



Update-Backup-Analysis

**Updating firmware** 

Saving, loading configuration

Saving, evaluating Recording

**Updating LON Modules** 

FST-2XT and FST-2XTs Recovery

**Updating LON Modules** 

Troubleshooting

**Short instructions** 



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# 1 General

This manual is a supplement to the FST-2XT manual and the FST-2XT Installation and Commissioning Manual. It is limited exclusively to the description of the aspects relevant to the function.



The safety guidelines of the FST-2XT manual and the FST Installation and Commissioning manual always apply.

# 1.1 Abbreviations, characters and symbols used

Symbol / abbreviation	Meaning
<b>&gt;</b>	Operational instructions Perform the tasks that follow this symbol in the specified order.
<u></u>	Warning notice This symbol is located in front of safety-relevant information
(i)	Information notice This symbol is located in front of relevant information.

## 1.2 Notation

Notation	Meaning
Bold	<ul> <li>Designations of menus, options, buttons, check boxes, input and display fields, display areas, navigation areas, software functions</li> <li>Keyboard commands</li> </ul>
Italics	<ul> <li>Designations of folders, screen windows, screen areas, work areas, tabs, software dialogs</li> <li>Operating level, parameters, paths, operating modes, and input and display values</li> </ul>
	> System messages > Cross references
<italics brackets="" in="" pointed=""></italics>	> Place holders for file names.
LCD font	> System messages of the controller



# 1.3 Further information

The following documents, among others, are available for the FST control system and its components:

- > ADM Manual
- > EAZ 256 Manual
- > EAZ TFT.45.110.210 Manual
- > EN81-20 Manual
- > FPM Manual
- > FST-2XT/s Manual
- > FST-2XT MRL Manual
- > FST Installation & Commissioning Manual
- > GST-XT Manual
- > LCS Manual
- > RIO Manual
- > SAM Manual
- > UCM-A3 Manual

These and other up to date manuals can be found in the download area of our website at <a href="https://www.newlift.de/downloads-311.html">https://www.newlift.de/downloads-311.html</a>

#### 1.4 How to contact us

If, after referring to this manual, you still require assistance, our service line is there for you:

Phone +49 89 - 898 66 - 110

E-mail <u>service@newlift.de</u>

Mon. - Thurs.: 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m.

Fr: 8:00 a.m. - 3:00 p.m.



# 2 Hardware requirements

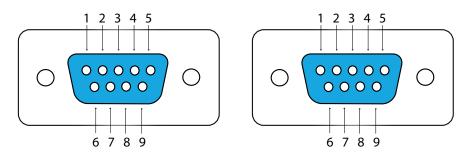
- > PC with MS Windows operating system
- > Internet access
- > Free USB port
- > USB stick, max. 32 GB (with FAT32 file system)

# 2.1 Serial interface cable (null modem cable) for FST

The cable is required for the following programs:

- > FST Editor
- > Elevision Light
- > Lon Modul Center

### **Technical data**



Connections A and B - SUB-D socket to SUB-D socket

## **Pinning**

Pin	Conductor color connection A	Conductor color connection B	Assignment A-B
1	black	orange	1-4
2	brown	red	2-3
3	red	brown	3-2
4	orange	black	4-1
5	yellow	yellow	5-5
6	-	-	not assigned
7	green	blue	7-8
8	blue	green	8-9
9	violet	violet	9-9
socket	black	black	S-S



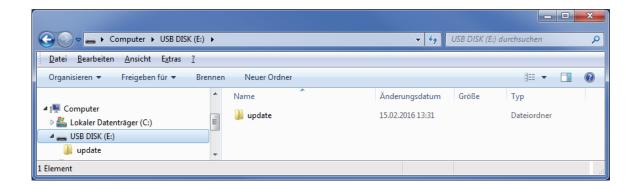
# 3 Firmware

# 3.1 Saving firmware update on the USB stick

- ➤ Connect the USB stick to the PC.
  Wait until the operating system has detected the USB stick as a removable disk.
- ► Create a new folder on the removable disk with the folder name update.



