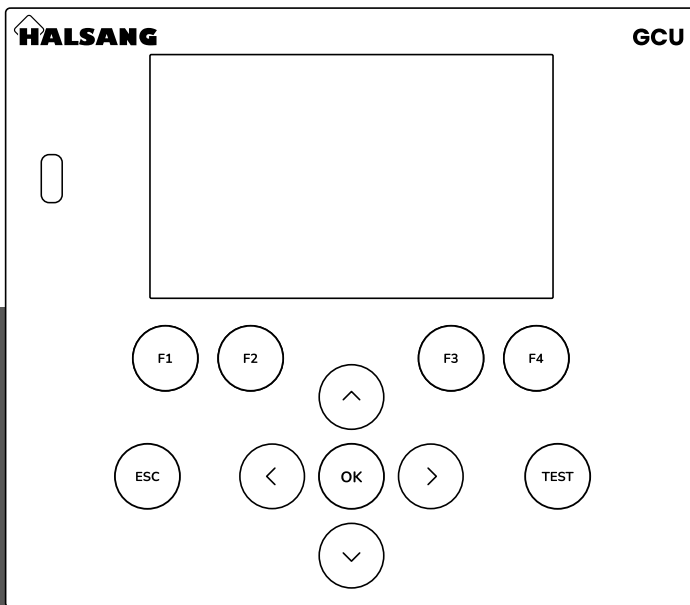


Halsang

Gate Control System

Swing and sliding gates

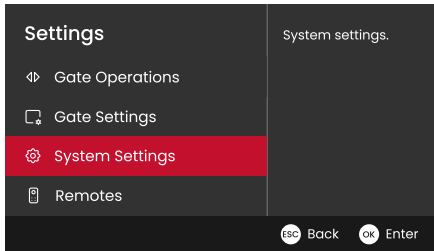


Quick start and configuration guide

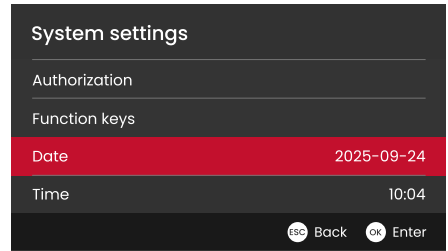
Quick start and configuration guide

This guide will help you get started with the GCU (Generic Control Unit) quickly. It covers the basic steps to configure and use the GUI in swing and sliding gate setups with AC motors.

1. Configuring date & time



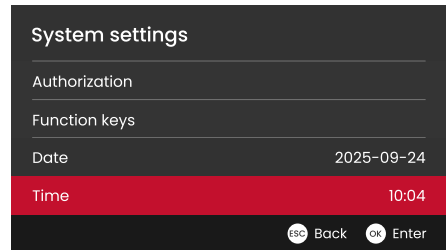
- 1 To configure the date and time press **OK** button and navigate to the **Settings** menu.



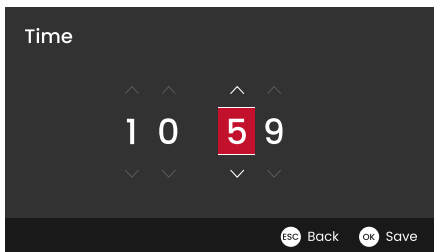
- 2 Select **Date**.



- 3 Enter the date in the YYYY-MM-DD format using arrow buttons. After entering the date, press **OK** to save the changes.

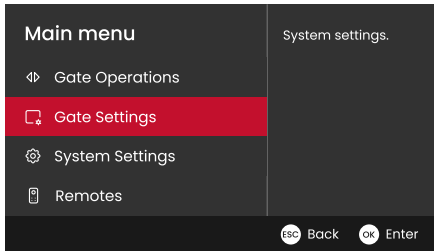


- 4 To set the time, select the **Time** option.

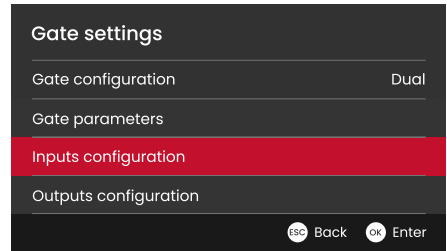


- 5 Enter the time in the HH:MM format. Press **OK** to save the changes.

