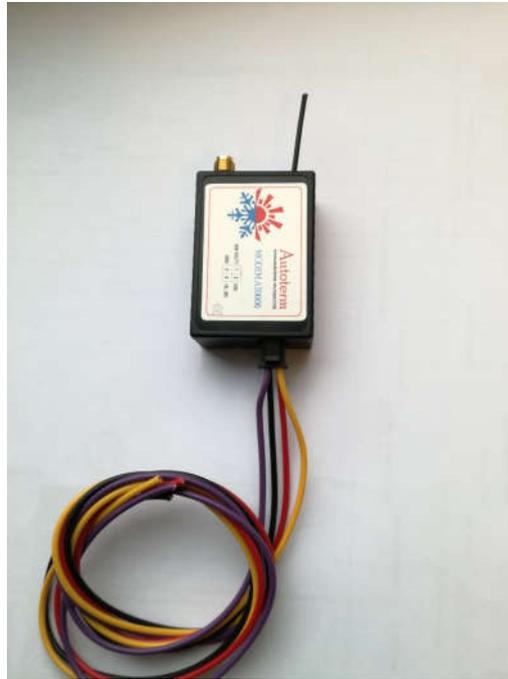


# Autoterm Qstart connection and set up manual



**Autoterm Qstart** (assy.AT0006) modem comes with a connector and connection wires.

Also the modem can be equipped with an GPS antenna.

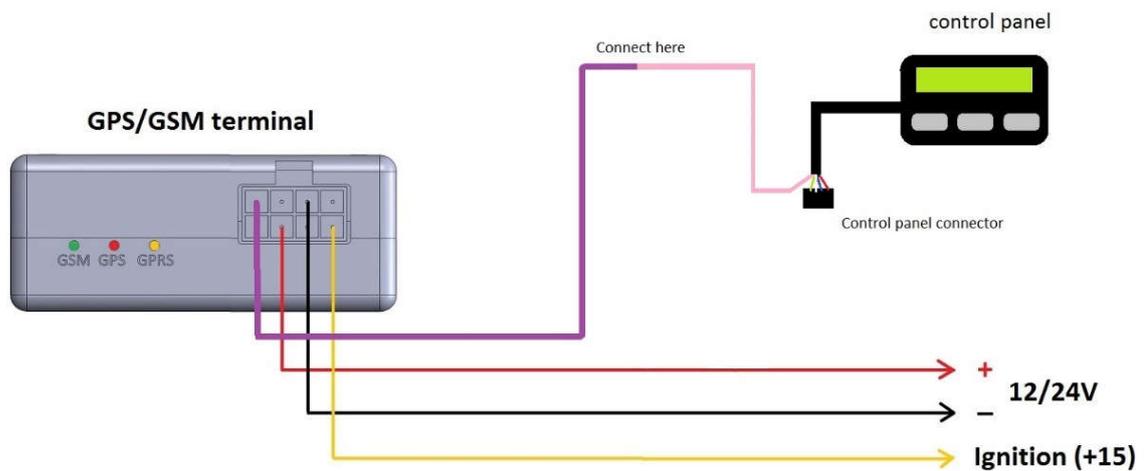


To connect **Qstart** modem to your heater there is two possibilities:

**First: Connecting **Qstart** modem to control panel**

If you have control panel with additional wire (it can be in Yellow or Pink color) like in picture below





You need to connect wires from modem like this:

Red wire connects to battery (+)

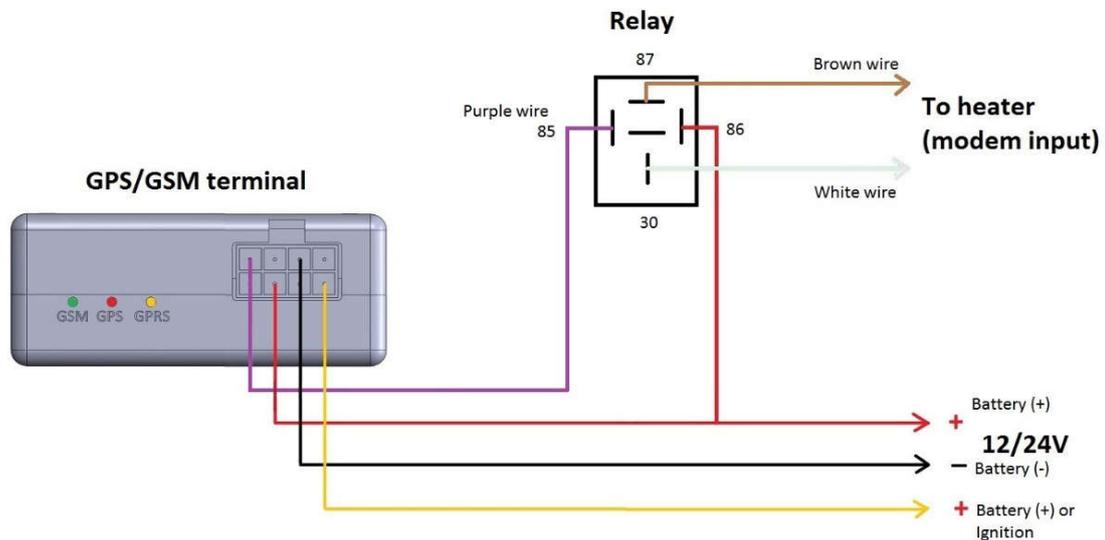
Yellow wire connects to ignition or battery (+)

