

## Introduction

The instructions in this document are to be seen as a support to change basic settings of the Viper 2000 *after having consulted with UWE Verken*.



**This document must not be distributed to unauthorized, as it is a risk to spoil the climate system control if you enter wrong values. UWE Verken is not responsible for changes made in configuration mode, these changes are made at your own risk.**

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**If you enter wrong information, there is a possibility to return to default setting. But then you have to be conscious of that you discard all customized settings. Before starting to change settings in configuration mode, you should therefore note all the present settings.**


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Further information about the Viper 2000 can be found in the following documents:



- Product sheet
- Installation sheet
- User instructions
- Function check

## Changes in configuration mode


### Instructions to go to configuration mode

1. Press  for 5 seconds and the following display is shown:

```
Verify TestMode
↓ 20°C ↓* 20% ↓ 20°C ☀ 5
```

2. *Within 3 seconds*, press  (parking function button)  
Now you are in view mode.
3. Press  for 5 seconds (AUTO) and the following display is shown

```
Set Access Key
# 0 # 0 # 0 # 0
```

4. Press the access code; 1212
5. Press  and the following display is shown:

```
Grp: 0 Item: 0 Cen/Fah
↑ ↑ °C
```

You have now entered configuration mode. This means that you can change a number of basic settings, which in turn may lead to malfunction of Viper 2000 if you enter wrong information. Therefore it is important that the instructions are followed carefully. If you are unsure, contact UWE Verken.



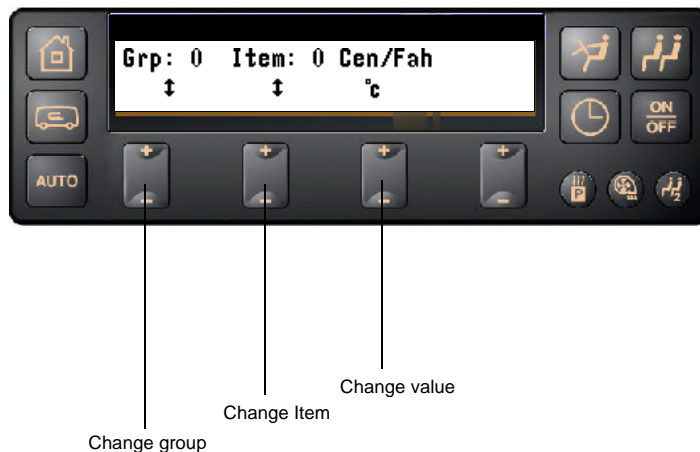
**UWE Verken is not responsible for changes made in configuration mode, these changes are made at your own risk.**

### Settings possible to change in configuration mode

When you have entered configuration mode you can change a number of general control methods within Group (Grp) 0, Grp 1 and Grp 2. You can also change settings for a specific component, for instance a heating fan or defroster temperature.

## Instructions to change general settings in configuration mode

First enter configuration mode (instructions page 2). To change general settings in Grp 0, Grp 1 and Grp2 you change via the function buttons according to the following:



## List of general settings

Grp	Item	Comp	Settings
0	0	Global	Unit Celcius or Fahrenheit. Not possible to change.
0	1	Global	Hide/Show. Decide whether you can be able to change for instance the passenger climate or not. These are the choices: ALL = means that driver-/passenger symbols are shown ACTIVE = means that driver-/passenger symbols are shown, provided that the components are connected Driver = means that passenger symbols are hidden, though the driver symbols are shown
0	2	Global	Set of temperature for AC lock. At temperature setting of +8°C the AC does not start below this temperature.
0	3	Global	Automatic return to home page. TRUE = Automatic return to home page FALSE = No automatic return to home page
0	4	Global	Home page locked for changes. TRUE = Home page locked for changes FALSE = Home page open for changes

