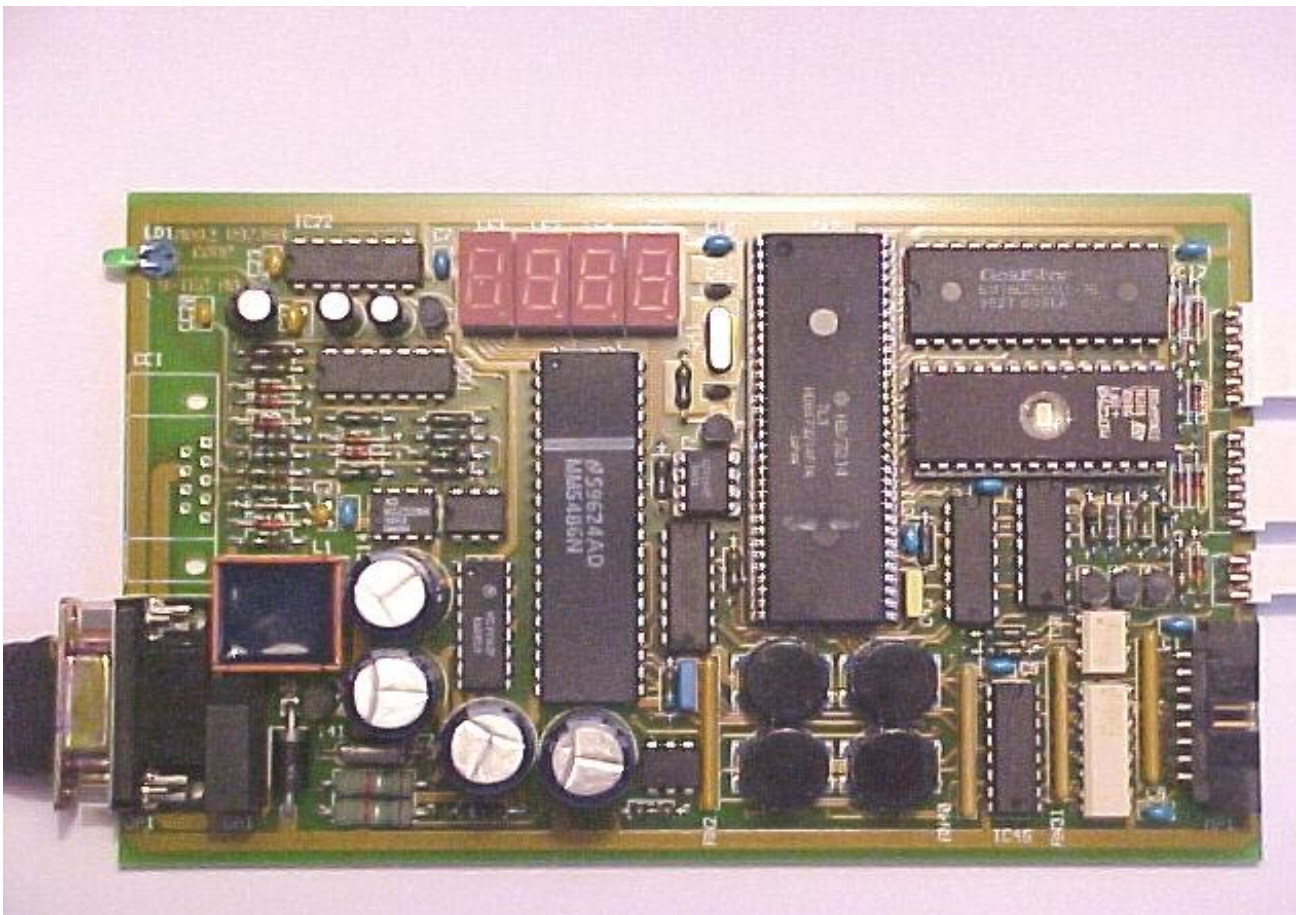




Softwaredescription MDB2 V9735 Initializing the Interface

Version of: 14.07.2000, update 05.11.2008





1. Application

The MDB2-Interface is a Vending Machine Controller VMC. It connects a Coffeemachine an one or more payment systems. The payment systems must have an MDB-Interface to connect them to the MDB2. The MDB2 connects directly to a coinacceptor CF330 from Mars electronics international. The powerful software on the MDB2 knows a connected payment system automatically an makes an autoconfiguration. All MDB-payment systems that are known by the auto plug'n'play Apnp-software are found in the chapter of the payment systems. The functions of the software on the interface can be controlled over the four programming keys and the 7segment LED-display. This is the description for programming the parameters on the interface. It is specially useful for the technician implementing the connection between coffeemachine and payment system.

