CTFID

VP-CFGSFT

BOSCH

en Software Manual

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1 Getting Started

The Configuration Tool for Imaging Devices (CTFID) includes two components:

– One (1) CD-ROM containing the software application
– Configuration Tool hardware (VP-USB, interface between your computer and an imaging device)

1.1 Compatible Devices

The CTFID uses Bilinx technology, a bidirectional communication method, embedded in the video signal of all of the latest Bosch AutoDome, Dinion, and FlexiDome cameras, including the AutoDome Easy II and the Dinion IR Imager (VEI-30 Series), and MIC Series 550 and 612. The software is also compatible with older Bosch cameras including the Unity Dome series and UPH 2D and 3D series. (See the table below for a list of compatible devices.
Note: This list does not identify every model in each series of compatible devices.)

Compatible devices
G3A Series Indoor AutoDome
ENV Series EnviroDome
G3B Series BasicDome
VG4 AutoDome 100 Series
VG4 AutoDome 200 Series
VG4 AutoDome 300 Series
VG4 AutoDome 500i Series
VG5 AutoDome 100 Series
VG5 AutoDome 600 Series
AutoDome Easy II
Dinion LT Series
Dinion XF Series
Dinion 2X Series
Dinion IR Imager (VEI-30 Series)
EX65 Explosion-protected Camera and Illuminator
FlexiDome DN Series
FlexiDome VF Series
FlexiDome XT Series
FlexiDome 2X Series
High Speed Positioning System units
MIC Series 550
MIC Series 612
UnityDome Series

2 System Requirements

The following are the minimum system requirements to run the Configuration Tool for Imaging Devices software application:

- PC operating platform: Windows® 2000, Windows XP®, Windows® Vista, or Windows® (32- and 64-bit versions)
- Processor: 200 MHz Pentium with MMX (or equivalent)
- RAM memory: 256 MB (dependent upon the operating system)
- Hard disk space: 50 MB
- Video system: 1024 x 768 with 16-bit color
- CD-ROM drive, if installing the software from a CD
- Connectivity: a free USB port (1.1 or higher)
- Connectivity through serial interface

3 Installing the CTFID Software

This chapter includes instructions for installing the software for the Configuration Tool for Imaging Devices. Before connecting to a compatible device, install the software.

Installing the Software

1. Insert the supplied CD into your CD drive.
   If the InstallShield Wizard does not start automatically, open the CD manually by clicking **Start > Run > Browse**. Locate and open the **autorun.exe** file. The **Macromedia Flash Player** window appears, prompting you to select one of the following options: Install Configuration Tool, User Guide, View the Readme file, and Exit. Click **Install Configuration Tool** to install the software.

   The **Choose Setup Language** window appears.

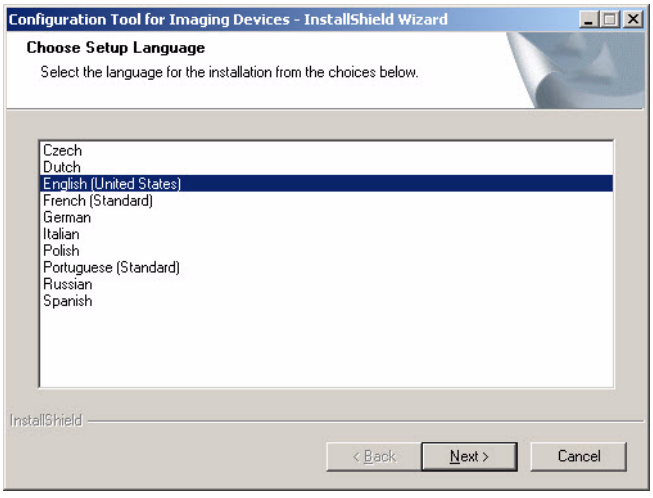


Figure 3.1 Choose Setup Language window

2. Select a language from the list, and then click **Next**. The main CTFID window and the **Preparing Setup** window appear momentarily, and then the **Welcome** window appears.

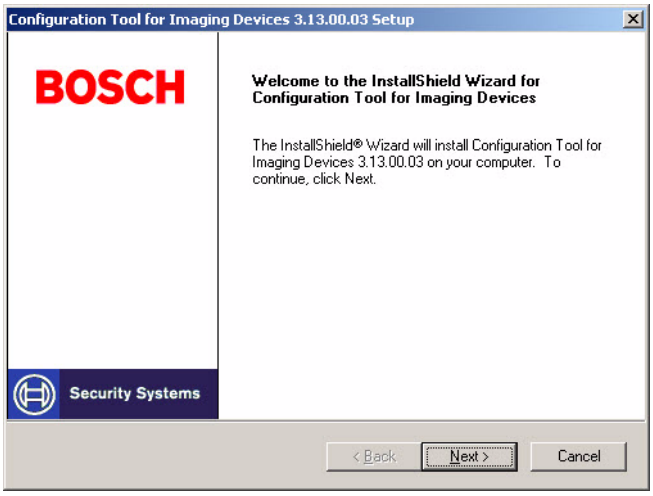


Figure 3.2 Welcome window Initiating the InstallShield Wizard setup

3. Click **Next** to continue installing the application. The **License Agreement** window appears.

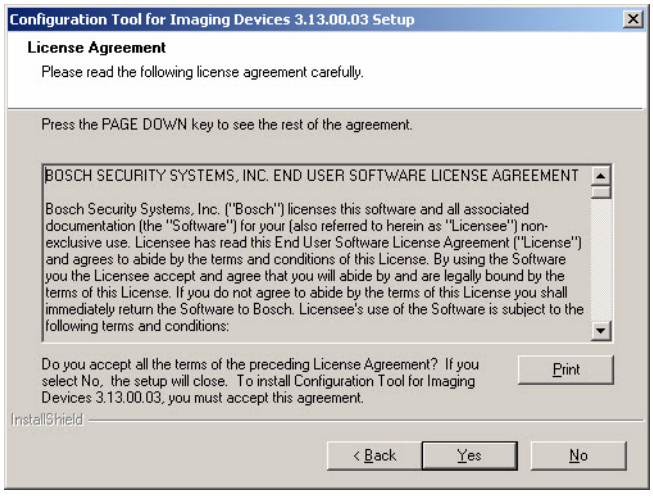


Figure 3.3 License Agreement window

4. Click **Yes** to accept the terms of the License Agreement. The **Start Copying Files** window appears.

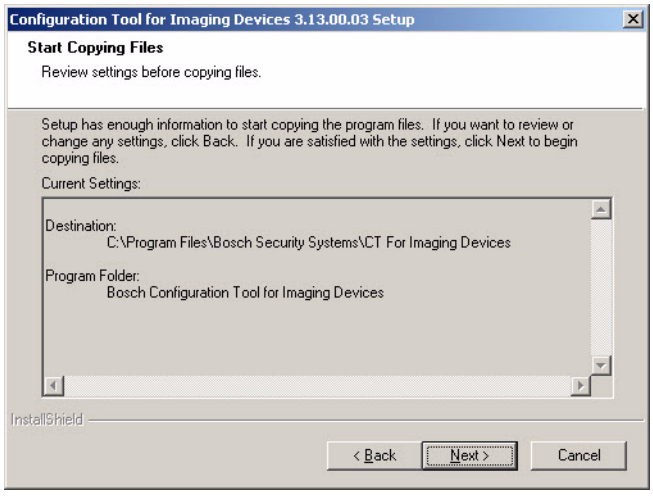


Figure 3.4 Start Copying Files window

5. Click **Next**. The **Setup Status** window appears; CTFID begins configuring the software installation. When installation finishes, the **Select Options** window appears. Click **Next**.

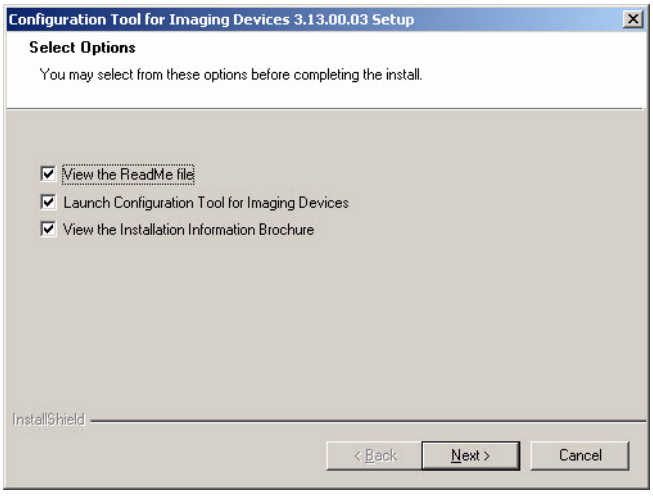


Figure 3.5 Select Options window

6. Check the appropriate box(es), and then click **Next**. The **InstallShield Wizard Complete** window appears.

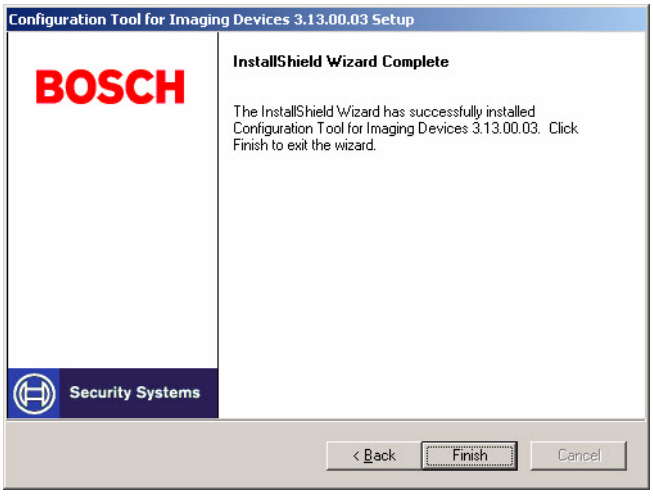


Figure 3.6 InstallShield Wizard Complete window

7. Click **Finish** to complete the installation. The CTFID application launches and/or the Instruction Manual and ReadMe file appear(s) automatically (if you selected those check box(es)).

4 Connections

There are three (3) possible connection types to link the CTFID software to the imaging device. The first two (2) choices communicate via coax using the Bilinx protocol. These two (2) choices connect to either the USB or serial COMM port of the PC. The CTFID is supplied with a VP-USB adaptor that plugs into any USB-compliant port supported by a Windows® operating system. Once the CTFID software is loaded, the adaptor communicates over the video signal from any Bilinx-enabled camera or AutoDome.
The third choice is direct RS-232 connection between the PC COMM port and an AutoDome. See each subchapter below for details about each connection.

4.1 Connecting via the USB Port

It is recommended that the CTFID software be installed before connecting the hardware to the USB port. See *Section 3 Installing the CTFID Software, page 7* for additional information. Bilinx devices may be connected to a PC running the CTFID via a USB connection. All Bilinx devices can be connected to the computer with the VP-USB cable. MIC Series 550 and MIC Series 612 cameras can also be connected to the computer via the MIC-USB485CVTR2 cable.

4.1.1 Connecting the VP-USB Configuration Tool to Your PC

To see the device output, use a CCTV monitor with looping inputs or a T connector (not provided) for the coaxial cable, and plug the second coaxial cable into the CCTV monitor. Ensure that the monitor is either auto-terminating or is set to low impedance. See *Figure 4.1* for an example of a typical CCTV monitor's connections.

NOTICE!
Some MIC Power Supply Boxes contain two coaxial video outputs. You can use the second channel video output to connect a MIC series camera the USB port on a PC.

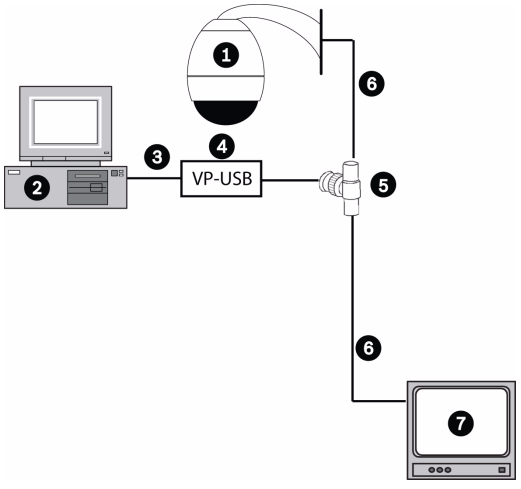


Figure 4.1 Connecting the VP-USB Configuration Tool

Number	Description
1	Typical AutoDome, MIC Series 550, MIC Series 612 or other Bilinx device
2	PC running CTFID software
3	USB port
4	VP-USB adapter
5	BNC "T" connector
6	Coax to input of monitor
7	Typical CCTV monitor

Making the Connection

1. Insert the Configuration Tool USB cable into a USB port on your computer. The other end of the USB cable is permanently attached to the Configuration Tool hardware.
2. Connect the coax from the VP-USB to the male connection of the BNC “T” connector.
3. Connect a coaxial cable to the input of the monitor.
4. Connect the other end of the monitor’s coaxial cable into one of the female connections on the BNC “T” connector.
5. Connect the coax from the camera to the other female connection of the BNC “T” connector.

4.1.2 Connecting the MIC-USBCVTR2 Cable to Your PC

The MIC-USB485CVTR2 is a signal converter allowing connection of MIC cameras to a PC USB port. Developed specifically for the MIC Series Camera range to facilitate easy setup and configuration when used with the CTFID software. Refer to the *MIC Series Power Supply Installation Manual* and to the *MIC Series USB485CVTR 2 User Guide* for details about this connection.

Making the Connection

1. Disconnect the MIC Series power supply from the mains power supply, open the MIC Series power supply and locate the telemetry header (HD5); unplug any connectors to telemetry headers HD4 or HD5.
2. Connect the MIC-USB485CVTR2 cable with the Molex connector to HD5; connect the 5-pin screw down terminal end to the MIC-USB485CVTR2.
3. Plug the USB connector on the long cable of the MICUSB485CVTR2 to an available USB port, the PC should detect a new device and inform you that the hard ware has been successfully installed.

4.2 Connecting via Serial port (VP-RS2BLNX Configuration Tool)

It is recommended that the CTFID software be installed before connecting the hardware to the serial port. Refer to *Section 3 Installing the CTFID Software, page 7* for additional information.