Pay attention to spelling and capitalisation. Use only lower-case letters.



You must request the firmware update file from our service line in advance.

There are two ways to obtain the firmware update:

- 1. via E-mail
- 2. via Link NEW LIFT Cloud
- ▶ Save the firmware update file that you received in the newly created *update* folder on the USB stick.

At <a href="https://www.newlift.de/downloads-311.html">https://www.newlift.de/downloads-311.html</a> you will find the following relevant files for download:

- > Information on version differences
  - FST-2XTchanges-customer-EN.pdf
- > This document

hb Update-Backup-Analysis fst2XT XTs 2020 09 en.pdf



### Do NOT extract the file with the .tar extension into the update folder!

- ▶ Wait until the file has been completely stored in the *update* folder on the USB stick.
- ► Remove the USB stick from the PC.



# 3.2 Copying the FST firmware update to the FST-2XT

- ► Save existing configuration:
  - »Save the configuration file internally
  - "4.1 Saving / loading the configuration internally on the FST" on page 11.

If necessary, also:

- »Save the configuration file on the USB stick.
- "4.2 Saving the configuration on the USB stick, loading from the USB stick" on page 11
- ▶ Use the controller fuse to switch the control system OFF and ON.
- ► Set the Auxiliary Mode switch of the FST-2XT to **ON**.
- ▶ Plug the USB stick with the firmware update into port X41 of the FST-2XT. The message USBStick OK appears briefly on the screen.
- ▶ In the menu of the FST controller, call up MAIN MENU/System/Update FST.



### This menu item is only displayed if the USB stick is plugged in.

- ► Select option Upd. f. USBStick.
- ► Select YES to start the update.

  After a few seconds, the FST-2XT update screen appears.



#### The update may take up to 4 minutes.

Following a successful update, the message UPDATE COMPLETE appears briefly on the screen.

If the update could not be completed successfully:

e.g., if the FST controller restarts immediately after briefly displaying the update screen:

- ▶ Use the controller fuse to switch the control system OFF and ON.
- ► Repeat update procedure.

The FST-2XT restarts following a successful update.

► Check the software version by pressing the **SHIFT + ENTER** buttons.

The following information appears:

--- FST information --HW Vers. :XXX-XXX
SW Vers. :U2.000 - XXXX
:tt/mm/jjjj
Boot Ver. :X.X.X.XX
DRV Vers. :XXXX

If the displayed SW version or the DRV version does not match the current software version: repeat the update process.

▶ Press the ENTER button to exit the menu item again.



# 3.3 Copying the GST firmware update to the GST-XT

- ► Plug the USB stick with the GST firmware update into port X12 of the GST-XT. The message GST USBStick OK appears briefly on the screen of the FST.
- ► Save existing configuration:
  - »In the menu of the FST controller, call up MAIN MENU/GST-Menu/Configuration/ GST-Config -> USB.
  - »Select YES.

The configuration data is stored on the USB stick in automatically created subdirectories. The message: GST Config XFER OK! appears briefly on the screen.

- ► Copying the GST firmware update to the GST-XT:
  - »In the menu of the FST controller, call up MAIN MENU/GST-Menu/Configuration/Update GST f. USB.
  - »Select YES to start the update.

The message GST WAITING TO RESET

appears briefly on the screen. The entire update process of the GST firmware takes approximately 50 seconds (25 seconds for the update and 25 seconds for the automatic restart of the GST-XT).

During the update process, the LEDs of the GST-XT illuminate continuously in sequence. Following a successful update, the message GST\_USBStick\_OK appears briefly on the screen.

- ► Check the software version by pressing the **SHIFT + ENTER** buttons:
  - »Scroll the screen until the following information appears.

```
---GST Information ---
GST SW Vers. : V2.0X0 - XXXX
: tt/mm/jjjj
```

If the displayed SW version does not match the current software version: repeat the update process.

