

MAK 3003 Measuring System LYNX

Quick Guide

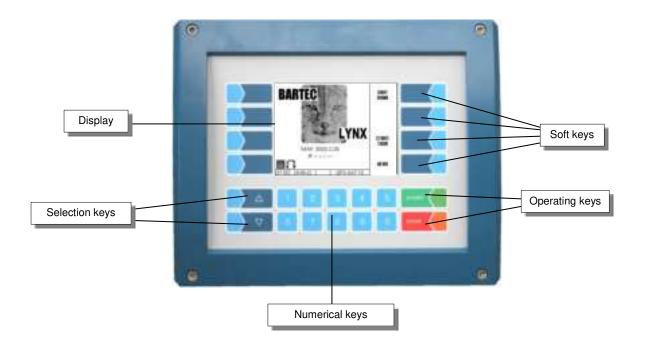


Software version MAK 3003 2.35

KBA 151021



Description of the operating unit





Operating keys

The operating keys have a fixed meaning, e.g. scroll up and down, start and stop pumping, number keys to enter numeric data etc.



Soft keys

Software controlled keys - depending on the respective operating state, these keys are activated by the software and will have different functions assigned to them - this function is shown beside the soft key on the display, e.g. MENU, SHUT DOWN etc.



Attention

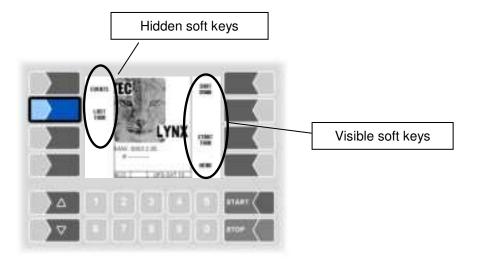
Some soft keys are "hidden" so that they don't clog up the screen. To activate a hidden soft key function, press any soft key on the corresponding side of the screen and the function will be displayed for 3 seconds - e.g. to activate the EVENTS screen, press any soft key on the left side of the display → the EVENTS function becomes visible and should be pressed within 3 seconds or else it will vanish again.

Home screen

Start-up screen: you will see this screen when the system starts up or after you have ended a tour.



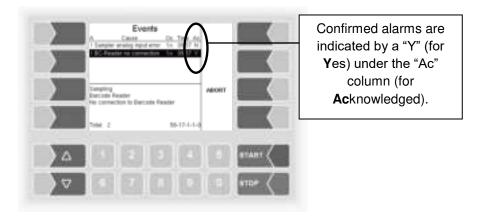
The system offers so called **hidden functions**. To display the hidden panel press any of the four left soft keys. The EVENTS and LAST TOUR functions become visible. Press the soft key labeled with the desired function within three seconds to enter it. If you do not press any soft key the hidden panel will disappear automatically.



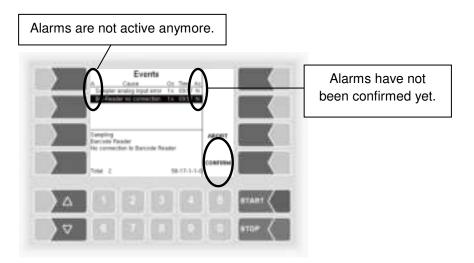
Events screen



Here you can see the EVENTS screen with two active alarms. Active alarms are indicated by an exclamation mark under the "A" column.



The "BC-Reader no connection" alarm is still active, but has been marked as acknowledged by the user. Please observe that the CONFIRM soft key has vanished once the alarm has been confirmed. If the problem that caused the alarm is fixed, the acknowledged alarm will be automatically removed from the EVENTS list.



Here you can see that the alarms are not active anymore because the problems causing them have been fixed. They will be displayed in the EVENTS list until they are confirmed or the system is restarted.



To leave the EVENTS screen you have to activate the hidden panel by pressing any of the left soft key first. Press EXIT within 3 seconds to return to the home screen.

Start a tour

1. Press the soft key labeled with START TOUR on the home screen



2. The **Start Tour** screen will appear. Before you can start a tour it is necessary to set the entries displayed on the screen. You can navigate through the entries with the selection keys at the bottom left of the operating unit. To set an entry press CHANGE (or any numeric key). Press CONFIRM to start the tour.



3. You will also need to enter the expected intake volume of this tour. This is important for sampling calculations.



You can skip this screen (if you do not want tour sampling) by pressing ABORT.

Start an intake

1. After starting the tour, the **Tour Details** screen will appear. This screen has hidden functions on both sides. It may also show already known intakes at the current location (GPS). If you have already picked up milk at this location, the system will remember the supplier id and volume and display it for faster operation.

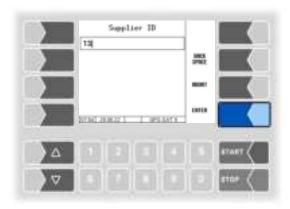


In the picture above you can also see the Tour Details screen with all hidden functions displayed (left and right).

2. To start an intake at a new location or if no GPS data is available, you have to activate the hidden panel by pressing any soft key at the right side. Press INTAKE within three seconds to initialize a new intake.



You are presented with the **Prepare intake** screen. Before you can start the intake you have to enter the **Supplier ID** and the **Expected Volume**.

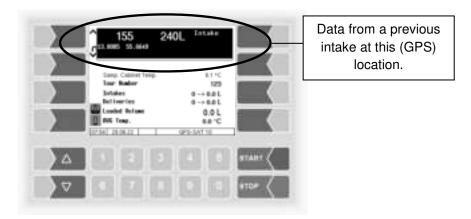


To set an entry, press CHANGE and type in the value with the numeric keys.



