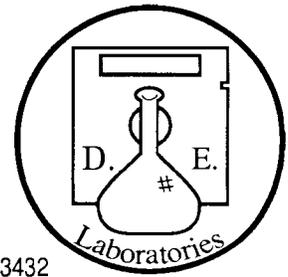


# The *SID Symphony Stereo Cartridge* Instructions

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Congratulations on your purchase of a *SID Symphony Stereo Cartridge*! This cartridge contains a SID (Sound Interface Device) chip, like the one inside your Commodore computer, and support circuitry. When used with an appropriate player program such as Mark Dickenson's *Stereo Player*, this cartridge allows you to play *Sidplayer* songs with six voices in stereo.

These instructions:

- give you operating guidelines,
- tell you how to set up the cartridge for use,
- provide troubleshooting tips,
- suggest where to find stereo SID music and information,
- explain how to create stereo *Sidplayer* songs, and
- state warranty information.

We strongly suggest that you read all of these instructions before using your *SID Symphony Stereo Cartridge*, and especially the next section, *Operating Precautions*.

## Operating Precautions

Your *SID Symphony Stereo Cartridge* contains a SID chip, an integrated circuit which is much more sensitive to handling than some other cartridges which you may own or use. The SID chip is especially susceptible to damage caused by static electricity on your person. For this reason, please observe the following:

- NEVER insert or remove the cartridge when your computer is on, **even if you have a cartridge expander device**. This kind of treatment will certainly damage your cartridge.
- NEVER open the cartridge. There are no user-serviceable parts inside. Opening the cartridge can discharge static electricity onto the SID chip—which can destroy it.

The cartridge has circuitry to protect the SID chip from static and short circuit damage while its case is closed and it is used in a reasonable manner. As long as you observe the two precautions above, you are in no danger of damaging your cartridge.

## Using the Cartridge

The *SID Symphony Stereo Cartridge* is easy to use. Just follow these instructions:

- 1) Turn off the power to your Commodore 64, 64c, 128, 128D, or SX-64 computer.
- 2) Plug the cartridge into the computer's cartridge port, label side up.
- 3) Turn your computer back on.

The cartridge is now ready to provide three more voices of sound for true stereo SID music.

Since the cartridge gives you stereo sound capabilities, you have audio outputs for both the left and right channels. The left channel, as defined by the stereo player for *Sidplayer* songs, consists of the three voices

from the SID chip inside your computer. The **right** side is composed of the three voices from the SID chip inside the *SID Symphony* cartridge. To fully appreciate the six stereo voices, hook up the outputs from your computer and cartridge to the left and right inputs, respectively, on your stereo receiver or amplifier. See Figure 1 below for a typical system setup. The Y splitter should have one male RCA plug splitting to 2 female RCA jacks, such as Radio Shack #42-2436. **Note:** The "Y" splitter is optional—if you don't want to connect your computer's audio to your monitor, you won't need it.

