

## **FanControl-U2**

### **Connection of the module in Land Rover vehicles**

## Module application in Range Rover Vogue (2013)

### Group 5; subgroup 1

#### Vehicle CAN bus:

- CAN-L – orange with a brown;
- CAN-H – orange with a violet stripe.

#### Standard control button:

- Central locking «lock» button located on the driver's door.

#### Control with the car's remote control key:

- Supported.

### Control of a factory parking heater

The module allows to activate the factory heater in order to warm-up the engine and interior. The module can be controlled with external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the factory remote key.



- The module can be activated just only for one time after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the system is limited to 20 minutes.

### Module connection

The module is connected to CAN bus at any convenient place, for instance, near the climate system control unit which is under the glove compartment. Module CAN 1 paired wire is used for connection (see Figure 1).



Figure 1

Module output #5 (blue/yellow wire) must be connected to pin #4 (brown/violet wire) of the 6-pin factory heater connector (see Figure 2).

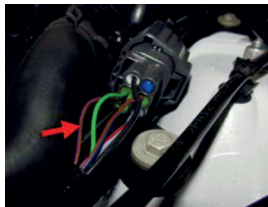


Figure 2

For detailed description of connection see Diagram 1.

### Control of an aftermarket heater

The module allows to activate the vehicle's climatic system and an aftermarket engine heater to warm up the engine and interior. The module can be controlled with external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the vehicle's remote key.

### Module connection

The module is connected to the vehicle's CAN-bus in series (using CAN1 and CAN3 of the module) right behind the climate system control unit (figure 1) which is located behind the glove box. Refer to the diagram 2.

## Module application in Range Rover Vogue, Sport (2014-2015)

**Group 5; subgroup 2 for Vogue (2014-2015)**  
**Group 5; subgroup 4 for RR Sport (2014-2015)**  
**with factory heater**

**Group 5; subgroup 2 for RR Sport (2014-2015)**  
**with an aftermarket heater**

**Vehicle CAN bus:**

- CAN-L – grey with a violet stripe
- CAN-H – violet with a green stripe.

**Standard control button:**

- "Home" button.

**Control with the car's remote key:**

- Suppressed.

### Control of a factory parking heater

The module allows to activate the factory heater in order to warm-up the engine and interior. The module can be controlled with external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the car's remote key.



- The module can be activated just only for one time after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the system is limited to 20 minutes.

### Module connection

The module is connected to the vehicle's CAN-bus in series (using CAN1 and CAN3 of the module) right behind the climate system control unit (figure 3) which is located behind the glove compartment.

Refer to the diagram 3.

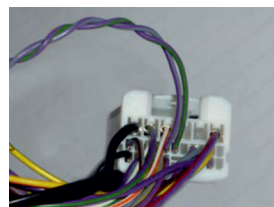
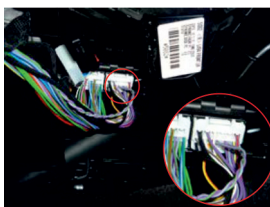


Figure 3

### Control of an aftermarket heater

The module allows to activate the vehicle's climatic system and an aftermarket engine heater to warm up the engine and interior. The module can be controlled with external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the car's remote key.

### Module connection

The module is connected to the vehicle's CAN-bus in series (using CAN1 and CAN3 of the module) right behind the climate system control unit (figure 3) which is located behind the glove compartment. Refer to the diagram 2.



To configure the module for operation with an aftermarket engine heater - setup the «Climate system alternative control algorithm N°1», you may use TECprog or the built-in programming button:

1. Press the programming button 14 times.
2. The module will indicate the option N°14 status by a series of one LED flash.
3. Press the programming button 1 time.
4. The system will respond with a series of two LED flashes.



You may adjust a preferable operating mode of the climatic system which will be activated each time the engine heater is started.

For this purpose:

1. Switch the vehicle's ignition ON.
2. Adjust a desired operating mode of the climate control system.
3. Press and hold the «Setup» button within 2 sec. The LED will light up.
4. Then the LED will flash 4 times to indicate that the settings are saved successfully.

## Module application in Range Rover Vogue, Sport (2016)

**Group 5; subgroup 2 Vehicle CAN bus:**

- CAN-L – grey with violet stripe.
- CAN-H – violet with a green stripe.