The following functions can be programmed or parametrized:

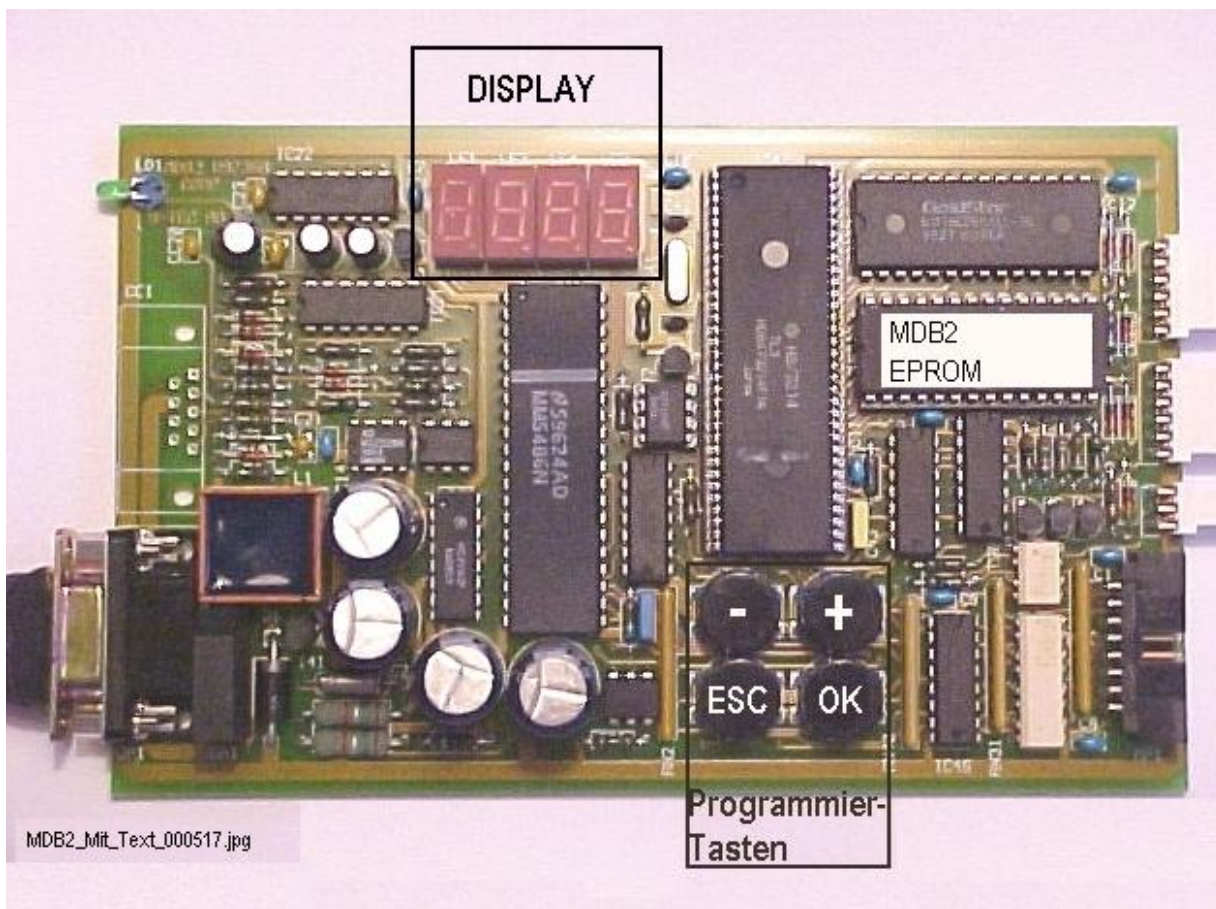
<input checked="" type="checkbox"/>	PRIC	Price	Prices of the products [1..128]
<input checked="" type="checkbox"/>	PTAB	Pricetable	Selection of active pricetable [1..6]
<input checked="" type="checkbox"/>	M-CH	Moneychann	Money channels of coinacceptor [1..6]
<input checked="" type="checkbox"/>	SCAL	Scalefaktor	Scalefactor for the prices [1,5,10]
<input checked="" type="checkbox"/>	DPOS	Dotposition	Dotposition for the 7segment LED-Display
<input checked="" type="checkbox"/>	ENAB	Enable	VMC-Enable for power-up
<input checked="" type="checkbox"/>	CRED	Creditdisplay	Show credit on the display for EC-Cash
<input checked="" type="checkbox"/>	REST	Remainingcredit	Clear remaining credit for coinacceptor, after a product is sold