To see the device output, use a CCTV monitor. Plug the coax connected to the imaging device to one of the BNC connectors of the VP-RS2BLNX (which can operate in either RS-232 or RS-485 mode). Connect another coax between the second BNC connector and the CCTV monitor. Ensure that the monitor is either auto-terminating or is set to low impedance. See *Figure 4.3* for an example of a typical CCTV monitor’s connections.

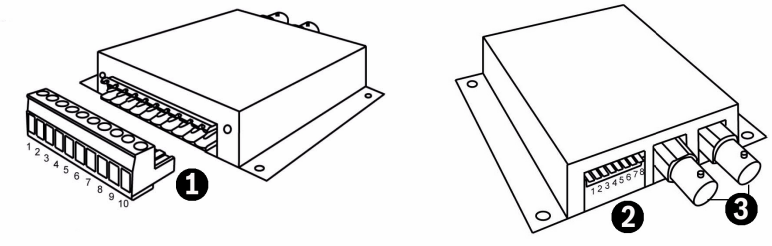


Figure 4.2 VP-RS2BLNX connections

Number	Description
1	Power and serial connection
2	Selects mode and baud rate
3	BNC connections, passive loop-through, high impedance, video input 1 Vpp nominal, 2 Vpp max.

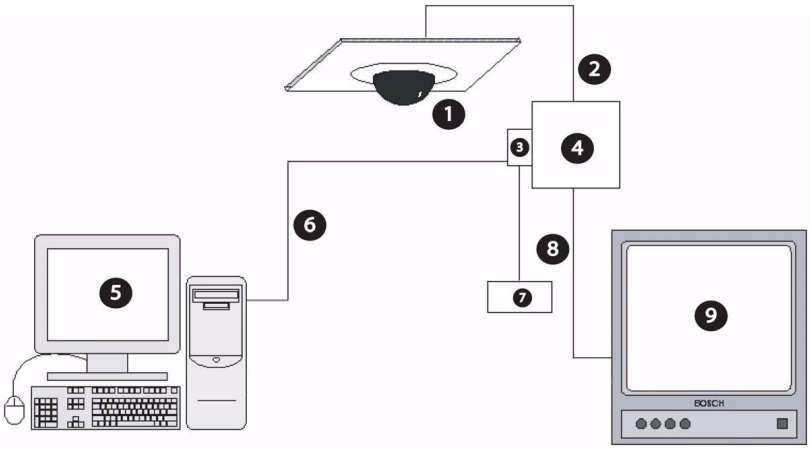


Figure 4.3 Connecting the VP-RS2BLNX Configuration Tool

Number	Description
1	Typical AutoDome version 5.10 or higher, and any other Bilinx device
2	Coax IN
3	Terminal block
4	VP-RS2BLNX
5	PC running CTFID software
6	RS-232
7	Power supply (not provided)
8	Coax OUT
9	Typical CCTV monitor

4.2.1 Connecting the VP-RS2BLNX (Bilinx) Configuration Tool to Your PC

Pin 1 and 2 of the terminal block are for the connections for the external power supply (not provided). The external power supply should be either 12-28 VAC (50/60 Hz) or 12-40 VDC (polarity independent), and galvanically insulated from video, RS-232 ground, and encasing.

NOTICE!

The Serial to Bilinx converter interface shall be supplied by a self-limited power source of less than 15 VA. Reinforced insulation is provided between input and output by safety transformer and distances on the PCB. USA/Canada: The Serial to Bilinx converter is a product for INDOOR use. It is intended for use with a UL-listed Class 2 power supply.

1. Connect a cable between the terminal block of the VP-RS2BLNX Configuration Tool to the serial port on the computer. See the pin out table below for the proper connections.

	Pin #	Description
PC DB9		
	2	RxD
	3	TxD
	5	GnD
VP-RS2BLNX terminal block		
	Pin 3	GND
	Pin 4	TxD
	Pin 5	RxD

-or-

	Pin #	Description
VP-RS2BLNX terminal block		
	Pin 6	Tx/Rx+ (B)
	Pin 7	Tx/Rx- (A)
	Pin 8	Do not connect
	Pin 9	Do not connect
	Pin 10	GND

Dip switch	Description
8	On: RS-485, Off: RS-232
7	RS-232 baud rate (On: 4800, Off: 9600 Bps)
7-1	RS-485 address (0 to 127)

Table 4.1 Mode and Baud Rate Selections

2. Connect the coax from the Bilinx device to one of the BNCs on the VP-RS2BLNX.
3. Connect a second coaxial cable from the looping output of the VP-RS2BLNX to the input of the CCTV monitor.

4.3 Connecting RS-232 to an AutoDome camera

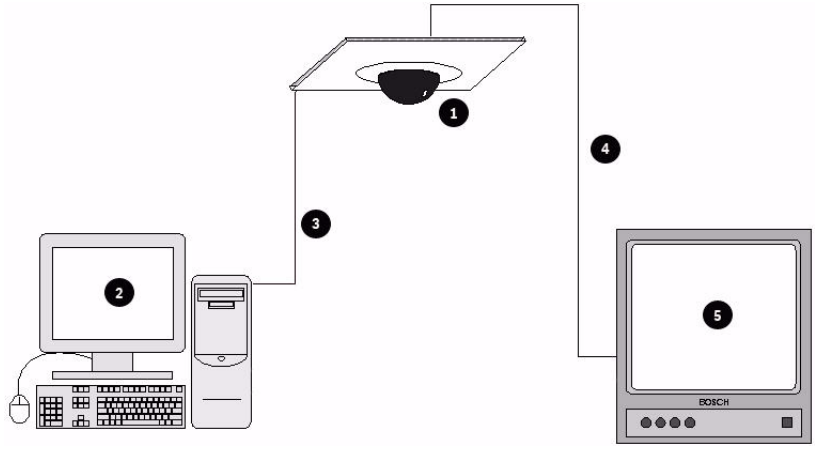


Figure 4.4 Connecting RS-232 to an AutoDome

Number	Description
1	VG4 Series or VG5 100 or 600 Series AutoDome
2	PC running CTFID software
3	RS-232
4	Coax to input of monitor
5	Typical CCTV monitor

4.3.1 Connecting the AutoDome to Your PC

1. Make the RS-232 cable using the table below.

	Pin #	Description
PC DB9		
	2	RxD
	3	TxD
	5	GnD
P105 (AutoDome 200, 300, 500)		
	5	RxD
	4	TxD
	6	GnD

2. Connect the DB9 connector to the comm port of the PC.
3. Connect P105 to the AutoDome.
4. Use coax to connect the Video output of the AutoDome to a CCTV monitor.
5. Reposition the slide switch located on the main board of the AutoDome. Slide the switch toward the camera head, inward and away from the LEDs. See *Figure 4.5*.

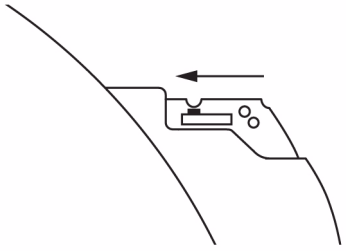


Figure 4.5 RS-232

5 Starting the CTFID Application

1. Double-click the **Configuration Tool for Imaging Devices** icon located on your desktop window.

   - or -

   Click the Windows **Start** button, and then select **Programs** > **Bosch Configuration Tool for Imaging Devices** > **Configuration Tool for Imaging Devices**.

Figure 5.1 Initial window

2. By default, the device tries to connect automatically to a device over Bilinx. The application displays the following message for approximately 20-30 seconds:

Figure 5.2 Checking device window

3. If a device is detected, proceed to *Section 6 Using the Configuration Tool, page 19* for details about using the CTFID software. If a device is not detected within 1 minute, or if you interrupt the process by clicking the **Cancel** button, you have the option to select an alternate interface or to work in offline mode.

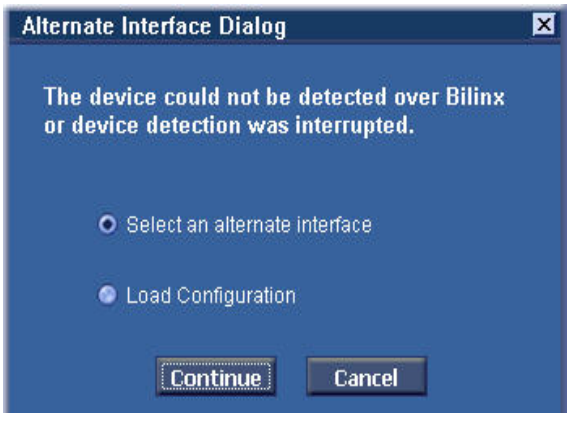


Figure 5.3 Alternate Interface Dialog box

4. To select an alternate interface, select the appropriate **Interface** option. Click **Continue** (see *Figure 5.3, Page 15*). Select the appropriate interface type and then proceed to Step 5.

   - or -

   To work in offline mode, select the **Load Configuration** option. Click **Continue** and then proceed to Step 6.

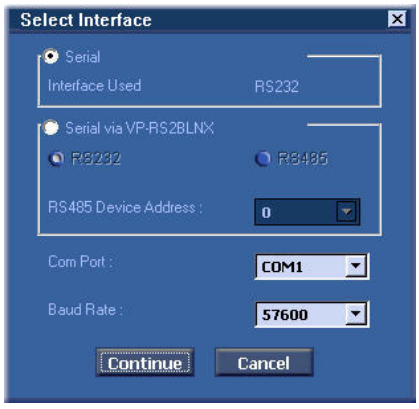


Figure 5.4 Select Interface window

5. The application attempts to detect a device.
   - If the application detects a device, the **Overview** window opens. (See *Figure 6.1* of Chapter 4).
   - If the application does not detect a device, the **Load Configuration** window opens.

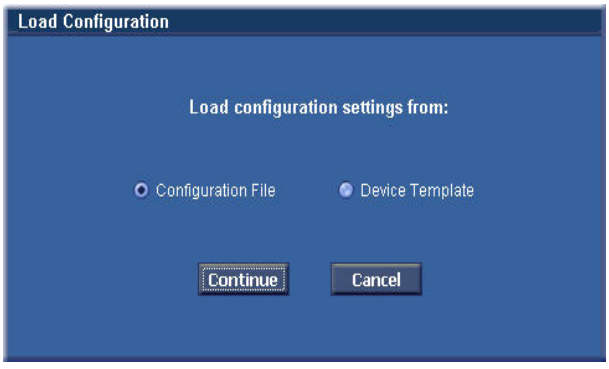


Figure 5.5 Load Configuration window

6. To open an existing configuration file, select the **Configuration File** option. Click **Continue** and then proceed to Step 7.
   - or -
   To create a new configuration file, select the **Device Template** option. Click **Continue** and then proceed to Step 8.

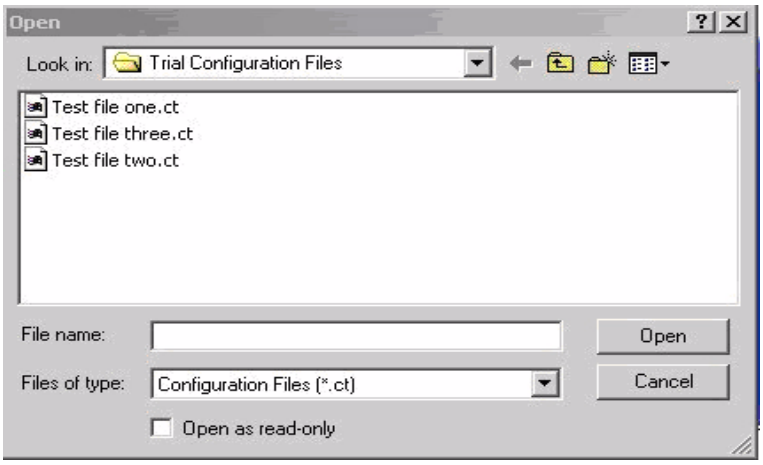


Figure 5.6 Open file dialog box

7. Navigate to the configuration file, and then click **Open**. Proceed to *Section 6 Using the Configuration Tool, page 19*.

Figure 5.7 Choose a device window

8. Highlight the name of the device for which you want to create a new configuration, and then select a Video Type, **NTSC** or **PAL**. Click **Continue**. The **Overview** window appears, displaying the default settings for the device.

9. Make the changes to the template. Click the **Save Configuration** button. The **Save As** dialog box opens.

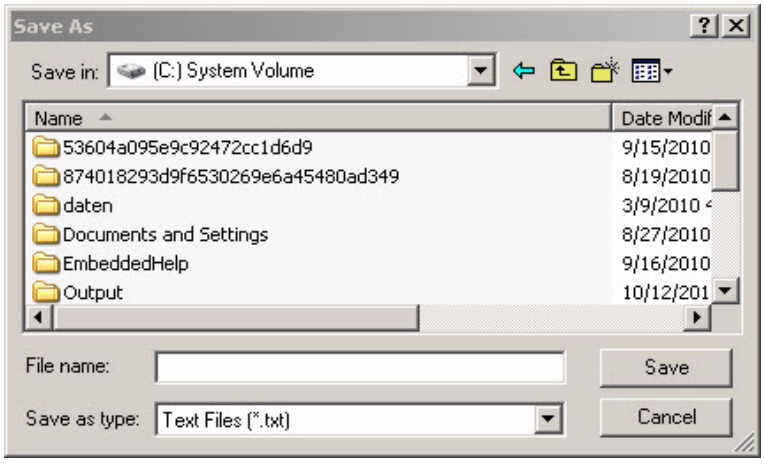


Figure 5.8 Save As window

10. Navigate to the folder where you want to save the configuration file.
11. Type a name for the configuration file in the **File name** field.
12. Click **Save**. The configuration file is saved in the specified folder.

6 Using the Configuration Tool

The CTFID main screen contains all the options for changing a template, configuring a live view, displaying specific device information, downloading information, changing device settings, and manipulating a device. By default, the CTFID opens to the **Overview** window, which displays general information about the device, the application environment, and the state of the application. The data includes specific device information.
The main screen is divided into four (4) segments, as illustrated in *Figure 6.1*.

