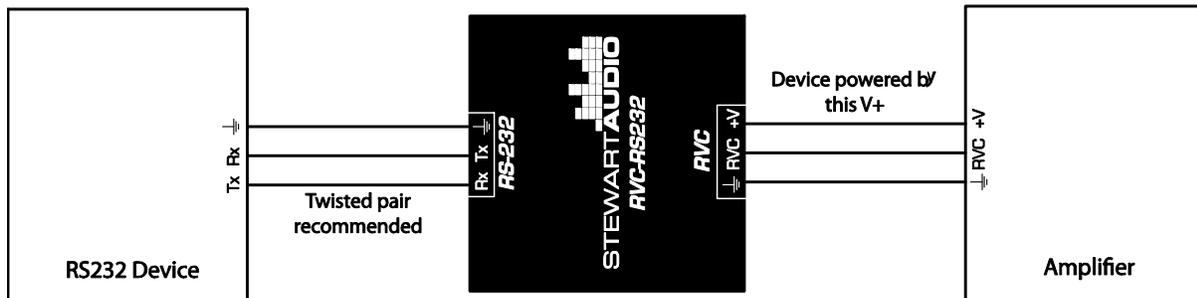


RVC-RS232 - Instruction Sheet

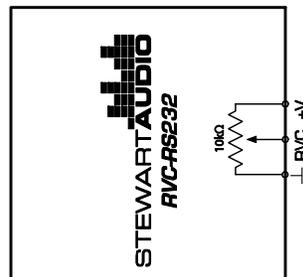
The RVC-RS232-IR is designed to work with any amplifier's Remote Volume Control (RVC) port which supplies 5-12VDC and at least 50mA of power. This product has been tested with all Stewart Audio amplifiers which fit that criteria but is compatible with other manufacturers' products.

Through the use of RS-232 commands, this box will control an internal digital potentiometer and mimic the standard 10K Ω potentiometer typically put into a wallplate. The available commands will mute, increase or decrease the volume, or set the volume to a specific value.

Connection Diagram



Note that the Tx and Rx on the device is relative to the individual devices



Internal Connection

RS-232 Instructions

All serial commands should be 8-bit commands at 9600 baud. Each command and response will start with the ASCII start of text symbol (**0x02**) and end with the ASCII end of text symbol (**0x03**).

On startup, the device will send **0x02 0x4F 0x4B 0x03** ('OK') to signify that it is operational. This will appear as **OK** in a terminal console.

Command Table

VOLUME_UP Increases the volume by 10%	0x02 0x76 0x75 0x03
VOLUME_DOWN Decreases the volume by 10%	0x02 0x76 0x64 0x03
VOLUME_DISCRETE Sets volume to a specific volume (rounded to nearest 5%). Range: 0x00 - 0x64 (0 - 100)	0x02 0x56 0xXX 0x03
MUTE_TOGGLE Toggles mute between muted and unmuted state.	0x02 0x6D 0x4D 0x03
MUTE_FORCE_MUTE Forces the amplifier into a mute state.	0x02 0x6D 0x79 0x03
MUTE_FORCE_UNMUTE Forces the amplifier into an unmuted state.	0x02 0x6D 0x6E 0x03
STATUS_VOLUME Returns the current volume.	0x02 0x76 0x53 0x03
STATUS_MUTE Returns the current mute state	0x02 0x6D 0x53 0x03
FIRMWARE_VERSION Returns the current version in the format: 0x02 0xXX 0xYY 0x03 (XX = Version, YY = Revision)	0x02 0x44 0x56 0x03

If an invalid command is received, the device will respond with **0x02 0x45 0x52 0x03**. This will appear as **ER** in a terminal console.

In response to a mute or volume command, the device will respond with:

0x02 0x76 0xXX 0x03 - The **0xXX** will be the hex equivalent of the current volume.

Muting and Memory

When the device is muted, it will save the current volume so that when unmuted it will return to the previously set volume.

All volume and mute settings are saved into an internal memory so it will recover within milliseconds from a power reset (compatible with amplifiers with sleep states).