

YARNMASTER® ZENIT⁺

First Startup Step by Step

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1 Installation

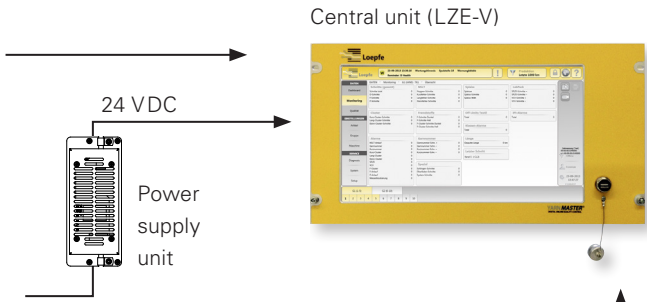
Variant 1

External power supply
24 VDC

or

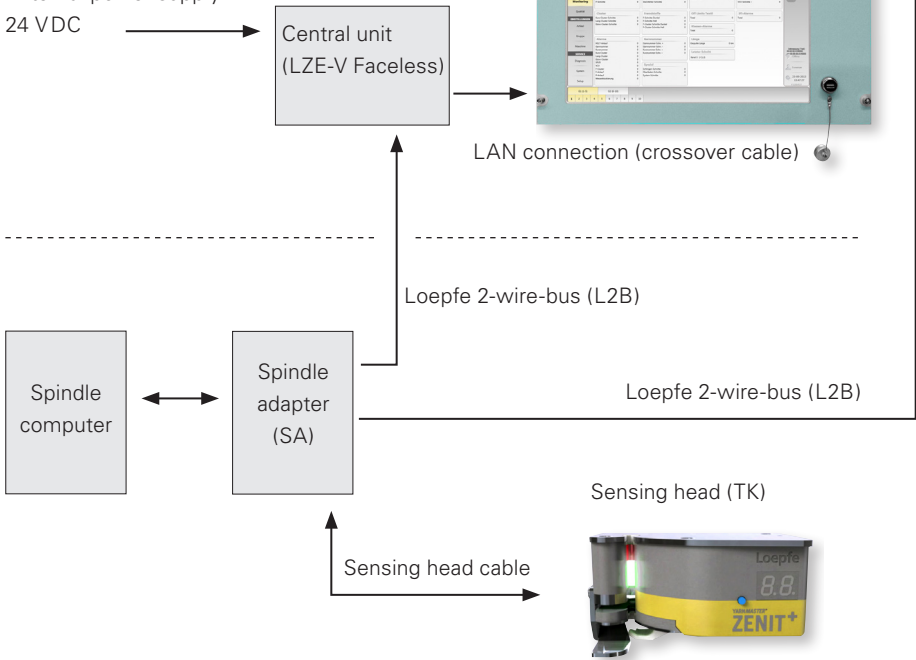
Variant 2

External power supply
90–264 VAC



Variant 3

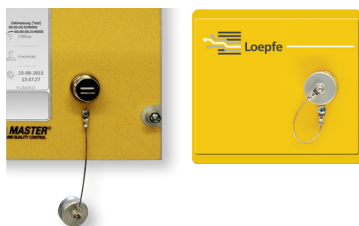
External power supply
24 VDC



 All cable connections are pluggable.

2 Connections LZE-V

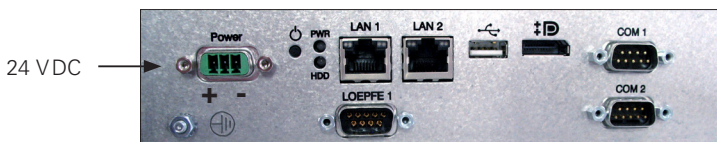
Front










USB interface (USB port) for import / export of settings and data as well as screenshots.

A removable cap protects the USB interface from dust and humidity.

