

Lector Viewer

FOR LECTOR®6XX

Software version 0.2.2



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About this manual

Scope and target groups

This manual describes the Lector Viewer for SICK's Lector®6xx type sensors. It contains all the information needed in order to use the Lector Viewer. It is intended for technical personnel who are responsible for working with the Lector Viewer in industrial environments.

Before starting to work with the Lector Viewer, read this manual carefully and make sure that you are familiar with the product. The information presented here will help you operate the product safely and correctly.

Additional documents

For further information on the Sensor Integration Unit (SIU), see the associated manual. This contains information on physical interfaces, assembly and operation, as well as technical data.

Typographical conventions

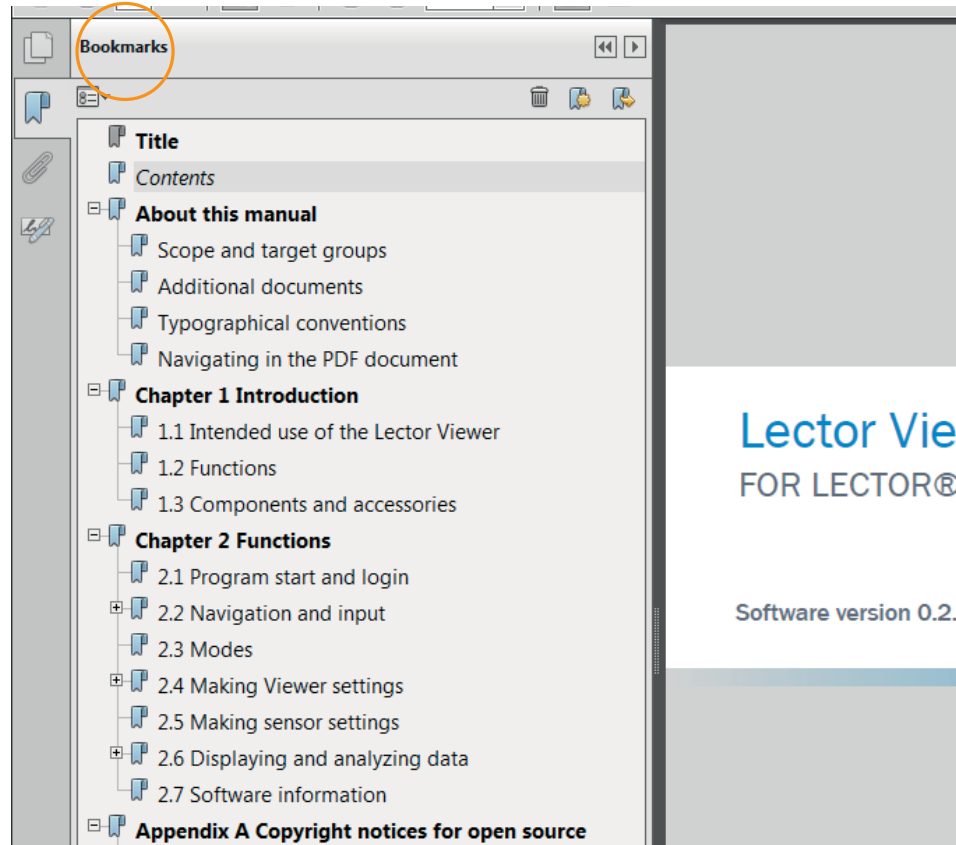
The manual uses the following typographical conventions:

<i>italic</i>	Italic text is used to identify menus, menu commands, dialog boxes, options, and the names of files and folders.
bold	Bold text is used for captions in illustrations.
<u>underscore</u>	Underscored text indicates a cross-reference or a web address.
monospaced	A monospaced font is used to indicate text or characters to be entered at the keyboard, such as commands and communication telegrams.

Navigating in the PDF document

About bookmarks

To display an overview of all the chapters and sections, click the bookmarks tab in the top-left section of the PDF. To select a chapter or section, click the corresponding bookmark.



About pages and cross-references

Cross-references refer to other points in the text. You can click on all the cross-references in this document in the same way as bookmarks.

2.1 Program start and login

When you start the Lector Viewer, the current live image is displayed. In addition, the user is automatically logged in with the lowest authorization level (*Operator*). No password is required for this user

The users *Authorized Client* and *Service* are also available in addition to *Operator*. These are assigned the following passwords by default:

<i>Authorized Client</i>	client
<i>Service</i>	servicelevel

You can change these passwords (see [Section 2.4.4 on page 15](#)). However, you must use the default password when you log in for the first time.

1.1 Intended use of the Lector Viewer

The Lector Viewer is an application used for SICK's Lector®6xx type sensors. It is used in industrial environments in combination with the Sensor Integration Unit (SIU).

The Lector Viewer and its accessories may only be used as described in this manual. In the case of any other usage or in the event of any modifications to the products (e.g. by opening the SIU housing) or to the SICK software, any warranty claims against SICK AG shall be null and void.

1.2 Functions

The Lector Viewer supports users when working with sensors of type Lector®6xx. Its most important functions are:

- ▶ Displaying status information
- ▶ Supporting operation in auto-setup mode
- ▶ Switching between different parameter sets
- ▶ Displaying and analyzing images

1.3 Components and accessories

The Lector Viewer consists of the following components:

- ▶ SD card containing the Lector Viewer installation
- ▶ SIU (with DC connector)

The following accessories are included in the system's scope of delivery:

- ▶ Lector Viewer manual
- ▶ SIU Quickstart document
- ▶ Software license key

The following accessories are **NOT** included in the system's scope of delivery:

- ▶ 24 V power supply unit for powering the SIU
- ▶ DC power supply cable, 4-pin
- ▶ Cable for connecting sensors

