Operating instructions Part B main screen overview

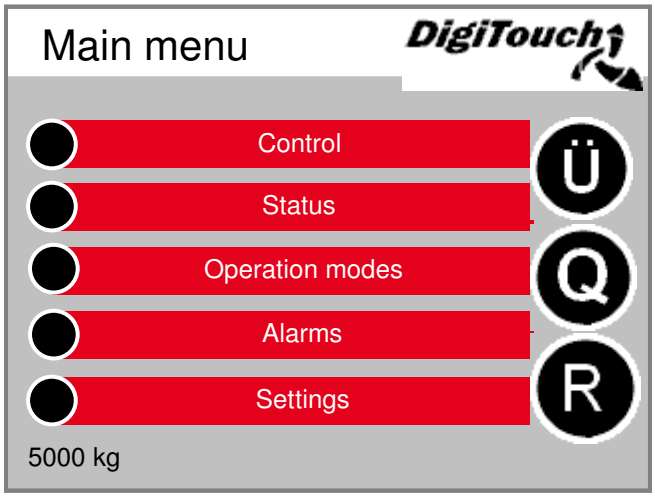
Language: English

$LastChangedRevision: 26995 $
$LastChangedDate: 2021-11-19 13:49:10 +0100 (Fri, 19 Nov 2021) $

Start screen

DigiTouch Bio welcomes you. Select the word "START" to access the main menu.

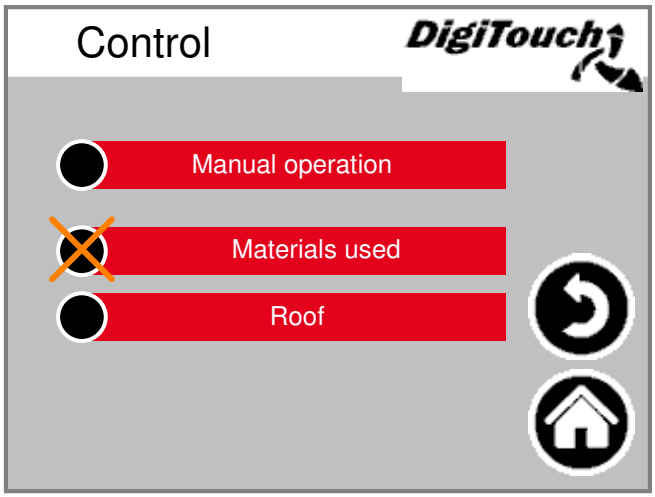
Main menu



This is the main menu.
By pressing the "Home" symbol you can return here at any time.
If the letter "R" appears next to the alarm symbol, you can reset the FC.
With the letter "Ü" you can return to the overview page, with "Q" you will enter Feeding.

Menu control

Main menu --> Control

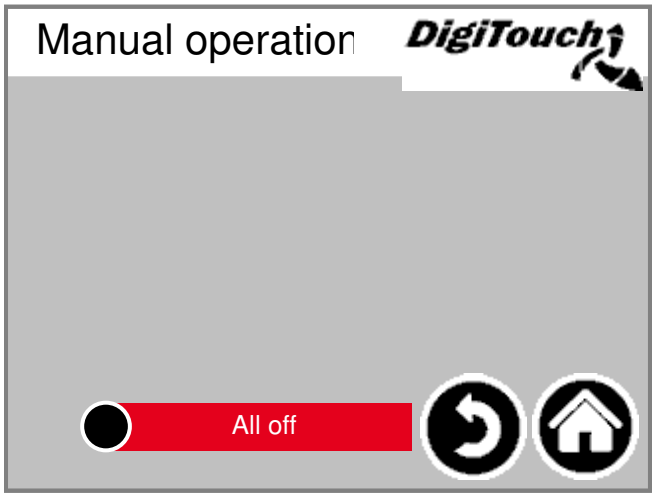


In this menu you can control filling and hand operations. When the black circle is crossed through, the menu is thus inactive, because the incorrect operating mode is currently selected.

Icon legend page 55 and 56

Manual operation

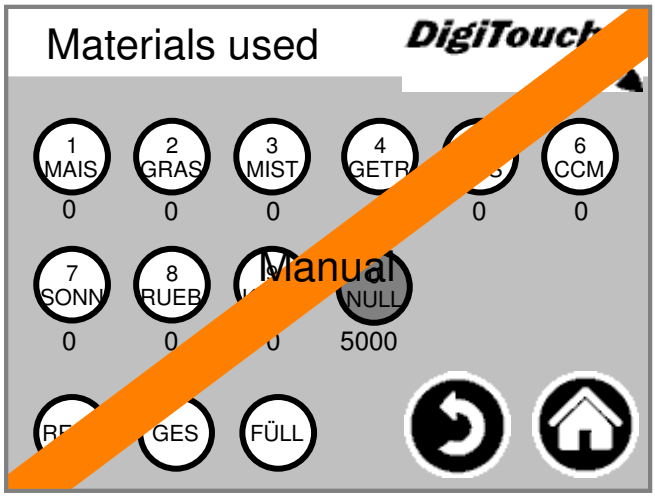
Main menu --> Control --> Manual operation



This screen provides no function. Except for other system types. See page 8 till 21. Type 0 has no manual operation

Menu materials used

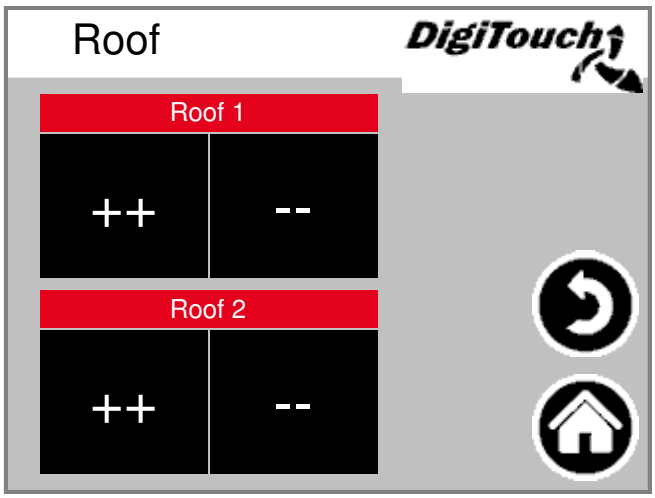
Main menu --> Control --> Materials used



This menu offers the same functions as the radio remote control. It provides a way of replacing this should, for example, the batteries fail.
Button REST: From the target quantity from the page products the filled quantity is subdracted.
Button GES: Here is only shown the gross weight on the large display
Button FÜLL: Here is shown the filled quantity.
ATTENTION: If GES is selcted, the two line display has one line because the weight is displayed big.

Roof

Main menu --> Control --> Roof



By pressing the "++" button opens the roof. The "--" button closes the roof.

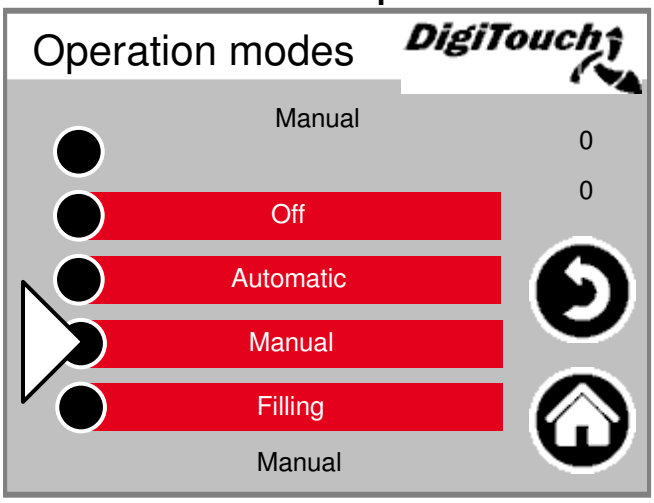
Icon legend page 55 and 56

Menu status

The status menu is described from page 8 onwards in this manual.

Operating mode selection

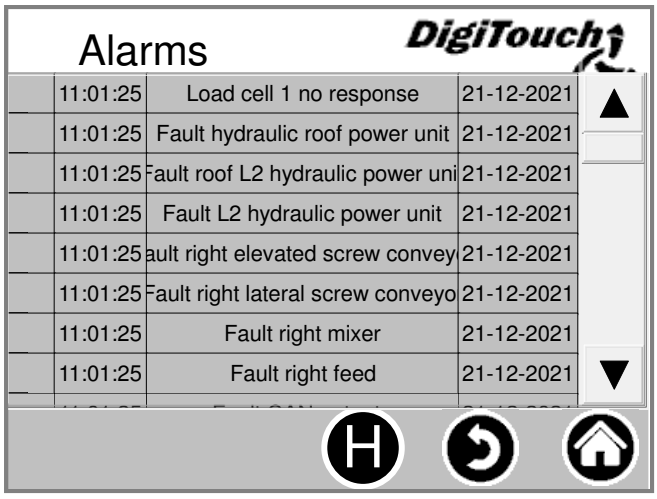
Main menu --> Operation modes



PART A of the manual has a more detailed description of the selection of the operation start. The selected operation start is indicated with a triangle. There are circumstances where the pressing of a button does not necessarily lead to a mode being changed, since for example, the return must be carried out first.

Page alarms

Main menu --> Alarms

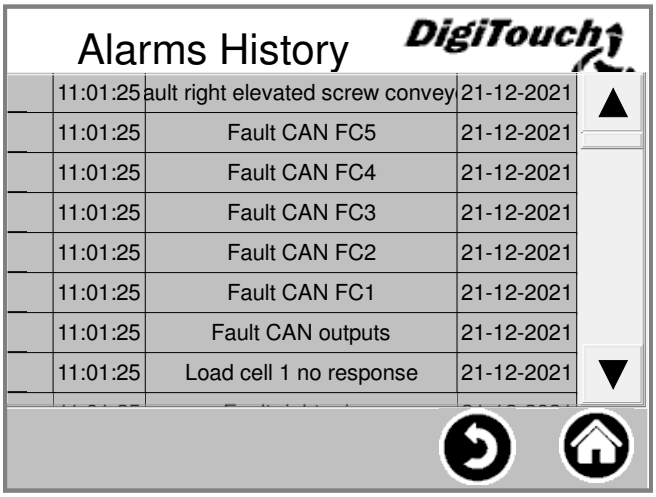


The pending alarms are shown here. Alarms, which are not in the queue, disappear from this list immediately. The alarms need not be confirmed or acknowledged. Particular executions of the frequency converters are an exception.
With button "H" a history of past alarms can be shown.

Icon legend page 55 and 56

Alarm history page

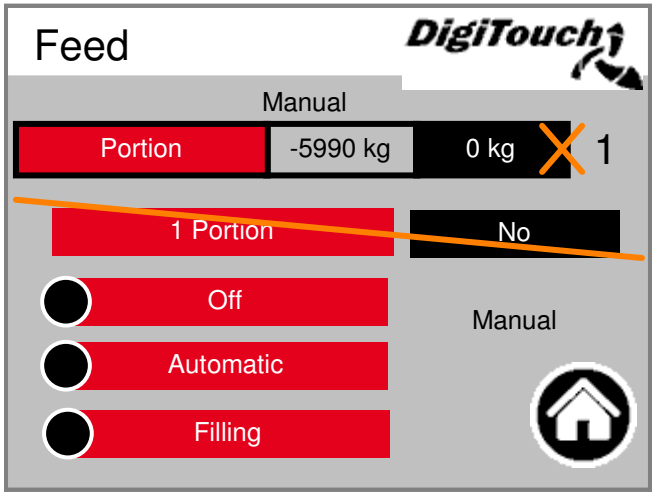
Main menu --> **Alarms --> H**



Past alarms are shown here.
In the menu "free memory" (see page 27) can the history be deleted.

Feed

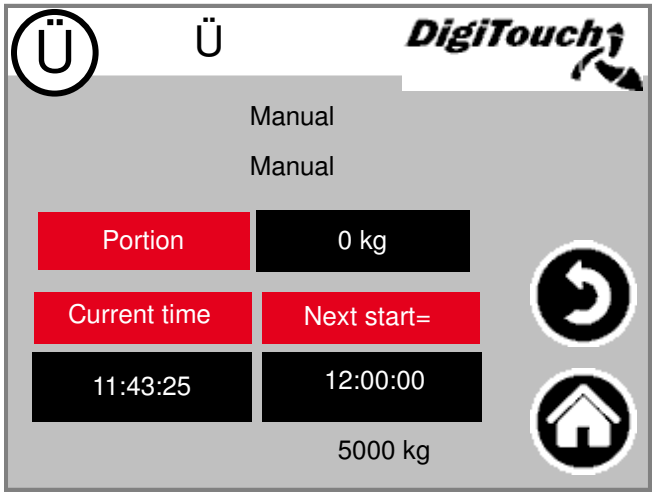
Main menu --> Q



The portion can only be adjusted by OFF or filling, in automatic a yellow cross shows that it is locked for input.
Here can the portion be feeded, here the operation mode can be selected.
This settings are also on other pages.

Ü

Main menu --> Ü

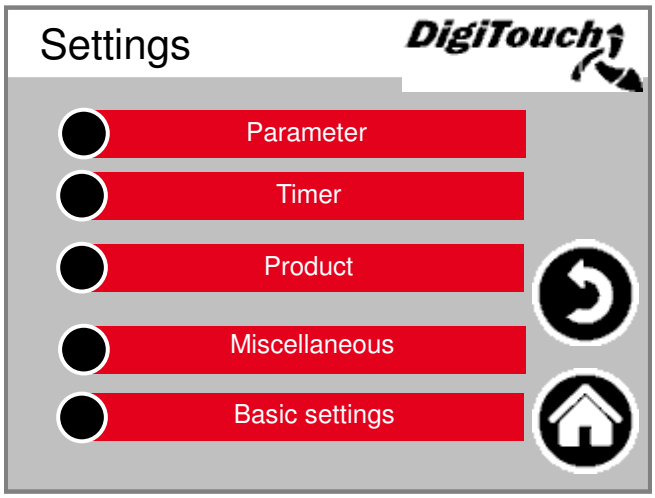


Here is the overview about the next feeding and the portion.

Icon legend page 55 and 56

Menu settings

Main menu --> Settings



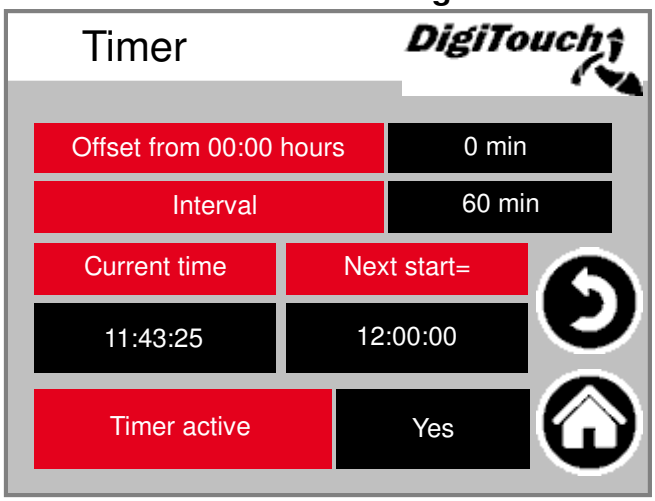
In this menu the equipment can be configured.
A separate description of each individual point can be found below.

Configure parameter/s

See pages 24 to 26

Timer

Main menu --> Settings --> Timer

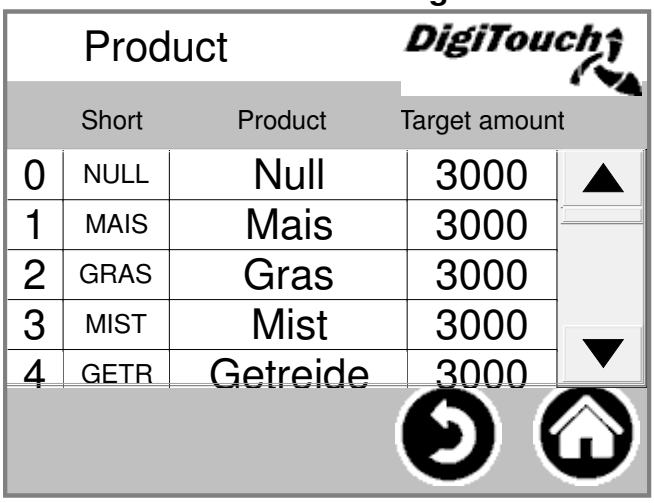


Here you can edit the integrated timer settings. You can enable or disable them below.
ATTENTION: When there is an external control present, this would normally take over the function of the timer. This should then be set to inactive here.

Icon legend page 55 and 56

Edit product

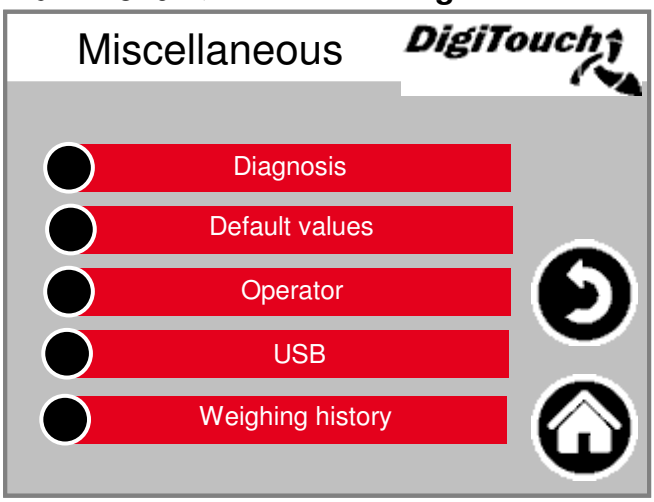
Main menu --> Settings --> Product



This menu allows you to enter both the name of the product and the target amount.
The names are processed in any case, but they only are displayed at the 1. of every month in the input material diary. The quantities are used only if the operating moder "REST" on the page input material or the remote control is selected.

Menu miscellaneous

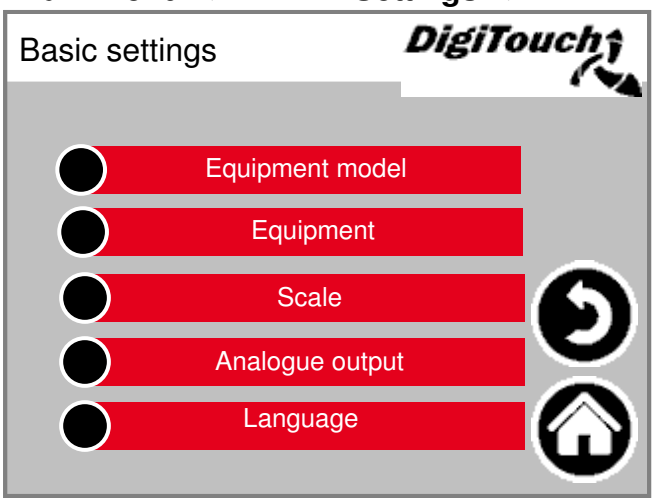
Main menu --> Settings --> Miscellaneous



Additional menu items, which are only selected occasionally.
See pages 27 to 36

Menu default settings

Main menu --> Settings --> Basic settings



Very basic settings can be configured in this menu.
System type and equipment are for users not available.

Icon legend page 55 and 56

Menu status

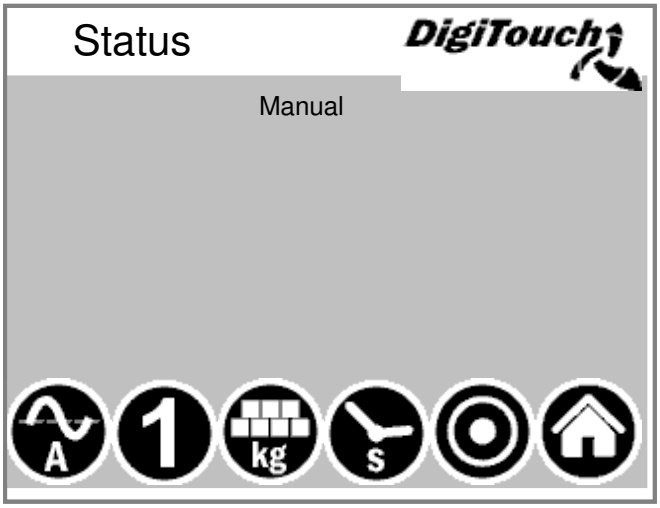
The status menu is described from page 8 onwards in this manual.

Type 0

DigiTouch Scale only

Status display

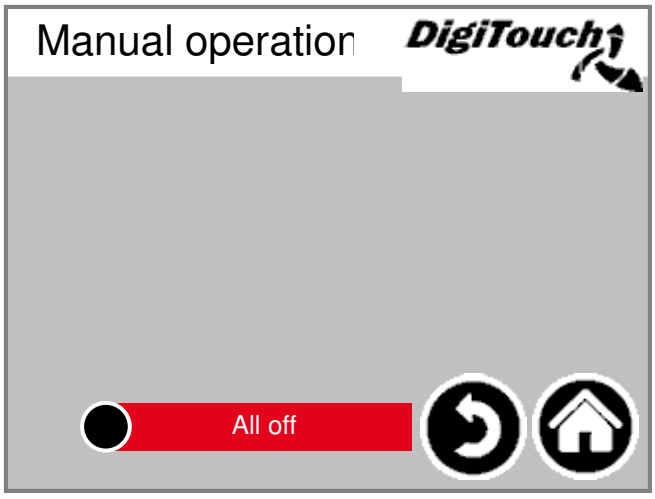
Main menu --> Status



The current stage is displayed at the top and the active motors (rotating white circles) directly in the middle of this screen.
R/L shows which feeding container and/or the direction of rotation of the respective screw (right or left) of the respective fermenter. Only relevent for double systems.
Below there are 5 symbols representing the different status indicators.
See pages 22 and 23
In addition, the limit switches are visualized.