**Standard control button:**

- "Home" button.

### Control of a factory parking heater

The module allows to activate the factory heater in order to warm-up the engine and interior.



- The module can be activated just only for one time after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the system is limited to 20 minutes.

### Module connection

The module is connected to CAN bus at any convenient place, for example at the climate system control unit which is behind the glove compartment. Module CAN 1 paired wire is used for

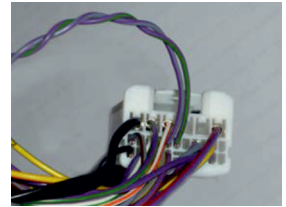
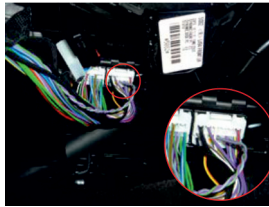


Figure 4

connection (see Figure 4).

The output of the system №5 (blue/yellow wire) is connected to pin №4 (brown/violet wire) of factory heater's 6-pin connector (see Figure 5). For connection is necessary to use an additional relay.

For detailed description of connection see Diagram 6

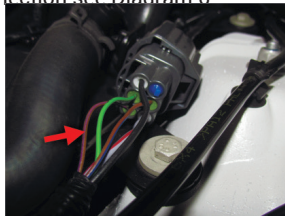


Figure 5

## Module application in Land Rover Discovery 4

<p><b>Group 5; subgroup 3 Vehicle CAN bus:</b></p> <ul style="list-style-type: none"> <li>• CAN-L – yellow with blue.</li> <li>• CAN-H – yellow with white.</li> </ul>	<p><b>Standard control button:</b></p> <ul style="list-style-type: none"> <li>• "Home" button.</li> </ul> <p><b>Control by the factory remote control:</b></p> <ul style="list-style-type: none"> <li>• Supported.</li> </ul>
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### Control of a factory parking heater

The module allows to activate the factory heater in order to warm-up the engine and interior. The module can be controlled from external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with car's remote key.

- ! • The module can be activated just only for one operating cycle after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the system is limited by 20 minutes.

### Module connection

The module is connected to the vehicle CAN bus by cutting into it (by paired wires CAN 1 and CAN 3) right at the climate system control unit which is under the gas pedal (see Figure 6). For detailed description of connection see Diagram 3.



Figure 6

### Control of an aftermarket heater

The module allows to activate the vehicle's climatic system and an aftermarket engine heater to warm up the engine and interior. The module can be controlled from external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the car's remote key.

### Module connection

The module is connected to the vehicle CAN bus by cutting into it (by paired wires CAN 1 and CAN 3) right at the climate system control unit which is under the gas pedal. For detailed description of connection see Diagram 2.

- ! For external heater it is required to enable alternative algorithm1 to do this:
  1. Within 10 seconds after ignition start up press the programming button 14 times.
  2. The module shall inform about the Item status by series of single flashes.
  3. Press one time the programming button.
  4. The module shall inform about the Item status by series of 2 flashes.

## Module application in Evoque (2011-2013), Freelander 2 (2013--)

<b>Group 5; subgroup 5 Vehicle CAN bus:</b> <ul style="list-style-type: none"> <li>• CAN-L – orange with violet.</li> <li>• CAN-H – gray with orange.</li> </ul>	<b>Standard control button:</b> <ul style="list-style-type: none"> <li>• "Home" button.</li> </ul> <b>Control by the factory remote control:</b> <ul style="list-style-type: none"> <li>• Supported.</li> </ul>
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### Control of a factory parking heater

The module allows to activate the factory heater in order to warm-up the engine and interior. The module can be controlled from external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the car's remote key.

- ! • The module can be activated just only for one operating cycle after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the sytem is limited to 20 minutes.
- The climatic system is activated in the blowing mode designed by the vehicle manufacturer.

### Module connection

The module is connected to CAN bus at any convenient place, for example at the climate system control unit which is behind the glove compartment. Module CAN 1 paired wire is used for connection (see Figure 7).

For detailed description of connection see Diagram 4.

