Troubleshooting the U2 and SxS Card Readers

At a recent site I found 11 computers which had issues using Sony XDCAM Disc and Card readers. The causes and cures I used are covered in this short document.
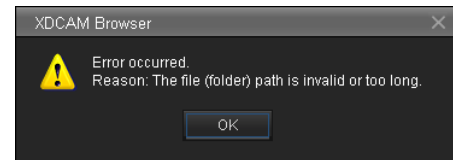
General

1. **U2**: Most issues are related to Driver and Firmware mismatches. The U2 Firmware and OS Driver should match each other, and be the approved versions of the AVID software. The versions match if they both come from the same version of the XDCAM DRIVE UTILITY.

   There are also settings on the U2 which can be wrong, causing problems like the drive refusing to record.
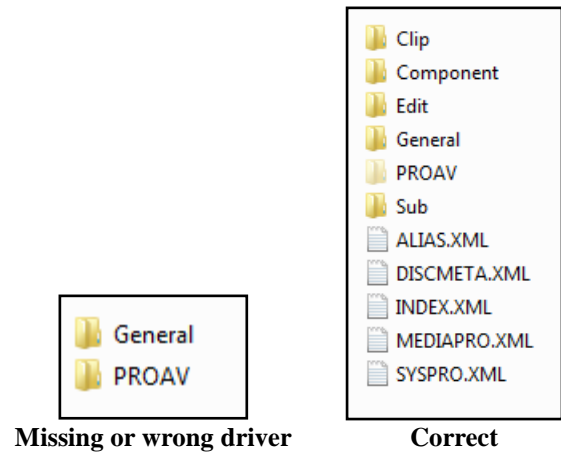
2. **SxS**: The most common error is to load only one of the two required drivers, or none at all. With no drivers loaded, the Windows default drivers will allow you to see the cards, but you will not be able to write to them.

3. **XDCAM BROWSER**: FILE LENGTH ERROR If you get this error when loading any clip into the player it is probably due to an invalid file path in SETTTINGS. This can only be fixed by deleting the program preferences.
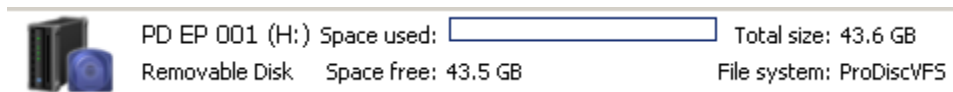
   XDCAM Browser
   Error occurred.
   Reason: The file (folder) path is invalid or too long.
   OK

1: U2: Do you have NO or a BAD DRIVER?

U2: In MY COMPUTER, open up the ProDisc. If you see PROAV and GENERAL folders only, the *XDCAM DRIVE UTILITY* software (which contains the driver) is not installed or the wrong version.

Missing or wrong driver	**Correct**

If a driver is installed, My Computer will report the disc as using the ProDiscVFS file system, as shown below. If the file system is not ProDiscVFS there is a driver issue.

What version driver do I have?

To see what version of the U2 driver (Sony Drive Utility) you have loaded on your computer, go to `CONTROL PANEL > PROGRAMS AND FEATURES` and look for this entry:
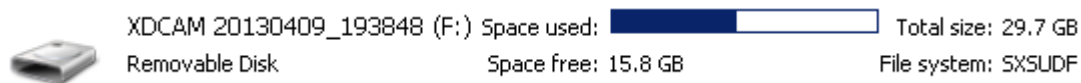
2:   SxS: Do you have NO or a BAD DRIVER?

An SxS card will appear with *no* drivers are installed. There are default Windows drivers for generic cards. All may appear fine until you attempt any write operations on the card, in which case write errors will prevent you from saving your changes to the card.
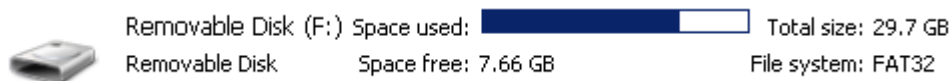
There are several ways to see if you have SxS drivers installed.

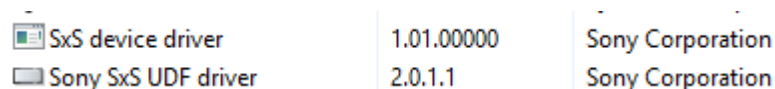In MY COMPTER, look at the reported File system for the SxS card.

For XDCAM it should be SXSUDF, as shown below. This will confirm the UDF drivers are installed.
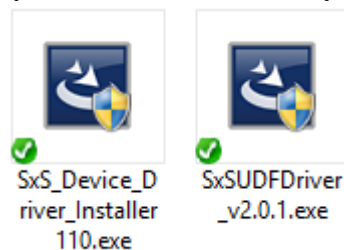
XDCAM 20130409_193848 (F:) Space used: Total size: 29.7 GB
Removable Disk   Space free: 15.8 GB   File system: SXSUDF

For XDCAM-EX, it should be FAT 32. This does not guarantee the Sony drivers are installed.

