PROGRAMMING

Modifications journal

Revision:	Date:	Modifications	Initials:
0	2009-04-24	Basic document, first edition	FC
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Overview modifications

Page	REVISION											Page	REVISION											Page	REVISION										
	0	1	2	3	4	5	6	7	8	9	10		0	1	2	3	4	5	6	7	8	9	10		0	1	2	3	4	5	6	7	8	9	10
1	X																																			
2	X																																			
3	X																																			
4	X																																			
5	X																																			
6	X																																			
7	X																																			
8	X																																			
9	X																																			
10	X																																			
11	X																																			
12	X																																			
13	X																																			
14	X																																			
15	X																																			
16	X																																			
17	X																																			
18	X																																			
19	X																																			
20	X																																			
21	X																																			
22	X																																			
23	X																																			

X	Changes in content, corrections	S	New paging

	DEUTSCH	ENGLISH	CT	CTS	CTMF	CTMF MRU	CTMcool
			V1.01	V1.13	V1.07 /FCC1.14	V1.07 /FCC1.14	V1.20
	Servicekarte	Service Card	X	X	X	X	X
1.	Bezüge Mühle 1 Total x	Supplies Grinder 1 Total x	X	X	X	X	X
2.	Milchmenge 1 Tasse	Milk quantity 1 cup			X	X	X
3.	Milchmenge 2 Tassen	Milk quantity 2 cups			X	X	X
4.	Macchiato Wartezeit: x s	Macchiato Waittime: x s					X
5.	Espr.Macchiato Schaumver. x s	Macchiato Foamdelay x s					X
6.	Wassermenge 1 Tasse	Water quantity 1 cup	X	X	X	X	X
7.	Wassermenge 2 Tassen	Water quantity 2 cups	X	X	X	X	X
8.	Teezeit	Teatime		X			
9.	Kaffeearoma M1 1 Tasse	Coffee aroma M1 1 cup	X	X	X	X	X
10.	Kaffeearoma M1 2 Tassen	Coffee aroma M1 2 cups	X	X	X	X	X
11.	Kaffeearoma M2 1 Tasse	Coffee aroma M2 1 cup	X	X	X	X	X
12.	Kaffeearoma M2 2 Tassen	Coffee aroma M2 2 cups	X	X	X	X	X
13.	Zyclenmenge Low (2.5s)	Cyclequantity Low (2.5s)			X	X	

	DEUTSCH	ENGLISH	CT V1.01	CTS V1.13	CTMF V1.07 /FCC1.14	CTMF MRU V1.07 /FCC1.14	CTMcool V1.20
14.	Sprache deutsch	Language english	X	X	X	X	X
15.	Kaffeetemperatur xx°C xxx°F	Coffee temp. xx°C xxx°F	X	X	X	X	X
16.	Kaffeefreigabe xx°C xxx°F	Coffeereadylevel xx°C xxx°F	X	X	X	X	X
17.	Produktewahl	Key selection	X	X	X	X	X
18.	Produktetext	Key text	X	X	X	X	X
19.	Pulvermenge M1 1 Tasse	Powder quantity M1 1 cup	X	X	X	X	X
20.	Pulvermenge M1 2 Tassen	Powder quantity M1 2 cups	X	X	X	X	X
21.	Pulvermenge M2 1 Tasse	Powder quantity M2 1 cup	X	X	X	X	X
22.	Pulvermenge M2 2 Tassen	Powder quantity M2 2 cups	X	X	X	X	X
23.	Vorbrühzeit M1 1 Tasse	Prebrew time M1 1 cup	X	X	X	X	X
24.	Vorbrühzeit M1 2 Tassen	Prebrew time M1 2 cups	X	X	X	X	X
25.	Vorbrühzeit M2 1 Tasse	Prebrew time M2 1 cup	X	X	X	X	X
26.	Vorbrühzeit M2 2 Tassen	Prebrew time M2 2 cups	X	X	X	X	X
27.	Vorbrühzeit POD	Prebrew time POD	X	X	X	X	X