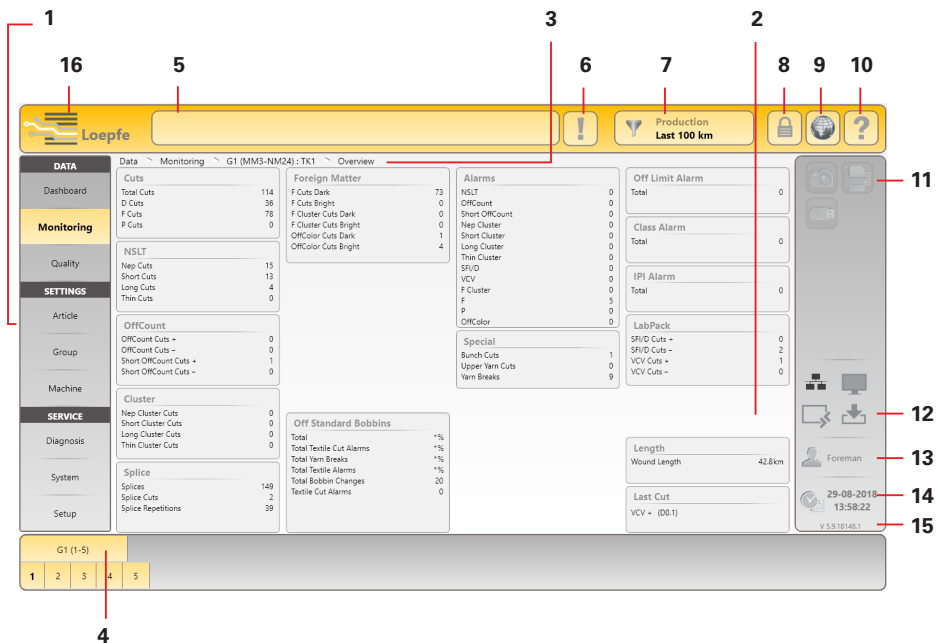
Rear



Marking	Type	Description
Power	Sub D PSC	<p>Power supply 24 VDC</p> <p>Contact 1 (+) 24 VDC</p> <p>Contact 2 not connected</p> <p>Contact 3 (-) 0 VDC</p>
		<p> Only 24 VDC may be supplied to this connection!</p> <p>ATTENTION</p>
	Threaded connection	<p>Protective ground</p>
		<p> This separate grounding point must be connected with the protective ground!</p> <p>DANGER</p>
LOEPFE 1	Sub-D, 9-pole connector	Connection of Loepfe 2-wire bus (L2B)
PWR	LED green / red	Power supply OK
HDD	LED red	Compact-flash drive active

Marking	Type	Description		
	Microswitch (Power ON/OFF)	LED green	Tap < 1 Sec.	Switch to standby mode controlled by operating system (LED becomes orange)
		LED green	Press > 1 Sec.	<i>Only in emergencies!</i> Forced, uncontrolled switch to standby mode (LED becomes orange)
		 Unsaved data are lost!		
		LED orange	Tap < 1 Sec.	Start (LED becomes green)
LAN 1	RJ45	Dedicated connection for LZE-V Faceless IP: 192.168.1.200 (Default) <i>Attention: Mistakenly changing the LAN 1 IP address might cause the LZE-V to lose the required communication link to the Savio PC!</i>		
LAN 2	RJ45	Connection for network IP: DHCP (Default)		
	USB 2.0	USB port		
	Display port (HDMI)	DP, maximum resolution 1600 x 1200		
COM 1	Sub-D, 9-pole connector	RS 485		
COM 2	Sub-D, 9-pole connector	RS 232		

3 User Interface / Navigation



- 1 Main navigation
- 2 Menu contents (list, overview, details)
- 3 Navigation path
- 4 Selection bar for group/spindle or article
- 5 Message window
- 6 Messages requiring intervention
- 7 Data selection filter (Dashboard, Monitoring and Quality menus)
- 8 Login / access level
- 9 Language selection
- 10 Online help
- 11 Action buttons / function buttons
- 12 Connection status (Ethernet / MillMaster TOP / Remote / Data Exist)
- 13 Active user level / logged on user
- 14 Date / time
- 15 Software version
- 16 Switch-over Loepfe / Savio GUI (only LZE-V Faceless)

Function Buttons



Language selection



Login / access level



Online help



List of messages requiring intervention



Create screenshot / save on USB stick



Create reports / save on USB stick



Data export / import



Back



Next



Edit settings



Confirm selection / input



Cancel selection / input



Undo input



Copy article



Start lot / group



Stop lot / group



Adjust (groups/spindles in production)



Reset monitoring data / quality data



Change password



Logout / user logout



Add user



Delete user



Acknowledge last message



Acknowledge all messages



Firmware Update



Input information

4 Language Selection

1. Tap Language button.



2. Select desired operator language.

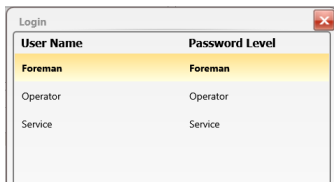


5 Login

1. Tap Login button.



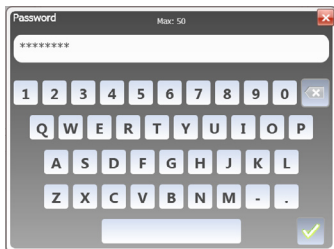
2. Select user "Foreman".
(Foreman login is required for all settings during initial start-up.)