Black wire connects to battery (-)

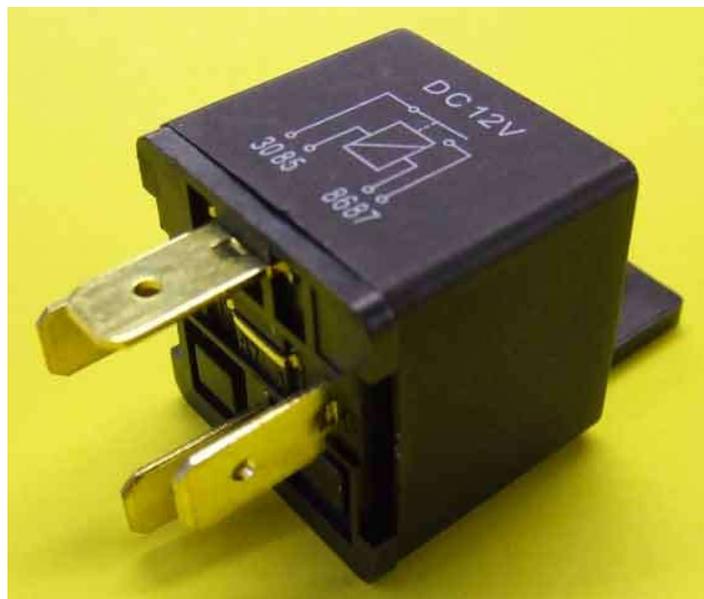
Purple wire connects with control panel additional wire  
(yellow or pink)

## Second: Connecting Qstart modem to heater trough relay

If you don't have additional wire to heater, then you need to connect modem to heater like this scheme



Attention!!! You need to get 4 pin relay for this connection type like in picture



Red wire connects to battery (+)

Black wire connects to battery (-)

Purple wire connects to "85" pin of relay

From heater (Modem wires) goes two wires brown and white



Those wires connects to "30" and "87" pins of relay

One more wire from battery (+) Connects to "86" pin of relay

## Setting up Qstart Modem

If one of these connection methods are done you need to insert sim card with no numbers in memory and without pin code

Factory settings for this modem is for connection with control panel

Remember if you connect this modem with relay, first you need to send one more message:

### **SET P99 0**

To start heater in preset mode just send these messages:

ON 30 (the heater will switch on for 30 min)

ON 60 (the heater will switch on for 60 min)

ON 120 (the heater will switch on for 120 min)

To turn off heater send:

OFF

For modems that are connected with relay you can start and stop heater for unlimited time with this messages:

To start heater:

SET P30 1

To stop heater:

SET P30 0

Before turning on the heater in a no-time limit of work, make sure that in the tank enough fuel and the heater will not harm the property or the health of

# Status indication LED

## GPS module status (Red LED).

Condition of LED	Description of operating mode
Constantly OFF	GPS module switched OFF.
Constantly ON	GPS module is not ready, module setup proceeding.
Fast blinking	GPS module ready, no GPS position detected.
Long blinks	GPS module ready, approximate position available.
Short blinks	GPS module ready, accurate position available.

## GSM module status (Green LED).

Condition of LED	Description of operating mode
Constantly OFF	GSM module switched OFF
Constantly ON	GSM module is not ready, module setup proceeding.
Fast blinking	GSM module ready, SIM card detecting/checking mode
Long blinks	GSM module ready, not registered, searching for available network.
Short blinks	GSM module ready, registered in network.
Double short blinks	Connected to GPRS/data transmission to server

If you have additional GPS antenna you can get GPS data with this command:

### GPS Actual GPS data

<b>Description</b>	This command requests actual GPS data from GPS receiver.
<b>Options</b>	Parameter is read only.
<b>Used values</b>	<b>LAT</b> – Actual Latitude in decimal degrees <b>LONG</b> – Actual Longitude in decimal degrees <b>SPEED</b> - Actual speed <b>FIX</b> – Actual GPS quality (0 and 1 – no position available, 2 – weak position, 3-good position) <b>SAT</b> – Number of satellites used for navigation
<b>Default value</b>	
<b>Comments</b>	
<b>Example</b>	To read parameter: <b>GET GPS</b>  Response from device: <b>LAT: 54.2345678</b> <b>LONG: 24.1234567</b> <b>SPEED: 0 KM/H</b> <b>FIX: 3</b> <b>SAT: 9</b>