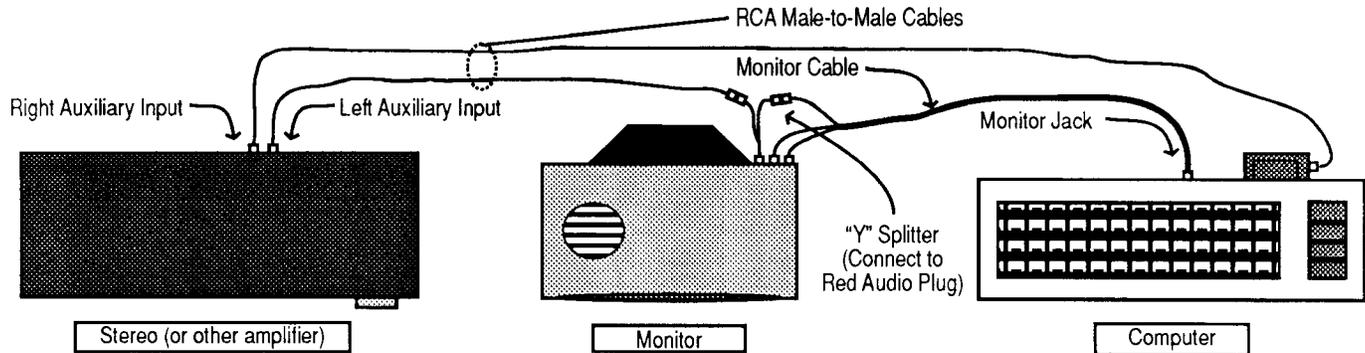


Figure 1—Example System Setup

#### Notes for Special Setups:

- **If you are using a 1902A monitor**, you don't need the Y splitter to bring the left channel sound to your stereo. Instead, plug one end of a RCA male-to-male cable into the "Audio In" jack on the back of the monitor and connect the other end to the left input on your stereo. This may sound a bit strange, but it works.
- **If you are using a 1084S monitor**, you can take advantage of its built-in stereo speakers. Simply plug one end of a short RCA male-to-male cable into the cartridge and the other end into the right side audio input on the monitor. If you wish to also have the sound go to your stereo, you will need two Y splitters and two RCA male-to-male cables.

The player for stereo *Sidplayer* songs is the public-domain *Stereo Player*, written by Mark A. Dickenson. The *SID Symphony Stereo Cartridge* has been tested and verified to work with versions 8.0 and above of this program. We recommend that you use version 10.0 or higher, though, for best results. To set up *Stereo Player*, just make sure the (A)ddress parameter is set to \$DE00. That's all there is to it! **Note:** If you do not have access to *Stereo Player*, Dr. Evil Laboratories distributes it plus 39 stereo tunes on a disk for \$1.00.

#### Troubleshooting Tips

If you are experiencing trouble with your cartridge, here are some possible problems and their solutions:

- **No music from cartridge** (you may hear static): First, check to make sure the address is set to \$DE00 for the software (such as *Stereo Player*). Then, check all of your audio cables to make sure they are in working order and plugged in correctly. If the cartridge is hot, there is a very good chance that the SID chip inside the cartridge has been damaged.
- **Cartridge sounds "funny"** (wrong tones, garbled notes, "hum", etc.): The first thing to do is check all of your audio cables to make sure they are in working order and plugged in correctly. Next, turn the computer off and then check to make sure the cartridge is seated properly in the cartridge port connector. If you are listening to the music through a stereo and you are hearing

a "hum" or "buzz", make sure both the computer and stereo are connected to the same ground. The easiest way to ensure this is to plug both components into the same wall outlet.

If your cartridge is in need of repair, return it to Dr. Evil Labs postage paid. See the *Limited 90-day Warranty* section for the terms of a warranty repair. Almost all repairs cost less than \$15.00.

### Finding Stereo Sidplayer Music

You can often find *Sidplayer* compositions in computer user group libraries or on computer bulletin boards. The headquarters for *Sidplayer* music, though, is the Music Room on the Quantum Link national information service. The Music Room has the largest collection of regular and stereo *Sidplayer* tunes in the world available for downloading. You can also take classes in creating *Sidplayer* tunes and ask many famous *Sidplayer* artists questions about techniques and music. The Music Room also organizes periodic "Sidfests" which bring people together who love *Sidplayer* music for a few days of workshops and music composing. You can also meet other *Sidplayer* artists in person and enjoy the local sights and attractions.

Dr. Evil Laboratories maintains an official presence on Quantum Link and GENie. On Q-Link, look for us in the Hardware Support Group, in the Music Room, or send electronic mail to "Dr Evil" (note no period in the name). On GENie, look for us in the Commodore Flagship or send mail to "DR.EVIL".

### Creating Stereo Sidplayer Music

The easiest way to create stereo *Sidplayer* songs is with *Stereo Editor*, by Robert Stoerrle. This public-domain package allows you to see all six voices onscreen at the same time and has many other powerful editing and playback features. To use *Stereo Editor*, however, you need to own a copy of *Compute!'s Music System for the Commodore 128 and 64: The Enhanced Sidplayer*, by Craig Chamberlain. Both the *Enhanced Sidplayer* and *Stereo Editor* are available from Dr. Evil laboratories.

Sometimes you may wish to use the *Enhanced Sidplayer* to create stereo music instead of *Stereo Editor* (such as when you want to use the C-128 version of the *Enhanced Sidplayer* editor because it gives you more memory for longer compositions). Since the *Enhanced Sidplayer* edits and plays just three voices (one side) at a time, you have to use a few tricks to successfully create a stereo composition. The *Enhanced Sidplayer* editor automatically appends a ".MUS" to every file it creates. *Stereo Player* plays files that end in this extension on the left side. It expects the right side filename to end in ".STR". Therefore, you must rename the right side file that you create with *Enhanced Sidplayer* to have the same base name as the left side but with a ".STR" extension before you play it with *Stereo Player*.

