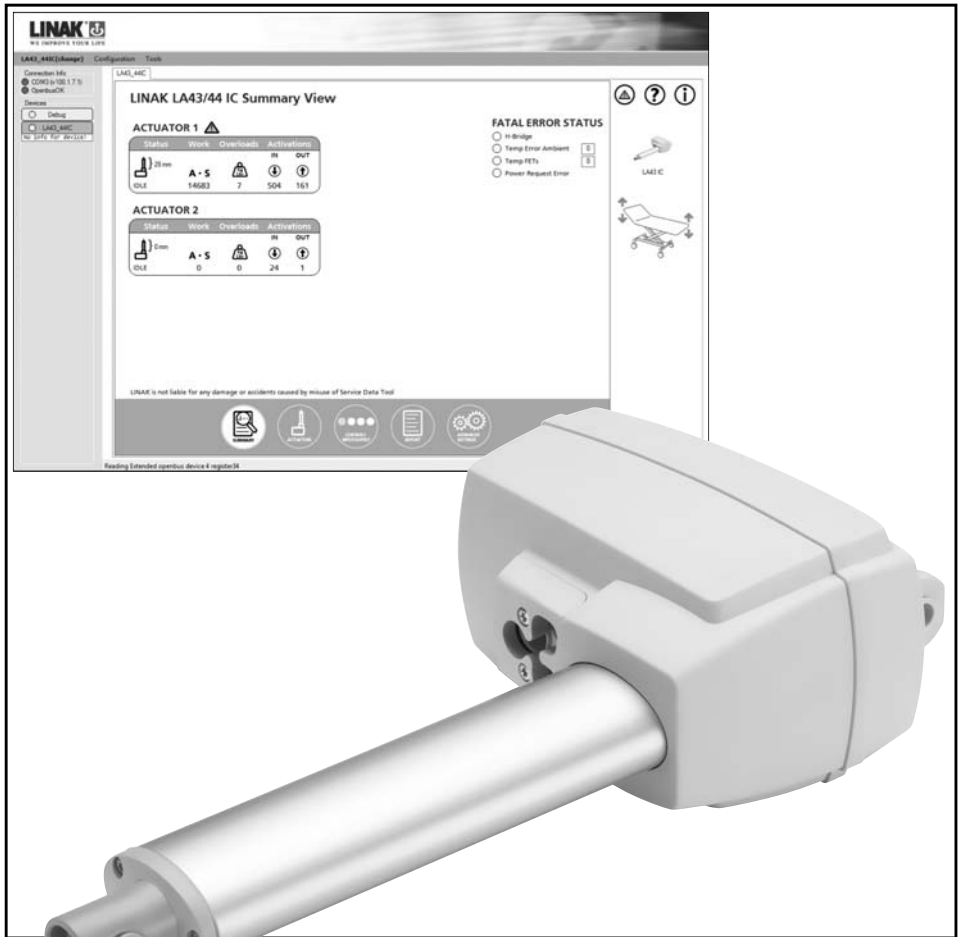


Service readout and Service Data Tool 2 for LA43 IC and LA44 IC



To learn more about LINAK please visit:
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Preface

We are delighted that you have chosen a product from LINAK.

Your new LA43 IC or LA44 IC actuator has a microprocessor inside making it possible to read out service data via the Service Data Tool. In this manual you can read about how to use and get the full benefit of the service function in your LA43 IC or LA44 IC actuator.

If no drivers are installed on your laptop (if you never have used service data tool on your laptop before, please contact your local sales representative to get access to the IB300001 user manual where this procedure is explained.

If you experience any problems with your new LA43 IC or LA44 IC actuator you are always welcome to contact your local LINAK representative who will be able to help you.