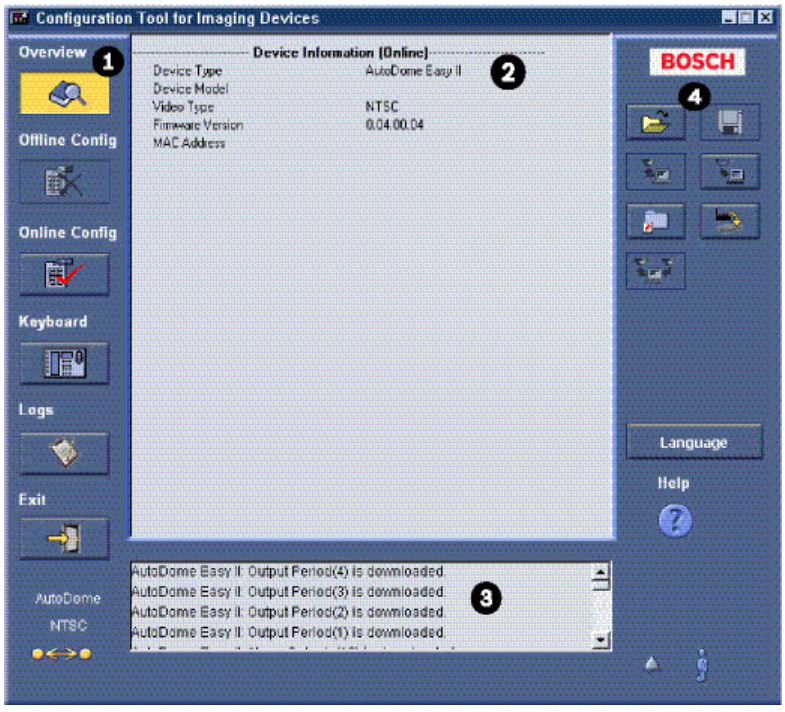


Figure 6.1 Overview / main window

Segment reference	Description	Function
1	Main menu column	The left-hand column represents the main menu, which includes the **Overview, Offline Config, Online Config, Keyboard, Logs**, and **Exit** buttons.
2	Central workspace	The middle section represents the central workspace, which includes device information or provides access to user settings.
3	System feedback	The bottom segment represents the system feedback, which includes device type, alarm, connectivity status, and motion information.
4	Operations column	The operations column includes buttons for creating, saving, uploading, downloading, restoring, printing, changing the language, and accessing the online Help system.

6.1 Main Menu Buttons

Button	Description
	Opens the **Overview** window. The **Overview** window displays general information about the device, the application environment, and the state of the application. The data includes specific device information.
	Opens the **Offline** configuration window. The **Offline** configuration window allows you to establish settings in a new configuration file or to modify settings in an existing configuration file. Note: The CTFID software allows two (2) files to be open simultaneously: – **Online** configuration file: contains the current settings for the connected device. – **Offline** configuration file: contains either the settings saved in a specific configuration file or the default device settings.
	Opens the **Online** configuration window. The **Online** configuration window displays the current settings for the device connected to the Configuration Tool software. Changes made to the settings in **Online** mode are reflected in the device.
	Opens the **Virtual Keyboard** window. The virtual keyboard controls various settings, depending on the device type. In **Online** mode, changing the settings on this screen automatically changes the settings on the device.
	Opens the **Logs** window. The **Logs** window allows you to download diagnostic information from the connected device. The downloaded diagnostic information can be saved as a text file. Note: The **Logs** button is enabled only when the CTFID software is connected to a VG4 Series AutoDome.
	Exits the Configuration Tool for Imaging Devices.

6.2 Offline Configuration Window

The **Offline** configuration window allows you to establish settings in a new configuration file, or to change settings in an existing configuration file. You can download and save data so that it can be manipulated and uploaded to other devices.
To access the window, click the **Offline Config** button. Settings are arranged in groups such as Camera, Lens, PTZ, Display, Alarm, and Miscellaneous.

Figure 6.2 Offline configuration window

NOTICE!
The headings and settings tree are available based on the device selected. For detailed information about the possible settings, refer to the installation instructions manual for the specific device.

6.2.1 Overwriting Configuration Settings

If you are working in an open file and would like to open another file in **Offline** mode, the following **Information** dialog box opens:

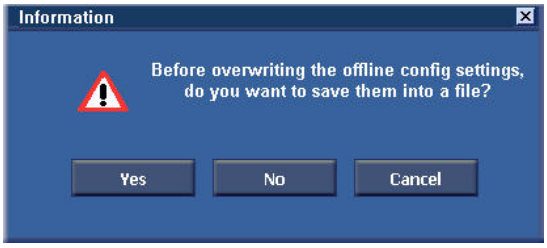


Figure 6.3 Information dialog box

The Information dialog box provides several options:

- Click **Yes** to open a **Save As** dialog box. Name the file and save it.
- If you click **No**, the changes to the file will not be saved. The **Load Configuration** dialog box opens. Choose a different file or device template.
- Click **Cancel** and the dialog box closes.

6.3 Online Configuration Window

The **Online** configuration window allows you to view the current settings of the device connected to the CTFID. When device settings are changed in **Online** mode, the changes are immediately conveyed to the remote device. To access the window, click the **Online Config** button. As with the Offline Configuration window, settings are arranged in groups such as Camera, Lens, PTZ, Display, Alarm, and Miscellaneous.

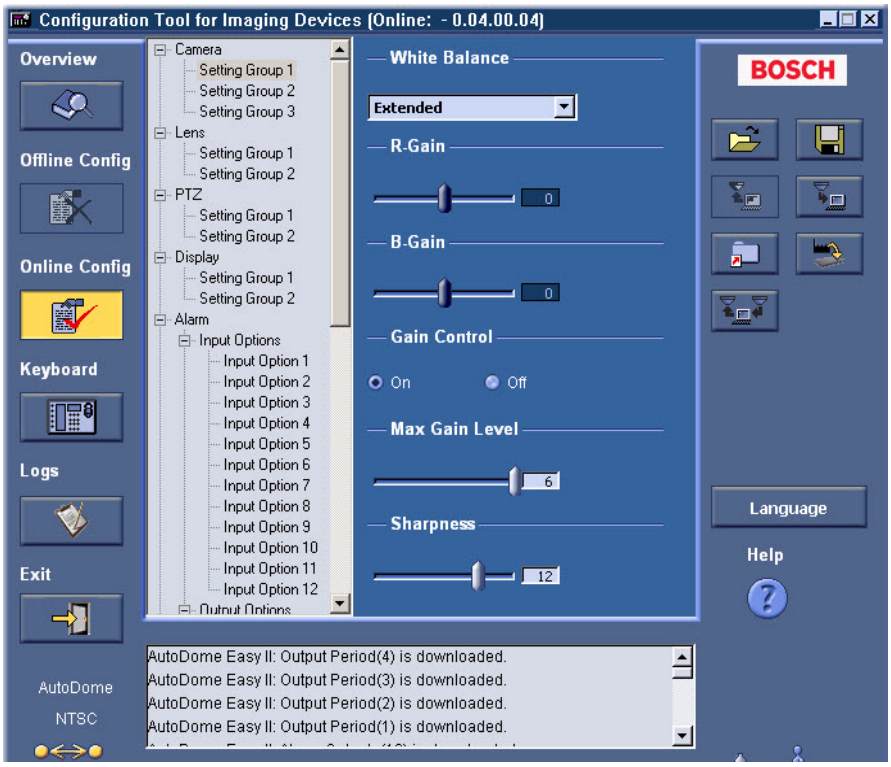


Figure 6.4 Online configuration window

NOTICE!

The headings and settings tree are available based on the device selected. For detailed information about the possible settings, refer to the installation instructions manual for the specific device.

6.4 Virtual Keyboard Window

The Virtual Keyboard window allows setting adjustments. If a PC monitor is connected to the device, the effects of the setting changes can be viewed. To access the window, click the **Keyboard** button.

NOTICE!
The layout of the Virtual Keyboard window varies depending on the device. The functionality described below may not be available on all devices.

6.4.1 Panning/Tilting AutoDome and MIC Series Cameras via the Virtual Keyboard

1. Place the cursor on the Pan/Tilt control (see #1 *Figure 6.5*), and then click and hold down the left mouse button.
2. Double-click the left mouse button to lock the cursor to the control.
3. Move the mouse to move the camera.
4. Single-click the left mouse button to release the cursor.

When used with a variable-speed device, the further the cursor is from the center of the control, the faster the device will pan.

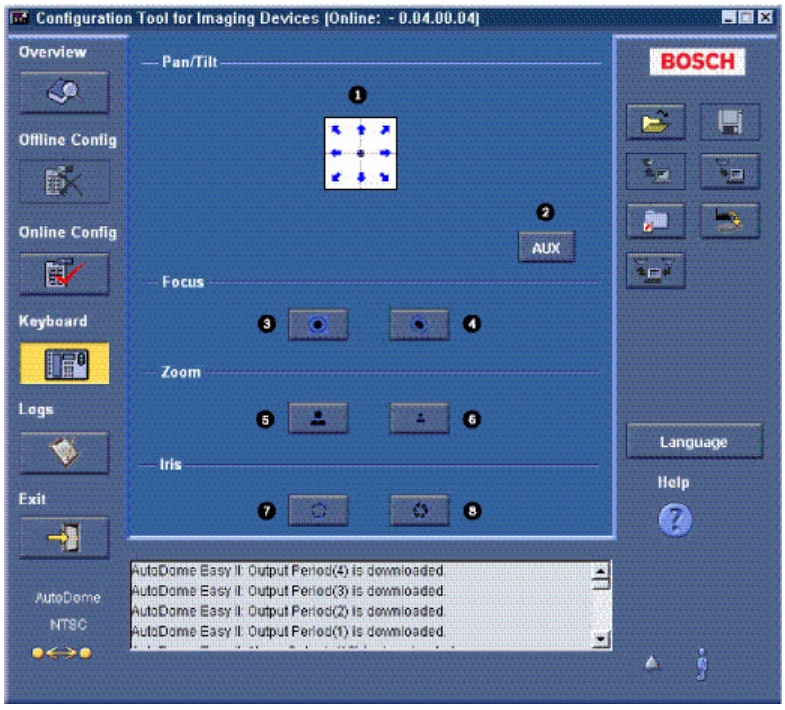


Figure 6.5 AutoDome Virtual Keyboard window

Number	Button	Description
1	Pan/Tilt	Moves the device.
2	AUX	Opens the **AUX** Commands dialog box.
3	Focus	Widens the scope of the focus lens.
4	Focus	Narrows the scope of the focus lens.
5	Zoom	Zooms in on the subject of the device.
6	Zoom	Zooms out and widens the field of view.
7	Iris	Increases the light level for proper exposure.
8	Iris	Decreases the light level for proper exposure.

6.4.2 Using the Virtual Keyboard with Dinion Cameras

1. Place the cursor on the **Enter** control (see #5 *Figure 6.6*).
2. Click once to open the **Mode** menu.
3. Click to open the submenus.
4. Click and hold to open the **Install** menu.
5. Click to open the submenus.

Figure 6.6 Dinion Virtual Keyboard window

Number	Button	Description
1	Pan/Tilt	Moves the cursor up.
2	Pan/Tilt	Moves the cursor to the right.
3	Pan/Tilt	Moves the cursor down.
4	Pan/Tilt	Moves the cursor to the left.
5	Enter	Opens menus and functions as an enter button.
6	AUX	Opens the **AUX** Commands dialog box.

6.5 AUX Commands Dialog Box

The **AUX Commands** dialog box simulates the hardware keypad, and allows direct entry of the **AUX** command. To open the **AUX** Commands dialog box, click the **AUX** button on the Virtual Keyboard window.

Figure 6.7 AUX Commands dialog box

Number	Description
1	Initiates camera movement to a shot. The shot is selected by entering a four-digit shot number in the **Shot #** field.
2	Defines a shot.
3	Turns on an auxiliary camera function.
4	Turns off an auxiliary camera function.
5	Displays numerical **AUX** commands entered.
6	Numerical keypad.

6.5.1 Entering Aux Commands

1. Select the command type option on the left.
2. Enter the four-digit number in the **Shot #** field (or click the four numerals via the keypad).
3. Click **Enter**. The command is sent to the device. For a list of AutoDome and Dinion keyboard commands, refer to *Section A AUX Keyboard Commands, page 57*.
4. Note the following:
   - Although the **AUX** button is active for the FlexiDome and Unity Dome Series, no additional commands are available.
   - The **AUX** button is disabled for Dinion mid-range models (Dinion LTC 0355, Dinion LTC 0356, Dinion LTC 0435, Dinion LTC 0455, FlexiDome VF VDM-345 Series, FlexiDome XT VDM-355 Series, FlexiDome VF VDC-445 Series, FlexiDome XT VDC-455 Series).

6.6 Logs Window

The **Logs** window allows you to download and view the diagnostic log information from the connected device.

NOTICE!
The **Logs** window is enabled only when a VG4 Series AutoDome camera is connected to the CTFID. The functionality described here may not be available for all devices.

6.6.1 Downloading and Saving Diagnostic Log Information

1. Click the **Logs** button. The system feedback section of the window displays the diagnostic log information.

Figure 6.8 Logs window download diagnostic log information

2. Click the **Download** button.
3. Click the **Save Logs** button. The **Save As** dialog box opens.

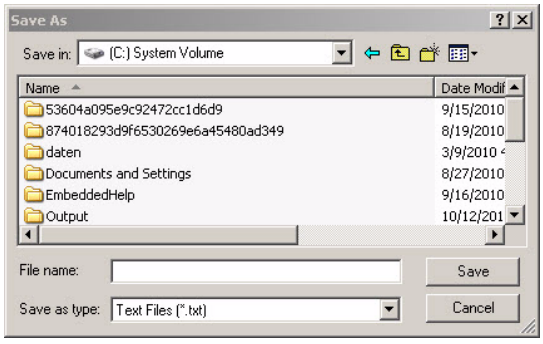


Figure 6.9 Save As dialog box

4. Navigate to the folder where you want to save the log file.
5. Type a name for the log file in the **File name** field.
6. Click **Save**. The configuration file is saved in the specified folder.

6.7 Central Workspace

The central workspace displays the main menu windows. For example, when the **Offline Config** button is clicked and a configuration file or device template has been selected, the central workspace displays a two-pane window. The settings tree and the windows in the central workspace vary depending on the device selected. The settings are divided into different groups. For detailed information about the possible settings, refer to the installation instructions manual for your specific device.