▶ Press the ENTER button to exit the menu item again.



# 4 Configuration

### 4.1 Saving / loading the configuration internally on the FST

#### Saving

- ▶ In the menu of the FST controller, call up MAIN MENU/System/Config-->Backup.
- ► Select YES to save the backup in the system.

#### Loading

- ▶ In the menu of the FST controller, call up MAIN MENU/System/Config<--Backup.
- ► Select YES to load the backup from the system.

# 4.2 Saving the configuration on the USB stick, loading from the USB stick

- ► Set the Auxiliary Mode switch of the FST-2XT to **ON**.
- ► Plug the USB stick into port X41 of the FST-2XT.

  The message USBStick OK appears briefly on the screen.

#### Saving

▶ In the menu of the FST controller, call up MAIN MENU/System/Copy to.



This menu item is only displayed if the USB stick is plugged in.

- ► Select the option Config → USBStick.
- ► Select YES.

The configuration data is stored on the USB stick in automatically created subdirectories. The message Config TRANSFER OK! appears briefly on the screen.

For unique identification, beginning with version V2.000-0102, the file is given a unique file name that is made up of the NEW *LIFT* factory number, installation ID and the lift factory number (provided this information has been recorded in the system).

#### Loading

▶ In the menu of the FST controller, call up MAIN MENU/System/Kopieren von.



This menu item is only displayed if the USB stick is plugged in.

- ► Select the option USBStick -> Config.
- ► Select YES.



Attention! An existing configuration is overwritten.

The FST loads the configuration data from the USB stick.

The control system automatically performs a restart.

Following a successful update, the message UPDATE COMPLETE appears briefly on the screen.

▶ Unplug the USB stick from port X41 of the FST-2XT.

The message USBStick REMOVED appears briefly on the screen.



# 5 Recording

The system performs an automatic on-board long-term recording. System activities as well as various statistics are stored daily on the SD card over a period of up to 31 days.

# 5.1 FST Recording

#### 5.1.1 Saving FST recordings on the USB stick

- ► Plug the USB stick into port X41 of the FST-2XT.

  The message USBStick OK appears briefly on the screen.
- ▶ In the menu of the FST controller, call up MAIN MENU/System/COPY TO.



#### This menu item is only displayed if the USB stick is plugged in.

► Select the option Record → USBStick.

The system records data daily. If no recordings are present for the day of the query, the message Rec. not available – Exit Menu OK? appears.

- ► Selec NO to remain in the menu.
- ► Set the date setting to the relevant date.
- ► Select YES to save the recording for the selected date to the USB stick.
- ► Unplug the USB stick from port X41 of the FST-2XT.

  The message USBStick REMOVED appears briefly on the screen.

## 5.2 GST-XT Recording

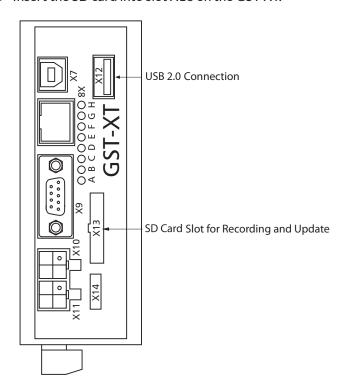
The integrated standard SD card interface allows recording for traffic analysis. The system performs an automatic on-board long-term recording. System activities as well as various statistics are stored daily on the SD card over a period of up to 31 days, provided that the SD card is inserted into the card slot X13 on the GST-XT.

SD card not included in the delivery. A 2-gigabyte standard SD card can be used.



### 5.2.1 Enable GST-XT Recording

▶ Insert the SD card into slot X13 on the GST-XT.



► To enable automatic recording: Switch the power supply of the GST-XT OFF and ON again.

### 5.2.2 Checking GST-XT Recording Status

This menu item can be used to check whether the recording of the GST-XT is currently being performed.

▶ In the menu of the FST controller, call up MAIN MENU/GST-MENUE/Status Window. The status of the recording can be read out in the first line of the display.