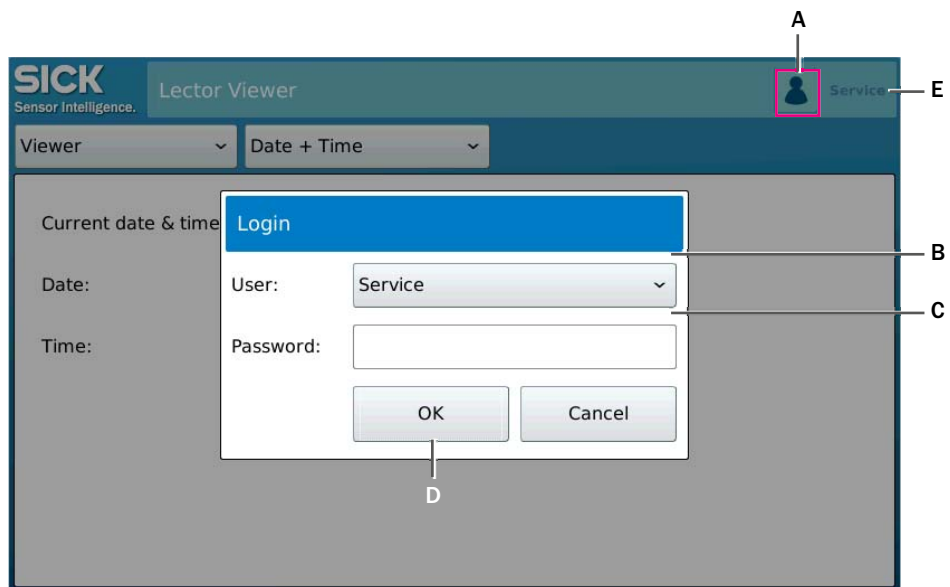
2.1 Program start and login

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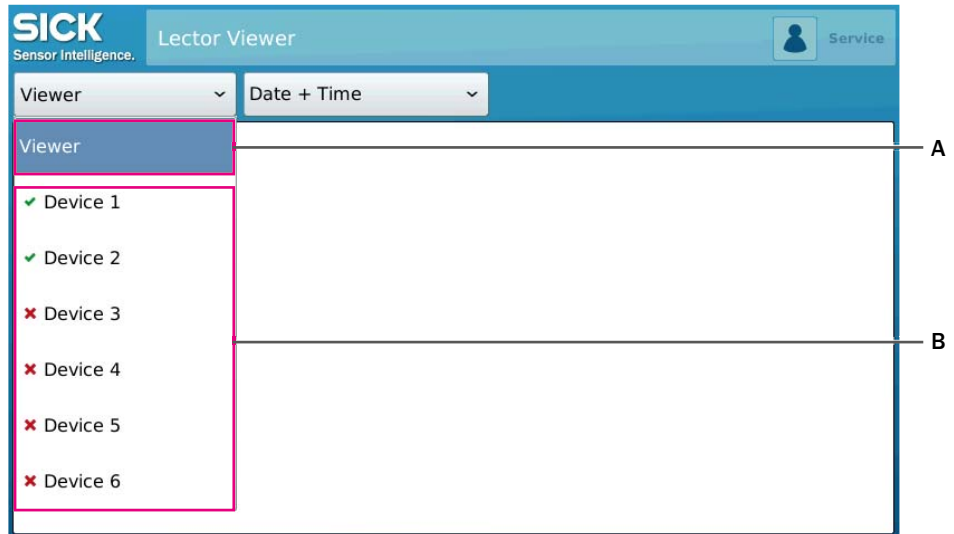
- A To log in as a user with extended rights, press the Login button in the top right-hand corner of the user interface
- B Select the required user profile
- C Enter the associated password
- D Confirm your input with *OK*
- E The user who is currently logged in is displayed next to the Login button

2.2 Navigation and input

2.2.1 Calling functions

You use drop-down menus to navigate in the Lector Viewer. Each window contains a maximum of three menus or menu levels. In the majority of windows, navigation is restricted to the main menu and one level below this.

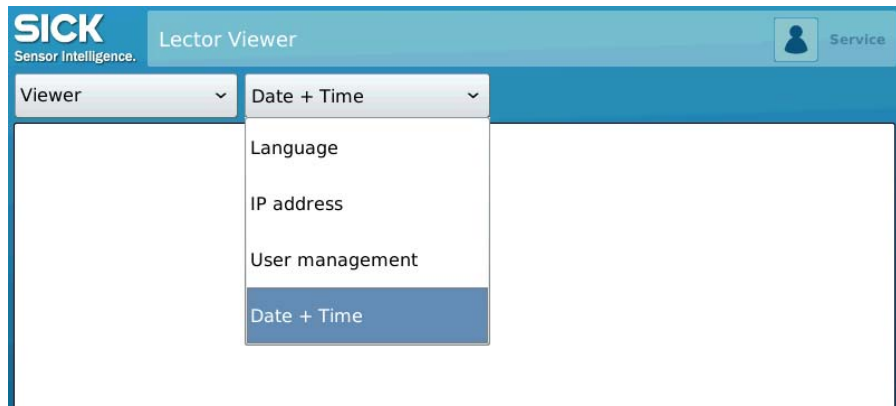
In the main menu, you choose between the Viewer as top-level instance (A) and the connected sensors (B).



Depending on the choice you make here, the associated functions are then available on menu level 2 (or 3).

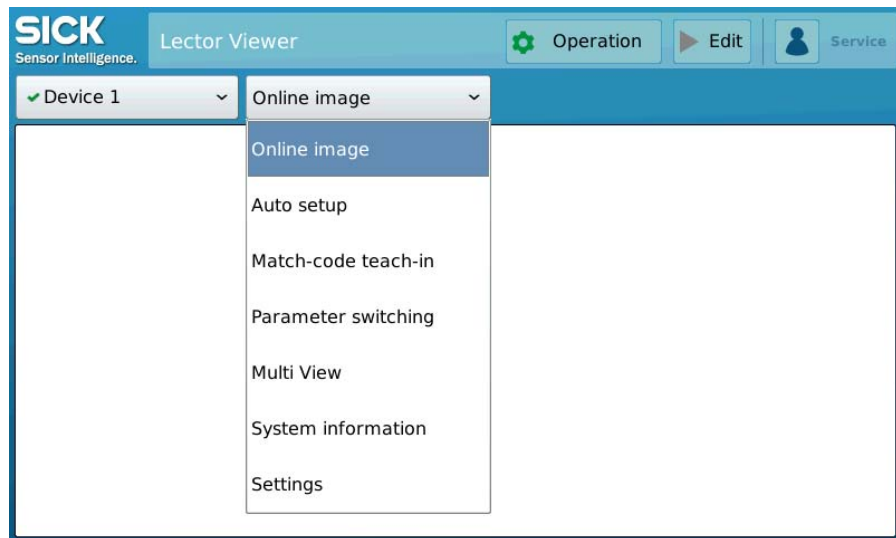
The higher-level functions for Viewer configuration allow you to set the following:

