

Operating Instructions

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LJU Automatisierungstechnik GmbH

Data Concentrator Module

in
Decentralized Bus Master Systems




A Member of


GRENZEBACH

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The standard names, trade names, product names etc. used in this description may also be brand names even when not specially indicated and as such subject to the statutory stipulations.

April 2013

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1 General

1.1 Information about the Manual

This description contains information about operation of the Data Concentrator (DKZ Module) in LJU Bus Masters.

It gives important notes on the operation.

Read this manual carefully before you use the device!

It will ensure smooth operation and prevention of errors, defects and damage to the installed system.

Every person who is assigned to work on or with the Data Concentrator must have read and understood this description before working with the device. This is mandatory even if the concerned person has already worked with such a device or the like, or has been trained by the manufacturer.

1.2 Abbreviations

DKZ	Data Concentrator Module
IKB	internal Communication Bus Module
PLA	Position Light Barrier Absolut
Tr	trolley
leB	left button
riB	right button
SB	separation block
PM	power module

2 Operation

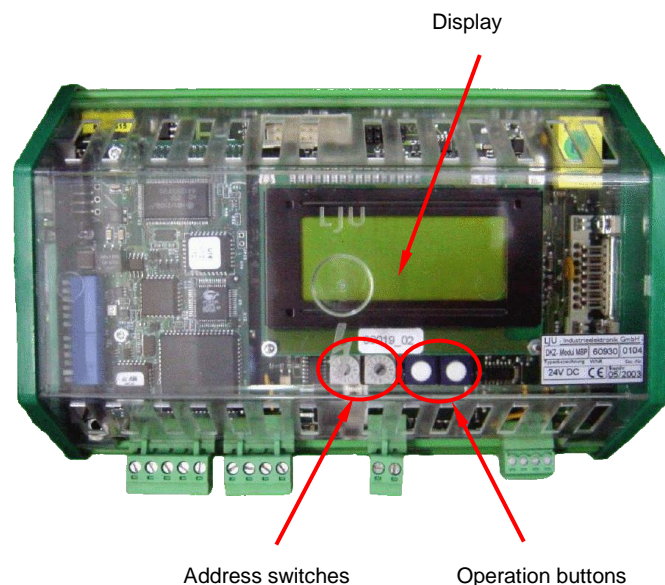
The Data Concentrator Module displays to the operator all area-relevant information of a DKZ area over a 4-line LCD screen (16 signs per line) and a simple menu control. Additionally it allows a system-near diagnosis and a manual intervention into the control course.

Menu navigation: The menu is partitioned in the main menu navigation with sub-menus. The submenus display additional information to the selected main menu.

Under the display the two address switches and the two operation buttons are located. With the two address switches left beside is put in the address of the DKZ at the field-bus. By using the two operation buttons purpose functions of the DKZ can be selected.

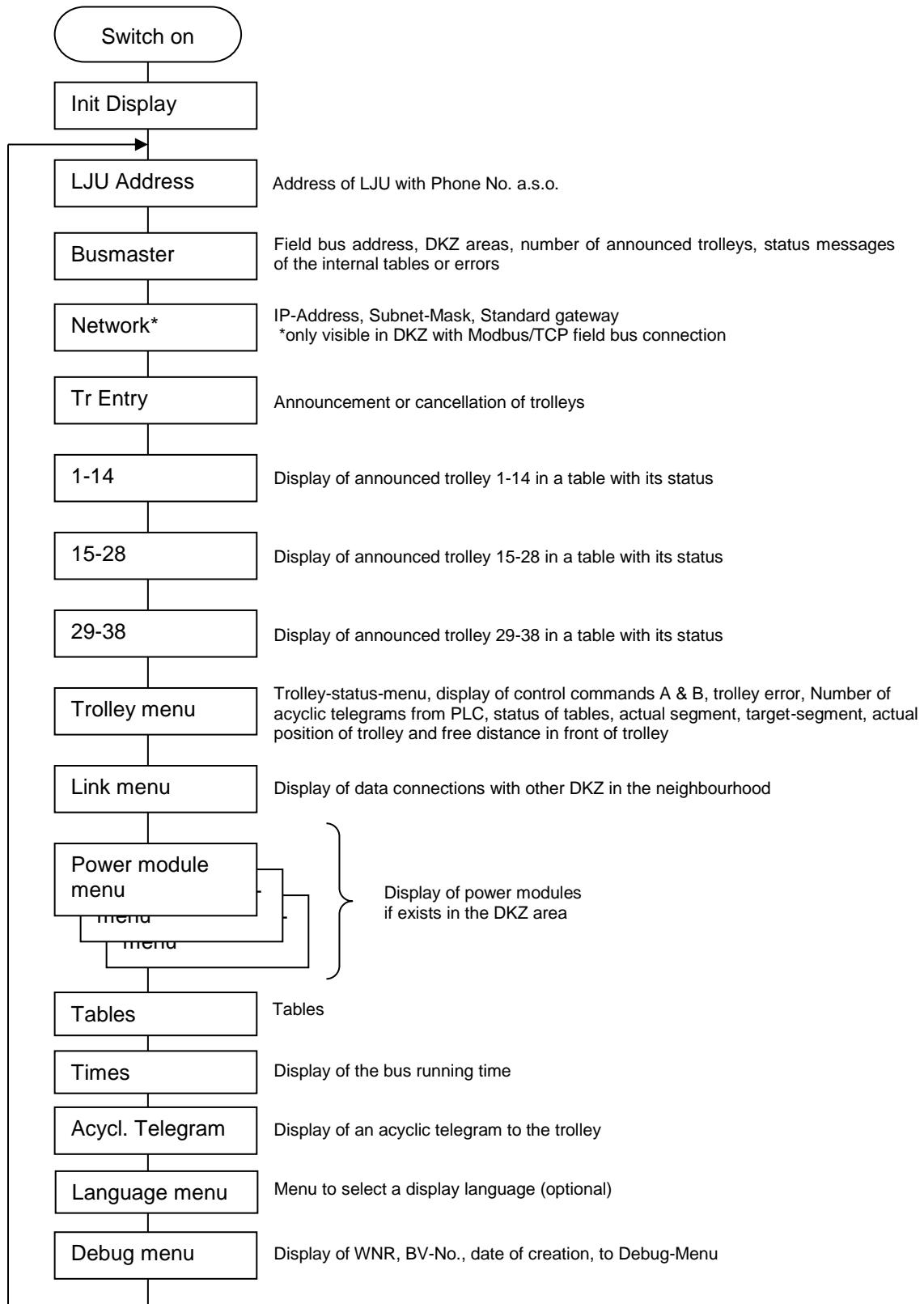
Select function:	left button (leB)	<ul style="list-style-type: none">- scroll through the main menu- back to the main menu in submenus- select function in submenus
	right button (riB)	<ul style="list-style-type: none">- select submenu- select function in submenus- commands to power modules

All control-functions work on during the service of the DKZ. The DKZ can stand without effects in each menu-step remains.



