

TASCAM.

X-48 and X-48mkII

How to convert a GPT ("GUID Partition Table") style drive for use with the TASCAM X-48

Background:

- The TASCAM X-48 can utilize FireWire (preferred) or USB external hard drives.
- The TASCAM X-48mkII can utilize eSATA or USB external hard drives.
- Both models can use NTFS (preferred) or FAT32 file systems.
- The maximum supported drive size is 2TB.

An external hard drive usually comes preformatted when purchased, and may be NTFS, FAT32 or even HFS+ (Mac) formatted. In recent years, since hard drives over the 2TB size became available, the Style of the Partiton table on the drive has also changed, with many drives now being preformatted with the new "GPT" style of partition table.

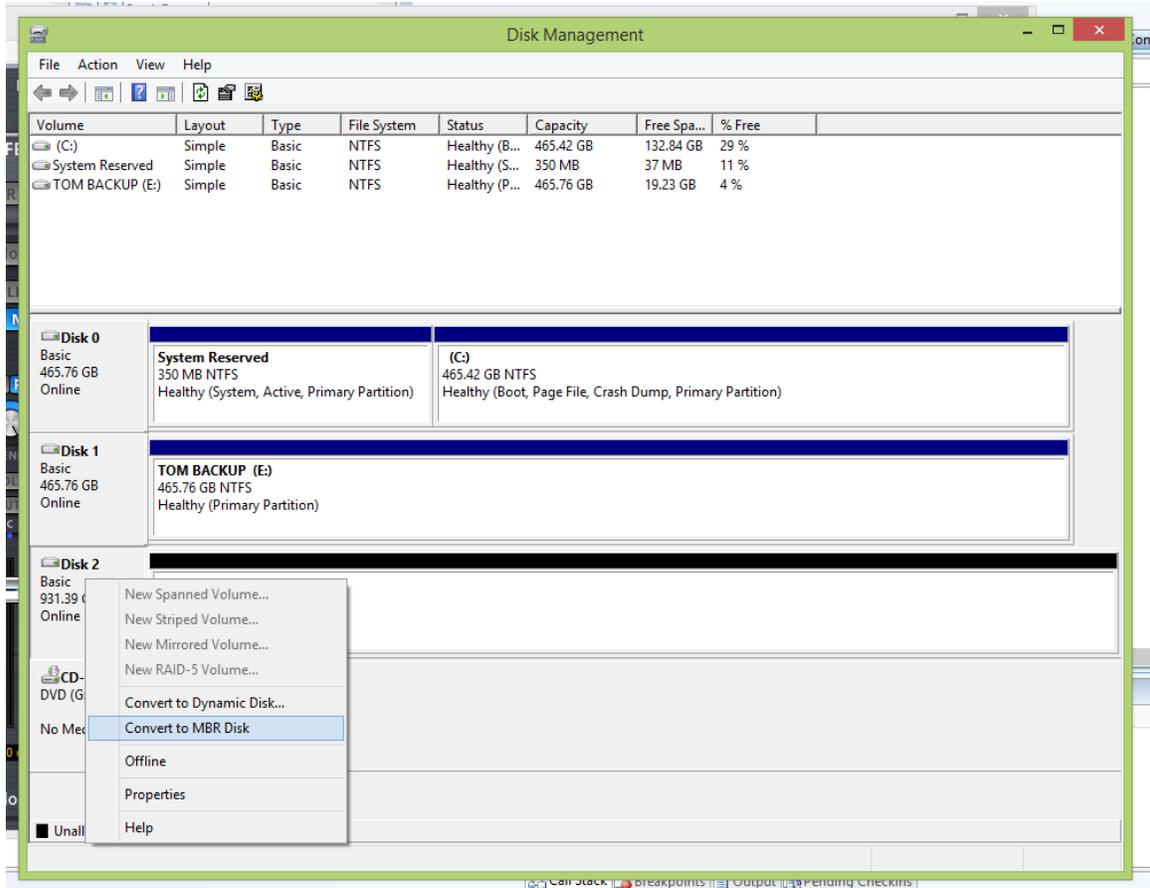
Windows 7, Windows 8 and Mac OS X support these drives. The X-48 only recognizes drives that use the original "MBR" style partition table.