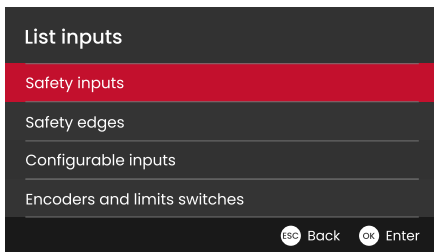
2. Configuring global inputs



- 1 To configure global inputs press **OK** button, and navigate to the **Gate Settings** menu.



- 2 Select **Inputs configuration**.



- 3 Here you can select input type you want to configure, e.g. Safety Inputs.

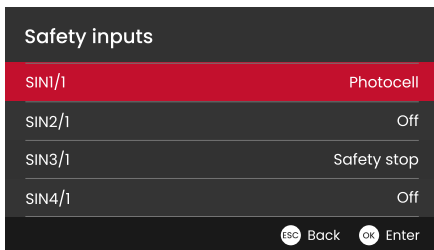


Note:

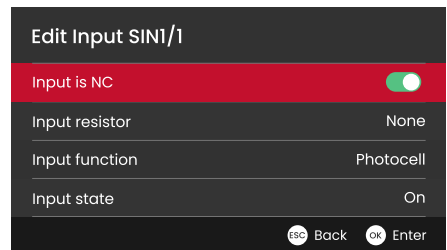
For proper gate operation, it is required to configure at least two inputs:

- Safety Stop
- Photocell

2.1 Setting input function and parameters



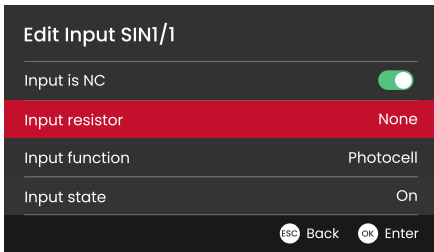
- 4 Now, select the input number you want to configure.



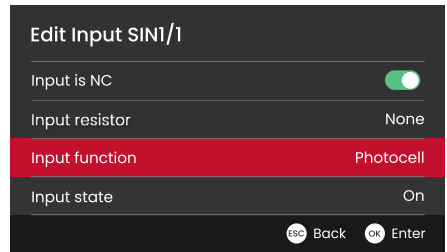
- 5 If the input source is connected to a normally closed (NC) contact, you should select the **Input is NC** option.

**Note:**

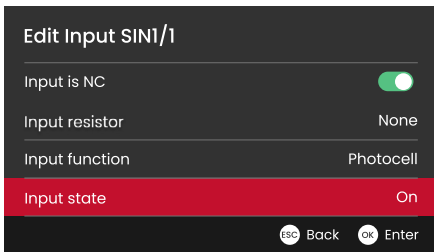
Input names are displayed in the format *SINx/y*, *SEx/y* or *INx/y*, where x is the input number matching the GateIO board label and y is the board index. When only one GateIO board is used, the index is always 0. For example, *SIN1/0* refers to the first safety input on the first GateIO board.



6 If the input source uses a resistor to detect open circuit, you should configure the installed resistor using the **Input resistor** option.



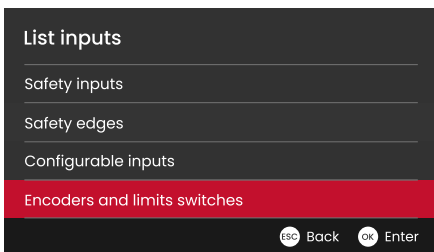
7 Function of the input can be set using the **Input function** option.



8 You can verify that the input is working correctly by checking the **Input state** option.

2.2 Configuring encoder inputs

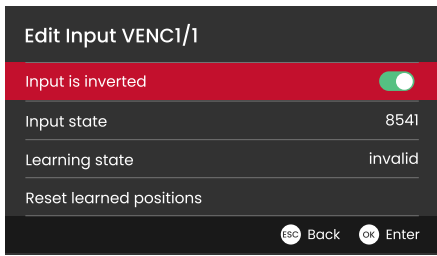
Encoder inputs are a special type of inputs that are used to read the position of the gate wing encoders. They have a fixed function and cannot be configured like regular inputs. However, you can still check their state and configure value inversion



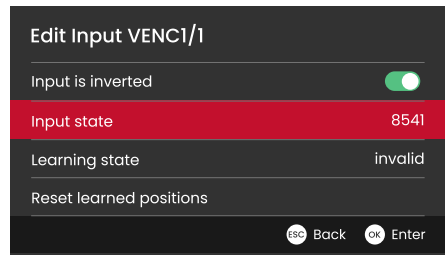
9 To configure encoder inputs back to **List Inputs** menu and select **Encoders and limit switches**.



