

A photograph of the RME TR400 Lithium Trailer parked inside a large industrial building with a high ceiling and open bay doors. The trailer is white with a blue stripe along the bottom. It has a large central tank with various pipes, valves, and a red fire extinguisher mounted on the side. On top of the tank, there are two gas cylinders, one orange and one blue, and two large circular lights. The trailer is positioned in the center of the frame, facing away from the camera towards the bright light coming from the open bay doors. The floor is a smooth, light-colored concrete. In the background, there are yellow walls, a black door, and some equipment.

**Looking for a smarter solution
for road markings and repair?**

Meet TR400 Lithium Trailer

QUICK START GUIDE

TR400 LITHIUM TRAILER.

1. Turn on TR400
2. Display
3. Temperatures
4. RME – MIX
5. Settings
6. Lights
7. Charging the batteries
8. Immersion heater
9. Technical specifications
10. Problem solving

TURN ON TR400

1. Make sure the Main Power switch is in the ON position.
(The main power switch should always be ON when charging the batteries.)



2. Check the Emergency stop button.
Twist clockwise and pull to release.



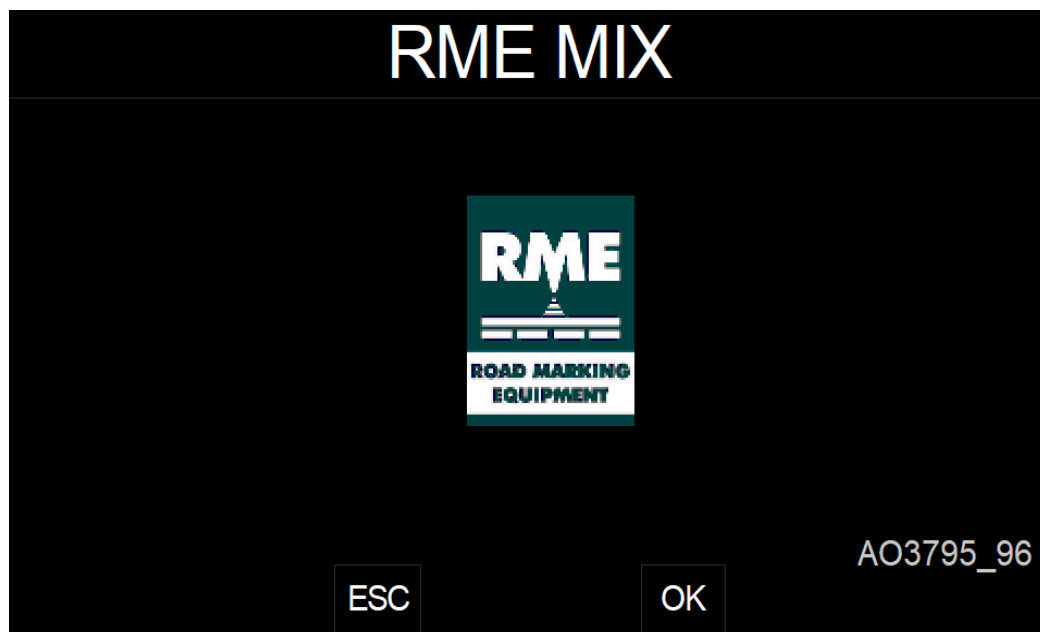
3. Turn the RME-SYSTEM knob to the first position (1)
Green light indicates System activated.



