# ConfigXT v1.1 User Guide February 2006

# ConfigXt: KVM Extender Firmware Upgrade & Configuration Utility

## Introduction

ConfigXt is a Windows utility that enables compatible KVM Extender Local or Remote Units to have their firmware upgraded and video configuration adjusted via a simple serial connection.

- Reports current firmware version
- Upgrade firmware

For Remote units with Skew compensation:

- Reports current video configuration
- Save and restore video configuration settings to/from a file (use for large installations)
- Reports current video configuration settings and allows adjustments to be made and saved to EEPROM

**Note:** ConfigXt is intended for use on a PC/Notebook for configuration/upgrade purposes and not on the main machine you are using the KVM extender to operate.

## Installation

- 1. Unzip ConfigXT into a folder on your desktop.
- Run Setup to install the ConfigXt utility which is compatible with all versions of Microsoft Windows.
- 3. In order to use ConfigXt the Microsoft .NET runtime framework needs to be installed. If this is not already installed on your system the setup utility will quit.

If you are installing ConfigXT from a CD the .NET environment may also be installed directly from the CD: Otherwise, you will need to download it.

In order to obtain the .NET framework, please use the following hyperlink:

#### Download Microsoft .NET Framework

**Note:** This a fairly large download and you may need to consider installing an additional language pack for non-english speaking locales. The .NET environment should be included in recent Windows Service Packs.

Install the .NET framework and then run ConfigXt Setup again.

### Connection

In order to use ConfigXt, a flash upgrade cable is required to link the extender Local or Remote Units to the configuration computer's serial port.

#### This cable (SDBX/UC1) is available through your dealer.

If you would like to construct your own cable, a simplified pin-out is detailed at the end of this document.

The Local or Remote Units are upgraded/configured separately and do not have to be connected to upgrade firmware.

#### Local Units

In order to upgrade the Local Unit it is necessary to connect a power supply to the Local Unit.

If your extender was provided with a 5V PSU for the Remote Unit connect this to the 5V PSU connector on the Local Unit and check that the green LED's on the front of the unit are lit

If your extender was provided with a 9V PSU for the Remote Unit, you need to do the following:

- 1. Open up the Local Unit
- 2. Locate the jumper behind the power supply connector and install it across the terminals (this enables a regulator to allow the 9V remote PSU to be connected to the Local Unit).
- 3. Connect the 9V PSU to the Local Unit and check that the green LED's on the front of the unit are lit.

Note: Remove the jumper when you have finished the upgrade!

- Connect the 9-way D connector on the flash upgrade cable to the serial port on the configuration PC.
- Connect the 25-way D connector on the flash upgrade cable to the CPU connector on the Local Unit.

#### **Remote Units**

- Power the Remote unit
- Connect the 9-way D connector on the flash upgrade cable to the serial port on the configuration PC.
- Connect the MiniDIN connector on the flash upgrade cable to the *mouse* connector on the Remote Unit.

**Note:** The Remote Unit does not have to be connected to the Local Unit in order to upgrade the firmware or save/restore a video configuration. If however, you want to experiment with adjusting the video settings using ConfigXT, then you should obviously connect the Remote Unit to the Local Unit and display some kind of test screen.

### Operation

1. To run ConfigXt, click on the icon placed on your desktop. The following screen should be displayed:

Connection Downloa	d Firmware   Configur	e	
Connect	Exit		
	and a second second		

2. Select the COM Port you want to use by 'right-clicking' on the appropriate section of the status bar. The selected COM Port will be remembered by ConfigXt.

Connect Download Firmware Configure	
Connect Exit Remote Unit Disconnected CDM1 Closed	
Disconnected C <sup>m.</sup>	COM 1 (Default)
	COM 2
	COM 4
and the second	COM 5

3. Ensure the extender unit is connected to the selected COM Port and powered. Now click on **Connect** to open a session.

Disconnect Downloa	ad Firmware )	Configure ]	
Disconnect	Елі		
COM1 Open Remote in Configurat	ion Mode	_	
fromoto in coninguiat			

Once connected, the status bar will report the connection status, unit type and current firmware version. Any problems in connecting will be reported and you should check cabling, extender power and COM Port selection.

**Important Note:** Once connected the extender Unit will enter **Configuration Mode** and the yellow LED on the primary interconnect will be lit. When in Configuration Mode the extender keyboard and mouse ports are not operational.

The only way to exit Configuration Mode is by clicking on the Disconnect button. If the extender unit is re-powered prior to disconnection it will power back up in Configuration Mode with video disabled. This is to ensure integrity in case of an aborted firmware download.

4. Once connected, ConfigXt may be used to download new firmware or adjust video configuration settings by clicking on the appropriate tab.

#### **Downloading Firmware**

1. Click on the Download Firmware tab and then click on Select File.





2. You should now navigate to location where you previously stored the firmware upgrade file (after downloading). The firmware upgrade file names always end in the extension **.sdf**. The directory and file name will be remembered by ConfigXt.

Note: You should obtain the required upgrade firmware through your dealer.

ConfigXT will only allow you to select firmware appropriate for your extender model.