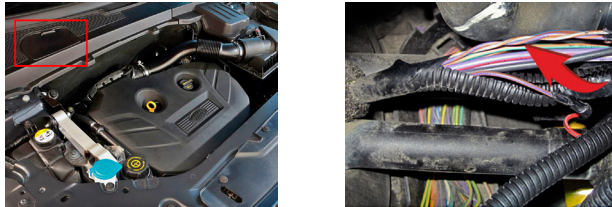


Figure 7

## Module application in Evoque (2014-2016)

<b>Group 5, subgroup 2 Vehicle CAN bus:</b> <ul style="list-style-type: none"> <li>• CAN-L – gray with violet</li> <li>• CAN-H – violet with green</li> </ul>	<b>Standard control button:</b> <ul style="list-style-type: none"> <li>• "Home" button.</li> </ul> <b>Control by the factory remote control:</b> <ul style="list-style-type: none"> <li>• Supported.</li> </ul>
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### Control of a factory parking heater

The module allows switching on the factory heater for engine and interior warm-up from additional devices (GSM module, aftermarket car alarm etc.) through the external input, by the standard vehicle button ("Home" button) or by the factory remote control.

- ! • The module can be activated just only for one operating cycle after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the sytem is limited to 20 minutes.
- The climatic system is activated in the blowing mode designed by the vehicle manufacturer.

### Module connection

The module is connected to CAN bus at any convenient place, connection is possible behind the climate control unit (Figure 8).

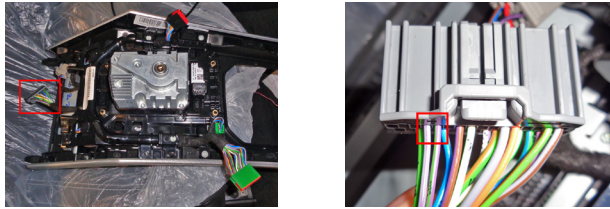


Figure 8

Module output №5 (blue yellow wire) has to be connected to the violet-brown wire in the heater harness (Figure 9).

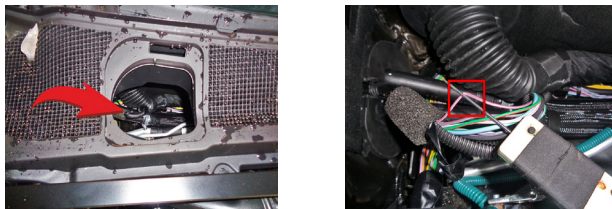


Figure 9

For detailed description of connection see Diagram 5.

- ! • The module can be activated just only for one cycle after the ignition is turned OFF, the next activation is possible after the ignition is turned back ON and then OFF.
- The maximum operating time of the sytem is limited to 20 minutes.
- The climatic system is activated in the blowing mode designed by the vehicle manufacturer.

#### Control of an aftermarket heater

The module allows to activate the vehicle's climatic system and an aftermarket engine heater to warm up the engine and interior. The module can be controlled from external devices (GSM-module, an aftermarket car alarm etc.) connected to one of two external control inputs; with the vehicle's interior button ("Home" button) or with the factory remote key.

#### Module connection

CAN1 and CAN3 twisted pairs are connected to the vehicle's CAN-bus in series right behind the climate control panel (figure 8). Refer to the diagram 2.

- ! To configure the module for operation with an aftermarket engine heater - setup the «Climate system alternative control algorithm №1», you may use TECprog or the built-in programming button:
  1. Press the programming button 14 times.
  2. The module will indicate the option №14 status by a series of one LED flash.
  3. Press the programming button 1 time.
  4. The system will respond with a series of two LED flashes.

### Module application in Discovery Sport (2015-2016)

<b>Group 5; subgroup 6</b> <b>Vehicle CAN bus:</b> <ul style="list-style-type: none"> <li>• CAN-L – grey with violet.</li> <li>• CAN-H – violet with green.</li> </ul>	<b>Standard control button:</b> <ul style="list-style-type: none"> <li>• "Home" button.</li> </ul>
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#### Control of a factory-fitted auxiliary engine heater

The module allows to activate the factory engine heater as well as the climatic system in order to warm up the engine and car's interior. The climatic system is activated in the last mode that had been used before the ignition was turned off.

#### Module connection

The twisted pairs CAN1 and CAN3 are connected to the vehicle's CAN-bus in series right behind the climate control panel (figure 10). Refer to the diagram 3.