3 The Menus

3.1 Overview of the Main Menus

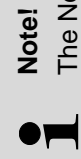
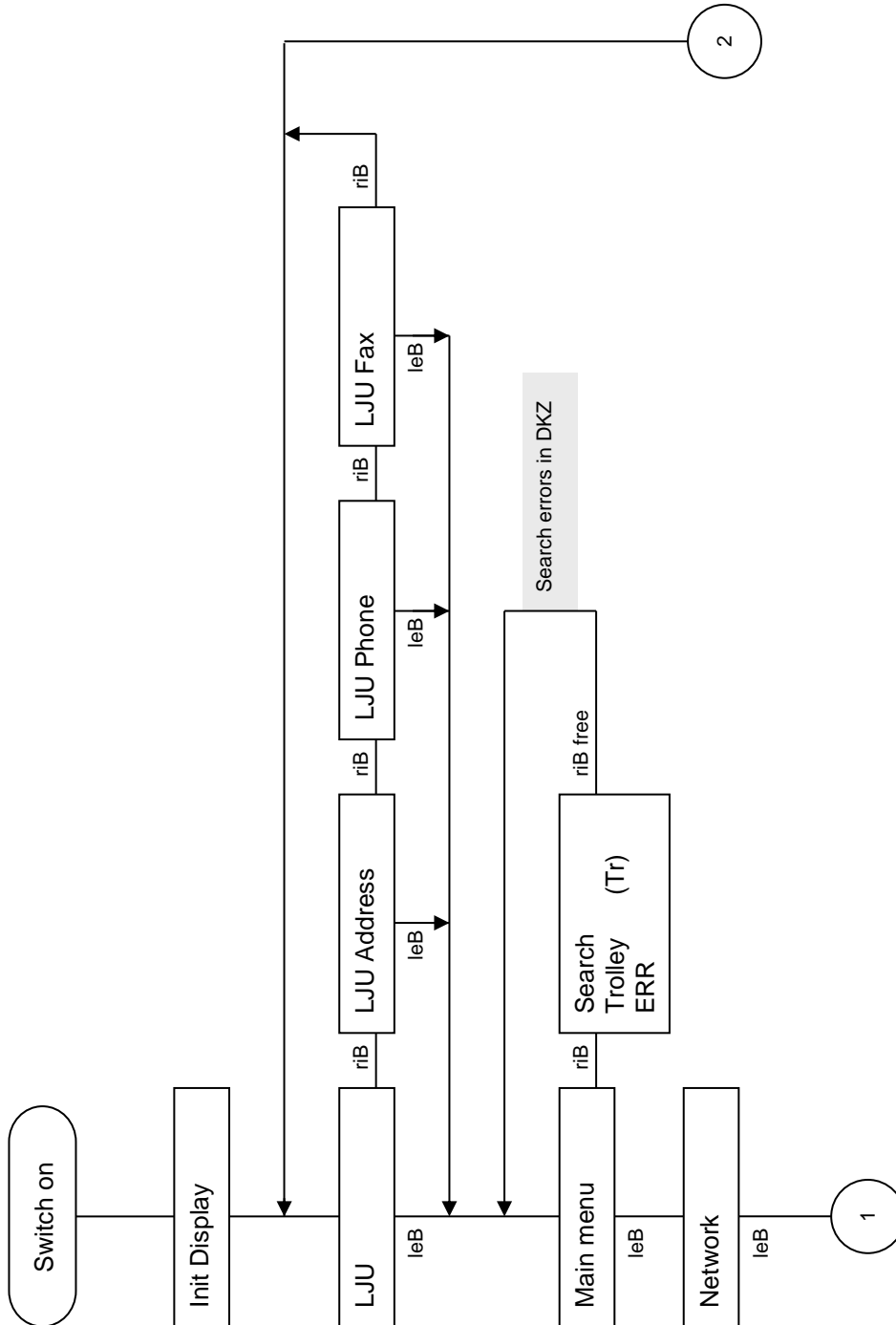


3.2 Menu Navigation

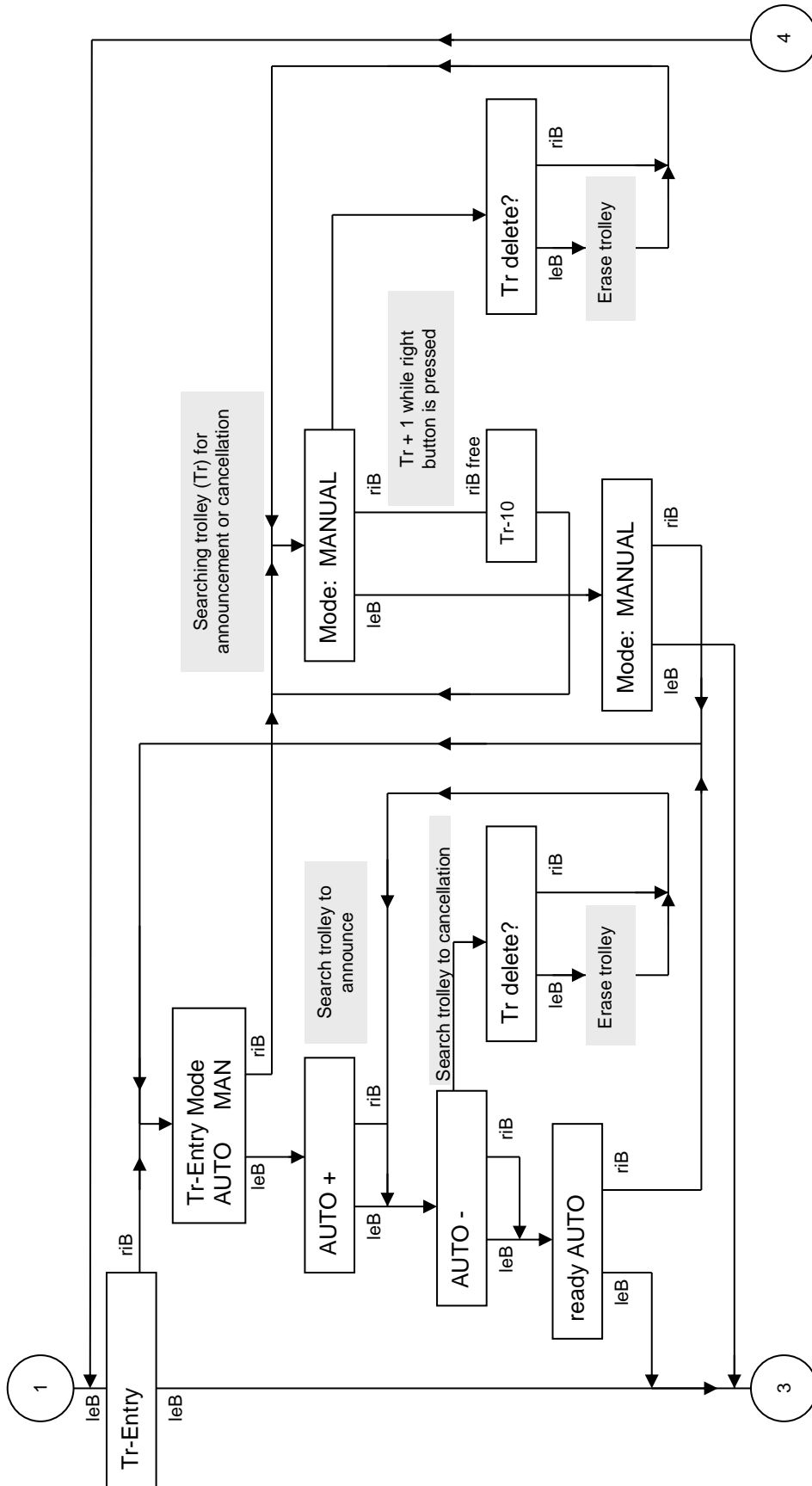


Note!

This chapter shows the scrolling through the main menu and the submenus. A detailed description of the menus is given from chapter 3.3.