LINAK A/S

Before getting started with Reading out service data on a laptop

Equipment needed to read out service data

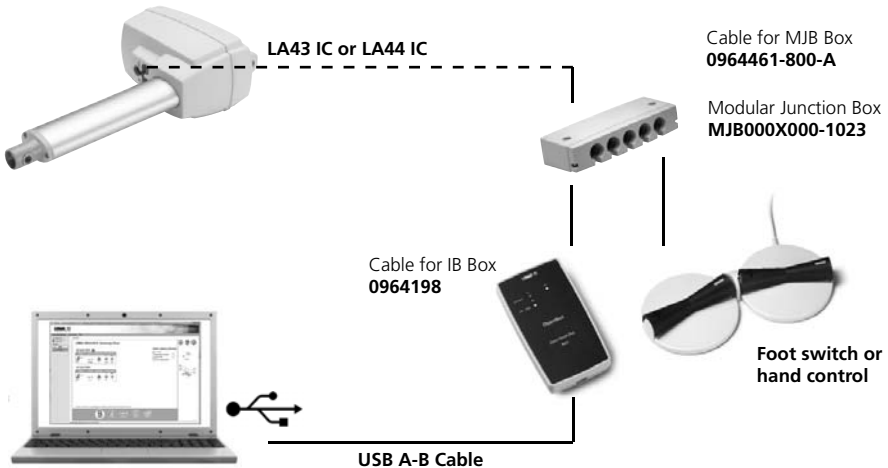
When reading out service information on a laptop you need:

- Service Data Tool 2 version 2.5.0 or newer version installed on the laptop. The software will be provided from your local LINAK sales representative.
- An OpenBus programming and data read out box (LINAK item number IB300001)
- A service readout cable (LINAK item number 0964198)
- Modular Junction Box for connection of Service Data Tool (LINAK item number MJB000X000-1023)
- Cable for connection of the Modular Junction Box to LA43 IC or LA44 IC (LINAK item number 0964461-800-A)
- One USB A-B cable

How to connect the equipment and get started



A) First of all make sure that Service Data Tool drivers and the Service Data Tool 2 software (version 2.5.0 or higher) is installed on your laptop.
If Service Data Tool drivers and the Service Data Tool software are not installed please see the SDT2 user manual.

B) Connect the equipment as shown below



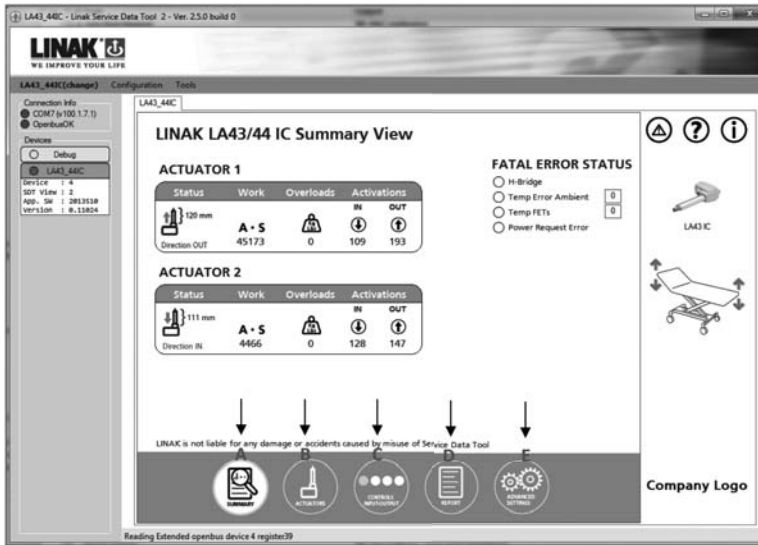
When connection is observed the red LED (“Supply 8V Missing”) in the current laptop window changes to green.

C) Wake the LA43 IC or LA44 IC (by pressing a button on the hand control or by pressing the foot switch).






D) Enter the Start menu on your laptop  and choose the LINAK programme to open the Service Data Tool  Linak SDT2

Reading out service data on a laptop


Ensure that the LA43_44 IC view is initiated by pressing the menu shown. Please contact your local LINAK Supplier for support if this is not the case.