REC-ON = GST-XT Recording is running



REC-OFF = Recording stopped





### 5.2.3 Saving GST-XT recordings on the USB stick

- ► Plug the USB stick into port X12 of the GST-XT.

  The message GST\_USBStick\_OK appears briefly on the screen.
- ▶ In the menu of the FST controller, call up MAIN MENU/GST-MENUE/Configuration/ GST-Recorder.



This menu item is only displayed if the USB stick is plugged in.

► Select option Record → USBStick.

The message Transfer Recording OK applears briefly on the screen.



The current day is copied to the USB stick. A selection of the remaining days must be available through the SD card on a PC.

- ► Select YES to save the recording to the USB stick.
- ► Unplug the USB stick from port X12 of the GST-XT.

  The message USBStick REMOVED appears briefly on the screen.

#### 5.2.4 Relevant menu items

Menu item	Description	Setting range
GST-Re- conder- Reconder RESTART	Start GST recording. Certain internal events are recorded with date and time. This recording is stored on a standard SD-Card (option). The recording will not start if a SD-Card is not inserted.	YES NO
GST-Re- corder- Recorder STOP	Stop the GST recording.	YES NO
GST-Re- corder- Recorder CONTINUE	Continue the stopped GST recording.	YES NO
GST-Re- corder- Copy Record to USB	This menu item copies the GST-XT's recording from a specified day onto the USB stick in the \recording folder.	YES NO
GST-Config -> USB-Stick	This menu item stores a copy of the current GST-XT configuration onto the USB stick in the \config folder.	YES NO

#### **5.2.5** Others

The following information is displayed in the second line of the display: AD  $= 0\% \times 0$ 

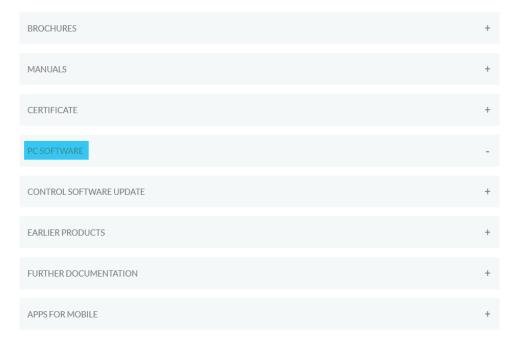
AD = 0 % /0	AD = 0% / 🖸
current detected traffic level as percent	current detected traffic level 0 = Low 1 = Mid 2 = Heavy



# 5.3 Evaluating recordings via EleVision Light

# 5.3.1 Downloading EleVision Light software

- ► Open the website <a href="https://www.newlift.de/downloads-311.html">https://www.newlift.de/downloads-311.html</a>
- ► Select sub-item PC software



- ► Depending on Windows requirements, download software for »Windows XP - LMS EleVision Light or
  - »Windows 7 LMS EleVision Light Win 7.



► Extract the software and execute the installation file *ElevisionLightVx\_xx.exe*.



The program automatically adds a start icon to the screen.

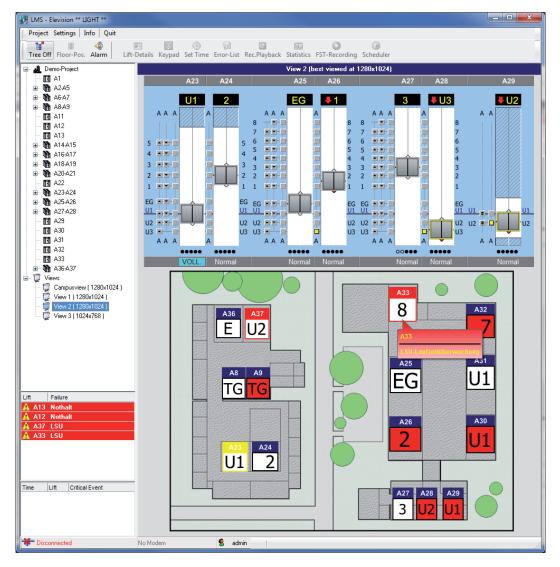


### 5.3.2 Visualising recordings with EleVision Light



- Elevision-Light Start the software.
- ► The program automatically loads a demo project the first time it is started.

