

# TIVO UPGRADE INSTRUCTIONS

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Instructions for dual drive upgrade for Sony SVR-3000

## A FEW WORDS OF CAUTION:

First and foremost, please be aware that upgrading a TiVo presents a few physical hazards. As with most consumer electronics devices, components in the TiVo may still carry a lethal charge, even after disconnecting from your power supply. Be aware of this while working inside your TiVo. Allow sufficient time for discharging of components and avoid contact as much as possible with potential hazards. While we have done everything we can to provide accurate, easy-to-follow instructions, we cannot be responsible for any damage done to your TiVo or to yourself as a result of your upgrade. By opening your TiVo, you agree that neither Adberg Consulting LLC nor any of its members or affiliates is responsible in any way for any harm done. Please be VERY careful when upgrading. NEVER open the TiVo while the unit is plugged in and NEVER operate the TiVo if the lid is not securely fastened.

**Please Note: Opening the TiVo *voids the warranty*.**

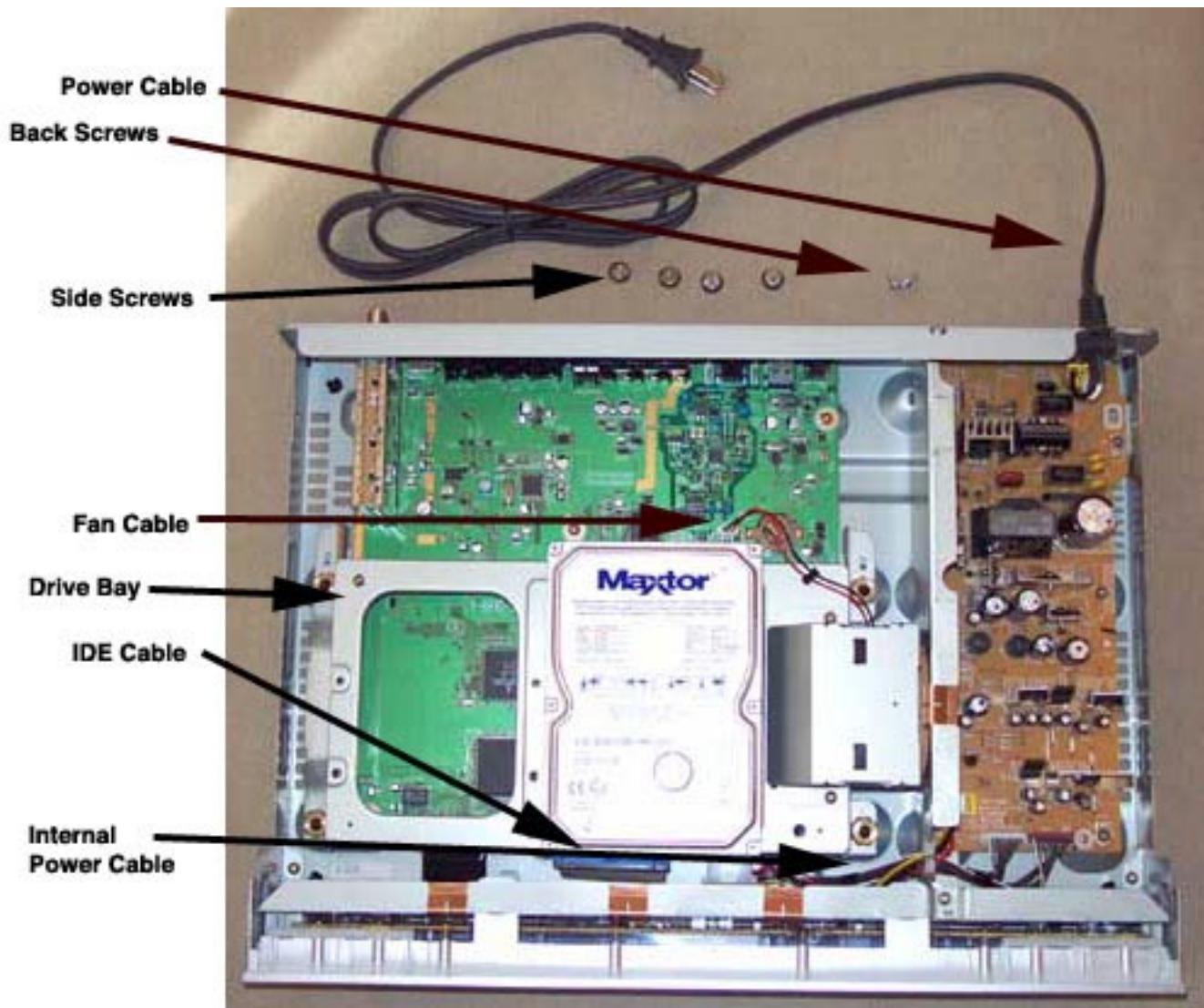
## 1. OPENING THE TIVO

1.1. Unplug the power cord from the TiVo and wait five minutes for the TiVo to discharge. Do not plug the TiVo back in until you are completely finished. Be very careful of static electricity, which can destroy your TiVo's internal parts. You shouldn't perform this upgrade on carpet.

1.2. Using a Philips-head screwdriver, unscrew the four screws on the back of your TiVo. The four screws are surrounded by silver from the top of the TiVo's.

1.3. Next, remove the four, large-head screws, two on each side of the unit.

1.4. Once the eight screws are removed, you have to remove the lid, which can sometimes be difficult. The WeaKnees.com "tried and true" method is to place the TiVo on the floor and kneel down with your knees about 6 inches from the FRONT of the TiVo. Place your palms on the top side edges of the TiVo, toward the back and push toward the back of the TiVo (this occasionally requires a bit of force). The cover should slide back and then up. Remove the cover from the TiVo, and set it in front of the TiVo unit, top up. You will use this as a platform for the drive bay.



