

Serial Audio Video Remote (SAVR3)
Compatibility
Upgrade Instructions

Revision IR – January 14, 2009

Author:

Jeff Behlendorf

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Revision History

Rev	Date	Pages	Change Description
IR	Jan 14, '09	All	Initial Version



Discussion

The SAVR3 baseline design incorporated a transient voltage suppression diode (TVSD) on each of the control channels to provide an additional layer of protection for the internal microprocessor against possible shocks or voltage transients on the data channel connections. These TVSD have been found to cause a severe compatibility problem with one specific model of Sony CD changer, the CDP-CX355. The TVSD components also increase the error rate for all data on these connections slightly, regardless of the device connected. Removal of the TVSD eliminates the problem and allows the SAVR3 to work reliably with all Sony CD changers.

Some soldering is required to remove the TVSD components, and reasonable care should be taken not to damage the unit during the upgrade process. This document provides detailed instructions for the end user to make this fairly simple modification.

Required Materials

The following materials are required to upgrade the SAVR3:

- SAVR3 (P/N: 200000-03)
- Soldering iron with fine tip
- Screw driver(s)
- Pliers
- Wire cutter



Modification Instructions

1. Using a small screw driver (#1), remove the four screws securing the SAVR3 cover (**figure 1**).



Figure 1: SAVR3 cover screws.

2. Remove the face plate from the SAVR3 by removing three retaining rings around the data ports Ch A, Ch B and Ch C using a pliers or flat blade screwdriver (**figure 2**). Turn the rings counter clockwise carefully. *Tip: Holding the screwdriver near the tip will help prevent slips that could leave scratches in the face plate.*

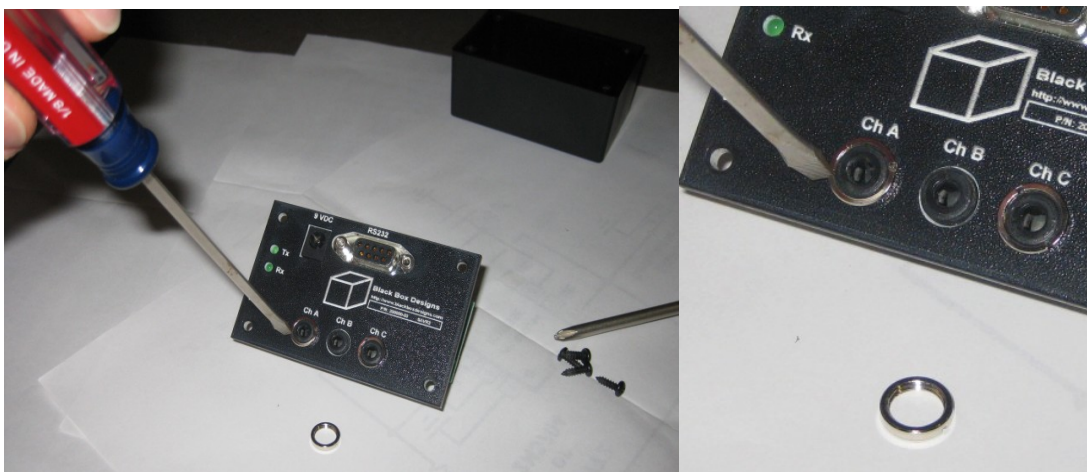


Figure 2: Remove the face plate

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3. Locate the three transient voltage suppression diodes (TVSD) (see **figure 3** below).