- 3. Now click on the **Download Firmware Button** to start upgrade the extender's firmware. A progress indicator will be shown on the status bar.
- 4. Once complete, ConfigXt will automatically close the session. Click on **Connect** again and check the status bar to ensure the firmware has upgraded correctly. Note that installing new firmware does not affect the current video configuration.
- 5. If you now wish to exit ConfigXt, click on the **Disconnect** tab to return to the Disconnect screen where you can quit configuration mode and then close ConfigXt.
- 6. Alternatively, you may select the **Configure** tab to save, restore or adjust the video configuration (feature only available with certain Remote units).

#### **Video Configuration**

**Note:** This tab is only available when connected to extender Remote Units featuring Skew Compensation. Compatible Remote Units must have firmware version 6.1 or higher installed.

The primary purpose of this function is to enable video configuration settings (for all monitors) to be saved to (and restored from) a configuration file. One typical application for this is where a large number of Remote Units are going to used with similar length cables. The first extender should be set up using the method outlined in the User Guide. ConfigXt may then be used to save these settings and then load them into the remaining Remote Units prior to installation. These Remote Units will then require only minor adjustments, saving valuable time.

ConfigXt also offers an advanced configuration mode that allows direct adjustment of video equalisation and delay. Adjustment of these settings is described in detail in the CATx User Guide. This advanced mode will only be of interest to more technically advanced users who wish to experiment.

Load Video D	onfiguration from fi		
Output Video	Configuration to file		

1. Click on the **Configure Tab** to enter configuration mode.

- 2. To save the current video configuration click on Output Video Configuration to file.
- 3. To load a previously saved video configuration click on Load Video Configuration from file.

	Select C	onfigura	tion File							<u>?×</u>
		Look in:	Convideo Se	tting Data I	Files	•	+ (	D 👉 (	•	
	My R Docu Des My Doc	ecent ments ktop uments mputer	國 ExtConfig( 國 ExtConfig.	(Output).c:	x.					
ConfigXt v1.0	My Ne Pla	atwork ces	File name:	Ext	ionfig			•		Open
biodumoet r			Files of type:	Con	figuration Files (*.cxt)			•	_	Cancel
Load Video ( Output Video	Configuratio	n from file tion to file			Advanced					
Connect	ed	v6.1	Remote	COM 2	Dual Video					

4. Navigate to the location where you wish to save or restore the file. *Video* configuration files names always end in the extension **.cxt**. The directory and file name will be remembered by ConfigXt.

- 5. After selecting the appropriate file the settings will be loaded into the extender (but not saved into EEPROM).
- 6. At this point you may quit ConfigXt by selecting the Disconnect Tab

ConfigXt v1.0				
Disconnect Download	Firmware	Configure		
Disc Video Sel	tings			×
COM2 Ope Remote in	Do you w	ant to save Vic	leo Settings to	EEprom?
		<u>s</u>	No	
Connected	v6.1	Remote	COM 2	Dual Video

Normally you would want to permanently save the video settings by clicking **Yes** to store them in the extenders EEPROM.

You may then quit Configuration Mode and exit ConfigXt from the Disconnect screen.

7. Should you need to restore all video settings back to default (zero) a video configuration file called 'Extender\_Defaults.cxt' is included with this release.

#### Advanced Video Configuration

#### This mode is intended for advanced users only.

1. To examine the current video settings and manually adjust them from within ConfigXt click on the **Advanced** button in the configuration screen.

isconnect   Do	wnload Firmware	Configu	ire		
Monitor 1	LFEQ	1	+		Monitor 1
Monitor 2	HFEQ	1	<u>+</u>		Save Settings
Monitor 2	Red Delay	15	-	42nS	
Monitor 3	Green Delay	15	*	42nS	
Monitor 4	Blue Delay	15	*	42nS	Back

- 2. The number of monitors supported by the Remote Unit will be shown in the status bar and you can select which the monitor for which you wish to view or edit the settings.
- 3. The settings for the selected monitor will be shown (grayed out).
- 4. To adjust the settings for the current monitor click on Adjust Settings.
- 5. You may now adjust the equalisation (0 255) or delay (0 15) settings. If you have a Local unit connected you can immediately see the effect of changing these settings on the monitors connected to the Remote Unit.
- 6. After making all adjustments click on **Save Settings** to store them in the extender's EEPROM.

7. You can now click **Back** to save these settings to a file, or click on the **Disconnect Tab** to quit Configuration Mode and exit ConfigXt.

9-way D Female (PC Serial Port)	Core	6-pin MiniDIN Male (Remote)	25-way D Male (Local)
2	Core 1	2	25
3	Core 2	6	20
5	Core 3	3	22
7+8	Joined in J1		
1+4+6	Joined in J1		
Shell	Drain	Shell	Shell

# Flash Upgrade Cable Pin-Out

# Current Extender Products Compatible with ConfigXT

SDBX/S1 SDBX/SA1 SDBX/D1 SDBX/DA1	(Remote Unit Only) (Remote Unit Only) (Remote Unit Only) (Remote Unit Only)
SDBX/S2 SDBX/SA2	(Remote Unit Only) (Remote Unit Only)
SDBX/R1 SDBX/RA1 SDBX/R2 SDBX/RA2 SDBX/R4 SDBX/RA4	
SDBX/S2-1 SDBX/SA2-1 SDBX/D2 SDBX/DA2	
SDMX/S2 SDMX/SA2 SDMX/D2 SDMX/DA2 SDBX/R2 SDBX/RA2	