- ▶ Language
- ▶ Communication
- ▶ User management
- ▶ Date and time



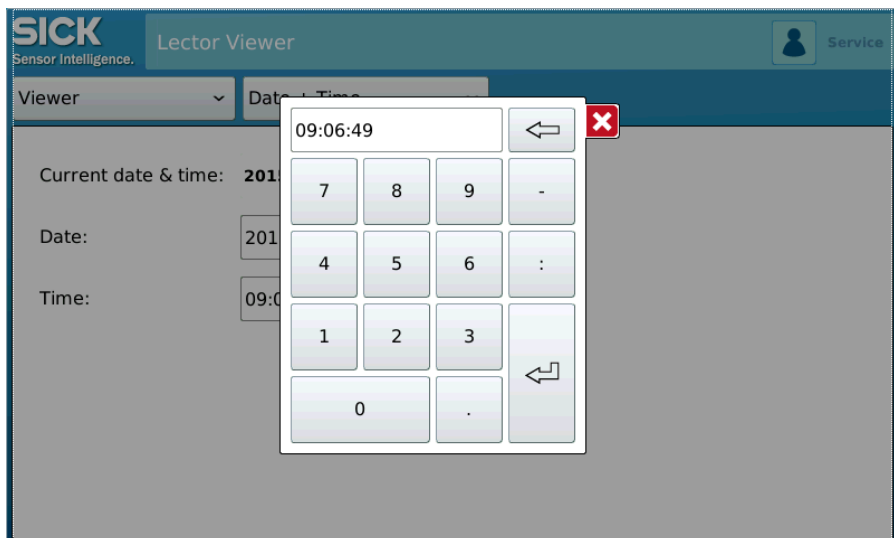
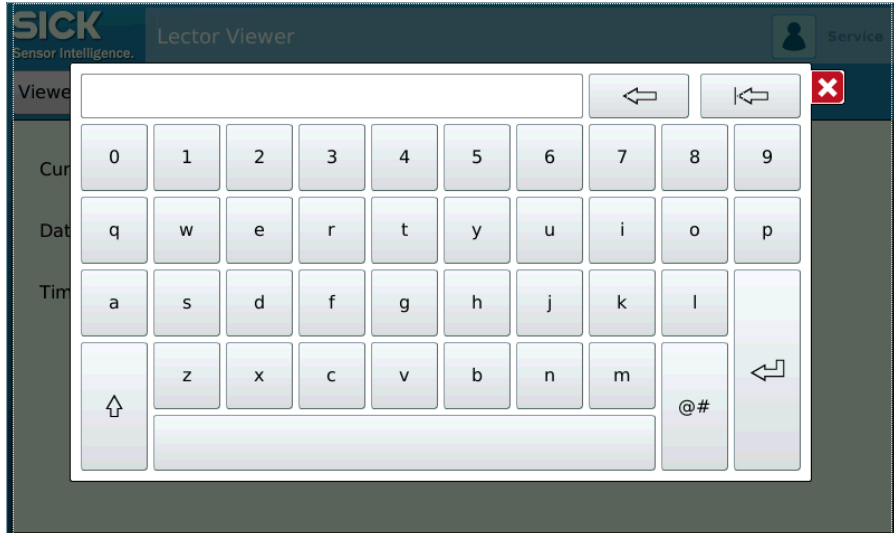
The functions that are available for all sensors are:

- ▶ Online image
- ▶ Auto setup
- ▶ Match-code teach-in
- ▶ Parameter switching
- ▶ Multi-view
- ▶ System information
- ▶ Sensor-specific configuration settings



2.2.2 Calling the screen keypad

If you press on a data entry window or text box then a keypad is displayed on the screen. To close the keypad again after making your input, press the screen next to the pad or press on the red X.



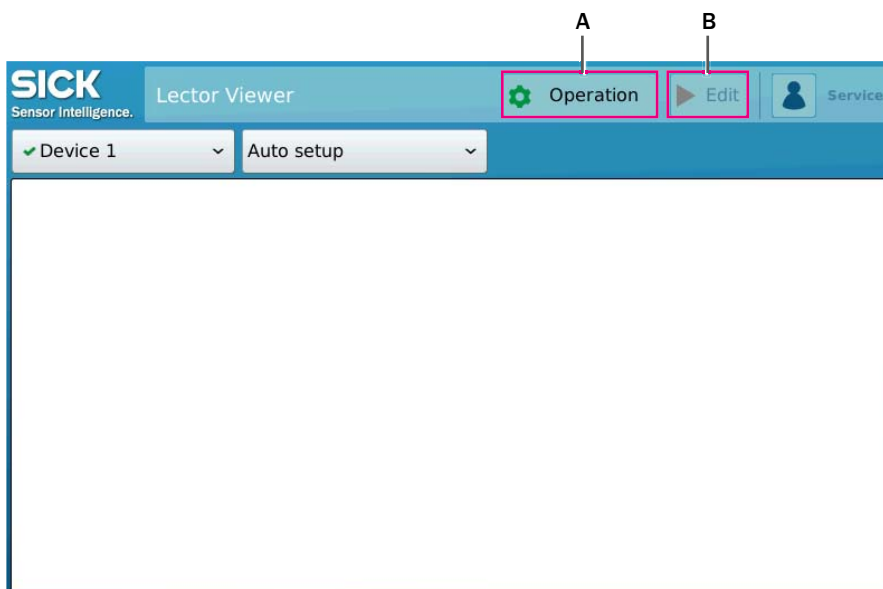
2.3 Modes

In general, a distinction is made between Standard mode (*Operation*, A) and Live mode (*Edit*, B). Live mode is available for the following functions:

- ▶ Online image
- ▶ Match-code teach-in
- ▶ Auto setup
- ▶ Parameter switching

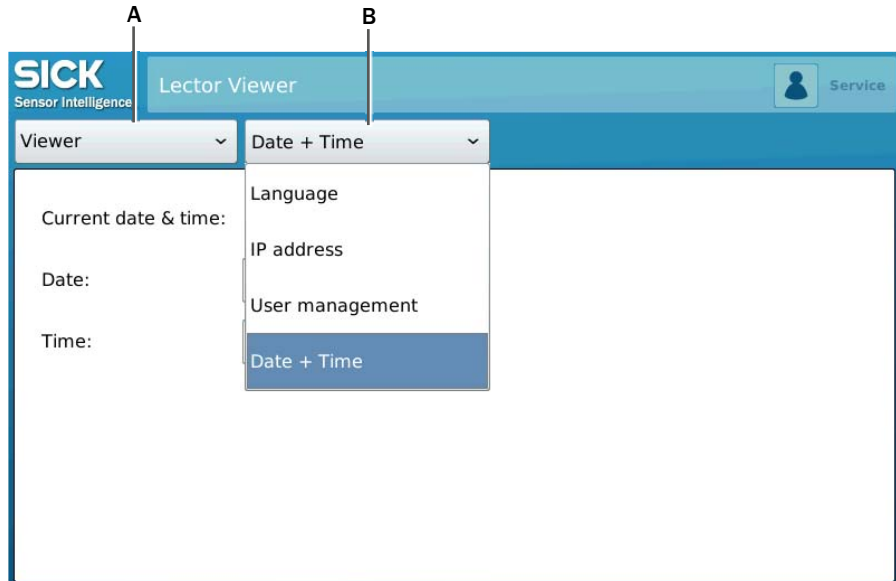


The other functions – multi-view, sensor settings and system information – can only be used in Standard mode. The mode is not shown separately in the title bars of the corresponding windows.



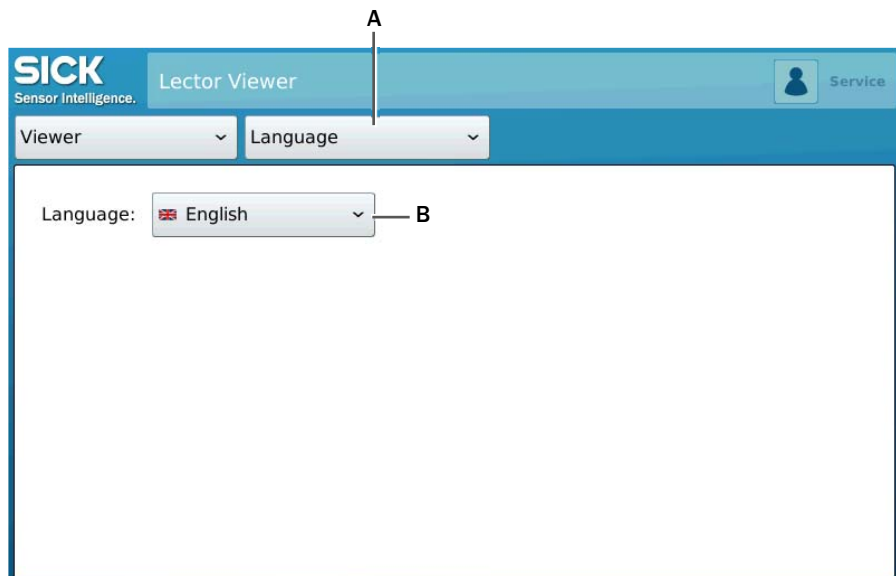
2.4 Making Viewer settings

2.4.1 First steps



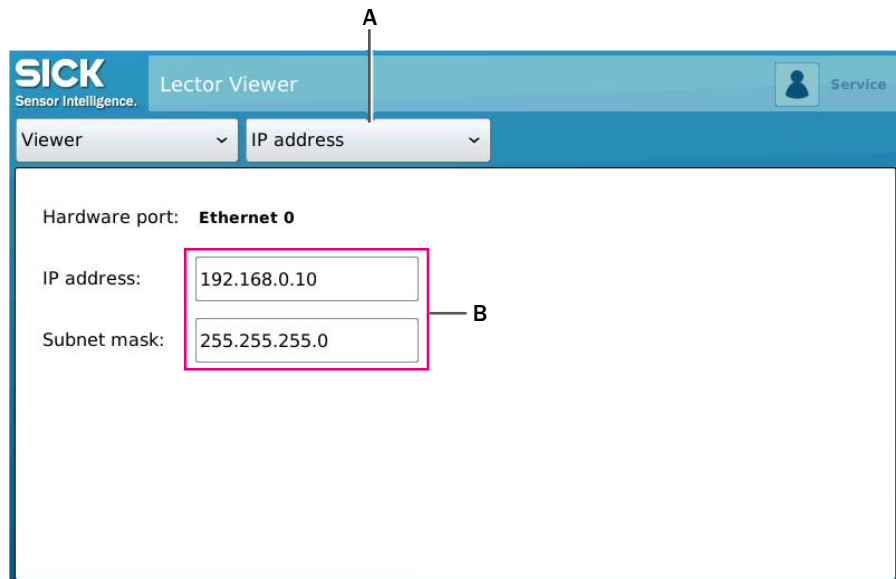
- A In the main menu, choose *Viewer*
- B On menu level 2, choose the required function

2.4.2 Selecting the language



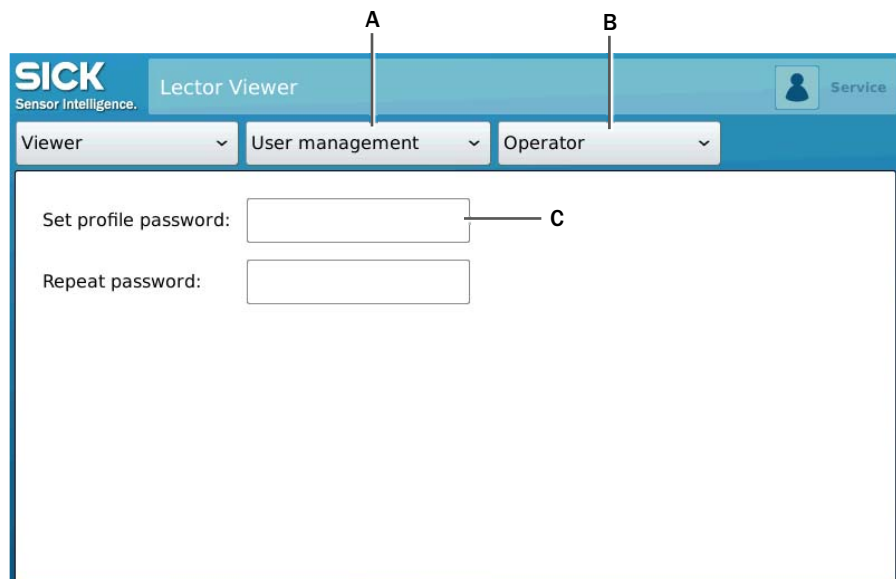
- A On menu level 2, choose the *Language* function
- B Now choose the required language in the drop-down menu.

2.4.3 Modifying the SIU's IP address



- A On menu level 2, choose the *IP address* function
- B Press the appropriate text box to enter the SIU's IP address and subnet mask.

