10, SHP1, SHP2, or SHP3 amplifier as shown below-right,



21. Now it's time to route the new Wired Remote Control cable through the back of the machine to the Magic Box. The most common way to route this cable is by removing the original rotary volume control and cancel switch, which are no longer used anyway. The old control can be removed with two 3/8 nuts, as shown below-left and below-center. Once detached from the cabinet, the old volume control can be completely removed and placed aside, as shown below-right.



22. Route the modular connector of the new remote control through the hole in the back of the cabinet. Be sure to make sure the cable is clear of the moving mechanism, and connect to the jack on the Magic Box.



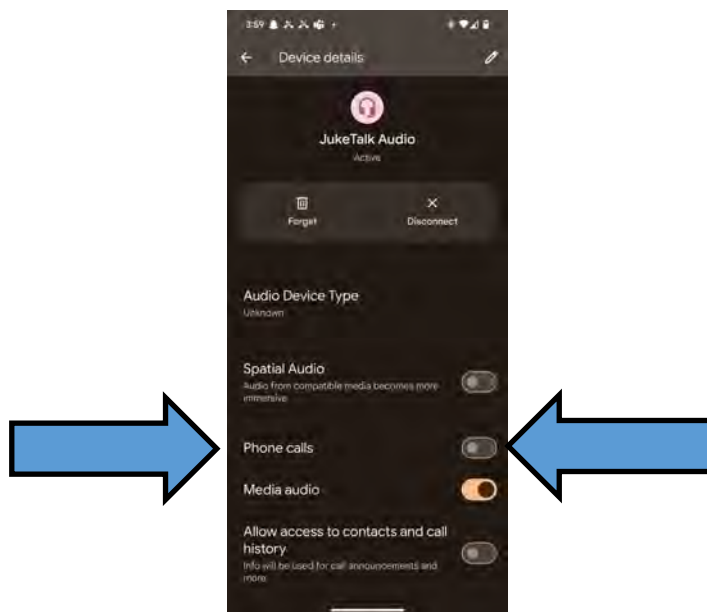
23. It is **STRONGLY** recommended to install the Arc Suppression Capacitors as shown in Addendum A. Omitting these capacitors will likely cause audible electrical noise, and may also cause undesired operation such as reset or lock-up.

If you have also purchased the Victory Glass Relay Box to remotely control the power to your jukebox, please refer to the directions included with the relay box to connect it at this time.

Installation is Complete! Proceed to Initial Adjustment Instructions on the Next Page.

Initial Adjustment Instructions

1. Power on the jukebox (either with the power switch on the back, or by using the power button on the remote **if** you have the optional Relay Box installed).
2. Make a selection on the keypad of the jukebox, and when the record begins to play, adjust the bass and treble to your preference. Note that too much bass will sometimes cause “feedback” into the phonograph needle, which can be a characteristic of the cabinet, speakers, or certain records. You may also need to adjust the rubber “snubber” stops on the top of the mechanism of some models. Other causes of feedback can include hardened motor mounts and/or motor coupler, or a missing or hardened rubber motor support plug. You can adjust the bass and treble using the buttons on the Magic Box board, or by using the keypad numbers 555/666 (bass down/up) and 888/999 (treble down/up).
3. After no selections remain, connect your smartphone, tablet, or laptop to the Bluetooth device named “**JukeTalk Audio**”. (Note that most phones/tablets default to a volume level of 50% when connecting to a new Bluetooth device. Press the volume up button on your device to increase it to 100%.) Begin streaming music from your favorite source (Spotify, iTunes, YouTube, etc.) and adjust the bass and treble to your preference.
4. By default on most phones, the setting for Phone Calls is enabled on the JukeTalk Audio device, which is not ideal. Go into your Bluetooth device settings for JukeTalk Audio and turn off the “Phone Calls” option, which will be similar to the example below.



