

Connection of communication unit 9998555

The communication unit can either be powered from the cigarette connector in the cab, or directly from the battery via cable **9809685**.

When programming/test unit **9808584** is used, the 24V relay can be replaced by a 12V relay for connection to vehicles with 12V electrical systems. In the same way, programming unit **9808635** can be connected to vehicles

with 24 V electrical systems by replacing the 12 V relay with a 24 V relay.

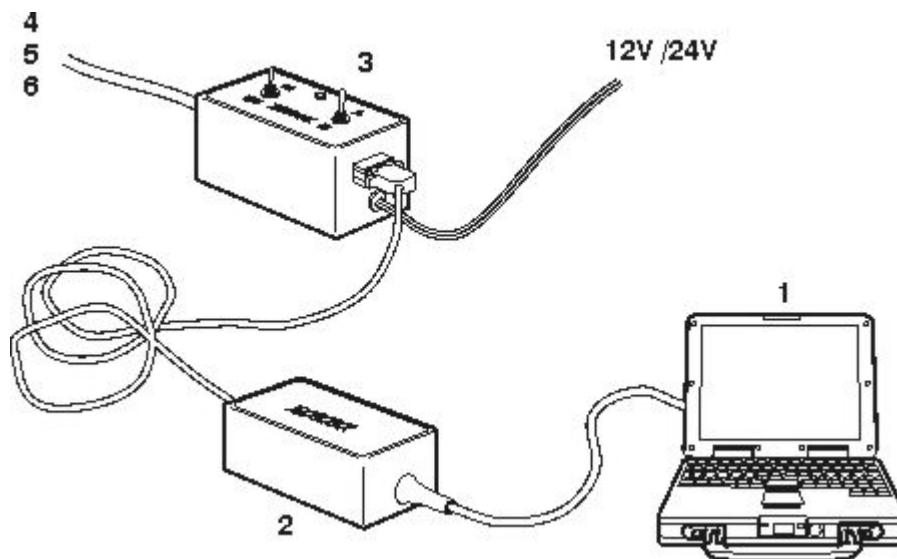
One of the switches on the communication unit is used to turn power to connected control units on or off. The other switch has two positions, A and B. Position A is used for programming of the vehicle control unit and control system D12A. Position B is used for programming or testing other control units.

On top there is an LED. The diode is lit during part of the operation.

Note: The LED shows if the communication unit is on or off.

When the control unit is directly connected it can be loaded with the complete software package. Any earlier software in the control unit will be overwritten. Parameters are automatically read from the control unit before new software is downloaded from the central system. When the control unit has been programmed with the new software, the original parameter settings are entered into the control unit again.

Note: Turn off the power supply to the control unit before connecting and disconnecting the cables!



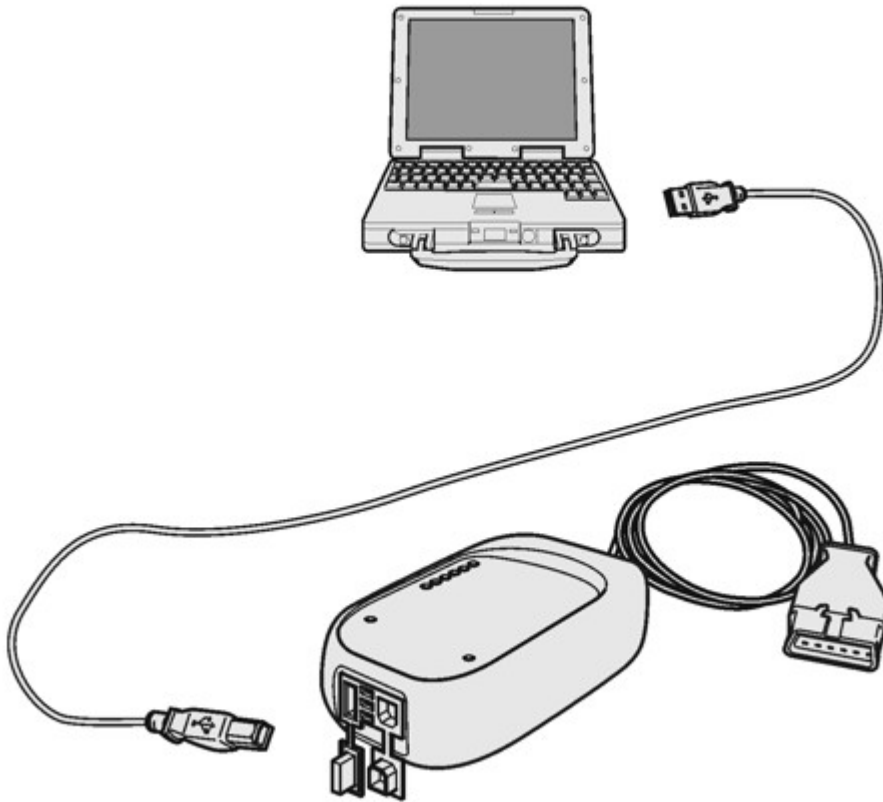
1. PC with VCADS Pro.
2. Communication unit, **9998555**.
3. Programming unit,
 - o **9808584** 24 V.
 - o **9808635** 12 V.
4. Cable for connecting directly to the engine control unit, **9808560** (not illustrated).
5. Cable for direct connection to the vehicle control unit, **9808561** (not illustrated).
6. Cable for direct connection to the instrumentation, **9808562** (not illustrated).