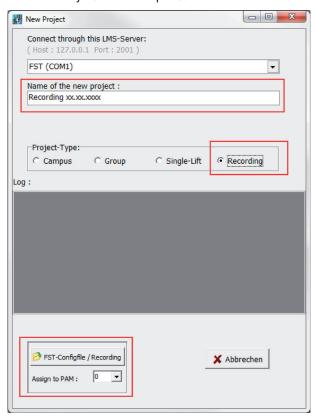
  On every subsequent program start, the program loads the last created project.



Demo project



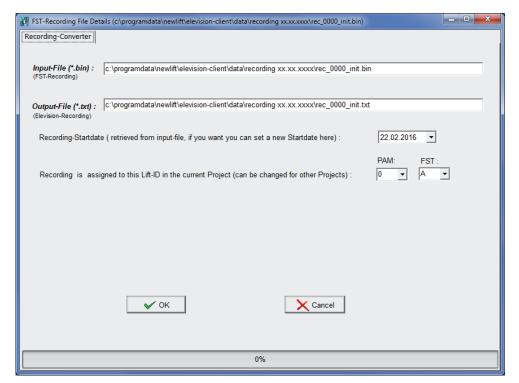
► In the menu bar, select option *Project / New Project*. The *New Project* window opens.



- ► Assign a new project name.
- ► Select project type **Recording**.
- ▶ Press the FST-Configfile / Recording button.
- ▶ Navigate to the stored recording file and double click to open it.
- ► Confirm the next two dialogs with **OK**.

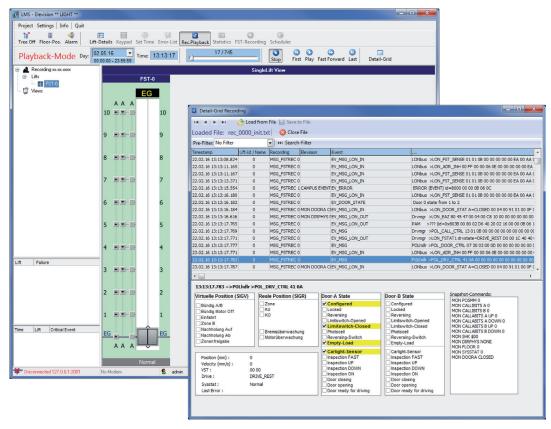
  While the recording file is loading, the recording converter automatically creates the files in the \*.bin and \*.txt formats.
- ▶ If necessary, change the folder structure at this point and exit the window with **OK**.





- ➤ Confirm the query *Do you want to play back the recording now?* with **Yes**. The program automatically starts the recording playback mode. At the same time, the *Detail Grid Recording* window opens.
- ➤ Start playback of the recording with **Play**.

  The program simulates the recorded events. At the same time, you can follow the individual event steps in the *Detail Grid Recording* window, select individual events and call up information.



► To exit *Elevision-Light*, click on **Quit** in the menu bar.

The program automatically closes all windows. The project as well as all corresponding text and binary files are retained.



# 6 LON modules

# 6.1 Updating with USB stick

- ► Set the Auxiliary Mode switch of the FST-2XT to **ON**.
- ▶ Plug the USB stick loaded with update software into port X41 of the FST-2XT. The message USBStick OK appears briefly on the screen.
- ▶ In the menu of the FST controller, call up MAIN MENU/System/Update LON-Module.
- ► SelectoptionUpdate f. USBStick.



## This menu item is only displayed if the USB stick is plugged in.

► Select YES.

The system automatically performs an update.

The message UPdated Moduls =  $\times$  appears on the screen, whereby x corresponds to the number of updated modules.

