

XProtect™ Bosch IntuiKey Keyboard Smart Client Plug-in User's Manual





# **Target Audience for this Document**

This document is aimed at system users and provides descriptions of how to install and maintain the plug-in for the Bosch IntuiKey keyboard in the Milestone XProtect Smart Client.



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# **General description**

The Bosch IntuiKey is a video control station that enables the user to view and control cameras and video recorders at local and remote facilities.

A full description of the Bosch IntuiKey is found in a separate document, Bosch Controller KBD Universal User Guide.pdf.

The BOSCH INTUIKEY SmartClient Plug-in enables using the BOSCH INTUIKEY to perform a subset of Milestone XProtect Smart Client functionality instead of using the SmartClient User Interface.

There is no "one to one" mapping of BOSCH INTUIKEY functions to SmartClient functions and vice versa. Some BOSCH INTUIKEY functionality is not applicable for SmartClient, and SmartClient contains functionality not implemented by the BOSCH INTUIKEY.

The reader should have knowledge of the BOSCH INTUIKEY operation. Reading the document that is mention above can give you this knowledge.



## Installation

The Smart Client plugin for Bosch IntuiKey keyboard comes with an installer. To install the plugin, unpack the zip files first.

🖉 🚽 < Data (l:) 🕨 MyTest 🕨 BoschIntuikeyTest		<b>- - 4</b> <del>9</del>	Search BoschIntuikeyTe	st		Q
Organize ▾ 👘 Install ▾ Burn New folder			8	. •		0
Documents	*	Name	~		Date m	odifie
Music		\iint BoschIntuikey	/PluginSetup.msi		16-02-2	2011 1
Videos						

Figure 1: Unpacking the installer

Double click on 'BoschIntuikeyPluginSetup.msi', start to install



Figure 2: Starting installation

#### Press on 'Next' button to second step:



icense Agreemer	nt 📃
ease take a moment to read I gree", then "Next". Otherwise	the license agreement now. If you accept the terms below, click '' e click ''Cancel''.
Lene m	
Installation and Use -	for the Milestone AProtect Smart Client
1. The Product may XProtect Smart Cl Corporate, Entern	only be used in connection with the Milestone lient product and the Milestone XProtect prise or Professional server products.
<ol> <li>The Product may computers under these computers</li> <li>The use of the Product of the Product</li></ol>	be installed on an unlimited number of one (1) Software License Code, as long as each of have a valid license for the Product.
I. Do Not Agree	© I <u>A</u> gree
	0,00

Figure 3: End User License Agreement

Confirm Installation			-
The installer is ready to install Milest	one XProtect Bosch I	ntuikey Plugin for Sm	art Client on your
lick "Next" to start the installation			

Figure 4: Confirming installation



### Press 'Next' again

Installing Milestor Intuikey Plugin for	e XProtect Bos Smart Client	ch	5
Milestone XProtect Bosch Intu	ikey Plugin for Smart Clien	t is being installed.	
Please wait			

Figure 5: Installation in progress

#### Wait for the installation to complete.

Milestone XProtect Bosch Intuikey Plug	in for Smart Client has be	en successfully installe	ed.
Click "Close" to exit.			
Please use Windows Update to check	for any critical updates to	the .NET Framework.	

Figure 6: Installation complete



Press 'Close' to finish the installation.

The software package includes the following files:

- plugin.def
- terminalModeDII.dll
- VideoOS.RemoteClient.Plugin.BoschIntuikey.dll
- VideoOS.RemoteClient.Plugin.BoschIntuikey.dll.config
- VideoOS.RemoteClient.Plugin.KeyboardPluginBase.dll
- Docs\ Bosch Controller KBD Universal User Guide.pdf
- Docs\IntuiKeySeriesK\_InstructionBook\_IntuiKeySeriesDigitalKeyboardSoftware\_enUS\_T5955786123.pd f
- Docs\ MilestoneXProtectSmartClient\_Bosch\_Intuikey\_Controller\_Plug-in\_Users\_Guide\_en-US.pdf (this file)



Figure 7: Location of the plug-in files



# Licensing

The plugin is ready to use only if the license file is valid and in right place.

The license file should always be placed in the same folder with plugin. By default, the license file *BoschIntuikeyKeyboard.lic* should be placed in

32 bit operating system: C:\Program Files\Milestone\XProtect Smart Client\plugin\ VideoOS.RemoteClient.Plugin.BoschIntuikey\

64 bit operating system: C:\Program Files (x86)\Milestone\XProtect Smart Client\plugin\ VideoOS.RemoteClient.Plugin. BoschIntuikey \

Organize 👻 🔟 Open with Burn New folder	tuikey	In the second videous remote client, Plugin	)
<ul> <li>Microsoft Virtual PC</li> <li>Microsoft Visual Studio 8</li> <li>Microsoft Visual Studio 9.0</li> <li>Microsoft Visual Studio 10.0</li> <li>Microsoft Web Designer Tools</li> <li>Microsoft.NET</li> <li>Milestone</li> <li>Milestone Dacolian LPR Web Services</li> <li>Milestone Event Proxy</li> <li>Milestone Installation</li> </ul>	*	Name Docs App.ico Docs Name App.ico Docs App.ico Docs Name Nam	Da 16- 16- 16- 16- 16- 16- 16- 16-
Multi-Source Transact Search plugin for SmartClient	7 4		