Manual operation

Main menu --> Control --> Manual operation

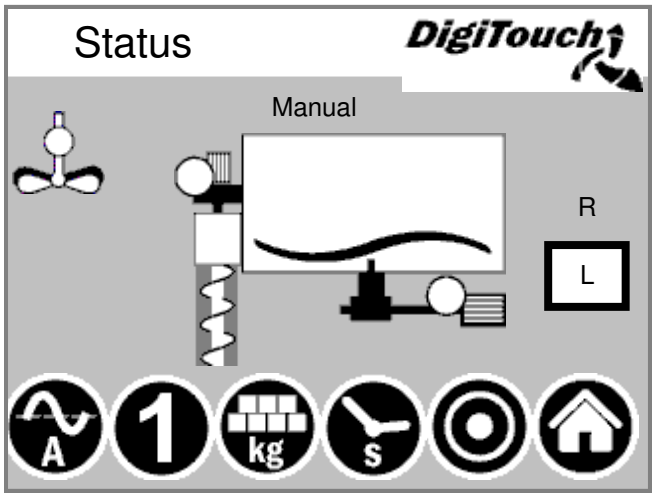


This screen provides no function. Except for other system types. See page 8 till 21.
Type 0 has no manual operation

Type 10

Rondomat
lower feed

Status display



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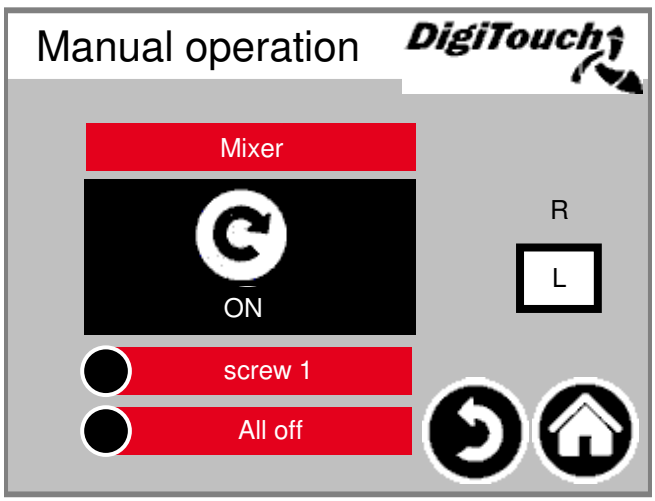
Manual operation



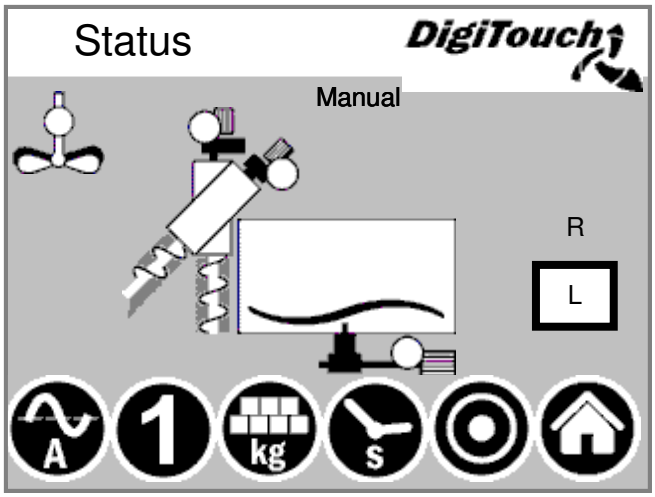
This screen facilitates manual operation of the individual drives. Normally this is not necessary.
Type 0 has no manual operation.
Before switch on the direction of rotation L/R (left/right fermenter) has to be selected, than the screw conveyor go`s left or right. This depends on the construction of the system and is shown in the system plan.
WARNING: No monitoring in this case. Screen can only be used when manual operation has been selected.

Icon legend page 55 and 56

Type 11

Rondomat upper feed

Status display



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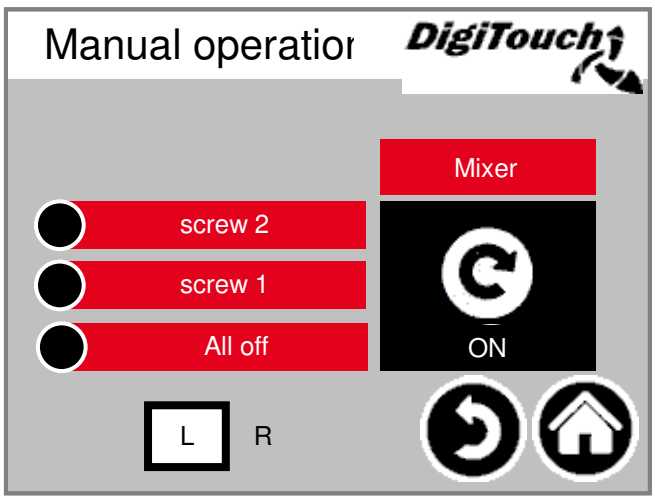
Manual operation



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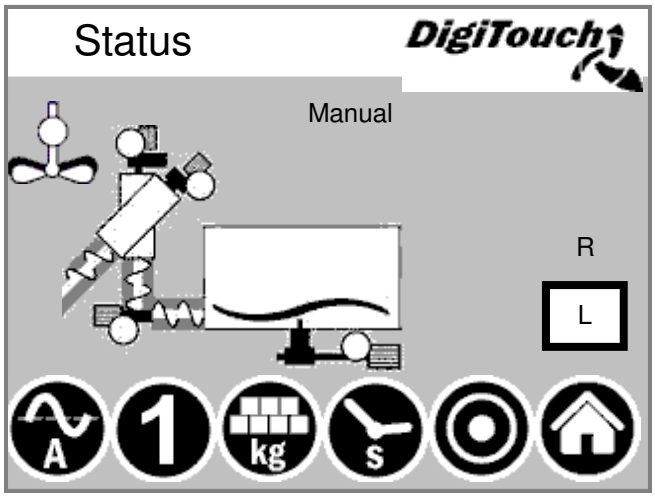
Icon legend page 55 and 56

Type 12

Rondomat
upper rear feed

Status display



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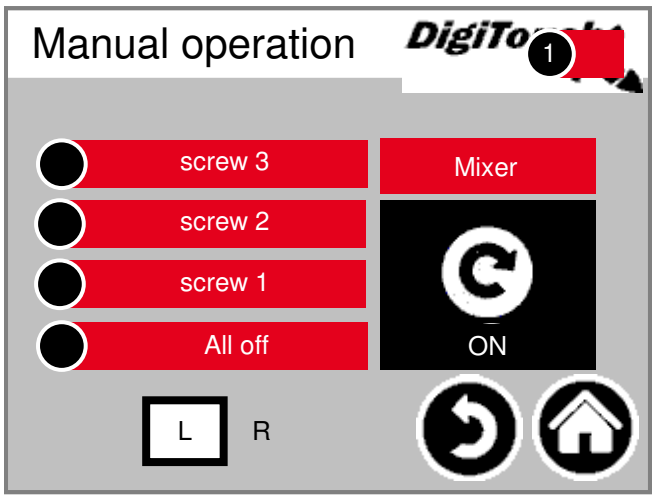
Manual operation



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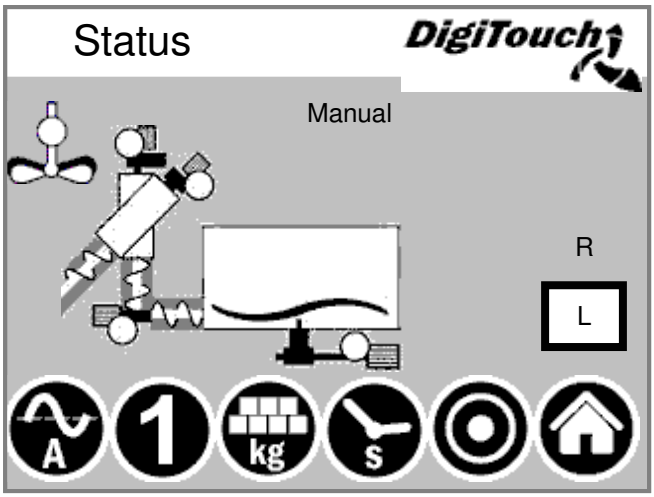
Icon legend page 55 and 56

Type 13

Rondomat
upper rear feed

Status display



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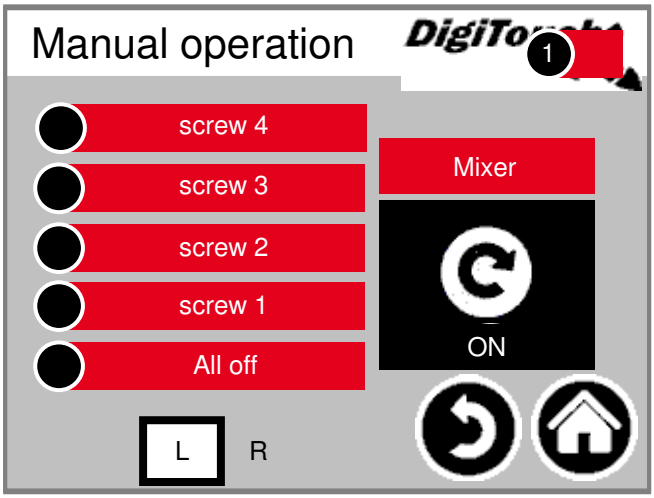
Manual operation



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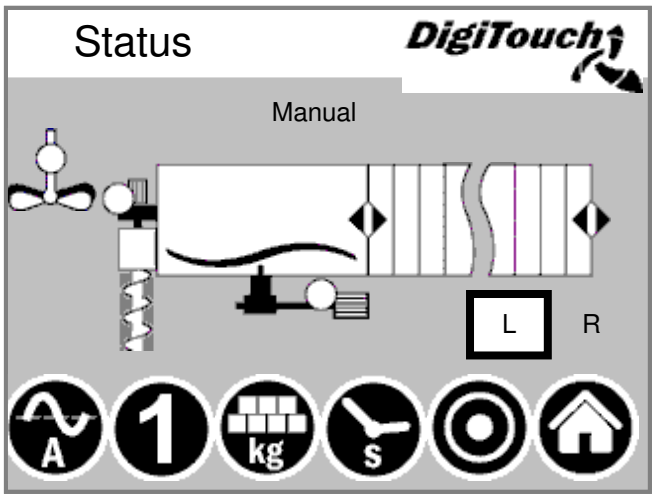
Icon legend page 55 and 56

Type 20

extension Rondomat lower feed

Status display



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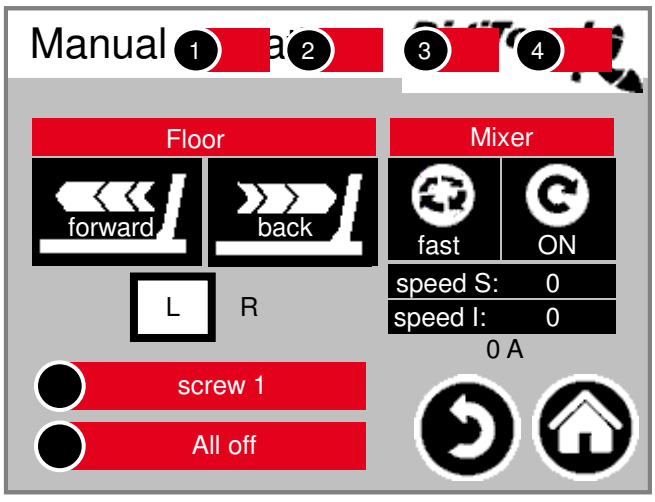
Manual operation



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Normally this is not necessary.
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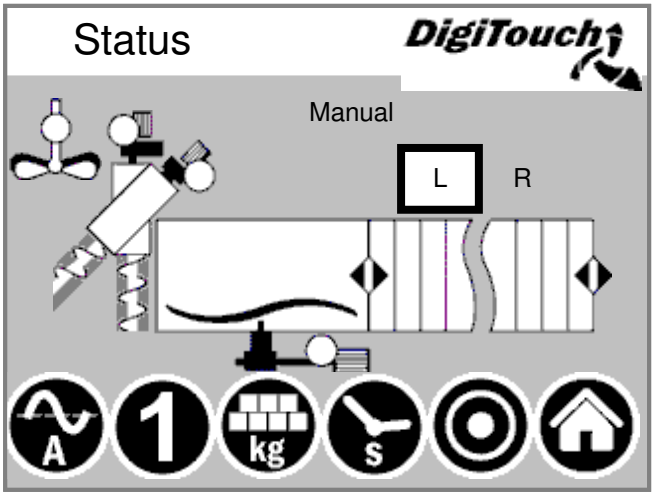
Icon legend page 55 and 56

Type 21

extension Rondomat
upper feed

Status display



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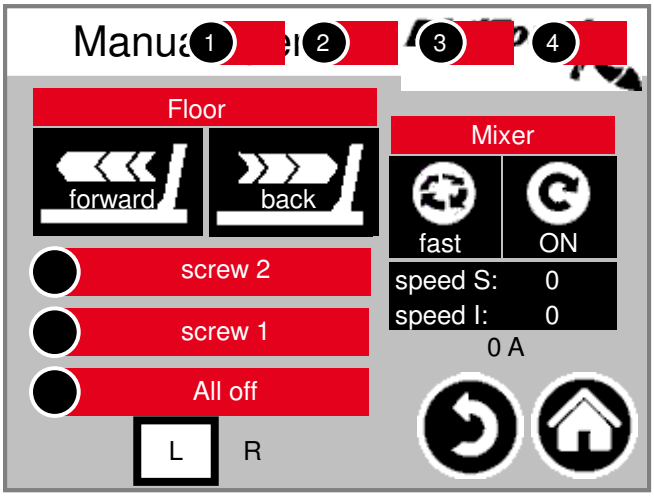
Manual operation



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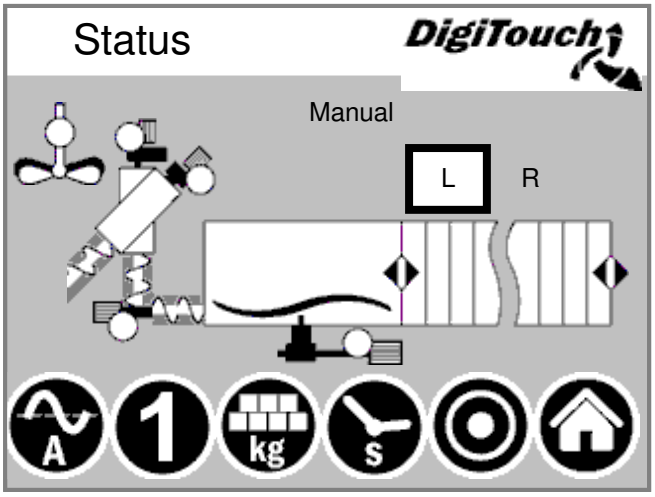
Icon legend page 55 and 56

Type 22

extension Rondomat upper rear feed

Status display



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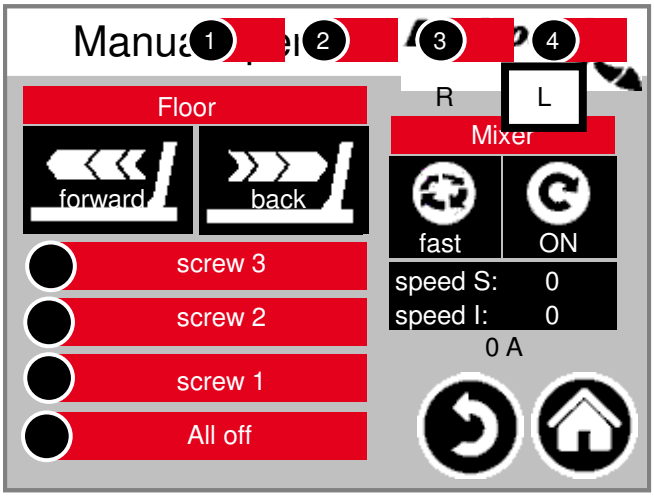
Manual operation



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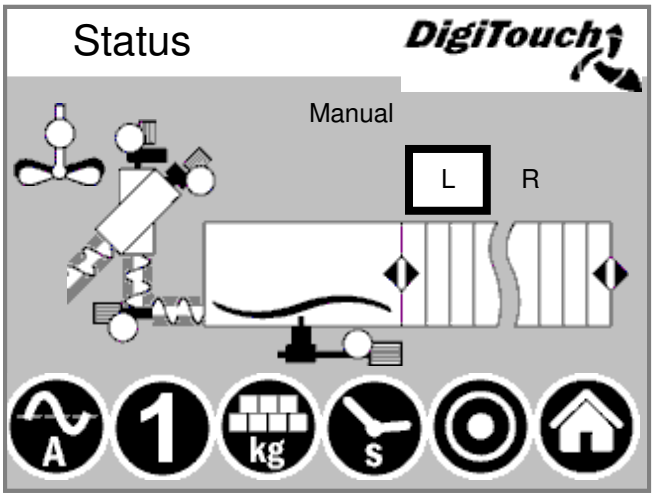
Icon legend page 55 and 56

Type 23

extension Rondomat upper rear feed

Status display



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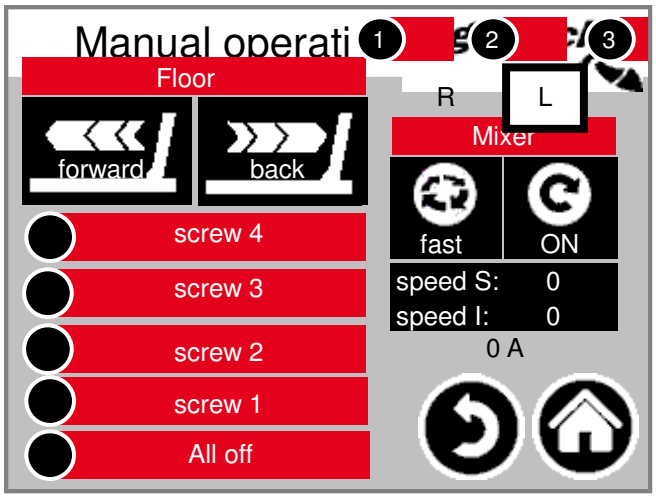

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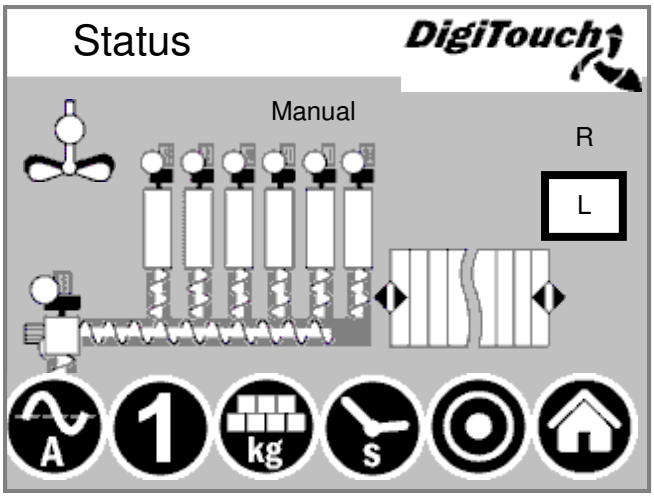
Icon legend page 55 and 56

Type 30

Duplex lower feed

Status display



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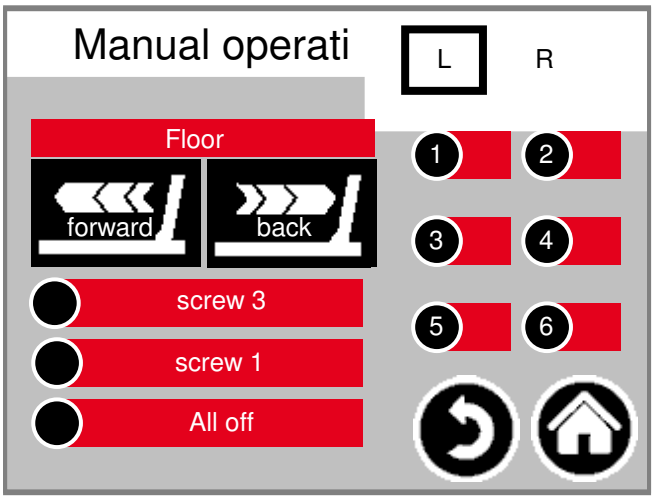
Manual operation



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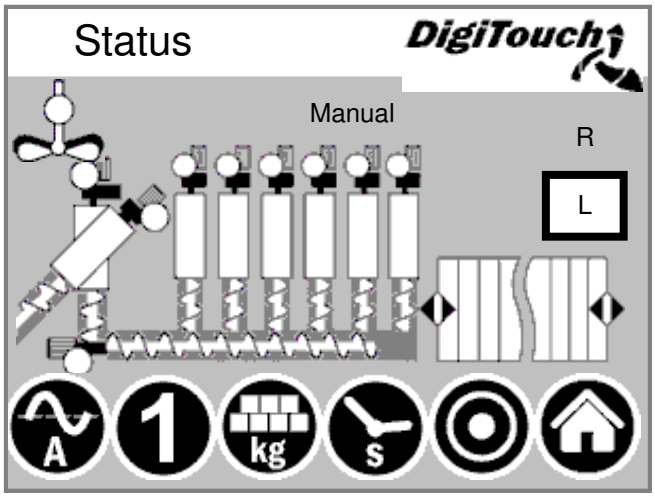
Icon legend page 55 and 56

Type 32

Duplex upper feed

Status display



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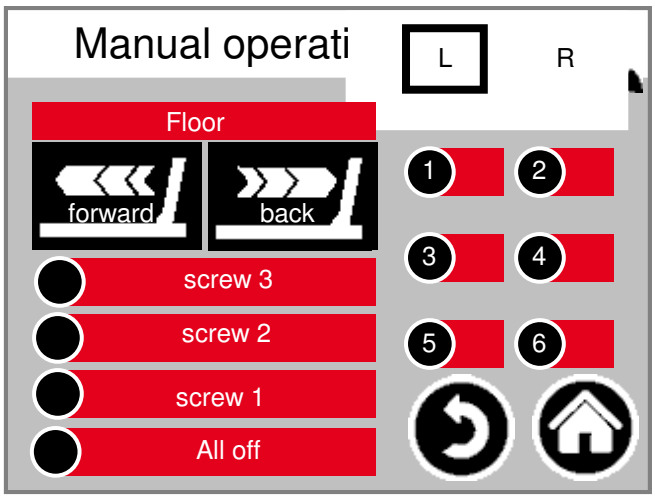
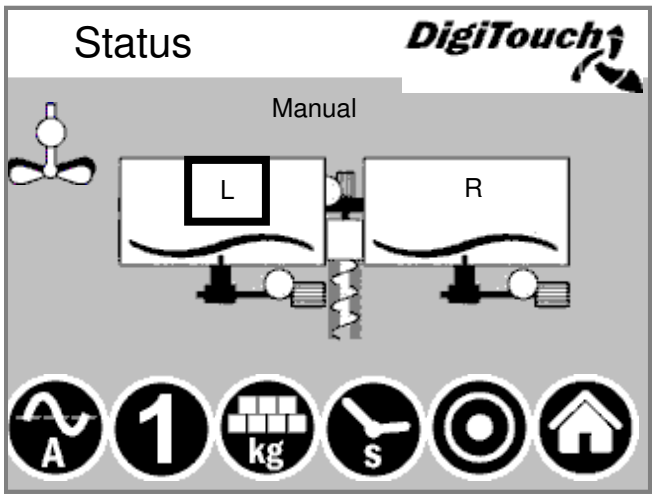


This screen facilitates manual operation of the individual drives. Normally this is not necessary.
Type 0 has no manual operation.
Before switch on the direction of rotation L/R (left/right fermenter) has to be selected, than the screw conveyor go`s left or right. This depends on the construction of the system and is shown in the system plan.
WARNING: No monitoring in this case. Screen can only be used when manual operation has been selected.

