

Smart-VS WebApp

USER'S GUIDE



Smart Vision Sensor

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This manual refers to software version 1.0.1 and later.

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Patents

See www.patents.datalogic.com for patent list.

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Smart-VS WebApp

Before using a Smart-VS device, a Teaching procedure must be performed. Teaching can be completed either using the embedded HMI (refer to the Smart-VS Quick Reference Guide) or the Smart-VS WebApp graphic user interface.



NOTE

To access the Smart-VS WebApp, Google Chrome is the recommended Internet browser.

To access the Smart-VS WebApp, connect to the device IP address 192.168.3.100 via Ethernet.

In case of a new device, the user is automatically redirected to the [Teaching Wizard](#).

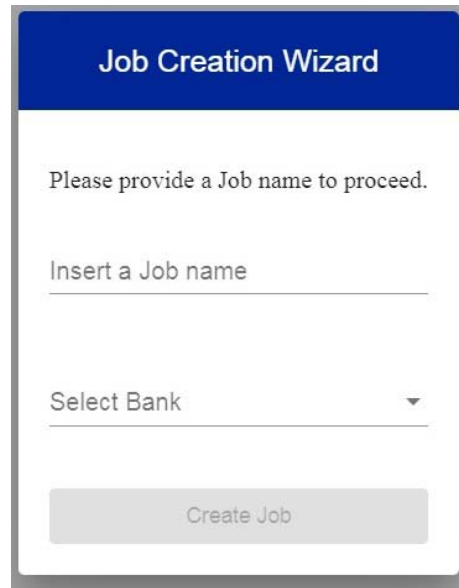
In case of an already trained device, the [Monitoring](#) page is displayed.

A [Settings](#) page is also available to adjust the device settings.

Device information and the software update feature are available on the [Utilities](#) page.

TEACHING

To perform Teaching on your Smart-VS device, enter a job name, select the bank where to store it, click on the Create Job button, and follow the procedure described below.

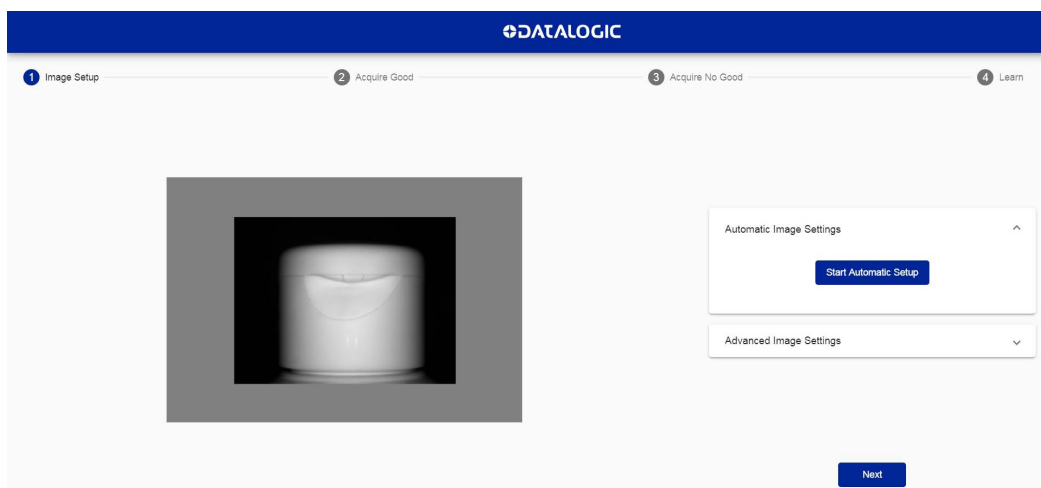


The image shows a 'Job Creation Wizard' form. It has a blue header with the title 'Job Creation Wizard'. Below the header, there is a text prompt: 'Please provide a Job name to proceed.' This is followed by a text input field labeled 'Insert a Job name'. Below that is a dropdown menu labeled 'Select Bank'. At the bottom of the form is a grey button labeled 'Create Job'.

Step 1: Image Setup

On the **Image Setup** page, select *Start Automatic Setup* to automatically set the Focus Distance, the Exposure Time, and the Sensor Gain parameters (suggested). Alternatively, select *Advanced Image Settings* to manually set the parameters.

It is also possible to move the Field of View based on the application needs, which can be useful when objects of different batch formats must be inspected on the same line. To do this, simply click on the image and drag it throughout the gray area.



After completing image setup, click NEXT.