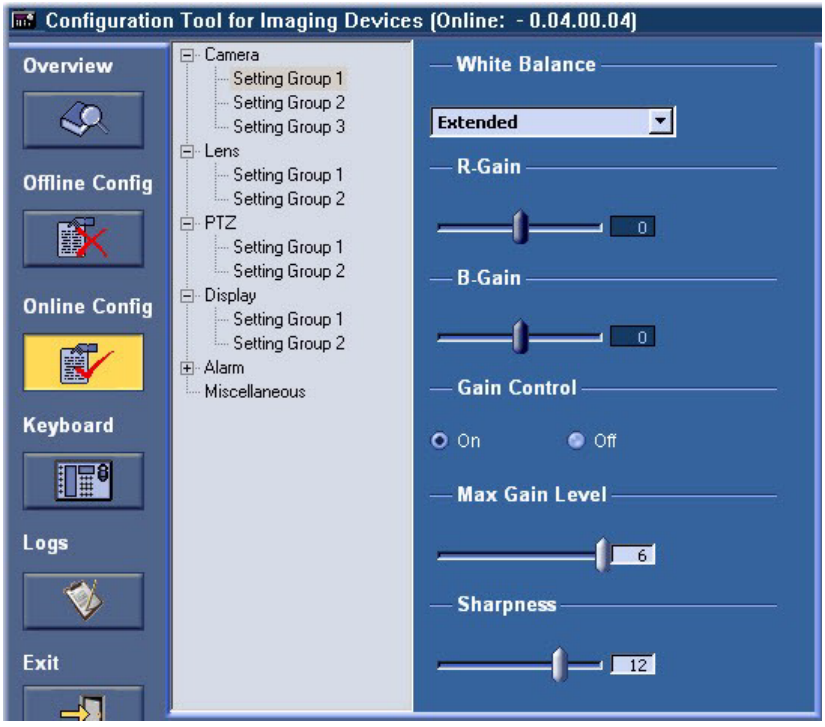
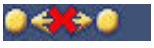


Figure 6.10 Central workspace with settings tree and device settings

6.8 System Feedback

The system feedback section includes device, alarm, and motion information. The **Status** text box displays specifics on the connected device in **Online** mode.

Number	Description
1	Indicates the name of the device currently connected in **Online** mode.
2	Indicates the video type of the device currently connected in **Online** mode.
3	Confirms that the device is connected to the Configuration Tool for Imaging Devices. When a device is not connected, a red X appears. 
4	Confirms that the application is displaying the current device settings. Any changes made to the settings are immediately applied. Other messages may include: – Confirmation message: When you change settings on the device, the setting change is noted in this box. If no message appears, the device has not received the change. – Error message: If there is a problem with the device, an error message may appear. Possible causes may be a connection problem or an incompatibility issue.
5	Detects the alarm condition of a connected device (icon turns red). Click the icon to acknowledge the alarm; the icon then returns to its normal gray color. Note: When the VG4 Series AutoDome detects the alarm condition, the alarm icon turns red and remains red until the alarm condition is cleared. The VG4 Series will not acknowledge an alarm by the icon being clicked. Note: The **Alarm** icon will always be present, but the associated functionality may not be available for all devices.
6	Detects motion of a connected device (icon turns red). Click the icon to acknowledge the motion. The icon returns to its normal gray color. Note: The **Motion** icon will always be present, but the associated functionality may not be available for all devices.

6.9 Operations Column

Button	Description
	Creates a new or opens an existing configuration file. When in **Online** mode, the configuration file opens in **Offline** mode by default.
	Saves the configuration file on which you are working.
	Uploads the open configuration file to the device. The **Upload Configuration** button is only available when working in **Offline** mode.
	Downloads the configuration file from the device to **Offline** mode. Note: If you click this button when working in **Offline** mode and are not connected to a device, the following error message appears: There is no compatible device currently connected.
	Uploads a firmware upgrade directly to the device. Note: Not available on the following models: Dinion LTC 0355, 0356, Dinion LTC 0435, and 0455; FlexiDome VF VDM-345 Series; FlexiDome XT VDM-355 Series; FlexiDome VF VDC-445 Series; and FlexiDome XT VDC-455 Series.
	Restores all settings in the device to factory defaults. CTFID subsequently downloads all settings from the device. Note: The functionality described above is only available when a VG4 Series AutoDome camera is connected to CTFID software.
	Prints the offline configuration settings when in Offline mode.
	Migrates the current offline or online settings of one AutoDome or MIC Series to another device.
	Automatically checks all of the **Select** check boxes and uploads all changes to the device (only appears when in **Offline** mode).
	Changes the language displayed by the Configuration Tool software. Note: The application must be restarted in order to affect the language setting change.
	Accesses the Configuration Tool software **online Help system**.

7 Configuration Settings

The configuration buttons enable the user to upload and download setting changes from a device. It is more efficient to only download/upload the settings that have been modified.

7.1 Saving a Configuration File

1. Connect to the device in **Online** mode. CTFID downloads the current settings of the device automatically.
   Note: If you wish to change settings before you save the file, navigate to the window(s) that display(s) the setting(s) that you want to change. Make the appropriate changes, and then click the check box(es) in the **Select** column.
2. Click the **Save Config** button. The **Save As** dialog box opens.
3. Navigate to the folder where you want to save the file.
4. Name the file and then click **Save**. The software saves the file. The **Save As** dialog box closes.

7.2 Uploading/Downloading Specific Configuration Settings

1. Click the **Offline Config** button. The central workspace displays the device settings in offline mode.
2. Click the **Load Config** button to open the configuration file that contains the current settings for the device. The **Load Configuration** dialog box opens. Select the **Configuration File** option, and then click **Continue**. Navigate to the directory that contains the configuration file, select the file (.ctm), and then click **Open**. The file opens.
3. Navigate to the setting(s) that you want to change. (For example, to change the **Max Gain Level** on an AutoDome or a MIC camera, click the **Offline Config** button, and then select **Setting Group 1** under **Camera**. Move the **Max Gain Level** slide to change the number.)
4. Click the check box(es) in the **Select** column.

Figure 7.1 Uploading and Downloading Specific Changes

5. Select additional device settings as appropriate.

6. Click the **Upload** or **Download Configuration** button. A dialog box opens to confirm that you want to replace the selected settings in the offline configuration file with the specific current device settings. Only the selected settings are uploaded or downloaded. Note: The device must be connected to CTFID software to upload or download device settings.
7. Click **Yes** to begin uploading or downloading the settings. In the system feedback section of the window, a progress bar indicates the progress of the operation. This can be a lengthy operation, depending on the number of configuration changes made. When the upload or download finishes, a confirmation message appears.

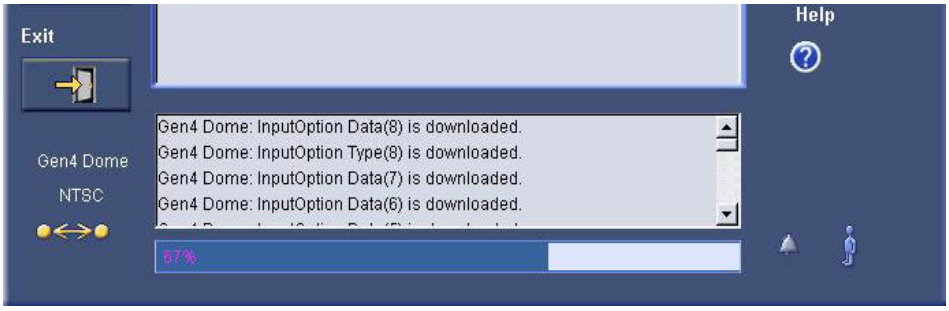


Figure 7.2 Progress Bar

NOTICE! If you have a number of devices that require the same change of settings, you can move from device to device, leaving the application open and uploading or downloading the same Select settings from the **Offline** mode configuration file. The Select check boxes are NOT saved when you save and close the configuration file.

7.3 Downloading All Configuration Settings

1. Click the **Offline Config** button or the **Online Config** button. The **Offline Configuration** window or **Online Configuration** window opens in the central workspace.
2. Click **Select All**. The **Select** check boxes are checked automatically; the button changes to **Deselect All**.
   Note: If you click the **Download Configuration** button before selecting the check boxes, you receive an error.
3. Click the **Download Configuration** button. The device settings are automatically downloaded into the application and displayed in the **Offline Configuration** window. In the system feedback section of the window, a progress bar indicates the progress of the operation. This can be a lengthy operation, depending on the number of configuration changes made. When the upload or download finishes, a confirmation message appears.

7.4 Uploading All Configuration Settings to a Device

1. In **Offline** mode, open the configuration file that contains the settings to upload. (See Step 2 of *Section 7.2 Uploading/Downloading Specific Configuration Settings, page 30*.)
2. Click **Select All**. The **Select** check boxes are checked automatically; the button changes to **Deselect All**.
3. Click the **Upload Configuration** button. A dialog box opens to confirm you want to replace the current device settings with those in the offline configuration file.
4. Click **Yes** to begin uploading the settings. In the system feedback section of the window, a progress bar indicates the progress of the operation. This can be a lengthy operation, depending on the number of configuration changes made. When the upload or download finishes, a confirmation message appears.

7.5 Migrating Configuration Settings

The Migration feature allows you to download the configuration settings of one AutoDome or MIC then upload those settings to another AutoDome or MIC. This feature ensures that the settings of each camera in a surveillance system are configured the same way.
The CTFID saves downloaded settings in a configuration file (.ctm) on the operator's computer. To upload the settings stored in the .ctm file, connect another AutoDome or MIC to the computer that contains the CTFID application and has access to the configuration file. Next, use the Migration upload utility to copy the settings in the configuration file to the AutoDome or MIC.
Note: Migration is available for transferring settings only between AutoDomes or MIC cameras. If you attempt to migrate settings between an AutoDome and MIC and another imaging device or between two non-AutoDome imaging devices, the CTFID relays a message that the imaging devices are incompatible. To migrate configuration settings, follow these steps:

1. Connect an AutoDome or MIC to a computer that contains the CTFID application. Ensure that you can connect this computer to the AutoDome or MIC that is to upload the configuration settings.
2. Launch the CTFID application on a computer that you can connect to different AutoDome or MIC Series cameras.
3. Configure the offline or online settings for the AutoDome or MIC using the CTFID main screen.
4. Click the **Migration** button. The **Migration** dialog box opens.

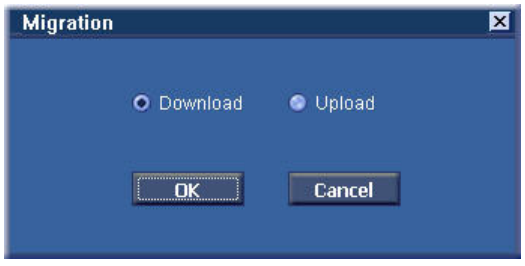


Figure 7.3 Migration download window

5. Select the **Download** option and then click **OK**. The CTFID collects the parameters for each AutoDome or MIC setting. The **Save As** dialog box opens.

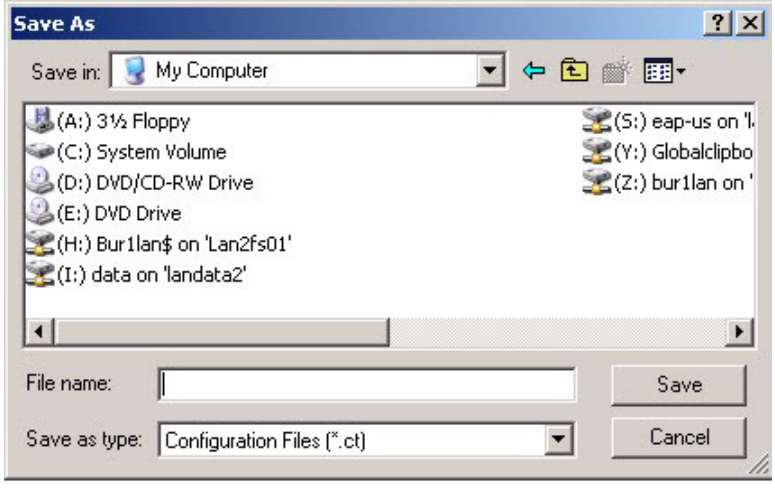


Figure 7.4 Migration Save As dialog box

6. Navigate to the directory in which you want to store the configuration file (.ctm).
7. Type a name for the file in the File name input box and then click **Save**. The main CTFID window reappears.
8. Disconnect the AutoDome or MIC from the computer.
9. Connect the AutoDome or MIC that is to upload the settings to the computer.
10. Launch the CTFID application and ensure that the tool connects to the AutoDome or MIC.
11. Click the **Migration** button. The **Migration** dialog box opens.

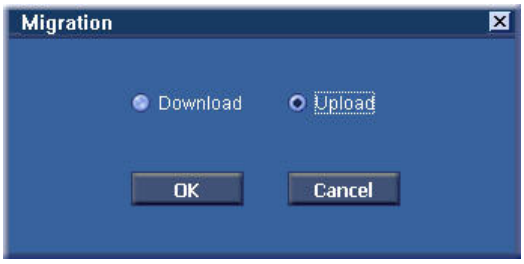


Figure 7.5 Migration upload window

12. Select the **Upload** option and then click **OK**. The **Open** dialog box opens.

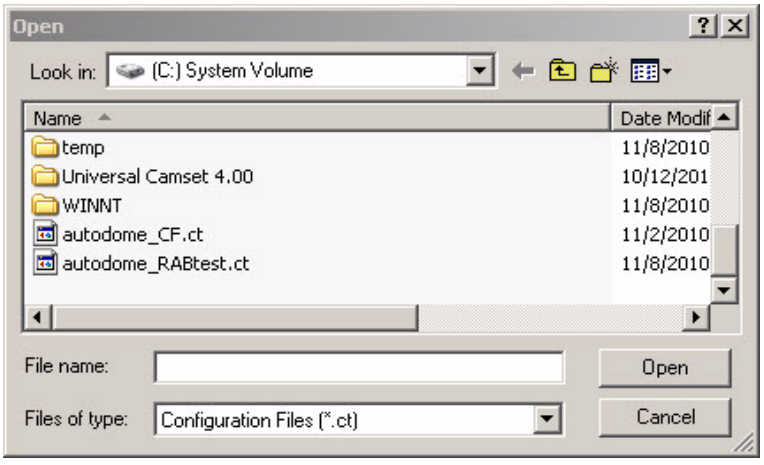


Figure 7.6 Migration Open dialog box

13. Navigate to the directory that contains the configuration file, select the file (.ctm), and then click **Open**. The CTFID software begins to upload the settings in the configuration file to the AutoDome.