	DEUTSCH	ENGLISH	CT V1.01	CTS V1.13	CTMF V1.07 /FCC1.14	CTMF MRU V1.07 /FCC1.14	CTMcool V1.20
28.	Entspannzeit M1 1 Tasse	Relax time M1 1 cup	X	X	X	X	X
29.	Entspannzeit M1 2 Tassen	Relax time M1 2 cups	X	X	X	X	X
30.	Entspannzeit M2 1 Tasse	Relax time M2 1 cup	X	X	X	X	X
31.	Entspannzeit M2 2 Tassen	Relax time M2 2 cups	X	X	X	X	X
32.	Entspannzeit POD	Relax time POD	X	X	X	X	X
33.	Nachpressung M1 1 Tasse	Press after M1 1 cup	X	X	X	X	X
34.	Nachpressung M1 2 Tassen	Press after M1 2 cups	X	X	X	X	X
35.	Nachpressung M2 1 Tasse	Press after M2 1 cup	X	X	X	X	X
36.	Nachpressung M2 2 Tassen	Press after M2 2 cups	X	X	X	X	X
37.	Mühle wechseln	Mill change	X	X	X	X	X
38.	Cappuccino Art	Cappuccino mode			X	X	X
39.	Milch Art	Milk mode			X	X	
40.	Bypass 1 Tasse	Bypass 1 cup	X	X	X	X	X
41.	Bypass 2 Tassen	Bypass 2 cups	X	X	X	X	X

	DEUTSCH	ENGLISH	CT	CTS	CTMF	CTMF MRU	CTMcool
			V1.01	V1.13	V1.07 /FCC1.14	V1.07 /FCC1.14	V1.20
42.	Mehrfachbezug	Multiple	X	X	X	X	X
43.	Filter x nicht aktiv	Filter x not active	X	X	X	X	X
44.	Servicezähler x	Service counter x	X	X	X	X	X
45.	Milchtemperatur xx°C xxx°F	Milk temp xx°C xxx°F		X	X	X	
46.	Milchfreigabe xx°C xxx°F	Milkreadylevel xx°C xxx°F			X	X	
47.	Calibratesensor xx°C xxx°F	Calibratesensor xx°C xxx°F		X			
48.	Kaffeesatz 800g	Grounds 800g	X	X	X	X	X
49.	Kaffeedrehzahl 1300rpm (1/min)	Coffeerevolution 1300rpm (1/min)	X	X	X	X	X
50.	Teedrehzahl 900rpm (1/min)	Tearevolution 900rpm (1/min)		X			
51.	Fülldrehzahl 1500rpm (1/min)	Fillrevolution 1500rpm (1/min)		X			
52.	Milchdrehzahl 900rpm (1/min)	Milkrevolution 900rpm (1/min)					X
53.	Schaumdrehzahl 1500rpm (1/min)	Foamrevolution 1500rpm (1/min)					X
54.	Heizung aus bevor Milchbezugsende 2000 ms	Turn off heater before Milkbeverage end 2000 ms					X
55.	Minimale Spülzeit nach Milchbezug 500 ms	Minimal Rinsetime after Milkbeverage 500 ms					X

	DEUTSCH	ENGLISH	CT	CTS	CTMF	CTMF MRU	CTMcool
			V1.01	V1.13	V1.07 /FCC1.14	V1.07 /FCC1.14	V1.20
56.	Spülzeit nach Milchbezug heiss 5000 ms	Rinsetime after Milkbeverage hot 5000 ms					X
57.	Spülzeit nach Milchbezug kalt 3000 ms	Rinsetime after Milkbeverage cold 3000 ms					X
58.	Milchansaugzeit normal 4000 ms	Milksuckintime normal 4000 ms					X
59.	Milchansaugzeit nach Milchspülung 7000 ms	Milksuckintime after milkrinse 7000 ms					X
60.	Reinigung Füllzeit 32 s	Cleanfill Time 32 s					X
61.	Pumpzeit Reinigungszyclus 20 s	Pump Time clean cycle 20 s					X
62.	Pumpzeit Spülzyklus 50 s	Pump Time rinse cycle 50 s					X
63.	Pumpzeit während Reinigung not active	Pump Time during cleaning not active					X
64.	Milchniveau Überwachung Niv1 on Niv2 off	Milkniveau Control Niv1 on Niv2 off					X
65.	Debit / Credit Off	Debit / Credit Off	X	X	X	X	X
66.	Maschinentyp normal	Machine type normal	X	X	X	X	X
67.	Keyboard 8 key	Keyboard 8 key	X	X	X	X	X
68.	Serviceinterall 50000p	Service interval 50000p	X	X	X	X	X
69.	Spülintervall Kaffee x min	Rinse Interval Coffee x min	X	X	X	X	X