Grp	Item	Comp	Settings
0	5	Driver	Concerns control of driver's place. <b>Manual</b> means that you manually set the driver's place parameters, i.e. manual setting of the defroster fan speed, blowers and flaps. <b>Auto</b> means that you set a desired driver's place temperature and the defroster temp, blowers and flaps are automatically controlled.
1	0	Driver	Min speed defroster fan in <b>heating mode</b> . Possible selections: 15-35%.
1	1	Comp 1	Min speed roof fan (TSV, EVAP, etc) <b>in heating mode</b> . Possible selections: 15-35%.
1	2	Comp 2	Min speed roof fan (TSV, EVAP, etc) <b>in heating mode</b> . Possible selections: 15-35%.
1	3	Driver	Min speed defroster fan <b>in AC mode</b> . Possible selections: 30-70%.
1	4	Comp 1	Min speed roof fan (TSV, EVAP, etc) <b>in AC mode</b> . Possible selections: 30-70%.
1	5	Comp 2	Min speed takfläkt (TSV, EVAP, etc) <b>in AC mode</b> . Possible selections: 30-70%.
1	6	Global	Main version. Not possible to change.
2	0	Driver	Balance ratio heating roof - floor. Adjustable -4 to +2 - gives less heat to roof circuit + gives more heat to roof circuit
2	1	Comp 1	Balance ratio heating roof - floor. Adjustable -4 to +2 - gives less heat to roof circuit + gives more heat to roof circuit
2	2	Comp 2	Balance ratio heating roof - floor. Adjustable -4 to +2 - gives less heat to roof circuit + gives more heat to roof circuit

Grp	Item	Comp	Settings
2	3	Driver	<p><b>Selection of primary heating method:</b>  Combi: Control of convector circuit  Viking: Shunt governing  Blower: Blower system</p> <p><b>If the circuit for this compartment not exist, choose:</b>  Co0: Recirculation blower connected to driver convector circuit 0  Co1: Recirculation blower connected to passenger circuit 1  Co2: Recirculation blower connected to passenger circuit 2</p>
2	4	Comp 1	<p><b>Selection of primary heating method:</b>  Combi: Control of convector circuit  Viking: Shunt governing  Blower: Blower system</p> <p><b>If the circuit for this compartment not exist, choose:</b>  Co0: Recirculation blower connected to driver convector circuit 0  Co1: Recirculation blower connected to passenger circuit 1  Co2: Recirculation blower connected to passenger circuit 2</p>
2	5	Comp 2	<p><b>Selection of primary heating method:</b>  Combi: Control of convector circuit  Viking: Shunt governing  Blower: Blower system</p> <p><b>If the circuit for this compartment not exist, choose:</b>  Co0: Recirculation blower connected to driver convector circuit 0  Co1: Recirculation blower connected to passenger circuit 1  Co2: Recirculation blower connected to passenger circuit 2</p>
2	6	-	Not used
2	7	-	Not used

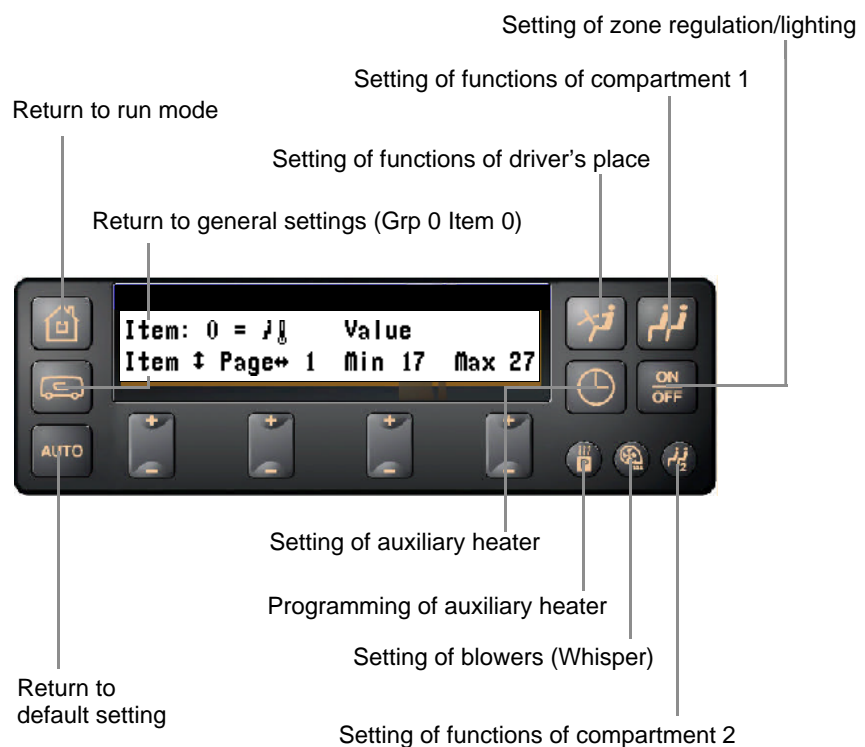
## Instructions to change component specific settings