7.6 Uploading Firmware to a Device

To upload firmware to a device, updates are available on the boschsecurity.com website or call technical support for information on receiving a CD-ROM.

1. Click the **Upload Firmware** button. The **Open** dialog box opens.

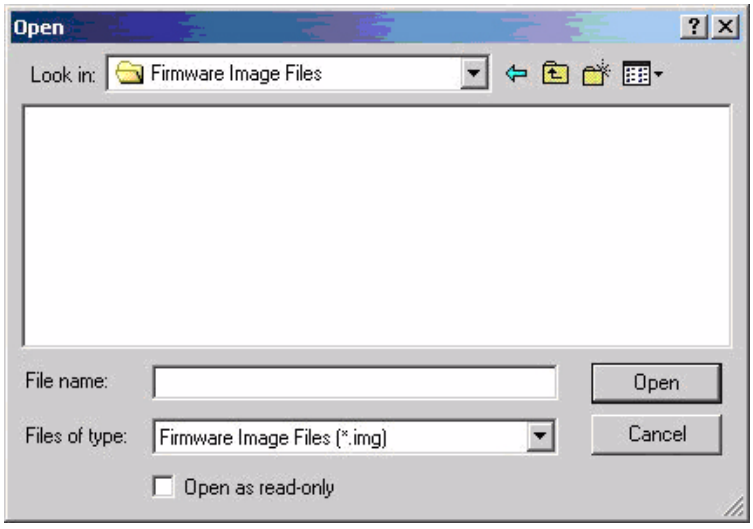


Figure 7.7 Open dialog box

2. Navigate to the directory that contains the .img file, select the .img file, and then click **Open**. The upload process erases the existing firmware and loads the new firmware into the device.

7.7 Uploading Firmware to a VG4/VG5 Series AutoDome

To upload firmware to a device, updates are available on the boschsecurity.com website or call technical support for information on receiving a CD-ROM. See the *VG4/VG5 Firmware Update Manual* for more information about upgrading a VG4 or VG5 Series AutoDome with the CTFID tool.

1. Click the **Upload Firmware** button. The **Choose Service Pack Folder** window opens.

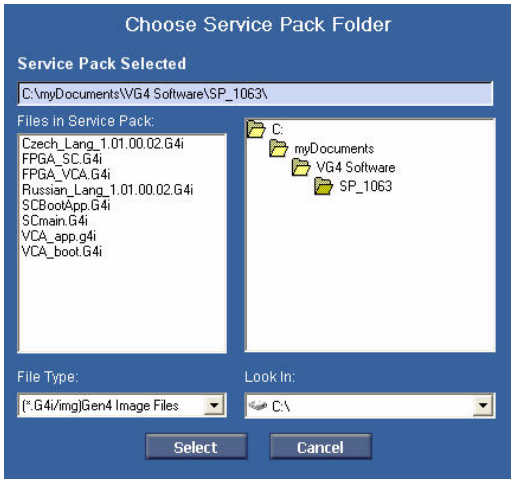


Figure 7.8 Service Pack dialog box

2. Navigate to the **Service Pack** folder.
3. Click the **Select** button.

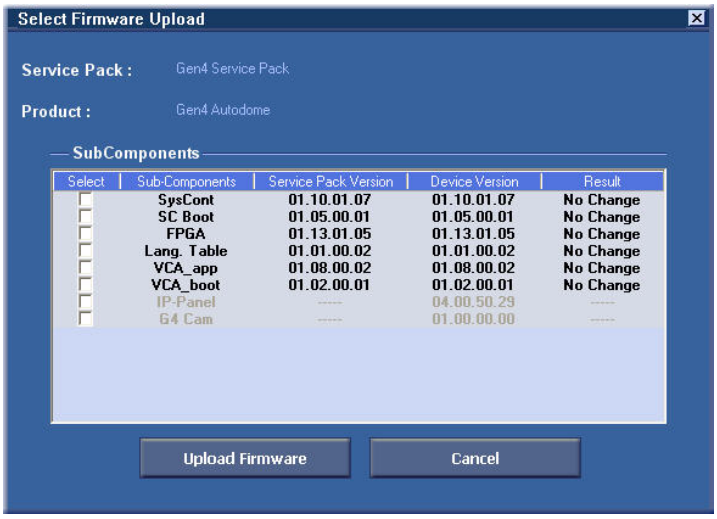


Figure 7.9 Firmware upload selection dialog box

4. Select the subcomponents that you want to update.
5. Click the **Upload Firmware** button. The upload process erases the existing firmware and loads the new firmware into the device.

8 Settings Tree Options

Options available within the settings tree will vary depending on the device selected. The table below identifies available features. *Models and/or options may vary depending on the product.

Feature	Description	Device	Default	Options
Action	Enables the operating mode to be selected when an alarm is activated.	Dinion^{XF}	None	None, Mode 1, Mode 2, Mode 3
Active	Controls how the alarm input is activated. Options include: **None:** Disabled. **High**: Alarm is activated when a logic high is received. **Low**: Alarm is activated when a logic low is received.	Dinion^{XF}	None	None, High, Low
Address	Allows the appropriate dome to be operated via the numerical address in the control system. The address may be set locally using the Bilinx Configuration Tool for Imaging Devices (CTFID) or remotely using the Fast Address function (see Fast Address).	G3A Series, NV Series, VG4 Series, G3A Series, VG5 Series, MIC 550, MIC 612	0000	(none)
AGC Type	Controls the Automatic Gain Control (AGC).	MIC 612	Outdoor	Outdoor, Indoor, Low Contract
Alarm Action	Selects the operating mode of the camera when the alarm input is active.	Dinion 2X	None	None, Mode 1, Mode 2, Mode 3, Mode 4, Mode 5, Mode 6, Mono
Alarm Input	Triggers an alarm when the input changes the condition. Options include: **N.O.** (Normally Open, dry contact). **N.C.** (Normally Closed, dry contact). **N.C.S.** (Normally Closed Supervised contact, available only for alarm inputs 1 and 2). **N.O.S.** (Normally Open Supervised contact, available only for alarm inputs 1 and 2).	VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	N.O.	**VG4 Series**: N.O., N.C., N.C.S., N.O.S. **VEZ Series**: N.O., N.C.
Alarm Inputs	Select none to disable the alarm input. Select active-high or active-low for the alarm input connector.	Dinion 2X, UPH Series	None	None, High, Low, Mode 1, Mode 2, Mode 3

Feature	Description	Device	Default	Options
Alarm Output	**VMD:** Output relay closes on VMD alarms. **External device:** Make the output relay available to remote communication devices. **Night mode active:** Output relay closes when camera is in monochrome mode. **Filter toggle**: Output relay closes just before the IR filter starts moving and opens when video level has stabilized (2 to 3 seconds).	Dinion 2X, UPH Series	VMD	External Device, VMD, Mono Mode Active, IR Filter Toggle, Remote
ALC Level (Automatic Light Control)	Automatically adjusts the camera according to the brightness of the scene.	Dinion 2X, Dinion^{XF}, Dinion FlexiDome, FlexiDome 2X Unity, UPH Series	0	-15 to +15
ALC Speed (Automatic Light Control)	Controls the speed for the video-level control loop.	Dinion 2X, Dinion^{XF}, FlexiDome 2X, Unity, UPH Series	Medium	Fast Medium Slow
Area Select	Controls the quadrant that you are editing.	Dinion^{XF}, UPH Series	1	1 to 4
Area State	Actively checks for motion in a predefined area.	Dinion^{XF}, UPH Series	On	On, Off
AutoBaud	Activates AutoBaud.	VG4 Series, VEZ Series	On	On, Off
Auto Black	Boosts the video signal level to produce a full amplitude video signal even when the scene contrast is less than full range (e.g. glare, fog, mist etc.). The darkest part of the signal is set to black and the lightest part to white, thus increasing the contrast.	Dinion^{XF} Dinion FlexiDome 2X FlexiDome Unity UPH Series	On	On, Off

Feature	Description	Device	Default	Options
Auto Focus	Continuously adjusts the lens automatically to the correct focus for the sharpest picture. Options include: **Spot**: Adjusts the auto focus to the center of the image. **Constant:** Sets the auto focus to on for the entire image. **Manual**: Disables the auto focus and sets the focus for manual operation.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Manual	Spot, Constant, Manual
Auto Iris	Automatically adjusts the lens to allow the correct illumination of the camera sensor. This type of lens is recommended for use where there are low light or changing light conditions. Options include: **Constant:** Sets the auto iris function to a constant value for auto iris operation. **Manual:** Disables the auto iris function and sets the iris control for manual operation.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Constant	Constant, Manual
Auto Iris Level	Increases or decreases brightness according to the amount of light.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	8	1 to 15
Auto Pan Speed	Continuously pans the camera at a speed between right and left limit settings.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	30	1 to 60
Auto Pivot	Tilts the camera through the vertical position as the camera is rotated to maintain the correct orientation of the image.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	On	On, Off
Auto SensUP Max	Sets the limit for sensitivity when the shutter speed is set to Auto SensUP.	VG4 Series	15x	2x, 4x, 7.5x, 15x
AUX	Enters the Aux Command dialog box where you send control commands to the camera.	VG4 Series, VG5 Series, MIC 550, MIC 612	0	0-99 See *Section A AUX Keyboard Commands, page 57*.

Feature	Description	Device	Default	Options
B-gain	Adjusts the blue gain to optimize the white point.	Dinion 2X, Dinion^{XF} LTC 0485, LTC 0610, LTC 0495, LTC 0620, Dinion LTC 0435, LTC 0455, FlexiDome VF VDC-445 and XT, FlexiDome 2X VDC-455, Unity Dome, UPH Series, VG5 Series, MIC 550, MIC 612	0	-5 to +5
Backlight Compensation (BLC)	Optimizes the video level for the selected area of the image. Parts outside this area may be underexposed or overexposed.	G3A Series, ENV Series, VG4 Series, VEZ Series, Dinion^{XF}, Dinion FlexiDome, Unity, VG5 Series, MIC 550, MIC 612	Off	On, Off
Baud Rate	The speed at which telecommunicated data is transmitted, measured in bytes per second (Bps).	G3A Series, ENV Series, VG4 Series*, VEZ Series*, VG5 Series, MIC 550 Series, MIC 612	9600	9600, 19200, 38400, 57600 2400*, 4800*, 9600*, 19800*, 38400*, 57600*
BiPhase/Audio	Turns BiPhase/Audio on and off. (Note: Audio is intended for a VG4 with an Ethernet module. Selecting audio disables Biphase communications.)	VG4 Series, VG5 Series, MIC 550, MIC 612	BiPhase	BiPhase, Audio
Black Level	The level of the video signal that corresponds to the maximum limits of the black areas of the picture.	Dinion 2X, Dinion^{XF} FlexiDome 2X, UPH Series	0	-55 to +55
Blanking	Cuts off the electron beam in a camera pickup device or picture tube during the retrace period. It is a signal that is composed of recurrent pulses at line and field frequencies. It is intended primarily to make the retrace on a pickup device or picture tube invisible.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	Not Blanked	Not Blanked, Blanked

Feature	Description	Device	Default	Options
BLC Level	Electronically compensates for high background lighting to give detail that would normally be silhouetted.	Dinion^{XF} Unity, UPH Series	0	-15 to +15
BLC Mode	Toggles the compensation for high background lighting to give detail that would normally be silhouetted	UPH Series	Off	On, Off
Cable Comp Level	Prevents image degradation caused by signal losses when transmitting video over long cable lengths.	Dinion 2X, Dinion^{XF}	(not active)	0 to 15
Cable Comp Type	Allows you to choose the coax being used. If unknown, select Default. Note: Anything above 1,000 ft. may cause a decrease in picture quality.	Dinion 2X, Dinion^{XF}	Off	Off, Default, RG59, Coax 12, Coax 6
Camera Buttons	Prevents unauthorized change of the camera settings by disabling the buttons.	Dinion 2X, Dinion^{XF}, Dinion, FlexiDome, FlexiDome 2X, Unity, UPH Series	Enabled	Enabled, Disabled
Camera Height	The straight vertical height in respect to the surface that you are tracking.	G3A Series, ENV Series, VG4 500 Series, VG5 Series	12 ft.	8 to 100 ft.
Camera ID	16-character camera name that may be displayed according to the ID position.	Dinion 2X, Dinion^{XF} FlexiDome 2X, UPH Series	(blank field)	(blank field)
Camera ID Position	Identifies the location of the camera ID label on the output screen.	Dinion 2X, FlexiDome 2X	Off	Off Top Left Top Right Bottom Left Bottom Right
Camera OSD	Enables or disables the camera on-screen display information from the live video image.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	On	On, Off

Feature	Description	Device	Default	Options
Color Burst	**Off**: The color burst in the video signal is switched Off in monochrome mode. **On**: The color burst remains active even in monochrome mode (required by some DVRs and IP encoders).	Dinion 2X, FlexiDome 2X	Off	On, Off
Custom Tour Period	Defines the length of time for a custom camera tour.	VG4 Series, VG5 Series, MIC 550, MIC 612	3 sec.	3-5 sec, 10, 15, 20, 25, 30, 40, 50 sec, 1-5 min., 10 min.
Day/Night	Camera is equipped with a motorized IR filter. The mechanical IR filter can be removed in low-light or IR illuminated applications by configuration settings.	Dinion 2X, Dinion^{XF} LTC 0495, LTC 0610, FlexiDome 495, FlexiDome 2X, UnityDome DN VG4-162 and VG4-164, DN VG4-152 and VG4-154	Auto	Auto, Color, Monochrome
Default Shutter	Allows the shutter speed to be set to a fast speed to eliminate motion blur and provides detailed and clear images of fast-moving objects while there is sufficient light. When light levels fall and other adjustments have been exhausted, the shutter speed reverts to the standard setting to maintain sensitivity.	G3A Series, ENV Series, Dinion 2X Dinion^{XF}, FlexiDome, FlexiDome 2X, Unity, UPH Series	1/60	1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000
Digital Zoom	Enables or disables the ability to enlarge or reduce the size of an image.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	On	On, Off
Display Pattern	Activates the test pattern mode to verify electronics (the output of the digital data channel) for the thermal camera.	MIC 612	Off	Off, Color Bars
Display Position	Controls the position for the OSD stamping.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	0	0 to 16