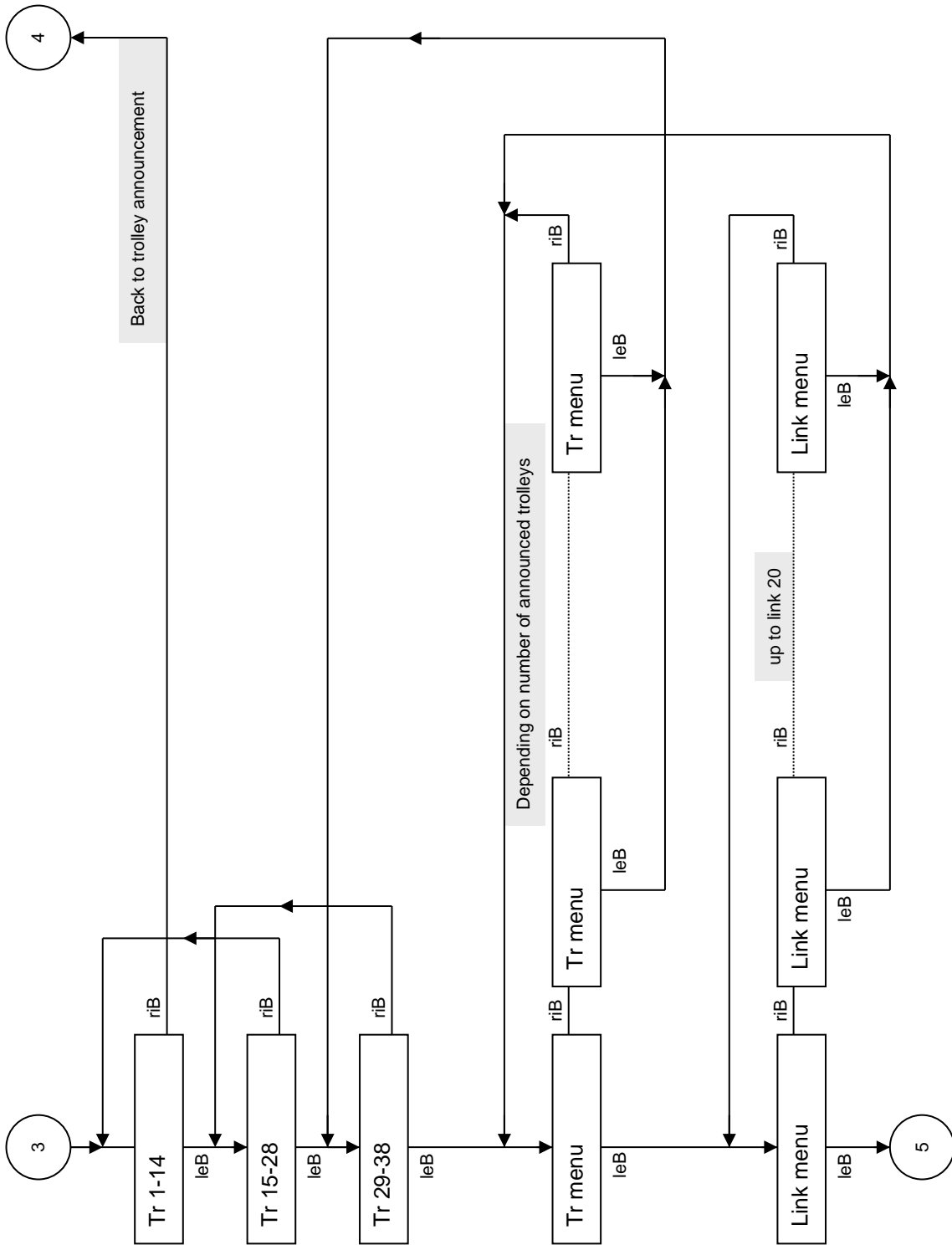


Note!
The Network configuration is only visible in DKZ with Modbus/TCP field bus connection.



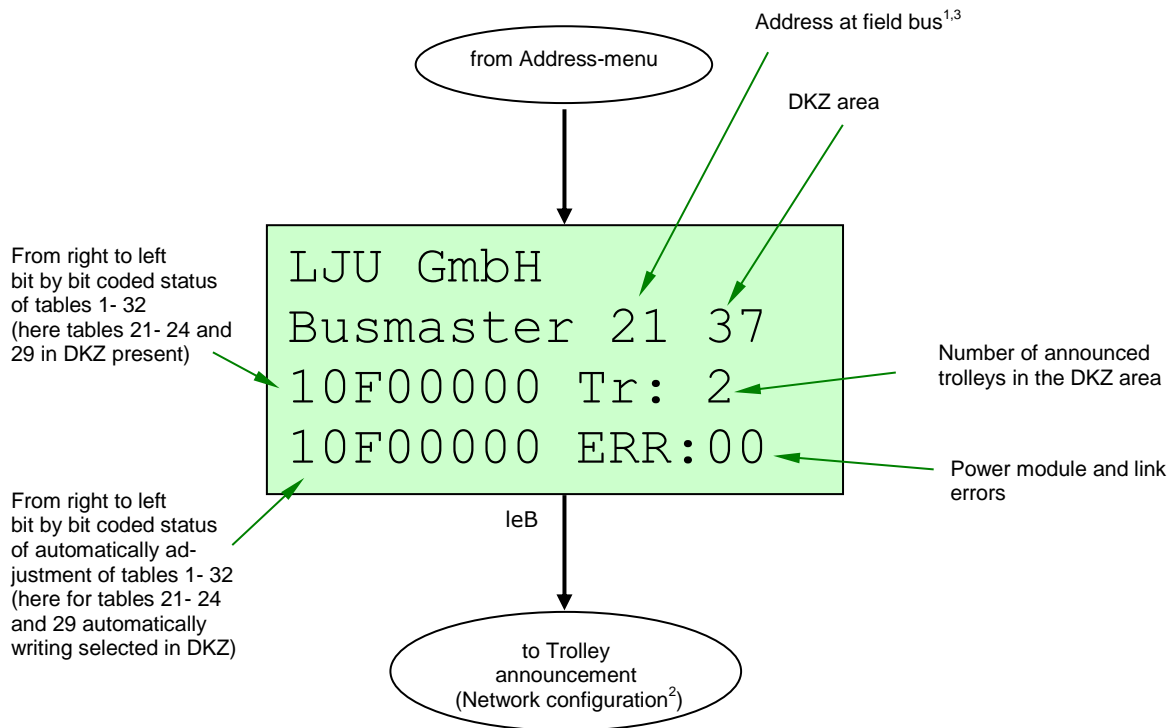
Note!
Announcement of trolleys (Tr) only if new trolleys online.
Cancellation of trolleys only if are trolleys offline.

The Menu

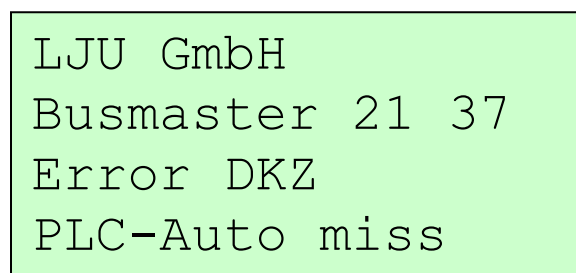


3.3 Descriptions of the Individual Menus

3.3.1 Busmaster Menu



or



Display of errors in the DKZ area (here missing release from PLC)