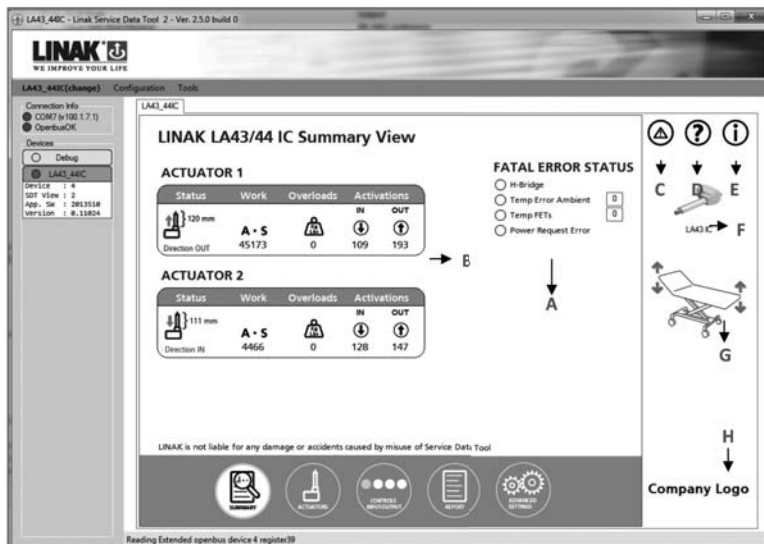


The Service Data Tool for LA43_44 IC is split into sections as described below.






	SYMBOL	EXPLANATION
A		For quick and easy overview of actuators info and fatal error status.
B		For detailed information about the actuators' statistical service data. For refreshing data from the control unit connected. For update of information when replacing the actuator.
C		For detailed information about hand control signals and codes.
D		For service reporting, production number, software number, item number of the application. Saving a complete relevant information for actuators data and service.
E		Intended for trained and authorised service technicians only. For change of service settings and update of actuator info if the control is replaced to maintain service data. For update of information when replacing the actuator.

Sections are updated every second to keep data updated.

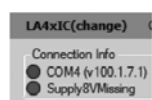
For further help and recommendations on each section, please press the help icon  or see this manual.



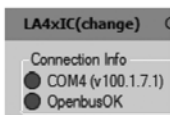
SYMBOL	EXPLANATION
A	H-Bridge If the H-Bridge LED is orange then you have fatal error and can use the troubleshooting button for help.
	Temp Error Ambient If the Temp Error Ambient LED is orange then you have fatal error and can use the troubleshooting button for help.
	Temp FETs If the Temp FETs LED is orange then you have fatal error and can use the troubleshooting button for help.
	Power Request Error If the Power Request Error LED is orange then you have fatal error and can use the troubleshooting button for help.
B	Status The green arrow indicates that the actuator is working and shows which direction, which is also written. The actuator position is shown with number.
	Work Work indicator for the actuator on channel 1 measures via ampere usage*seconds in use. The work indicator gives a very good indication of how much the actuator is worn. The indicator can only be reset by exchanging the actuator through SDT2 "Actuator" menu.
	Overloads Reduce the load on the actuator if there has been an overload. If a buffer actuator is used, the amount of overloads is an expression of how many times the actuator has run into end-stop and been overloaded.
	Activations Read out how many times a control button has been activated.

	SYMBOL	EXPLANATION
C		Troubleshooting flowchart that guides how a failure can be solved.
D		Help-manual of what the different functions means.
E		The customer can add their own information as PDF-file.
F		A picture of the product, it will change depending on which product is connected.
G		The customer can change the application picture.
H	COMPANY LOGO	The customer can add their own LOGO.

- A green LED indicates that the connection is working 100%
- A red LED indicates something is missing or has an error. A small text right to the LED informs about the problem.