	DEUTSCH	ENGLISH	CT V1.01	CTS V1.13	CTMF V1.07 /FCC1.14	CTMF MRU V1.07 /FCC1.14	CTMcool V1.20
70.	Reinigungsalarm 1000	Cleaning alarm 1000	X	X	X	X	X
71.	Powermanagement On	Powermanagement On		X	X	X	
72.	Motorswitch Switch	Motorswitch Switch	X	X	X	X	X
73.	Mahlposition 358	Mill position 358	X	X	X	X	X
74.	Spannungsüberwa. nicht aktiv	Voltagecontrol not active	X	X	X	X	X
75.	Kaltstartspülung 1.3 Liter	Cold start rinse 1.3 Liter	X	X	X	X	X
76.	Autom.Befüllung aktiv	Autofill Funct. active			X	X	
77.	Niveauvorwahl erweitert ein	Level range extended on			X	X	
78.	Niveauanzeige MRU ein	Leveldisplay MRU on			X	X	
79.	Autoreinigung aktiv	Autoclean active			X	X	
80.	Milch_Entleerung aktiv	Milk_Dump active			X	X	
81.	Boilerspülung Off	Boilerpurge Off		X			
82.	Standby Temp. nicht aktiv	Standby Temp. Not active	X	X	X	X	X
83.	Wasseranschluss Netzdruck	Water normal	X	X	X	X	X

	DEUTSCH	ENGLISH	CT V1.01	CTS V1.13	CTMF V1.07 /FCC1.14	CTMF MRU V1.07 /FCC1.14	CTMcool V1.20
84.	Option Zähler On	Option counter On	X	X	X	X	X
85.	Satzbehälter Zeit 5s	Drawer Time 5s	X	X	X	X	X
86.	Milchstarttemp. Hoch	Milkstarttemp. High			X	X	

Using the <u>Service Master Card</u> the technician can
access and program the individual beverage settings.

The following pages explain how to navigate within the programming parameters.

After inserting the Sevice Master Card, the display reads „Service Card"
The adjustments on the beverage setting can now be made.

FUNCTION OF THE „STEP-KEY"

Press the „step" key to enter the programming menus.

Step forward
Press „step"-key.

Step backwards
1. Press and hold „2x"-key.
2. Now, you are able to step backwards by pressing the „step"-key.

Enter menu
Set parameters with the „Plus" or „Minus" key.

Exit menu
Press „step" key.

TEST-COFFEE

It is necessary to test the values, changed in the programming mode, imme-
diately. By pressing the corresponding product key for 2sec., a test coffee
can be supplied without leaving the programming mode.

Function is only available in the menu:
Powder quantity, prebrew time, relax time and press after

For the test coffee, the waiter-, cash- and coin-systems are not active.

DOUBLE-PRODUCT KEYS

All models have 8 or 12 product keys.
With the „Double" key two or more cups of the desried beverage can be
produced.

Double product: „X"   ⟶ Double product in one brew cycle
Multiple product: „2" - „9" ⟶ Multiple products with one brew cycle
                                 for each product

Important hint

Double products can also be programmed individually on one single button.
Please note that double-product settings or changes in the menus
Water quantity
Coffee aroma
Powder quantity
Bypass
are made in the program „1 cup".

Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
Service Card	After inserting the Service Master Card the display reads „Service Card". The adjustments can now be made.	x	x	x	x	x
1. Supplies Grinder Total x	The menu Supplies Total provides information on the number of products served. Press the desired product selection key to show the corresponding number of servings. There are three different totals available: - **Supplies total grinder 1** This appears automatically at first. First the total of grinder 1 and by pressing the individual product keys the product's total. Reset totals as descibed below. - **Supplies total grinder 2** Press the „decaf" key and you will receive the total of grinder 2 and by pressing the individual product keys the product's total. Reset totals as descibed below. - **Supplies total POD** Press the „Plus" key to show the total of all POD products and by pressing the individual product keys the product's total. Reset totals as descibed below.	x	x	x	x	x

> **Reset product totals to 0**
>
> Press and hold the „2x" key. Afterwards press the specific product key and the counter will be set to zero.