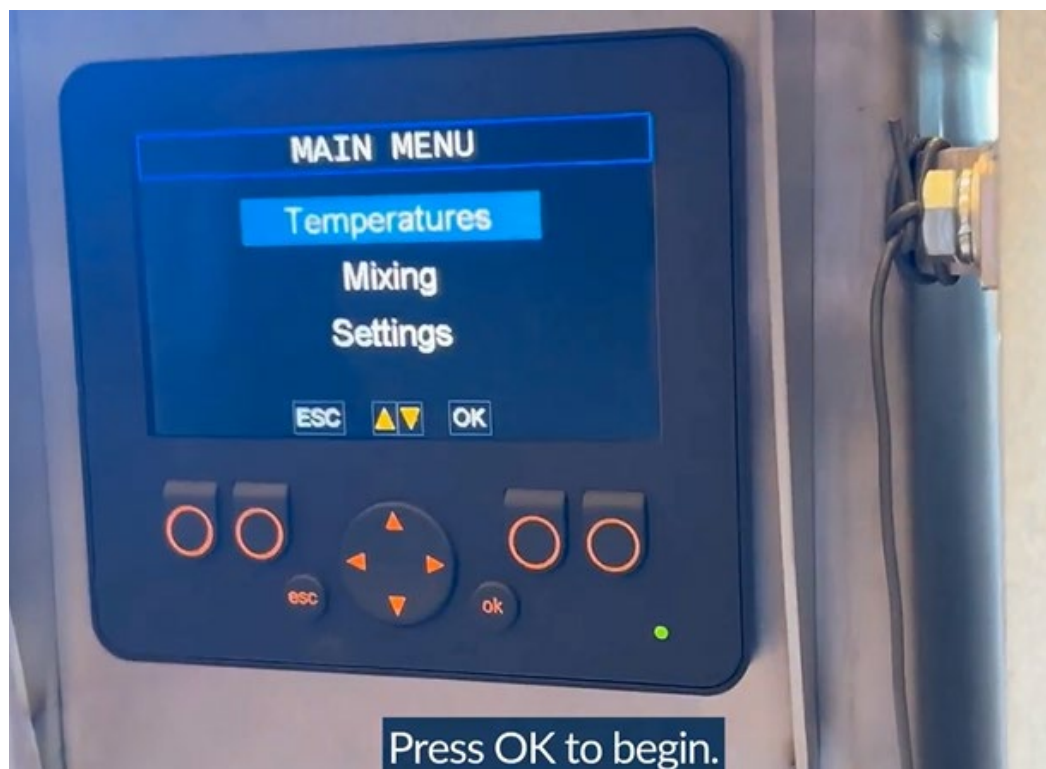
4. In a few seconds push the emergency reset button, Blue light indicates emergency reset. Wait for the loading display to start, takes about 30 seconds.
Now the machine is ready for start



DISPLAY



5. When the display shows the startpage, press OK to begin.



From the main menu the different pages can be accessed by stepping up and down with the arrows and pushing "OK". Push ESC to go backward.

TEMPERATURES

In the temperature page the different temperatures in the system are displayed. The operator can activate the thermostat from here. Use the buttons “1” or “0” to turn on or off the heating.



To set the setpoints for the burner press SET. The left/right buttons are used to step between the fields. The up/down arrows are used to increase/decrease value. When the heater is activated the system will control the burners to maintain the correct temperature in the vessels. When the temperature in the material is below the setpoint and a hysteresis(5C) at the same time as the temperature of the oil is below the setpoint and a hysteresis(5C) the burner is activated. *When the temperature is above the setpoint the burner is deactivated.*

In this page there are different icons representing different states:



Thermostat activated.



Burner activated.



Burner error.

RME-MIX



To start the RME_MIX simply press 1 in this page and the mix starts when the temperature reaches 180C

In this page there are different icons representing different states:



RME_MIX STOP



RME_MIX Normal Speed



RME_MIX High Speed

SETTINGS

In SETTINGS you adjust agitator speed and temperatures for mixing.

These are set on default when you receive the trailer and should not be changed if not required.

Push arrow down to SETTINGS and press OK.



You will be required to enter a PIN code. This code is 1 2 3 4.



Use arrows left and right to move between the squares, and arrows up and down to set number. Then press OK.



Mix lo speed

Here you set the % of mixing speed for low speed. Normally set to 80% of capacity.
Approximately 1 turn of the agitator in 4 seconds.



Mix hi speed

Here you set the % of mixing speed for high speed. Normally set to 90% of capacity.
Approximately 1 turn of the agitator in 3 seconds.



Lowest mix temperature

Her you set the temperature for when the agitator should start mixing when heating up the material.