3. Tap password input field.



4. Enter Foreman password (=12911291).







5. Confirm entry with .

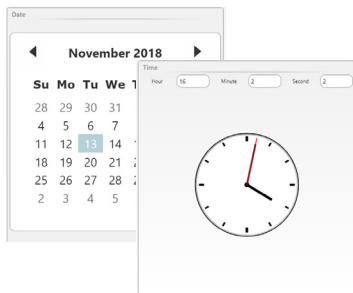
6. Confirm password / Login with .



6 Set Date and Time

SERVICE > Setup > Date and Time

1. Activate the Edit mode by tapping  .
2. Enter date/day.
3. Enter time (hour, minutes, seconds).
4. Confirm each entry with  .
5. Save date and time with  .
6. Confirm pop-up "Save date and time settings" with  .



7 Firmware Update

SERVICE > System > Firmware Update



Master Module, Bootloader and Firmware Versions

The versions shown in the “Master Module” field and in the “Spindles” field must match the versions shown in the “Firmware Archive” field.



- » Red version number: versions do not match
- » Grey version number: TK is offline


Firmware Archive		Master Module	
Master Module	2.0.7.0	Version	2.0.7.0
Bootloader	2.0.48.85	Update State	Application
Firmware	4.2.50.127		


Update Progress		Spindles		
Master Module	100%	Spindle	Firmware	Bootloader
TK (Bootloader / Firmware)	0%	1	4.2.32.230	2.0.30.179
		2	4.2.32.230	2.0.30.179
		3	4.2.50.127	2.0.48.85
		4	4.2.50.127	2.0.48.85

Perform the Firmware Update

A firmware update must be performed if the versions do not match:

1. Activate the edit mode by tapping .
2. Start the Master Module update with .
 - » The status of the update is displayed in the progress bar.


 It can take some time (30 s) until the update is terminated and the respective next update button becomes active!

3. Start the TK (Bootloader / Firmware) update with .
 - » The status of the update is displayed in the progress bar.
 - » **UF** (Update Firmware) is displayed for all sensing heads which do not match.
 - » **PA** is displayed after a successful update.
4. Check firmware and bootloader version of the spindles.
5. Terminate the firmware update.

8 Check and Complete Base Settings

SETTINGS > Machine

> Base Settings

1. Activate the edit mode by tapping .
2. Check and complete the base settings as follows:

Machine Type	Read only
Machine Name	Enter name (optional)
MillMaster Link	On / Off
Total Spindles	Enter total number of winding units of machine
Yarn Count Unit	Select unit (Nm, Ne, Tex, Den)
Sensing Head Type	Installed sensing head type (D, DF, DFP)
Splice Check Length	Use default setting
Previous Shift	km / kg

Base Settings

Machine Type Schlathorst ACX5/AC6

Machine Name

MillMaster Link




Total Spindles

Yarn Count Unit


Sensing Head Type

Splice Check Length

Previous Shift

3. Save settings with .
4. Confirm pop-up "Save machine settings!" with .
5. Return to the overview with .

> Default Group Settings

6. Use default settings.
7. Return to the overview with .

Default Group Settings

Drum Pulse Length

Reduction Fine Adjust

Reduction Cone Change

Bunch Monitoring

Threshold Static Yarn Signal

Threshold Dynamic Yarn Signal

> Default Data Acquisition


8. Use default settings.

Default Data Acquisition

Window Length

9 Define a Group

SETTINGS > Group (List)

1. Select group no. 1.
2. Double-clicking group no. 1 in the list opens the overview of the respective group settings.
3. Activate the edit mode by tapping .

Settings > Group > G1 > List

Group						
No.	First	Last	TK	Pilot	Status	Lot
1	1	5	DFP	2	Defined	DOM
2	6	9	DFP	2	Defined	DOM

> Settings Group

4. First Spindle / Last Spindle: Enter spindle range (first and last spindle of the group)
5. Article: Tap entry field and select a predefined article from article list.