Removable Disk (F:) Space used: Total size: 29.7 GB
Removable Disk   Space free: 7.66 GB   File system: FAT32

To be sure your SxS Drivers are installed, and to check their versions, look in your `CONTROL PANEL > PROGRAMS AND FEATURES`. You should see two drivers for the SxS cards:

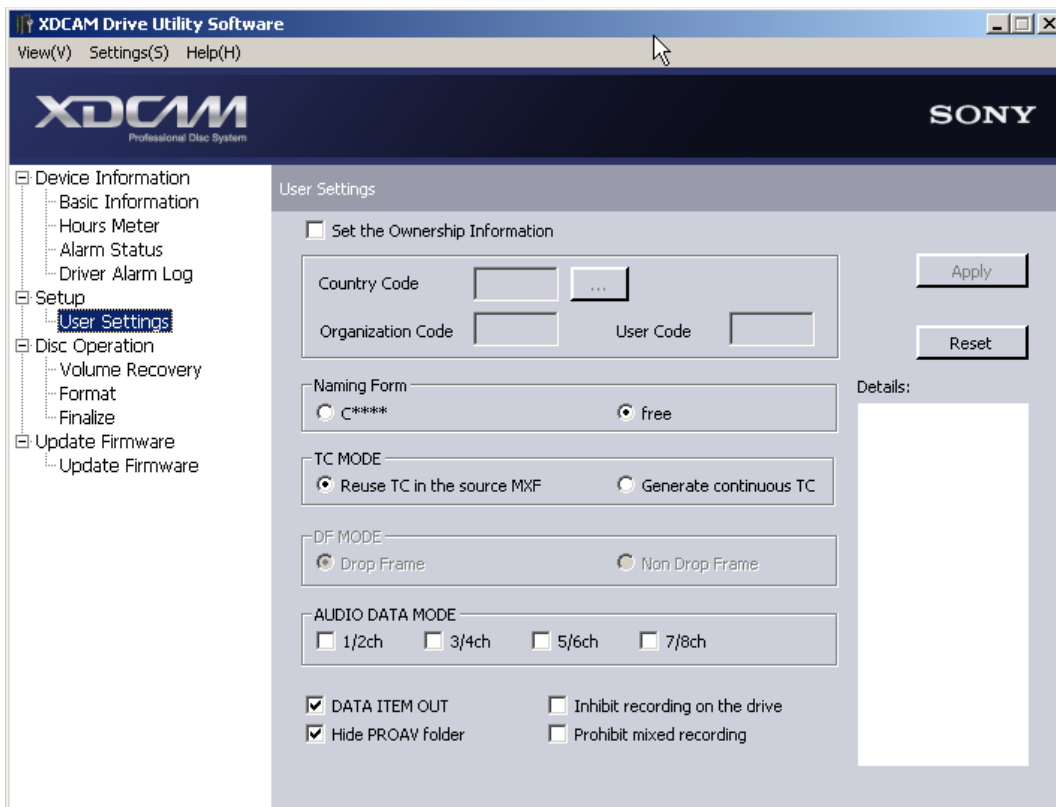|		
SxS device driver	1.01.00000	Sony Corporation
Sony SxS UDF driver	2.0.1.1	Sony Corporation

A common problem is having only *one* Sony driver installed. The SxS cards require an SxS Driver and a Sony UDF SxS Driver. These come together in the Sony download, but sometimes the second (UDF Driver) does not get installed. You need to do two installs, running each of these .exe files you download from Sony:

SxS_Device_Driver_Installer_110.exe   SxSUDFDriver_v2.0.1.exe

Drive Utility Settings

There are no knobs, buttons or switches on the U2, but there are settings. These are made using the DRIVE UTILITY, and are a common source of issues. When working with the settings, remember these important facts:

- The settings are stored on the computer, not the drive. When you move a drive between computers you must check these settings

- The settings only 'stick' if you make the changes as an administrator. As a regular user, you can change the radio buttons, but when you close the application the changes are simply discarded.