Connection of communication unit 88890020

There are three different ways, described below, of connecting communication unit **88890020**.

Via USB-cable

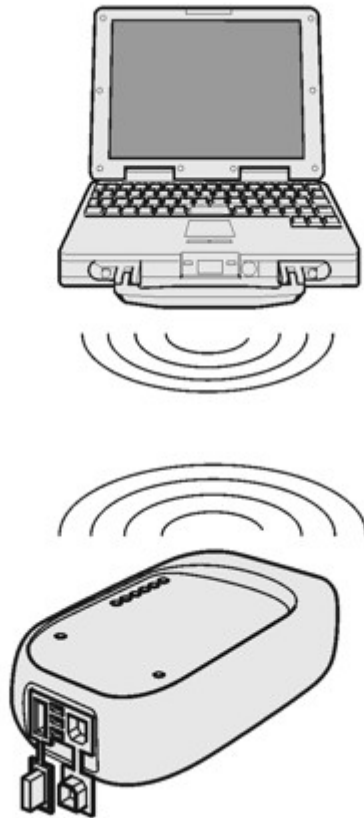
1. Connect the communication unit to the vehicle.
2. Connect the USB-cable between the communication unit and the PC.
3. Select communication unit **88890020** and USB-cable setting in window **Alternative**.



Directly to the communication unit

Note: Your PC must have Wireless LAN 802.11b/g and support for 128 bit WEP (encryption), if it is to be used for direct communication with the communication unit. The Panasonic CF29 has this built into the motherboard. Additional Wireless LAN cards will be recommended in the future.

1. Connect the communication unit to the vehicle.
2. Select communication unit **88890020** and **Direct to communication unit** in window **Alternative**.



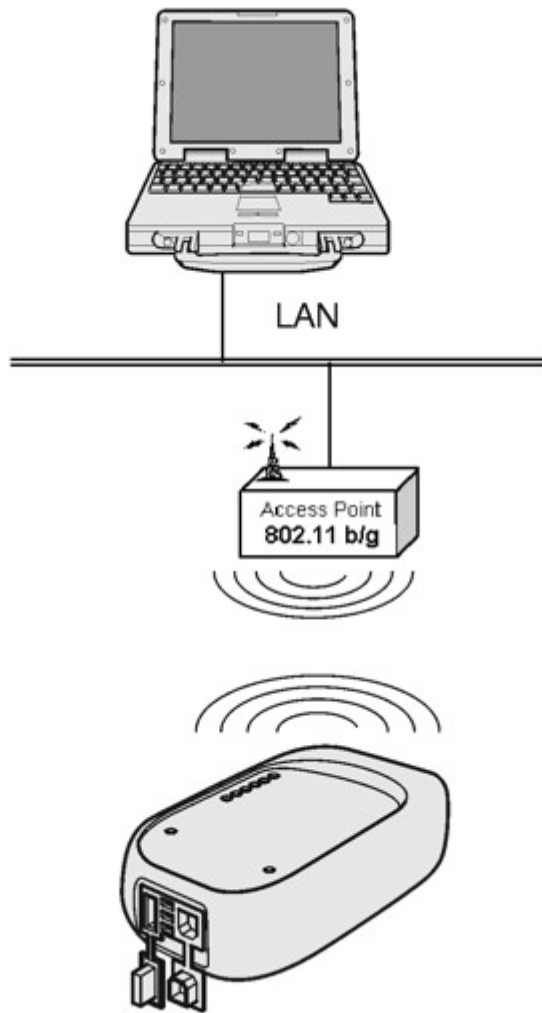
Security level Directly to the communication unit

Communication is performed using 128 bit WEP, Wired Equivalent Privacy. The WEP-key is generated automatically and is not seen during the configuration.

Via an access point

Note: Contact the local IT-support or network technician before installation.

1. Connect the communication unit to the vehicle.
2. Select communication unit **88890020** and **Via an access point** in window **Alternative**.



Security level Via an access point

There are three alternatives for this:

- WEP and MAC-address. Communication is performed using 128 bit WEP, Wired Equivalent Privacy. The WEP-key is written in during configuration. The MAC-address is to be written into the access point for additional security.
- WPA and PSK. Communication is performed via WPA, Wi-Fi Protected Access.
- 802.1x. Communication is performed using standard EAP_MSCHAP v2. The communication unit is then treated as a PC and will be logged on to the network using a username and password.

Product description for communication unit 88890020

Communication unit **88890020** has a number of different coloured LEDs. These LEDs show the status of the communication unit and indicate warnings, etc. Refer to the table below for an overview.