USER MANUAL

Version 1.03 - September 2013



XFly.Streamer



Copyright

EVS Broadcast Equipment S.A. – Copyright © 2005-2013. All rights reserved.

Disclaimer

The information in this manual is furnished for informational use only and subject to change without notice. While every effort has been made to ensure that the information contained in this user manual is accurate, up-to-date and reliable, EVS Broadcast Equipment cannot be held responsible for inaccuracies or errors that may appear in this publication.

Improvement Requests

Your comments will help us improve the quality of the user documentation. Do not hesitate to send improvement requests, or report any error or inaccuracy on this user manual by e-mail to <u>doc@evs.com</u>

Regional Contacts

The address and phone number of the EVS headquarters are usually mentioned in the Help > About menu in the user interface.

You will find the full list of addresses and phone numbers of local offices either at the end of this user manual (for manuals on hardware products) or at the following page on the EVS website: <u>http://www.evs.com/contacts</u>

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage:

http://www.evs.com/downloadconter

Table of Contents

TABL	E OF CONTENTS	IV
1.	PRODUCT OVERVIEW	5
1.1 1.2 1.3 1.3	Introduction Network Architecture Description Hardware and Software Requirements 3.1 Minimal Requirements	5 6
2.	PROCEDURE	7
3.	CONFIGURATION	9
3.1 3.2	Configuration of Local XSquare/XTAccess Configuration of Remote XSquare/XTAccess	
4.		11
4.1	XSecure Manager	11
5.	USER INTERFACE	12
5.1 5.2 5.3 5.4 5.2 5.2 5.2 5.2 5.2 5.5 5.5 5.5	 4.2 Timecode Edition Rules	14 15 15 16 17 17 18 19 20
6.	OPERATIONS	21
6.1 6.2 6.3 7.	How to Record Streams How to Retry Streaming Jobs One by One How to Preview Files?	23 23

1. Product Overview

XFly Streamer is a software dedicated to the backup of streams from one or several EVS video servers (XT2, XT2+, XT3, XS, XTnano). XFly Streamer manages the backup and transfer of all streams selected by the operator.

This manual describes the configuration interface, which is easy to use and straightforward.

XFly Streamer acts as a user interface for the XSquare/XTAccess file transfer application running in the background. XFly Streamer sends its commands to XSquare using the SOAP jobs files.

Please refer to the XSquare Suite documentation for detailed instructions about this application.

1.1 Introduction

We recommend to install the XFly Streamer user interface on the same computer as the XSquare/XTAccess file transfer application, so that XSQ Suite is dedicated to XFly Streamer and is not used by any other application.



Important

XSquare/XTAccess is restricted to file transfer with wrapping when required, but cannot perform any format transcoding.

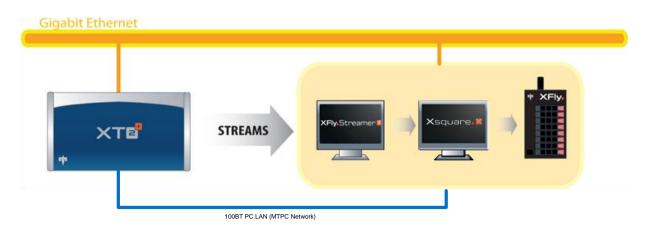
XFly Streamer is able to communicate only with one single XSquare application at a time, but it manages the backup of streams from multiple EVS servers.

XFly Streamer creates SOAP files corresponding to the backup of streams, grabs jobs requested by the operator, and sends these files to the local XSquare application.

1.2 Network Architecture Description

XFly Streamer must be installed on the same computer as the XSquare/XTAccess applications. The streams to be archived are located on one or several servers and storage units connected to the same network. Two networks are used for the various communications and the transfer of files, as illustrated below. Physically, these networks can be one and the same, or separate for the sake of performance:

- The **MTPC network** is used to detect EVS servers, to identify them, and to transfer the list of REC channels to be backed up.
- The **HCTX network** is used to transfer the streams data between the XFly Streamer and XTAccess computer, the EVS servers and the storage unit.