¹ Not in DKZ with Modbus/TCP field bus connection

² Only in DKZ with Modbus/TCP field bus connection

³ If using a Profinet/Profibus-Gateway Address 2 is displayed

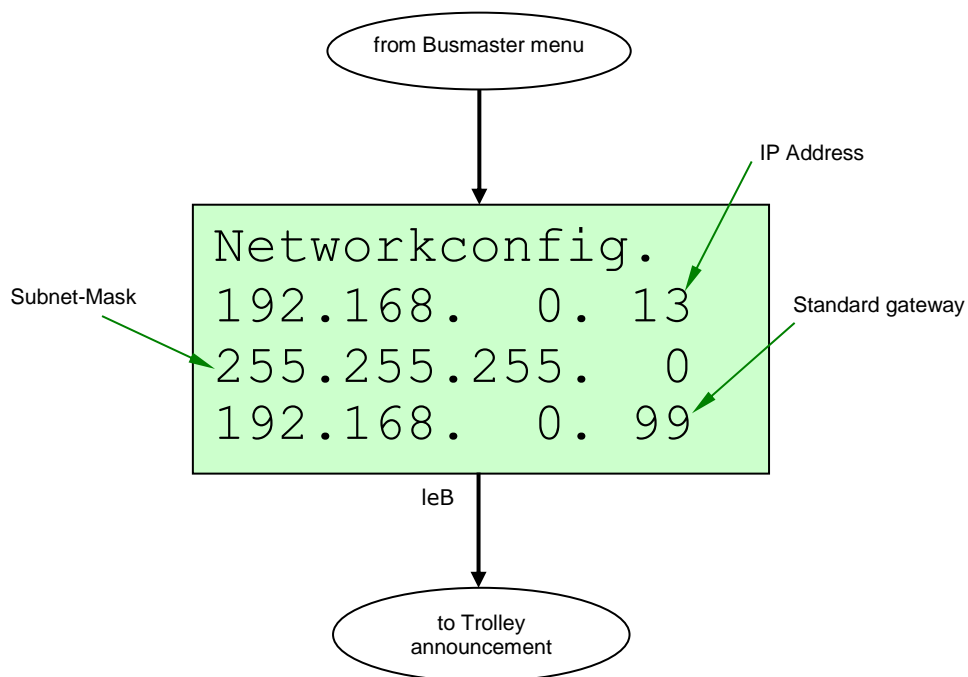
3.3.2 Network Configuration



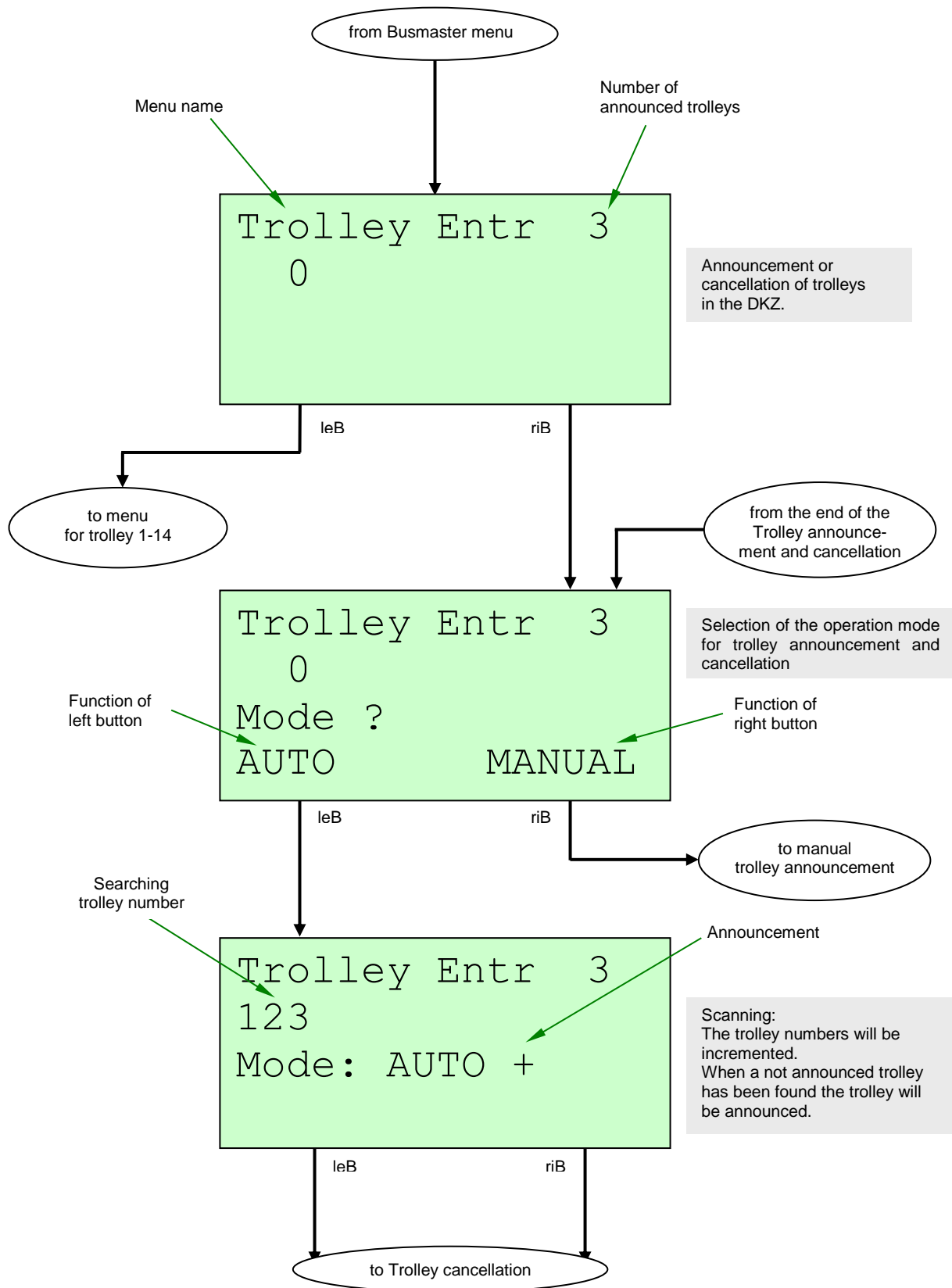
Note!

This menu is only visible, if using the DKZ with a Modbus/TCP interface.

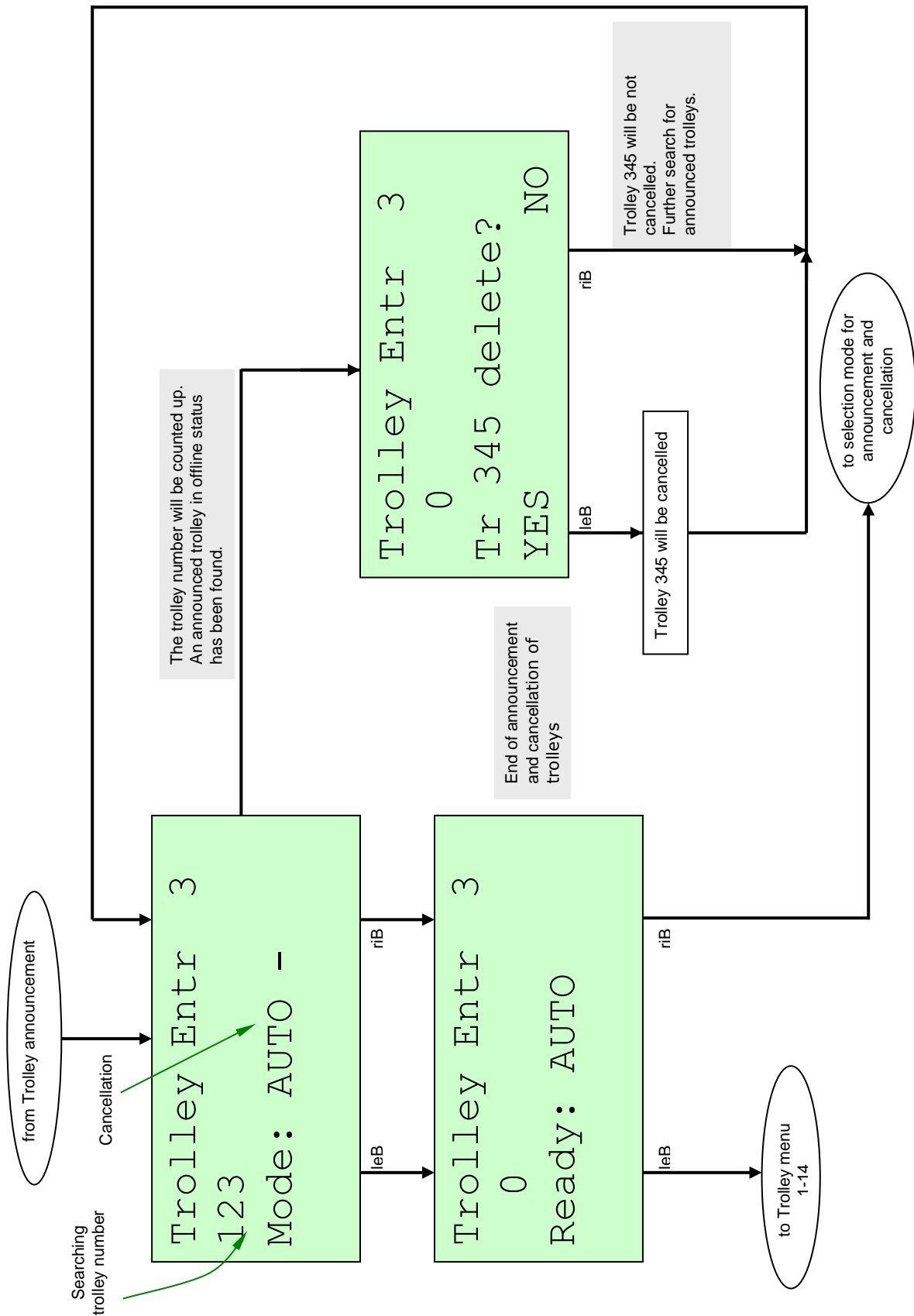
This menu shows the current network configuration of the Modbus/TCP-Module.