Feature	Description	Device	Default	Options
DVR/IP Encoder	**On**: The camera output is optimized for connection to a DVR or IP encoder to compensate for compression methods. **Off**: The camera output is optimized for connection to an analog system (matrix switcher or monitor.	Dinion 2X, FlexiDome 2X	Off	On, Off
Dynamic Noise Reduction	Measures the noise (image artifacts) in the picture and automatically reduces it.	Dinion 2X, Dinion^{XF}, FlexiDome 2X, Unity, UPH Series	Auto	Auto, Off
Dynamic Engine	**Off:** Turns off all automatic scene detail and enhancements (only recommended for testing). **XF-DYN**: Extra internal processing is enabled for low-light applications (traffic, etc.). **2X-DYN**: 2X-Dynamic adds dual sensor exposure to the XF-DYN features. In harsh lighting conditions pixels from each exposure are mixed to give a more detailed image (use 2X-DYN when SmartBLC is not required). **SmartBLC:** BLC window and weighting factor are automatically defined. Camera dynamically adjusts these for changing light conditions. Includes all the benefits of 2X-DYN.	Dinion 2X, FlexiDome 2X		Off, XF Dyn, 2X-Dyn, (2X-DYN is available only in LTC 0498 models) SmartBLC
Enabled	Activates or deactivates Alarm Rules.			Yes, No
Filtermove	Activated when the filter changes.	Dinion^{XF}		
Flat-Field Correction	The thermal camera uses an internal process called flat-field correction (FFC) to improve the?quality of the thermal video image displayed on the monitor. During this process, a shutter?rotates in front of the Focal Plane Array (FPA) to give a uniform temperature (a flat field) to?every detector element.	MIC 612		

Feature	Description	Device	Default	Options
Focus Polarity	Capability to reverse the operation of the focus button on the controller.	G3A Series, ENV Series, VG4 Series	Normal	Normal, Reverse
Focus Speed	Controls how fast the auto focus will readjust when the focus becomes blurred.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	2	1 to 8
Freeze Frame	Holds a preposition video frame while moving to another preposition. The video is unfrozen once the new scene is reached.	VG4 Series, VEZ Series, VG5 Series, MIC 550 Series, MIC 612	On	On, Off
G-Gain	Adjusts the green gain to optimize the white point.	Dinion^{XF} LTC 0485, LTC 0610, LTC 0495, LTC 0620, Unity, UPH Series	0	-50 to +50
Gain	An increase in voltage or power, usually expressed in dB.	Dinion 2X, Dinion^{XF}, FlexiDome 2X, Unity, UPH Series	AGC	AGC, Fixed
Gain Control	Automatically sets the gain to the lowest possible value needed to maintain a good picture.	G3A Series, ENV Series, VG4 Series, VEZ Series, Dinion, FlexiDome, VG5 Series, MIC 550, MIC 612	On	On, Off
Go to Shot	Switches to a predefined shot.	G3A Series, ENV Series	1	0 to 99
Heater	An internal heater that compensates for outdoor environments.	FlexiDome, FlexiDome 2X	Off	On, Off
Horizontal Phase	Adjusts the horizontal phase offset.	Dinion 2X, Dinion^{XF}, Dinion	0	-25 to 125
Illuminator	Controls IR illuminators. When ON, the camera gives a much better image at low light levels.	MIC Series 550IR	Off	Off, On, Auto
Illuminator Intensity	Controls the intensity of the illuminator.	MIC Series 550IR		

Feature	Description	Device	Default	Options
Inactivity	Selects the time period for which the dome must be not controlled before the inactivity event is executed. Options include: **Off**: Select Off when the dome should remain in the position. **Scene 1**: Select Scene 1 when the dome should go to Scene 1. **Previous Aux**: Select Previous Aux when the dome should go to the previous Aux value.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Off	Off, Scene 1, Previous Aux
Inactivity Period	Determines the behavior of the dome when the control for dome is inactive.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	2 min.	3-5 sec, 10, 15, 20, 25, 30, 40, 50 sec, 1-5 min., 10 min.
ID Border	Places a border around the camera ID on the output screen.	Dinion 2X, FlexiDome 2X	Off	On, Off
ID Position	Determines the position of the camera ID name.	Dinion^{XF}, UPH Series	Off	Off, Top, Bottom
IR Contrast	Optimizes the camera's contrast. Options include: **Enhanced**: The camera optimizes contrast in applications with high IR illumination levels. **Normal**: The camera optimizes contrast in mono application with visible light illumination.	Dinion 2X, Dinion^{XF} LTC 0495, LTC 0610, FlexiDome 495, Flexidome 2X, UnityDome DN VG4-162 and VG4-164, DN VG4-152 and VG4-154	Normal	Enhanced, Normal
IR Focus Correction	Optimizes the focus for IR lighting.	MIC 550 Series	Off	On, Off, Auto
Iris Polarity	Capability to reverse the operation of the iris button on the controller.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	Normal	Normal, Reverse
Iris Speed	Controls how fast the iris will adjust the opening according to the illumination of the scene.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	5	1 to 10
Input	Selects the alarm input type.	G3A Series, ENV Series	Disabled	Disabled, N.O., N.C.
Input #/Output #	Defines the type of physical input/output.	VG4 Series	1	1 to 4

Feature	Description	Device	Default	Options
Input/Output Option	Defines a list of alarm inputs/ outputs for an alarm rule.	VG4 Series, VG5 Series, MIC 550, MIC 612	None	Alarm Inputs 1-7, Alarm Output 1-3, Alarm Relay, OSD, Shot None, None Note: options vary based on the VG4 configuration
In Tour	Determines if the scene is included in a preposition tour.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	No	Yes, No
Language	Controls the language for the OSD.	G3A Series, ENV Series, VG4 Series*, Dinion 2X, FlexiDome 2X	English	English, French, Spanish, German, Portuguese, Polish, Italian, Dutch, Czech*, Russian*
Line Lock Delay	Adjusts the vertical line lock phase delay from 0° to 359°.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	0	0 to 359°
Low Pressure	Indicates if the unit is pressurized.	VG4 Series with pressurized environmental housing	On	On
MAC Address	Shows MAC address (factory set, cannot be changed).	Dinion 2X, Flexidome 2X	no default	no selections
Mask Active	Turns each of the four masks on or off.	Dinion 2X, FlexiDome 2X	Off	On, Off
Mask Select	Identifies one of the four different areas to be masked.	Dinion 2X, FlexiDome 2X	1	1, 2, 3, 4
Max Zoom Speed	Controls the zoom speed.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Slow	Slow, Medium, Fast

Feature	Description	Device	Default	Options
Max Gain Level	Controls the maximum value the gain can have during AGC operation.	G3A Series, ENV Series, VG4 Series, VEZ Series, Dinion 2X, Dinion^{XF}, FlexiDome 2X, Unity, UPH Series	6 6 20 20	1 to 6 1 to 6 0 to 30 0 to 28
Mode ID	10-character title.	Dinion^{XF}, Dinion 2X, UPH Series	24 Hour	
Mode ID Position	Identifies the location of the mode ID label on the output screen.	Dinion 2X, FlexiDome 2X	Off	Off Top Left Top Right Bottom Right Bottom Left
Mono Burst	Adjusts the color burst. Options include: **On**: The color burst remains active even when the camera is in monochrome mode. **Off**: The color burst in the video signal is switched OFF when the camera is in monochrome mode.	Dinion^{XF} LTC 0495, LTC 0610, FlexiDome 495, UnityDome DN VG4-162 and VG4-164, DN VG4-152 and VG4-154	Off	On, Off
Motion	The sensitivity number the camera detects in an active area.	Dinion^{XF}	0	None
Multi alarm	Activates or deactivates multiple alarm settings.	MIC Series 550, 550IR	Off	On, Off
Night Mode	Adjusts the filter operation of the camera. Options include*: **Auto**: Switches the filter depending on the scene illumination level. **On**: Removes the IR filter allowing full IR sensitivity. **Off**: Allows the IR filter to be available for color mode operation.	G3A Series, ENV Series, VG4 Series, Dinion, Unity, VG5 Series, MIC 550, MIC 612	Auto Auto Auto Auto	Off, On, Auto Off, On, Auto Off, On, Auto Off, Forced, Auto
Night Mode Color	Switches an Auto IR filter in monochrome operation.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	Off	On, Off

Feature	Description	Device	Default	Options
Night Mode Threshold (IRE)	Adjusts the auto level at which the camera switches to monochrome operation.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	30	10 to 55
NightSense	Activates the method of boosting the sensitivity of high-resolution Bosch color cameras by 9db (a factor of 3) by combining the signal of the color image in a single monochrome picture.	UPH Series	Auto	Off, Forced, Auto
Notch Filter	Switches notch filter on or off. The notch filter can remove a Moiré pattern or color artifacts caused by closely spaced vertical lines or objects (e.g. vertical security bars over windows).	Dinion 2X, FlexiDome 2X	Off	On, Off
Orientation	Reverses the image 180 degrees (ideal when mounting upside down).	VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Normal	Normal, Inverted, Canted
OSD (on-screen display)	Text for on-screen display alarm (16 characters maximum).	G3A Series, ENV Series, Dinion^{XF}, Dinion, FlexiDome, Unity	On	On, Off
OSD Alarm Text	17-character text displayed on a monitor when the camera triggers a motion detection alarm.	Dinion 2X, FlexiDome 2X	no default	MOTION DETECTED
OSD Brightness	Adjusts the brightness for the OSD. The value 0 is for a dark display and 10 is for a bright display.	G3A Series, ENV Series, VG4 Series, VEZ Series	0	0 to 10
OSD Feedback		Dinion 2X, FlexiDome 2X, UPH Series	On	On, Off
Output Period	Controls the length of time the output relay is activated. **Follow**: Alarm output will remain activated for the same amount of time the alarm input is activated. **Latched**: Alarm stays on until the operator clears it.	G3A Series, ENV Series, VG4 Series, VEZ Series	Follow	Follow, 1-5 sec, 10, 15, 30 sec, 1-5 min., 10 min. Latched
Password	Controls access to locked command menus.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	0000	(none)
Pattern	Selects pattern for all masks.	Dinion 2X, FlexiDome 2X	Black	Black, Grey, White, Noise

Feature	Description	Device	Default	Options
Peak Average	Adjusts the balance between peak and average video control. At 0 the camera controls the average video level, at +15 the camera controls the peak video level.	Dinion 2X, Dinion^{XF}, FlexiDome 2X, Unity, UPH Series	0	-15 to +15
Peak White Invert	Use Peak White Invert to reduce glare from the CRT/LCD display. Use in ANPR/LPR applications to reduce headlight glare. (Test on-site to ensure that it does benefit the application and is not distracting for operators of the security system.)	Dinion 2X, FlexiDome 2X	Off	On, Off
Pre-Comp	Amplifies the video gain to compensate for long distance cable runs.	VG4 Series	1	1-10
Priority	Only available in day/night auto mode. The higher priority as selected below as light level decreases. Options include: **Color**: Camera gives a color image as long as the light level permits. **Motion**: The camera avoids motion blur as long as the light level permits.	Dinion 2X, Dinion^{XF} LTC 0495, LTC 0610 FlexiDome 495, FlexiDome 2X, UnityDome DN VG4-162 and VG4-164, DN VG4-152 and VG4-154	Color	Motion, Color
PTZ Fixed Speed	Controls the pan, tilt, zoom with a fixed speed value.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	4	1 to 15
R-gain	Adjusts the red gain to optimize the white point.	Dinion 2X, Dinion^{XF} LTC 0485, LTC 0610, LTC 0495, LTC 0620, Dinion LTC 0435, LTC 0455, FlexiDome VF VDC-455 and XT VDC-455, FlexiDome 2X, Unity, UPH Series, VG5 Series, MIC 550, MIC 612	0	-5 to +5

Feature	Description	Device	Default	Options
Saturation	Adjusts the color saturation. A setting of -15 leads to a monochrome image.	Dinion 2X, Dinion^{XF} LTC 0485, LTC 0610, LTC 0495, LTC 0620, FlexiDome 2X, Unity, UPH Series	0	-15 to +5
Scene #	Switches between scenes.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	1	1 to 99
Second Video Channel	Switches the video channel between Thermal camera option and Visible (optical) camera?option.	MIC 612	Thermal	Thermal, Video
Sector #	Switches between sector names.	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	1	1 to 16
Select	The trigger for the alarm output.	Dinion^{XF}	VMD	VMD, Remote
Sensitivity	Determines the amount of motion detected in a predefined area required to trigger the alarm output.	Dinion	0	0 to 100
Sensitivity Up	Increases camera sensitivity by increasing the integration time on the CCD. This is accomplished by integrating the signal from a number of consecutive video frames to reduce signal noise.	Dinion^{XF}, Unity, UPH Series	4x	Off, 2x, 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x
SensUp (Auto SensUp)	Increases camera sensitivity by increasing the integration time on the CCD. This is accomplished by integrating the signal from a number of consecutive video frames to reduce signal noise.	Dinion 2X, FlexiDome 2X, VG4 Series	4x 15x	15x, 10x, 9x, 8x, 7.5x, 7x, 6x, 5x, 4x, 3x, 2x, Off
Sharpness	Adjusts the sharpness of the picture.	G3A Series, ENV Series, VG4 Series, VEZ Series, Dinion 2X, FlexiDome 2X, VG5 Series, MIC 550, MIC 612	6 6	1 to 16
Sharpness Level	Adjusts the sharpness of the picture.	Dinion^{XF}, Unity, UPH Series	0	-15 to +15

