

XO CAMERA INTERFACE SERVICE

YB-781
Version 1.05



XO[®] CAMERA INTERFACE SERVICE

The software is intended to be used on a PC connected to an XO 4 or XO FLEX unit and allows for the foot control of the unit to be used for issuing basic commands (e.g. freeze image and store image) to dental imaging programs running on the same PC.

Note: This software cannot be used in combination with XO Smart Link

1 REQUIREMENTS

Hardware	PC with a serial port (built-in or USB-to-serial adaptor) XO 4 or XO FLEX dental unit (firmware 3.50 or later) Serial cable
Software	Windows 10, XP or Windows 7 (32/64 bit) .NET Framework 4.0 Client (or later)

2 INSTALLATION

To install the software, double click on the installer file. Follow the instructions on screen. Note that administrative privileges are required. The software must be installed on the same PC as the imaging program and must be connected to the workstation through a serial port.

The program can be removed (uninstalled) through the "Programs and features" view of the Windows control panel.

3 USAGE

To start the program, click:

Start → All programs → XO CARE → XO Camera Interface Service → XO Camera Interface Service

Note: it is possible to configure the program to automatically start when the PC is powered on.

The software is designed to run in the background and to be invisible during normal operation. When started, the program adds an XO icon to the icon tray area of the Windows taskbar (Figure 1). To setup or shut down the program, right click on the icon and then on either "setup" or "shut down".

Status and error messages originating from the program are shown using small "balloon" messages pointing to the XO tray icon (Figure 2).

When properly configured the program will allow inputs from the A, B and North buttons of the foot control to be forwarded to another program running on the PC. Note that the program must be started separately and that the inputs are only forwarded when the camera is the only active (forward) instrument on the workstation.



Figure 1: Tray icon and menu



Figure 2: Messages

4 SETUP OPTIONS

To configure the program right click on the XO tray icon and then on 'Setup'. This will open the configuration window (Figure 3).

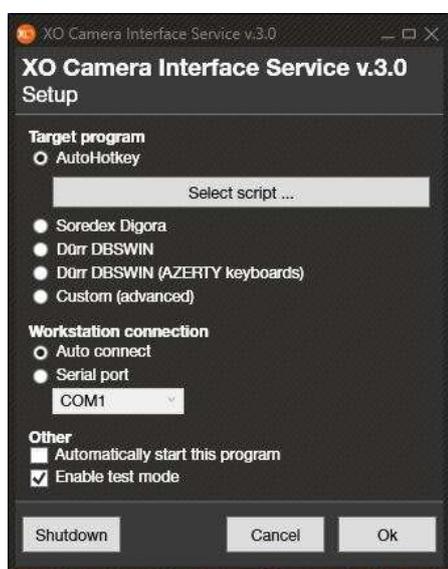


Figure 3: Configuration window

Target program: The target program is the imaging program you wish to use. The choices are: Soredex Digora, Dürr DBSWIN¹ and custom. For Soredex Digora and Dürr DBSWIN you can choose the function associated with the A, B and North buttons on the foot control using the drop down menus. The use of the "Custom" target is not covered by this manual.

For Visiquick, Romexis, DTX Studio and DentalEye follow the instructions below:

1. Download the script corresponding to the relevant dental imaging program from xo-care.com.
2. Download AutoHotKeys program from autohotkeys.com and install with administrator privileges.
3. Set Autohotkeys to run as admin in this folder: C:\Program Files\AutoHotkey.
4. Run the XO Camera interface program with administrator privileges, select the menu "AutoHotKey", select the script and run.

5 DEFAULT SETUP OF THE SCRIPTS

Left/A/X button on footcontrol: Open camera window.

Joystick North: Save

Right/B/O button on footcontrol: Freeze/Live

To configure the setup of the footcontrol, simply open the script in Notepad and move the letters marked in the image below around.