3.3.3 Trolley Announcement

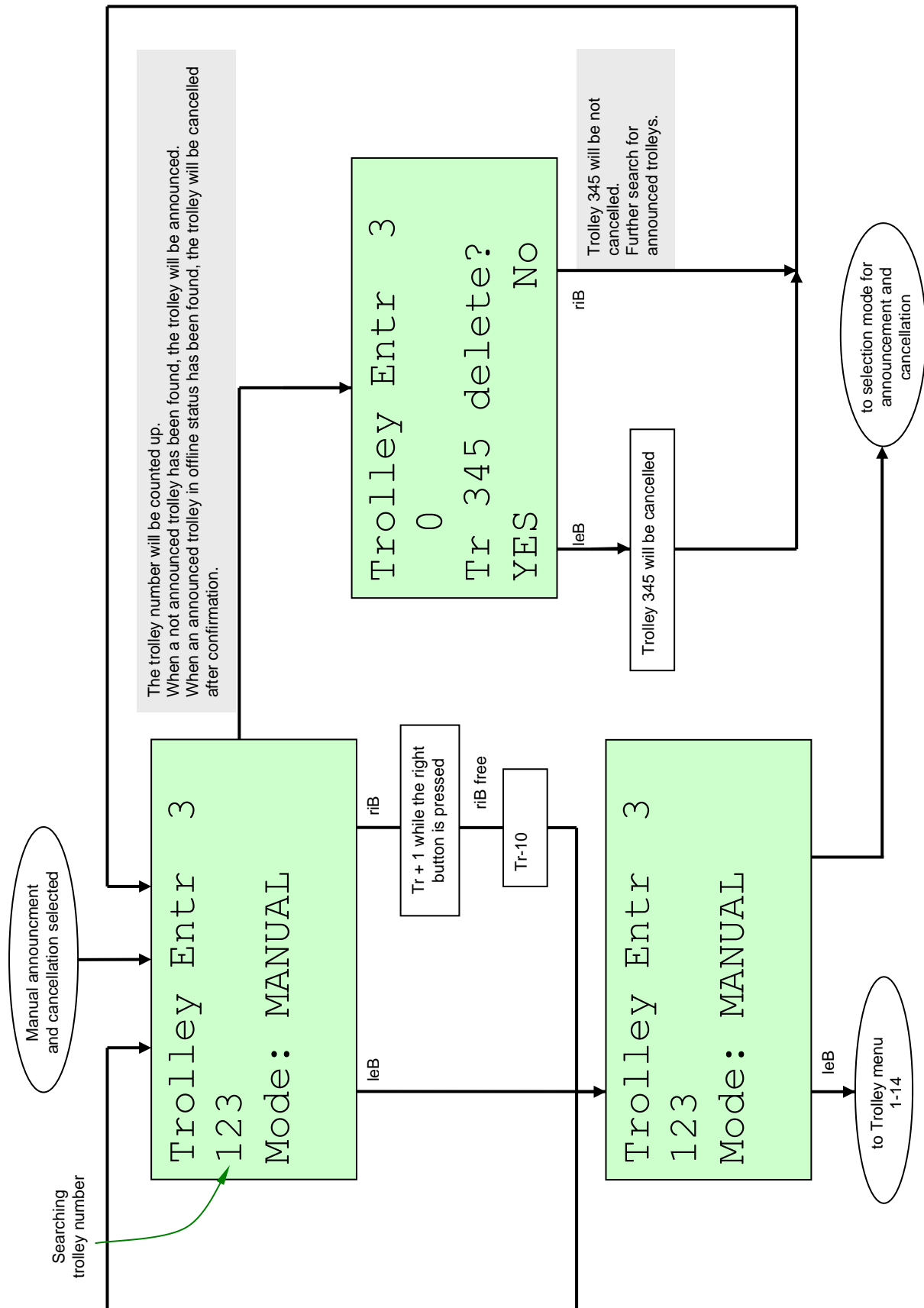


Auto:

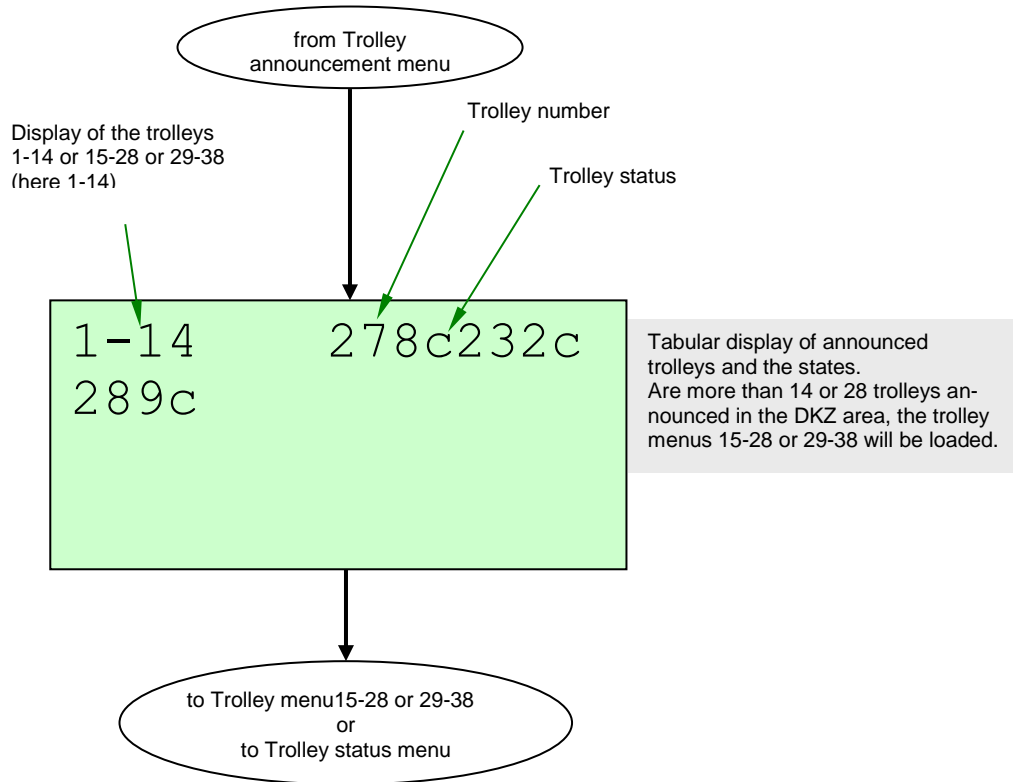


The Menu

Manual:

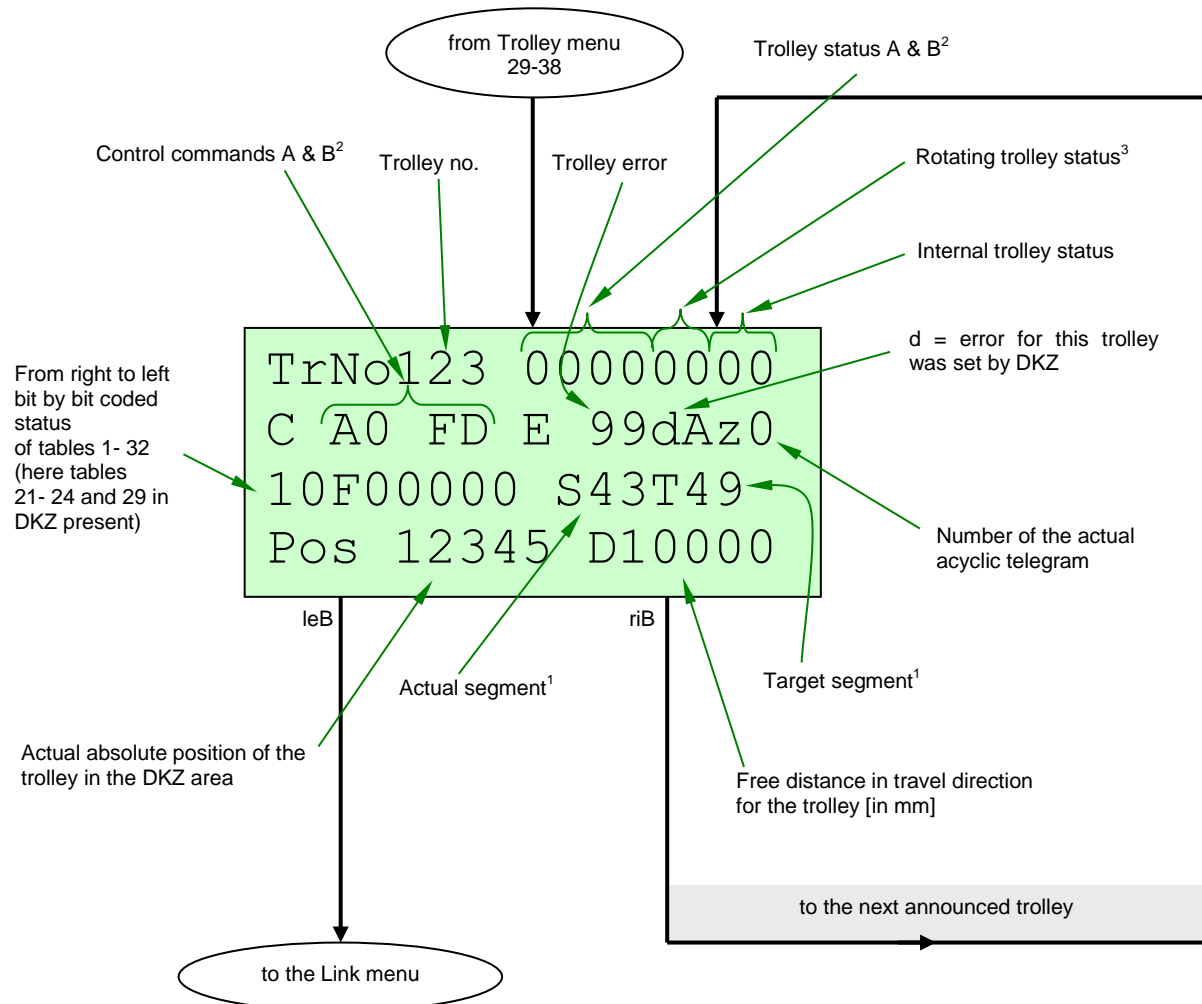


3.3.4 Trolley Menu



Status	Trolley
	communication OK
c	no communication
a	cancellation (exit DKZ)
f	with error
e	in announcement (entry DKZ)

3.3.5 Trolley Status Menu



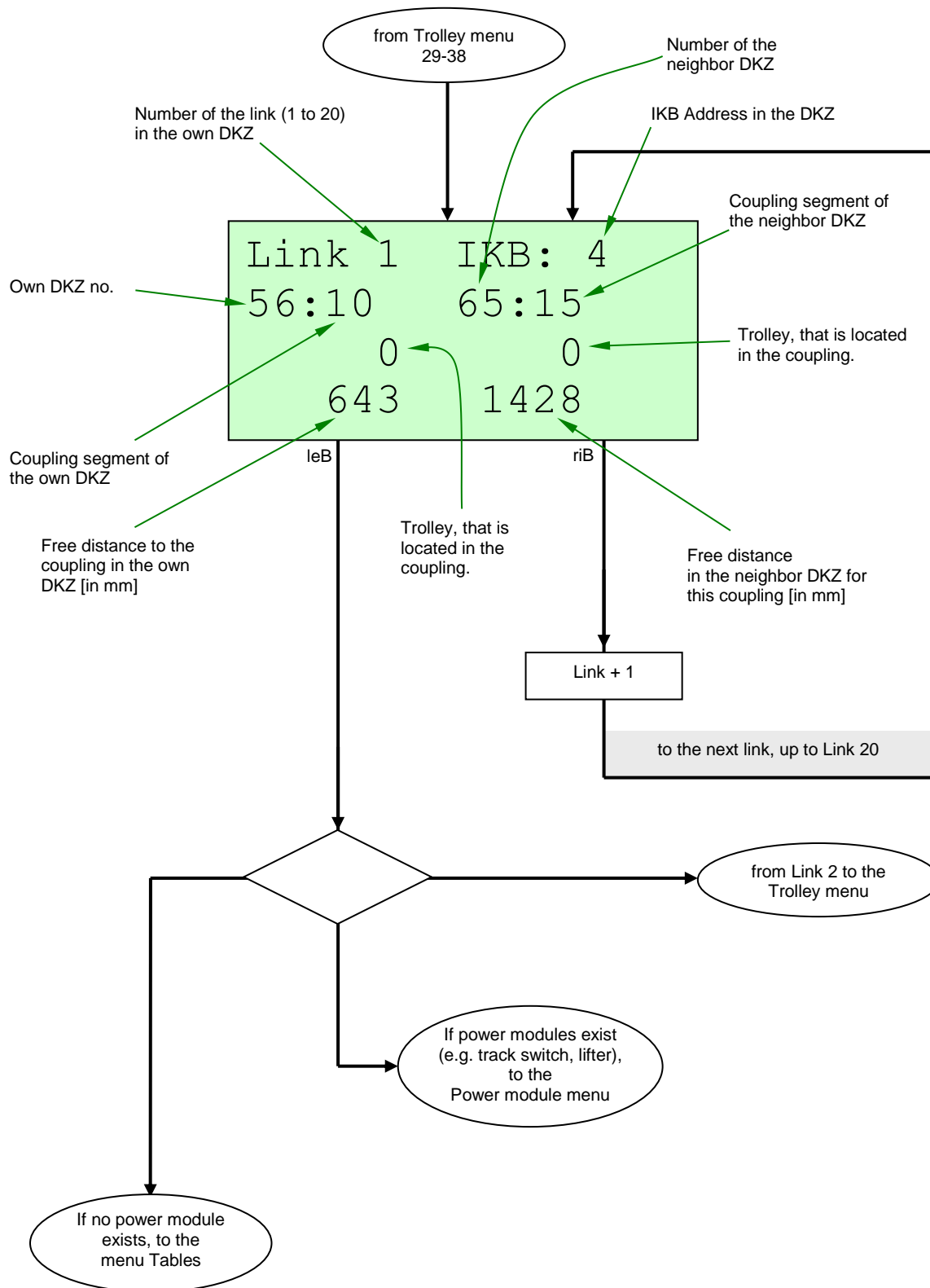
Internal trolley status	Meaning
01	Data of the Preventive Maintenance read
02	Checksum comparison ready
04	Report trolley for acknowledgement to neighbor DKZ
08	Trolley reports an error
10	Bus communication to the trolley is OK
20	Trolley is located in the coupling segment "Exit"
40	Faulty bus communication to the trolley
80	Trolley is located in the coupling segment "Entry"