2. Programming

Those elements are important for the programming of the MDB2-Interface:



The programming keys have the following functions:

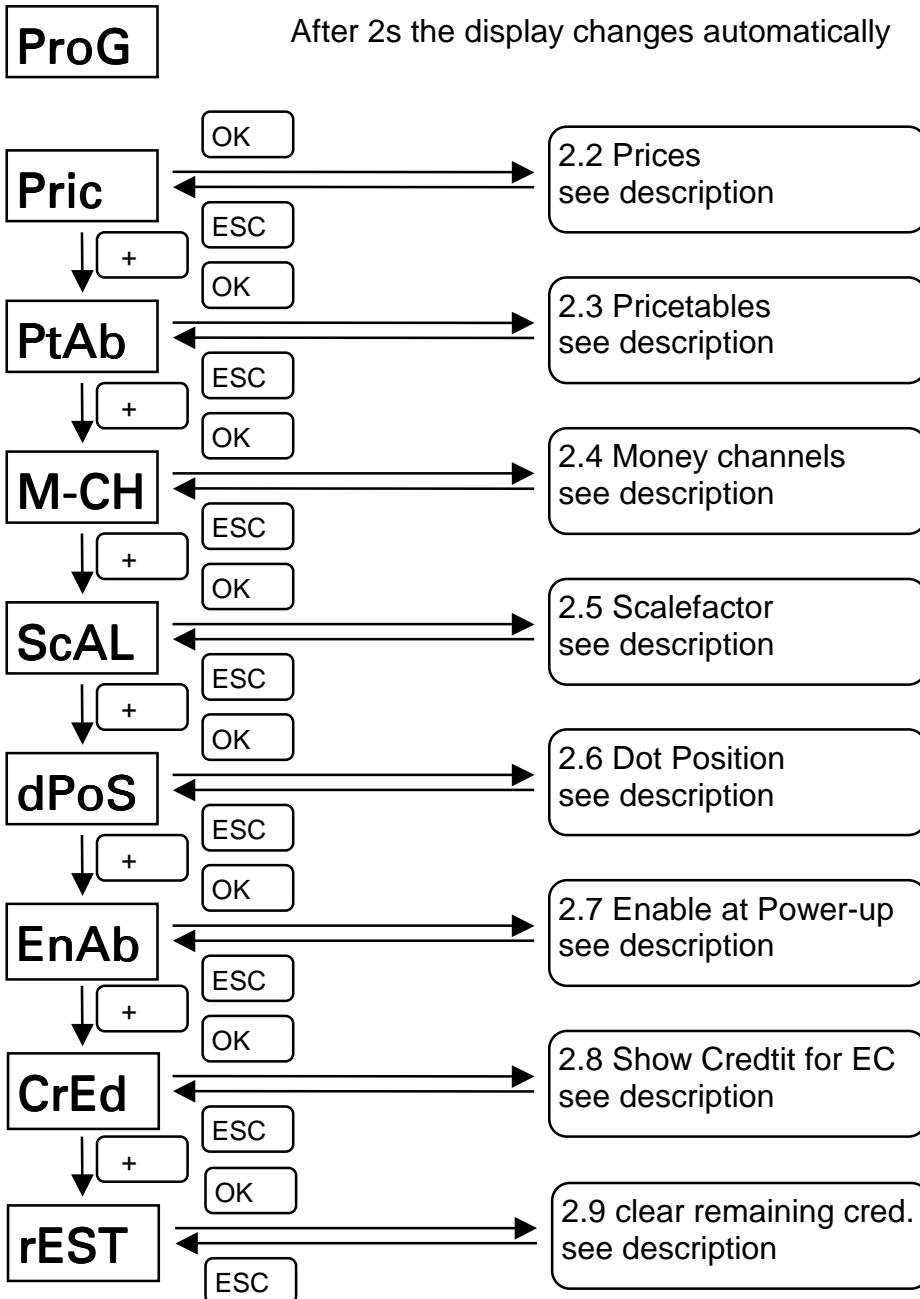
OK	OK/enter programming
ESC	ESC quit without update
-	Minus
+	Plus