## 2. DISCONNECTING THE DRIVE BAY

2.1. With the cover off and looking underneath the front lip of the TiVo, you will be able to see (1) one hard drive, (2) a ribbon cable that runs from the greenish motherboard underneath the drive to the hard drive, (3) a multi-colored (red, black, yellow) power cable that runs from the power supply to the hard drive, and (4) a fan cable that runs from the hard drive bay to the motherboard.

2.2. Take note of your hard drive's manufacturer (Maxtor or Western Digital). You will need this information later.

2.3. Place the TiVo lid upright in front of the TiVo, forming a platform that will be used to support the drive bay after you remove it.

2.4. Gently remove the fan cable from the motherboard. Pull straight up and out. (See Picture.)

2.5. Using your screwdriver, unscrew and remove the four screws securing the drive bay to the TiVo chassis.

2.6. Once the screws are removed, you will be able to lift the drive bay up and out of the TiVo. Flip the drive bay up and out of the TiVo and onto the TiVo lid, with the hard drive face-down on the TiVo lid and the two cables running from the drive to the TiVo. You will now need to remove both of the cables connected to the hard drive by following the instructions below:

(a) The hard drive has a power connector running into the hard drive. The power cable has a white connector plugged into the hard drive. Remove the power connector from the hard drive. The power cables are sometimes difficult to remove; patience and wiggling it back and forth usually does the trick.

(b) Remove the hard drive ribbon cable (longer, gray cable with a blue or black connector) from the hard drive by pulling on the hard plastic piece connected to the hard drive.

### **3. REMOVING THE EXISTING DRIVE(S)**

3.1. With the hard drive bay upside down on the TiVo lid, remove the four screws connecting the hard drive to the hard drive bay. Do not confuse these screws with the four screws you removed from the back of the TiVo before removing the lid.