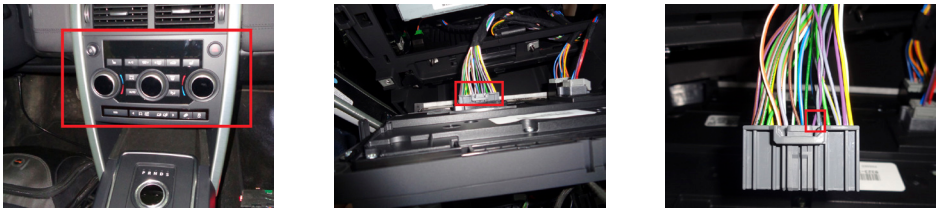


Figure 10

### Module application in Discovery Sport (2017-2019)

<b>Group 17; subgroup 1</b> <b>Vehicle CAN bus:</b> <ul style="list-style-type: none"> <li>• CAN-L – grey with violet.</li> <li>• CAN-H – violet with green.</li> </ul>	<b>Standard control button:</b> <ul style="list-style-type: none"> <li>• "Home" button.</li> </ul>
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#### Controlling a factory engine heater

The module allows to activate the factory engine heater as well as the climate system in order to warm up the engine and car's interior. The climate control module is activated in the last mode that had been used before the ignition was turned off.

#### Module connection

The twisted pairs CAN1 and CAN3 are connected to the vehicle's CAN-bus in series right behind the climate control panel (figure 10). Refer to the diagram 3.

### Discovery Sport (2019--), Evoque (2018--)

<b>Group 17; subgroup 2</b> <b>Vehicle CAN bus:</b> <ul style="list-style-type: none"> <li>• CAN-L – №11</li> <li>• CAN-H – №12</li> </ul>	<b>Standard control button:</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
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#### Controlling an aftermarket engine heater

The module allows to activate the climate control system in the last operating mode that was used before switching the ignition OFF and to simultaneously actuate an aftermarket engine heater.

Connections

CAN1 and CAN3 of the module should be connected to the vehicle CAN-bus in series right by the climate control unit (figure 11). Refer to the diagram 3 for details.

