

# eAccess MachineController GEN2 installation manual



















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## Bill of materials

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|--|---|
| 1. eAccess MachineController GEN2 device   | 8. M12A-08BMMB-SL7001 ( <b>SERIAL</b> )                           |
| 2. 5A fuse                                 | 9. M12A-05BMMB-SL7001 ( <b>USB</b> )                              |
| 3. Emergency start switch w. cable         | 10. M12, MALE, STRAIGHT, D, 4P, PG7, GOLD ( <b>ETHERNET</b> )     |
| 4. EMERGENCY START sticker                 | 11. M12, MALE, STRAIGHT, B, 4P, PG7, GOLD ( <b>CAN</b> )          |
| 5. M12S-04BFFB-SL7002 ( <b>12-24V</b> )    | 12. Antenna - supplied with <b>2J875 oBGF</b> or <b>2J605oPGF</b> |
| 6. M12A-08BMMB-SL7001 ( <b>IO</b> )        |   |
| 7. RPC-M12-MS-4CON-PG7-MU ( <b>RELAY</b> ) |   |

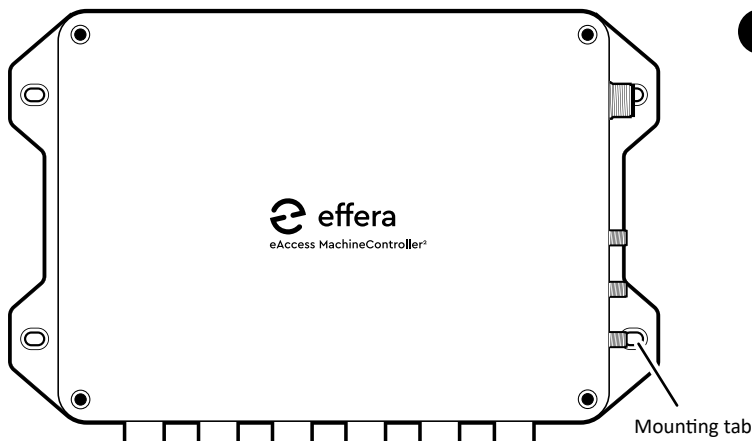
1 	2 	3 	4 
5 <b>12-24V</b>  	6 <b>IO</b>  	7 <b>RELAY</b>  	8 <b>SERIAL</b>  
9 <b>USB</b>  	10 <b>ETHERNET</b>  	11 <b>CAN</b>  	

12 <b>2J875 oBGF</b> 	<b>2J605oPGF</b> 
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Follow the installation manual during connection. Perform a verification test after completing the assembly to ensure that the system is operational.



**SHUT OFF THE MAIN POWER ON THE MACHINE BEFORE INSTALLING AND CONNECTING THE CONTROL UNIT!**



## 1 Installing the control unit

Install the control unit using the 4 mounting tabs. We recommend that you install the device in a concealed area to protect it against tampering.



When connecting conductors to equipment, you **MUST** use end sleeves or an equivalent.



It is important that the control unit is **NOT** installed in a way that reduces the operator's field of view, limits the operator's physical ability to move, or limits the operator's access to the machine's service equipment!

## 2 Power supply

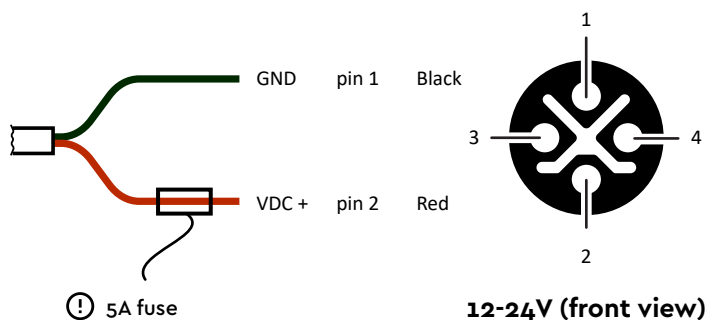
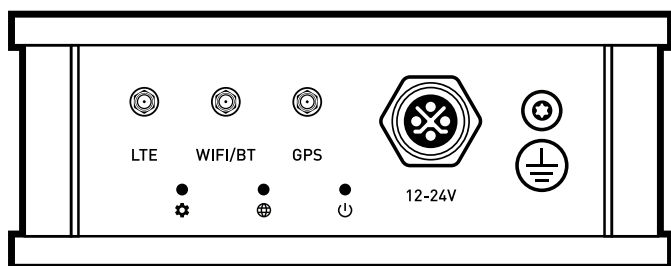


The power supply **MUST** be secured using a 5A fuse.

