The VALCam USB Professional offers special features that increase capture efficiency and enhance image quality. By following the procedures outlined in this document, the VALCam Professional can be used to its full potential.

Setting the Zoom control for optimal print quality

- To achieve the highest image quality, it's crucial that the camera is zoomed in for a tight head and shoulders shot
- Being zoomed out wide and cropping in software will result in a good quality capture on the screen, but a poor quality printed image
- The Zoom function of the camera is controlled by the zoom buttons located on the upper right side of the application
- You can also use the "+" and "-" keys next to the numeric key pad on your keyboard to control the zoom function of the camera instead of using the mouse



Zoom Set Too Tight



Zoom Set Correctly



Zoom Set Too Wide



- Holding down the "Ctrl" and "Shift" keys will increase or decrease the speed at which the camera zooms for faster and more precise adjustments
- Make sure you are zoomed in tightly on your subject to provide the best capture for high quality prints
- Note: Once the proper zoom is set, it should not be changed at anytime. It's highly recommended to lock the zoom setting after it's been optimized. Locking controls are explained latter in the document.
- Once the zoom is set use the Image Centering methods described below to center the image. Do Not change the zoom setting.

Image Centering

The VALCam Professional has two techniques that simplify image centering. Using these procedures the image can be centered quickly and efficiently.

Method 1 - Double Click AutoCentering:

- Place the mouse cursor on any feature of the live video display. Typically this will be the tip of the subject's nose.
- Double Click the left mouse button.
- The image will immediately center the point you double click on.
- See Example below

Before Double Click



After Double Click



Method 2 – Click, Drag, and Release:

- Position cursor on a feature to reposition. Typically this will be the tip of the nose
- Hold down the left mouse button. See Figure 1
- While holding down the left mouse button, move cursor to desired position. See Figure 2
- Release left mouse button and camera will move to position the image correctly. See Figure 3

Figure 1



Figure 4

Figure 2



Figure 3



Figure 4



• Or use the $\uparrow, \downarrow, \leftarrow, \rightarrow$ arrows on either the keyboard

Method 3 – Manually position the camera with the Pan/Tilt controls

- Hold down the Shift or Control keys to speed up or slow down the movement of the camera. This can be useful for fine tuning camera position
- Note: Methods 1 and 2 are more efficient and recommended.
- You can return the camera to it's original position (straight forward) by clicking on the home button in the application.

AutoCropping

The VALCam Professional allows cropping of the live and capture image. When used in conjunction with the auto centering feature, full auto cropping is implemented. Unlike other systems the auto cropped image can be previewed before capture. When using this feature, the cropping control can be disabled in your badging software for faster processing. All the major badging software packages allow their cropping feature to be disabled to take advantage of this feature.

Set Cropping:

- Click "Adjust->Crop"
- Select the cropping ratio that your software package uses. Most applications (ID Works, Jolly, Assure, Card Five) use ³/₄.

Some applications use 4/5(Ccure). You can also select Custom to set any desire cropping ratio.



Flesh Tones Advanced (Capture Type	Crop Auto Position
Croping Select C No Cropping C 4/5 C 3/4 C 2/3 C Custom	Horizonal 356 Vertical 475 Resize	
Video Rotation C 90 Camera T PTZ Rev) C 270	

Home

- Close the "Adjust" dialog box.
- All captures will now be cropped correctly. Additional software cropping will not be needed and can be disabled.

No Cropping

³/₄ Cropping



Taking a Non-Flash Capture

Your VALCam has the ability to take captures without the use of the flash. In some settings and light stable environments using the flash to get a quality capture may not be necessary. Camera controls allow optimizing color balance and brightness. When using these controls the changes can be viewed in the live preview as the changes are made.

Set the Live Brightness Settings

- Verify that the flash is turned off in the application
- Adjust the "Brighter" and "Darker" buttons for optimal image illumination
- This should be done with a subject in the position used to take captures
- If the "Brighter" and "Darker" buttons are not working verify that the "Flash Off" radio button is selected in the Use Flash box

Set Correctly

100 H

Use Flash OK IV Flash OK IC Flash On Receive Call IF Yes IC No

Too Bright



Optimizing Live Color Balance

The live preview/capture color balance can be fine tuned for a very accurate color balance. When these changes are made the setting are locked and will not change even when the system is power down.

- Click the Adjust button.
- Click the Manual radio button
- Adjust the Red control up until the image is too red.
- Adjust the Red control down until the image doesn't have enough red.





Adjust 🛛 🔀
Flesh Tones Advanced Capture Type Crop Auto Position Live Adjustments Live Blue Live Color 0 0 72 Auto White Balance Auto White Accurate Manual
Flash Adjustments Flash Red Flash Blue Image: Image of the structure Image of the structure
Pan/Tilt/Zoom Speed C Slow
3 of 7

QSG-P01

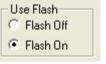
- Set Red control mid way between these settings. •
- Repeat these setting with the Blue control.
- Iterate between the Blue and Red controls until the color balance is optimized

Taking a Flash Capture

The VALCam also has the ability to take captures with the use of a photo-flash. Using the flash enables you to take consistent captures in varying light conditions, even in a dark room.