1.3 Hardware and Software Requirements

1.3.1 Minimal Requirements

The guidelines for the minimum software and hardware requirements are:

- OS: Windows 7 Pro
- Software: Framework .NET 4.0
- Motherboard: I5 660 3.3 GHz dual core
- DRAM: 4 GB (1 GB shared with graphic card)
- Graphic: Chipset Intel G965 Express or equivalent dedicated graphic card (Nvidia/AMD)

2. Procedure

To install XFly Streamer, proceed as follows:

- 1. Double-click the XFIy Streamer installer, and follow the steps of the setup wizard.
- 2. Click Next to continue.
- 3. Select I accept the agreement and click Next.
- 4. Browse to an installation folder destination and click Next.
- 5. Browse to a folder where to save the AV files and data (for instance, drive S: for XFLY device), and click Next.
- 6. Select the components to install, and click Next:
- XFLYRegister: detection of XFly box via Bonjour protocol
- XSquare suite (Recommended)
- XViewer application for A/V preview
- (DB maintenance script)

🗐 Setup - XFly Streamer	- • •
Select Components Which components should be installed?	
Select the components you want to install; dear the components you install. Click Next when you are ready to continue.	do not want to
Full installation	•
V XSquare VXIEWER VXFLYRegister XFlyStreamer	7.2 MB 6.5 MB
Current selection requires at least 14.8 MB of disk space.	
< Back Next	> Cancel

- 7. Select the Start Menu folder in which the application shortcuts will be saved, and click Next.
- 8. Check or not the desktop icon creation, and click Next.
- 9. All components and related tasks/options are ready to be installed. Click **Install** to start the installation.
- 10. All files are installed in **silent mode**.

The installation process continues with the BONJOUR services installation, with the .NET Framework 4, the XFLY registration to Bonjour protocol, and then with XSquare suite installation.

Refer to XSquare suite documentation for detailed information of all its components.

11. To complete the XFly Streamer installation, the computer needs to be rebooted. Click **Finish**.



After the installation, the following shortcuts are added to your desktop:

1		\Rightarrow	\mathbf{O}
XSecure		XFly Streamer	XViewer
Manager	Jobs Cleanup		

XSquare and XTAccess are automatically associated and XTAccess is automatically launched at start-up and minimized in the task bar.



Important

When you first start XTAccess, the application modifies or adds the TcpAckFrequency key in the Windows registry. This key allows better backup performances. XTAccess needs then to be re-started.

XTAcce	ess 🛛 🕅
?	XTAccess created 2 new key(s) in Windows Registry.
T	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{interface id}\TcpAckFrequency]
	You must restart your computer for the changes to take effect. Do you want to reboot now ?
	Qui <u>N</u> on

3. Configuration

3.1 Configuration of Local XSquare/XTAccess

The installer sets up automatically all software and components, therefore **no additional setting is required** prior to operate XFly Streamer.

The following parameters of the local XSquare have been modified during the installation process:

	Online ?	Disabled	XTA Nickname	Total Max. Dest.	Total Max. Trans.
ۥ	►		XFlyA188260	15 🗘	4

Total Max. Destinations is set to 15 in order to operate both Nano.Air and XFly.Streamer applications.

Total Max. Transcodings is set to 4 in order to allow Import facilities with Nano.Air application.

The following folders are automatically created and shared with full permissions:

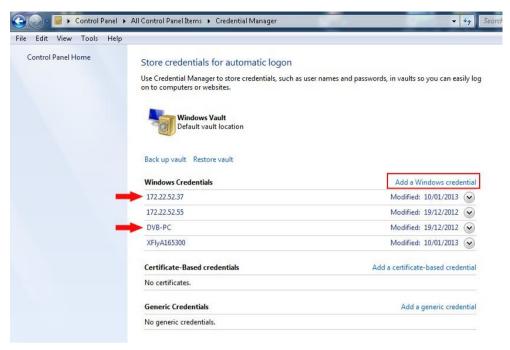
- \\grab and \ima folders to collect the images needed to display the thumbnails. These folders are in hidden mode.
- \\xfly_streamer\AV_files folder to collect the audio/video files.

The local XTAccess software and its XFLY_Streamer_XML unit are automatically launched at start-up. Therefore, XFly Streamer is ready to operate.

3.2 Configuration of Remote XSquare/XTAccess

In order to work properly with an XTAccess installed on a remote system, you have first to set the XSQ parameters and to create the shared folders as described in section "Configuration of Local XSquare/XTAccess" on page 9.Then, you have to define Windows credentials, to log on automatically to the remote computer.