2.4.4 User management: Profiles and passwords

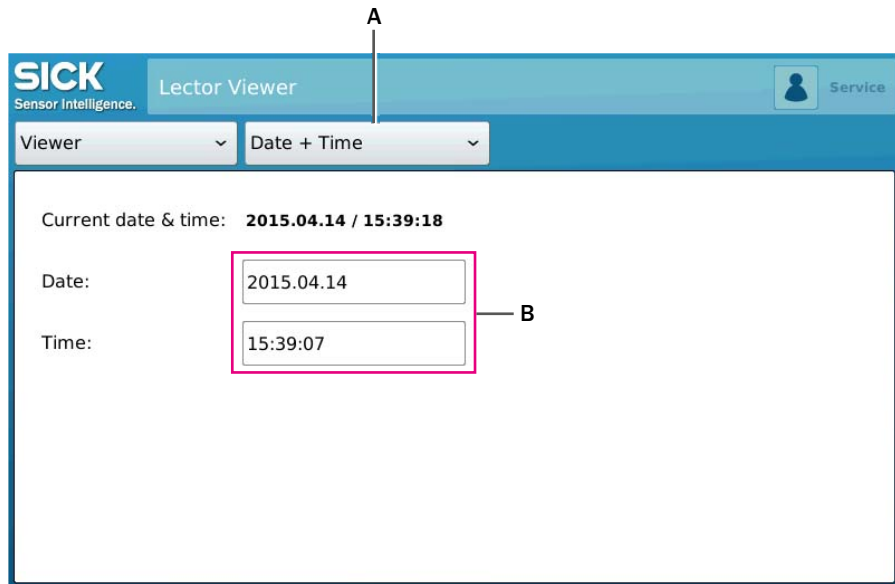


- A On menu level 2, choose the *User management* function
- B In menu level 3, select the required user profile. You can choose between the following profiles: *Operator*, *Authorized Client*, *Service*
- C Assign a password to the profile



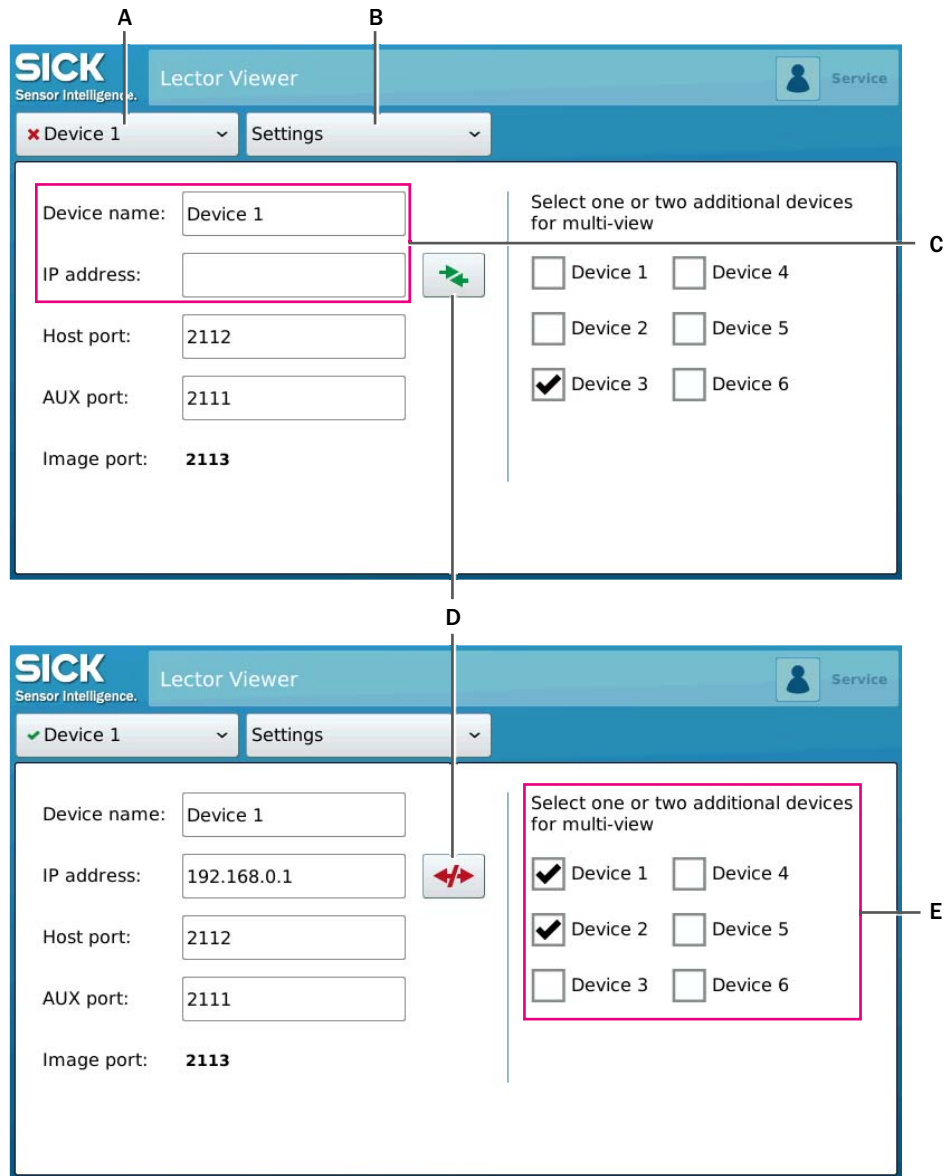
You should note that only *Service* users are authorized to modify the IP address, user management and date/time settings.

2.4.5 Date and time



- A On menu level 2, choose the *Date + Time* function
- B Press the appropriate text box to enter the date and time for the Viewer.