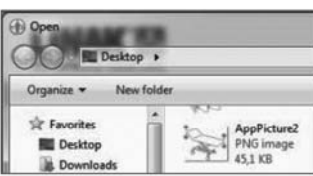
Connection to IB30 OK
Control Box connected= 8V missing









Com Port Connection: SDT IB30 version
OpenBus: Ok/Fail




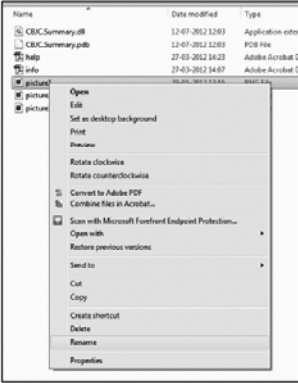
How to change the Application picture, Company logo and Information PDF-file



Change Application picture and company logo

SYMBOL	EXPLANATION
	<p>Click on the application picture or COMPANY LOGO with the right mouse button to select another picture or logo. Please use the file type JPEG or PNG.</p>
	<p>Choose the application picture from your desktop.</p> <p>The size of the new application picture or company logo should be:</p> <p>Application picture: Width 138 pixels, Height 112 pixels</p> <p>Company logo: Width 150 pixels, Height 18 pixels</p>

Change information pdf file

SYMBOL	EXPLANATION
<p>1</p> 	<p>To change the pdf files: help or info –  </p> <p>Open Computer</p>
<p>2</p> 	<p>Open the drive including "LINAK"</p>
<p>3</p> 	<p>Open SDT2</p>
<p>4</p> 	<p>Open Devices</p>

SYMBOL	EXPLANATION
<p>5</p> 	<p>Open the software-map for LA43/44 IC</p>
<p>6</p> 	<p>Click on views</p>
<p>7</p> 	<p>Click on the view you want to change the PDF-file in. For example summary</p>
<p>8</p> 	<p>Rename the existing pdf file. For example from "info" to "OLD" Remember to save or write the name you just have changed. In this example you have to remember "info"</p>

SYMBOL	EXPLANATION
<p>9</p> 	<p>Copy the file you want to move to the folder where you want to change the pdf.</p>
<p>10</p> 	<p>Rename the new pdf with the name of the pdf you want to replace. If we take the example from point 8, you have to change it to "info"</p>

Actuators

LINAK LA43/44 IC Actuators View

ACTUATOR 1

Status	Cutoff Limit	Work	Overloads	Acc.Duration	Activations
IDLE	IN [A] 7 OUT 7	A · S 45173	0	Σ[s] 449	IN 109 OUT 193

ACTUATOR 2

Status	Cutoff Limit	Work	Overloads	Acc.Duration	Activations
IDLE	IN [A] 3 OUT 3	A · S 4514	0	Σ[s] 360	IN 130 OUT 150

LINAK is not liable for any damage or accidents caused by misuse of Service Data Tool

Company Logo

SYMBOL	EXPLANATION
A 	To ensure that the application will stop if the current draw exceeds the preset limits.
	Total work on the actuator (A*S); Work indicator for the actuators measures via ampere usage *seconds in use. The work indicator gives a very good indication of how much the actuator is worn. LA23: 10.000 cycles in life test equals: 1.500.000 A*S LA27: 10.000 cycles in life test equals: 2.180.000 A*S LA31: 10.000 cycles in life test equals: 2.900.000 A*S LA34: 10.000 cycles in life test equals: 4.200.000 A*S LA43: 10.000 cycles in life test equals: 3.750.000 A*S LA44: 10.000 cycles in life test equals: 5.600.000 A*S BL1 : 10.000 cycles in life test equals: 1.800.000 A*S On the actuator 1 - the work indicator can only be reset by exchanging the actuator through service data tool "Advanced settings". On the actuator 2 the work indicator is reset by pressing
	Total number of overloads reached inwards and outwards.
	Accumulated activity duration time in seconds.
B 	When activating this button it will lead you to the "Advanced settings page" where you can replace the new actuator data for LA43/44 IC.
C 	Activate this button for update of data when the actuator has been replaced. When a new actuator has been connected it can be re-initiated to start from zero. If "replace" is not activated the LA43/44 IC believes the first actuator is still connected and the wrong data will be shown.