- i. For connecting to the power supply, refer to the appendix with instructions for the relevant manufacturer model.



Control unit can **ONLY** be connected to a 12-32V DC power supply.



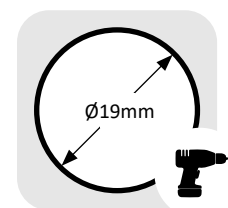
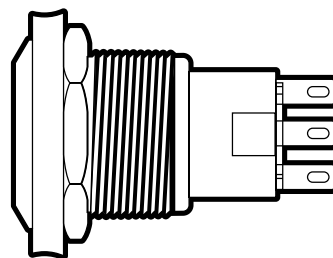
- ii. Connect pins on the M12 plug for connection to the control unit as shown in the sketch above.
- iii. Connect the M12 plug to the control unit in the connector marked **12-24V** as indicated on the sketch.

### 3 Connecting the emergency start switch and start signal

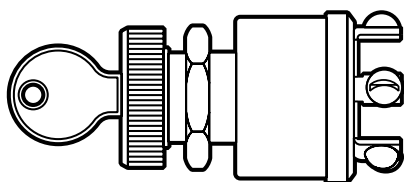
- i. Drill out mounting hole for the switch at a suitable location, Ø19mm.



The emergency start switch **MUST** be installed in close proximity to the ignition key, so that both devices can be operated simultaneously by one person.



- ii. Mount and attach the emergency start switch.
- iii. Place the "EMERGENCY START" sticker near the emergency start switch.



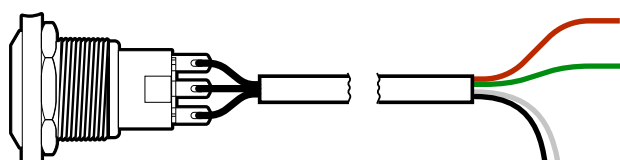
- iv. For connection to the ignition system, see the appendix with instructions for the relevant manufacturer model.

- v. Run and fix cables from the emergency start switch and ignition lock up to the control unit.

We recommend concealing these to prevent cable breakage and wear.

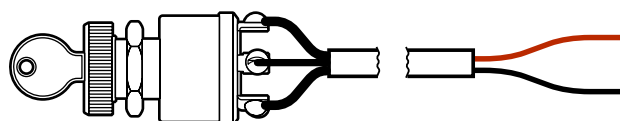
- vi. Connect pins on the M12 plugs in order to connect to the control unit as shown in the sketch below.

Emergency start

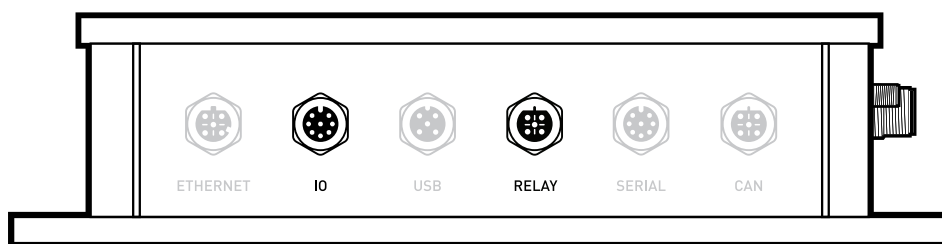
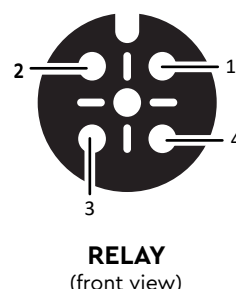
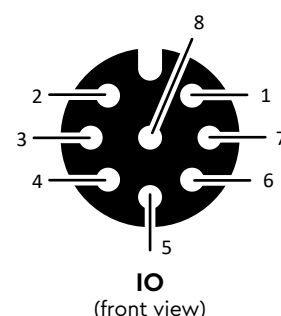


pin 1 Red  
pin 4 Green

Ignition



pin 1 White  
pin 2 Black  
VDC + pin 1 Red  
GND pin 2 Black



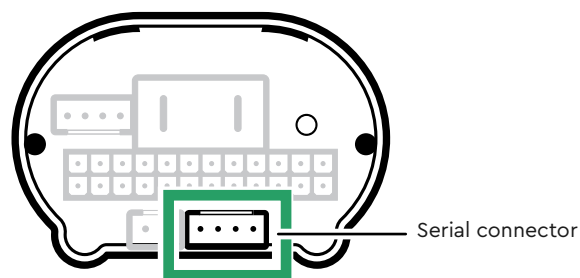
- vii. Connect the M12 plugs to the control unit using the connectors labelled **IO** and **RELAY** as indicated in the sketch.