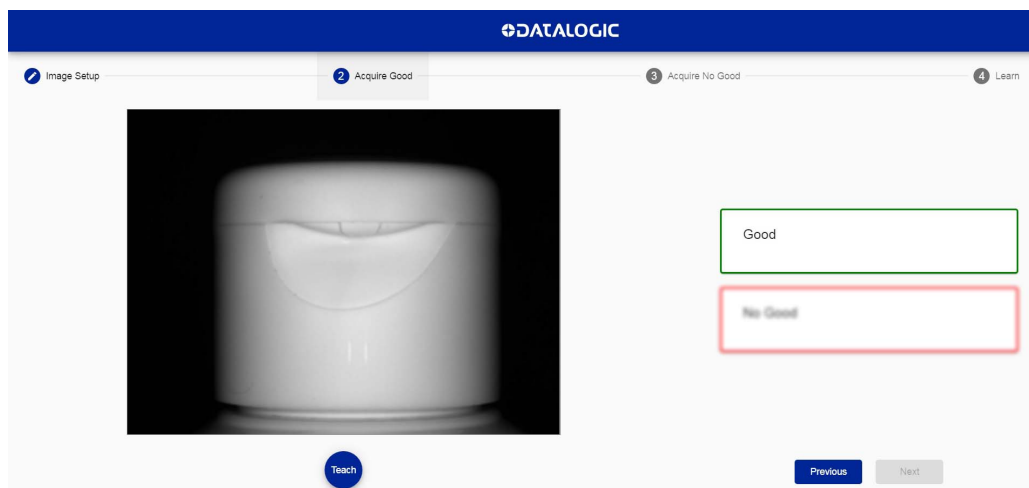
Step 2: Acquire GOOD

On the **Acquire GOOD** page, one or more GOOD objects can be acquired by clicking on the *Teach* button. It is recommended to acquire as many GOOD images as the known number of instances to be treated as GOOD.



NOTE

A maximum of 6 images can be stored in both GOOD and NO GOOD boxes.



NOTE

Click on an acquired object in the GOOD box and select DELETE to delete it.

After adding at least one object, you can click *Next* and go to the Acquire NO GOOD page.

Step 3: Acquire NO GOOD

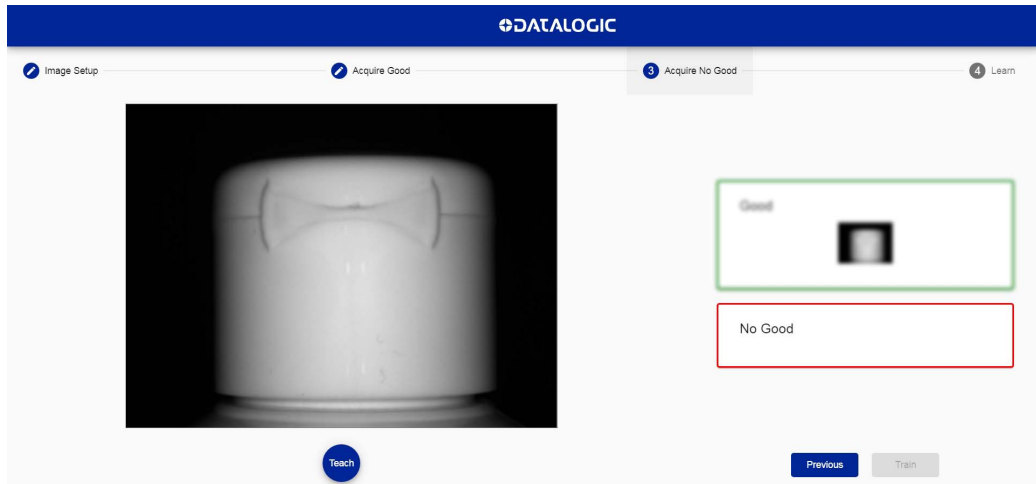
On the **Acquire NO GOOD** page, one or more NO GOOD objects can be acquired by clicking on the *Teach* button.

It is recommended to acquire as many NO GOOD images as the known number of instances to be treated as NO GOOD.



NOTE

A maximum of 6 images can be stored in both GOOD and NO GOOD boxes.