¹ Control with routing tables, if control with cyclic commands the actual command is displayed in plaintext

² Meaning of the Bits project-dependent

³ Display project-dependent

3.3.6 Link Menu

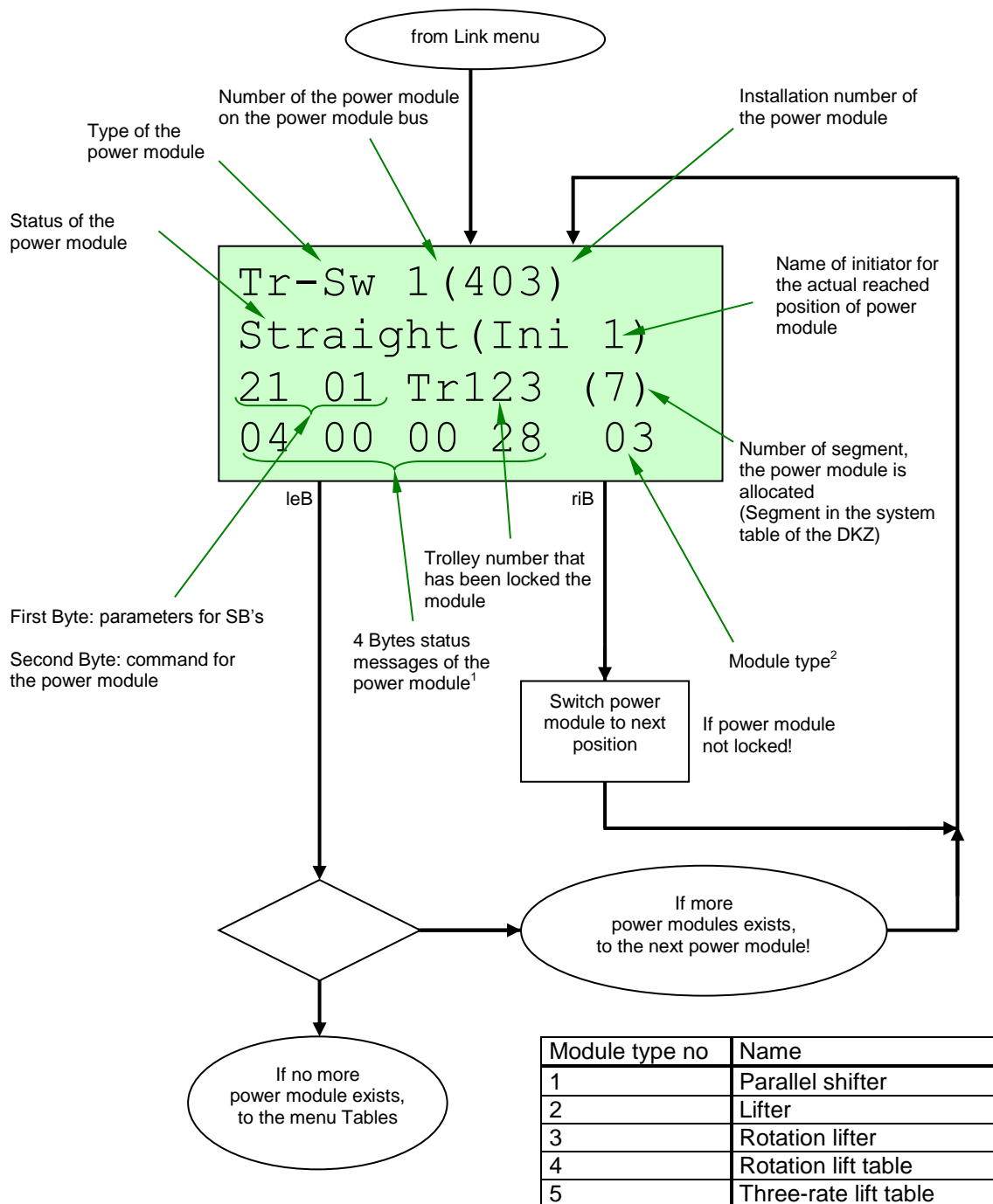


3.3.7 Power Modules Menu



Note!

This menu is only visible, if a power module (e.g. track switch, lifter) exists in the DKZ area.

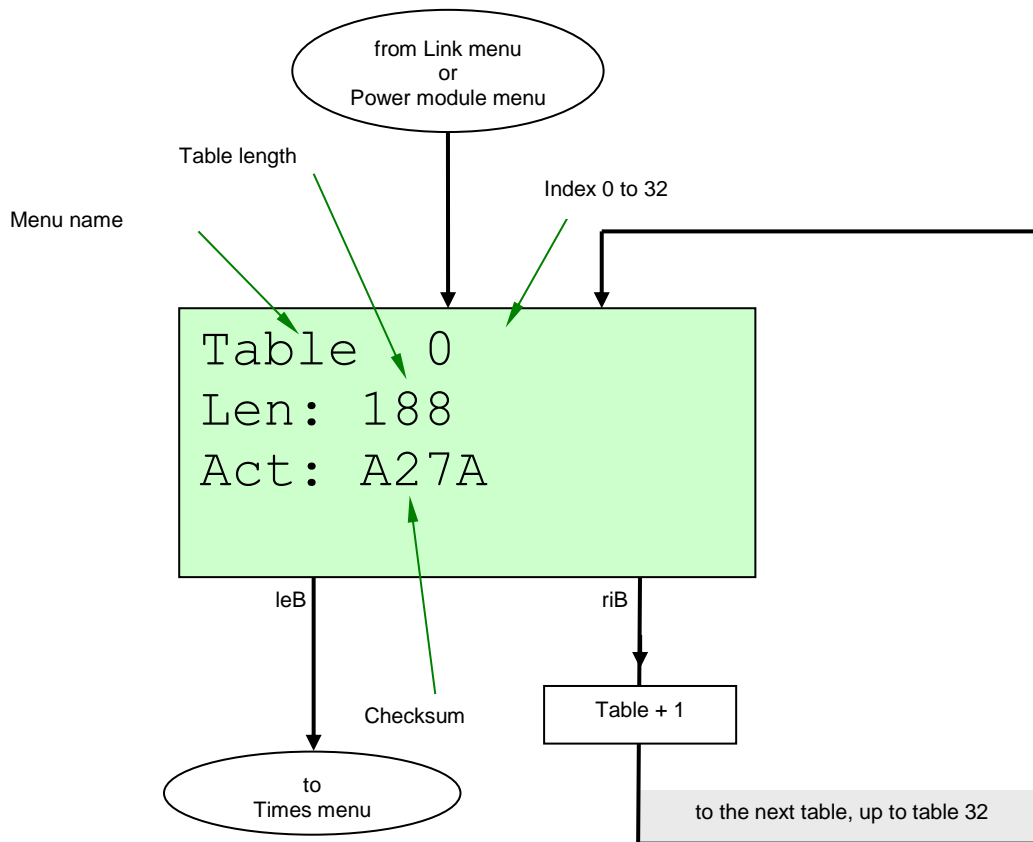


¹ The status message contains the status of initiators and if necessary error messages.