## 4 Connecting an Alkolås 720 device

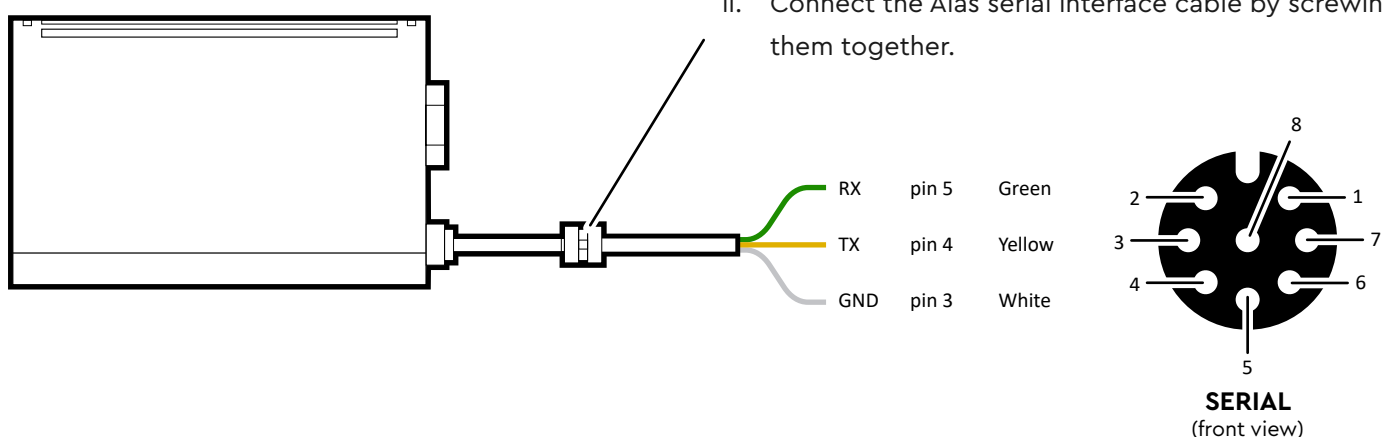
Proceed to the next section for installation without Alkolås.

Connecting the interface to the Alkolås device.

- i. Connect the serial interface cable to the connector on the Alkolås device as indicated in the sketch.

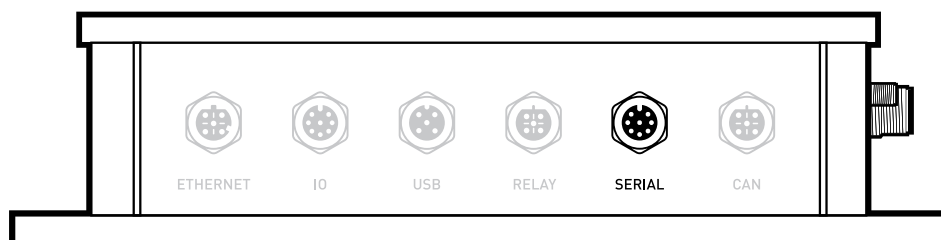


- ii. Connect the Alås serial interface cable by screwing them together.



- iii. Run and fix the cable up to the control unit. We recommend concealing the cable to prevent breakage and wear.

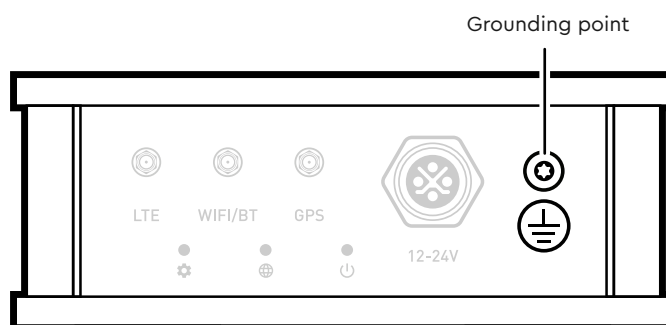
- iv. Connect the pins on the M12 plug in order to connect to the control unit as shown in the sketch above.



- v. Connect the M12 plug to the control unit using the connector labelled **SERIAL**, as indicated in the sketch.

## 5 Grounding the control unit

- i. Connect the ground lead from the grounding point of the control unit to the fixed chassis ground of the machine.