Select Control Panel > User Accounts and Family Safety > User Accounts > Manage your credentials.



Click "Add a Windows credential", and fill the remote computer address, user name and password fields. For each remote system, two credentials must be added: one with the IP address, the other with the machine name.

4. Licensing

4.1 XSecure Manager

When you need to install a new license code, or extend the validity of a temporary license code, you must use the XSecure Manager application.Start the XSecure Manager application by double-clicking the XSecure Manager shortcut on your desktop.How to Get a License Key FileIn the XSecure Manager application, fill in the Customer Information area.

Click the **Request** button from the Operations area below. This will generate an XML file. Select the location where you want to save that file, and click **Save**.

XSecure Manager	version 1.01.05				×
Identification					
	System ID BWG7-145-	IRM-HP8	Serial Number	r 25570	
				-	
Customer Inform	nation				Warning
Company					Note : this form must be filled in on the computer where the EVS
First Name		Last Name			application will be used
Email Address					
Phone Number					
Computer Descript	ion XSQUARE-PC				
		_	_		
License List					
		_		_	
Application 60 - XTAccess	Module 10 - Base Package	Type TEMP GLOBAL	From	To see global	Code y5mHj-YhAGP-82fPG-ZL@6M-P0u11
60 - XTAccess	20 - Transcoding	TEMP GLOBAL		see global	cInHj-q5JGP-725MG-ZLi6M-08y11
120 - XFly Streamer		TEMP GLOBAL		see global	c5ms#-gYASP-82585-PL0KM-08u11
130 - Xsquare	10 - Base Package	TEMP GLOBAL		see global	SIms0-gg@Vw-0cGzG-VL0IQ-O7uI1
100 Naquore	To - base r devage	TENIP GEODAL		see global	Shibo gqorri ocaza reale oran
•					F
		Global	Expiration Date	17 JUN 2013	
Operations					
Request	Select this option to ge Then you will receive a				-mail to your EVS support representative.
	Select this option to im	ort the License Key	File sent by EVS	and activate the	e corresponding licenses.
Import Key File	2				
			y type the license esponding license		click on "Load" to activate Quit

Send this XML file to your EVS support contact, specifying which new license codes or license code extensions you need. In return, you will receive another XML file containing the license codes or code extensions that you have requested.

Copy that XML file in a directory visible by the XSecure Manager setup (using a USB key for instance, or your LAN network).

In the XSecure Manager application, click the Import Key File button from the Operations area. The license codes will be automatically imported, and a dialog box will confirm how many license codes have been successfully imported.

Note

Modifying NIC configuration (for example, Port teaming) will invalidate your software license. Please contact EVS support to generate a new key according to your new configuration.

5. User Interface

The XFly Streamer window contains the areas highlighted on the screenshot, and described in the table below:

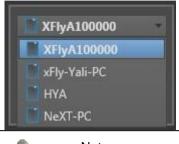
XFly Streamer			×
XSquare-PC 6344G/64988	Wrapper Destir		ly.Streamer≣ਾ
ZSquare-PC_1.1.3			%CAMLBL %CAM %E Edit 300 Min.
V XT Series 2 X5 22 X7 nano X5 nano X5 nano X5 nano X6 nano	Beijing 115060 A-REC1 REC Dur. 000005 Remain: 0459:55 0.0% FileNameEVS-REC1 A 23-01-2013 13h37m14:15 Hong Kong 24960 A-REC1 REC Dur. 0000003	Beijing 116060 B-REC 2 REC Dur. 000001 Remain: 0459:59 FileNameEVS-REC2 B 23-01-2013 13h37m14s15	Beijing 116060 4 C-REC3 0.0% REC Dur. 00.09.05 0.0% FileName£VS-REC3 C 23-01-2013 13h37m14s15 Hong Kong 24960 C-REC3 REC Dur. 00:00:03
B-REC2	Remain: 0459:57 0.0% FileNameEVS-RECI A 23-01-2013 22h17m56s24 Server TC 13:37:51:22 TC IN 13:37:14:15 TC OUT	Data from Server	Remain: 04:59:57 0.0% FileNameEVS-REC3 C 23-01-2013 22h17m56s24 PC_1.1.30.0 is selected 5 116090 is received . IP :192.168.173.205 12245678 22960 is received . IP :192.168.173.201

