

## ***Firmware revision information for:***

### **AdderLink X200**

#### **1. Elements contained within an upgrade**

The AdderLink X200 system consists of various elements (listed below) that may be individually or collectively upgraded. During the upgrade process you will be given the choice of which elements you wish to upgrade. Each element has an independent version number sequence that is detailed in this document. Note that if you wish to upgrade any CAMs (Computer Access Modules), these will need to be connected to the X200 extender and powered on during the upgrade process.

- **X200 firmware** (the firmware associated with the X200 remote user station - see section 2 for firmware revision)
- **PS/2 CAM firmware** (the firmware associated with the PS/2 CAM in audio and non-audio versions - see section 3 for firmware revision)
- **USB CAM firmware** (the firmware associated with the USB CAM in audio and non-audio versions - see section 4 for firmware revision)
- **USB DA CAM firmware** (the firmware associated with the USB Dual Access CAM in audio and non-audio versions - see section 5 for firmware revision)
- **Sun (8-pin) style CAM firmware** (the firmware associated with the Sun ® CAM - see section 6 for firmware revision)

#### **2. X200 remote user station revision information**

##### **Version 1.05**

Initial release.

##### **Version 1.06**

Right mouse button no longer used for mouse switching to allow its use with Catx switches

Further fine tuning of default video brightness

### **Version 1.07**

UTP interface timing changes to improve reliability of video sync polarity information. In some cases this could cause the video to temporarily to blank.

### **Version 1.08**

More UTP interface timing changes to further improve reliability

Increased channel change time out to ensure key release codes are not missed

### **Version 1.09**

Some USB devices which are slow to start up could fail to start under certain conditions.

### **Version 1.10**

Not released internal use only

### **Version 1.11**

Added support for 12 bit mice and improved mouse speed

### **Version 1.12**

Dip switch 4 forces US country Code. Placing dip switch 4 ON means that when the keyboard is reconnected or the user station power cycled a US country code is sent to the CAM module.

### **Version 1.13**

Resolved a very occasional video blanking problem with the AVX4000 switch.

### **Version 1.14**

Not released internal use only

### **Version 1.15      October 2011**

Added support for two page EDID (currently supported on USB DA CAM only).

Added support for Absolute mouse mode. This mode can be used with the USB CAM version 2.00 or higher and with the USB DA CAM version 1.00 or higher. USB CAMs with older versions of firmware can be upgraded via the X200. See section 1 of these notes and the X200 manual (available on [www.adder.com](http://www.adder.com)) for details.

## **Version 1.16**

Not released internal use only.

## **Version 1.17 March 2013**

Added support for multiple keyboards and mice. It is now possible to support a maximum of three keyboards and three mice, making a total of six devices. This allows for support of keyboards with other devices off a USB hub.

Card readers are not supported.

Added support for full speed mice.

Added support for the Logitech unifying receiver.

Fixed an issue with the memory not being initialized correctly at power on. This meant that occasionally at power on the X200 could get into a state where the keyboard or mouse failed to initialize or entered configuration mode, and required power cycling.

## **Version 1.18 November 2014**

Improved the USB processing stack in order to make it much more robust and recover from potential EMC induced lockups.

## **3. PS/2 CAM firmware revision**

### **Version 2.02**

*(July 2006)*

Initial release.

## **Version 2.03**

*(October 2006)*

DDC transfer improved. DDC is now updated when the CAM is switched on (if the CATx switch has been configured to update DDC).

## **Version 2.04**

*(November 2006)*

This version enables the cascade switching commands to flow through the CAM. This means that a CATX switch can be cascaded to other PS/2 style switches from Adder such as the SmartView XPro and the AdderView Matrix.

## **Version 2.05**

*(December 2006)*

This version overcomes a DDC clash problem that can be seen on HP DL 360, 380 and 580 running Windows 2003 Server. The DDC clash caused the CAM to get into a continuous loop trying to write the DDC and this prevented the PS/2 ports from operating or the video from being enabled. The problem can be resolved by disabling the DDC refresh using the DDC options in the OSD menu (press F1 then F1 from the main OSD screen to access). This firmware detects the clash condition and ensures orderly operation of the CAM in all conditions. Sun CAM firmware modified similarly. USB CAM operates differently and so did not exhibit the issue.

## **Version 2.06**

Never officially released.

## **Version 2.07**

*(January 2007)*

The size of an internal buffer holding keyboard and mouse status information has been increased. Theoretically, this buffer could overflow, losing status information, so it has been increased as a precaution.

