

DVRupgrade® Kit Installation Instructions

Add-On Drive Kit

Series2 TCD 240/540 Standalone units / HUMAX Standalone Units

Series DirecTV SD Units

Note: Read all instructions first! Do not place your unit or its components on a carpeted floor while open. The internals of your unit contain sensitive electronic components that can be damaged by static electricity. Under no circumstances should you touch any component of the unit's power supply, even if the unit is unplugged; it has the potential to shock you.

The drives included with your kit are pre-configured and jumpers are already set appropriately. DO NOT CHANGE JUMPER SETTINGS ON ANY DRIVE WE SUPPLY WITHOUT CONTACTING DVRUPGRADE FIRST!

Step 1 Using the Torx driver included with your kit, remove the four cover screws on the rear of the unit. On some newer models, there may be five screws.



Step 2 Remove the cover by sliding towards the rear, and lifting the back edge. The internals of your unit are shown below.



Step 3 Remove both connectors on the bottom of the drive (disk drive cable [left] - power connector [right]).



Step 4 Remove the two screws on the right side of the drive; they are attaching the drive and bracket to the TiVo chassis. Remove the drive assembly from the chassis.



Step 5 Inspect jumpers on rear of the **original TiVo drive**; if it is a Maxtor drive, move the jumper as far left as it will go (left photo). If the drive is a Western Digital drive, move the jumper to the middle column (right photo).



Step 6 Now put the original TiVo drive aside; we will re-install it in the TiVo again shortly.

Secondary Bracket Sub-Assembly Instructions

Step 7 Shown below are most all of the components included with your secondary bracket. Note that you may have some extra components left over after the installation; extra bits are included and may be necessary depending upon the type of unit in which you are installing the bracket.



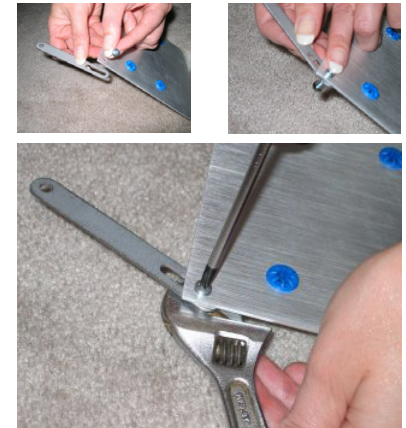
Step 8 Insert blue grommets into the four large holes of the secondary bracket.



Step 9 Insert one of the 1/2" long screws through the mounting plate and through the elongated slot/hole in the linkage arm.



Step 10 Thread the 1/2" long screw into the locknut and position the linkage arm approximately as shown. Tighten it snugly enough so that the linkage arm can be adjusted by sliding it.



Step 11 Position the mounting plate as shown. Ensure the holes are lined up as shown; the hard drive connectors are on the left side in the photo below.



Step 12 With the mounting plate positioned on top of the disk drive, line up the holes in the blue grommets with the threaded holes in the disk drive. Insert the metal stand-offs into each of the blue grommets.



Step 13 Line up the 4 screw holes in the hard drive with the blue grommets. Insert a 1/2" screw through the white plastic washer and into each of the holes in the hard drive as shown. Securely tighten each screw.



Step 14 This is what the bracket should look like after it is secured to the hard drive. Note that the drive connectors are still on the left side.

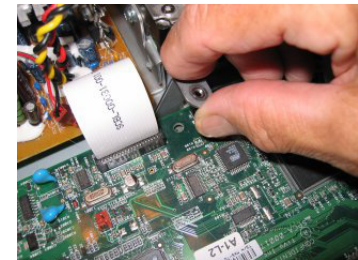
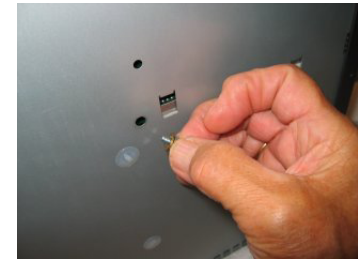


Secondary Drive Assembly Installation

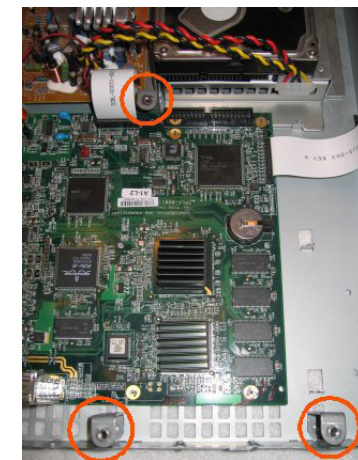
Step 15 Carefully turn TiVo on its side and locate the hole notated by the circle, below. If your unit does not have this hole, please skip to **step 21** for alternative instructions.