Area		Description
1.	Storage and Processing Devices Selection	From this area, the operator can select the device to store the AV files, and the device (i.e. the XSQ/XTA) to process the different tasks for grabbing thumbnails and for recording streams.
2.	Servers List	This area displays the list of all servers detected on the network.
3.	Settings	This area allows to set the AV files format, destination folder, auto naming pattern, and the maximum duration for recording.
4.	Channels Area	This area shows the server recorder channels which are selected in the servers' list.
5.	Commands and Status	This area displays the Timecode reference and duration, the status and the 2 main commands to start and stop the recordings.
^	Note:	
		window, the caption bar mentions the Application name per. There is no menu bar.

5.1 Storage and Processing Device Selection

Thanks to BONJOUR protocol, at start-up, XFLY systems are detected and listed in a drop-down list.

Clicking on the arrow on the right will display all systems detected. In the dropdown list, XFly is identified as Machine_Name + EVS_SN.



Note

The local device is displayed on the top of the list with bold letters.

Once a system is selected its capacity information and a related diagram are updated:



The second drop-down list lists all XTAccess detected on the local network via BONJOUR protocol.

Clicking on the arrow on the right will display all processing devices detected. In the dropdown list, XTAccess is identified as Machine_Name+EVS_SN+version number.



Note

The local XSquare is always displayed on the top of the list with bold letters.

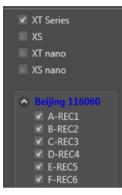
5.2 Server List

Filters

V	XT Series
V	XS
	XT nano
	XS nano

This pane displays the four families of EVS video servers which can be seen by Xfly Streamer: XT series, XS, XTnano and XSnano. Select one or several server types you want to display in the servers' list.

Select servers and then channels



This pane displays a list of all available servers found on the network after a discovery process. This list is based on the selection made in the Filters pane.

This list is updated regularly and automatically by new discovery processes.

Once the list is displayed, select all servers by clicking on the left arrow, then check the boxes of the channel on which you want to perform a backup.

CAM Label information, if defined, will be refreshed every two minutes to get the latest information from the server.



The server list displays only the servers configured with record channels, and will only display the record channels.

5.3 Channels Area

The channels area is filled with all selected channels (Max 6 channels) into the server list.

Each channels' field displays the same information:

The Channels area is divided into 6 panels. Each panel is dedicated to one channel. The screenshot below features a single panel, as all fields have the same meaning in all panels.



5.4 Commands and Status

5.4.1 Area Description

This area contains the following buttons and fields:

Button/Field	Description
Server TC	This field displays the timecode reference of the first server selected in the servers list. This field is not editable.
TC IN	The TC IN field is editable. Click into the TC IN field and enter a value. Press ENTER to validate.
	The TC IN value must exist in the material of the selected server. This means that only TC "in the past" can be entered in the TC IN field.
TC OUT	The TC OUT field is editable. Click into the TC OUT field and enter a value. Press ENTER to validate.
	The TC OUT value must be higher than the TC IN value.
E/E	This button appears only when the TC IN field is manually edited.
E/E	It allows to clear the TC IN and TC OUT fields. It is disabled when a recording is in progress.
	See section
Duration 00:00:05:04	This field displays the duration computed from the TC IN and TC OUT values, or, if TC OUT is not defined, according to the maximum duration defined in the Settings area.
Record button	The Record button allows to start the backup of the recoding trains on all selected channels. The backup record starts instantly.
	The Record button lights red when the recording is in progress.
	See section "How to Record Streams" on page 21.

Button/Field	Description		
Stop button	The Stop button allows to stop the backup of the record trains on all selected channels. As the backup files need to close properly, it can however take some time before the job is finalized. During this time, the message "Finalizing" will be displayed in the status area.		
	The Stop button lights blue when the stop command has been enabled but the recording is still finalizing.		
	See section "How to Record Streams" on page 21.		
Status	This field displays information and error messages related to the current operations.		

5.4.2 Timecode Edition Rules



Note

XFly. Streamer checks the validity of timecode values manually entered by user. If a wrong value is entered, the TC field is cleared.

Click in the TC IN field and enter manually a TC value.

The E/E button (to return to current TC) appears

Server TC	00:01:29:21
TC IN	00:00:36:03
TC OUT	::

Clicking the Record button starts all recordings from this TC IN value.