Figure 8: Placing the license file

Error messages will be displayed on the Keyboard Setup form only if license checking fails. For example:

If no license file was found		
Failed to load file. Exception message: Could not find file 'C:\Program Files (x86)\Milestone\XProtect	* *	More Info
If license has expired		
The license has expired.	A T	More Info

Click on "More Info" button can see error message in details:





Figure 9: Plugin licensing details

Note: MAC addresses are also listed. A MAC address can be copied to the clipboard by clicking.

	Milestone Bosch Intuikey Keybo	ard
	Version: 2.0.0.0	
	Expiration Date: 31. maj 2011	
	MAC address(es):	Copied
	00-1E-8C-BE-86-8F	
	00-50-56-00-01	
		*
milestone		
The Open Platform Company		OK

Figure 10: Copying MAC address information

About information can always be displayed by right click on system menu of Setup Form:

ē į	Restore					19
	Move	Bau	đ:		Parity:	
	Size	▼ 192	00	•	None	•
-	Minimize	Stor	hit		Handshake:	
2	Maximize	<ul> <li>▼</li> <li>1</li> </ul>	- Dett.	<b>*</b> ]	None	•
x	Close Al	lt+F4			Concenter	
	Flip Up / Down		Û	Zoom		Ć
rar Acti	Flip Up / Down	Group	0	Zoom	100 0 0 00 0 0 0 0	
Acti	Flip Up / Down tions Key	Group Views.All		Zoom Action Select view 'New	v View (2 x 2)' in "Shared.MyTest"	
Acti	About Flip Up / Down tions Key 1 2	Group Views.All Views.All		Zoom Action Select view 'Nev Select view 'Nev	v View (2 x 2)' in 'Shared.MyTest' v View (1 x 1)' in 'Shared.MyTest'	
Acti	About Flip Up / Down tions Key 1 2 3	Group Views.All Views.All Application		Zoom Action Select view 'Nev Select view 'Nev No Action	v View (2 x 2)' in 'Shared.MyTest' v View (1 x 1)' in 'Shared.MyTest'	
Acti	About Flip Up / Down tions Key 1 2 3 4	Group Views.All Views.All Application Application		Zoom Action Select view 'New Select view 'New No Action No Action	v View (2 x 2)' in 'Shared.MyTest' v View (1 x 1)' in 'Shared.MyTest'	
Acti	About Flip Up / Down tions Key 1 2 3 4 5	Group Views.All Views.All Application Application		Zoom Action Select view 'Nev Select view 'Nev No Action No Action No Action	v View (2 x 2)' in "Shared.MyTest" v View (1 x 1)' in "Shared.MyTest"	

Figure 11: Accessing the About box



## **Keyboard installation mode**

All communication between the Bosch IntuiKey keyboard and the third-party PC is performed through an RS-232 interface. The following diagram illustrates this configuration:



Figure 12: Keyboard connection.

This connection requires a standard Null modem RS-232 link. If desired, the Bosch Security Systems cable S1385 can be used. Connect one end of the RS-232 interface cable to the 9-pin RS-232 Serial Port located on the far right side of the rear of the KBD-Universal keyboard. Connect the other end of the RS-232 interface cable to a COM port on the PC.



Figure 13: Cable connection.

NB: In order to get use Terminal mode, the firmware version of Bosch IntuiKey need to be 1.92 or later.



### Setup

 16. februar 2011 - 14:50:55
 Image: Construction of the second second

To show the configuration window of the plug-in, click the Application Menu on the SmartClient.

Figure 14: The 'Show Application Menu' button is listed in the Drop-Down menu.

Select the 'Bosch IntuiKey Keyboard Setup' menu item. The setup window is displayed.

### Serial Port Properties Setup

- COM Port: Select the COM (Serial) port the BOSCH INTUIKEY is connected to. The Drop-Down list displays a list of all COM port on the computer.
- Baud, Parity, Data Bits, Stop Bits, and Handshake: These must be the same values that are defined on the BOSCH INTUIKEY by the system administrator.

### **Joystick Options**

The joystick tilt direction on the BOSCH INTUIKEY is:

- Joystick forward -> Tilt up
- Joystick backwards -> Tilt down

This is the opposite of the default for a normal joystick.

The 'Flip Up / Down' switch enables the user to invert Tilt direction to match standard joystick.



Joystick properties		
Pan / Tilt	Zoom	
🔲 Flip Up / Down		

Figure 15: Joystick setup

By adjusting Pan/Tilt and Zoom TrackBar, PTZ sensitivity can be changed as well.

### **Configurable Actions**

The Bosch IntuiKey SmartClient Plug-in contains a method for sending User-defined instructions to the SmartClient. Currently, the number of configurable actions is configurable but limited to 640.