First enter configuration mode (instructions page 2). In this mode you can beside the possibility to change general setting also decide how a specific component shall be controlled. For instance, there is possible to select whether a heating fan shall be controlled manually or not possible to turn off. Further on, it is possible to select defroster temperature range etc.

The procedure to change a setting is:

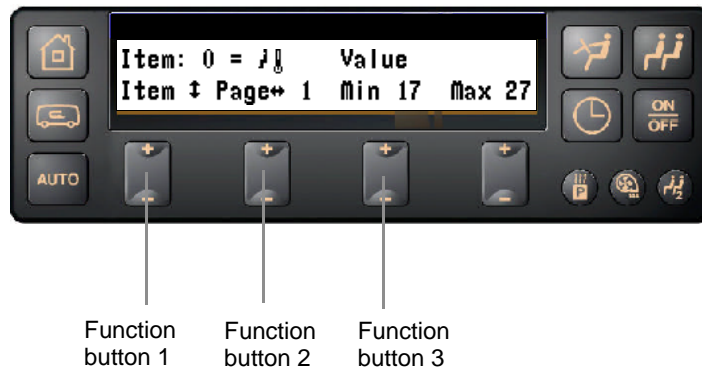
1. What component do you want to change?
2. In which compartment is the component/function situated? What button does correspond to the compoannt on Viper 2000? Press desired climate zone /function:

### The button functions in configuration mode



3. How do you want to control the component/function?
  - manually only?
  - automatically only?
  - automatically and manually?
  - not possible to shut off?
  - number of (ON)-steps (fan speeds, temp scale etc)
  - hide or show component symbol?
  - etc

4. Now choose the component according to the following:



- a) Step with function button 1 until you reach desired component.  
 b) After having selected component, you can with function button 2 choose between four different setting pages, they are:

- **Page 0 Index.** Here you select if the component shall be controlled manually, automatically etc. according to following:

Min -2: Means that the component/function not is possible to switch off:

```
Item: 1 = /&#101; Index
Item &#9650; Page<math>\leftrightarrow</math> 0 Min -2 Max 1
```

Min -1: Means possibility to control automatically:

```
Item: 1 = /&#101; Index
Item &#9650; Page<math>\leftrightarrow</math> 0 Min -1 Max 3
```

Min 0..: Means that the min setting is step 0...

```
Item: 1 = /&#101; Index
Item &#9650; Page<math>\leftrightarrow</math> 0 Min 0 Max 3
```

Min 1 means that the min setting is step 0 and so on...

Max defines how many steps the component shall be possible to regulate, for instance Max 10 is selected to be able to set the temperature in 10 steps.

Min/Max is set with button 3 and 4.

- **Page 1 Value.** defines the value range possible to select, for instance control between 17 and 27 degrees, alternately 0 and 100% for a fan.

- **Page 2 Option.** For unit selection. DON'T TOUCH!

- **Page 3 Hide/Set to.** Defines if it shall be possible to change a component setting, i.e. if the component symbol shall be hidden or shown to the driver. With function button 3 you choose Hide/True or False. With function button 4 there is a possibility to direct choose how to run the component:


-1: AUTO  
0: OFF  
1: Step 1  
2: Step 2  
etc.

**EXAMPLE: Setting of defroster fan**

The purpose with this example is to show practically how to enter configuration mode a change a basic setting of a certain component.