Lowest mix temperature down

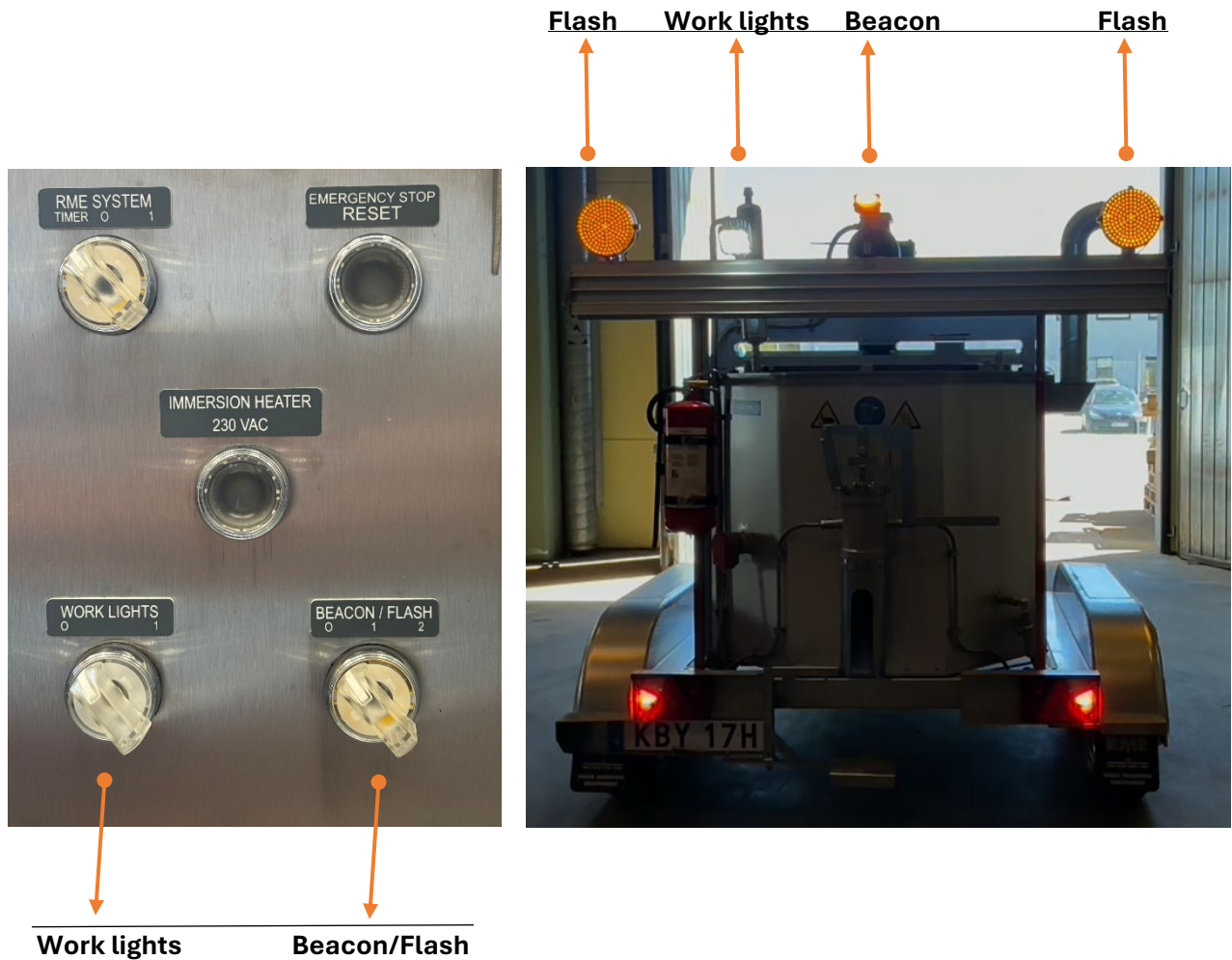
Her you set the temperature for when the agitator should stop mixing when cooling down.