Icon legend page 55 and 56

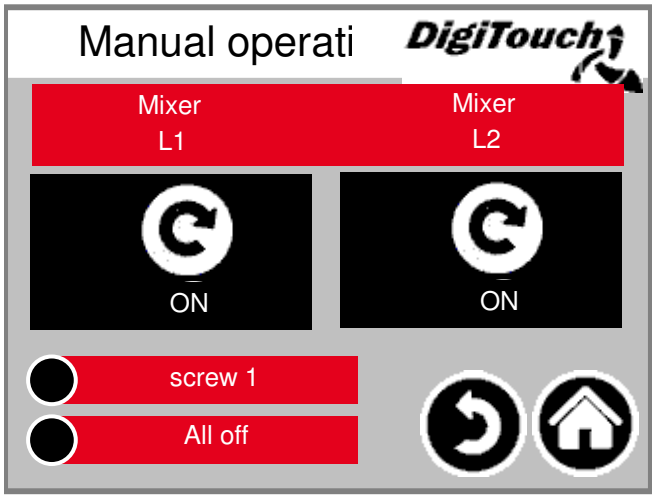
Type 40
Double Rondomat
lower feed

Status display



The current stage is displayed at the top and the active motors (rotating white circles) directly in the middle of this screen.
R/L shows which feeding container and/or the direction of rotation of the respective screw (right or left) of the respective fermenter. Only relevent for double systems.
Below there are 5 symbols representing the different status indicators.
See pages 22 and 23
In addition, the limit switches are visualized.

Manual operation



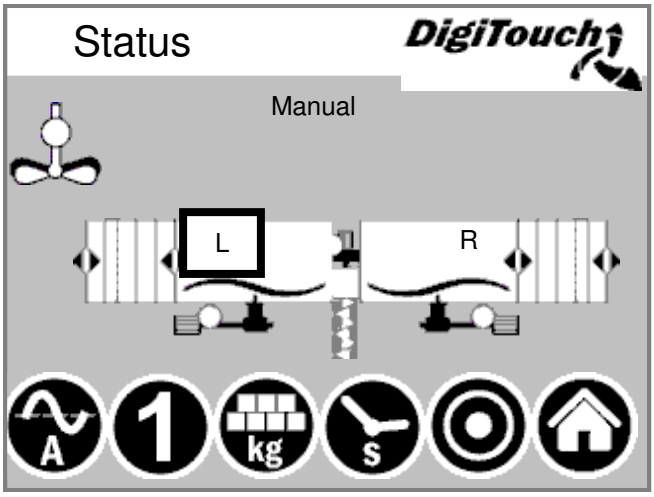
This screen facilitates manual operation of the individual drives. Normally this is not necessary.
Type 0 has no manual operation.
Before switch on the direction of rotation L/R (left/right fermenter) has to be selected, than the screw conveyor go`s left or right. This depends on the construction of the system and is shown in the system plan.
WARNING: No monitoring in this case. Screen can only be used when manual operation has been selected.

Icon legend page 55 and 56

Type 50

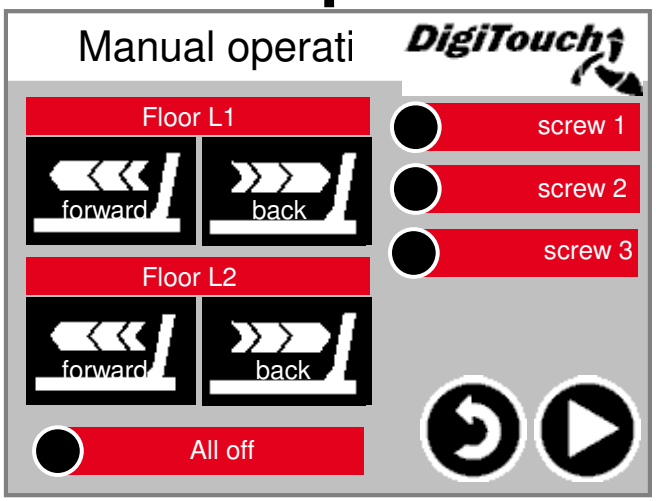
Double Rondomat as Duplex lower feed

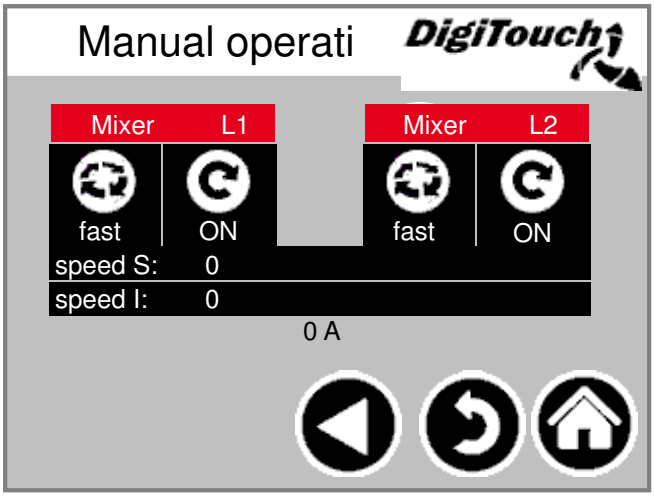
Status display



The current stage is displayed at the top and the active motors (rotating white circles) directly in the middle of this screen.
R/L shows which feeding container and/or the direction of rotation of the respective screw (right or left) of the respective fermenter. Only relevent for double systems.
Below there are 5 symbols representing the different status indicators.
See pages 22 and 23
In addition, the limit switches are visualized.

Manual operation





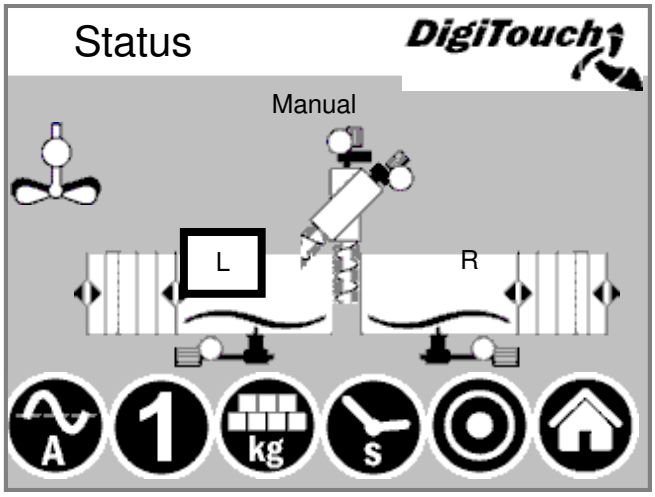
This screen facilitates manual operation of the individual drives. Normally this is not necessary. Type 0 has no manual operation. Before switch on the direction of rotation L/R (left/right fermenter) has to be selected, than the screw conveyor go`s left or right. This depends on the construction of the system and is shown in the system plan.
WARNING: No monitoring in this case. Screen can only be used when manual operation has been selected.

Icon legend page 55 and 56

Type 51 / 52

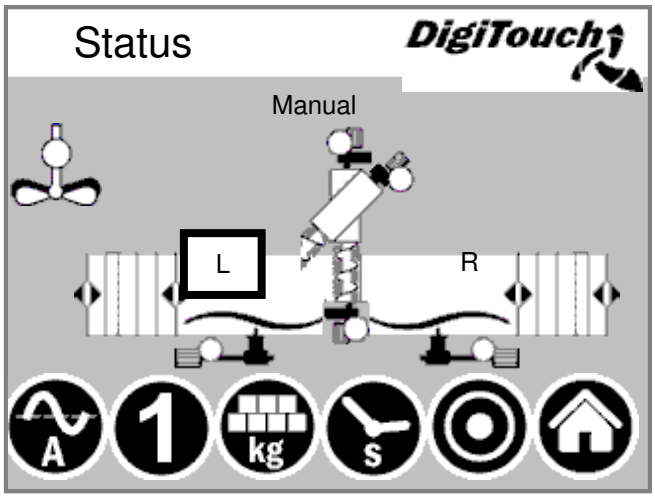
Double Rondomat as Duplex upper feed

Status display 51



The current stage is displayed at the top and the active motors (rotating white circles) directly in the middle of this screen.
R/L shows which feeding container and/or the direction of rotation of the respective screw (right or left) of the respective fermenter. Only relevent for double systems.
Below there are 5 symbols representing the different status indicators.
See pages 22 and 23
In addition, the limit switches are visualized.

Status display 52

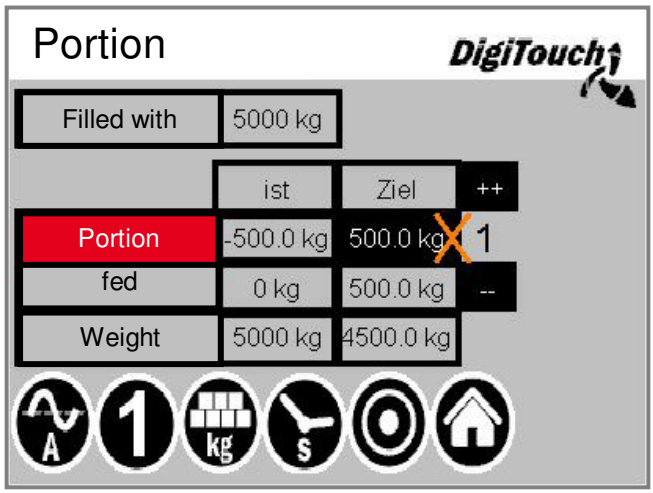


Manual operation

See pages 20

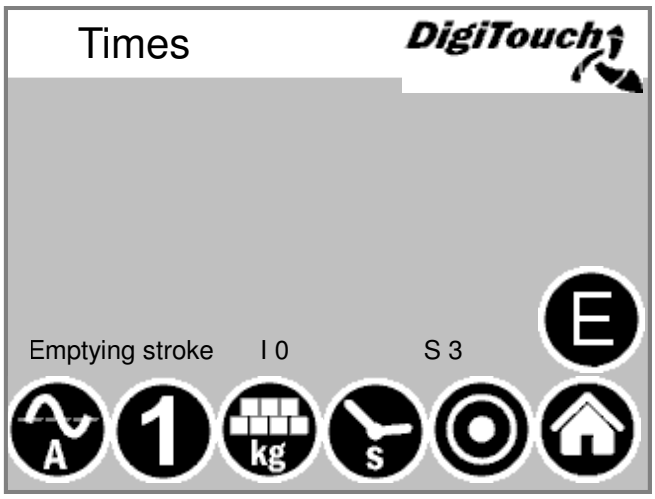
Icon legend page 55 and 56

Symbol "kg" (portion)



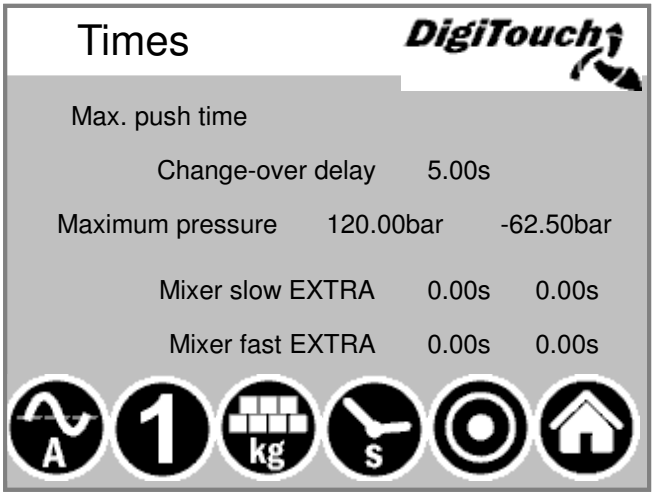
Here the portion is adjusted. (black box portion target).
With ++ and -- the portion can be increased or reduced/left
out for the next feeding.
Portion "is" = to reach the target weight with the feeding quantity
Portion "target" = adjustet dosing quantity
Feed "is" = quantity of the last feeding
Feed "target" = quantity, that should be reached with the next feeding
Weight "is" = gross weight less feeding quantity
Weight "target" = gross weight after the next feeding.
With this new procedure the containers will be empty "on the dot".
ATTENTION: The portion can only be adjusted in filling mode
and operating mode "Off"!

Symbol "s" (timer)



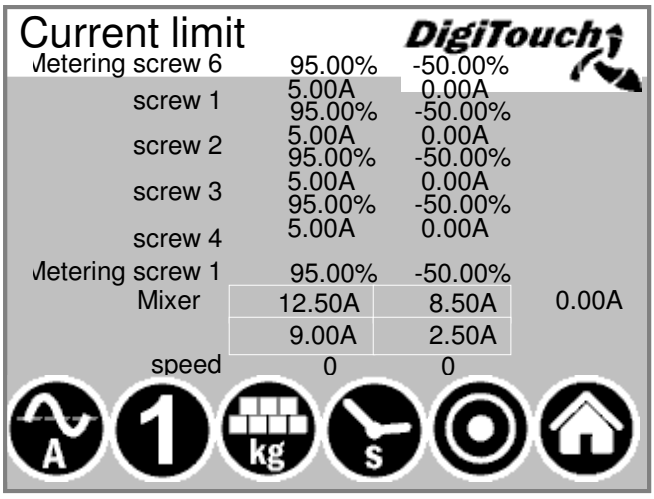
The individual timers are displayed here.
See pages 24 and 25
By pressing the "E" button
additional timers are displayed.

Times "E"



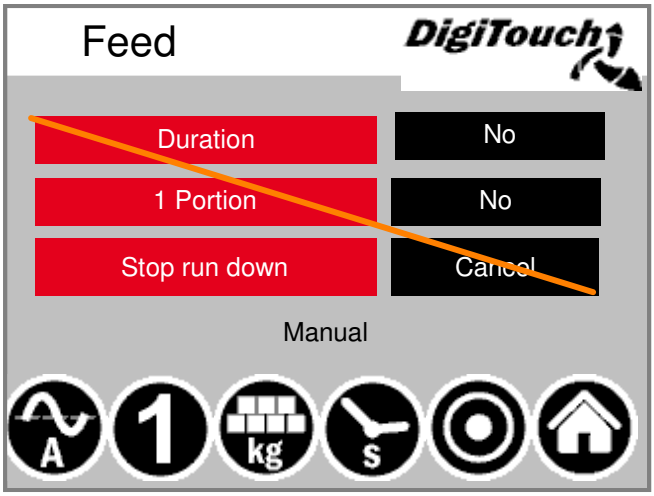
The special times are displayed here. Variable depending on the equipment of the system.

Symbol "A" (power display)



The power indicator remains blank when in idle mode. A value indicating power as well as the limit value is only displayed when a particular motor is running. If a limit value is exceeded, the conveyer from the previous stage is stopped in order to reduce material supply. As a result, blockages and overloads are reduced and prevented!
See pages 25 to 26

Symbol "1" (feed)



The top button puts the equipment in continuous mode. Feeding then runs continuously until the button is pressed again. Button 2 allows an individual portion to be introduced. Pressing the button again stops the dosing, even when the portion has not been used. If you wish to interrupt the process in this phase, button 3 can be used for this. These settings can only be made in "Automatic" operating mode.

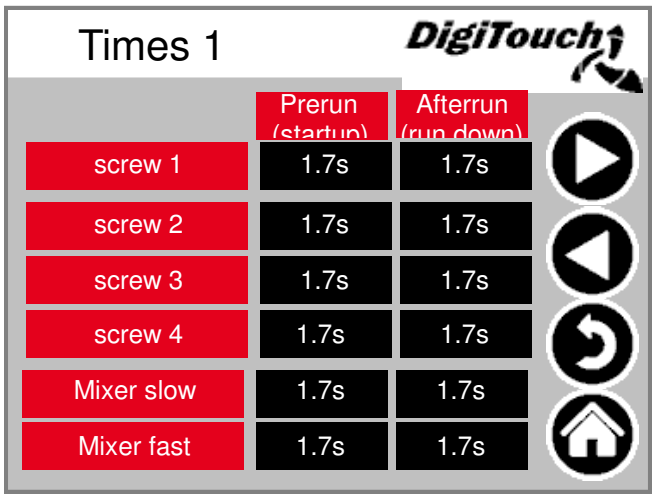
Icon legend page 55 and 56

Configure parameter/s

Setting the operating parameters
With a higher-level control such as Profibus, Profinet etc. have to set the times like this be because it is the given time from the higher-level control for a dosing cycle do not exceed.

Times 1

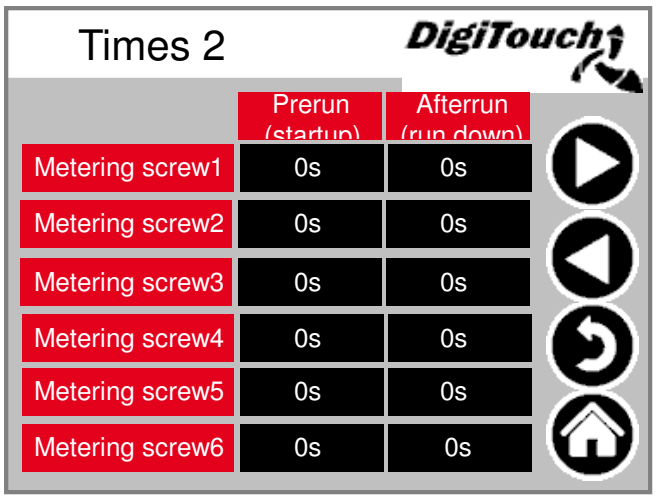
Main menu --> Settings --> Parameter



Pre- and afterrun times.
ATTENTION: The menu conforms to the equipment configuration. Here the lead time or Follow-up time of each Conveyor screws set.

Times 2

Main menu --> Settings --> Parameter --> 1x

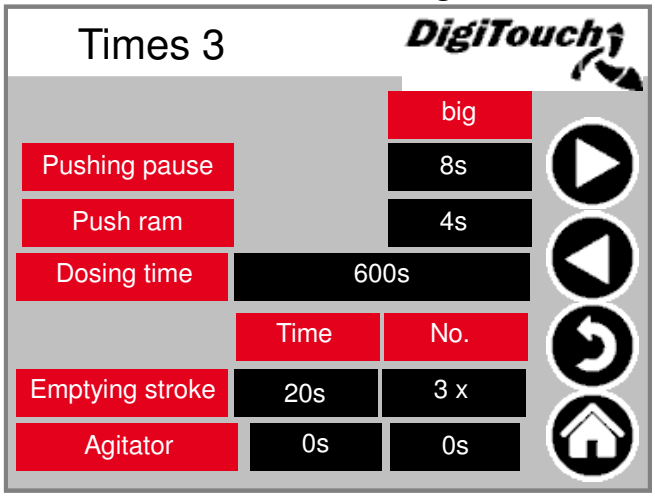


Pre- and afterrun times.
ATTENTION: The menu conforms to the equipment configuration.