Feature	Description	Device	Default	Options
Show Camera ID	Displays the camera ID on the monitor.	Dinion 2X, FlexiDome 2X	Off	On, Off
Show Test Patterns	Select the desired test pattern to help installation and fault-finding.	Dinion 2X, FlexiDome 2X		Color Bar 100%, UV Plane, Sawtooth 2H, Greyscale 11-Step, Cross Hatch, Checkerboard
Shutter/AGC	Adjusts the electronic shutter speed (AES). Controls the time period for which light is gathered by the collecting device. Options include*: **Auto**: Allows the camera to automatically set the shutter speed. **AES**: Camera maintains the selected shutter speed as long as the light level of the scene permits. **FL**: Flickerless mode avoids interference from light sources (recommended for use with video iris or DC iris lenses only). **Fixed**: Allows a user-defined shutter speed.	G3A Series, ENV Series, VG4 300 and 500 Series, VEZ Series, Dinion 2X, Dinion, Dinion^{XF} FlexiDome, FlexiDome 2X Unity, UPH Series	1/60 1/60 AES AES Fixed AES	Auto, 60x, 30x, 15x, 7.5x, 4x, 2x, 1/1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000, Fixed, AES, FL*
Shutter Mode	Turns Auto SensUP on or off.	VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Auto SensUp (VG4 Series 300 and 500 Series)	Auto SensUp, Off
Spot Meter Display	Controls the display of the spot meter, ON or OFF, and switches between degrees C and F.?The Spot Meter must be ON before either the Thermal Digital readout or Thermometer can be?displayed.	MIC Series 612	Off	On, Off
Stabilization	An algorithm that virtually eliminates camera shake in both the vertical and horizontal axes, resulting in exceptional image clarity (see also Image Stabilization).	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	On	On, Off

Feature	Description	Device	Default	Options
Standard Tour Period	Changes dwell time between presets during the tour.	VG4 Series	5 sec	3-5 sec, 10, 15, 20, 25, 30, 40, 50 sec, 1-5 min., 10 min.
Sub Carrier Phase	When in Genlock, adjusts the sub carrier offset in 1-degree increments. Only available when in Genlock.	Dinion 2X, Dinion^{XF}, Dinion	0	0 to 358
Switch Level	Adjusts the auto level at which the camera switches to monochrome operation.	Dinion 2X, Dinion^{XF} LTC 0495, LTC 0610, FlexiDome 495, FlexiDome 2X, UnityDome DN VG4-162 and VG4-164, DN VG4-152 and VG4-154	0	-15 to 15
Sync In	Electronic pulses that are inserted in the video signal for the purpose of assembling the picture information in the correct position.	Dinion 2X, Dinion^{XF}, UPH Series	High	High, 75 Ohm
Sync Mode	Selects the synchronization method for the camera. Options include: **Crystal**: Synchronizes the camera to an internal crystal (default). **Line Lock**: Synchronizes the camera to AC power and eliminates picture roll in multi-camera systems.	G3A Series, ENV Series, VG4 Series, VEZ Series, Dinion^{XF}, Dinion, FlexiDome, Unity	Internal	Line Lock, Crystal - I, Internal, Genlock*
Synchronization	Selects the synchronization method for the camera.	Dinion 2X, Dinion^{XF}, Dinion, FlexiDome, Unity	0	Line Lock, Internal, Genlock, HV Lock*
Thermal Image	Adjusts the display mode for the thermal camera. Options.	MIC 612	White Hot	White Hot, Black Hot, Fusion, Rainbow, Glowbow, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot

Feature	Description	Device	Default	Options
Ticker Bar	The ticker bar moves continuously to show that the image is live and not frozen or played back.	Dinion 2X, FlexiDome 2X	Off	On, Off
Tilt-Up Limit	Sets the upper tilt limit of the camera.	VG4 Series, VEZ Series, VG5 Series		Selected scene
Title	16-character scene name that is displayed when the Dome moves to a scene (must be enabled or disabled via the Title OSD).	G3A Series, ENV Series, VG4 Series, VG5 Series, MIC 550, MIC 612	(blank field)	(blank field)
Title OSD	Controls how the camera displays the on-screen Sector and Scene titles. Options include: **Off**: No on-screen titles are displayed. **On**: Always displays on-screen titles. **Momentary**: On-screen titles displayed for a few seconds, then hidden (default).	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	Momentary	On, Off, Momentary
Tour Period	Controls the waiting time until the dome moves to the next scene.	G3A Series, ENV Series, VG4 Series, VEZ Series, VG5 Series, MIC 550, MIC 612	5 sec.	3 sec. to 10 min.
Track	Alarm input option that turns the tracker on when the alarm is activated.	G3A Series, ENV Series, VG5 600 Series	Off	On, Off
Tracker	Automated motion tracking system.	G3A Series, ENV Series, VG4 500 Series, VG5 600 Series	Off	On, Off
Tracker Communication	Enables or disables communication between the camera and tracker module.	G3A Series, ENV Series	On	On, Off
Tracker Period	Controls the length of time the tracker is activated. **Follow Input**: Tracker remains activated for the same amount of time the alarm input is activated. **Latched**: Tracker stays on until the operator clears it.	G3A Series, ENV Series, VG4 500 Series, VG5 600 Series	Follow Input	Follow Input, 1 sec. to 10 min., Latched
Transmit	Alarm input option that enables a Bilinx alarm message to be transmitted to the head end equipment.	G3A Series, ENV Series	Off	On, Off

Feature	Description	Device	Default	Options
Trigger	Alarm output option that selects the input to control the alarm output.	G3A Series, ENV Series	(none selected)	Input 1, Input 2, Input 3, Input 4
Vertical Phase	Adjusts the vertical phase offset.	Dinion 2X, Dinion^{XF}, FlexiDome, FlexiDome 2X, Unity	0	0 to 358
VMD (Video Motion Detection) Mode	Compares the current image with a reference image and counts the number of pixels that have changed between the two images. An alarm is generated when the number of pixel changes exceeds a user-configured threshold.	Dinion 2X, Dinion^{XF} Dinion, FlexiDome 2X, UPH Series	Off	On, Off, Silent, OSD
VMD Area	The current area is displayed with the upper left corner flashing. The flashing corner of the image can be moved with the Up, Down, Left, Right arrow keys. Pressing the Select key moves the flashing cursor to the opposite corner, which can now be moved. Pressing Select again freezes the area and exits the area menu.	Dinion 2X, FlexiDome 2X		
White Balance	Adjusts the color settings to maintain the quality of the white areas of the image.	G3A Series, ENV Series, VG4 Series, VEZ Series	Auto	ATW, Indoor, Outdoor, AWB Hold, Extended, Manual
		Unity, Dinion 2X, Dinion, FlexiDome 2X, UPH Series	ATW	ATW, AWB Hold, Manual*
		VG5 Series, MIC 550, MIC 612	ATW	ATW, Indoor, Outdoor, AWB Hold, Extended, Manual, Outdoor Auto, Sodium Lamp Auto, Sodium Lamp
White Balance Speed	Adjusts the speed of the white balance control loop.	Dinion 2X, FlexiDome 2X, UPH Series	Medium	Fast, Medium, Slow

Feature	Description	Device	Default	Options
Wide Dynamic Range	Turns the wide dynamic range feature on or off.	VG4 300 and 500 Series	Off	On, Off
Wiper	Starts or stops the wiper mechanism.	MIC Series 550, 550IR	Off	Off, Start, One Shot, Intermittent
Wiper/Washer	Starts or stops the wiper/washer function.	MIC Series 550, 550IR	Off	Start, Off
XF-Dynamic	Optimally captures the detail in both the high and low light areas of the scene simultaneously, maximizing the information visible in the picture.	Dinion^{XF}, Unity, UPH Series	Medium	Off, Low, Medium, High
Zoom Polarity	Capability to reverse the operation of the zoom button on the controller.	G3A Series, ENV Series, VG4 Series	Normal	Normal, Reverse

9 Troubleshooting

The following section details information to confirm that the CTFID software is functioning properly.

9.1 Confirming System Connection between the PC and the Device

When the CTFID software starts, the software automatically detects and connects to the attached device. The **Online Configuration** button is enabled when a connected device is detected. Settings for that device should download into the software.

To confirm that the device is connected to the application on the PC:

1. Verify that you are in **Online** mode (the **Online Configuration** button should have a yellow background).
2. Verify that the Connection Status Indicator icon (displayed in the **System Feedback** area) indicates that a connection has been made.

If the application is not detecting a connected device:

1. Check the device to ensure that it is working properly.
2. Verify that there are no loose connections between the Configuration Tool hardware and the PC and the Configuration Tool hardware and the device.
3. Verify that the green light on the Configuration Tool hardware is illuminated.
4. If necessary, disconnect the Configuration Tool hardware from the PC and reconnect it.
5. Review the **Status** text box in the **System Feedback** section (lower text box in the main screen). If the application is connected to a device, download confirmation messages are displayed.

Figure 9.1 Online configuration window, status text box

9.2 Identifying a Device Error

If you attempt to open a file that has been configured for a different device, a warning message appears. Click **OK** and open a file that has been correctly configured.

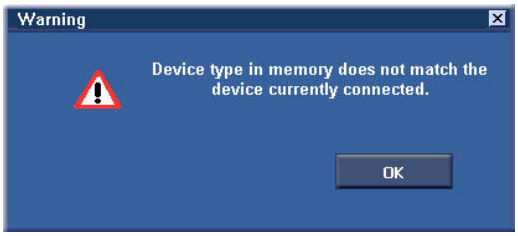


Figure 9.2 Device type error

9.3 Identifying the Version of CTFID Software

1. Click the CTFID icon to the left of the software title (in the header bar).

   A drop-down menu appears.

Figure 9.3 Drop-down menu from CTFID Icon

2. Scroll down and click **About**. The **About** screen appears, displaying the number of the version of the CTFID software.

Figure 9.4 About screen

A AUX Keyboard Commands

A.1 Commands, AutoDome

Lock	Function key	Comm no.	Command	Description	VG4 200	VG4 300	VG4 500 and VG5 600	G3A ENV
	On/Off	1	Scan 360°	Autopan without limits	•	•	•	•
	On/Off	2	Autopan	Autopan between limits	•	•	•	•
•	On/Off	3	Iris Control	Enters menu (auto, manual)	•	•	•	•
•	On/Off	4	Focus Control	Enters menu (spot, auto, manual)	•	•	•	•
	On/Off	7	Play Custom Pre-position Tour	Activate/Deactivate		•	•	
	On/Off	8	Play Pre-position Tour	Activate/Deactivate	•	•	•	•
•	On/Off	9	Inactivity Mode	Enters menu (Off, Return to Scene 1, Recall Previous PTZ Command)	•	•	•	•
•	On/Off	11	Auto Iris Level adjust	Enters Iris Level Adjustment menu	•	•	•	•
	On/Off	14	Set Autopan and Scan Speed	On—increase Off—decrease or adjust slide bar	•	•	•	•
	On/Off	15	Set Pre-position Tour Period (dwell)	On—increase dwell Off—decrease dwell	•	•	•	•
•	On/Off	18	AutoPivot Enable	Enables/disables AutoPivot	•	•	•	•
	On/Off	20	Backlight Comp	Backlight Compensation	•	•	•	•
•	On/Off	23	Electronic Shutter	Enters Shutter Speed menu	•	•	•	•
	On/Off	24	Stabilization	Electronic Stabilization			•	•
•	On/Off	35	White Balance Mode	Enters White Balance menu	•	•	•	•
•	On	40	Restore Camera Settings	Restores all settings to their original defaults	•	•	•	•
•	On/Off	41	Line Lock Phase Adjust	On—increase Line Lock delay Off—decrease Line Lock delay	•	•	•	•
•	On/Off	42	Sync Mode	On—Line Lock Off—Internal	•	•	•	•
•	On/Off	43	Auto Gain Control	AGC—On, Auto, Off	•	•	•	•
•	On/Off	44	Sharpness	Enters Sharpness menu	•	•	•	•
•	On	46	Advanced menu	Enters Main Setup menu	•	•	•	•
	On	47	View Factory Settings	View all menu default settings	•	•	•	•
	On/Off	50	Playback A, continuous	Activate/Deactivate		•	•	•
	On/Off	51	Playback A, single	Activate/Deactivate		•	•	•
	On/Off	52	Playback B, continuous	Activate/Deactivate		•	•	•
	On/Off	53	Playback B, single	Activate/Deactivate		•	•	•

Lock	Function key	Comm no.	Command	Description	VG4 200	VG4 300	VG4 500 and VG5 600	G3A ENV
	On/Off	56	Night Mode menu	On, Off, Auto (Day/Night only)	•	•	•	•
	On/Off	57	Night Mode setting	On, Off, Auto (Day/Night only)	•	•	•	•
•	On/Off	58	Day/Night Threshold	On–menu (Day/Night only)	•	•	•	•
•	On/Off	60	On Screen Display	On–enable Off–disable	•	•	•	•
•	On	61	Display Adjust	Adjust on-screen display	•	•	•	•
	On	62	Pre-position Title menu	Enters Pre-position Title menu	•	•	•	•
•	On	63	Zone Title menu	Enters Zone Title menu	•	•	•	•
	On	64	Alarm Status	Enters Alarm Status menu		•	•	•
	Off	65	Alarm Acknowledge	Acknowledge alarm or deactivate physical outputs		•	•	•
	On	66	Display software version	Displays software version number	•	•	•	•
	On	72	Re-initialize camera	Performs camera/lens re-initialization functions	•	•	•	•
	On/Off	78	AutoTrack	Turns AutoTrack on or off			•	•
•	On	79	Camera Height	Enters the Camera Height menu			•	•
•	On/Off	80	Digital Zoom Lock	Turns digital zoom on and off		•	•	•
	On/Off	81	Physical output 1	On–activates output Off–deactivates output		•	•	
	On/Off	82	Physical Output 2	On–activates output Off–deactivates output		•	•	
	On/Off	83	Physical Output 3	On–activates output Off–deactivates output		•	•	
	On/Off	84	Physical Output 4	On–activates output Off–deactivates output		•	•	
•	On/Off	86	Sector Blanking	Enters Sector Blanking menu		•	•	•
•	On/Off	87	Privacy Masking	Enters Privacy Masking menu		•	•	•
	On/Off	90	Command Lock/Unlock	On–lock on Off–lock off	•	•	•	•
•	On/Off	91	Lens Polarity menu	On–reverse Off–normal	•	•	•	•
•	On/Off	92	Lens Polarity menu	On–reverse Off–normal	•	•	•	•
•	On/Off	93	Lens Polarity menu	On–reverse Off–normal	•	•	•	•