10 Next select the desired encoder input.



11 To configure value inversion select the **Input is inverted** option.



12 You can verify that the encoder input is working correctly by checking the **Input state** option.



Warning:

Encoder values should increase as the gate wing is moving towards the closed position. In other words, closed position should have the highest encoder value and the open position should have the lowest encoder value.

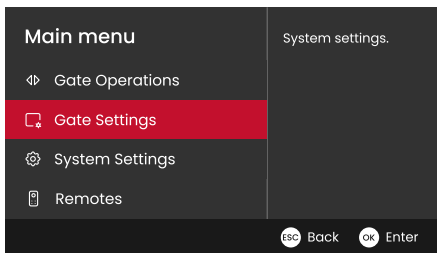
If the encoder values are increasing the other way around, you should enable the **Input is inverted** option for the encoder input.



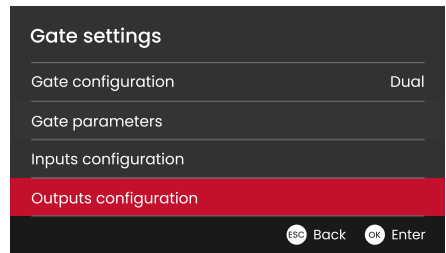
Warning:

Please make sure that the encoder value does not cross 0 value during the gate operation. If the encoder value crosses 0, it needs to be physically adjusted to the correct position before the gate can operate correctly.

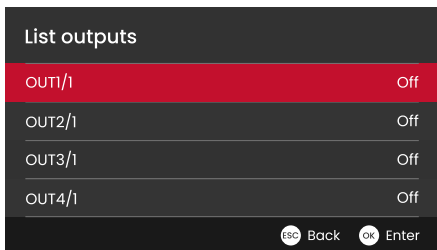
3. Configuring global outputs



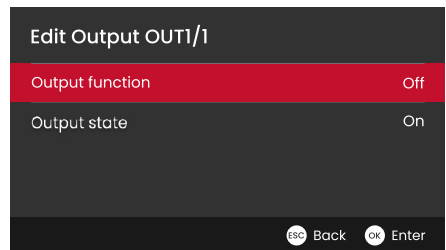
1 To configure global outputs, press **OK** button, and navigate to the **Gate Settings** menu.



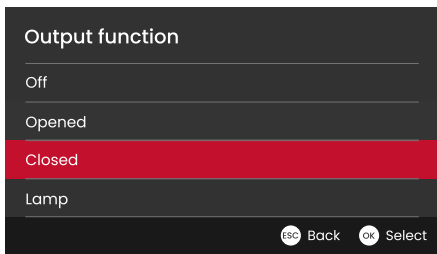
2 Next select **Outputs configuration**.



3 Select the desired global output.



4 Next select **Output function**.

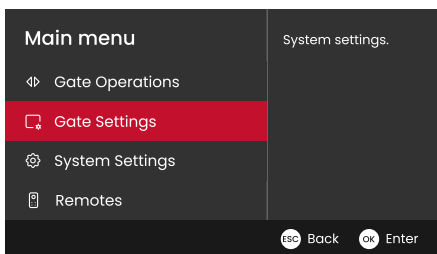


- 5 Here you can set up the gate-wide outputs such as Lamp, Semaphore Lights or E-Lock.

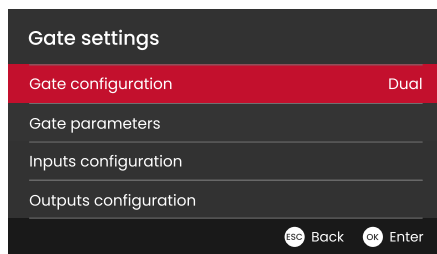
4. Configuring swing gate settings

Sliding gate configuration - see next chapter (5).

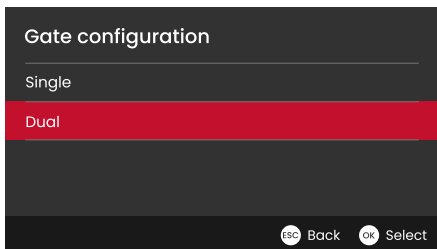
4.1. Setting swing gate type (Single or Dual)



- 1 Press **OK** button and navigate to the **Gate Settings** menu.