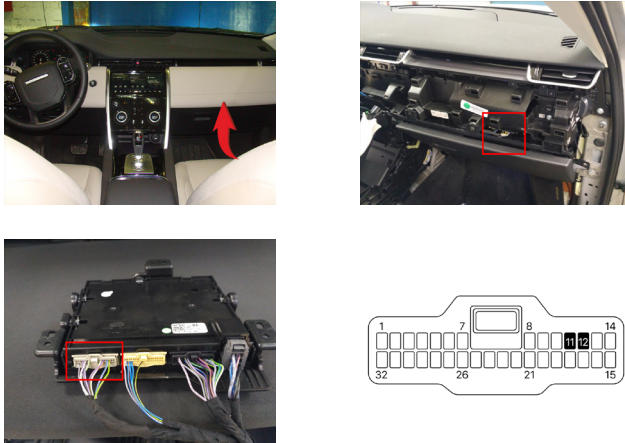


Figure 11

Diagram 1

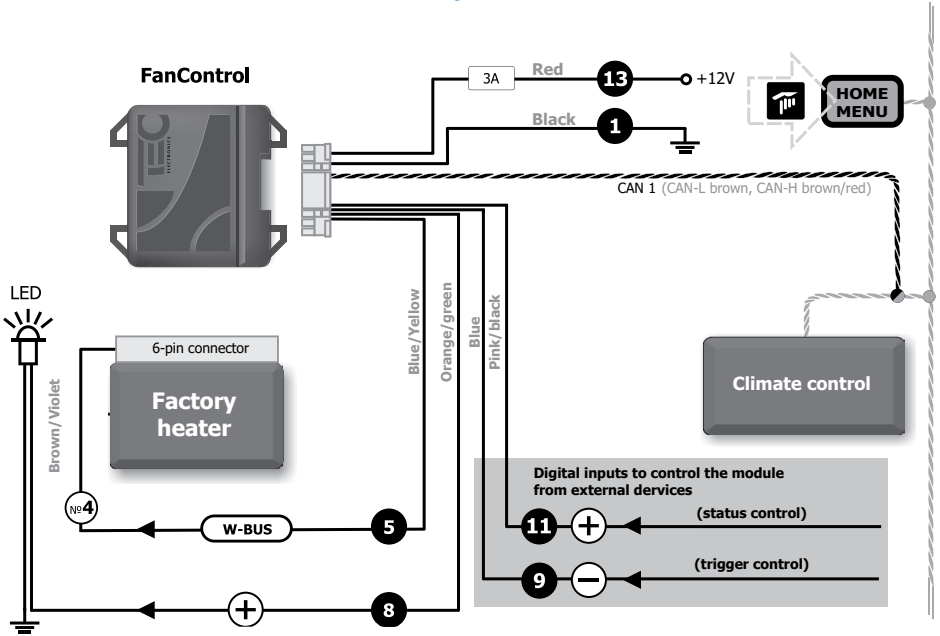


Diagram 2

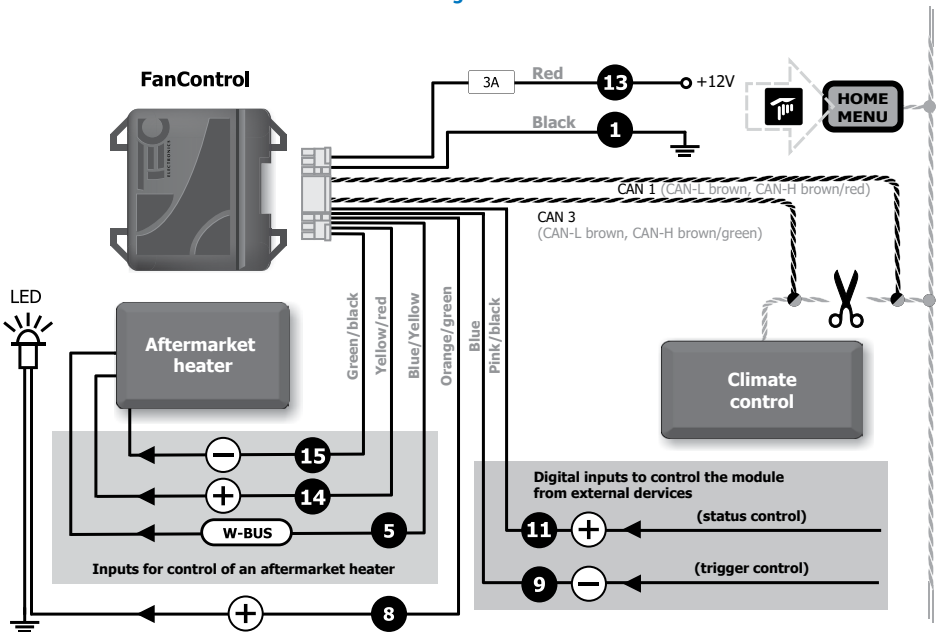