Problem: The defroster fan can as default be set in AUTO, OFF and fan speed 1, 2, 3. Instead, you want to change the basic setting so it is never possible to select higher fan speed then minimum speed. Besides you want to change so that it is not possible to shut the fan OFF.

Solution:

1. Go to “configuration mode” (instructions page 2)
2. Press the driver place button  and the following display is shown:

```
Item: 0 = j|  Value
Item ↓ Page↔ 1  Min 17  Max 27
```

3. Press function button 1 to go to the defroster setting:

```
Item: 1 = j*  Index
Item ↓ Page↔ 0  Min -1 Max 3
```

4. Select “Min -2” with function button 3. This means that it will not be possible to select shut off defroster fan. Select “Max 1” which means that it will be possible to select only one defroster fan speed, this display is shown:


```
Item: 1 = j*  Index
Item ↓ Page↔ 0  Min -2 Max 1
```

5. Press function button 2 to go to page 1; Value. Here you can set-Min-Max speed. Since you do not want higher speed than 30% (min), choose min 0 and max 30:

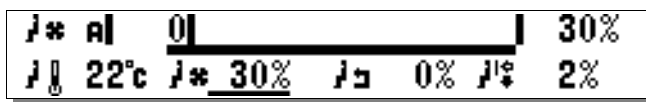
```
Item: 1 = j*  Value
Item ↓ Page↔ 1  Min 0  Max 30
```

6. Press function button 2 until you come to page 3, Hide. Select Hide: False, as you want the defroster symbol to be shown:

```
Item: 1 = j*  Hide Set To
Item ↓ Page↔ 3  False  -1
```

7. Now the settings in configuration mode are finished. Press  to return to run mode.

8. In order to check the result of the changes, press the driver's place symbol and regulate the defroster fan. You will now find out that you only will be able to choose between AUTO or 30% fan speed:



## Instructions to restore to default setting

To reset the settings to the settings as they were when leaving the factory, just follow these instructions:


1. Press  for 5 seconds and the following display is shown:

```
Verify TestMode
/| 20°C /* 20% #| 20°C ☀ 5
```

2. *Within 3 seconds*, press  (parking function button)  
Now you are in view mode.

3. Press  for 5 seconds (AUTO) and the following display is shown

```
Set Access Key
# 0 # 0 # 0 # 0
```

4. Press the access code; 1212
5. Press  and the following display is shown:


```
Grp: 0 Item: 0 Cen/Fah
↑ ↑ °C
```

6. Press  and the following display is shown

```
Restore default setup
Comp 0 False
```

7. Select the node that you want to reset with function button No 1  
Comp 0 = Display node  
Comp 1 = Compartment node 1  
Comp 2 = Compartment node 2
8. Press function button No 2 to reset (change from False to True) and the following display is shown

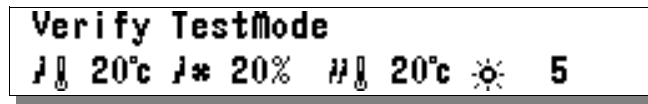
```
Filling EE
Comp 0 True
```



9. Press  to return to run mode.

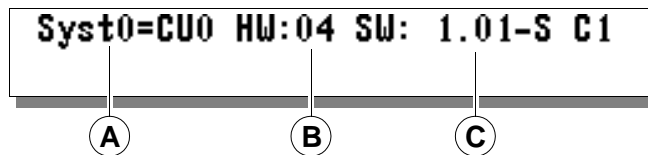
## Instructions to check version

The purpose of this chapter is to describe how to check the version of the Viper 2000 hardware and software.

1. Press  for 5 seconds and the following display is shown:







2. *Within 3 seconds*, press  (parking function button)
3. Press  (SMOG button) and the information about the display node is shown (syst0):



Explanation to the fields:

- A. Type of node (syst0=display, syst1=pass1, syst2=pass2)
- B. Hard ware card (in this example card 4)
- C. Software version (in this example 1.01)

4. Press  (passenger compartment 1) followed by a press on the  (SMOG) to check passenger node 1.
5. Articulated bus/bus with two passenger zones:  
Press  (passenger compartment 2) followed by a press on the  (SMOG) to check passenger node 2.