If the USB does not contain any valid data, the message:

...Update not successful... no valid file found appears on the screen.

In this case, contact the New *LIFT* service line or perform the update via the Lon Module Center software.

# 6.2 Downloading Lon Module Center software

- ► Open the website <a href="https://www.newlift.de/downloads-311.html">https://www.newlift.de/downloads-311.html</a>
- ► Select sub-item PC software





▶ Download the LON Module Center software *s\_lon\_v1\_x\_x\_x.zip*.



▶ Extract the software and execute the installation file LonModulCenter\_1\_x\_x\_x.exe.



The program automatically adds a start icon to the screen.

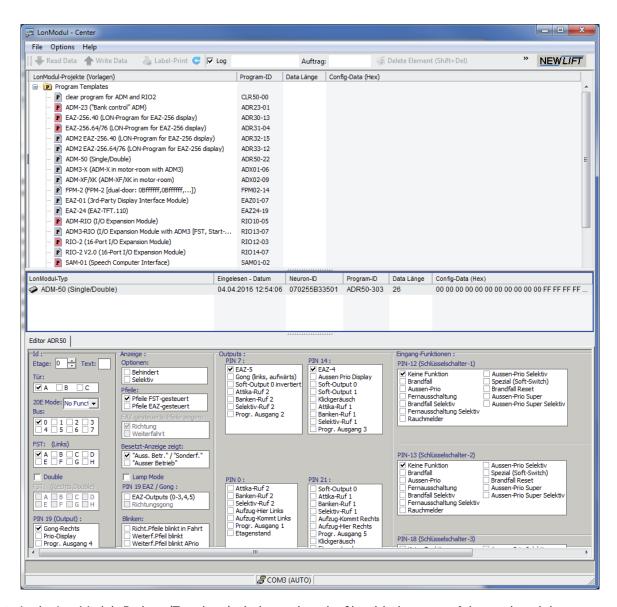
# 6.3 Updating with Lon Module Center software

► Connect PC and FST controller (port X9) with null modem cable via the serial interface.



- LonModul-Center Start the software.
- ▶ Bridge the service pins of the used module with a metal object (e.g., screwdriver). The software detects the module type and automatically opens an editor window with information on the module, in the example here module ADM-50.





- ▶ In the Lon Module Projects (Templates) window, select the file with the name of the used module.
- ▶ Drag the selected file down into the **Lon Module Type** window using *drag and drop*.
- ► Confirm the query *Do you really want to perform the program update?* with **Yes** to start the update. A progress window appears on the screen.
- ► Wait until the progress window closes and the screen with the message *Module successfully programmed* appears.



# 7 FST-2XT and FST-2XTs Recovery

It may happen that the update is not completely carried out and then the FST-2XT/s application runs no longer when installing an FST-2XT/s update.

The FST-2XT/s application can be restored by means of the rescue program FST-2XT-Recovery.

#### **Conditions**

- > The operating system is still starting.
- > The screen shows the NEW LIFT logo and the FST lettering.
- > Up to software version 2.000-0132: the debug jumper has to be set.



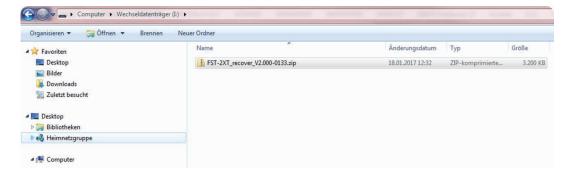
FST start screen

## 7.1 FST-2XT-Recovery Software

The software FST-2XT\_recover\_V2.000-013x.zip must be requested from our service line in advance.

There are two ways to obtain the software:

- 1. via E-mail
- 2. via Link NEW LIFT Cloud
- ► Save the received zip file FST-2XT\_recover\_V2.000-013x.zip, on the USB stick in the main directory.
- ► Unpack the ZIP file, for example with Windows Explorer. Select the file and press the right-hand mouse.