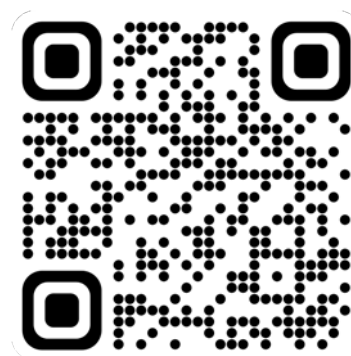
JukeTalk Remote Control App

Your Victory Glass Magic Box includes the FREE JukeTalk app, which is available for both Android and Apple (iOS) devices. JukeTalk gives you the ability to adjust volume, bass and treble, reject selections, and mute the jukebox. You can also make selections from JukeTalk by dialing the 3-digit selection from the app. Also available from the app are a “Random Selection” function, as well as the “Top Tunes” (aka “Golden Bar”) feature, which will play the 8 Top Tunes (100, 110, 120, 130, 140, 150, 160, and 170) with a single press.

To install JukeTalk, open the Google Play Store or Apple Store, and search for “JukeTalk”, or use the appropriate QR Code below. You should find the app in the store with the following logo:



Android / Google



iOS / Apple

Install and Open the app. Upon first opening the app, it will search for any newly detected devices within range.

Select the manufacturer Seeburg, and the model of your jukebox, and give it a friendly name (for example, “Seeburg Entertainer”). Then tap “Run JukeTalk!” and enjoy!

Troubleshooting

Symptom: JukeTalk app cannot locate your jukebox.

Possible Causes: Bluetooth is turned off on your phone/tablet, jukebox is not connected to a live outlet, jukebox is out of range.

Symptom: Low volume when streaming Bluetooth audio, even though volume in JukeTalk is at a high level.

Possible Causes: Bluetooth volume on your phone/tablet is turned down. Typically you can increase this by pushing the “volume up” button on the side of your phone/tablet.

Symptom: Bluetooth audio appears to be playing from your smartphone or tablet, but nothing is coming out of the jukebox. (Phonograph records play without an issue.)

Possible Cause: The muting contacts on the front of the mechanism may be dirty or out of adjustment. Clean or adjust the muting contacts.

Symptom: You hear a 'snap' or 'pop' through the speakers when the mechanism starts, stops or reverses directions.

Possible Cause: Be sure to add the arc suppression capacitors to the play control (in the DCC) and on the paddle reversing switch (on the mechanism) as shown in addendum A.

Symptom: Jukebox loses connectivity to JukeTalk and Bluetooth streaming when the mechanism is in operation, or the jukebox powers off completely on it's own (when using a relay box).

Possible Cause: Be sure to add the arc suppression capacitors to the play control (in the DCC) and on the paddle reversing switch (on the mechanism) as shown in addendum A.

Addendum A:

Installing Arc Suppression Capacitors

Purpose: When these jukeboxes were designed 50+ years ago, the condition of electrical arcing (and the electrical noise it creates, known as ESD) between contact points was less of an issue for these reasons:

- Previously, the amplifier was muted during all scanning operations of the mechanism. Now, the amplifier is always “live”, and simply alternates between phono and Bluetooth modes. Therefore any ESD in the machine gets amplified and becomes audible as ‘pops’ or ‘snaps’.
- Modern microprocessors such as the one in the Magic Box are more sensitive to ESD noise.

The severity of the ESD noise can vary depending on the condition and cleanliness of the contact points, relative humidity, etc. This ESD can cause undesired operation such as noise through the speakers, and can also cause the Magic Box to lock up or reset.

The simplest and most reliable way to correct all of these issues is to install the included arc suppression capacitors on the “play control” contacts in the Digital Control Center (DCC) chassis, and on the mechanism reversing paddle switch. Please see photographs below showing the installation of the two capacitors (polarity of the capacitors is not important).

IMPORTANT NOTE: When working on the reversing paddle switch on the mechanism, take a picture or take note of the position of the paddle switch (left or right) before beginning your work. It is imperative to make sure the switch is in the same position when you are finished. Failure to do so may bend the contact block (aka “frog board”) fingers on the Tormat memory unit.

Be sure to use the included wire insulation on the leads of the capacitors to avoid short circuits, should a lead come in contact with a nearby screw / wire / contact / etc.

- On the play control switch, the new capacitor will be connected to the same two terminals as the existing ceramic disc capacitor (note: typically, one lead of the ceramic disc capacitor is broken off, which can be re-soldered as part of this operation).
- On the mechanism reversing paddle switch, connect the new capacitor to the terminals with the **blue** and **red** wires.