Icon legend page 55 and 56

Times 3

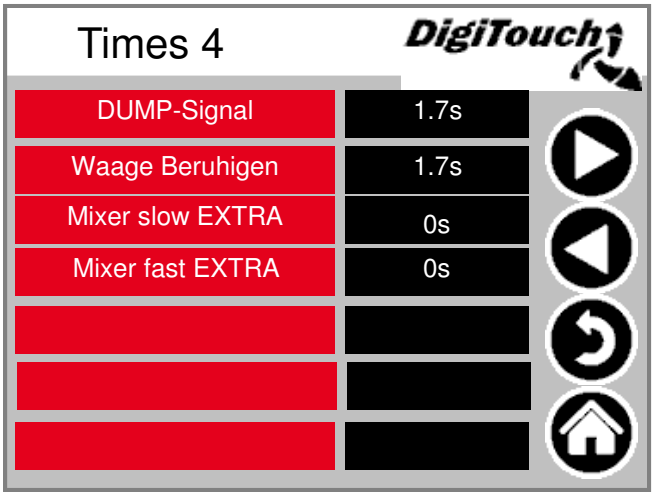
Main menu --> **Settings -->** **Parameter -->** **2x**



Cycle time of the sliding floor.
Must be adapted to the material.
Maximum dosing time --> Switch- off due to exceedance.
Emptying stroke - when the end position is reached the wall retracts repeatedly in order to reduce the residue quantities.

Times 4

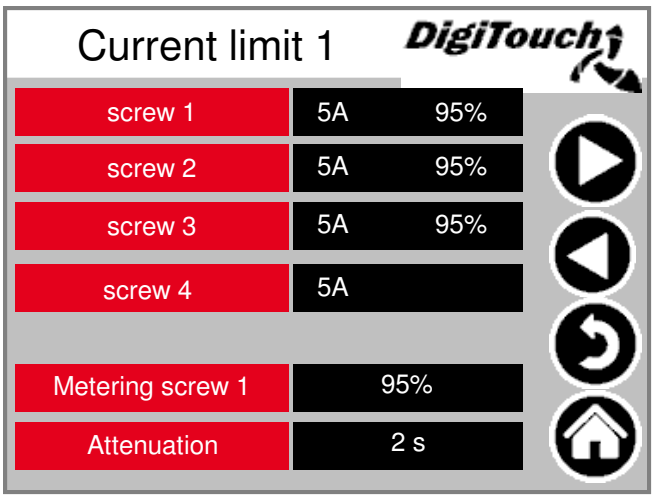
Main menu --> **Settings -->** **Parameter -->** **3x**



DUMP signal = ready message Libra reassurance = reassurance before completion report
Additional idle time for Multimix or add-on Rondomat, if by downstream units (Qz etc.) the conveyor screws are switched off in batch, but continue to mix the Multimix or add-on Rondomat to shred the material or to fill the exit.

Current limit 1

Main menu --> **Settings -->** **Parameter -->** **4x**



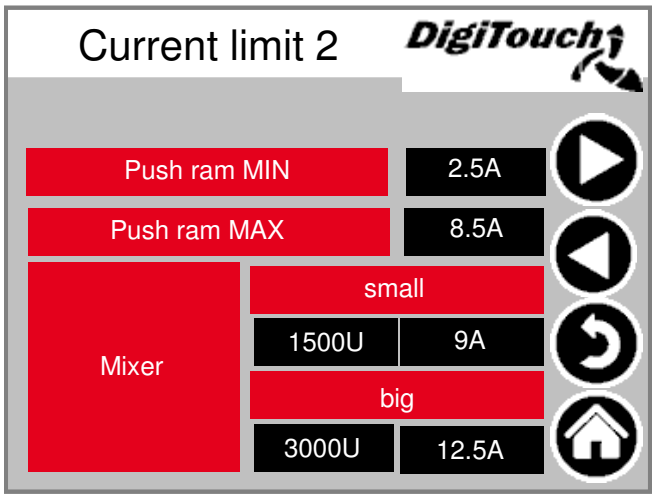
Power limit in A or in % depending on equipment.
Mixer activation in A and speed when equipped with FC.

Icon legend page 55 and 56

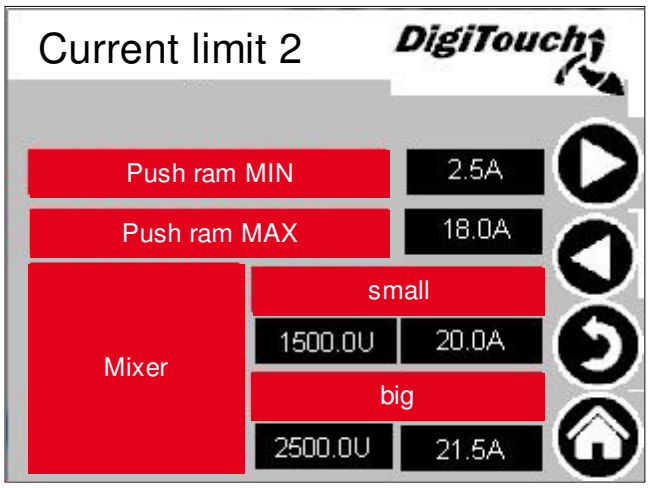
Current limit 2

Main menu --> **Settings -->** **Parameter -->** **5x**

Rondomat



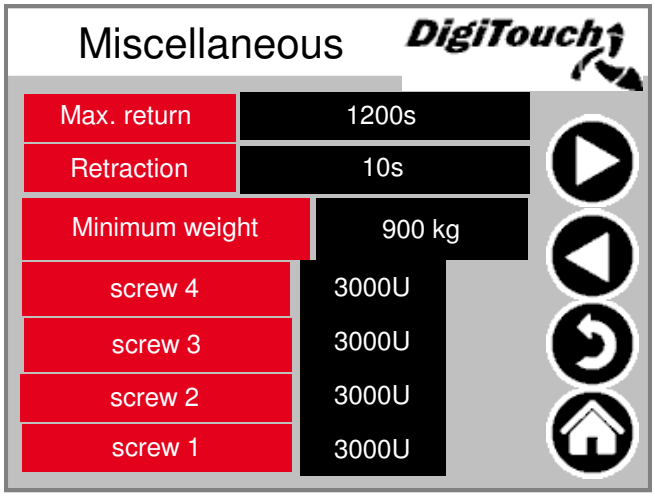
Multimix



Only if "Push ram MAX" gets undershot by the extension Rondomat/Micromix and the mixer in the big rotational speed is then the Sliding floor pushes.
If "small" "A" gets undershot the mixer switches to the big rotational speed.
If "big" "A" gets overshot the mixer switches to the small rotational speed.
Set current depending on the module

Miscellaneous

Main menu --> **Settings -->** **Parameter -->** **6x**

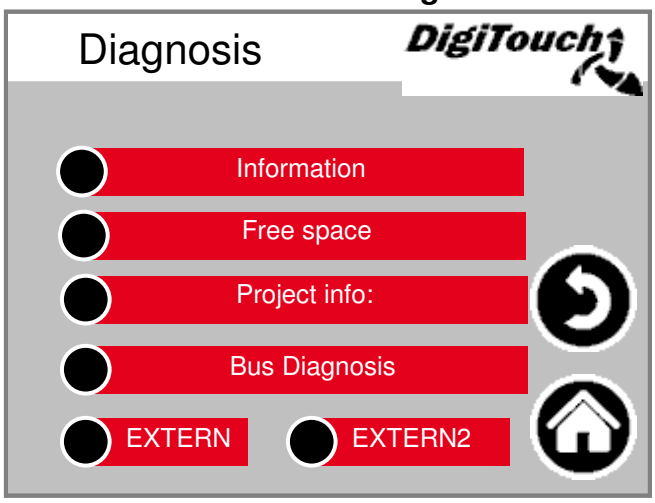


Max. return: Maximum time for the valve return.
Retraction: When Filling is switched to Automatic the Wall moves X seconds forward (precompression).
Minimum weight, below which the equipment switches off.
The system unlocks with double minimum weight.
Screw conveyors only appear if the conveyor screws in the equipment selected with FU. Here it is possible to adjust the fixed speed of the individual screws.

Icon legend page 55 and 56

Diagnosis

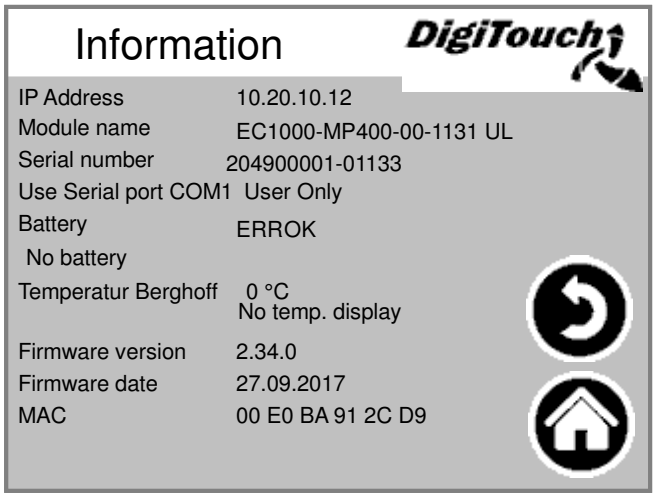
Main menu --> Settings --> Miscellaneous --> Diagnosis



Menu
overview for diagnosis!

Information

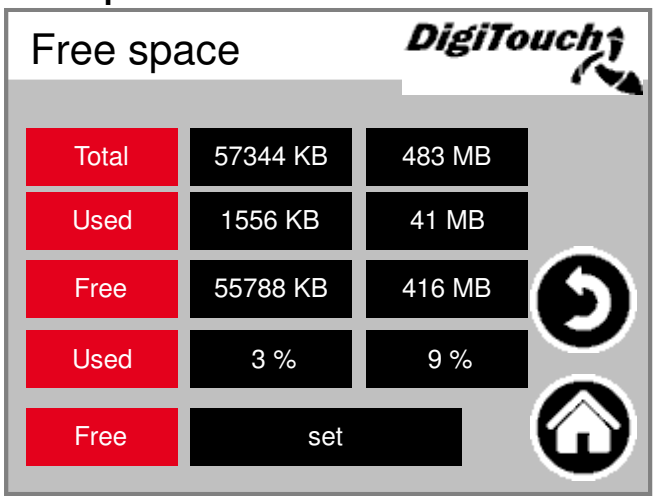
Main menu --> Settings --> Miscellaneous --> Diagnosis
--> Information



Here are displayed the information of SPS itself.
At SerialPortCOM1Use has to be "User Only"
This page should be checked Monthly if battery shows "OK".
If it is not "OK" the battery has to be replaced according to biogas control manual part C: DC1000.
For EC1000 no battery replacement is possible.

Free space

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Free space

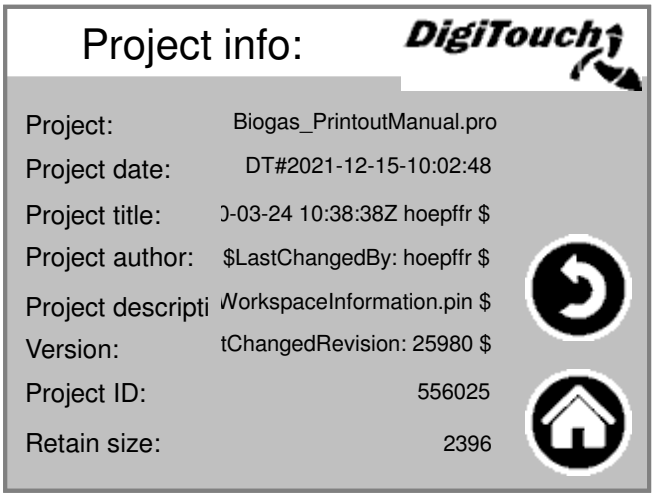


Amount of free memory.
Button to delete the alarm history and to free memory.
Internal Memory = left column
The external memory (right column) can only be used if there is a SD-card integrated and activated.

Icon legend page 55 and 56

Project info

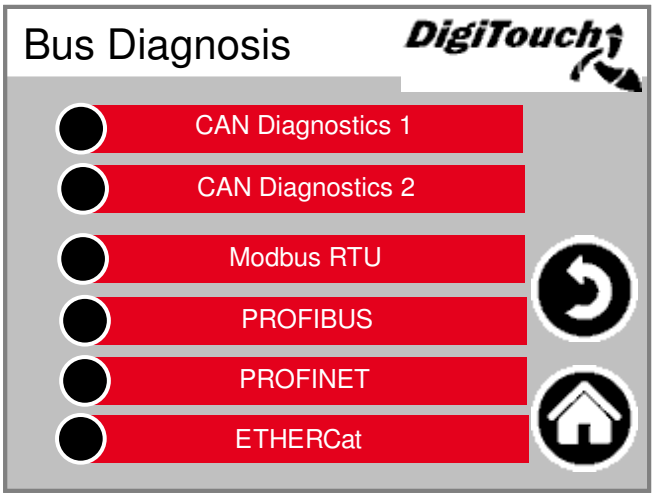
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Project info



Project information, such as type, Program Version date etc..
This information are very important for an update, also for the replacement of the SPS or of the touch panels.

Bus Diagnosis

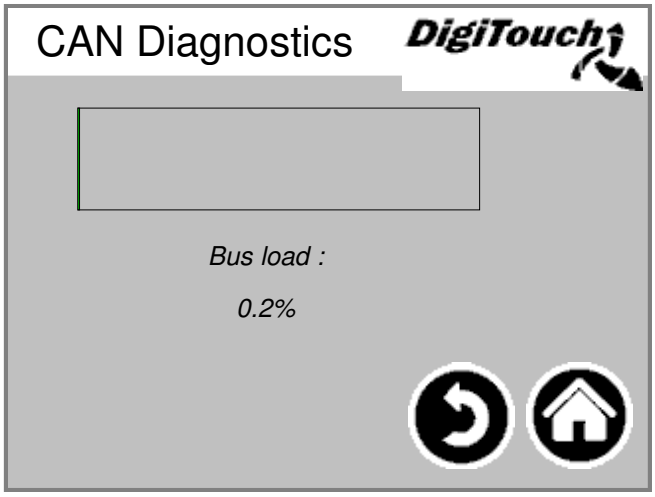
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis



Diagnosis of the different bus systems.

CAN bus load

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> CAN Diagnostics 1

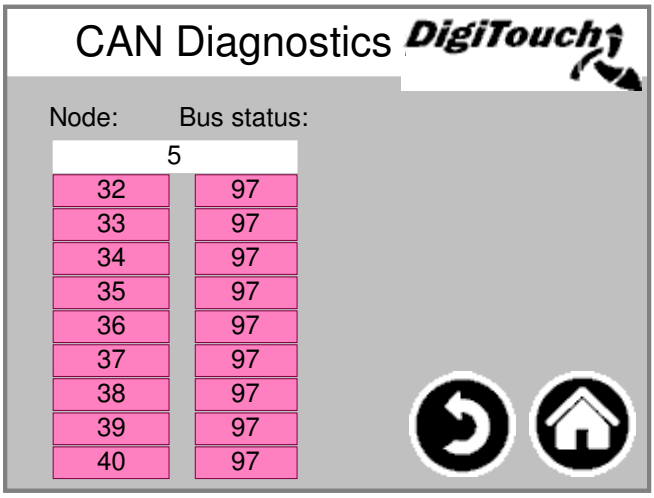


Bus load on the CAN bus.
If the bus load shows over 40% for a longer period, then at least one participant has constant errors.

Icon legend page 55 and 56

CAN Diagnostics

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> CAN Diagnostics 2



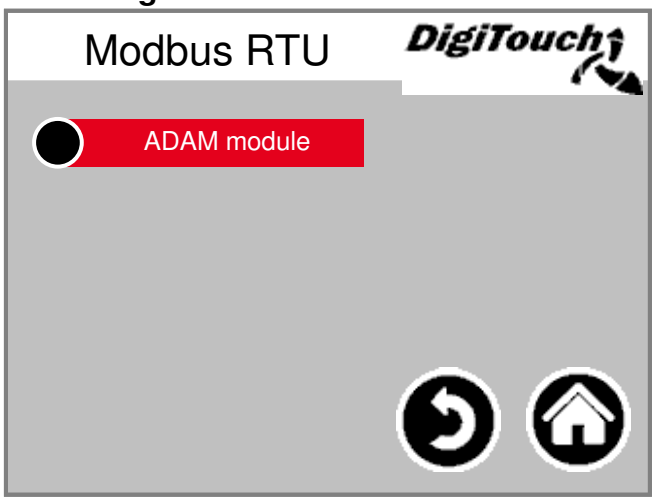
The different CAN devices top down:
The top bar shows the status of the master.
The boxes at the bottom are the slaves and their status.
Node 32: Can 32 module (Phoenix-Lenze)
Node 33: Mixer FU
Node 34: Screw 1
Node 35: Screw 2
Node 36: Screw 3
Node 37: Screw 4
Node 38: 2. Lenze module
CAN master analog output FU1.. FU4
The status in detail:

MASTER:
Status 0,1,2: They run from the master automatically and in the first cycles following an SPS start.
Status 3: Status 3 of the master will be retained for some time.
Status 5: Status 5 is the normal operating mode for the master.
SLAVE:
Status -1: The slave is reset by the NMT message [reset node] and changes independently into status 1.
Status 1: The slave changes after a maximum time of 2 seconds, or immediately after receiving its boot-up message into status 2.
Status 2: The slave automatically changes into status 3 after a delay of 0.5 seconds. This time confirms that many open CAN devices are not immediately ready to receive their configuration SDOs, after they have sent their boot-up messages.
Status 3: In status 3 the slave is configured. Slaves where a problem arises during the configuration phase, stay in status 3 or change directly into a failure state following the configuration phase (status > 5).
Status 5: Status 5 is the slaves normal operating mode.
Status 97: A node changes into status 97 when it is operational (Operational device in the CAN configuration) and not on the SDO request, after the object has responded with 0x1000.
Status 98: A node changes to Status 98, when the device type (object 0x1000) does not correspond to the configuration type.

Icon legend page 55 and 56

Modbus RTU

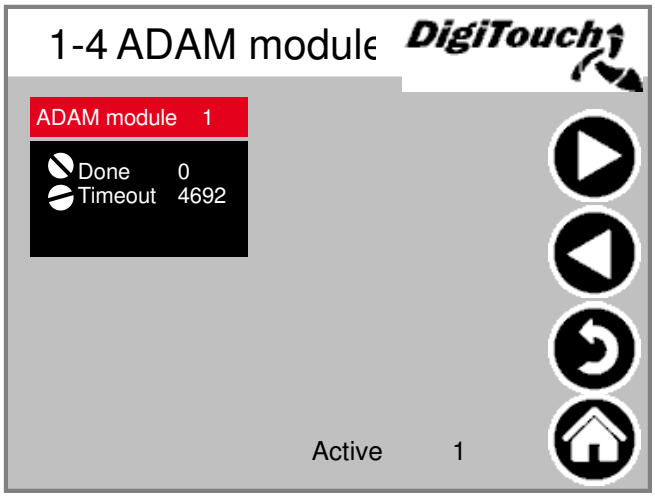
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> Modbus RTU



Diagnosis page for programmer

ADAM module

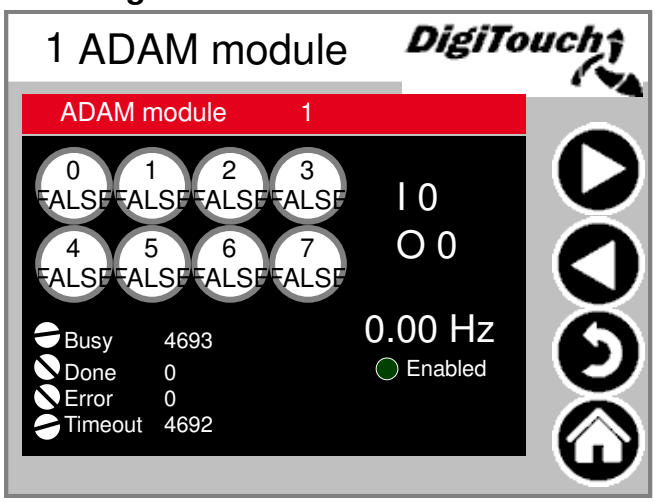
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> Modbus RTU --> ADAM module



Diagnosis page for programmer

ADAM module 1

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> Modbus RTU --> ADAM module --> ADAM module 1

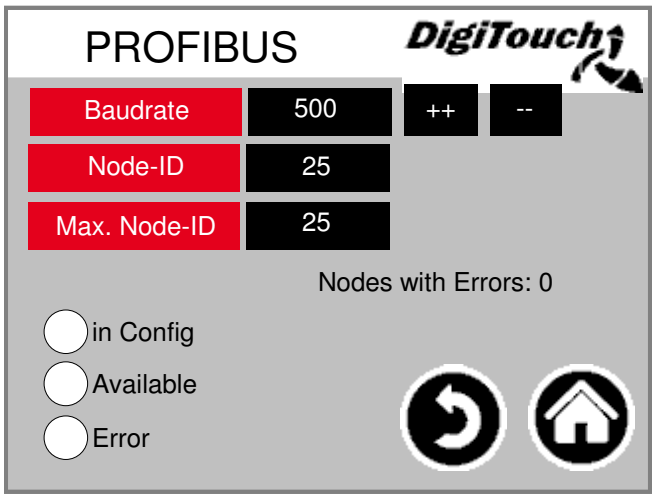


Diagnosis page for programmer

Icon legend page 55 and 56

PROFIBUS_DC1005

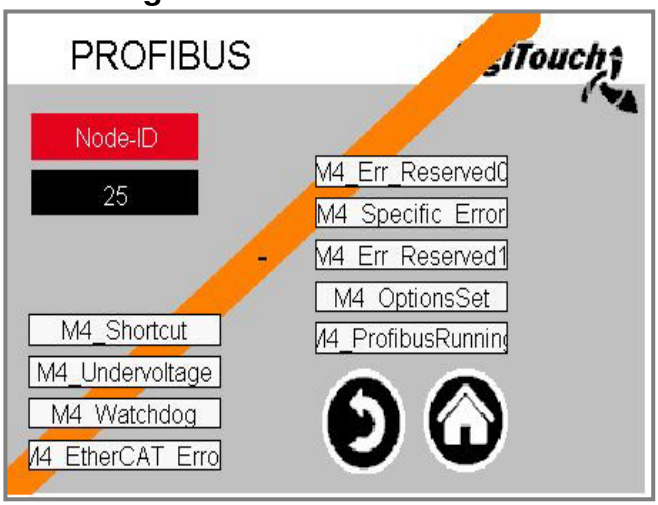
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> PROFIBUS



Baud rate: Setting is defined by the master, can be adjusted with ++ and -- for master to slave communication
Node-ID: Address of the feeding container is indicated by the customer.
Max. Node-ID: Highest Node-ID of the profibus network.
Nodes with Errors: Amount of the incorrect subscribers
in Config = activated
Availiable = connected

PROFIBUS_EC1000

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> PROFIBUS

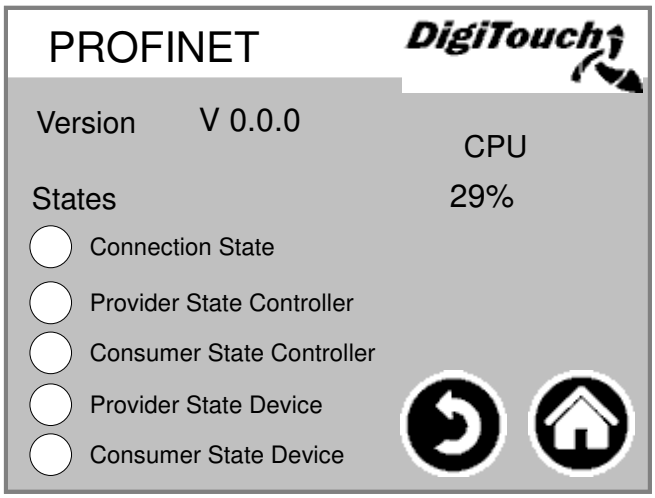


Node-ID: Address of the feeding container
There is a auto-baudrate for EC1000, for this the master must be started at first and then the slave.