The Duration field is updated according to the maximum duration defined in the Settings area.

Server TC	00:01:29:21	
TC IN	00:00:36:03	
TC OUT	: : 05:00:00:0	

The maximum duration is still up to 300 minutes. When entering a TC OUT value, XFly Streamer checks if the maximum duration is not reached.

At any time, the user can edit the TC OUT value. The Duration field is updated with the exact duration.

Clicking the Stop button updates the TC OUT and Duration fields accordingly:

Server TC	00:01:29:21
TC IN	00:00:36:03
TC OUT	00:01:36:03 00:01:00:00

The TC IN, TC OUT and Duration information remain on the screen until the jobs are all finalized. Then the Timecode area is cleared.

5.5 Settings

The settings defined in this area are memorized, and will be restored at next start of the application.

5.5.1 Wrapper Selection

Wrapper		
QT Mov	•	Options



Important

XTAccess is restricted to file transfer with wrapping when required, but cannot perform any format transcoding.

The available wrappers are:

- EVS MXF
- OP1a MXFXDCAM
- QuickTime Movie
- QuickTime Reference
- Avid MXF OPAtom
- DV-DIF
- OP1a MXF SMPTE
- Wave (audio only)

Clicking on the arrow on the right will display the list of available wrappers:



Click the Options button for more parameters:

OPTIONS					×
Wrapper	QT Mov				
Generate	EVS XML metadata				
	FCP XML metadata		QTLocalPath	//Volumes	
		Save	Cancel		

For generating **EVS XML metadata**, select the first option. This EVS metadata file can be generated with all wrappers.

For generating **FCP XML metadata** select the second option. This FCP metadata file can be generated only when **QT Movie** and **QT Reference** wrappers are selected and is set by default.

An additional parameter: <QTLocalPath>**\\\Volumes**</Local Path> is required to be compatible with MAC OS. This information will be embedded in the resulting XML file.

For generating **AVID AAF metadata** select the second option. This AAF metadata file can be generated only when **AVID MXF OPAtom** wrapper is selected.

An additional parameter is available to create the structure of Avid Media Files folders. Selecting this parameter will create (and share) **/Avid MediaFiles/MXF/1** folders on your local drive (drive S: for XFLY device). All new Avid MXF OPAtom files will be saved to these folders/sub-folders.

OPTIONS			×
Wrapper	Avid MXF OPAtom		
Generate	EVS XML metadata		
	FCP XML metadata		
	AVID AAF metadata	Save files to 'Avid MediaFiles folder'	
	Save	Cancel	

5.5.2 Destination Selection



The Destination field specifies the path where the AV files will be saved, for all channels.

Note The files can be saved to **shared** folders only.

5.5.3 Auto Filename Definition



The filename is user-defined and can be modified as desired.

A direct access to the **Prefix** field allows the user to set a different name to each recording, for example: Take01, Take02...

Click the **Edit** button to change the autonaming pattern:

AutoNaming			×
Prefix: EVS-			Reset
Backup Filename For	mat String %CAMLBL %CAM %BDATE %TCIN		
Available Items		•	Append
		ок	Cancel

Click the **Reset** button to restore the default filename.

Modify the Backup Filename Format String

In the Backup Filename Format String field, delete/modify the default items,

To add information, select an item from the Available Items drop-down list:

%XTIP(XT IP)
%CAM(Camera)
%CAMLBL (Camera Label)
%UMID(UmID)
%IDMAT(ID Material)
%VARID(VarID)
%TCIN(TimeCode IN)
%BDATE(Backup Date)
%BYEAR(Backup Year)
%BMONTH(Backup Month)

Click the Append button to add the selected item at the end of the field.

If necessary, modify the position of the items in the field with the cut/paste commands (CTRL + X, CTRL + V).

Finally, click **OK** to validate.

5.5.4 Maximum Duration Setting



In case a stream is a backup with endless command, the application will stop the backup when the maximum duration defined in this field has been reached.

The default value is 300 minutes and the value can be set from 1 to 300 minutes.

5.6 The About Window

Clicking on the icon opens the About window:

This window displays the following items:

- The XFly Streamer application version.
- A link to this User Manual in digital format.
- A list of EVS technical support emails and phones if you need further assistance with this product.