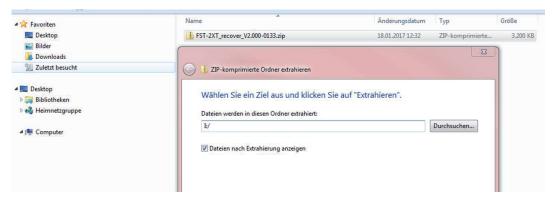


► Select the option Extract all...

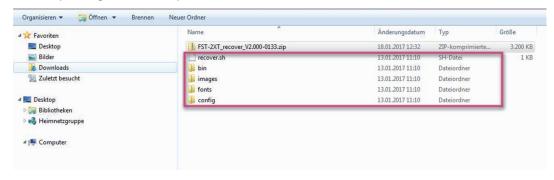


The window extract ZIP-compressed folder opens.

► Reduce the suggested drive path to the drive name (for example drive I:\) and click to the **extract** button.



After unpacking the directory structure must look as follows:



The directory structure after unpacking



# 7.2 Run FST-Recovery

- ▶ After disconnecting USB stick from the PC, plug on the X41 port of the FST.
- ► Switch off the FST controller with the control fuse **F4**.
- ► For software versions up to V2.000-0132: Connect any jumper (e.g., from J90) on X7: Connect the debug jumper between PIN1 and PIN3 on X7 (upper row, first and second pin from right)



FST-2XT - debug jumper plugged in



FST-2XTs - debug jumper plugged in



▶ Switch on the controller again. The recovery will start automatically.



Recovery is stated

▶ Wait until the display shows the message "remove USB-Stick".



Recovery finished

► When the message "remove USB-Stick" appears, remove the USB stick. The FST restarts automatically.



Restart

- ► Wait until the FST-2XT/s has completely booted.
- ► Switch off the FST-2XT/s by means of control fuse F4.
- ▶ Remove the Debug jumper if necessary and plug it to its original position.
- ► Switch on the FST-2XT/s by means of control fuse F4.
- ► Wait until the controller has completely booted.

Recovery is completed.



# **7.3 FAQs**

### Why does the Recovery repeat?

If the USB stick isn't removed after the end of the Recovery process, the Recovery starts again after the reboot.

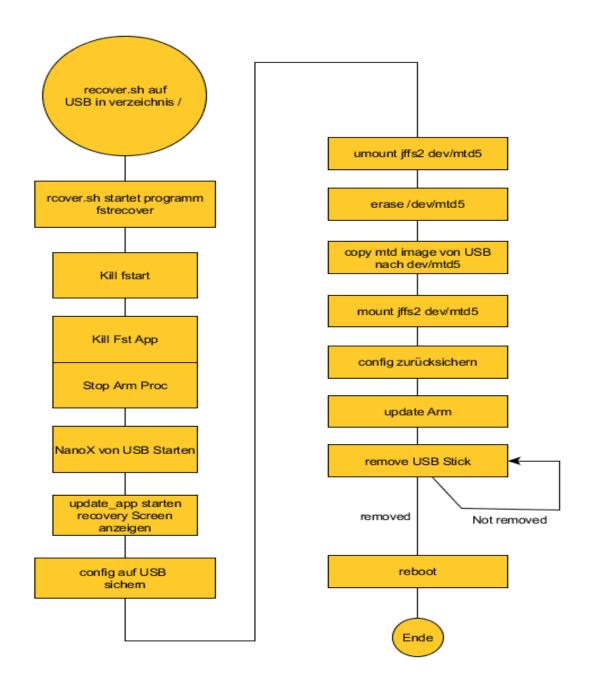
▶ Remove the USB stick after the end of the Recovery process.