How to conclude on the service information

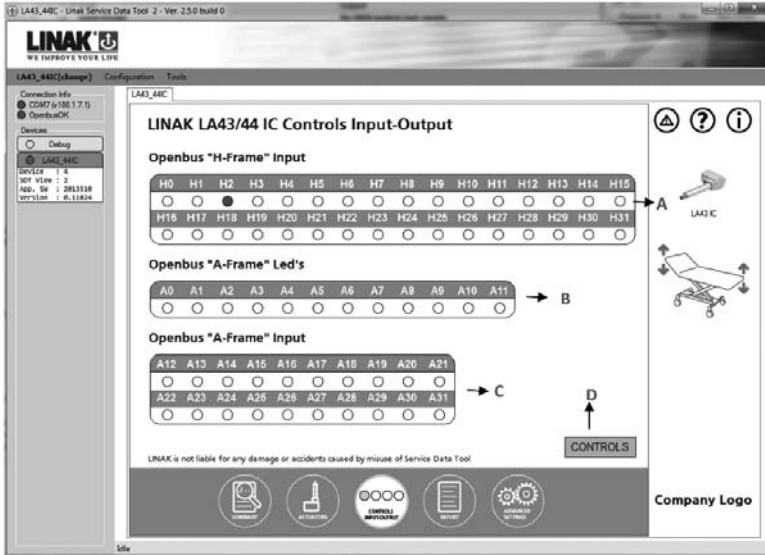
Total work:

Please contact the manufacturer of the medical application e.g. couch / table or chair for treatment and examination. The manufacturer will decide when it is appropriate to consider exchanging the actuator.

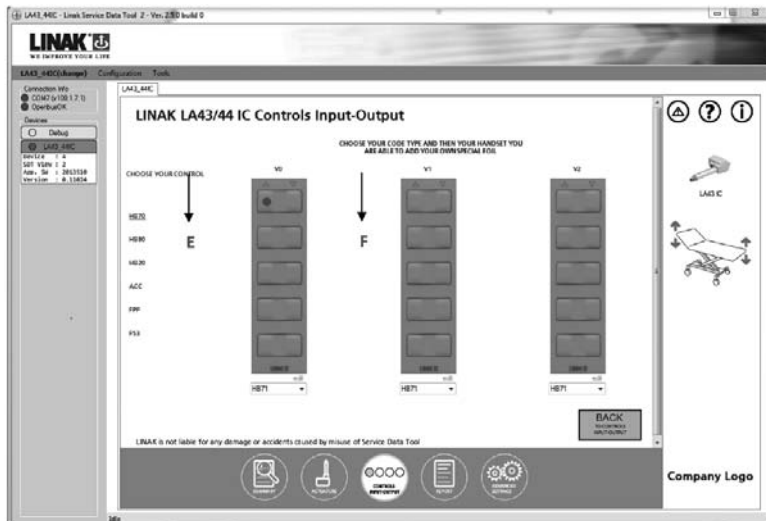
Overload:

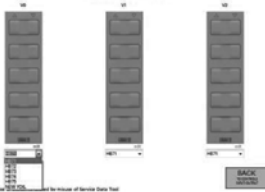


If overload has occurred it is recommended to consider stronger lifting equipment with higher working load for the particular patient / institution.