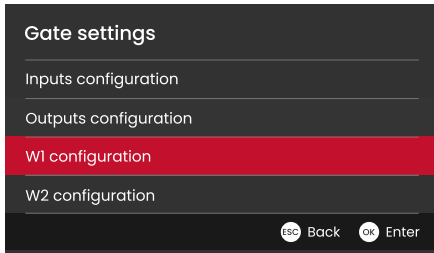


- 2 Select **Gate configuration**.

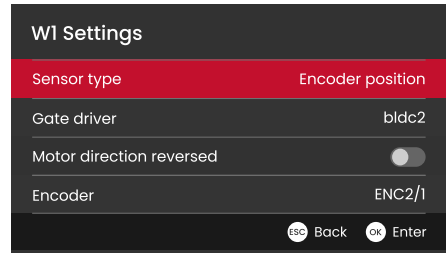


- 3 Here you can set the gate type (**Single** - one wing, **Dual** - two wings).

4.1. Configuring W1 and W2 wings

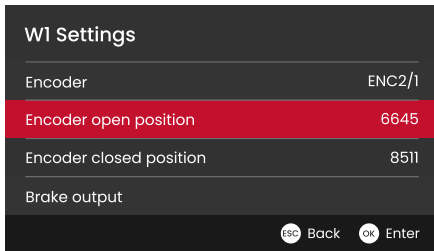


- 4 Press **ESC** button to back to the **Gate Settings** menu. Select **W1 configuration**.

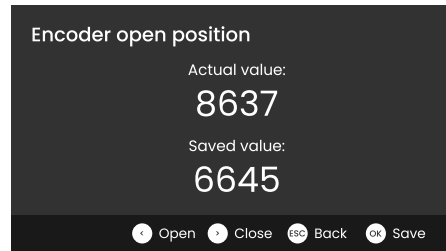


- 5 Here you can set the parameters for W1 or W2 wings such as **Sensor type**, **Driver**, **motor direction** and **encoder positions**.

4.2. Configuring Encoder open and close positions



- 6 Navigate to the **Encoder open position**.



- 7 Use arrow keys to move the gate wing in the open or close direction. Press **OK** to save desired position.

After configuring **Encoder open position**, repeat the same steps for **Encoder close position**.

Once W1 configuration is complete, perform the same steps for W2 by selecting **W2 configuration** in the Gate Settings menu.



Note:

When doing first time configuration, saved encoder positions will read 0000.



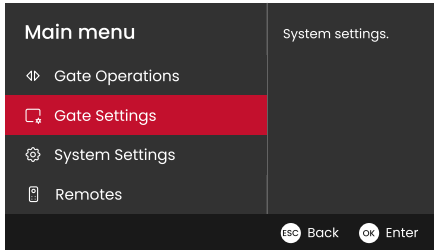
Warning:

Pay attention to the actual movement direction. If the gate wing is moving in the opposite direction than expected, you should change the **Motor direction** option.

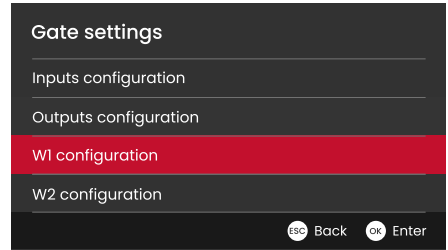
5. Configuring sliding gate settings

Sliding gates are configured in a similar way to swing gates, but use **limit switches** instead of absolute position encoders.

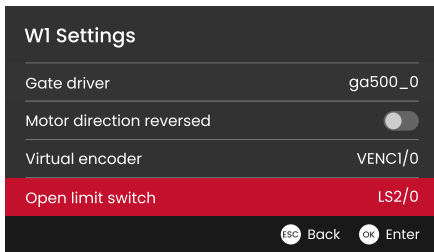
5.1. Configuring limit switches



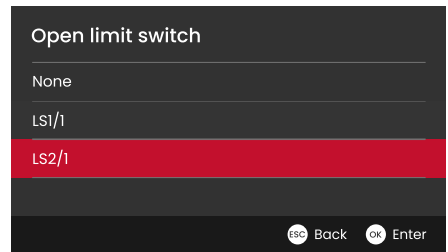
- 1 Press **OK** button and navigate to the **Gate Settings** menu.