2.1 Programming structure

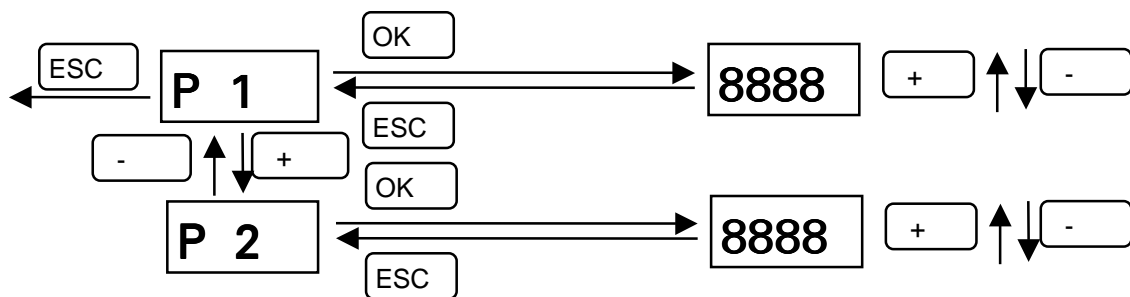
To enter the programming mode the **OK** -key has to be pressed for 3s until the following message appears on the display:





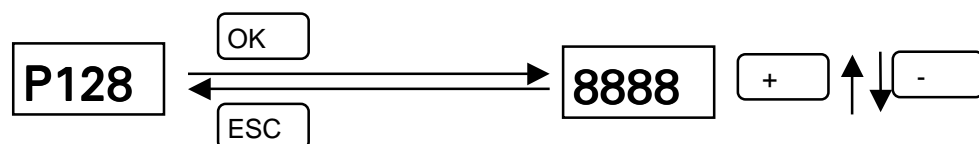
2.2 Programming the Prices

Up to 128 Product prices can be programmed in the MDB2-Interface. Up to 6 different pricetables (lists of prices) are possible (see also chapter 2.3). The pricetables must only be programmed, if the coffeemachine debits over the product code and if the prices are not loaded with the appropriate function of the CCI-protocol.



usw.

The prices are programmed with the +/- keys. After a certain delay the autorepeat function begins.



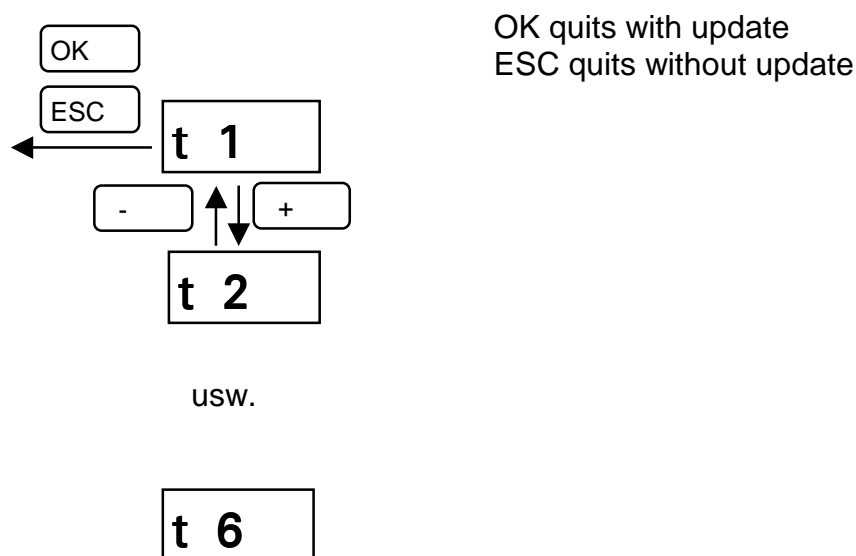
This function has no importance for the Black & White coffeemachines and other coffeemachines which have the programming of the product prices on the machine itself.