Icon legend page 55 and 56

PROFINET

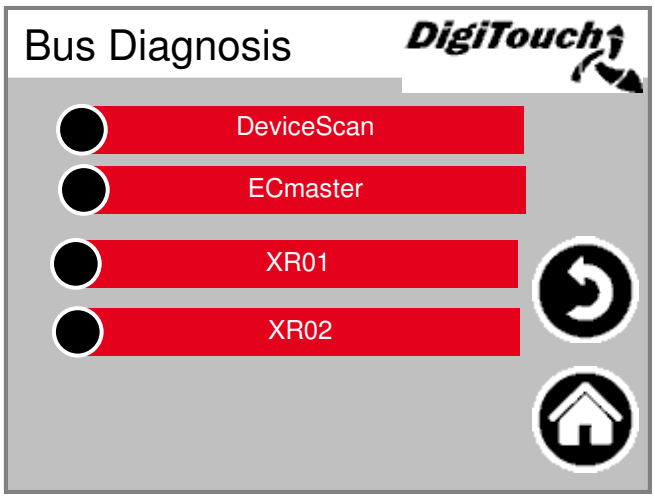
Main menu --> Settings --> Miscellaneous --> Diagnosis -->
Bus Diagnosis --> PROFINET



When it says version V0.0.0 Profinet is not available for this system or it is not installed.
The CPU usage should not be over 60% for a longer period. If this is the case the transmission speed of the busses have to be slow down. This can be done with the higher-level control. For example for Siemens S7 the update time has to be 8000 ms by the IO-cycle. The accepted update cycles have to be without IO-dates 15 and the watchdog time 120000ms.
Connection State, Provider State Controller and Consumer State Controller shows if there is a connection. Provider State Device and Consumer State Device shows if Profinet is active.
DC_ProfinetDevice V1.1.0 has to be noted for commissioning.

ETHERCat

Main menu --> Settings --> Miscellaneous --> Diagnosis -->
Bus Diagnosis --> ETHERCat

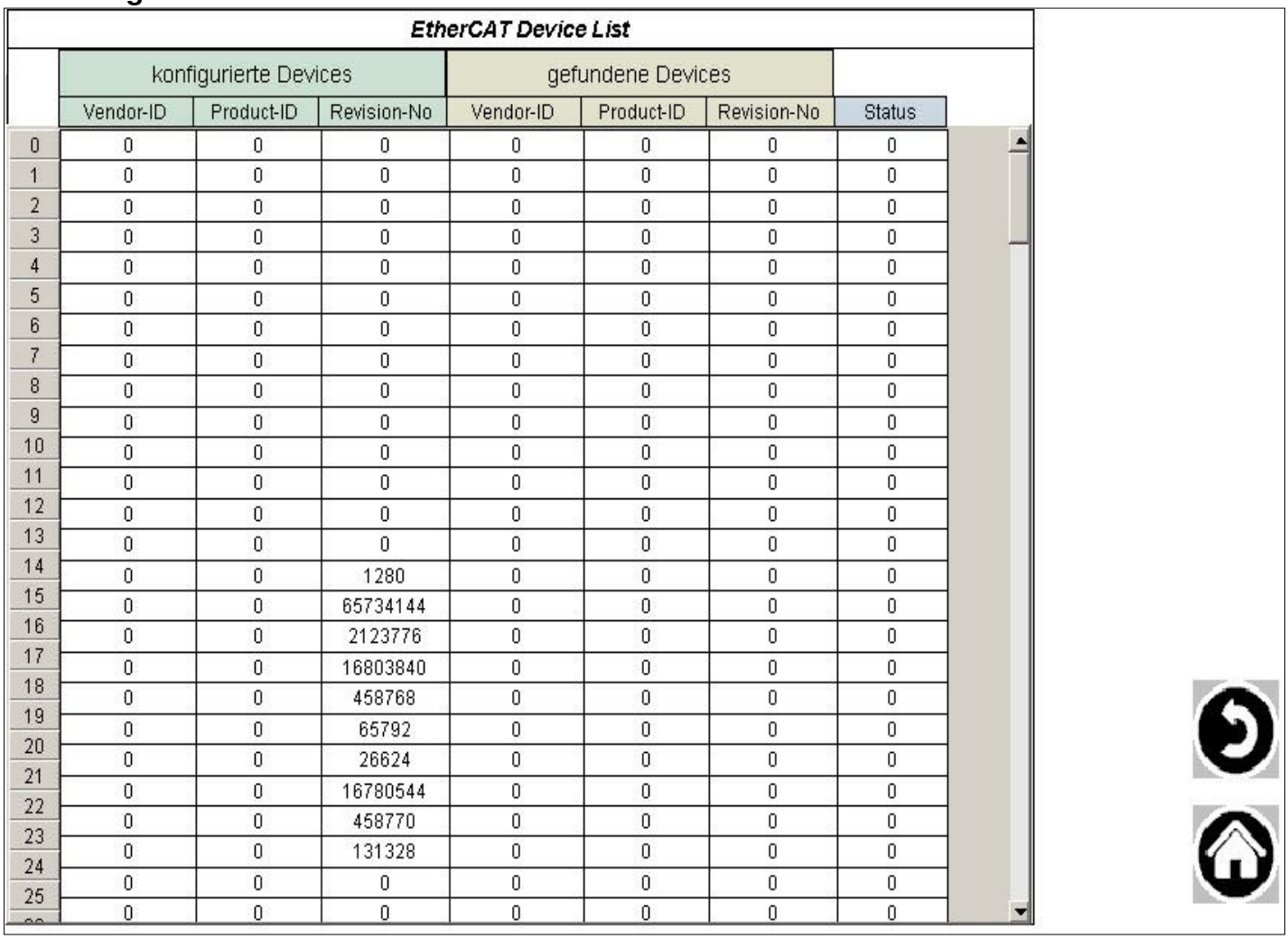


Only EC1000 has this page
DeviceScan is the bus scan which can be performed with the EasiCat.
Ecmaster is the EC1000 itself(SPS2)
XR01 is the first expansion card (SPS3)
XR02 is the second expansion card (SPS4)

Icon legend page 55 and 56

DeviceScan

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> ETHERCat DeviceScan



EtherCAT Device List

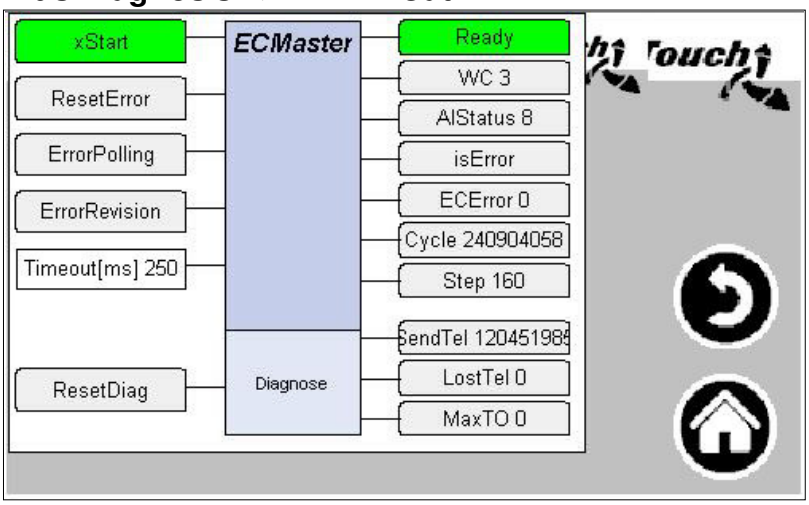
	konfigurierte Devices			gefundene Devices			
	Vendor-ID	Product-ID	Revision-No	Vendor-ID	Product-ID	Revision-No	Status
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0
14	0	0	1280	0	0	0	0
15	0	0	65734144	0	0	0	0
16	0	0	2123776	0	0	0	0
17	0	0	16803840	0	0	0	0
18	0	0	458768	0	0	0	0
19	0	0	65792	0	0	0	0
20	0	0	26624	0	0	0	0
21	0	0	16780544	0	0	0	0
22	0	0	458770	0	0	0	0
23	0	0	131328	0	0	0	0
24	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0

On the left side are displayed the existing subscribers of the project and on the right side are displayed the detected subscribers after the scan. The difference to the bus scan from EasiCat is, that here are only shown the IDs and not the names.

Icon legend page 55 and 56

ECMaster

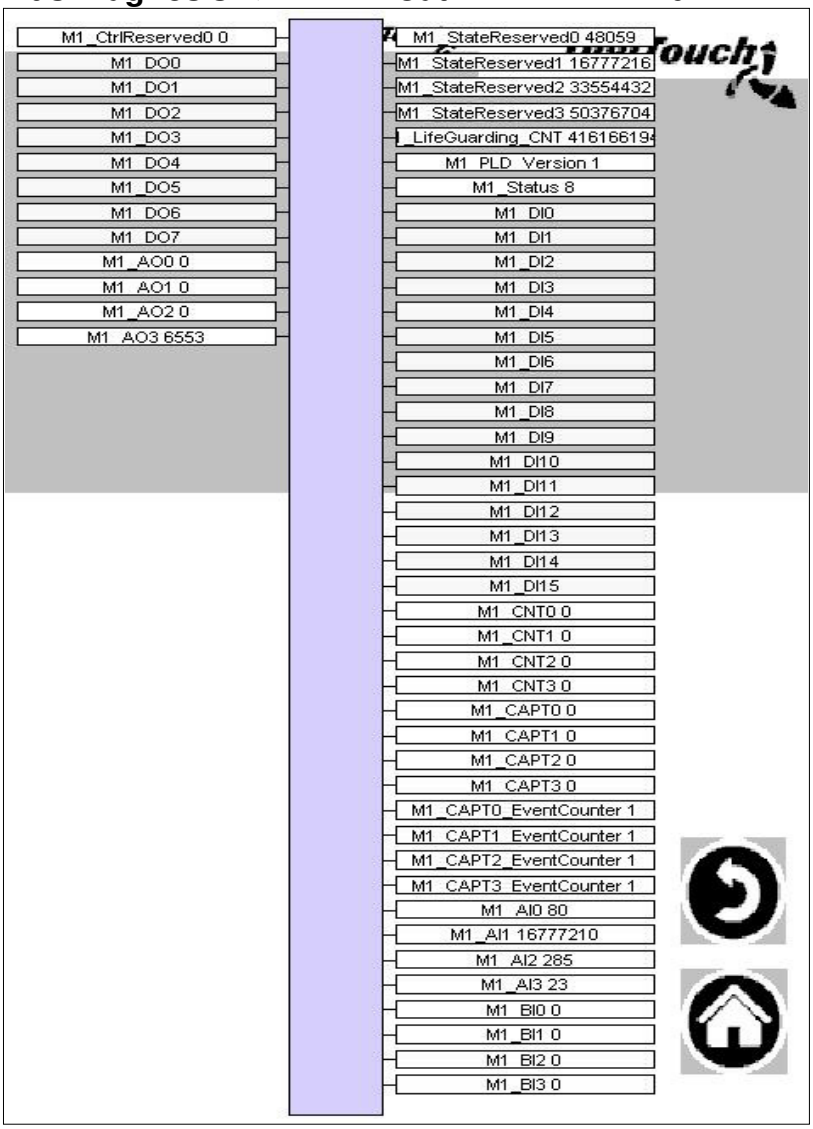
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> ETHERCat ECMaster



Shows the condition of the EtherCAT master. This is also indicated with one LED on the EC1 Further information for LED indicators: Biogas control instruction part C: EC1000

XR01

Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> ETHERCat XR01

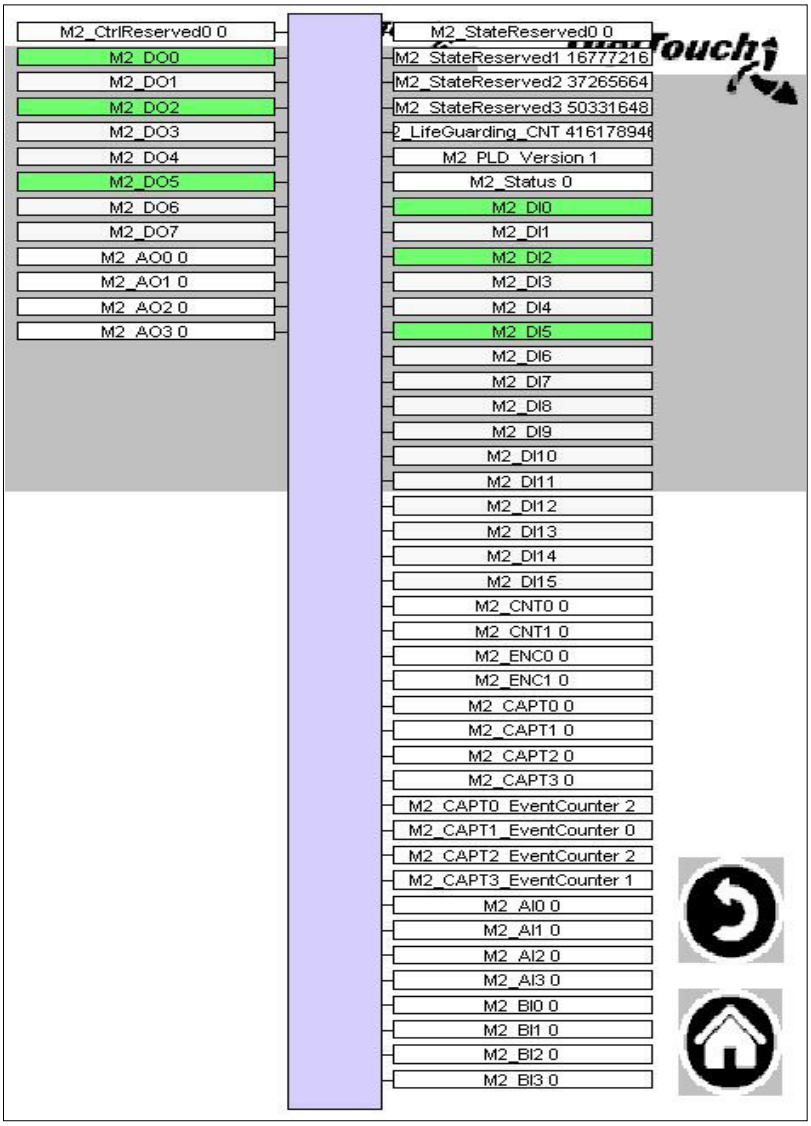


Here the digital input and output can be diagnosed. The analog outputs are also shown. The LEDs on the XR01 are explained here: Biogas control instruction part C:
E IO XR module

Icon legend page 55 and 56

XR02

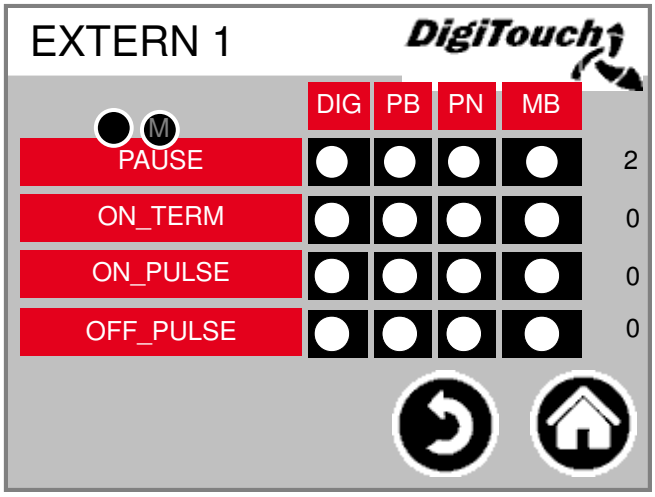
Main menu --> Settings --> Miscellaneous --> Diagnosis -->
Bus Diagnosis --> ETHERCat XR02



Here the digital input and output can be diagnosed. The analog outputs are not shown. The LEDs on the XR02 are explained here: Biogas control instruction part C: E IO XR module

EXTERN 1

Main menu --> Settings --> Miscellaneous --> Diagnosis -->
Bus Diagnosis --> EXTERN 1

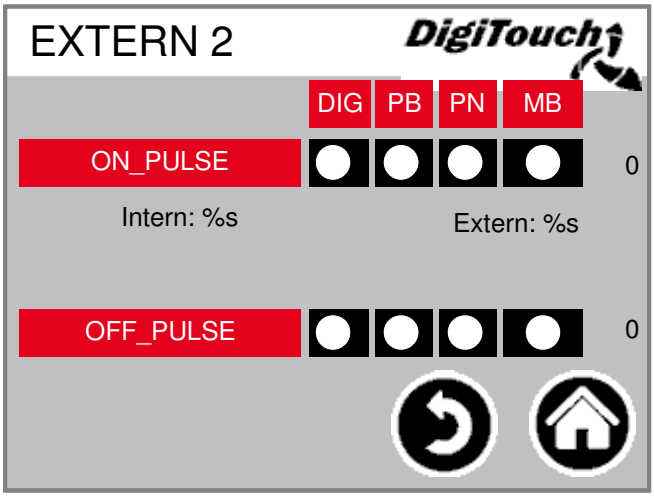


DIG = digital input
PB = Profibus
PN = Profinet
MB = Modbus
!= Boolean operator is shown, if pause negate is selected in the external equipment
M = Flag, pause signal is extended
A filled in circle means, that it is selected
The numbers on the right side shown how often pause, On_term, On_pulse and Off_pulse were strucked

Icon legend page 55 and 56

EXTERN 2

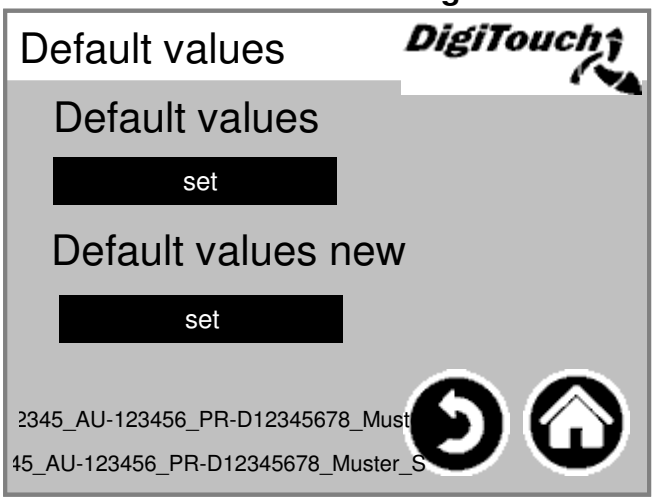
Main menu --> Settings --> Miscellaneous --> Diagnosis --> Bus Diagnosis --> EXTERN 2



DIG = digital input
PB = Profibus
PN = Profinet
MB = Modbus
If On-pulse Internal activated pulses are counted from the internal time switch.
If it is external the pulses from external sources are counted.