## **Version 2.08**

*(April 2007)*

Recognises the utp cascade command (C5h) which fixes a fault when cascaded between an XPro and a CATx switch.

## **Version 2.09**

*(December 2007)*

1. Unit resends keyboard mode when utp link is re-established to fix problems with repowering the CATx switch.
2. A problem with using a mouse with some Linux systems has been resolved.

## **Version 2.10**

*(February 2008)*

Fixed fault in previous version which could mean keyboard LED state not sent correctly.

# **4. USB CAM firmware revision**

## **Version 1.02**

*(July 2006)*

Initial release.

## **Version 1.03**

*(October 2006)*

1. DDC transfer improved. DDC is now updated when the CAM is switched on (if the CATx switch has been configured to update DDC).
2. Country Code feature added to ensure compatibility with Sun computers when used with keyboards that have for different language layouts. This feature in the CAM is associated with the Country Code feature supported on version 2.06 of the KVM switch engine. Note that the user has the option to read the country code from the keyboard (Sun keyboards) or select a country code manually where the keyboard does not report a country code. These options are accessible on the CATx switch's OSD menu.

## **Version 1.04**

*(November 2006)*

Resets the default keyboard and mouse settings (associated with the CATx port that the CAM is connected to) when the CAM is powered on. This ensures that the correct mouse resolution and keyboard set are used even if another style of CAM were previously connected to the same CATx port.

## **Version 1.05**

*(January 2007)*

Non audio versions spent too long trying to communicate with hardware only present on audio versions. This time has been reduced.

## **Version 1.06**

*(January 2007)*

Occasionally DDC data or keyboard settings were being lost at power up. This could cause rare video or keyboard problems. This fault has been corrected.

## **Version 1.07**

*(February 2008)*

Code added to allow a PS2 keyboard to generate key presses only available on a Sun keyboard. Once turned on, the translation can generate the codes shown below.

<i><b>PS/2 keyboard</b></i>	<i><b>Sun keyboard</b></i>
Right-[Ctrl] [F1]	Stop
Right-[Ctrl] [F2]	Again
Right-[Ctrl] [F3]	Props
Right-[Ctrl] [F4]	Undo
Right-[Ctrl] [F5]	Front
Right-[Ctrl] [F6]	Copy
Right-[Ctrl] [F7]	Open
Right-[Ctrl] [F8]	Paste
Right-[Ctrl] [F9]	Find
Right-[Ctrl] [F10]	Cut
Right-[Ctrl] [1]	Mute

Right-[Ctrl] [2]	Volume -
Right-[Ctrl] [3]	Volume +
Right-[Ctrl] [4]	Power*
Right-[Ctrl] [H]	Help

**Version 2.00.**  
*(October 2011)*

Added support for absolute mouse mode

## **5. USB DA CAM firmware revision**

**Version 1.00**  
*(April 2011)*

Initial release.

**Version 1.01**  
*(July 2014)*

1. Improved EDID support for Catx switches.
2. Caps lock and Scroll lock leds could get out of synch.

## **6. Sun (8-pin) style CAM firmware revision**

### **Version 2.02**

*(July 2006)*

Initial release.

### **Version 2.03**

*(October 2006)*

1. DDC transfer improved. DDC is now updated when the CAM is switched on (if the CATx switch has been configured to update DDC).
2. Country Code feature added to ensure compatibility with Sun computers when used with keyboards that have for different language layouts. This feature in the CAM is associated with the Country Code feature supported on version 2.06 of the KVM switch engine. Note that the user has the option to read the country code from the keyboard (Sun keyboards) or select a country code manually where the keyboard does not report a country code. These options are accessible on the CATx switch's OSD menu.

### **Version 2.04**

*(December 2006)*

This version overcomes a potential DDC clash problem that has been observed on the PS/2 CAM when connected to HP DL 360, 380 and 580 computers running Windows 2003 Server. The DDC clash caused the PS/2 CAM to get into a continuous loop trying to write the DDC and this prevented the PS/2 ports from operating or the video from being enabled. The problem can be resolved by disabling the DDC refresh using the DDC options in the OSD menu (press F1 then F1 from the main OSD screen to access). This firmware detects the clash condition and ensures orderly operation of the CAM in all conditions.

Although there is no evidence that this problem could be encountered on Sun systems, the modification has been added anyway.