2.3 Pricetables

On the MDB2-Interface up to 6 pricetables can be used. With the function PTAB the actual pricetable is selected. The pricetable is also valid for the programming of the product prices. It stays valid until an other pricetable is activated by the coffeemachine over the CCI-interface. By default the pricetable 1 is used.



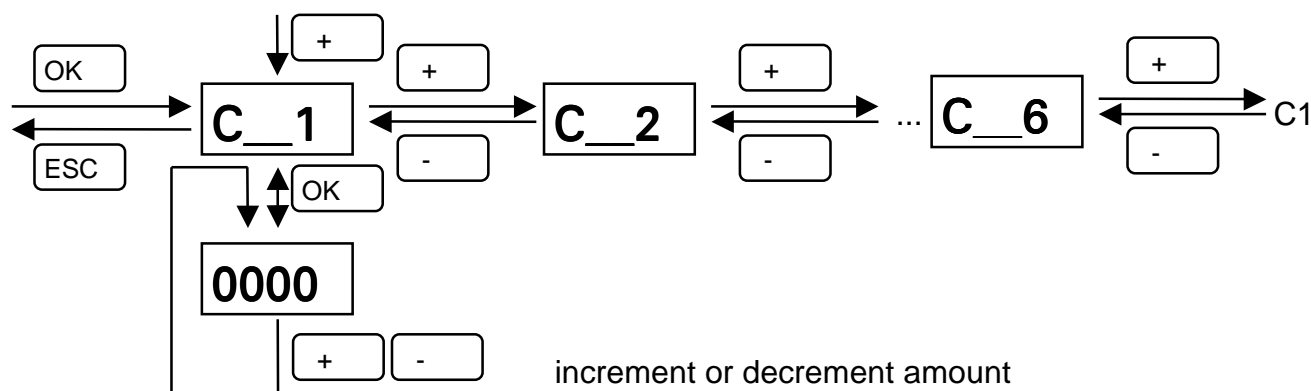
This function has no importance for the Black & White coffeemachine and other coffeemachines which don't use the pricelist function.





2.4 Money channels / coin channels

With this function the coin channels of the Mars coinacceptor CF330 can be programmed.



The MDB2-Interface supports 6 coin channels for the Mars coinacceptor CF330. This is the proposal for different countries:

Channel	CH	EU
1 A	0.10	0.10
2 B	0.20	0.20
3 C	0.50	0.50
4 D	1.00	1.00
5 E	2.00	2.00
6 F	5.00	5.00

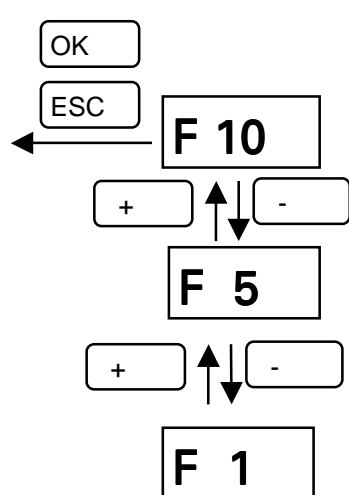
The factory setting for the MDB2-Interface is CH / EU.





2.5 Scalefactor

This function is needed for calculating the prices from 8-bit values. Mostly the scalefactor is the least common divider of a coin set. The scalefactor ist multiplied by the 8-bit-Value of the price from the pricetable to obtain the correct price in valueunits. For the swiss coinset without the 5 pence coin, the scalefactor is 10. For a coinset with a 5pence and a 25pence coin, the scalefactor would be. The default value for the scalefactor is 10.



OK quits with update
ESC quits without update

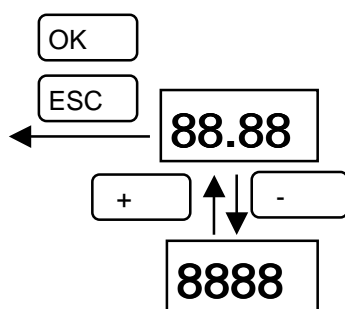
This function has no importance for the Black & White coffeemachine an other coffeemachines that don't use the pricelist function.