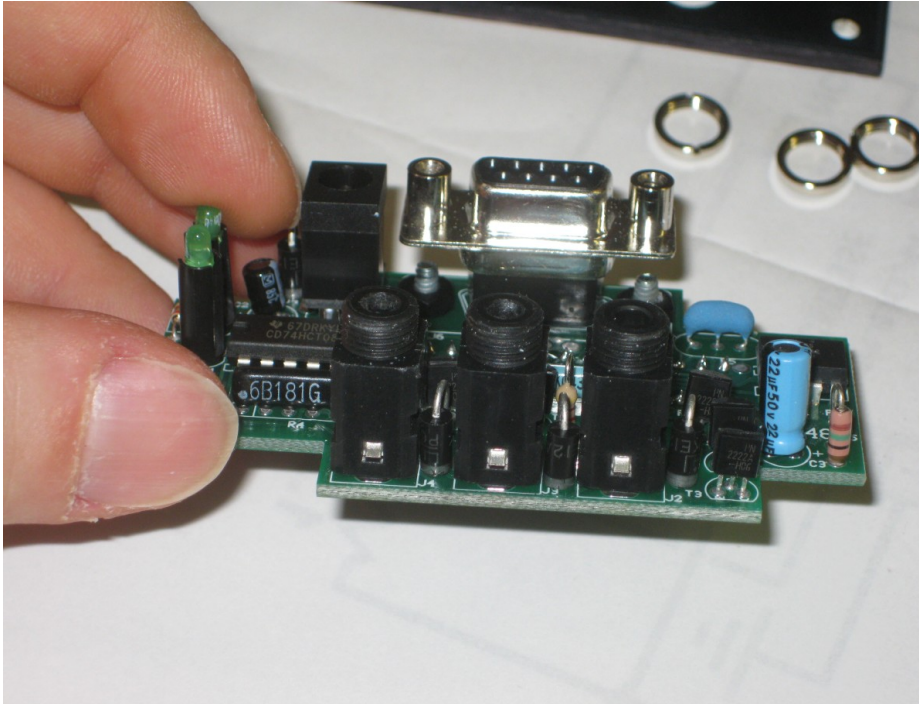


Figure 3: Transient voltage suppression diodes (TVSD)

4. The TVSD at the end of the row can easily be cut in half using a wire cutter (see **figure 4**).
5. Once cut in half, a soldering iron and a pliers are used to remove the two remaining component leads.

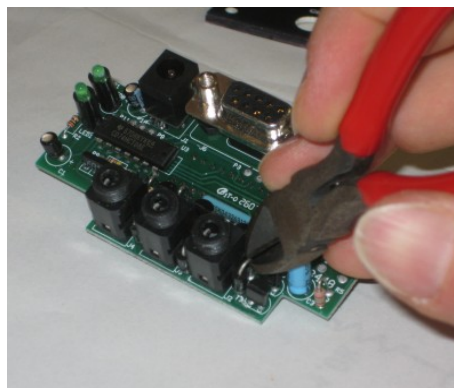


Figure 4: Transient voltage suppression diodes (TVSD)



- The two remaining TVSD components are somewhat more difficult to access. To remove these, it will be necessary to heat the component leads and press them partly through the board to gain a small amount of working room (see **figure 5**). This can be accomplished by heading one component leg at a time and pressing it into the board with the tip of the soldering iron. Just a small amount of movement is necessary, but pushing the component leg as far out as possible will make the next step easier.

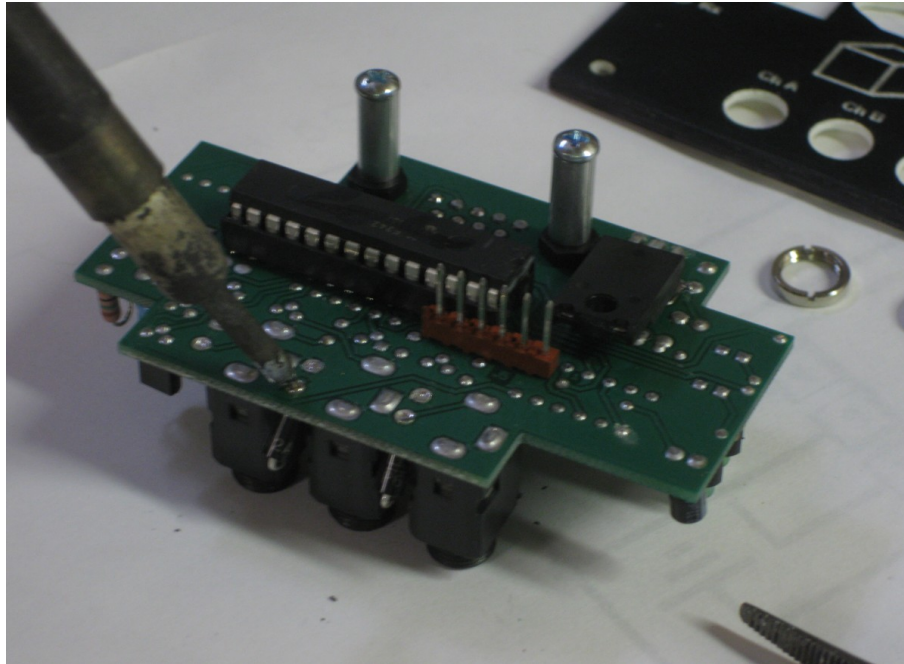


Figure 5: Loosen transient voltage suppression diodes (TVSD) component legs with a soldering iron.