Step 16 Insert a 1/4" long screw with flat washer through the hole and at the same time, insert the C-clip under the motherboard and on top of the screw you are inserting through the bottom of the case. You can tighten the screw through the bottom of the case (the C-clip has a threaded hole in it). Note that the C-clip does not sit on top of the motherboard; it goes between the motherboard and the bottom of the TiVo case.



Step 17 Now locate and mount the remaining two C-clips similarly; all three are shown mounted below. We recommend you not fully tighten the screws holding the C-clips until after you've located and secured the drive assembly in the following steps. Note that some chassis already have side mounts, and the C-clips are not necessary.



Step 18 Lay the assembled hard drive and mounting bracket on the C-clip mounts and adjust the linkage arm to line up with the hole in the C-clip next to the power supply.



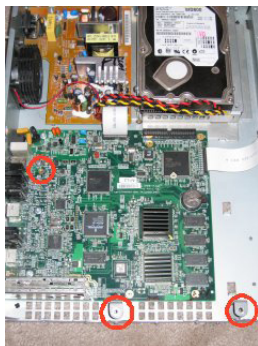
Step 19 Screw the two 1/2" self-tapping screws through the mounting plate and into the C-clips along the edge of the case. Note that these holes are not threaded, so you are "cutting" them as you turn the screw; you may need to use a slight amount of force. Lastly, use a 1/4" screw to attach the linkage arm to the C-clip next to the power supply.



Step 20 Now if everything is located properly, tighten up screws holding C-clips to TiVo chassis.

Alternate Instructions for locating C-clip
If you were referred to this step from Step 15 please continue, otherwise, you can skip to step 25.

Step 21 Note that mounting points for C-clips and bracket are shown below.

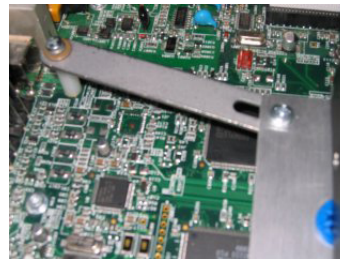


Step 22 Locate and secure two of the C-clips to the outer edge of the TiVo chassis in the positions depicted in the previous photograph. Use the 1/4" screws and do not fully tighten until final positions have been determined.

Step 23 Locate drive assembly as shown below, and use two 1/2" self-tapping screws to secure the mounting plate to the C-clips on the edge of the case. Now swivel the linkage arm counter-clockwise and you will see that there is a Torx screw securing the motherboard to the chassis. Remove this Torx screw from the motherboard (you will be replacing it with a support that will hold up the linkage arm and also secure the board).



Step 24 Place the unthreaded plastic spacer on top of the newly revealed screw hole; you can then swivel the linkage arm over it and line the hole in the linkage arm up with the spacer and the threaded hole in the motherboard. Secure the assembly in place using the 30mm screw, lock washer and flat washer; then screw the spacer into the motherboard where the Torx screw you removed was originally located.



Step 25 Now carefully connect the IDE and power cables. You will need to use the supplied "Y" splitter for the drive power connectors, and use the supplied flat ribbon cable for connecting the drives. Note that the **BLUE** connector on the ribbon cable must connect to the TiVo motherboard and the remaining black connectors can be used for the hard drives. It does not matter which connector goes to what drive, however the cable will need to be neatly folded to accommodate the drive positions. Please be patient with this step - it is OK to fold the cable as needed, but ensure you do not pinch the wires too tightly. Just be patient and you'll find that everything fits neatly and nicely.



Step 26 Replace the cover, reconnect and power-on unit. Your unit should only take a few moments to power up and boot as it normally would. If it does not boot successfully, please ensure you have connected everything properly and according to the instructions.

To verify successful installation, proceed to the system information screen by selecting **Messages and Setup**, and then **System Information**. Use your remote's channel-down button to view the new recording capacity of your unit.

Congratulations, you are done! If you have any questions or problems with your installation, please contact us using the form on our website. Additional resources are available at <http://www.dvrupgrade.com/support/> and these instructions are also available online at http://www.dvrupgrade.com/install_instructions.cfm.

Thanks again for purchasing your upgrade kit from DVRUpgrade, the home of the original TiVo Upgrade!