LiCONiC INSTRUMENTS

StoreX

STXDriver

Installation and Configuration Instructions

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To check Software Version: Application Window

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HISTORY PAGE

DOCUMENT CHANGE HISTORY

Date	*Version*	*Changes*	*Author*
03.05.2018	V1.0	Initial Version	Ralf Kindle
09.05.2018	V1.1	Correction path of rxtxSerial.dll	Ralf Kindle
08.06.2021	V1.2	Add command line call conf file and run	Ralf Kindle

1 STXDriver Installation Instructions

This installation instruction will allow to use the Liconic STXDriver Software with any Liconic Incubator System of the STX, STR, LPX and LPR Series. The instruction will cover the installation from ground up, no previous installation of Liconic Software required.

1.1 Prerequisites

In order to be able to install the Liconic STXDriver and use of it, the following prerequisites need to be met. This includes hardware and software installed, prior to the installation of the Software.

1.1.1 Hardware

Windows 7 or later operation System (32bit / 64bit)

1.1.2 Java

Install Java JRE 8 (build 261)

1.2 STXDriver Installation

After the prerequisites have been met the installation of the Liconic STXDriver Software can be started:

1. Download the latest Liconic STXDriver Package:
    a. https://www.liconic.com/page.php?id=466
2. Unzip the provided archive:
    a. Password: liconic
3. Copy the unzipped files into a folder:
    a. C:\Liconic This path will be used in this document; the path may be customized and subsequently adapted for the complete configuration.
4. For the ease of use create the following short cuts to the required applications:
    a. C:\Liconic\jSTXDriver.jar
5. Copy the correct version of the communication Library:
    a. Navigate to the folder C:\Liconic\win32 or win64 according to the operations system
    b. Modify the file ending “.dl_” to “.dll”
    c. Copy the file into the folder where the jSTXDriver.jar is located: C:\Liconic

This concludes the installation part. The next step is to configure the paths in the configuration files.

1.3 STXDriver Configuration Files

The configuration files are readily prepared if the path as proposed is used. Should an alternative path be used all the configuration files have to be adapted to correspond with the altered setup.

1.3.1 DriverConfig.xml

File Location: C:\Liconic\STXDriver\DriverConfig.xml

If an alternate Location for the Software has been choses, open the DriverConfig.xml with an editor such as Notepad++.

1. Change Path to the Device Configuration Files:

    a. Device.xml located in the sub folder:
    [PATH]\DriverConfig\Devices

    b. If more than one device is used an entry for each device pointing to the according device config file has to be added:

```
<Parameter>
        <Name>ConfigFile</Name>
        <Value>C:\STXDriver\DriverConfig\Devices\DeviceX.xml</Value>
</Parameter>
```

2. Change Path to the Log Folders

    a. LowLevel:
    [PATH]\LowLevelLog

    b. HighLevel:
    [PATH]\HighLevelLog

    c. TCP:
    [PATH]\TCPLog

    d. DevicesError:
    [PATH]\DeviceError

1.3.2 Device.xml

File Location: C:\STXDriver\DriverConfig\Devices

For each device connected an individual Device.xml config file has to be created. Open the Device.xml with an editor such as Notepad++. Following configuration can be done for each device:

1. Communication Port

    a. Device communication port

```
<Parameter>
        <Name>DeviceComPort</Name>
        <Value>COM1</Value>
</Parameter>
```

    b. Barcode reader port (optional)

```
<Parameter>
        <Name>BCReaderComPort</Name>
        <Value>COM2</Value>
</Parameter>
```

2. Hardware configuration

    a. Door: Set to “true” for climate units

```
<Parameter>
        <Name>ShovelPlateSensor</Name>
        <Value>true</Value>
</Parameter>
```

3. Sensors (optional)

   a. Shovel Plate Sensor: Set to “true” for plate tracing

```
<Parameter>
        <Name>ShovelPresenceSensor</Name>
        <Value>true</Value>
</Parameter>
```

   b. Plate Present Sensor: Set to “true” when Barcode reader present

```
<Parameter>
        <Name>PlatePresenceSensor</Name>
        <Value>true</Value>
</Parameter>
```

   c. Transfer Station Plate Sensor: Set to “true” to monitor Sensor on transfer Station

```
<Parameter>
        <Name>1TransferStationPlateSensor</Name>
        <Value>true</Value>
</Parameter>
```

   A second sensor can be configured, depending on the present configuration of the unit

4. Cassette Configuration (optional)

    a. Remove the comment marks <!-- and --> at beginning and end of the section

    b. Change Path to the cassette configuration file:
    [PATH]\DriverConfig\Devices\CassettesConfig.xml

    c. Enable the use of the cassette configuration

```
<Parameter>
        <Name>UseCassConfTable</Name>
        <Value>true</Value>
</Parameter>
```

5. Parameters (optional)

    a. In the parameter file changes of settings for the hardware (Offsets, Set points) can be stored. These will be sent to the device upon initialisation

    b. Remove the comment marks <!-- and --> at beginning and end of the section

    c. Change Path to the parameter file:
    [PATH]\DriverConfig\Devices\Parameters.xml

1.3.3 CassettesConfig.xml

This file contains the cassette setup of the device and has to be created for each device individually.

File Location: C:\ DriverConfig\Devices\CassettesConfig.xml

1. Create an entry for each cassette within the unit

   a. For each cassette the following entries have to be created

```
<Cassettes>
        <Id>1</Id>
        <Z-Pitch>788</Z-Pitch>
        <Levels>22</Levels>
</Cassettes>
<Cassettes>
        <Id>2</Id>
        <Min>2</Min>
        <Max>5</Max>
        <Z-Pitch>1913</Z-Pitch>
        <Levels>10</Levels>
</Cassettes>
```

   b. Parameters:

ID:	Cassette Enumeration 1 = Cassette 1
Z-Pitch:	Pitch in Motor pulses
Levels:	Number of levels within the cassette
Min:	First Cassette of range with same config
Max:	Last Cassette of range with same config

1.3.4 Parameters.xml

This file contains the hardware parameter setup of the device and has to be created for each device individually.

File Location: C:\ DriverConfig\Devices\Parameters1.xml

1. Create an entry for each parameter to be changed from default

    a. For each parameter an entry needs to be created with the new value

```
<Parameter>
        <Name>DM25</Name>
        <Value>27</Value>
</Parameter>
```

    b. Furthermore flags and timer may also be modified if required

```
<Parameter>
        <Name>T3</Name>
        <Value>10</Value>
</Parameter>

<Parameter>
        <Name>ST 1611</Name>
        <Value>1</Value>
</Parameter>
```

1.4 Command Line Startup

The driver can be started from the command line with the configuration file provided. Also, it is possible to set it to automatically run and minimize it to the system tray.

Following is the explanation of the command line startup of the driver.

1.4.1 Basic Command Line Startup

The following command line instruction is needed to start up the driver. In any case the path to the config file should be provided. The “--” indicates the parameters to be sent with the driver call.

java -jar jSTXDriver.jar --ConfigFile=D:/Folder/DriverConfig.xml

1.4.2 Command Line Startup with additional Parameters

Adding to the basic startup of the driver, following two additional parameters can be used:

--Run=true: Sets the driver immediately to run state

--Minimized=true: Minimizes the window to the system tray

The command line complete in this case is as following:

java -jar jSTXDriver.jar --ConfigFile=D:/Folder/DriverConfig.xml --Run=true --Minimized=true