The X-48 is based on a customized version of Windows XP Embedded, and so predates the newer GPT format for drives. When such a drive is connected, the X-48 will do nothing with it. Running the Disk Management Tool from the File menu will show "GPT Protective partition" for that drive. Formatting options are not available.

The following solutions are available to modify the drive to be usable on the X-48. All data on the drive is erased with these processes. This procedure only needs to be done once when the drive has first been purchased.

Using a Windows 7 or Windows 8 PC:

1. Connect the external hard drive to the Windows 7/8 computer.
2. Start the Disk Management Tool.
3. Identify the new disk in the list.
4. Click on the partition within that disk and delete it using the right click menu.
5. Once the disk has no partitons, right click on the left area where the Disk size is displayed and select the "Convert to MBR Disk" option. This option is only accessible when there are no partitions left. (see screen shot below)
6. Create a new basic partition to use the whole drive size, format to NTFS.
7. The drive is now usable on the X-48.



Using only the X-48:

1. Connect the External hard drive to the X-48. It will not show up in the file manager, because the partition style is not supported.
2. Start the Disk Management tool from the File Menu.
3. Verify that the drive is physically recognized, but displays "MBT Protective Partition" for that drive.
4. Unlock the X-48 maintenance backdoor.
 - a. Press CTRL+SHIFT+ALT+U
 - b. a prompt appears.
 - c. Click on the password area
 - d. type the password "sanity" and press enter. Do not type the quotation marks for this or subsequent instructions.
5. Start a command line prompt
 - a. Press CTRL+SHIFT+ALT+C
6. Start the manual disk partition tool.
 - a. Type "diskpart" and press enter
 - b. Leave the disk management tool window open as well.
7. type "list disk" and press enter to verify that the drive is connected.
8. type "select disk 1" and press enter to select the external drive . Warning - this is assuming that only the internal drive (disk 0) and a single external drive (disk 1) is connected to the X-48. If more than 2 drives are connected, be sure to verify

- you are selecting the drive you wish to convert. DVD drives do not appear in this list.
9. type "clean" and press enter . Warning This removes all data from the drive instantly. If you selected the internal drive (disk 0), you will need to re-install the X-48 OS from the system restore CD. When this command is finished, the disk management tool should show the drive with an "X" mark, and as uninitialized.
 10. Use the Disk management tool - Right click on the left hand panel for the drive and select "Initialize".
 11. Right click on the right hand panel for the drive and select Create a partition.
 12. Format it, and assign a drive letter.
 13. The drive is now visible to the X-48.
 14. Exit the manual disk partition tool. Click on the command prompt window again, type "exit" and press enter
 15. Exit the command prompt window - type "exit" and press enter
 16. Exit the Disk management tool by selecting Exit from the File menu or the X mark in the top left corner of the window.
 17. The X-48 will automatically shutdown.
 18. Start up the X-48 as normal, you can re-format the drive if desired.

Using a Mac:

1. Connect the external drive to the Mac
2. Start the Disk Utility
3. Select the drive
4. In the partition tab, select "1 partition" from the partition layout pull down menu.
5. Click on "options..."
6. Choose Master boot record.
7. Close the options dialog
8. Choose "MS-DOS (FAT)" for the file system. The Mac is not able to format drives to NTFS.
9. Click on Apply.
10. Wait for the Mac to partition and format the drive.
11. When finished, the Mac may prompt you whether to use the drive for Time Machine. Choose "Do not Use".
12. Power down and disconnect the external drive and attach to the X-48.
13. Re-format the drive on the X-48 if you wish to use the NTFS file system (recommended).