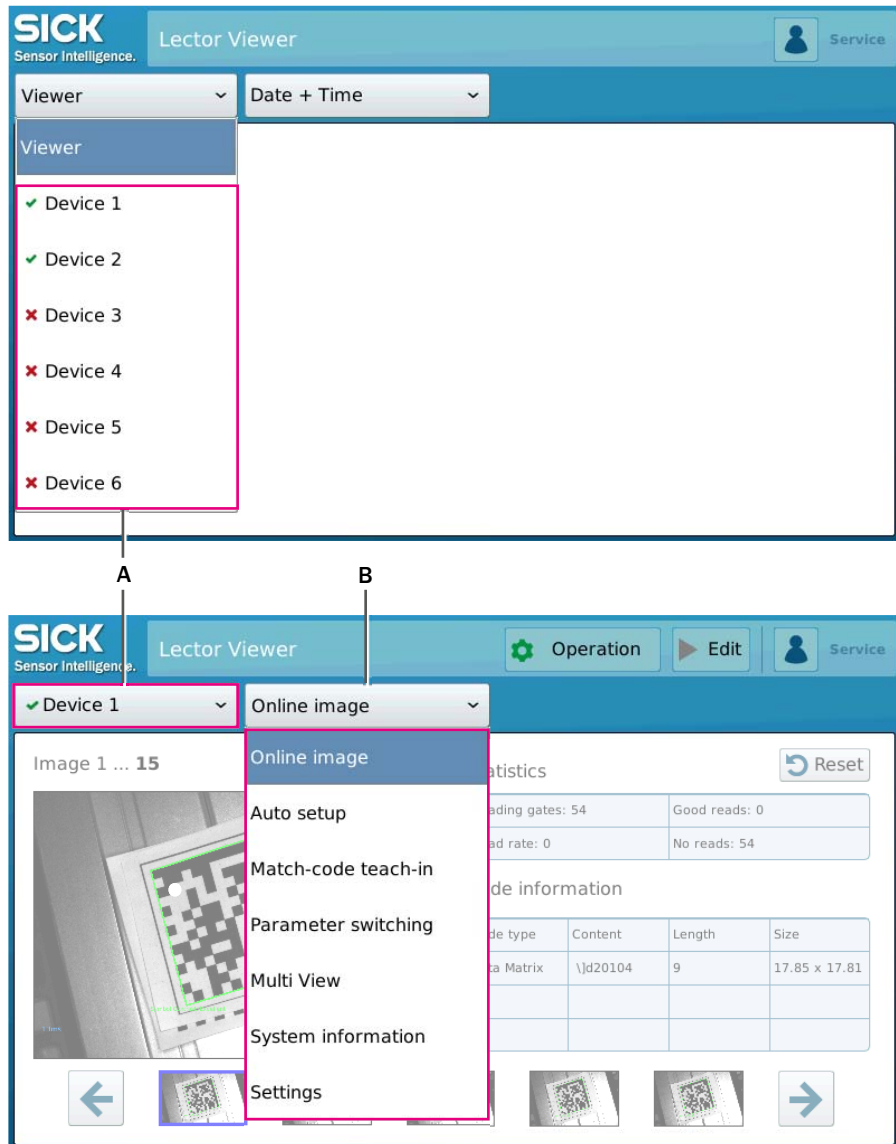
2.5 Making sensor settings



- A In the main menu, choose the sensor whose settings you want to modify
- B On menu level 2, choose the *Settings* function
- C Enter a name and the IP address for the selected sensor
- D Use this button to open or close the connection between the SIU and sensor.
- E You can use the checkboxes to choose two more sensors for the multi-view function.

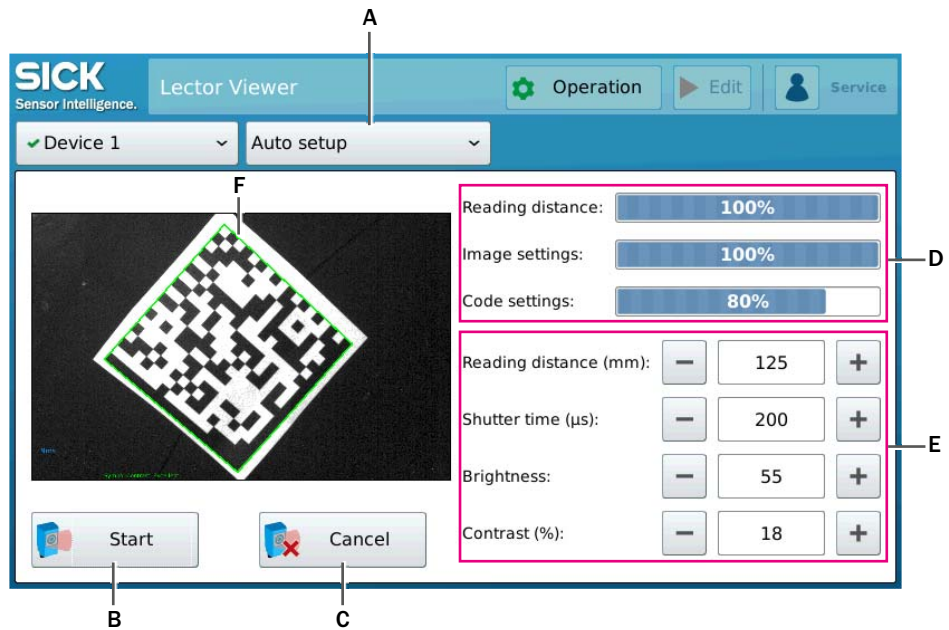
2.6 Displaying and analyzing data

2.6.1 First steps



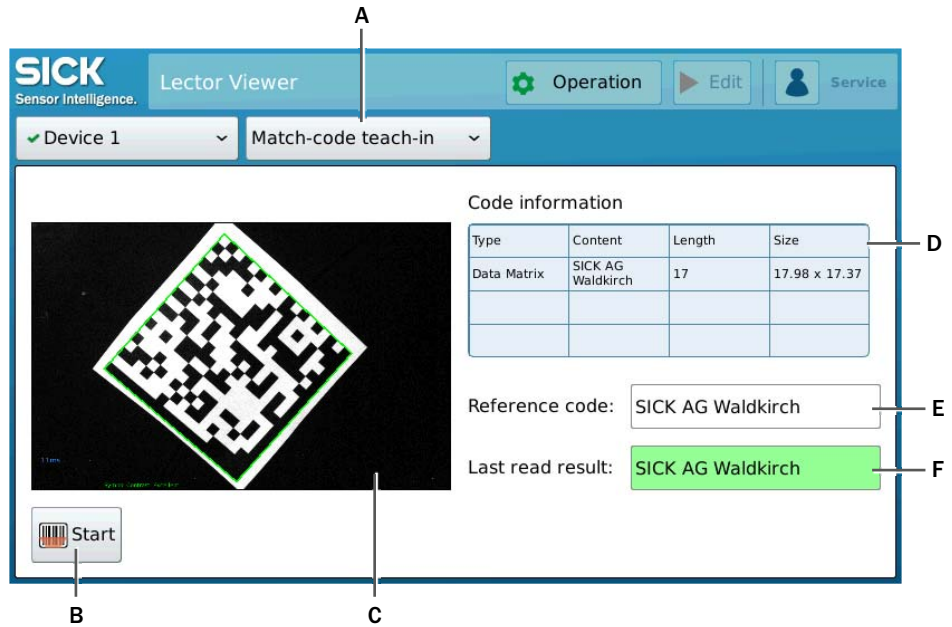
- A In the main menu, choose a sensor
- B On menu level 2, choose the required function