Set default values

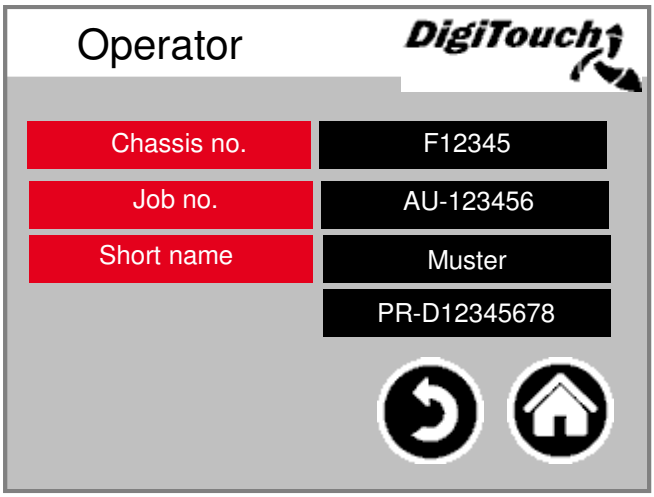
Main menu --> Settings --> Miscellaneous --> Default values



Default values: Load the last default values.
Default values new: Here the default values can be newly saved. This is only possible for service technicians

Operator

Main menu --> Settings --> Miscellaneous --> Operator

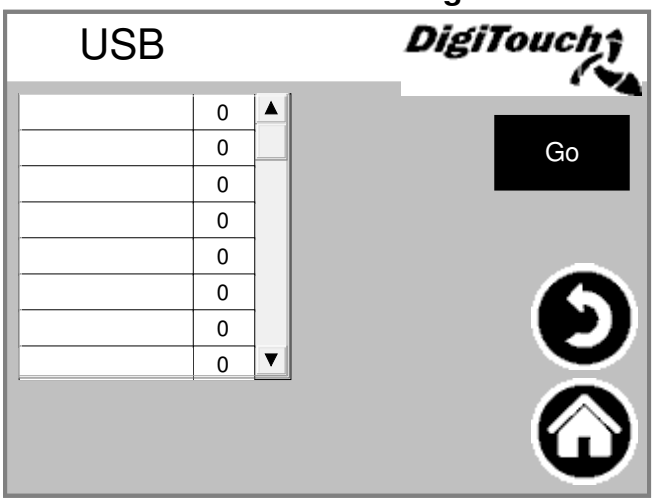


Shown here is all the inportant information of the machine which are necessary for spare parts and service requests.

Icon legend page 55 and 56

USB

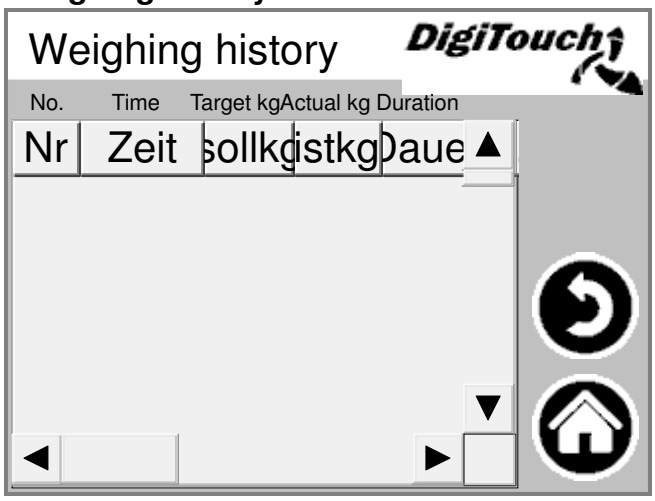
Main menu --> Settings --> Miscellaneous --> USB



This mask serves to read the feed material log books.
Alternatively this data can be retrieved using an Ethernet connection.
You have to press "Go" several times until the message concerning the safe removal of the USB stick is displayed.
ATTENTION: In some cases the USB stick isn't recognized, e.g. if it has a wrong communication protocol.
Try again with another USB stick.

Weighing history

Main menu --> Settings --> Miscellaneous --> Weighing history

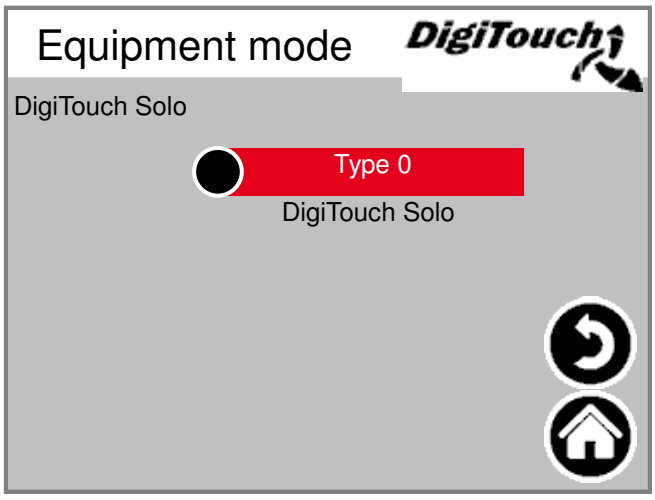


Here actual and target quantities, feeding time and duration are recorded.
If a software update performed the history scale is deleted.
How to reset the history scale is explained in the biogas control manual part C.

Icon legend page 55 and 56

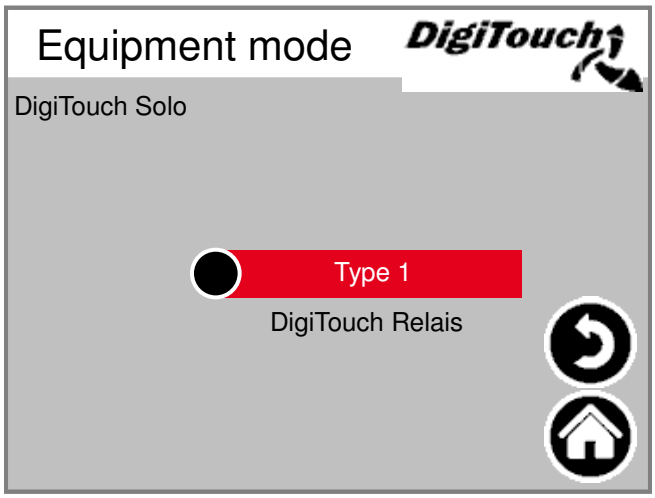
Setup menu

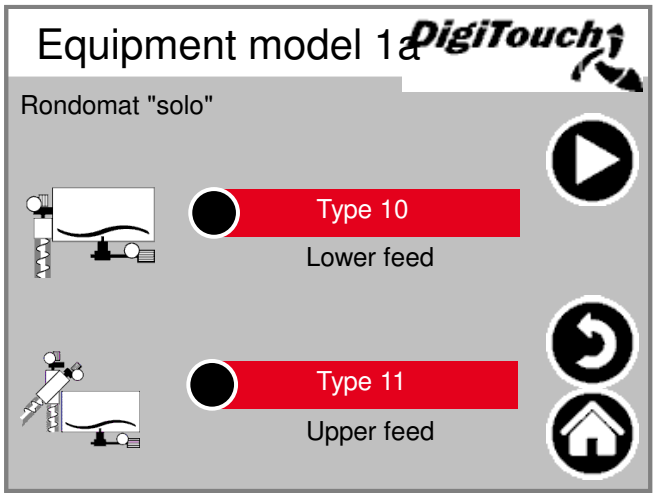
Main menu --> **Basic settings -->** **Equipment model**



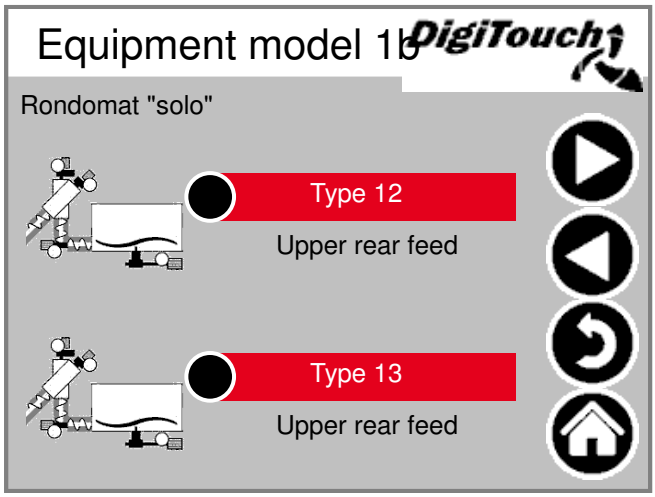
The menus (system type) shown here are for the setup mode and not intended for the user. They are protected with a code.
Here the respective system type that is fitting to the machine can be selected.
Is different depending on project status.

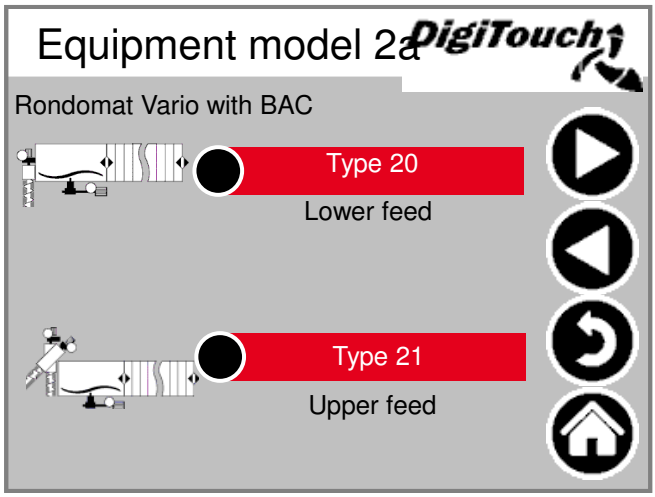
Main menu --> **Basic settings -->** **Equipment model**





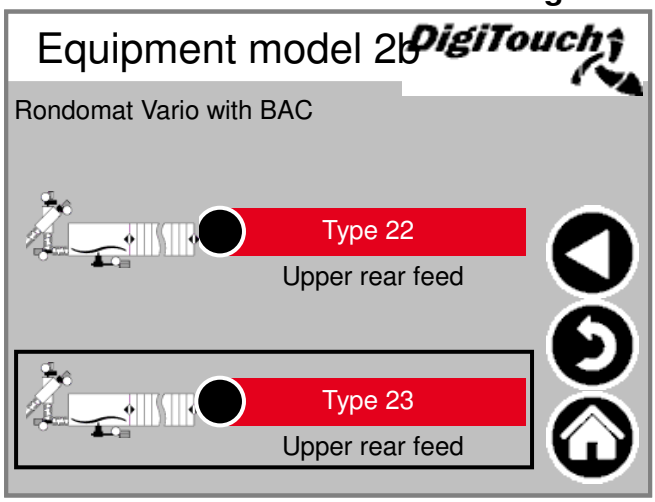
Main menu --> **Basic settings -->** **Equipment model**



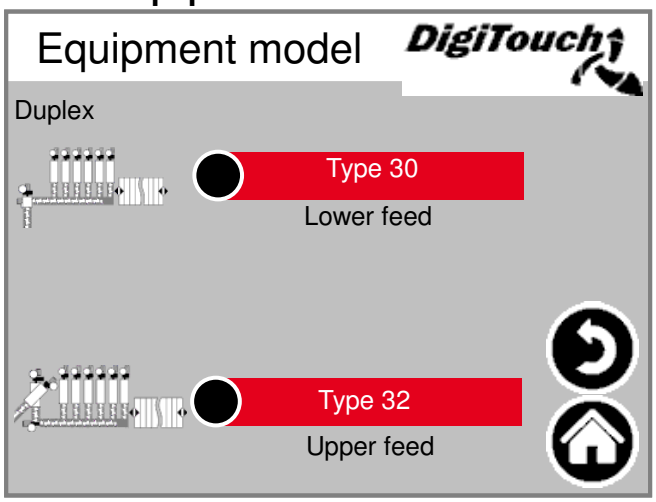


Icon legend page 55 and 56

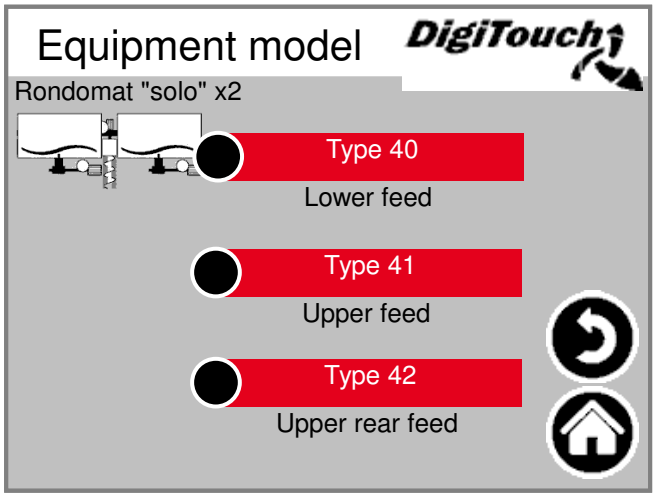
Main menu --> **Basic settings -->**



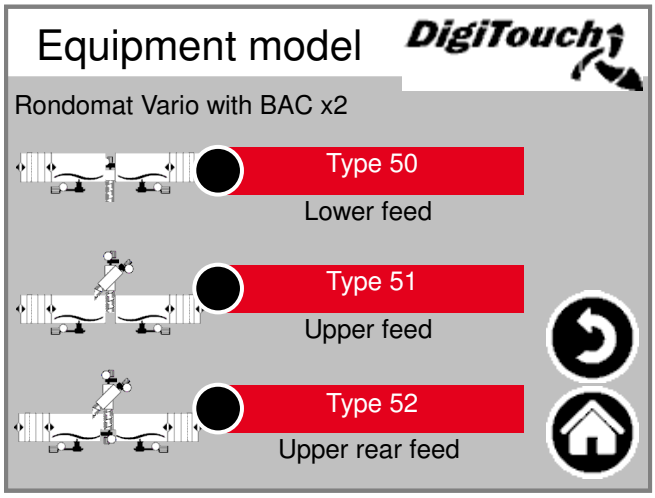
Equipment model



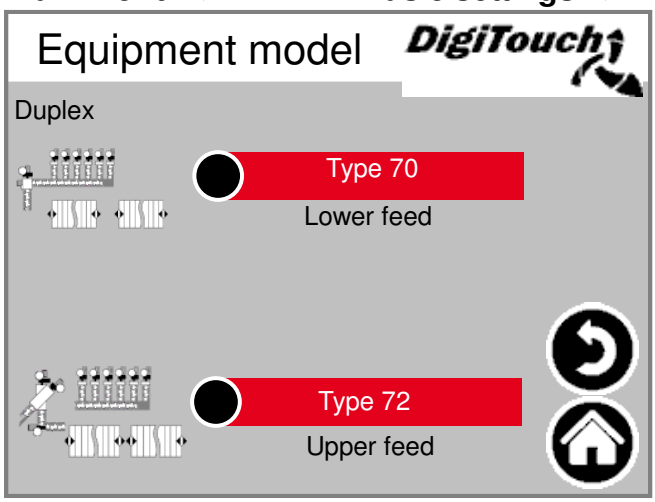
Main menu --> **Basic settings -->**



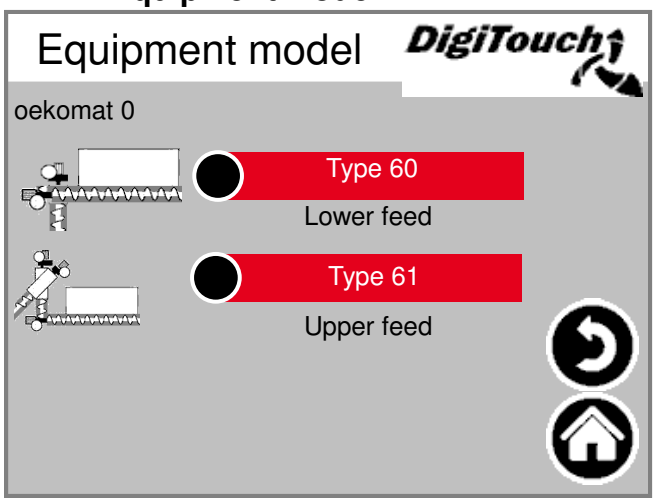
Equipment model



Main menu --> **Basic settings -->**

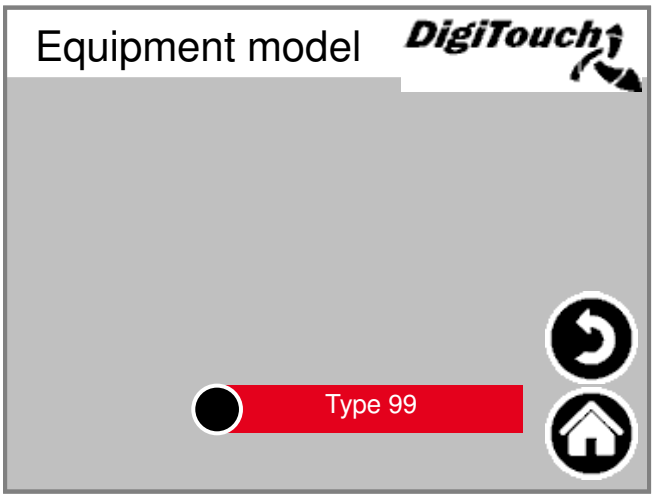


Equipment model



Icon legend page 55 and 56

Main menu --> **Basic settings -->** **Equipment model**



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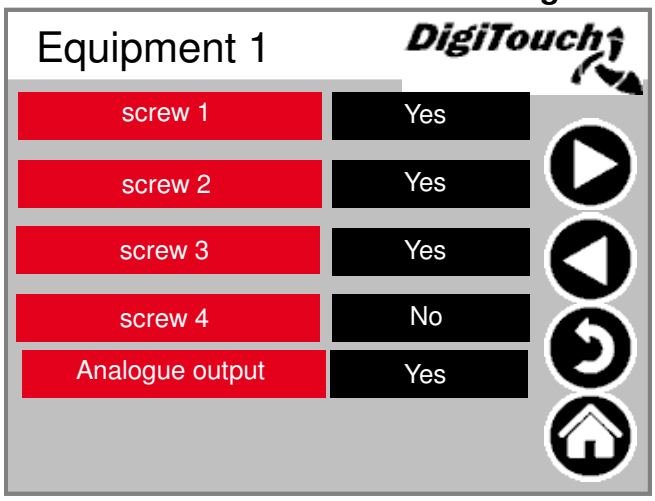
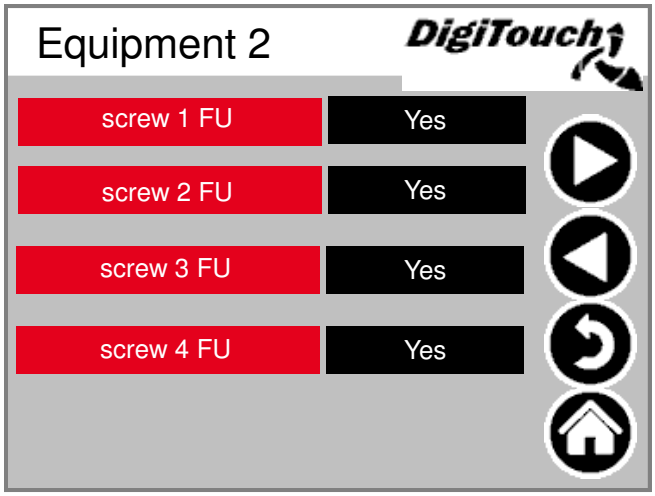
Equipment

Main menu --> Basic settings --> Equipment



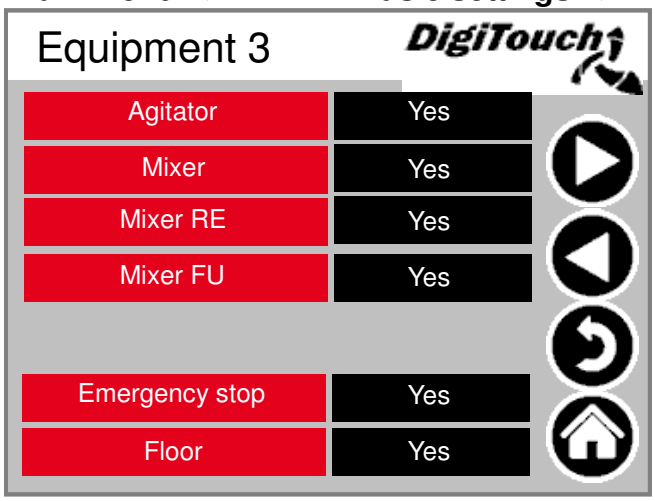
The menu (equipment) displayed here are for the setup and not for the operator. They are protected with a code.
The respective screws of the machine can be selected here.
Attention: If there is a frequency converter for one screw, "No" has to be selected.
ATTENTION: If analogue output is activated for EC1000, the current measurement of the screw does not work and has to be disconnected and the screw has to be deactivated.

Main menu --> Basic settings --> Equipment --> 1x



Determine whether the screws be operated with or without FU.
If one screw is operated without FU, here the respective screw has to be set "No".