- Once the components have been shifted partly out of the board, they can be bent to one side to allow access with a wire cutter to divide the part into two halves for removal. (**Figure 6**).

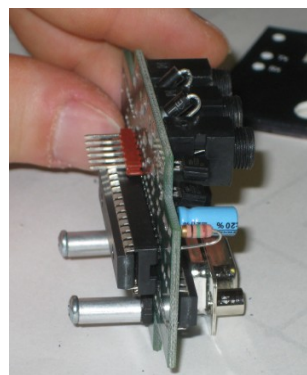


Figure 6: Bent transient voltage suppression diodes (TVSD)



8. Cut the two remaining TVSD components in half with a wire cutter.
9. Remove the TVSD components one leg at a time with a soldering iron and pliers. When finished the SAVR3 will appear as shown in **figure 7** below.

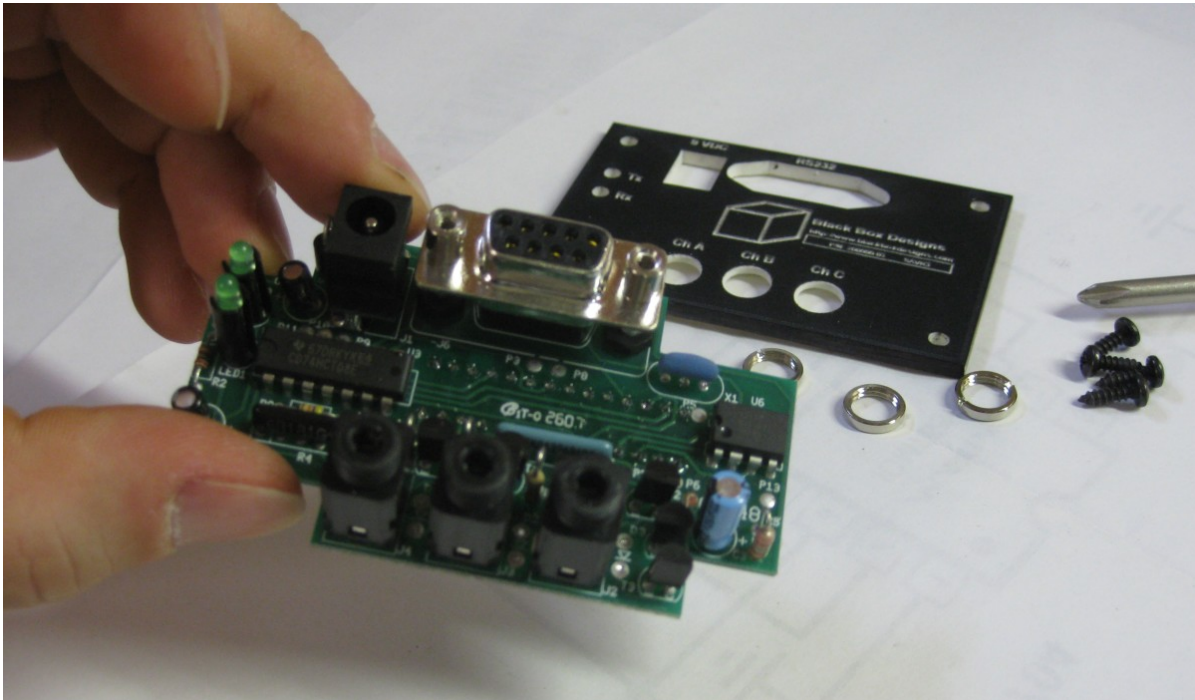


Figure 7: SAVR3 with all TVSD components removed.

10. Reinstall the face plate and cover screws.

This completes the SAVR3 compatibility modification.