The actions are defined using the setup module, described later in this document. They are activated by pressing a number and following ENTER key (configurable, e.g. can be changed to F1, F2...) on the Bosch IntuiKey.

Example: pressing digits 1 and 2 on the numeric keypad followed by 'ENTER' (default), send the instruction that is defined as number 12 in the generic actions list to the SmartClient. If no instruction is defined for generic action 12, nothing happens.

In the Keyboard Setup dialog you define the instructions (actions) that are executed when you press a number (1 - 12) followed by the ENTER key. The Drop-Down button appears on the selected row. A click on this button displays a list of all available SmartClient instructions, where you can select one to assign to the current rows number. The list looks like this:



COM	oard Communication		<b>D</b>			P-3-	
COM	Port.		19200		None	•	
Data	hite		13200			Handshake	
8	Dits.	•	Stop bit:	_	•	None	•
loysti Pan /	ck properties Tilt p Up / Down	16.1	· · · · · ·		Zoom	active at a	
ction	s Key	Group		_	Action		14
•	1	Applicatio	on	•	No Action		•
	2	Applicatio	on	•	No Action		-
	3	Applicatio	on	•	No Action		•
	4	Applicatio	on	•	No Action		-
	5	Applicatio	on	٠	No Action		+
	6	Applicatio	on	•	No Action		-
	7	Applicatio	n	•	No Action		•
	8	Applicatio	on	•	No Action		-
	9	Applicatio	on	•	No Action		-
	10	Applicatio	on	٠	No Action		-
	11	Applicatio	on	•	No Action		•
	12	Applicatio	on	•	No Action		
	LEFTSOFTKEY1	Applicatio	on	•	No Action		
		r	1		C		

Figure 16: Plugin Configuration Dialog

Below is an example of a possible assignment.



NeyDu	bard Communication		28 112			22 14	
COM Port:			Baud:			P <u>a</u> rity:	
COM1			19200		•]	None	
Data bits:			Stop bit:			Handshake:	
8			[1 •]			None	
Joystic Pan / 1    Flip	ck properties Tilt		· · · · ·	)	Zoom	an an an an an an an an Cr	
Actions	s Kev	Group		_	Action		1
	1	Views.All		-	Select view 'New	View (2 x 2)' in 'Shared.MyTest'	Ŧ
	2	Views.All		-	Select view 'New	View (1 x 1)' in 'Shared.MyTest'	-
	3	Applicatio	n	-	No Action		+
	4	Applicatio	n	-	No Action		-
	5	Applicatio	n	-	No Action		•
	1000 C 11						- 1
	6	Applicatio	n	-	No Action		-
	6 7	Applicatio Applicatio	n n	•	No Action No Action		•
	6 7 8	Applicatio Applicatio Applicatio	n n	•	No Action No Action No Action		•
	6 7 8 9	Applicatio Applicatio Applicatio Applicatio	n n n	• • •	No Action No Action No Action No Action		•
	6 7 8 9 10	Applicatio Applicatio Applicatio Applicatio Applicatio	n n n n		No Action No Action No Action No Action No Action		* * * *
	6 7 8 9 10 11	Applicatio Applicatio Applicatio Applicatio Applicatio Applicatio	n n n n n	• • • • •	No Action No Action No Action No Action No Action No Action		
_0	6 7 8 9 10 11 12	Applicatio Applicatio Applicatio Applicatio Applicatio Applicatio Applicatio	n		No Action No Action No Action No Action No Action No Action Show live		

Figure 17: Instructions assignment example

### Number of Configurable Generic Actions

The number of configurable generic actions is changeable. Under the plug installation folder: VideoOS.RemoteClient.Plugin.BoschIntuikey.dll.config looks like:





Figure 18: Number of configurable generic actions

The marked number is number of configurable actions that are going to display in the setup form.

In this document this number is set to 12.



## **Default Settings**

Default settings can be activated by pressing the "Default settings" button from the Setup Form.

The default setting including:

- COM Port: "COM1". •
- Baud: 19200, Parity: None, Data bits: 8, Stop Bits: 1, and Handshake: None •
- Generic actions (number 1-12): •
- o all not assigned
- Bosch IntuiKey spec:
  - ENTER Select Generic number.
  - MON Select monitor by number(shortcut) 0
  - IRIS\_PLUS Iris up on selected camera
  - o IRSI\_MINUS Iris down on selected camera
  - SHOT Select camera by number(shortcut) 0
  - 0 FOCUS\_PLUS - Focus near on selected camera
  - FOCUS\_MINUS Focus far on selected camera 0
  - RIGHTSOFTKEY1 Show Live 0
  - RIGHTSOFTKEY2 Show Playback 0
  - RIGHTSOFTKEY3 Show Setup 0
  - RIGHTSOFTKEY5 Forward playback 0
  - RIGHTSOFTKEY6 Reverse playback RIGHTSOFTKEY7 Play/Stop 0
  - 0
  - PTZ default joystick move motions such as pan left/right/stop, tile up/down/stop, and zoom 0 in/out



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