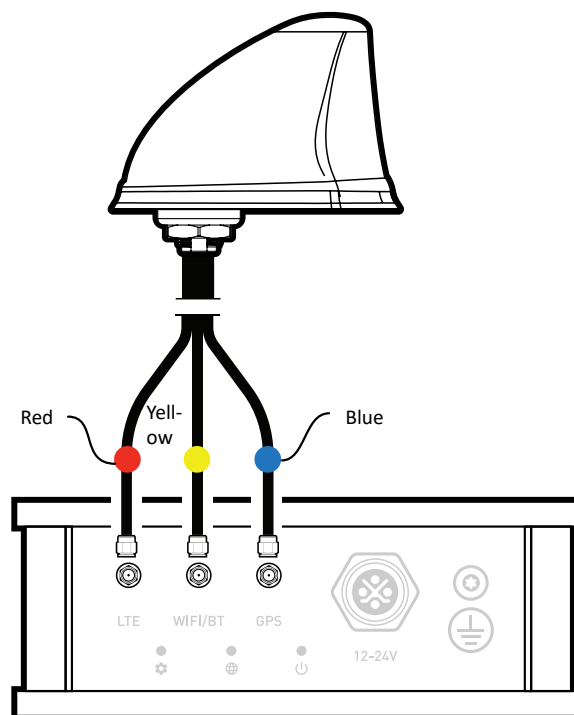


## 6 Installing and connecting the antenna

Installation depends on which antenna is included:

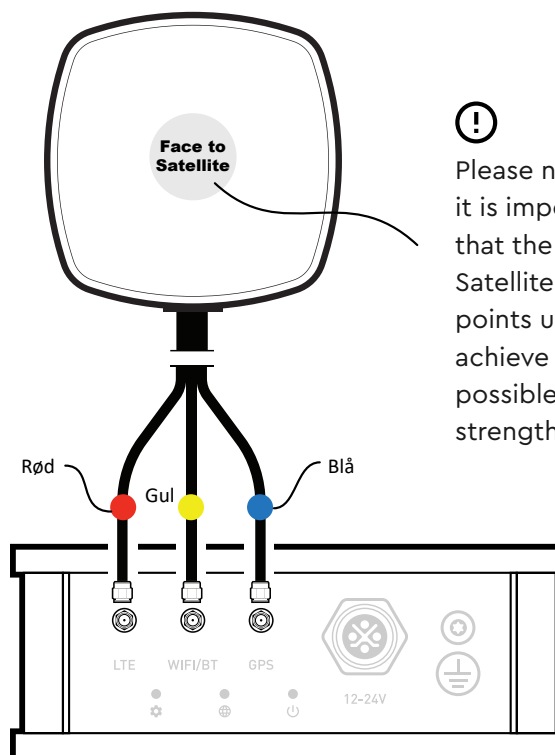
### Antenna option: 2J8750BGF

- i. The antenna should be mounted in an upright position, and the cables should be attached vertically down from the antenna. Choose an area that is least shielded from all sides, and if possible, mount the antenna outdoors. This will ensure the best possible signal quality.
- ii. Run and fix the antenna cables up to the control unit. To protect the cables, we recommend that you place them in concealed cable trays.
- iii. Screw the 3 antenna cables to the control unit as indicated in the sketch.



### Antenna option: 2J6050PGF

- i. To achieve the best possible signal strength, the antenna must be mounted with the sticker 'Face to Satellite' pointing upwards. Choose an area with minimal shielding from all sides and, if possible, mount the antenna outdoors. This will ensure the best possible signal quality.
- ii. Run and fix the antenna cables up to the control unit. To protect the cables, we recommend that you place them in concealed cable trays.
- iii. Screw the 3 antenna cables to the control unit as indicated in the sketch.