2.6 Dotposition

The function dotposition is used for the correct representation of the amount on the 7segment LED-display. When the dot is activated there are 2 digits representing whole units and 2 digits after the dot. This is the default setting.



OK quits with update
ESC quits without update

The dotposition has no influence on the internal treatment of the valueunits und between the interface, the payment system and the coffeemachine.

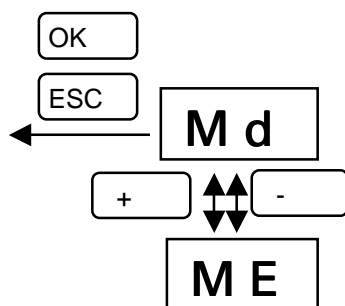




2.7 Enable at Power-up

Some coffeemachines do not send an Vend-Enable-command to the interface. Those machines assume, that the interface is ready as it is powered up. For testpurposes without coffeemachine it can be very useful, to enable the interface manually. If this function is enabled, the MDB2 interface is ready after power-up to take valueunits. The connected payment systems are initialized and enabled.

The default is disable. After a power-up the coffeemachine must enable the MDB2-interface with the Vend-Enable command. Normally the coffeemachine does this after initializing mechanical parts and after heating up just before it goes to the ready state. When the vend enable command is received, the interface enables all payment systems connected to it.



OK quits with update
ESC quits without update

Interface disable after power-up (default)

Interface enable after power-up

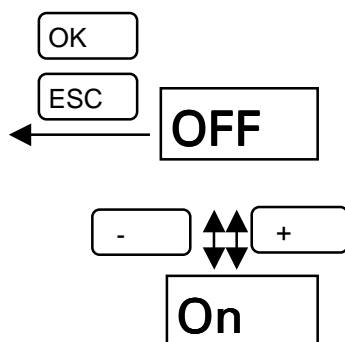
This function is only used for coffeemachines without Vend-Enable (very seldom). It also can be used to test the interface without coffeemachine.





2.8 Credit

Some manufacturers of payment systems especially the EC-Cash-payment system (Electronic Purse) used in switzerland, want that the stored amount of the media isn't shown on the display of the coffeemachine. For the installation nevertheless it could be useful to show the amount on the coffeemachine to check and debug the system. After the installation this function must be set according to the description of the payment system manufacturer.



OK quits with update
ESC quits without update

disables credit display on the coffeemachine (default).

enables credit display on the coffeemachine.

This function operates only with an EC-Cash payment system.

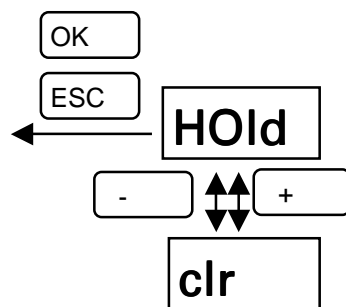




2.9 Clear remaining amount

When a coinacceptor is connected to the MDB2-interface it happens, that there is more credit than the price of the product. If this function is enabled, the remaining amount is cleared, after the product is done. There are two possibilities how to handle the remaining credit:

1. The remaining credit stays valid. (default)
2. The remaining credit is cleared and belongs to the operator of the installation.



OK quits with update
ESC quits without update

remaining credit stays valid (default).

remaining credit is cleared.

This function only operates with the coinacceptor.

This function clears the (eventually) remaining credit on the display only after the next product is sold!





3. Reset in the field (Fieldreset)

It happens very seldom, that an Interface has to be moved from one place to another. In this case or when all parameters are badly programmed, it is necessary to bring the MDB2-interface to the factory state.

1. To reset the interface the press the -key for 3s until the following message appears on the display:

After 2s the display changes automatically, then you have to repeat step 1.

2. After the message prog appears, immediatly press the -key two times.

On the display the message appears.

3. Press the -key for 2sec.

The interface is initialized to the factory default values.

On the display the message appears.

Attention: Step 2 must be performed immediately after step 1 to enter the reset sequence. Otherwise the setup sequence is entered!