For example, you could name the left side file "LEFT SIDE" and the right side file "RIGHT SIDE" from within the *Enhanced Sidplayer* editor. The editor creates two files: a "LEFT SIDE.MUS" and a "RIGHT SIDE.MUS". You then exit the editor and rename "RIGHT SIDE.MUS" to "LEFT SIDE.STR" before playing it with *Stereo Player*.

**Note:** You need to rename "LEFT SIDE.STR" to "RIGHT SIDE.MUS" before attempting to edit it again with the *Enhanced Sidplayer* editor.

### Using the Cartridge with MIDI

The *SID Symphony Stereo Cartridge* may be used in conjunction with any Commodore 64/128-compatible MIDI interface. However, as shipped from the factory, the stereo cartridge occupies the same spot in memory as a MIDI interface. If you wish to use a stereo cartridge and a MIDI interface simultaneously

(such as with *MIDI—SID Connection*), you will need to have Dr. Evil Laboratories change the “base address” of the cartridge from \$DE00 to \$DF00. This can be done at no charge. Once the base address of the cartridge has been changed, you will need to change the (A)ddress parameter in *Stereo Player* to \$DF00. *Stereo Editor* automatically detects where the cartridge is in memory.

The *Sidplayer* system was not originally designed to support MIDI. After the release of the *Enhanced Sidplayer*, Craig Chamberlain defined a “MIDI extension” to *Sidplayer* (using AUX commands) and released two different 3-voice “*MIDIplayers*”—one for any “non-handshaking” MIDI synthesizer and a special version for Casio CZ-series synthesizers. Frank Prindle worked with Craig to develop and release a 6-voice version of the non-handshaking *MIDIplayer*. Frank also wrote *MIDI—SID Connection*, a simple sequencer which records MIDI input and converts it to *Enhanced Sidplayer* format for playback on one or two SID chips. Robert Stoerrle included Craig's MIDI definition in the *Stereo Editor* player module—it can play back *Sidplayer* files with the appropriate AUX commands on any MIDI synthesizer.

Although there are now several MIDI tools for the *Sidplayer* system, there remain some significant gaps in functionality:

- Neither the *Enhanced Sidplayer* editor or *Stereo Editor* support real-time input of music via a MIDI synthesizer. There is talk that a second version of *Stereo Editor* will add this feature.
- There is no 6-voice player to complement the Casio-specific 3-voice player (which supports patch file loading). There are also no other other manufacturer/model-specific players.

All of the MIDI tools discussed above can be found on various commercial information services and local BBSes/user groups. If you can't locate the tools, Dr. Evil Laboratories distributes all of the *MIDIplayers* plus *MIDI—SID Connection* on a disk for \$5.00.

### Limited 90-day Warranty

Dr. Evil Laboratories warrants that each *SID Symphony Stereo Cartridge* will be free from defects in material or workmanship for a 90-day period beginning when the cartridge is shipped. This warranty covers parts and labor for repairing defects in the cartridge as it was manufactured. The warranty does not cover unreasonable wear and tear or abuse on the cartridge, nor breakage through negligence.

The manufacturer does not warrant that this unit is fit for any particular purpose. In no event shall damages for loss of use of this cartridge extend beyond the purchase price of this item. Any attempt to alter or repair the cartridge by persons not associated with Dr. Evil Labs voids any remaining warranty on the cartridge.

If your cartridge needs warranty service, return it to Dr. Evil Labs postage paid. Make sure you package it very securely to prevent any damage during shipping. You may also want to send the cartridge insured. Enclose a letter stating the nature of the problem and describing your computer system. Your cartridge will be repaired free of charge and returned postage paid, unless it is determined that the problem is not defect-related. Dr. Evil Labs reserves the right to determine what is and what is not a defect. This cartridge, as well as many other peripheral devices of this nature, is extremely sensitive to static electricity. Therefore, damage due to static electricity discharge once the cartridge is in your possession is not considered a defect, and therefore is not treated as a warranty repair.