See also the descriptions to the power modules

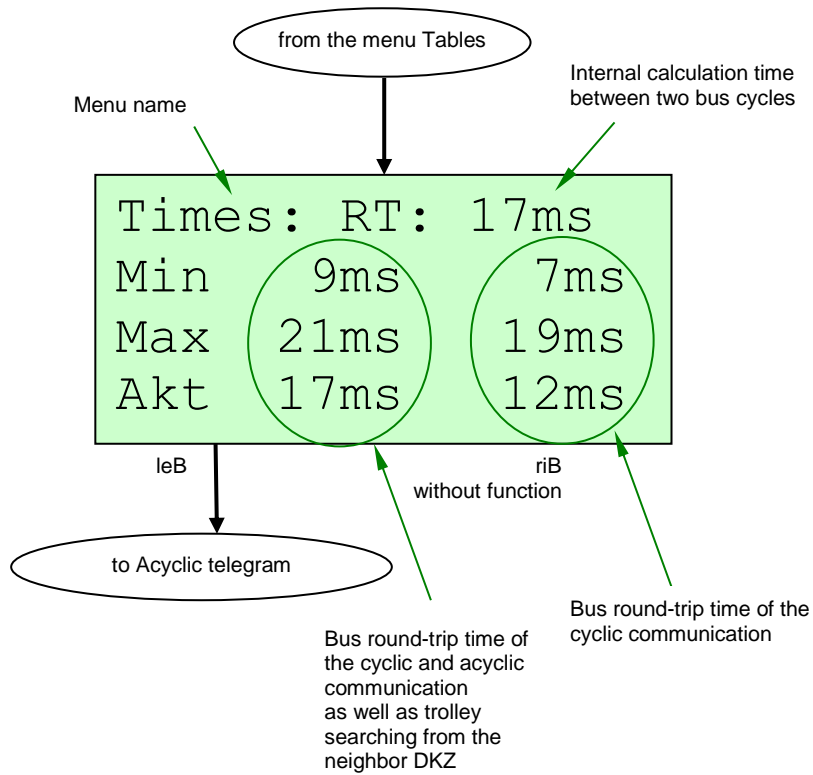
² Module types can vary, project-depending

3.3.8 Tables

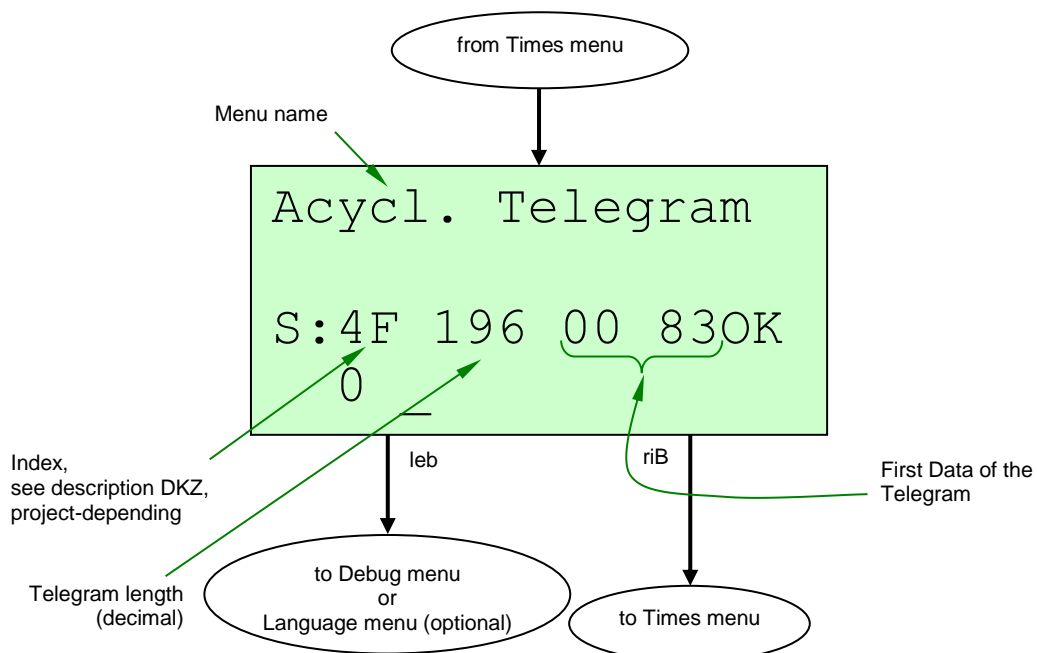


The Menu

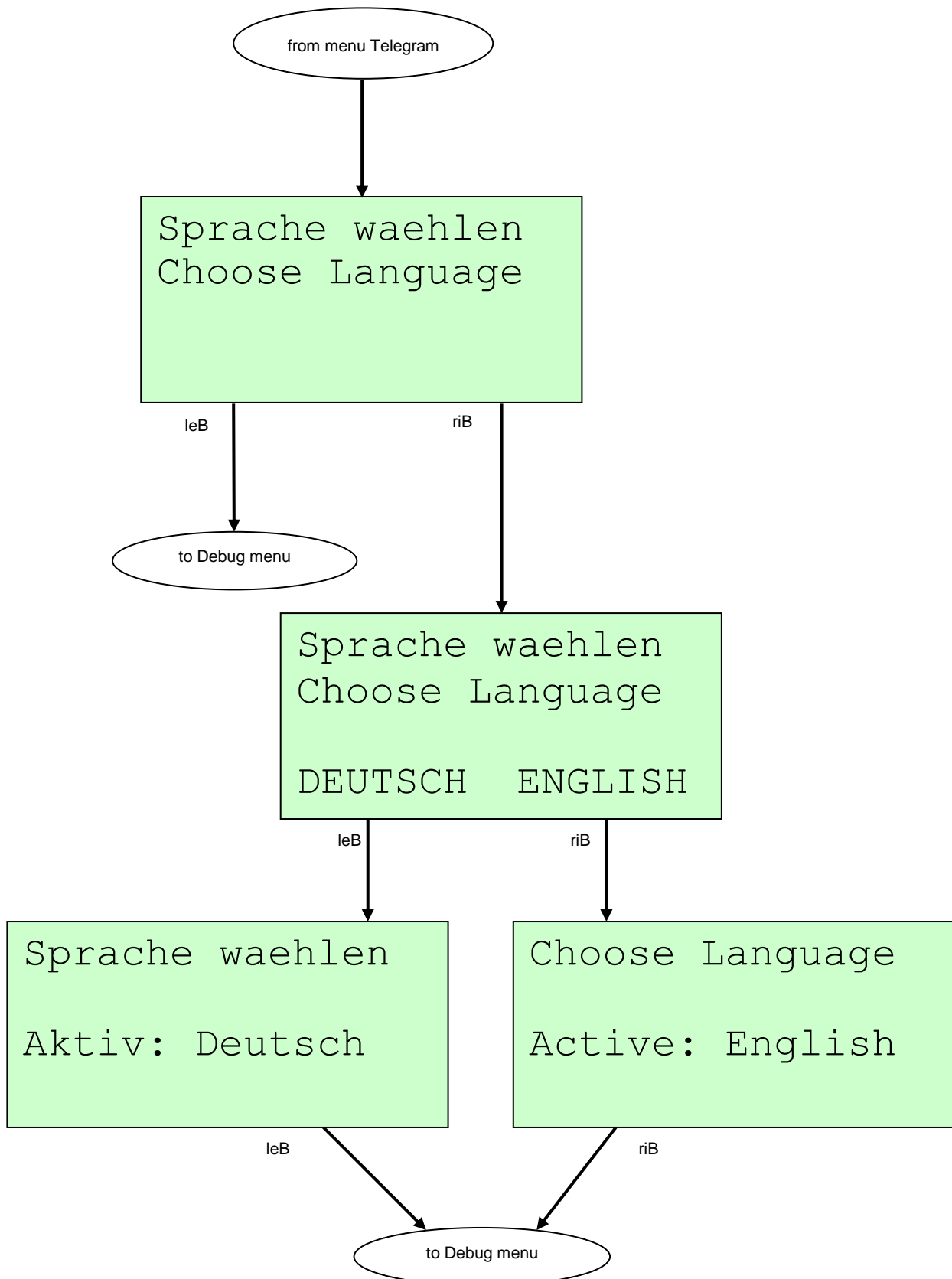
3.3.9 Display of the Bus Running Time



3.3.10 Display of a Acyclic Telegram to the Trolley



3.3.11 Language menu (optional)



3.3.12 Debug Menu

This menu displays information about the WNR, BV No. And creation date of the software as well as debug information.