2.6.2 Setting up a sensor automatically



- A On menu level 2, choose the *Auto setup* function
- B This where you start the setup process
- C You can terminate the setup process here
- D Progress indicator for the setup process
- E Here you can modify or readjust the different settings for the selected sensor if auto setup does not yield satisfactory results. The settings are made for *Reading distance*, *Shutter time*, *Brightness* and *Contrast*
- F Live image

2.6.3 Teaching match-codes

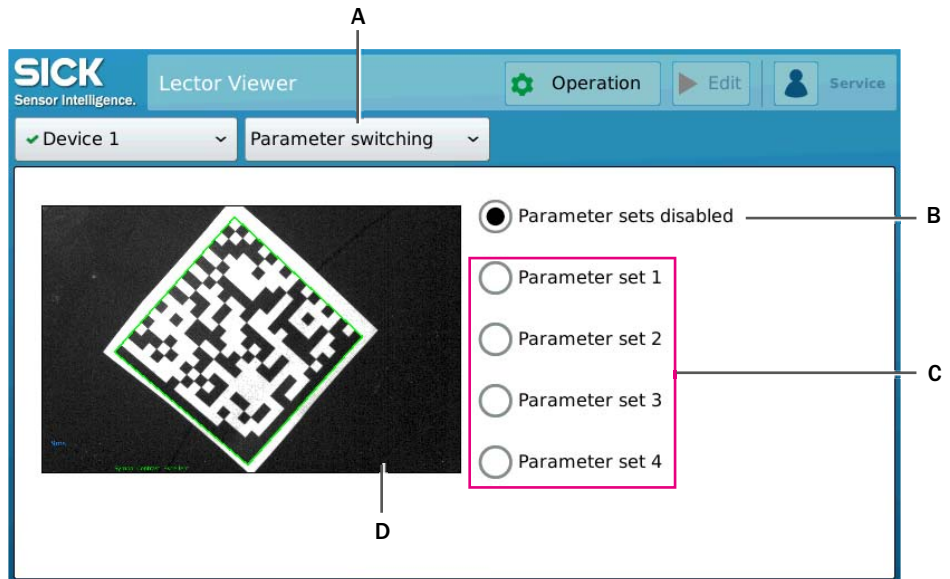


- A On menu level 2, choose the *Match-code teach-in* function
- B This where you start the teach-in process
- C Image currently being taught
- D Information on the read code
- E Taught or predefined reference code
- F Code currently being read Green = matches reference code; red = does not match reference code



You can teach your reference code in two ways: You can either press the *Start* button, or enter the code directly in the *Reference code* box (E).

2.6.4 Switching between parameter sets

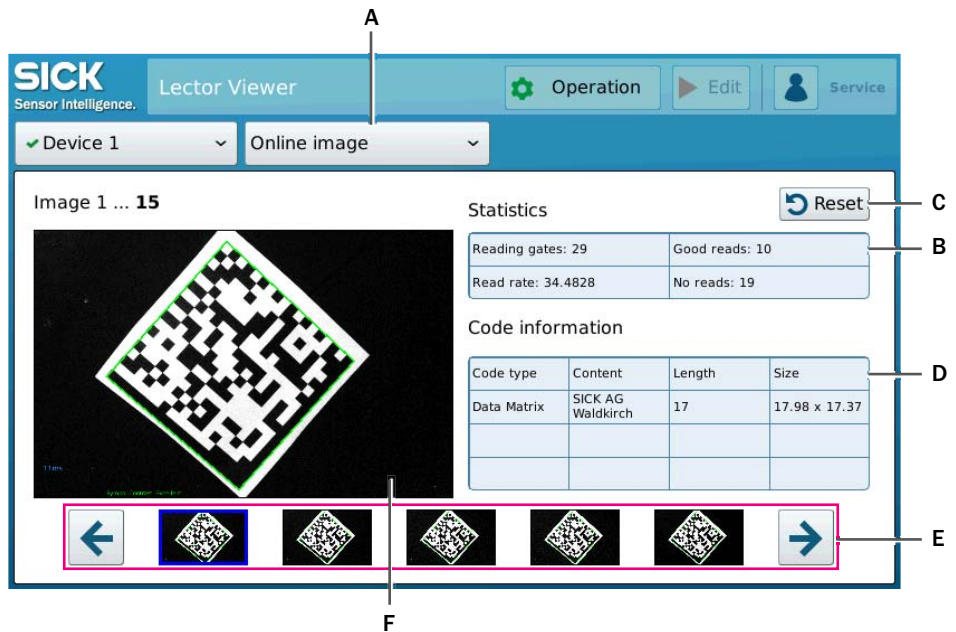


- A On menu level 2, choose the *Parameter switching* function
- B If the *Parameter sets disabled* button is selected then you are working with the current parameters
- C To work with stored parameter records, choose the associated button here
- D Live image



Please note that you cannot configure the individual parameter sets in the Lector Viewer but only in the connected sensor itself. To do this, you need the program SOPAS.