- When some settings are wrong, no errors will appear. A 'bad' setting, like `INHIBIT RECORDING` to `ON`, will still allow you to *choose* to write to the disc, it just *won't do it*.
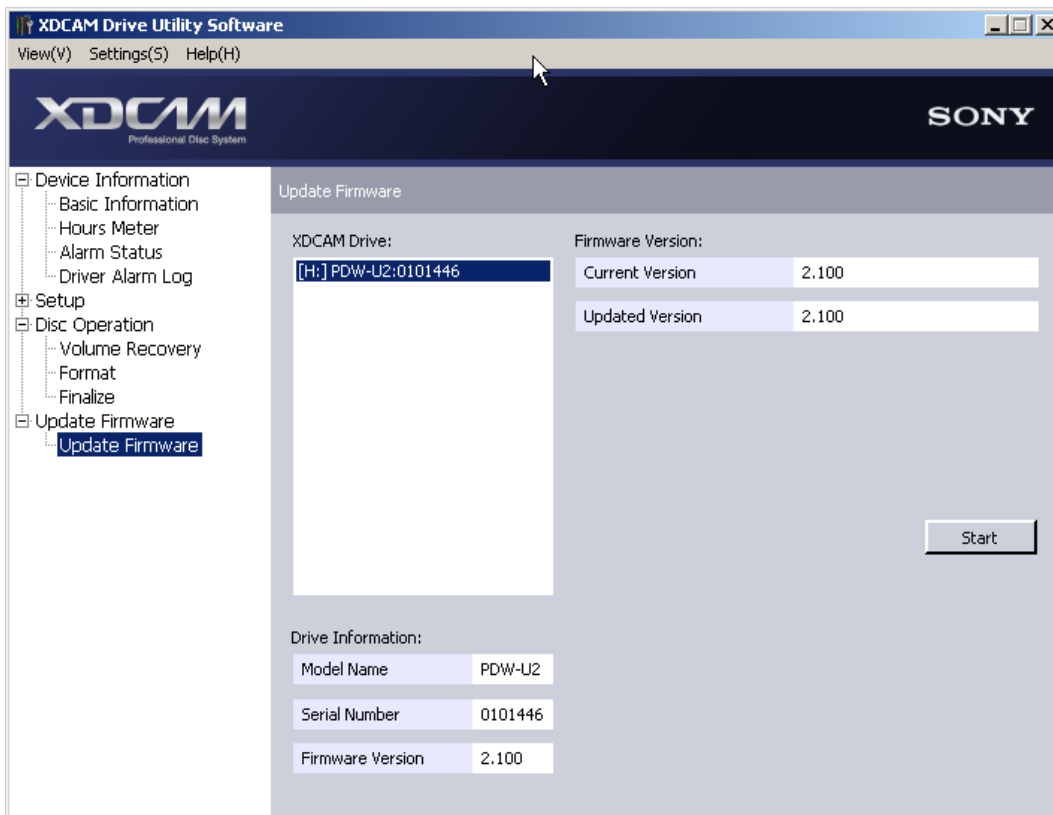

Feel free to read about all the settings in the documentation. For our normal use at the CBC, the "`Inhibit Recording on the drive`" and "`Prohibit Mixed Recording`" are usually *not* selected. These are the settings which can leave the disc refusing to record.

Firmware Version

Finally, the U2 has circuitry inside which runs its own computer program – the Firmware. This Firmware sometimes needs to be changed. This is done with the Drive Utility software, as seen below.
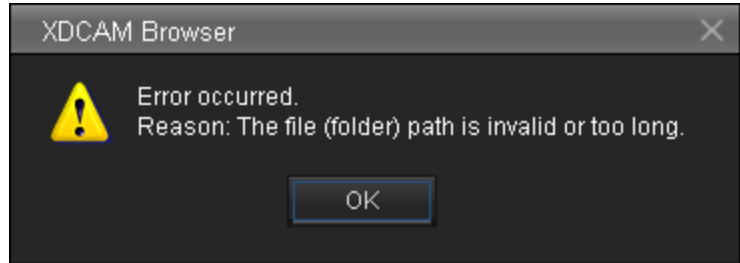
The utility will show you the currently loaded version in the U2, and the version that came with the Drive Utility. The FIRMWARE of the U2 should normally match the Drive Utility you are using. Below, we see they do – both are 2.100. If there is a mismatch, change the U2 firmware or change the Drive Utility so they match. Often, we use the Avid Release notes as a guide to the versions which we want.

3: *XDCAM BROWSER / CONTENT BROWSER:*
   File Length Error

Recently, I have seen this error a number of times on computers running Sony Browser or Content Browser. It appears every time the user tries to load a clip.

The error is caused by some file paths being set to the ADMINISTRATORS folders, but the user is not the administrator. This error can only be fixed by deleting the program preferences- the file paths cannot be changed in a dialogue.

Close the Browser software, and:

> Windows 7 / 8, delete Sony Browser preferences here:
> `C:\USERS\USERNAME\AppData\LOCAL\ Sony`
>
> Windows XP, delete Sony Browser preferences here:
> `C:\Documents and Settings\USERNAME\Local Settings\Application Data\Sony`

The settings will be recreated when you restart the program.