Controls Input - Output



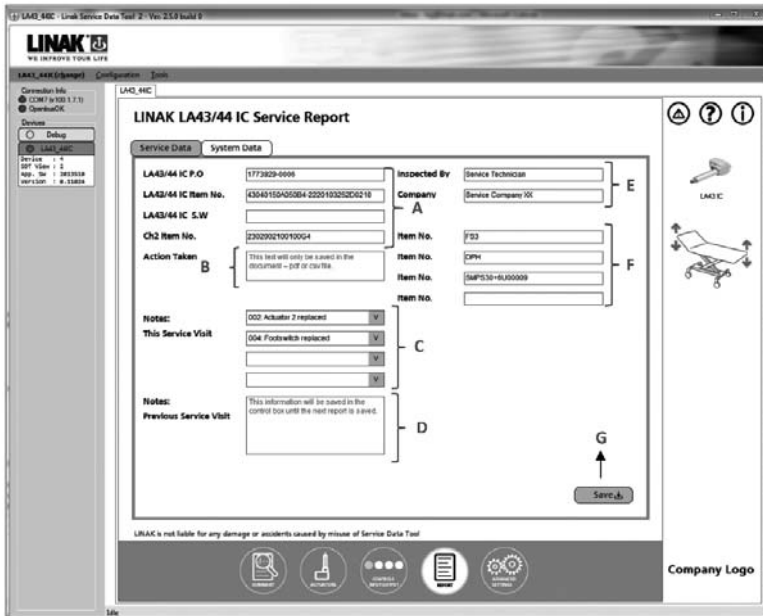
	SYMBOL	EXPLANATION
A	<p>Openbus *H-Frame* Input</p>	CpenBus Signals
B	<p>Openbus *A-Frame* Led's</p>	CpenBus Diode Signals
C	<p>Openbus *A-Frame* Input</p>	CpenBus Button Signals
D		The button leads to Handsets page where you add your own foil and test the button functionality.



SYMBOL	EXPLANATION
<p>E</p> <p>CHOOSE YOUR CONTROL</p> <p>HB70</p> <p>HB80</p> <p>HB20</p> <p>ACC</p> <p>FPP</p> <p>FS3</p>	<p>EXPLANATION</p> <p>Choose which control you want to test. You can choose between; HB70, HB80, HB20, ACC, FPP; FS3.</p>
<p>F</p> <p>Choose your control type and then your handset. You are able to add your own special foil</p> 	<p>Define your handset code type by looking at the label on the control, see example below. Afterwards you can choose the control.</p>  <p>Item No. HB8495V0002-63</p> <p>How to define: HB84, with the code type V0</p>
<p>F</p> 	<p>EXPLANATION</p> <p>How to add new foil? When you click on "NEW FOIL" you have to open the foil picture you want to add. Please use the file type JPEG or PNG.</p>

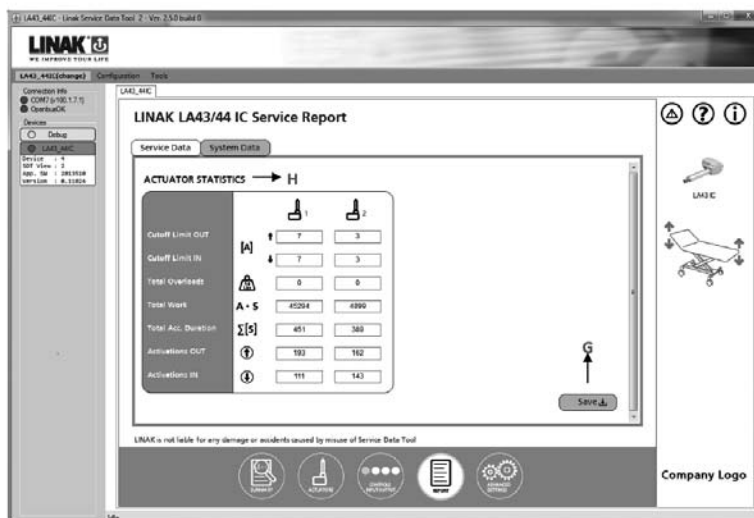
Report


After each service visit it is recommended to fill in the Service report and press “save” to maintain service data.