2.6.5 Displaying an online image

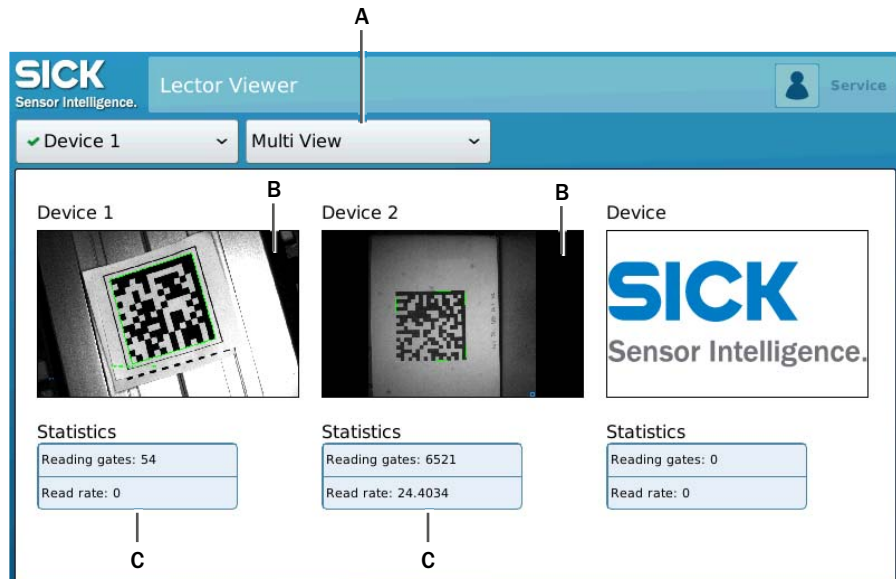


- A On menu level 2, choose the *Online image* function
- B Associated statistics
- C Press *Reset* to reset the values of the statistics to 0
- D Information on the last code read
- E History function with navigation: Here you can display the last 15 images that the sensor has sent the Viewer
- F Live image



Press the live image to zoom in on it.

2.6.6 Displaying images from multiple sensors in parallel



- A On menu level 2, choose the *Multi View* function
- B Last live image sent to the Viewer by each selected sensor
- C Information on the respective live image: Reading gates and reading rate

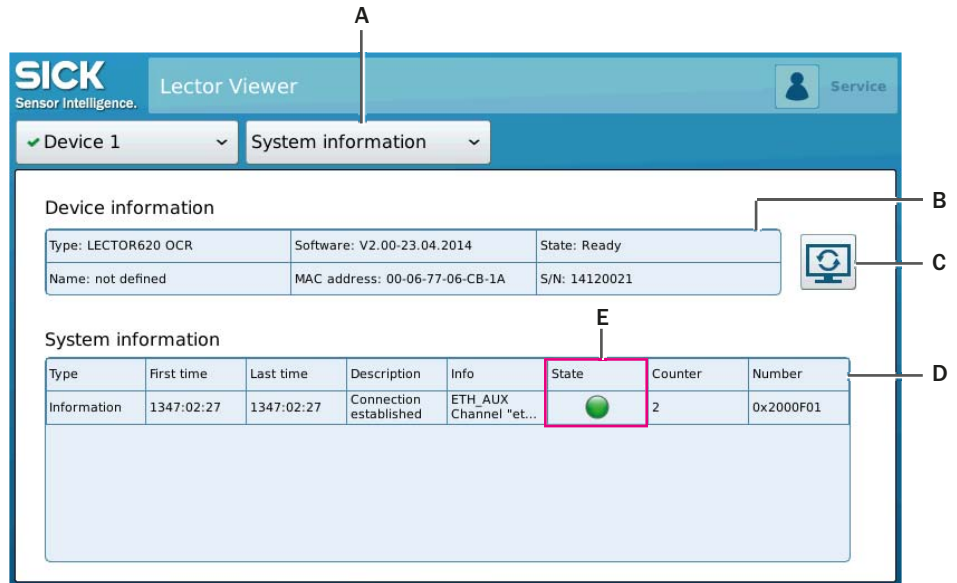


When you press one of the live images you go directly to the *Online image* page for the corresponding sensor (see [Section 2.6.5 on page 22](#)).



Please note that due to the available memory of the Lector Viewer, only one image from the Lector®64x or Lector®65x can be displayed at any one time in multi-view.

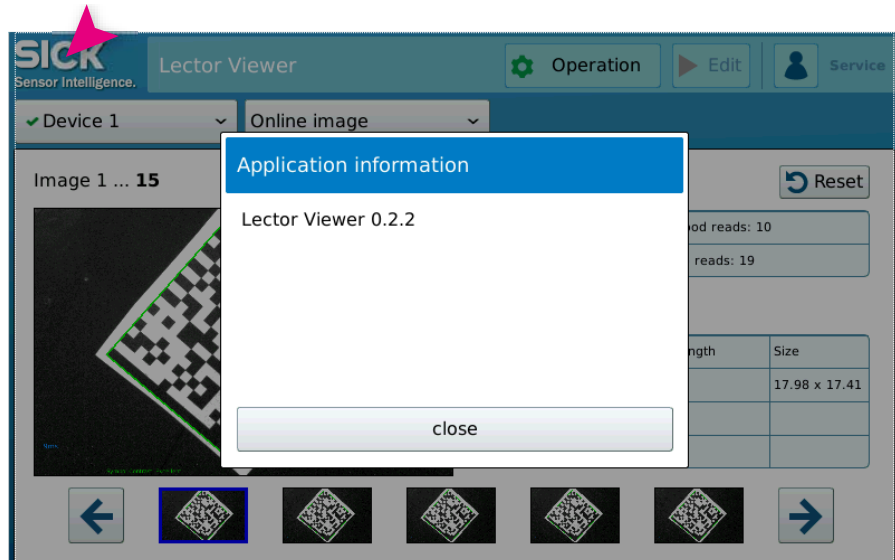
2.6.7 Displaying system and status information



- A On menu level 2, choose the *System information* function
- B Information on the currently selected sensor
- C Press the screen icon to refresh the display
- D List of status messages
- E The sensor status is indicated by the color displayed under *State*:
 - Gray Inactive
 - Green Information
 - Yellow Warning
 - Red Error
 - Blue Permanently saved error message

2.7 Software information

To display the version number of the Lector Viewer, press the SICK logo at the top left corner of the screen.



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Version 3, 29 June 2007

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A.3.2 Texas Instruments Keyboard-Software

Author: LT Thomas <ltjr@ti.com>

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The “System Libraries” of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A “Major Component”, in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work’s System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

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E-Mail sick@sick.cz

China

Phone +86 4000 121 000

E-Mail info.china@sick.net.cn

Phone +852-2153 6300

E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00

E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301

E-Mail info@sick.de

España

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E-Mail info@sick.es

France

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E-Mail info@sick.fr

Great Britain

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E-Mail info@sick.co.uk

India

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E-Mail info@sick-india.com

Israel

Phone +972-4-6881000

E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41

E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341

E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680

E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44

E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00

E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0

E-Mail office@sick.at

Polska

Phone +48 22 837 40 50

E-Mail info@sick.pl

România

Phone +40 356 171 120

E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30

E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39

E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732

E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990

E-Mail office@sick.si

South Africa

Phone +27 11 472 3733

E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4

E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800

E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00

E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288

E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00

E-Mail info@sick.com.tr

United Arab Emirates

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