Diagram 3

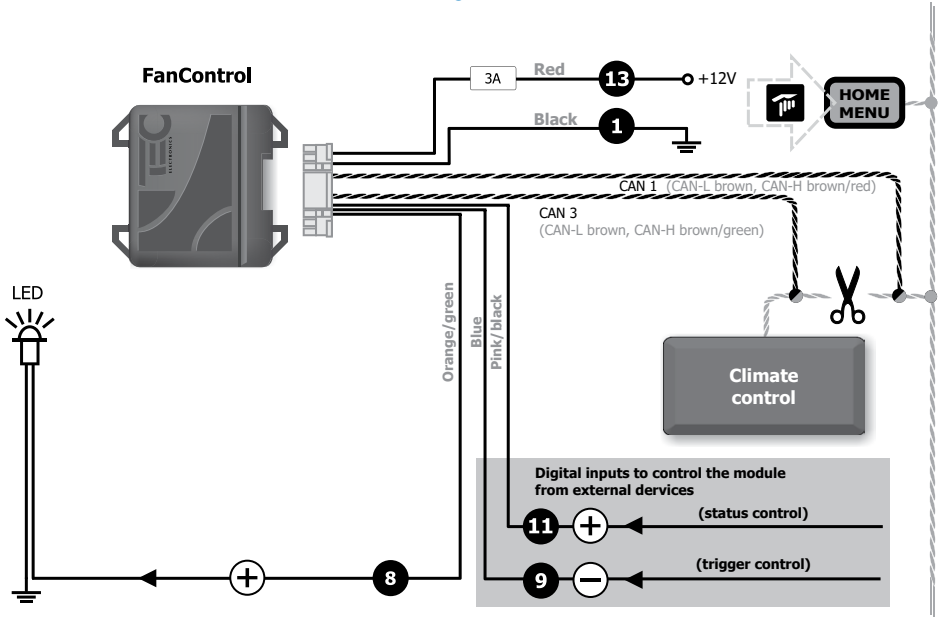


Diagram 4

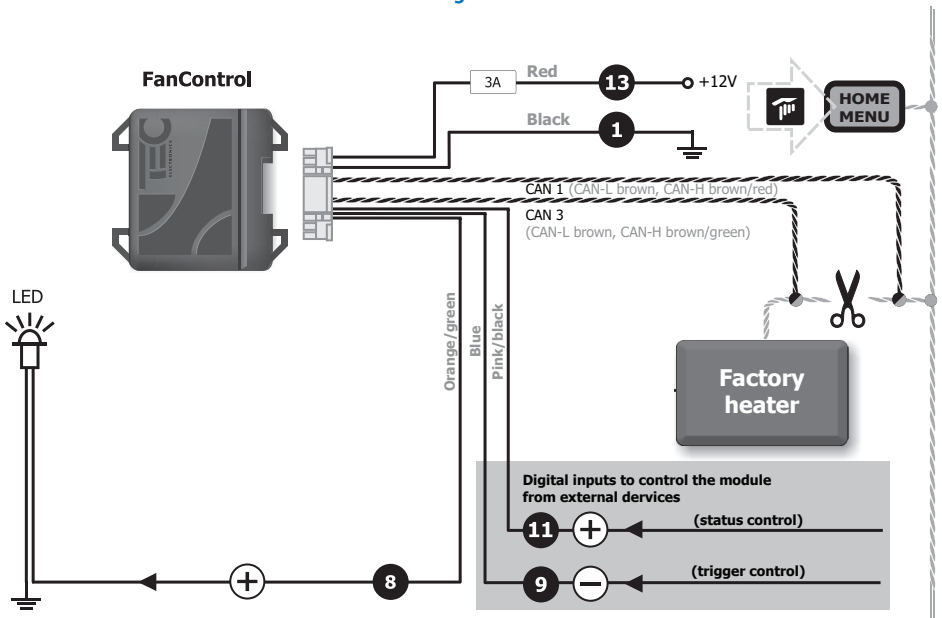


Diagram 5

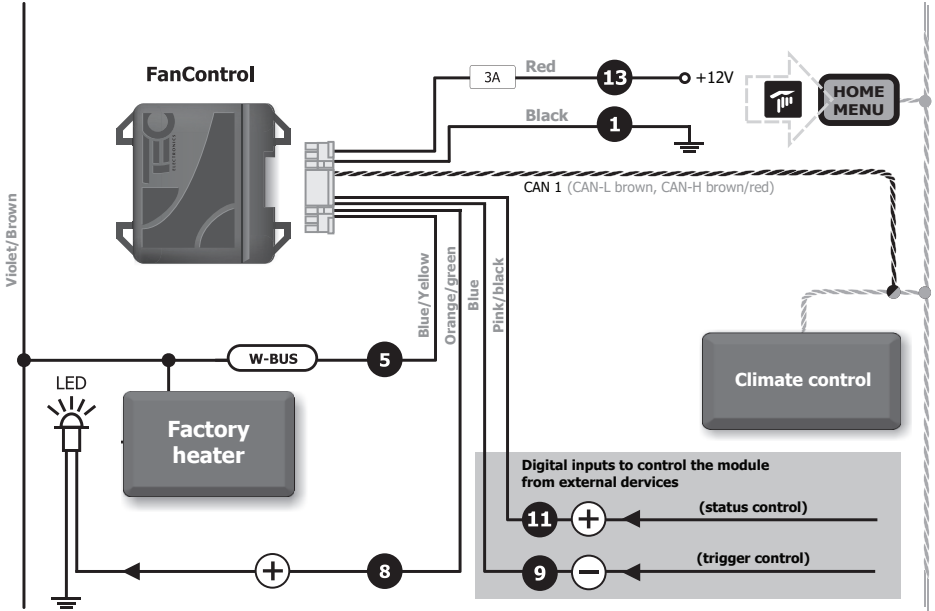


Diagram 6