Setting up the Flash

The flash settings must be adjusted the first time that flash is • used in a new environment, generally this feature will not need to be changed once set





- Click the Flash On radio button in the Use Flash box of the application
- Position a subject in the location and position where you want to take captures •
- Make sure that the subject is framed correctly in a tight head & shoulders shot like explained in step 2 •
- Estimate the distance between the subject and the camera •
- Use the "Brighter and "Darker" buttons in the Flash Brightness box to set the distance •
- Click the "Capture" button •
- The captured image will probably be either too bright or too dark •

Flash Too Bright

Flash Set Correctly

Flash Too Dark Delad

- Click the "Don't Save" button
- Use the Flash Brightness buttons to adjust the intensity of the flash, if the image is too dark click the • "Brighter" button and vice-versa. Then click the "Capture" button again
- Note: You should leave at least 7 seconds in between taking flash captures for the flash to fully recharge
- Repeat until flash brightness is optimized •
- Once the flash is set no adjustments are required between uses as the settings are saved and stored • locally

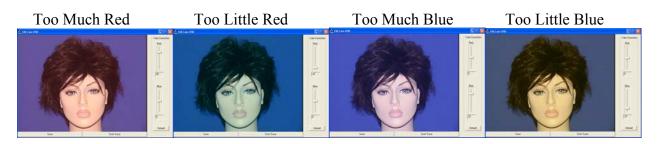
Fine Tuning the color balance of the Captured Image

The color balance of the captured image can be easily adjusted in real time if needed. Any color changes will be applied to additional captures without further adjustment. These changes are remembered between and applied after the PC is rebooted.

Color Adjustment

• Quick color adjustments are available to easily control the color balance of the captured image

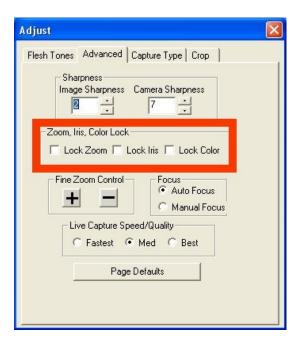
- After the capture, the image is displayed with the "Save" and "Don't Save" buttons
- A Red and Blue sliders appears next to the captured image
- To adjust the image increase the "Red" slider until the image appears too Red. Then decrease "Red" until the image appears to be lacking in Red, then place the slider in the middle of that range
- Repeat this procedure with the "Blue" slider
- Iterate this procedure between both color bars until you have optimized the image



- Note: Yellow skin tones indicates too little blue, so add blue to correct
- When finished, click the "Save" button
- Color adjustment is complete and the settings will be saved and remembered in between captures and sessions

Locking Settings

- The Flash, Zoom, and Color settings can be locked from the "Adjust" menu. This can be useful to assure that operators will not change the settings after they have been optimized
- Click the "Adjust" button
- Adjust
- Once the Adjust box pop up appears click on the "Advance" tab
- Locate the "Lock Zoom", "Lock Iris", and "Lock Color" check boxes
- If desired, a password can be set in the registry to force a security check when trying to open the "Adjust" dialog box



In addition to the procedures noted in this document there are additional advanced settings available please consult your manual or call for further technical help.

User Interface

The VALCam professional offers special features that increase capture efficiency and enhance image quality. By following the procedures outlined below you will be able to access the Law Enforcement User Interface and use its added beneficial features.

The VALCam Professional supports two user interfaces.

The Law Enforcement User Interface

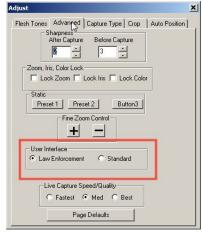




The Standard User Interface

To switch between the two interfaces.

- Click on the "Adjust" button on the bottom right side of the program
- Click on the "Advanced" Tab
- Locate the section labeled User Interface and click the radio button of the interface you wish to use.





Law Enforcement Zoom Presets

The Law Enforcement UI allows for up to three preset Zoom settings to be saved, allowing any operator to have instant access to these settings.

- 1. Click on the "Adjust" Button on the bottom right of the program window
- 2. Click on the "Advanced" tab
- 3. In the Main User Interface window use the "+" and "-" to the needed specifications

+ –

keys to adjust the zoom

- 4. Once the Zoom has been properly set simply press the "Preset 1" button in the "Static" section of the "Adjust" window, the setting has now been saved.
- 5. To check that the setting was saved use the "+" and "-" keys to adjust the Zoom
- 6. Click the "Preset 1" radio button in the Main User Interface window to check that the program returns the camera to the specified Zoom setting
- 7. Repeat 3-6 for Preset 2 and Preset 3 if needed