3.2. Set aside the drive(s) you have just removed for safe keeping.

### **4. CONNECTING THE NEW HARD DRIVES TO THE DRIVE BAY**

4.1. Included in your upgrade kit are two replacement hard drives. You will need the four screws that you removed from the hard drive bay. The screws will be used to attach one of the upgrade drives to the drive bay.

4.2. You will first want to attach the new drive marked "A" to the drive bay. Install the drive in the position closest to the LEFT side of the TiVo (as you are looking at the TiVo from the front). In the pictures above and below, the location of the A drive should be the LEFT location. Align the hard drive on the drive bay. Using the screws included in your kit (or that were removed when you removed your TiVo's original drive(s)), attach the drive to the bracket by following the instructions below:

(a) We have found that the easiest way to attach the drive to the bracket is to turn the bracket upside down. Using one hand, hold the drive against the bottom of the bracket and look through the holes in the drive bay to align the screw holes. Using your hands, screw the screws into each of the four holes. Use a Philips-head screwdriver to tighten the screws.

(b) NOTE: Check to be sure that the drive is attached so that the drive connectors face the proper way. See the picture above

4.3. You should now have one drive connected to the drive bay.

4.4. Repeat these steps and attach the drive marked "B" to the RIGHT position on the drive bay.

4.5. NOTE: If your drives are not marked "A" and "B," the "B" drive is the drive that has the two jumpers in a straight, horizontal line. "Jumpers" are the plastic pieces that are located on the back of the drive, between the location for the power cable and the IDE drive cable.

## 5. REPLACING THE POWER CABLE AND IDE CABLE

5.1. Your upgrade kit contains two cables. The first is a multi-color (black, red, yellow) power splitter cable. The second is a hard drive IDE cable (see picture below). You will first need to ADD the power cable to the end of the existing TiVo power cable and REMOVE the current hard drive cable from the TiVo.