LIGHTS

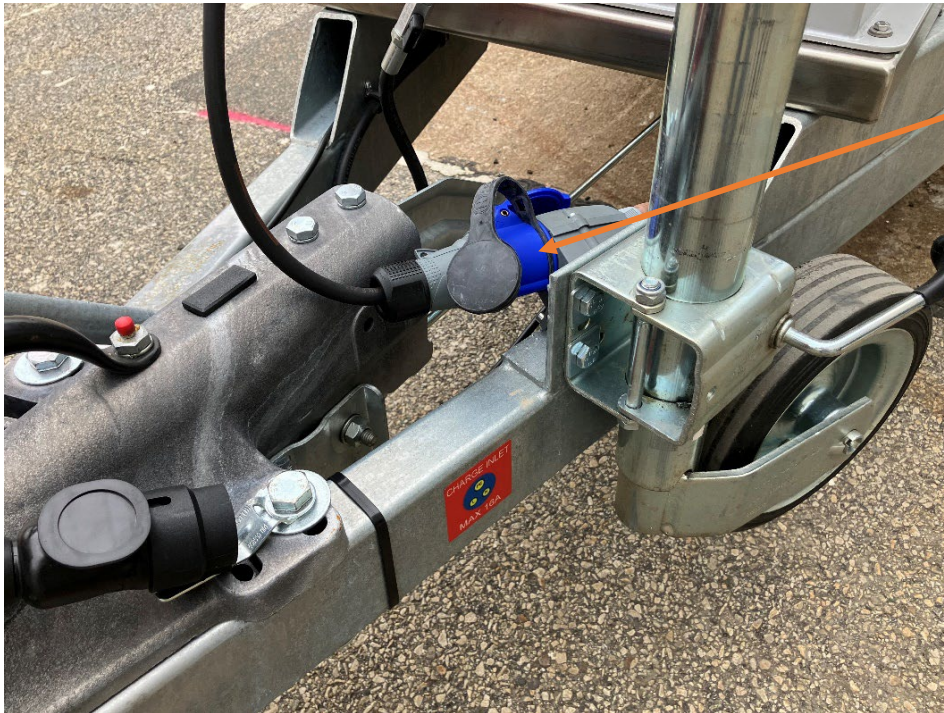
There are three kinds of lights on the back of the trailer, activated on the cabinet.

1. WORK LIGHTS
2. BEACON
3. FLASH



CHARGING THE BATTERIES

1. Connect the charge cable to the CEE Charge Inlet.



2. Connect the other end of the cable to the grid, the standard plug is a 10A Shucko but can be upgraded to a 16A CEE. (Software must be upgraded)
The Machine has an Inlet power limitation depending on the cable and connector used.

- The standard charge cable is limited to 10A with Shucko grid Connector,



- The optional charge cable is limited to 16A with CEE grid Connector,



3. Turn the RME-SYSTEM knob to the first position (1)
Green light indicates System activated.
4. In a few seconds push the emergency reset button,
Blue light indicates Machine ready.
5. Now the charging progression will be displayed in the 7" screen.



IMMERSION HEATER

To use the immersion heater the trailer must be connected to the grid via the charge cable.

The immersion heater can be turned on by setting the RME SYSTEM on timer and pushing the IMMERSION HEATER button. Or through the Hager mood timer function:

Timer

1. Turn the RME_SYSTEM knob to the TIMER position.
2. Push the EMERGENCY STOP button.
3. Now the Immersion heater will operate via the timer.
4. The timer is set in the cabinet or more easily with a mobile unit via Bluetooth. The **Hager Mood** app lets you easily program and control Bluetooth-enabled time switches, lighting, and shutters from your smartphone or tablet

<https://hager.com/au/support/faq/hager-mood>



Initial Setup & Pairing

1. Download: Get the Hager Mood app from the Google Play Store or the App Store.
2. Enable: Turn on Bluetooth, Location, and Mobile Data on your mobile device.
3. Account: Log in to your myHager account or use Guest mode.
4. Connect: Search for your time switch via Bluetooth. For security, a login confirmation is required by physically pressing a button on the actual product.
5. Configure: Assign a name and location to the new installation



TECHNICAL SPECIFICATION

DESCRIPTION

Specially low built trailer with 400L preheater designed for thermoplastics.

Equipped with additional Lithium battery. 10 kWh (LiFePO4)

Up to 2,5 ton CO2 reduction yearly.

The preheater is hot oil jacketed, and has a powerful agitation gearbox to handle both block material and sack.

The large filling hatch is mounted low and located at the front (equipped with a safety switch to stop the agitation when the lid is open).