### Can Recovery and the firmware update be saved on the same USB stick?

Yes. However, during the update of the firmware the following points must be observed:

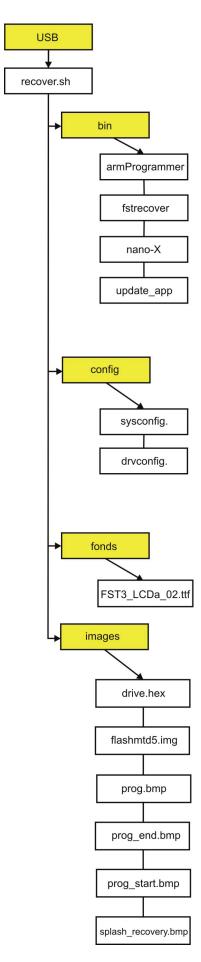
- ▶ Do not plug the USB stick before the complete start-up of the FST.
- ▶ After a successful update immediately remove the USB stick.

# 7.4 Program sequence. Overview





# 7.5 Program structure





# 8 Error list

#### 8.1 Save error list on the USB stick

- ► Set the Auxiliary Mode switch of the FST-2XT to **ON**.
- ► Plug the USB stick into port X41 of the FST-2XT.

  The message USBStick OK appears briefly on the screen.
- ▶ In the menu of the FST controller, call up MAIN MENU/System/Copy to.



### This menu item is only displayed if the USB stick is plugged in.

- ► Select option Error List -> USB.
- ► Select YES to save the error list on the USB stick.

  The error list is stored on the USB stick as *error\_list.txt*.

  The message Error LIST TRANSFER OK appears briefly on the screen.
- ► Unplug the USB stick from port X41 of the FST-2XT.

  The message USBStick REMOVED appears briefly on the screen.

## 8.2 Visualising the error list

▶ Open the *error-list.txt* file on the PC with the help of *Windows WordPad* or another editor program.

# 9 Troubleshooting



With software versions beginning with V2.000-0117, the operating system is also updated during the update.

## 9.1 Control system failure

In isolated cases, an apparent control system failure can occur:

#### IF

- > the FSM menu does not start
- > the FST menu remains stuck following the boot screen or
- > the screen changes to a white surface

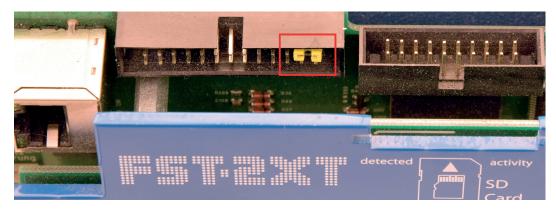


Bootscreen



#### **THEN**

- ► Switch off the FST controller with the control fuse **F4**.
- ► Connect any jumper (e.g., from J90) on X7:
  - »Connect the debug jumper between PIN1 and PIN3 on X7 (upper row, first and second pin from right)



FST-2XT - debug jumper plugged in



FST-2XTs - debug jumper plugged in

➤ Switch control system back on.
The control system starts after approx. 5 seconds.



Serial interface X9 may be limited in function after the jumper is set. In this case please inform the NEW *LIFT* service line.

## 9.2 The FST application does not start

The update might not be completely carried out when installing an FST update.

► Run the application FST Recovery See chapter "7 FST-2XT and FST-2XTs Recovery", on page 22



# 9.3 Error messages

Error message	Possible cause	Error correction
USBStick UNKNOWN	»USB stick not detected by the FST »USB stick defective »Incorrectly formatted USB stick	»Use the controller fuse to switch the control system OFF and ON »Change USB stick »Change USB stick
RECORD TRANSFER ERR!	»Recording performed incom- pletely or incorrectly »Recording was interrupted	Repeat recording procedure
DIR NOT FOUND!	»Capitalisation of file name not correct »Folder not present	»Rename folder on USB stick »Create folder on USB stick
UNZIP FAILED	The file with extension *.tar was already extracted into folder update	Copy file FST-2XT_update_ V2.000-xxxx.tar to the USB stick again and repeat the update
UNKNOWN DIR ERROR	Folder not detected by the FST	Use the controller fuse to switch the control system OFF and ON

# **NOTES**

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