		Last Updated
	SYMBOL	EXPLANATION
A	<p>LA43/44 IC P.O. <input type="text"/></p> <p>LA43/44 IC Item No. <input type="text"/></p> <p>LA43/44 IC S.W. <input type="text"/></p> <p>CH2 Item No. <input type="text"/></p>	Write the information which is on the label of the product.
B	<p>Action Taken</p> <p><input type="text" value="This text will only be saved in the document - pdf or csv file."/></p>	Description made in this box will be read out when the report is saved.
C	<p>Notes:</p> <p>This Service Visit</p> <p><input type="text" value="002: Actuator 2 replaced"/> <input type="button" value="v"/></p> <p><input type="text" value="004: Footswitch replaced"/> <input type="button" value="v"/></p> <p><input type="text" value=""/></p> <p><input type="text" value=""/></p>	Choose up to 4 notes after the service visit. Messages for the next service visit - will be stored and readable at next visit.
D	<p>Notes:</p> <p>Previous Service Visit</p> <p><input type="text" value="This information will be saved in the control box until the next report is saved."/></p>	Up to 4 notes readable from the previous service visit.

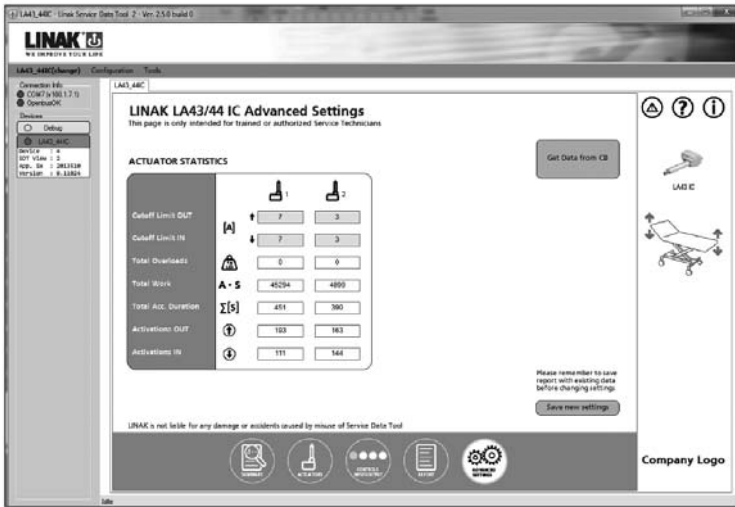
E	Inspected By <input type="text" value="Service Technician"/> Company <input type="text" value="Service Company XX"/>	Fill in the information; Inspected by, Company
F	Item No. <input type="text" value="FS3"/> Item No. <input type="text" value="DPH"/> Item No. <input type="text" value="SMPS30+8U00009"/> Item No. <input type="text"/>	Fill in the Item No. for other Controls



	SYMBOL	EXPLANATION
G		When the application has been checked and the information completed, press "save" to save as PDF, CSV, send to Email. Relevant actuator statistics and system data will be included in the report.
H		


Advanced settings

Please notice! This section is only intended for trained and authorized service technicians



	SYMBOL	EXPLANATION
A		Remember to update actuator info if the LA43/44 IC is replaced . In this way you maintain the statistical service data information on the actuators.
B		Get/Retrieve data from CB: When entering New Data the data will be visible with bold script. "Get Data from CB" undo changes and retrieve existing data from the control box.
C	<p>Please remember to save report with existing data before changing settings</p>	Remember to save report with existing data before changing settings. Save new settings: This will reset the above information with the new data filled in.

Info Site:

The manufacturer of the medical application e.g. couch / table or treatment chair for treatment and examination can add one information site which will be accessible in each section via the icon 

The information site may include further information e.g. service checklist for the Service Technician to follow Etc.

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