Heating is done with a diesel burner, and when connected to the grid a 2kW electric element can be used. (Maintenance Heating)

Rear Oil jacketed manual outlet.

LED display controlling the temperature and RME-MIX program for the material.

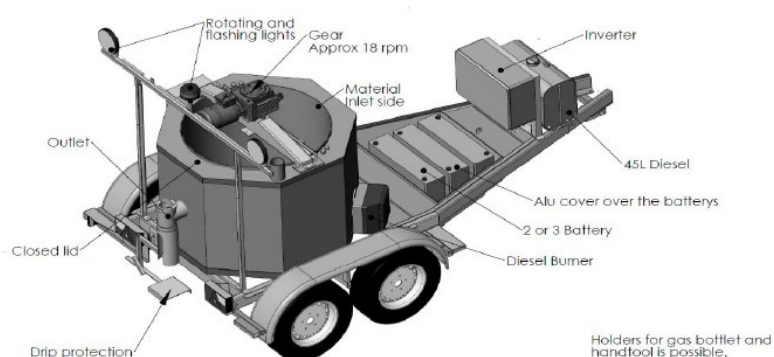
Touch Display for a simple overview of the battery system.

Inverter Multi Plus-II provides the system with 3000kVA and has a built-in charger with 70A.

The equipment is CE marked. Sign stand and warning lights included

SPECIFICATION

Length:	4,2 m
Width:	1,90 m
Height:	Approx. 2,2 m
Total weight trailer:	2.700 kg
Total Tara weight trailer:	Approx. 1.650 kg
Pre Heater Volume:	400L
Heating:	Riello oil burner 230V
Pre Heater heating:	Heat Oil
Temp regulator:	Heat Oil
Agitator motor:	Electronic, Oil, Material
Outlet boiler:	Helical Worm Gear Unit
Motor on Gear:	Helical Worm Gear Unit
Heating element	
Display Machine Operation:	Level valve, manual
Display Battery Management	
Diesel tank:	1.5kW
Battery:	2 kW
Inverter:	
Sound level:	IFM 4,3" LED
	5" Touch
	50L
	LiFePO4 10 kWh
	Multitplus-II 3000kVA 2,4kW
	44 dB(A)



PROBLEM SOLVING

Q: The batteries are not charging

A: The main power switch should always be on when charging the batteries.

Q: Blowing fuses: We noticed that the trailers demand a huge peak in electric power when we plug them in. Is there any way we can prevent this peak charge?

A: The charger should have a 10A limit to prevent overload, this parameter is visible in the Touch display. (This parameter resets to 32A if the inverter/charger software is updated.)

Q: Not possible to switch on: The lithium batteries of the trailers were fully charged before we set out to work. But when we tried to start the machines, everything was black: the main switch, the emergency switch, the green switch... nothing worked to get the trailer started.

A: The batteries and shunt are two separate systems and they sync when the batteries are fully charged. If charging with the main power switch turned off the meter will hit 100% but the batteries will not charge.

Q: One of the trailers worked normally, but stopped after 30 minutes. Same as above: did not respond to any of the switches.

A: Same as above, the main power switch has been in the off position when charging and the batteries have not been fully charged. These problems can also occur when the inverter/charger software is updated, updating resets every parameter to default.

Q: When our technician brought it back to the workshop, and plugged in the main power, he managed to switch it on and it started normally. It continues to run for a couple of minutes once you remove the power line, but then it stops again and is impossible to restart.

A: When you plug the trailer to the grid it powers the system via the charger, but if the main power switch is off the power never reaches the batteries.

Or if the software is updated, the charger drops to 24 volts.



Q: We noticed that the batteries have low voltage (22V) while in the LED display it says 100% charged.

A: Same answer, the charger should be set to 27,5 volts and if you only have 22 volts in the batteries the main power switch has been in off position or the software has been updated.

Control that every switch is turned on and charge the trailer. In the display you can see the AC IN power consumption and this should show about 1950W when it charges correct.

When you charge check the voltage on the batteries, it should progress from the starting value up to 27,5 volts.

If the voltage only climbs to 24 volts the charger has the wrong parameters.

Notice that the Lithium batteries charges slower in colder temperatures, under 0C not at all.