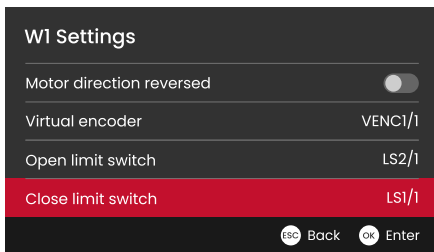
- 2 Select **W1 configuration**.



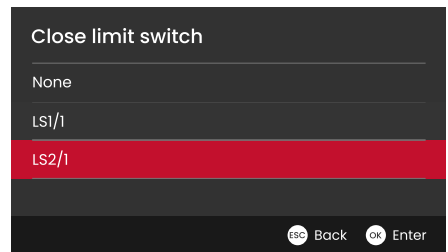
- 3 Next select the **Open limit switch**



- 4 Select the **input** that is connected to the open limit switch and press **OK**.



- 5 Next select **Close limit switch**.



- 6 Select the **input** that is connected to the close limit switch and press **OK**.



Note:

Only inputs that are configured as Limit switch function can be selected.

By default, *LS1/x* and *LS2/x* inputs are configured as limit switches but any other inputs can be used as well.

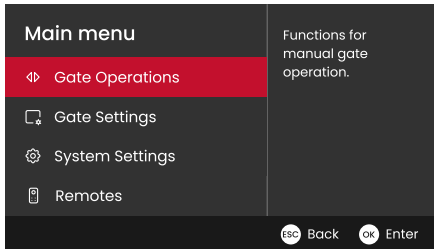


Warning:

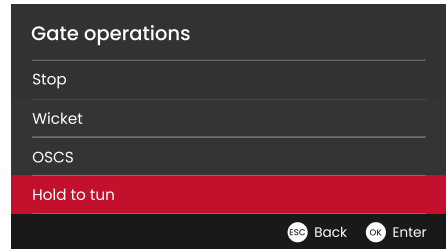
Pay attention to the limit switch mapping. Incorrect mapping of the open and close limit switches can cause the wing to move past its limits, which can damage the gate or the motor. When not sure which limit switch maps to the open or close position, you can use the **Hold to run** mode to move the gate manually.

6. Testing the gate operation

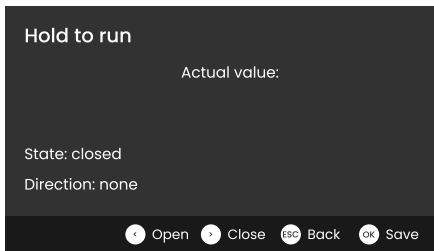
It is recommended to test the gate operation after configuring the gate settings using the Hold to run mode. This mode allows you to manually move the gate.



- 1 Press **OK** button and navigate to the **Gate Operations** menu.

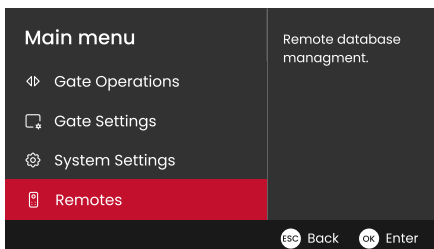


- 2 Select **Hold to run**.

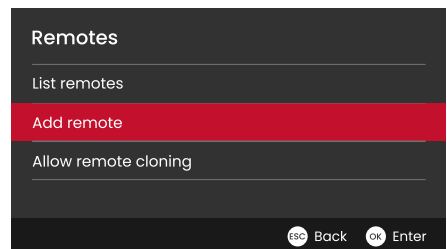


- 3 In this mode, you can use arrow keys to move the gate wings in the open and close directions respectively.

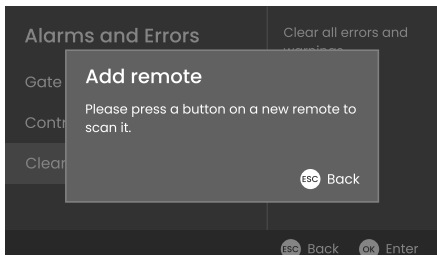
7. Adding remotes



- 1 Press **OK** button and navigate to the **Remotes** menu.



- 2 Select **Add remote**.



- 3 The GCU will wait for a button on the remote to be pressed. Once the button is pressed, the GCU will register the remote and add it to the list of remotes.