Press ENTER and CONFIRM to start the intake.

3. To start the intake at an already known (GPS) location, just select the desired entry (if multiple entries are displayed) and press the green START button → the system will start to suck in the milk.

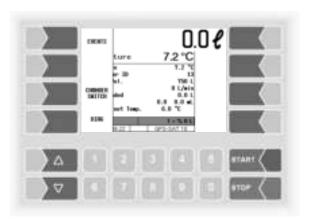


4. The system waits for milk to be sucked in. You can abort the intake by pressing ABORT as long as no milk has been detected - once milk has been detected, the ABORT soft key will disappear.



If you press ABORT, you will return to the Tour Details screen. You can restart the intake again if needed.

5. During the intake you can look at events or open a diagnosis window by activating the corresponding hidden function. Press any left soft key to display the hidden functions. Press EVENTS to display messages or alarms, press DIAG to show technical information of the current intake.





This screen shows the diagnosis window opened.

6. Toward the end of the intake, the system enters the so called **Post Sucking State** - the milk sensor is deactivated and the milk temperature is not shown anymore as there is no more milk in the line. To end the intake, press FINISH. If there is still a large amount of milk in the hose, you can start a post sucking sequence to empty the hose by pressing the green START button.



Emptying the system

After your last intake, you must empty the system to assure that the remaining milk in the system is transferred into the trailer.

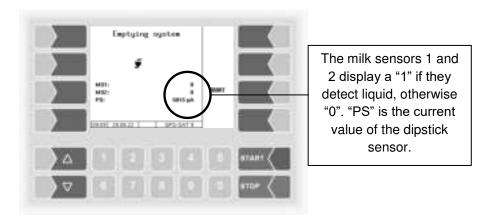
 In the Tour Details screen, activate the hidden MENU function by pressing any right soft key → the MENU function becomes visible and has to be pressed within 3 seconds to activate.



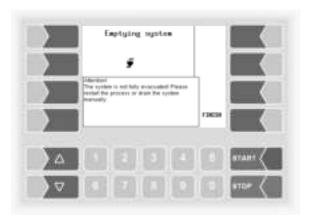
2. The **Tour Menu** screen will appear. Select **Emptying System** with the selection keys and press ENTER. The pump will suck air to press the remaining milk from the system into the trailer.



3. Wait until the pipe icon will be displayed as empty. The system will automatically stop after the configured duration is over. You can stop the process at any time by pressing FINISH. If the system stops automatically without clearing the system completely, restart the process.



A warning will be displayed if there is still liquid in the system.



End the tour

 In the **Tour Details** screen, activate the hidden END TOUR function by pressing any right soft key → the END TOUR function becomes visible and has to be pressed within 3 seconds to activate.

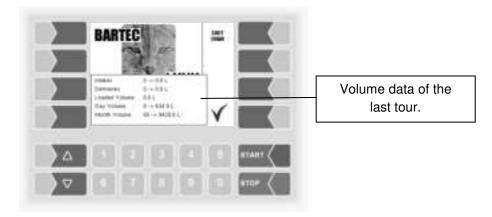


2. Press CONFIRM to end the tour.



3. You will return to the home screen. To view data of your last tour, activate the hidden LAST TOUR function by pressing any left soft key → the LAST TOUR function becomes visible and has to be pressed within 3 seconds to activate.





4. To turn off the system, press SHUT DOWN.



Cleaning (CIP)

The following steps explain how to clean the system, intake hose and tank at the CIP-facility. Once the hoses, handles etc. have been set correctly, the CIP program at the controller must be started.

1. The cleaning process can only be started within a tour: Press START TOUR.



2. The **Start Tour** screen will be displayed. Enter the Tour Number, Dairy Number etc. and press CONFIRM.



3. The **Tour Details** screen will appear. This screen has hidden functions on both sides. Activate the hidden MENU function by pressing any right soft key → the MENU function becomes visible and has to be pressed within 3 seconds to activate.



4. The **Tour Menu** screen will appear. Select **Cleaning** with the selection keys and press ENTER. You need to enter a cleaning ID before continuing.

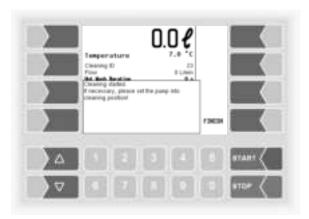


Attention

Please follow the instructions displayed at the screen before starting the CIP

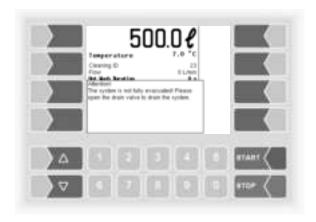


5. The System is now ready to start the CIP process. The valves will start to alternate after flow is detected. Depending on the pump type of your system there may be additional warnings/information displayed before or after the CIP starts.



During the CIP process the system will alternate the state of the valves to ensure that the normal intake path (including sampler tubes) and the ventilation path will be passed by the CIP fluids.

6. After the CIP process has stopped you can press FINISH. This will open all valves and display a message to drain the system.







Important

Open the manual draining valve below the gas separator and wait until the system is empty. If your system uses an impeller pump, you will also need to (manually) drain the pump

After the milk and level sensor do not detect any liquid in the system the FINISH button will appear to complete the CIP process.