Lock	Function key	Comm no.	Command	Description	VG4 200	VG4 300	VG4 500 and VG5 600	G3A ENV
	On/Off	94	Set Azimuth Zero Point	On–Displays azimuth/ elevation readings Off–Hides azimuth/elevation readings			•	
	On/Off	95	Display Azimuth/ Elevation Readings	On–Displays azimuth/ elevation readings Off–Hides azimuth/elevation readings			•	
	On/Off	96	Display Compass Readings	On–Displays compass heading Off–Hides compass heading			•	
	On/Off	99	Factory P/T Home Position	Recalibrates home position; can be used as an Alarm Output	•	•	•	
	On/Off	100	Record A	Activate/Deactivate		•	•	•
	On/Off	101	Record B	Activate/Deactivate		•	•	•
	On	997	FastAddress, display	Display current address	•	•	•	•
	On	998	FastAddress, all units	Display and program current address	•	•	•	•
	On	999	FastAddress, unaddressed domes	Display and program unaddressed AutoDomes	•	•	•	•
	Set	“1-99”	Pre-position programming	Set ##–programs a preset view	1-64	•	•	•
	Shot	“1-99”	Pre-position recall	Shot ##–recalls programmed preset	1-64	•	•	•
	Set	100	Pre-position menu	Enters the Pre-position menu	•	•	•	•
	Set/ Shot	101	Autopan left limit	Set–programs left limit Shot–shows limit	•	•	•	•
	Set/ Shot	102	Autopan right limit	Set–programs right limit Shot–shows limit	•	•	•	•
	Set	110	Factory P/T home position	Set–recalibrates home position	•	•	•	•
•	Set	802	Edit Password	Enters the Edit Password menu		•	•	•
•	Set	899	Reset ALL	Restores all settings to original defaults and clears all user-programmed settings	•	•	•	•
	Set	900	Edit Tour 1 (Standard)	Enters the Standard Tour Scene menu		•	•	
	Shot	900	Edit Tour 2 (Custom)	Enters the Custom Tour Scene menu	•	•	•	•
	Set/ Shot	901-999	Adds/Removes a pre-position shot from Tour 1	Set ###–adds preset Shot ###–removes preset	901-964	•	•	•

Comm no.	Description
142	VLH debug values on the screen
143	WBH debug values on the screen
144	VLH/WBH debug values on screen
145	Color chart
146	White balance pixels

NOTICE!
Although the **AUX** button is active on both the FlexiDome and Unity Dome Series, no additional commands are available.

A.2 Commands, MIC Series Optical Camera

Locked	Function Key	Command No.	Command	Description
	On/Off	1	Scan 360° / Auto Pan (Continuous)	Activates/deactivates Autopan without limits.
	On/Off	2	Autopan (within Limits)	Activates/deactivates Autopan between limits.
*	On/Off	3	Iris Control	Enters the menu (auto, manual) for iris control.
*	On/Off	4	Focus Control	Enters the menu (spot, auto, manual) for focus control.
	On/Off	7	Play Custom Pre-position Tour	Activates/Deactivates the playback of a custom, pre-position tour.
	On/Off	8	Play Pre-position Tour	Activates/Deactivates the playback of a pre-position tour.
*	On/Off	9	Inactivity Mode	Enters the inactivity menu (Off, Return to Scene 1, Recall Previous PTZ Command).
*	On/Off	11	Auto Iris Level Adjust	Enters the Iris Level Adjustment menu.
	On/Off	14	Set Autopan and Scan Speed	Enters the speed adjustment slide bar.
	On/Off	15	Set Pre-position Tour Period (dwell)	Enters the dwell adjustment slide bar.
*	On/Off	18	AutoPivot Enable	Enables/disables AutoPivot.
	On/Off	20	Backlight Comp	Turns Backlight Compensation on or off.
*	On/Off	23	Electronic Shutter	Enters the Shutter Speed slide bar.
	On/Off	24	Stabilization	Turns Electronic Stabilization on or off.
	On/Off	26	Wide Dynamic Range	Activates/deactivates Wide Dynamic Range.
	On/Off	30	White Balance	Enters the White Balance menu.
*	On/Off	35	Fixed White Balance	Enters the White Balance menu.
*	On	40	Restore Camera Settings	Restores all settings to their original defaults.
*	On/Off	43	Auto Gain Control	Switches AGC modes (On, Auto, Off).
*	On/Off	44	Aperture Correction (Sharpness)	Enters the Sharpness menu.
*	On	46	Advanced Menu	Enters the Main Setup menu.
	On	47	View Factory Settings	Displays all menu default settings.
	On/Off	50	Playback A, continuous	Activates/Deactivates continuous playback A.
	On/Off	51	Playback A, single	Activates/Deactivates single playback A.
	On/Off	52	Playback B, continuous	Activates/Deactivates continuous playback B.
	On/Off	53	Playback B, single	Activates/Deactivates single playback B.
	On/Off/	56	Night Mode Menu	Enters the Night Mode menu (On, Off; Auto (Day/Night only))
	On/Off	57	Night Mode Control (IR Filter In/Out)	Enables/disables Night Mode (Day = Off /Night = On).
*	On/Off	58	Day/Night Threshold	Enables/disables the day/nigh threshold (On–menu (Day/Night only)).

Locked	Function Key	Command No.	Command	Description
	On/Off	59	Night Mode Priority	Motion–Activates Night Mode before slow shutter, preserving full-frame integration as light is reduced. Color–Activates slow shutter before Night Mode, preserving color longer as light is reduced.
*	On/Off	60	On Screen Display	On–Enables on-screen display. Off–Disables on-screen display.
*	On	61	OSD Display (Adjust)	Adjusts the view of the On-screen Display.
	On	62	Pre-position (Scene) Title menu	Enters the Pre-position Title menu.
*	On	63	Zone/Sector Title Menu	Enters the Zone Title menu.
	On	64	Alarm Status	Enters the Alarm Status menu.
	Off	65	Alarm Acknowledge	Acknowledges alarms or deactivates physical outputs.
	On	66	Display Software Version	Displays the number of the software version.
	On/Off	67	Focus Adjust for IR Illuminators	On - Automatically adjusts camera focus with IR illumination is present.
*	On/Off	69	Alarm Rule Activation/Deactivation	On–Enables all alarm rules. Off–Disables all alarm rules.
	On	72	Re-initialize Camera	Performs camera/lens re-initialization functions.
*	On/Off	80	Digital Zoom Lock	Turns digital zoom on and off.
	On/Off	81	Alarm Output 1 Open Collector	On–Activates output. Off–Deactivates output.
	On/Off	82	Alarm Output 2 Open Collector	On–Activates output. Off–Deactivates output.
	On/Off	83	Alarm Output 3 Open Collector	On–Activates output. Off–Deactivates output.
	On/Off	84	Alarm Relay	On–Activates alarm relay. Off–Deactivates alarm relay.
*	On/Off	86	Sector Blanking / Masking	Enters / Exits the Sector Blanking menu.
*	On/Off	87	Privacy Masking	Enters / Exits the Privacy Masking menu.
	On/Off	89	Preposition Overwrite Confirmation (toggle)	On–Isues a message that prompts for approval to overwrite a preposition. Off–No confirmation message issued.
	On/Off	90	Command Lock/Unlock	On–Lock on Off–Lock off
*	On/Off	91	Zoom Polarity	On–Reverse Off–Normal
*	On/Off	92	Focus Polarity	On–Reverse Off–Normal
*	On/Off	93	Iris Polarity	On–Reverse Off–Normal
*	On/Off	94	Set Azimuth Zero Point / Recalibrate Azimuth Compass	Sets the zero degree pan position.
	On/Off	95	Display Azimuth/Elevation Readings	On–Displays azimuth/elevation readings. Off–Hides azimuth/elevation readings.
	On/Off	96	Display Compass (Point) Readings	On–Displays compass heading. Off–Hides compass heading.
	On/Off	97	Video channel (toggle)	On - Switches view to thermal camera. Off - Switches view to optical camera.
	On	99	Factory P/T Home Position	Recalibrates home position; can be used as an Alarm Output.

Locked	Function Key	Command No.	Command	Description
	On/Off	100	Record A	Activates/deactivates recording A.
	On/Off	101	Record B	Activates/deactivates recording B.
	On/Off	102	Wiper continuous	Turns on/off continuos wiper mode.
	On/Off	103	Wiper intermittent	Activates the wiper in Intermittent mode (the wiper wipes twice, then turns off after 15 seconds).
	On/Off	104	Wiper one shot	Activates (One shot) to wipe five times, then turn off.
	On/Off	105	Wash/Wipe	Activates wash/wipe mode. Cameras moves to designated washer preset (62), wiper starts automatically.
	On	997	FastAddress, display	Display the current FastAddress of the camera.
	On	998	FastAddress, all units	Displays the current FastAddress of the camera and programs all units.
	On	999	FastAddress, unaddressed cameras	Displays and programs unaddressed MIC612 units.
	Set	“1-99”	Pre-position Programming	Set ##–Programs a preset view.
	Shot	“1-99”	Pre-position Recall	Shot ##–Recall programmed preset.
	Set	100	Pre-position Menu	Enters the Pre-position menu.
	Set/Shot	101	Autopan Left Limit	Set–Programs left limit. Shot–Shows limit.
	Set/Shot	102	Autopan Right Limit	Set–Programs right limit. Shot–Shows limit.
	Set	110	Factory P/T Home Position	Set–Recalibrate home position.
*	Set	802	Edit Password	Enters the Edit Password menu.
*	Set	899	Reset ALL	Restores all settings to original defaults and clears all user-programmed settings.
	Set	900	Edit Tour 1 (Standard)	Enters the Standard Tour Scene menu.
	Shot	900	Edit Tour 2 (Custom)	Enters the Custom Tour Scene menu.
	Set/Shot	901-999	Adds/Removes a Preposition Shot from Tour 1	Set ###–Adds preset. Shot ###–Removes preset.

A.3 Commands, MIC 612 Thermal Camera

Locked	Function Key	Command No.	Command	Description
	On/Off	1	Scan 360°	Autopan without limits.
	On/Off	2	Autopan	Autopan between limits.
	On/Off	7	Play Custom Pre-position Tour	Activates/Deactivates the playback of a custom, pre-position tour.
	On/Off	8	Play Pre-position Tour	Activates/Deactivates the playback of a pre-position tour.
*	On/Off	18	AutoPivot Enable	Enables/disables AutoPivot.
	On/Off	50	Playback A, continuous	Activates/Deactivates continuous playback A.
	On/Off	51	Playback A, single	Activates/Deactivates single playback A.
	On/Off	52	Playback B, continuous	Activates/Deactivates continuous playback B.
	On/Off	53	Playback B, single	Activates/Deactivates single playback B.
*	On/Off	69	Alarm Rule Activation/Deactivation	On–Enables all alarm rules. Off–Disables all alarm rules.
*	On/Off	80	Digital Zoom Lock	Turns digital zoom on and off.
	On/Off	81	Alarm Output 1 Open Collector	On–Activates output. Off–Deactivates output.
	On/Off	82	Alarm Output 2 Open Collector	On–Activates output. Off–Deactivates output.
	On/Off	83	Alarm Output 3 Open Collector	On–Activates output. Off–Deactivates output.
	On/Off	84	Alarm Output 4 Relay	On–Activates output. Off–Deactivates output
	On/Off	88	Proportional PTZ	On–Activates Proportional PTZ. Off–Deactivates Proportional PTZ.
	On/Off	90	Command Lock/Unlock	On–Turns on the lock. Off–Turns off the lock.
	On/Off	97	Video channel (toggle)	On - Switches view to thermal camera. Off - Switches view to optical camera.
	On	99	Factory P/T Home Position	Recalibrates home position; can be used as an Alarm Output.
	On/Off	100	Record A	Activates/Deactivates recording A.
	On/Off	101	Record B	Activates/Deactivates recording B.
		102	Wiper alarm	Turns the wiper alarm on/off manually.
		103	Wiper wipe	Activates the wiper in Intermittent mode (the wiper wipes twice, then turns off after 15 seconds).
		104	Wiper wipe	Activates (On shot) to wipe five times, then turn off.
		105	Washer/Wiper	Activates the washer/wiper.
	On	454	White Hot	Activates thermal display mode White Hot.
	Off	454	Black Hot	Activates thermal display mode Black Hot.
	On	455	Ice Fire	Activates thermal display mode Ice Fire.
	Off	455	Globow	Activates thermal display mode Globow.
	On	456	Ironbow 1	Activates thermal display mode Ironbow 1.
	Off	456	Ironbow 2	Activates thermal display mode Ironbow 2.
	On	457	Rainbow	Activates thermal display mode Rainbow.
	Off	457	Fusion	Activates thermal display mode Fusion.
	On	458	Sepia	Activates thermal display mode Sepia.
	Off	458	Rain	Activates thermal display mode Rain.
	On	459	Color 1	Activates thermal display mode Color 1.

Locked	Function Key	Command No.	Command	Description
	Off	459	Color 2	Activates thermal display mode Color 2.
	On	460	Red Hot	Activates thermal display mode Red Hot.
	Off	460	Green Hot	Activates thermal display mode Green Hot.
	On	463	SPOT meter display	Activates the SPOT meter.
	Off	463	SPOT meter display	Deactivates the SPOT meter.
	On	997	FastAddress, display	Display the current FastAddress of the camera.
	On	998	FastAddress, all units	Displays the current FastAddress of the camera and programs all units.
	On	999	FastAddress, unaddressed cameras	Displays and programs unaddressed MIC612 units.
	Set	“1-99”	Pre-position Programming	Set ##–Programs a preset view.
	Shot	“1-99”	Pre-position Recall	Shot ##–Recall programmed preset.
	Set/Shot	100	Pre-position Store/Clear	Enters/ Exits pre-position menu.
	Set/Shot	101	Autopan Left Limit	Set–Programs left limit. Shot–Shows limit.
	Set/Shot	102	Autopan Right Limit	Set–Programs right limit. Shot–Shows limit.
	Set/Shot	103	Lock Commands	Locks commands.
	Set/Shot	104	Unlock Commands	Unlocks commands.
	Set/Shot	106	Pre-wash position	Sets the camera in pre-wash position.
	Set	110	Factory P/T Home Position	Recalibrates home position.

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