Main menu --> Basic settings --> Equipment --> 2x



Agitator "Yes": When controlling the agitator, only then a signal is outputted to an external agitator
Mixer "Yes": If mixer controlled contactor.
Mixer RE is only needed if there are 2 mixers and they should run by turns (left/right mixer)
Mixer FU "Yes": If with FU
Emergency stop: An alarm is only given if "Yes" is selected, only for digitouch solo if "No"
Floor: Only with "Yes" signal on the hydraulic unit

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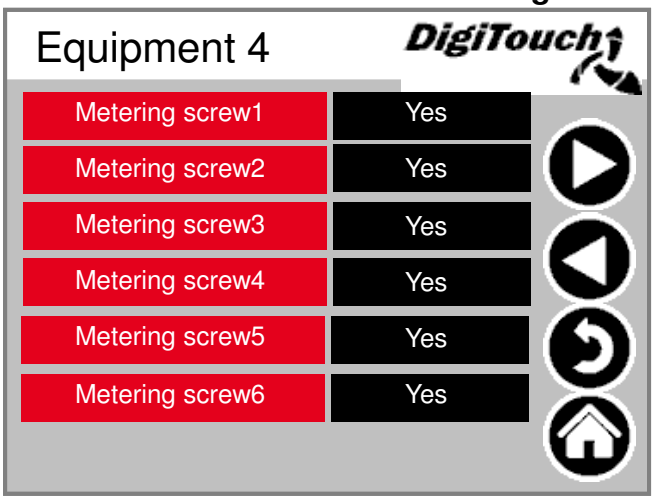
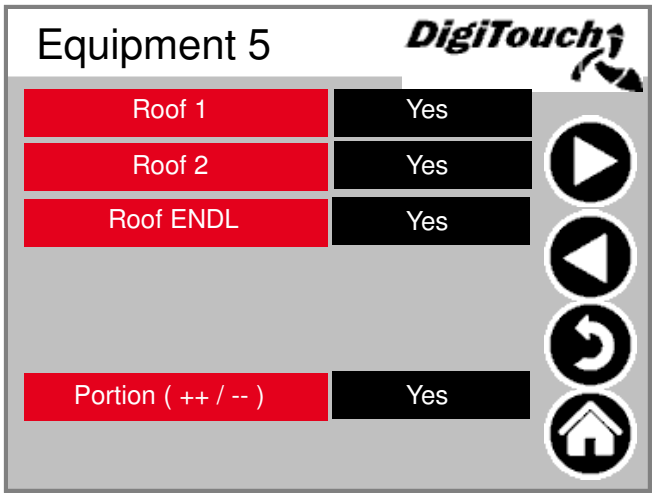
Main menu --> Basic settings --> Equipment 3x



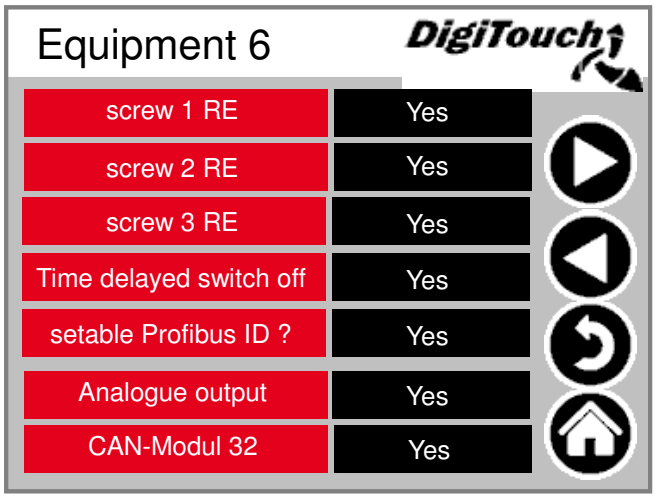
If it is a duplex system here the respective metering screws can be activated. In a special case it is also for other system types possible to misuse 1 to 4 metering screws as so-called special contactors. The amount of the metering screws depend on the system types.

Main menu --> Basic settings --> Equipment 4x



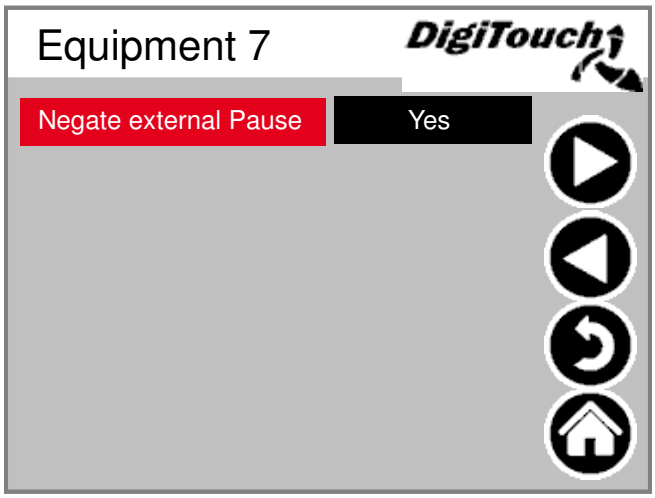
Here it is possible to set if the feeding container has a roof, with or without end position sensor.
Portion (++/--): With this field it is activated, that the customer has the possibility, dosing an additional portion or omit a portion during the automatic mode.

Main menu --> Basic settings --> Equipment 5x



The screws RE 1-3 are provided for dosing with one feeding container on 2 fermenters.
Switch off after time: activates the maximum dosing time
seatable Profibus ID ?: only with Profibus connection, has to be activated here
Analog output: is the 4-20mA output of the scale to the customer.
ATTENTION: If it is activated the current measurement of the contactor does not work for screw 4 and has to be disconnected and the screw 4 has to be deactivated and for DC1000 without black plugs has to be activated
the Can module 32.

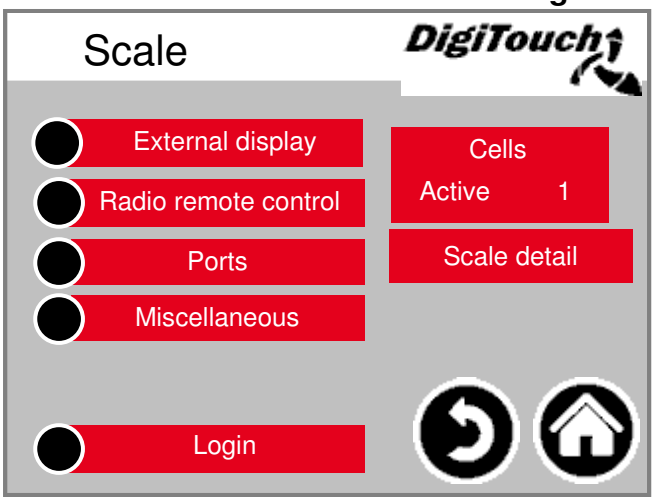
Main menu --> Basic settings --> Equipment 6x



Here the external pause signal can be negated, that means that the signals applied permanent and only decrease if the respective signal switches.

Scale

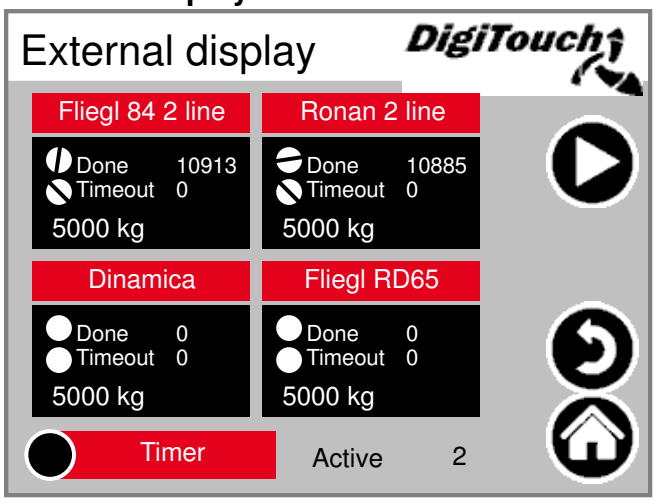
Main menu --> Basic settings --> Scale



The overview menu enables access to all weighing scale setting and diagnosis functions.

External display 1-4

Main menu --> Basic settings --> Scale --> External display

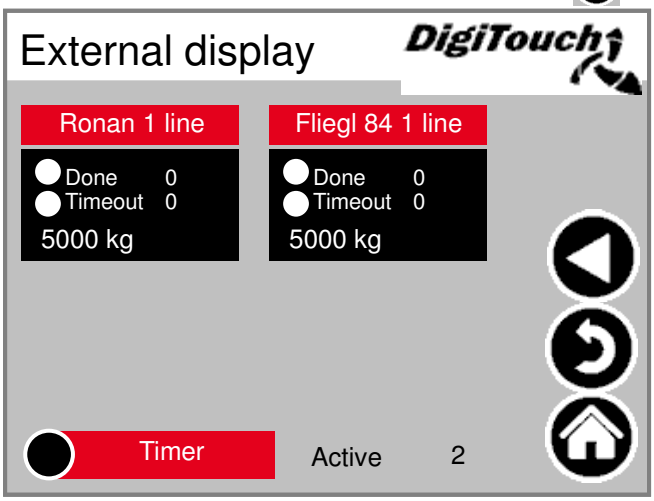


Activating an external display. ATTENTION: Many settings require a new start for them to take effect. Active: Shows how many displays are active, at maximum 1 display can be active. If accidentally more displays are activated, all displays have to be deactivated. If active 0 then the correct display should be selected. After that wait 15 seconds, press the house and after waiting again 15 seconds restart.

Icon legend page 55 and 56

External display 5-6

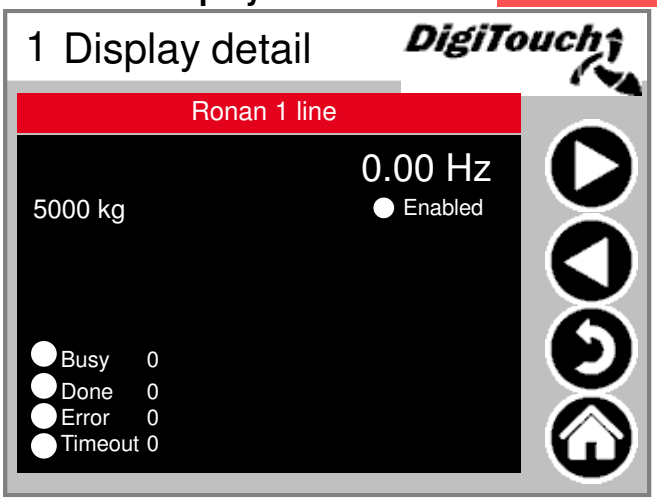
Main menu --> **Basic settings -->** **Scale -->**
External display --> **1x**



Activating an external display.
ATTENTION: Many settings require a new start for them to take effect.
Active: See external display 1-4
ATTENTION: Ronan 1-line and Fliegl 1-line should not be selected because this types hav always 2-lines.

Display 1 detail (1 line)

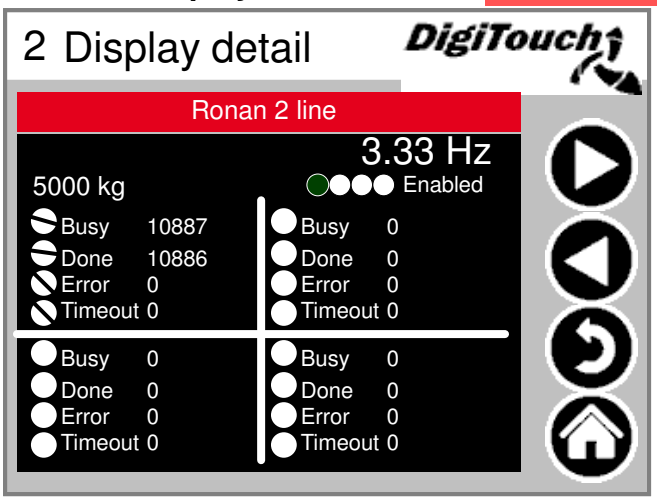
Main menu --> **Basic settings -->** **Scale -->**
External display --> **Ronan 1 line**



Detailed view of the display, for all 1 line displays the mask looks like this (1 data area).

Display 2 detail (2 lines)

Main menu --> **Basic settings -->** **Scale -->**
External display --> **Ronan 2 line**



Detailed view of the display, for all 2 line displays the mask looks like this (4 data areas).

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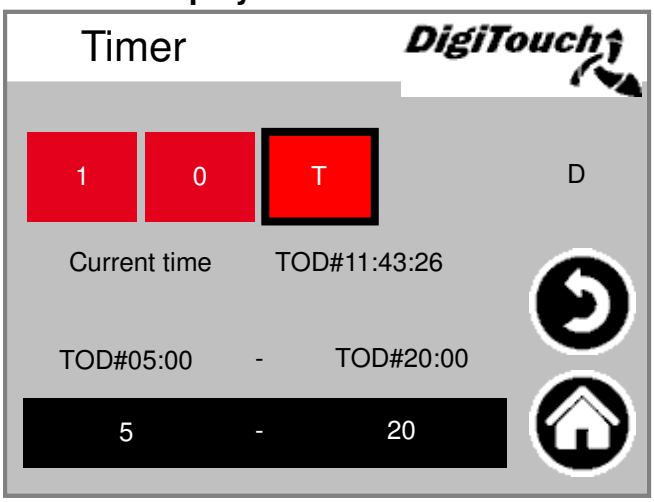
Timer

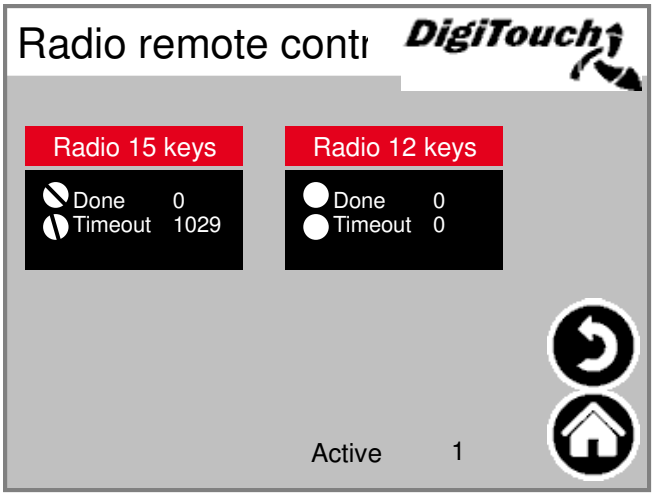
Main menu --> Basic settings --> Scale --> External display --> Timer



Here you can activate night mode (T). At the bottom of the page the time can be set, from when till when the display is activated.
Or continuous mode (1) or continuous-OFF (0)

Radio remote control

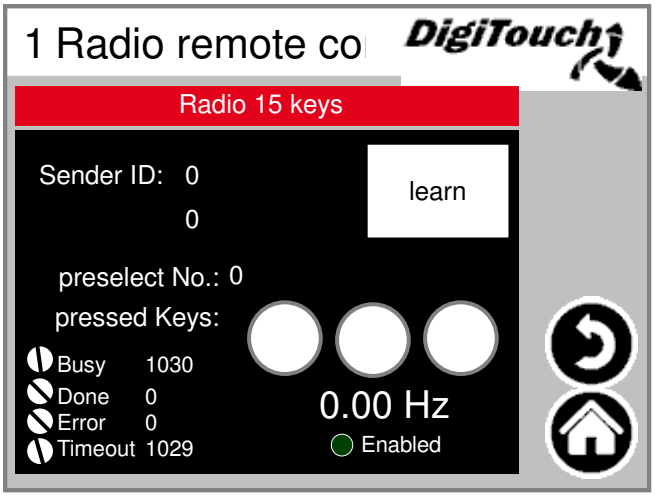
Main menu --> Basic settings --> Scale --> Radio remote control



Touch box to activate
Touch bar to get to details.
Only select 15 touch radio if no SD-card has been inserted and activated.
Otherwise no Profinet is possible.
Active: Shows how many radio remote controls are active.

Radio remote control detail 15 keys

Main menu --> Basic settings --> Scale --> Radio remote control --> Radio 15 keys



Detailed view radio. The serial number is saved here using "learn".
Sender ID: Only if the address of the radio is displayed, "learn" can be used.
3 circles depict the state of the 3 upper keys.

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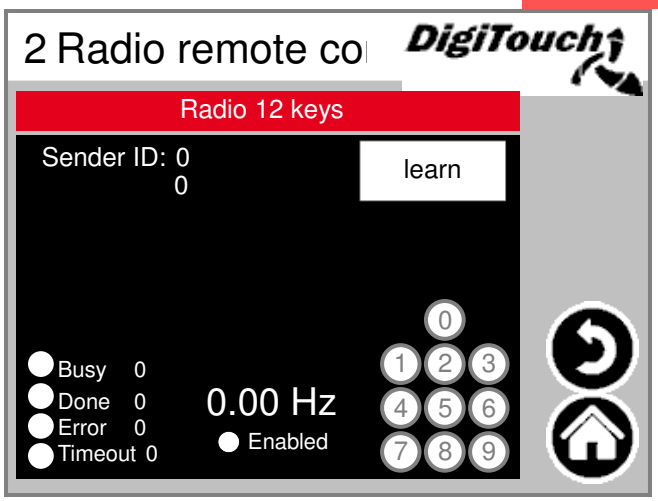
Radio remote control detail
12 keys

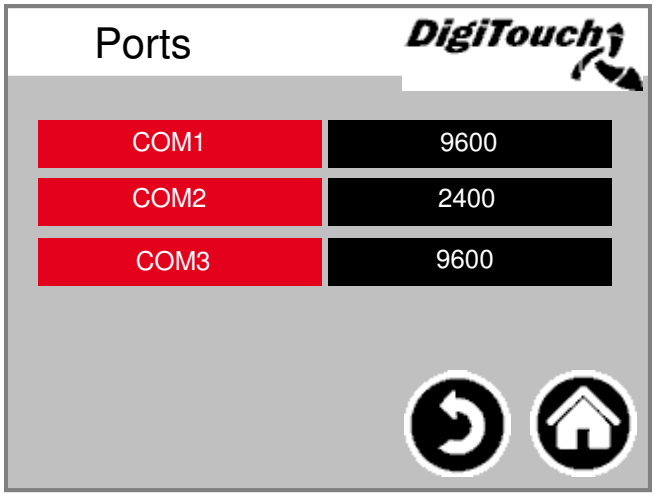
Main menu --> Basic settings --> Scale -->
Radio remote control --> Radio 8 keys



Detailed view radio. The serial number is saved here using "learn".
Sender ID: Only if the address of the radio is displayed, "learn" can be used.
Number field shows which signals come from the radio.

COM ports

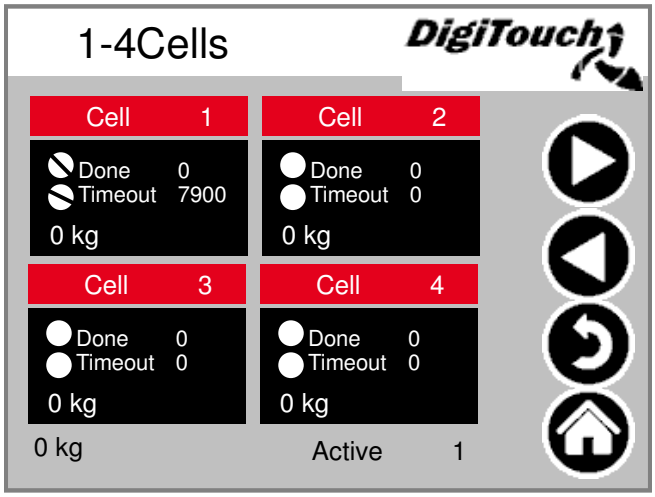
Main menu --> Basic settings --> Scale -->
Ports



Display of the 3 COM port baud rates.
For diagnostic purposes!
COM1 = Display (display variations)
COM2 = Radio 15 buttons
COM3 = Scale, radio 12 buttons, adam mode

Cells 1-4 (identical 5-8; 9-12; 14-17)

Main menu --> Basic settings --> Scale -->
Cells

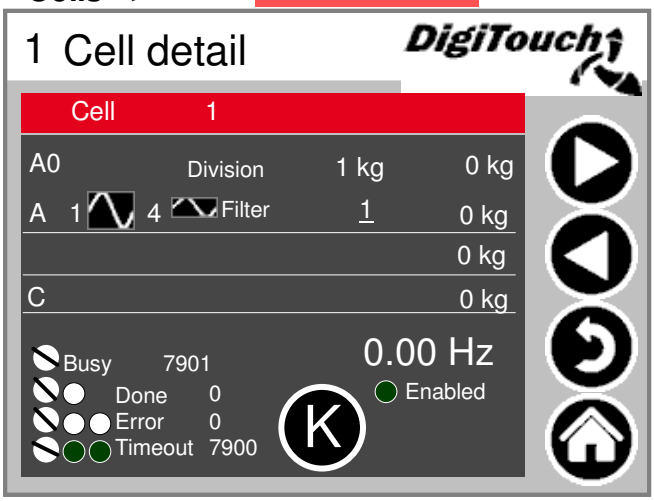


Overview of 4 cells each.
Arrows for browsing. Touch box to activate Touch bar to get details.
If done counts, all right.
If timeout counts up, cell faulty.
"Active": Shows how many cells are active per page

Icon legend page 55 and 56

Cell 1 (identical)

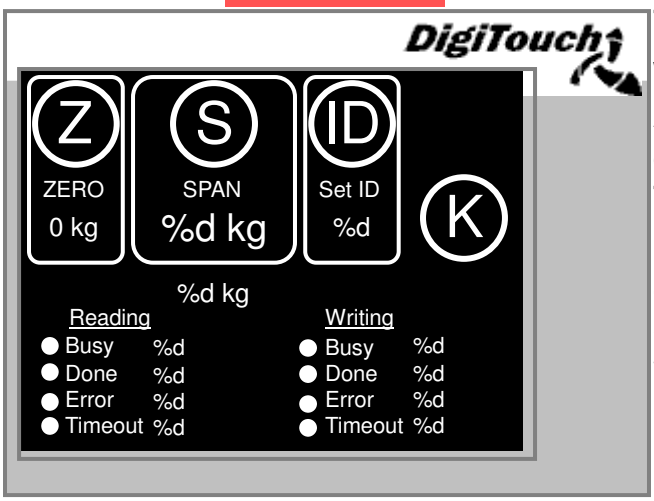
Main menu --> Basic settings --> Scale --> Cells --> Cell 1



Detail menu including setting minimum and maximum cell loading;
Filter A (and C in older versions)
Programming the weight cell with "K"
If error counts up, cell is defective Division 10kg = cell D50
Division 1kg = all other D-types

Calibrate (identical)

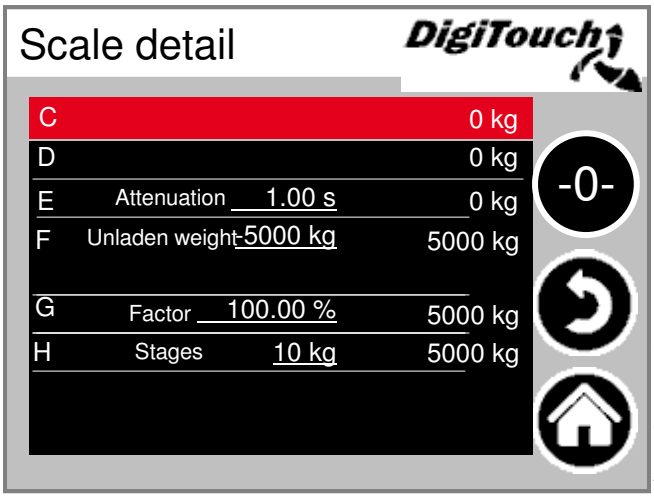
Main menu --> Basic settings --> Scale --> Cells --> Cell 1 --> Enable --> K



The individual cells get a new 0 value with Z.
Attention: Only perform in unloaded condition.
The maximum weight value can be indicated with S, this should be done only with a calibrated press.
Otherwise the cell is defective.
With ID can be send the required address to an arbitrary cell (attention: only one cell may be connected at one time. Otherwise all cells have the same address.)