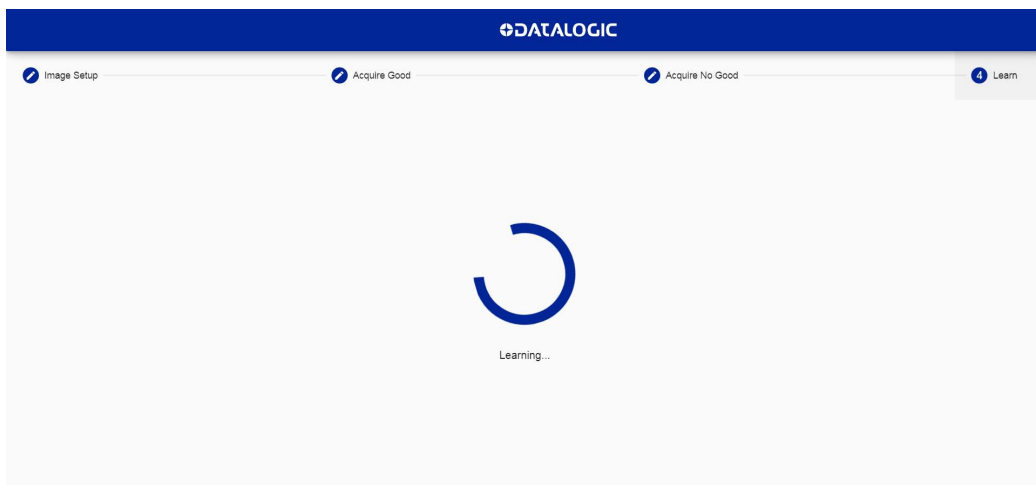
NOTE

Click on an acquired object in the NO GOOD box and select DELETE to delete it.

After adding at least one NO GOOD object, you can click on the *Teach* button.

Step 4: Learn

This step is completed automatically.



Once the device is trained, the Smart-VS WebApp switches to the Monitoring page.

MONITORING

The **Monitoring** page is divided into an upper bar, a main area, and a bottom bar.



The **upper bar** contains the job name to the left. Use the drop-down menu to switch to another job (if present).



If you want the selected job to be the running and startup job, click on the Play button before leaving the page.

Next to the job name, the following icons are present:

ICON	DESCRIPTION
	Upload job: uploads a job from your PC (.svscfg file)
	Download job: downloads the current job on your PC
	Add new job: switches to the Training wizard to create a new job
	Delete job: deletes current job

The **main area** includes:



- the GOOD and NO GOOD boxes to the left;
- the cropping area at the center;
- the statistics box to the right. This shows the statistics concerning the ongoing acquisitions.

The **bottom bar** displays an archive of acquisitions (filmstrip).



When the device receives no trigger event, the Monitoring page only displays the statistics box to the right and a blank filmstrip.

To start acquiring objects, two options are available:

	Save and Play with External Trigger
	Play with Self-Trigger

The *Play* button is also a *Save* button: click on it before leaving the page to store any change.



NOTE

The *Play with Self-Trigger* button is not an actual operating mode (output signals are not driven). It is only intended for demonstration purposes or preliminary checks in static condition.

Next to the *Play* icons, the acquisition results are displayed as green bars for GOOD objects, red bars for NO GOOD objects, and gray bars for OVERRUN¹ occurrences.

Click on the *Pause* icon to stop acquisition and enable all available functions.

Dragging the gray box along the bottom bar displays the acquisitions included in that interval. You can now perform **Incremental Training**: click on an acquired image and select GOOD or NO GOOD to add it to the corresponding acquisition box. It is also possible to drag and drop acquired images to the GOOD / NO GOOD box or from the GOOD box to the NO GOOD box and vice versa.

After clicking on one of the *Play* icons, the newly added acquisitions will be used by the device in addition to those stored during the initial Teaching procedure.



Furthermore, the Smart-VS WebApp allows image saving. Any image shown in the WebApp can be saved clicking on it and selecting *Save*.



NOTE

It is recommended to enable the browser option “Ask where to save each file before downloading”.

The following options are also available:

Filter New Images All 	Show all images or just one category between GOOD, NO GOOD, and OVERRUN
	Download the entire filmstrip



NOTE

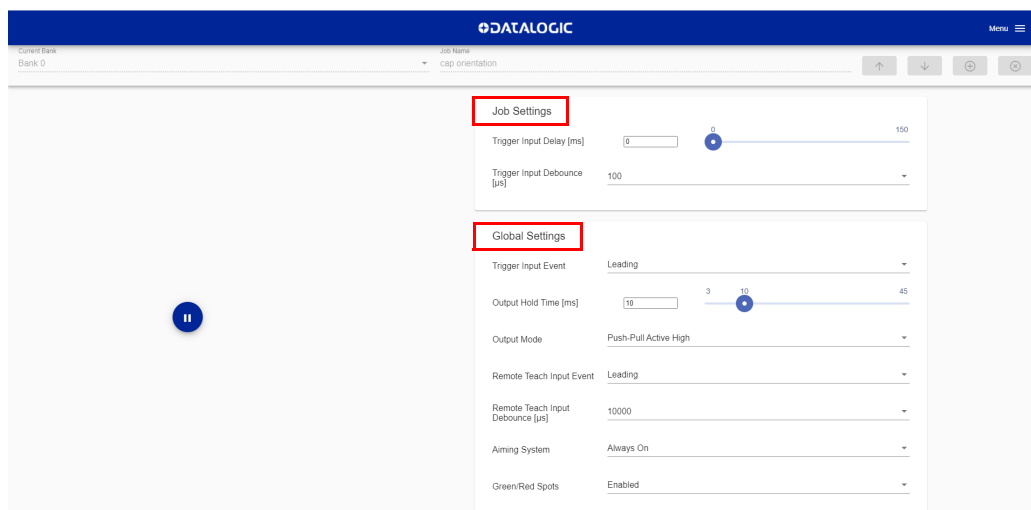
Selecting the option “Download the entire filmstrip” downloads the last 50 acquisitions.