¹ There are two options for Dürr DBSWIN: If the PC is equipped with an AZERTY keyboard then the target program must be set to "Dürr DBSWIN (AZERTY keyboards)". Use "Dürr DBSWIN" for QWERTY keyboards.

```
romexis.ahk - Notepad
File Edit Format View Help
#SingleInstance force

nextIsFreeze := "true"

+^!a:
IfWinExist, Planmeca Romexis
{
    WinActivate ; use the window found above
    Send !p
}
return

+^!n:
IfWinExist, Intra Cam
{
    WinActivate ; use the window found above
    Send !s
}
return

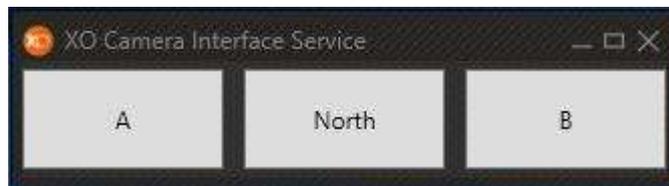
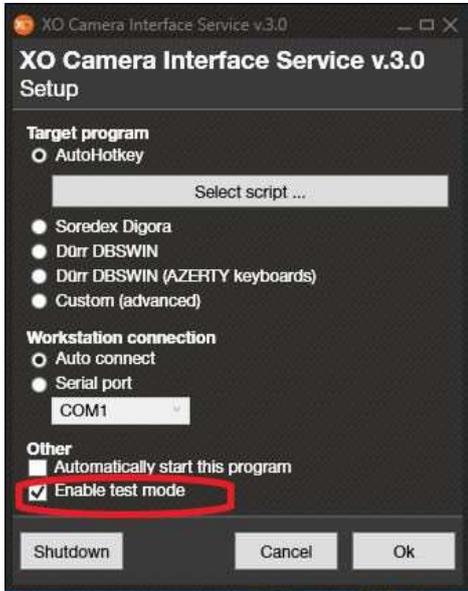
+^!b:
IfWinExist, Intra Cam
{
    WinActivate ; use the window found above

    if(nextIsFreeze = "true") {
        Send !f
        nextIsFreeze := "false"
    }
    else {
        Send !r
        nextIsFreeze := "true"
    }
}
return
```

A = Left/A/X button
N = Joystick North
B = Right/B/O button

6 TEST FUNCTION

To test the communication between the Camera Interface program and the dental imaging program, select the test function. A small window with 3 buttons will appear.



7 UNIT CONNECTION

You can choose between two different ways of connecting to the XO 4 and XO FLEX units. When set to "Auto connect" the program will automatically detect and connect to the unit when the program is started. This is the recommended setting. In some rare cases you may want to manually specify the port to be used. This can be done by selecting the 'serial port' option.

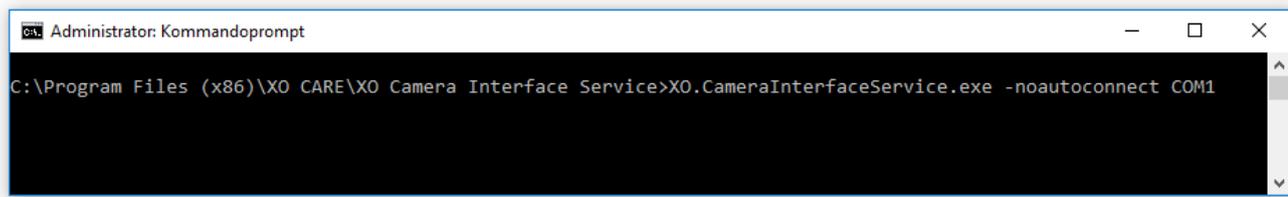
Automatic start: The program can be configured to start automatically when the PC is powered on. To do this simply click the checkbox labelled "Automatically start this program".

Note: it is not necessary to make any changes to the target program.

8 OVERRIDING UNIT CONNECTION SETTINGS

By default, the software will use the "auto connect" feature to establish a connection to the unit. In some rare cases, such as when a loop-back serial port is present on the system, the auto connect feature will fail in a way that makes it impossible to enter the setup portion of the software. If this happens it is possible to override the connection settings from the command line:

- 1) Open a command prompt (as administrator)
- 2) Navigate the folder where the software was installed
- 3) Enter the command shown in Figure 4. The name of the serial port ("COM1") should be changed to match the name of the port connected to the unit.

A screenshot of a Windows Command Prompt window titled "Administrator: Kommandoprompt". The window shows a command being entered: "C:\Program Files (x86)\XO CARE\XO Camera Interface Service>XO.CameraInterfaceService.exe -noautoconnect COM1". The command is displayed in white text on a black background. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

```
C:\Program Files (x86)\XO CARE\XO Camera Interface Service>XO.CameraInterfaceService.exe -noautoconnect COM1
```

Figure 4: Command to override connection settings

9 COMPATIBILITY

The program works by sending short-cut key combinations to the target program. Because the set of short-cuts recognized by a particular program can differ from version to version, the software is not *necessarily* compatible with all versions of Soredex Digora and Dürr DBSWIN. The program has been tested with and is known to be compatible with:

- Soredex Digora, version 2.7
- Dürr DBSWIN, version 5.11.0
- Romexis
- Visiquick
- DentalEye
- DTX Studio

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Subject to change.
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