Settings scale detail

Main menu --> Basic settings --> Scale --> Scale detail

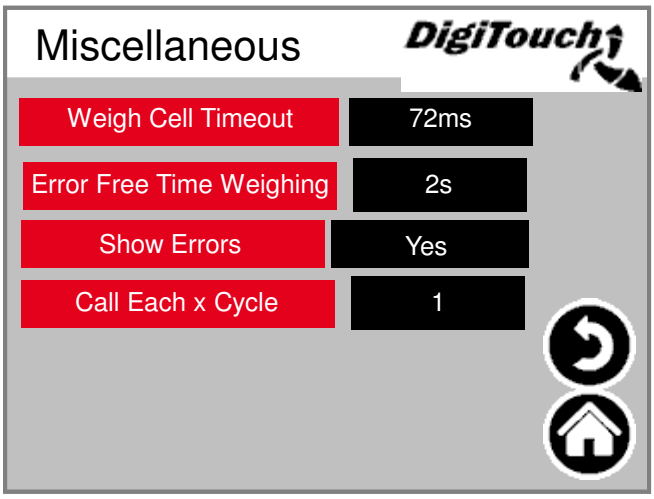


(Maximum and minimum weighing capacity; total filter; older version)
increments "-0-": Set container offset (attention only for empty containers)
Factor: calibrate the weighing device
Steps: Display in 10kg steps
Damping : PT1-part, recommendation of 2 seconds
Empty weight: tare weight of the container
ATTENTION: Only by time dosing the value has to be set on -5000kg

Icon legend page 55 and 56

Miscellaneous

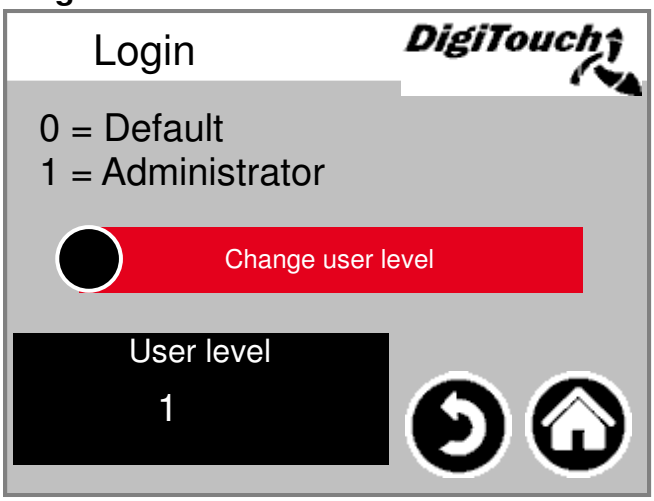
Main menu --> Basic settings --> Scale --> Miscellaneous



Weigh Cell Timeout: response time of the cell Error Free Time Weighing: time when consectuive errors not lead to the cancellation of the feeding
Show Errors: Deactivate/Activate, that alarms be displayed
ATTENTION if "No" it can come to uncontrolled dosing -> complete dosing all at once)
Call Each x Cycle: Selection if every x-cycle from the scale is accessed

Login

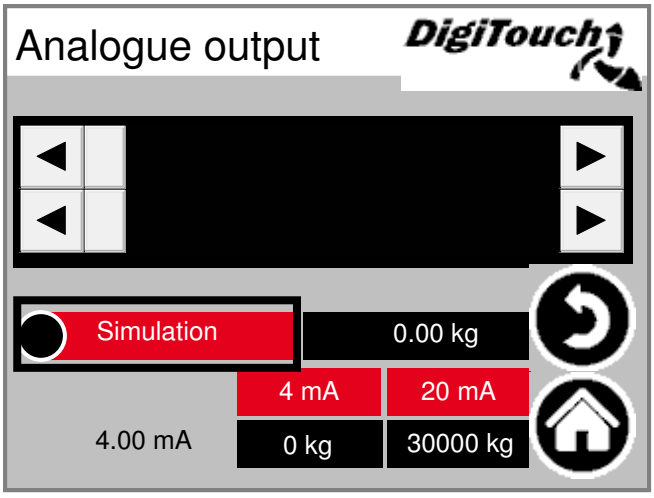
Main menu --> Basic settings --> Scale --> Login



Here is the log in and the log out for the admin

Analogue output 4..20 mA

Main menu --> Basic settings --> Analogue output

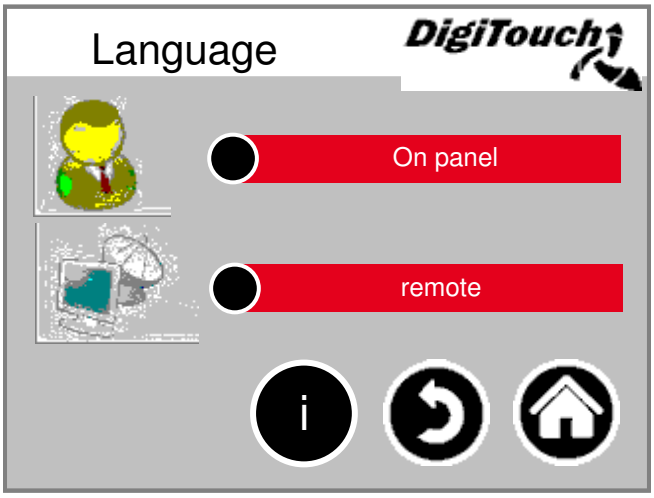


Parameterisation of the analogue output. Simulation can be used, in order to make a comparison with the higher-level control system.
The red boxes with mA values shown the scaling of the system.
With the black boxes with the kg values the settings of the filling weight can be made. This has to accord to the higher-level system.
The mA value besides the black boxes shows the current output mA value

Icon legend page 55 and 56

Language selection

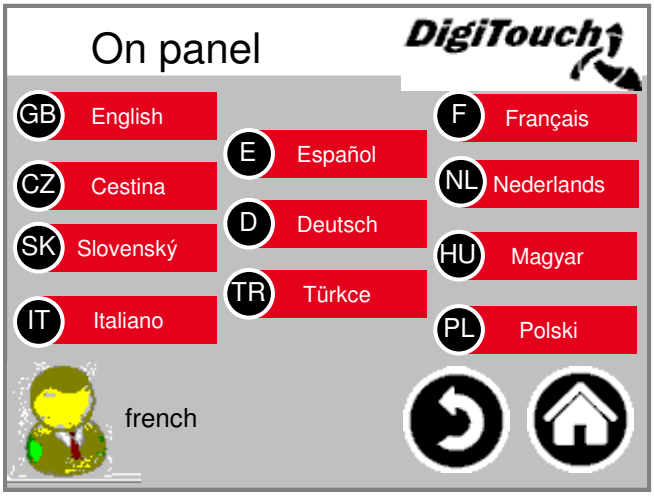
Main menu --> Basic settings --> Language



Here you can specify if working locally or at a remote location. "Working locally" relate to DC1000 panel and the VNC mode of EC1000 "Remote location" relate to Web-Visu, the Java visualisation, which can be reached from for example http://10.20.10.2:8040/webvisu.htm It also relate to the http visualisation of the external touch panel, the digitouch and the spidercontrol app.

Local language selection

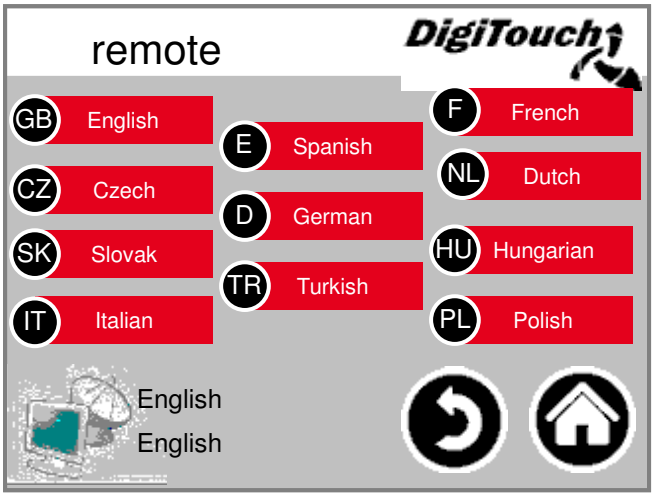
Main menu --> Basic settings --> Language --> On panel



Language switch - local. The language of the touch screen is changed and saved in such a way, that it is still available at the next start (power fail- safe).

Language selection removed

Main menu --> Basic settings --> Language --> remote

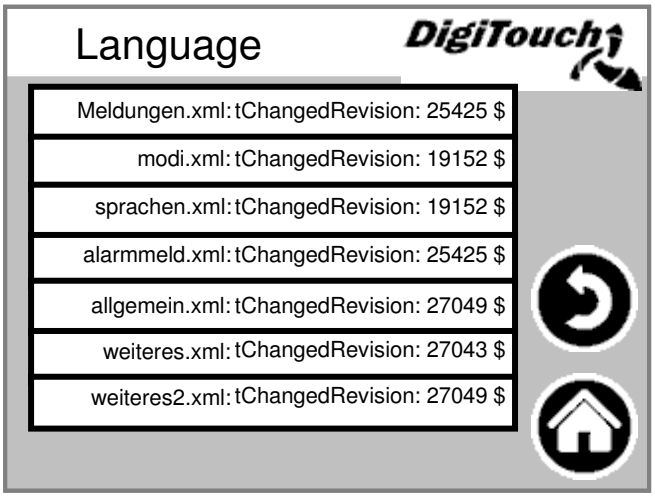


Language switch - remote. Here the language can be changed using a remote console, e.g. via the Web.

Icon legend page 55 and 56

Language file information

Main menu --> Basic settings --> Language --> i



The language file version is shown here. This is to check whether a file update was successful. This information are only important for the service technicians.

Icon legend page 55 and 56

Alarm texts

0	system/alarmgroupallalarms 0	8	Fault right feed
1	Emergency stop	9	Fault hydraulic roof power unit
2	Fault screw 2	10	Fault valve fuse
3	Fault screw 3	11	Fault roof L2 hydraulic power unit
4	Fault screw 1	12	Fault L2 hydraulic power unit
5	Fault roof valve fuse	13	Fault L2 valve fuse
6	ult variable frequency mixer mot	14	ault right elevated screw conveye
7	Fault hydraulic power unit	15	Fault right lateral screw conveyor

16	Fault screw 4	24	Fault right mixer
17	Fault metering screw1	25	A1 card error
18	Fault metering screw 2	26	Fault FC screw 4
19	Fault metering screw 3	27	A2 card error
20	Fault metering screw 4	28	A3 card error
21	Fault metering screw 5	29	Fault FC screw 3
22	Fault metering screw 6	30	Fault FC screw 2
23	Fault mixer	31	Fault FC screw 1

32	Load cell 1 error	40	Load cell 9 error
33	Load cell 2 error	41	Load cell 10 error
34	Load cell 3 error	42	Load cell 11 error
35	Load cell 4 error	43	Load cell 12 error
36	Load cell 5 error	44	Load cell 13 error
37	Load cell 6 error	45	Load cell 14 error
38	Load cell 7 error	46	Load cell 15 error
39	Load cell 8 error	47	Load cell 16 error

48	Load cell 1 no response	56	Load cell 9 no response
49	Load cell 2 no response	57	Load cell 10 no response
50	Load cell 3 no response	58	Load cell 11 no response
51	Load cell 4 no response	59	Load cell 12 no response
52	Load cell 5 no response	60	Load cell 13 no response
53	Load cell 6 no response	61	Load cell 14 no response
54	Load cell 7 no response	62	Load cell 15 no response
55	Load cell 8 no response	63	Load cell 16 no response

64	system/alarmgroupallalarms 64	72	system/alarmgroupallalarms 72
65	system/alarmgroupallalarms 65	73	system/alarmgroupallalarms 73
66	system/alarmgroupallalarms 66	74	system/alarmgroupallalarms 74
67	system/alarmgroupallalarms 67	75	system/alarmgroupallalarms 75
68	system/alarmgroupallalarms 68	76	system/alarmgroupallalarms 76
69	system/alarmgroupallalarms 69	77	system/alarmgroupallalarms 77
70	system/alarmgroupallalarms 70	78	system/alarmgroupallalarms 78
71	system/alarmgroupallalarms 71	79	system/alarmgroupallalarms 79

Alarm texts

80	system/alarmgroupallalarms 80	88	system/alarmgroupallalarms 88
81	system/alarmgroupallalarms 81	89	system/alarmgroupallalarms 89
82	system/alarmgroupallalarms 82	90	system/alarmgroupallalarms 90
83	system/alarmgroupallalarms 83	91	system/alarmgroupallalarms 91
84	system/alarmgroupallalarms 84	92	system/alarmgroupallalarms 92
85	system/alarmgroupallalarms 85	93	system/alarmgroupallalarms 93
86	system/alarmgroupallalarms 86	94	system/alarmgroupallalarms 94
87	system/alarmgroupallalarms 87	95	system/alarmgroupallalarms 95

96	system/alarmgroupallalarms 96	104	system/alarmgroupallalarms 104
97	system/alarmgroupallalarms 97	105	system/alarmgroupallalarms 105
98	system/alarmgroupallalarms 98	106	system/alarmgroupallalarms 106
99	system/alarmgroupallalarms 99	107	system/alarmgroupallalarms 107
100	system/alarmgroupallalarms 100	108	system/alarmgroupallalarms 108
101	system/alarmgroupallalarms 101	109	system/alarmgroupallalarms 109
102	system/alarmgroupallalarms 102	110	system/alarmgroupallalarms 110
103	system/alarmgroupallalarms 103	111	system/alarmgroupallalarms 111

112	Low available memory	120	HAlarmGroupMemory.m.ID08
113	Very low available memory	121	HAlarmGroupMemory.m.ID09
114	RETAIN memory error	122	HAlarmGroupMemory.m.ID10
115	Time delayed switch off	123	HAlarmGroupMemory.m.ID11
116	Low available SD memory	124	HAlarmGroupMemory.m.ID12
117	Very low available SD memory	125	HAlarmGroupMemory.m.ID13
118	HAlarmGroupMemory.m.ID06	126	HAlarmGroupMemory.m.ID14
119	HAlarmGroupMemory.m.ID07	127	Wireless ID error

128	Fault CAN master	136	IAlarmGroupCANBus.m.ID08
129	Fault CAN outputs	137	IAlarmGroupCANBus.m.ID09
130	Fault CAN FC1	138	IAlarmGroupCANBus.m.ID10
131	Fault CAN FC2	139	IAlarmGroupCANBus.m.ID11
132	Fault CAN FC3	140	IAlarmGroupCANBus.m.ID12
133	Fault CAN FC4	141	IAlarmGroupCANBus.m.ID13
134	Fault CAN FC5	142	IAlarmGroupCANBus.m.ID14
135	IAlarmGroupCANBus.m.ID07	143	IAlarmGroupCANBus.m.ID15

Notification texts

0	MELDUNG_INIT	Notification after switch on
1	MELDUNG_PAUSE	Pause
2	MELDUNG_HAND	Manual
3	MELDUNG_AUS	Off
4	MELDUNG_BEFUELLEN	Filling
5	MELDUNG_EXTERN_PAUSE	External pause
8	MELDUNG_LEER	Minimum weight
9	MELDUNG_STOERUNG	Fault

10	MELDUNG_VORLAUF_RUEHRWERK	Agitator startup
11	MELDUNG_VORLAUF_FOERDERSCH	screw 1 startup
12	MELDUNG_VORLAUF_FOERDERSCH	screw 2 startup
13	MELDUNG_VORLAUF_FOERDERSCH	screw 3 startup
21	MELDUNG_VORLAUF_DOSIERSCHN	Metering screw 1 startup
22	MELDUNG_VORLAUF_DOSIERSCHN	Metering screw 2 startup
23	MELDUNG_VORLAUF_DOSIERSCHN	Metering screw 3 startup
24	MELDUNG_VORLAUF_DOSIERSCHN	Metering screw 4 startup

25	MELDUNG_VORLAUF_DOSIERSCHN	Metering screw 5 startup
26	MELDUNG_VORLAUF_DOSIERSCHN	Metering screw 6 startup
32	MELDUNG_VORLAUF_MISCHER_LA	Mixer slow startup
33	MELDUNG_VORLAUF_MISCHER_SC	Mixer fast startup
41	MELDUNG_DOSIERUNG	Dosage
52	MELDUNG_NACHLAUF_MISCHER_S	Mixer fast run down
53	MELDUNG_NACHLAUF_MISCHER_L	Mixer slow run down
62	MELDUNG_NACHLAUF_DOSIERSCH	Metering screw 6 run down

74	MELDUNG_NACHLAUF_RUEHRWER	Agitator run down
80	MELDUNG_AUTOMATISCHE_RUECK	Automatic return
81	MELDUNG_ENTLEERHUB	Emptying stroke
82	MELDUNG_DUMP_SIGNAL	DUMP Signal
83	MELDUNG_FREIFAHREN	Retraction
84	MELDUNG_ANGEFORDERTE_RUECI	Requested return
85	MELDUNG_WAAGE_BERUHIGUNG	Weighing stabilization
0	0	Notification after switch on

63	MELDUNG_NACHLAUF_DOSIERSCH	Metering screw 5 run down
64	MELDUNG_NACHLAUF_DOSIERSCH	Metering screw 4 run down
65	MELDUNG_NACHLAUF_DOSIERSCH	Metering screw 3 run down
66	MELDUNG_NACHLAUF_DOSIERSCH	Metering screw 2 run down
67	MELDUNG_NACHLAUF_DOSIERSCH	Metering screw 1 run down
71	MELDUNG_NACHLAUF_FOERDERSC	screw 3 run down
72	MELDUNG_NACHLAUF_FOERDERSC	screw 2 run down
73	MELDUNG_NACHLAUF_FOERDERSC	screw 1 run down

Icon legend

Switches to the page in the red

Currently not available

Here is the overview about

Switches to the feeding page

Reset the FU


Switches to the previous page


Switches to the main menu

Shows the alarm history


Shows the further section of the page


Shows the previous section of the page

Additional equipment (for example metering screw) appears on the manual operation page if the system has 1 to 6 additional equipments

Shows the detailed view of the cell, the display or the ADAM module. For example cell 1


Bolean operator is shown, if pause negate is selected in the external equipment

Flag, pause signal is extended


Shows if something is selected, not selected


Shows if something is selected, selected


Shows if something is selected, not selected


Shows if something is selected, selected

Here it switches to the cell calibration page only visible for the admin

S Can indicate the maximum weight value

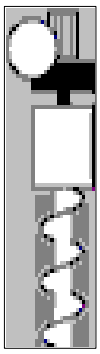
ID Send the required address to an arbitrary cell

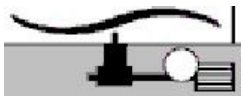
Z Can give individual cells a new 0 value

-0- Set container offset

i Shows language file information

 Agitator

 Screw

 Mixer motor

 Limit switch not activated

 Limit switch activated