1. Overrun occurrences are mostly due to a noisy trigger signal and/or a too fast sequence of trigger events (e.g. more than two events every 50 ms). Choose a proper Debounce filter time and/or adjust the line speed to have 20 pieces per second.

SETTINGS

This page contains Job Settings and Global Settings.

It can be reached using the hamburger icon on the upper right corner.



The parameters under Job Settings are variable for each job, which means that any change will only be valid for the current job:

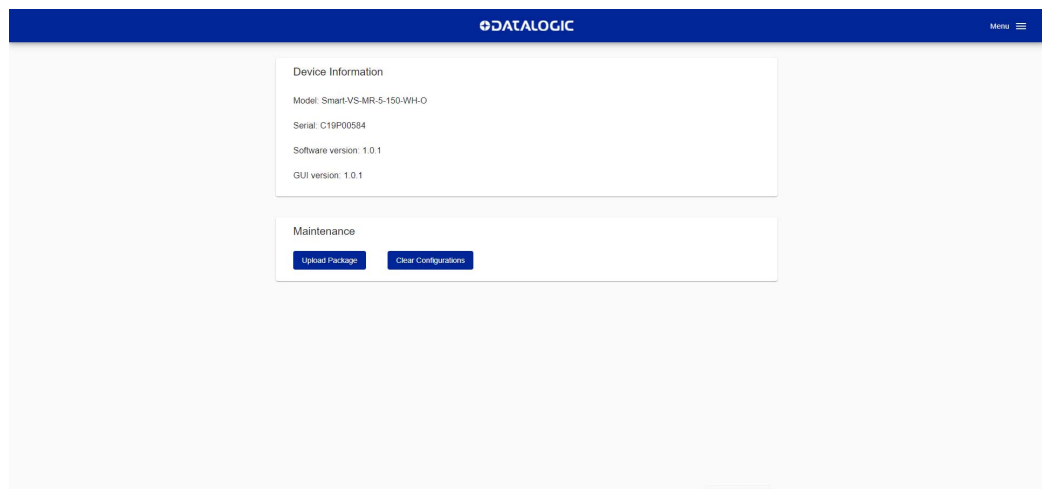
- **Trigger Input Delay:** the delay to apply prior to the acquisition process of the trigger event. It is measured in time (ms). This parameter can be adjusted along with image acquisition: images are shown on the related window.
- **Trigger Input Debounce:** filter debounce time measured in μ s.

The parameters under Global Settings are common to all jobs, which means that any change will be valid for all jobs:

- **Trigger Input Event:** can be either Leading or Trailing.
- **Output Hold Time:** the time (ms) during which the output data remains valid.
- **Output Mode:** available selections are NPN, PNP, Push-Pull active High, Push-Pull active Low.
- **Remote Teach Input Event:** available selections are Leading and Trailing.
- **Remote Teach Input Debounce:** filter debounce time measured in μ s.
- **Aiming System:** available selections are Always ON, Always OFF, Calibration Only.
- **Green/Red Spots:** available selections are Calibration Only, Enabled, Disabled.

UTILITIES

The **Utilities** page can be reached using the hamburger icon on the upper right corner.



This page contains:

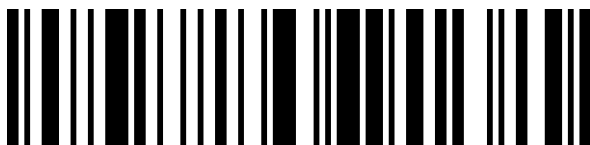
- **Device Information:** information about the device model, serial number, software version, and GUI version.
- **Maintenance:**
 - *Upload Package* to upgrade the device software.
 - *Clear Configurations* to clear all created jobs and reset all Global Settings to default.

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821006961

(Rev B)

September 2020