Settings Group

First Spindle	<input type="text" value="1"/>
Last Spindle	<input type="text" value="5"/>
Pilot Spindles	<input type="text" value="2"/>
Sensing Head Type	<input type="text" value="DFP"/>
Lot	<input type="text" value="DOM"/>
Article	<input type="text" value="ARTICLE1"/>

> Settings Optional

6. Use default settings.

Settings Optional


Drum Pulse Length	<input type="text" value="9.2mm"/>
Reduction Fine Adjust	<input type="text" value="35%"/>
Reduction Cone Change	<input type="text" value="25%"/>
Bunch Monitoring	<input type="text" value="On"/>
Threshold Static Yarn Signal	<input type="text" value="40%"/>
Threshold Dynamic Yarn Signal	<input type="text" value="25%"/>
Fine Adjust Mode	<input type="text" value="Continuous"/>

> Data Acquisition

7. Use default settings.



Data Acquisition

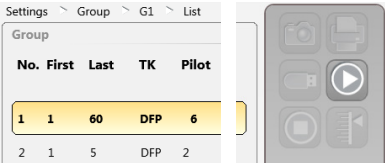
Window Length	<input type="text" value="100 km"/>
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8. Save group settings with .

10 Start Group

SETTINGS > Group (List)

1. Select group no. 1.
2. Start group no. 1 with .
3. Confirm pop-up "Start Group" with .




The adjustment is started:

- » "Production" is displayed in column "Status" and "Active" in column "Adjust".

No.	First	Last	TK	Pilot	Status	Lot	Article	Adjust	DiaDi
1	1	60	DFP	6	Production	LOT 2	30COMB	Active	-

- »  (Adjust) is displayed for all sensing heads.

4. Start and monitor the respective number of pilot spindles individually.
 - » The  display goes out for each pilot spindle when adjustment is terminated.


After successful adjustment of all pilot spindles:

- » "Completed" is displayed in column "Adjust"

No.	First	Last	TK	Pilot	Status	Lot	Article	Adjust	DiaDi
1	1	60	DFP	6	Production	LOT 2	30COMB	Completed	-


Afterwards, an adjustment must also be performed for each non-pilot spindle.

- » The  display goes out for each non-pilot spindle when adjustment is terminated.



If "Completed [x]" is displayed after adjustment, it was not possible to complete adjustment with all pilot spindles. In this case it is recommended to repeat adjustment with other pilot spindles! The other spindles may be started only when adjustment status "Completed" is displayed!

Sensing Head Display





Class Type

A1	F0 F00
E	G0 G00
H1	
with . = class cut without . = channel cut	
C0 C00	D0 D00
with . = thin place without . = thick place	
S1	R1 R1
I1	O1 O1
with . = bright without . = dark	

Cut Type


n Nep	Un Joint	nep
S Short	US Joint	short
L Long	UL Joint	long
t Thin	Ut Joint	thin
with . = class cut without . = channel cut		


 **flashing display indicates ALARM** (selected no. of repetitions reached)



Sensing Head Display

n- Nep - unclassified	L- Long - unclassified
S- Short - unclassified	t- Thin - unclassified
0c Off Count	SF SFI/D
Sc Short Off Count	c VCV
with . = minus without . = plus	
nC Cluster nep	UP Upper Yarn
SC Cluster short	bu Bunch
LC Cluster long	
tC Cluster thin	
FF F (foreign matter)	FC F Cluster
with . = bright without . = dark	
PP P (synthetics)	
. Zeroing	

 **flashing display indicates ALARM** (selected no. of repetitions reached)



Spindle

-	Yarn runs – Diameter difference	≤ +/- 10%
-	Yarn runs – Diameter difference	> + 10%
-	Yarn runs – Diameter difference	> - 10%

Technical Alarms

AL 0	Technical Alarm (alternating)
AL 1	Cutter supply or coil failure (alternating)
AL 2	Internal power supply failure TK (alternating)
AL 3	No NTP signal (alternating)
AL 4	Knife blocked (alternating)
AL 6	Zeroing failed (alternating)
AL 7	Spindle cycle timeout (alternating)

Textile Alarms

CA	Class Alarm
OA	Off Limit Alarm
IA	IPI Alarm

System Info

Ad	Adjust
do	Doffing
PS	Waiting for spindle communication
PC	Waiting for central unit parameters
PA	Spindle locked, group not started
BB	Reset
UF	Update TK Firmware

System Cuts

00	Cut by spindle
01	Zeroing failed
02	Cut by user (Test / Reset button)
03	D brightness regulator out of limit
04	F brightness regulator out of limit
05	Adjust cut
06	Cut failed
08	Adjust failed
09	Configuration changed by LZE
0A	Spindle power failure

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