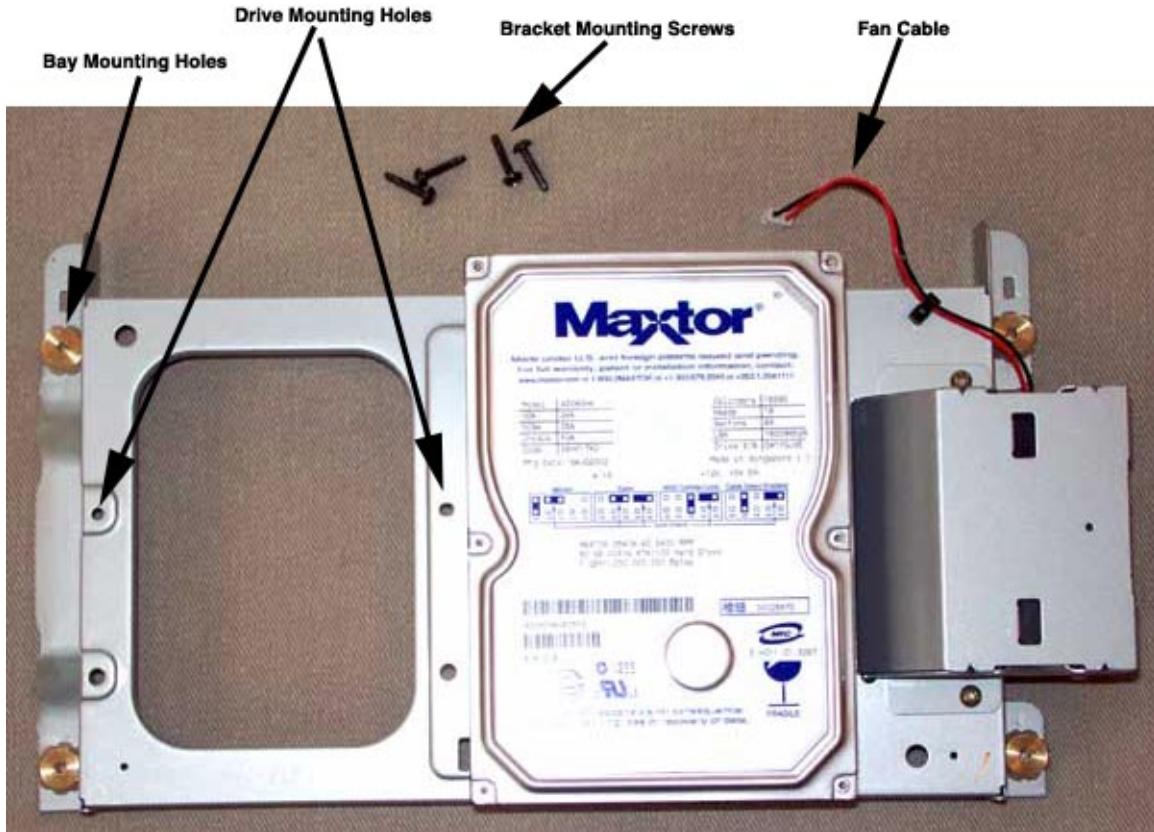


(a) Carefully remove the gray ribbon cable from the TiVo's motherboard and set it aside. Pull straight up from the black plastic piece attached to the motherboard. Be very careful with static and do not touch the motherboard itself. You will not need the cable anymore.

(b) Take the red/yellow/black power splitter cable included with your upgrade kit and connect the male end (the only end that will fit) into the power cable that you removed from the original hard drive.

5.2. Install the hard drive cable that was included in your upgrade kit onto the motherboard. When looking at the cable, you will notice that two of the three connectors are closer together than the other (blue in the picture above) connector. The end that goes in the motherboard is the one pictured on the LEFT in the picture above. You will want to install the LEFT end of the cable into the motherboard, being careful to install the cable in the proper position. You will notice a slight groove in one side of the plastic connector. That small groove aligns with the groove on the motherboard socket.

5.3. Once you have connected both the power cable and the hard drive cable, you should have a long hard drive (gray) cable and a long power cable hanging out of your TiVo.



## 6. CONNECTING THE POWER AND HARD DRIVE CABLES TO THE DRIVES

6.1. If you have the floor/table space, move to the back of your TiVo so that you are looking at the back of the two hard drives.

6.2. Connect the two power cords to the two drives, being sure to align the power connectors properly (rounded side down). Be sure that the power connectors are securely fastened.

6.3. Connect the gray hard drive cable to each of the hard drives. The connector at the end (the RIGHT connector in the picture above) plugs into your TiVo's original drive. The middle connector plugs into your new drive. Again, be sure the cable is pushed snugly into the drive (it only fits one way). Be very careful not to bend any of the hard drive pins.

6.4. Now move back in front of your TiVo to re-attach the drive bay.

## 7. RE-ATTACHING THE DRIVE BAY

7.1. Once you have the cables connected to the drives, carefully flip the drive bay over.

7.2. Align the four screw holes in the bracket with the holes on the TiVo chassis. Make sure the cables aren't under the bracket and that the bracket sits flat on the chassis mount. Make sure the fan cable is free.

**7.3.** Screw the four screws back into the holes on the drive bay.

**7.4. Insert the fan cable back into the motherboard. (This is easy to forget, which is why it is in bold!)**

## 8. RE-ATTACHING THE TIVO LID

8.1. Kneel down in front of your TiVo as you did when you removed the lid. Place the TiVo lid back over the TiVo. Align the clips on each side of the lid so that they clip down on the sides of your TiVo. Slide the lid toward you while simultaneously pushing down on the top of the lid.

8.2. Once the lid is in place, reattach the eight screws.

We thank you very much for your purchase and hope that you enjoy your newly-enhanced TiVo. Please [email us](#) with any comments, suggestions or complaints. If you found the upgrade easy to install (or even if you found it more difficult than you expected), we'd love to know. If you found our service to be excellent (or awful), we want to know that too. We're always looking to improve our products and services...the more we hear from you, the better. Thanks very much!