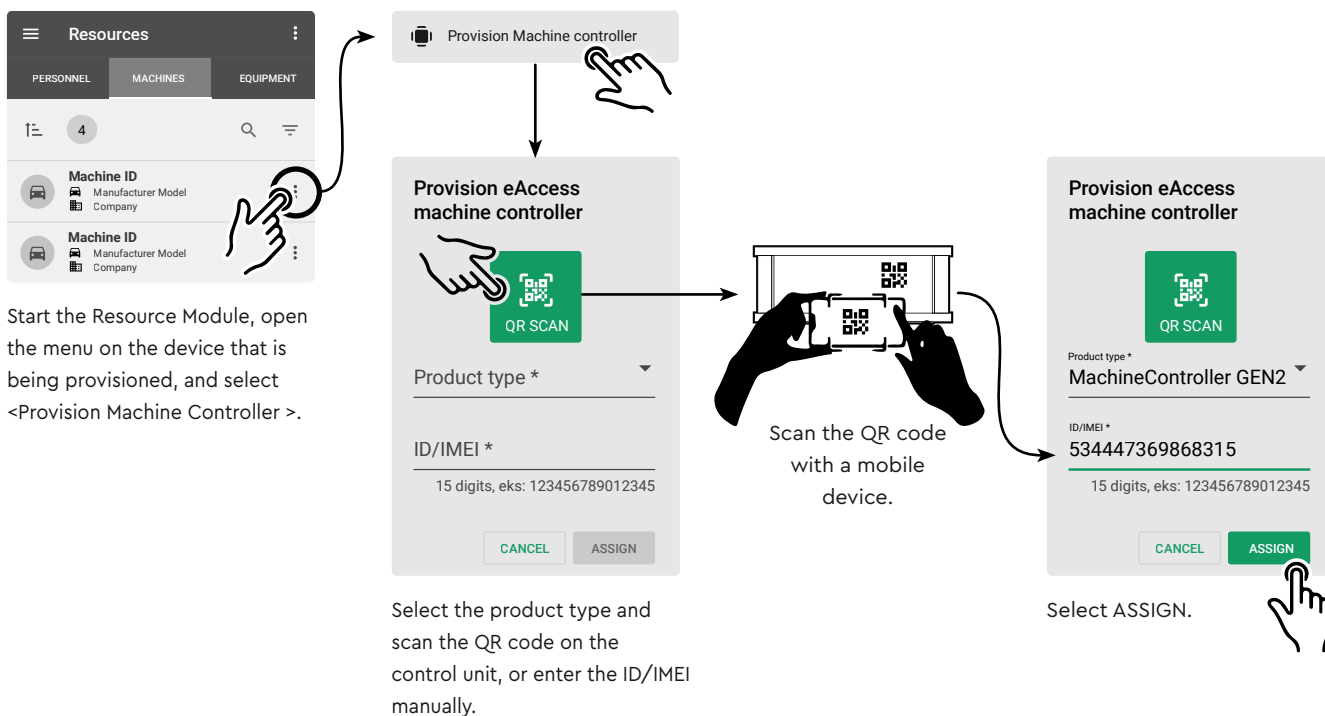


Please note that it is important that the 'Face to Satellite' sticker points upwards to achieve the best possible signal strength.

## 7 Provisioning the control unit

In order to provision the control unit, you must already have a user account and access to the Effer Insight app. During provisioning, the control unit is assigned to the device. To do this, follow the process below.

ⓘ During provisioning, the LED light on the device will glow red until all necessary software has been downloaded and installed. When the device is ready, the LED will turn green. The time it takes before the unit is fully provisioned depends on several factors such as coverage.





## 8 System verification

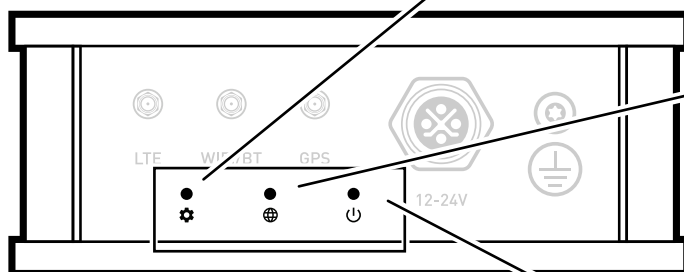
- Activate the main power for the machine.
- Verify that it is no longer possible to start the machine directly by turning the ignition switch.
- Verify the emergency start procedure of the machine by holding down the emergency start switch while simultaneously turning the ignition key. The machine should now start up normally.
- Verify the start-up procedure by following the operator verification instructions. The machine should then start up as usual.



It is critical that all the above verifications are checked to ensure that the machine can be started for normal operations and in the event of an emergency.

## 9 Troubleshooting and LED lights





The LED lights on the control unit show the status of the device. The different colours and flashing patterns indicate the state of the device.



### LED description






#### Operational status

-  Red: Operating error.
-  White: Not provisioned.
-  Flashing white: Provisioning in progress.
-  Green: All OK



#### Network

-  Red: No internet connection.
-  Green: Connected to the internet.
-  Flashing green and blue: Provider is remotely connected to device for troubleshooting.



#### Power

-  Light green: The device is powered.