6. Operations

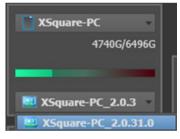
6.1 How to Record Streams

To start the recording, proceed as follows:

1. Click this shortcut to launch the XFly. Streamer software. The following screen appears:

XSquare-PC 4740G/6496G			×F	-ly. Strea	mer 🗐 🖻
					Max. Duration
XSquare-PC_2.0.3	- Options	\\XSquare-PC\xfly_streamer	Browse EVS-	%CAMLBL %CAM %BE Edit	300 Min.
Собрание РС 24310 Обрание 16 24310 Обрание 17 24310 Обрание 17 2430 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 24300 Обрание 17 243000 Обрание 17 2430000 Обрание 17 2430000 Обрание 17 243000 Обрание 17					
			Status XSquare XSqua Data from Ser Walting	re-PC_2.0.31.0 is selected er 116060 is received . 1P :192.168	1.173.205

2. Select the XFIy hardware (storing device) and the processing device (i.e. XTAccess) from the two drop-down lists in the upper left corner. The local system and software if present always appear in bold at the top of the list.



3. Then check a server family to filter the servers list:

XT Series
🕅 XS
🗹 XT nano
🗹 XS nano
CDTV-X 24740
👻 China 110990
🗙 Next 4U 29140

4. Into the server list, click the server drop-down list to display the list of available channels:

•	CD	DTV-X 24740
		A-REC1
		B-REC2
		C-REC3
		D-REC4

The selected channel is now displayed in the channel area with thumbnails generation to preview the channel:

B-REC2	-
REC Dur. 00:00:02	
Remain: 04:59:58	0.0%
FileNameEVS-REC2 B 23-01-20	013 22h17m56s24

- 5. Repeat step 4 to select all channels desired.
- 6. Check and, if necessary, modify the wrapper selected, the destination path to save the file, the format string for automatic file naming, and/or the maximum recording duration.



7. Then click the **Record** button to start the recording:



The **Record** button lights red, and a red frame is displayed around each channel. All selections and settings are disabled during the recording.



8. Click the **Stop** button to stop the recording:



Note

As the backup files need to close properly, it can however take some time before all jobs are finalized

How to Retry Streaming Jobs One by One 6.2

When a job has failed, a retry command is available in the Channel pane.

The user has the possibility to retry the job without stopping or re-starting the other jobs in progress.

XT nano 110990 B-BaiHu Retry	\oslash
REC Dur. 00:00:00 Remain: 00:05:00	Current TC
FileName:	

The **Retry** button is only available for the job(s) failed in the same channel pane. And the **Retry** command is only available for streaming jobs.

6.3 **How to Preview Files?**

While recording files, you can control the quality of the file with the XViewer application.

This application is installed with the XFLY.Streamer package.

XSNanoONE 120290 A-REC1 REC Dur. 00:00:00 Remain: 05:00:00 0%

FileNameEVS-REC1 A 09-APR-2013 18h46m49s

Right-Click in the thumbnail to open the following menu:

Preview file: selecting this item launches the XViewer app with the selected file opened in E/E mode

File Path



File Path: selecting this item opens the Windows explorer window with the selected path

7. DB Maintenance

For DB maintenance, automatic scripts have been added in order to delete numerous GRAB jobs created during XFST operations and saved to XSQ Database.

These jobs can be deleted on a regular basis without affecting the XFST operations and in order to avoid unnecessary entries in the SQL database of XSquare.

Three scripts are added to your system during the installation of XFLY.Streamer, those scripts cover the main workflows:

- 1. Grabs entries older than 24-hour are automatically deleted every day at 7 am.
- 2. Grabs entries older than 24-hour are automatically deleted at Windows startup.
- 3. Grabs entries older than 24-hour are deleted **upon user request** by clicking the icon saved to your desktop:



Corporate +32 4 361 7000

North & Latin America +1 973 575 7811

Asia & Pacific +852 2914 2501

Other regional offices www.evs.com/contact



EVS Broadcast Equipment is continuously adapting and improving its products in accordance with the ever changing requirements of the Broadcast Industry. The data contained herein is therefore subject to change without prior notice. Companies and product names are trademarks or registered trademarks of their respective companies.

EVS Headquarters Liège Science Park 16, rue Bois St Jean B-4102 Seraing

Belgium