Note:
It is possible to access this program without Service Master Card.
Press and hold the „Minus" and „step" key simultaneously for 5 seconds. The display shows „Supplies Total".
You can check the number of supplied products but it cannot be rest to 0.

Press the „step" key to leave the programming mode back to Ready.

Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
2. Milk quantity 1 cup **3. Milk quantity 2 cups**	By pressing the „Minus" or „Plus" button the amount of milk can be progrmmed in the parameter Milk Quantity Cup. By pressing the respective milk beverage key twice rapidly the automatic dosing will be started. As soon as the desired level is reached press the same product key once to stop and memorize the amount of milk dispensed.			x	x	x
4. Macchiato Waittime: x s	By pressing the Minus or Plus key in the parameter Macchiato Wait Time the waiting time between the milk and coffee dispensing for the Latte Macchiato can be programmed. The adjustment ex works is 15 seconds, i.e by pressing on one of the 2 Latte Macciato products milk will be dispensed first, then there will be a 15 second waiting time and subsequently the coffee will be dispensed. During the waiting time the milk in the glass is able to settle. Once the coffee is filtered through the milk it pushes the milk froth to the top creating the 3 layers between milk, coffee and milk froth.				x	

Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
5. Espr.Macchiato Foamdelay x s	**This menu must not be changed (disappears in future)!**					x
6. Water quantity 1 cup	By pressing the Minus or Plus key in the product parameter Water Quantity the water quantity can be programmed. By pressing the individual coffee or tea product key twice the automatic dosing will be started. As soon as the desired level is reached press the same product key once to stop and memorize the amount of water dispensed. The maximum amount of water is 0.8 liters.	x	x	x	x	x
7. Water quantity 2 cups						
8. Teatime	By pressing the product Tea the water quantity can be programmed. By pressing twice the automatic dosing will be started. As soon as the desired level is reached press the Tea key once to stop and memorize the amount of water dispensed.		x			
9. Coffee aroma M1 1 cup	In the menu Coffee Aroma the coffee aroma of the individual beverage on both grinders can be adjusted to personal taste. Therefore the brew cycle and the coffee powder quantity can be easily adjusted.	x	x	x	x	x
10. Coffee arome M1 2 cups	• Press the desired coffee product key. The coffee aroma can be adjusted by pressing the Minus key, (weaker taste), or the Plus key, (stronger taste). Note: The following parameters can be adjusted during the coffee aroma function:					
11. Coffee aroma M2 1 cup	• Preinfusion • Relax Time • After Press					
12. Coffee aroma M2 2 cups	• Powder Quantity The parameters can also be adjusted in the respective menu parameter.					
13. Cyclequantity Low (2.5s)	In the parameter Cycle Quantity the duration of time of the individual cleaning cycles for the Autoclean function can be adjusted. With the „Minus" or „Plus" key the follwoing adjustments can be made: • Low (2.5s) • Medium (3s) • High (3.5s)				x	x
14. Language english	Press the „Minus" or „Plus" key to select the display language, (English, German or French).	x	x	x	x	x
15. Coffee temp. xx°C xxx°F	By pressing the „Minus" or „Plus" key in the parameter Coffee Temperature" the water temperature in the coffee boiler can be programmed between 78 and 99 degrees.	x	x	x	x	x

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
16.	**Coffeereadylevel** xx°C xxx°F	By pressing the „Minus" or „Plus" key in ther parameter Coffee Ready Level you can set the temperature at minimum temperature the coffee output will be disabled. If the temperature in the boiler is below the set temperture level the message Please Wait appears on the display and there will be a wait until the boiler has reached the programmed temperature level. The temperature can be set between 70 and 80 degrees C, (158 and 176 F), however it will always be 8 C (14F), under the actual set temperature. The setting range changes proportionally to the preset coffee temperature.	x	x	x	x	x
17.	**Key selection**	In the parameter Key Selection by pressing the „Minus" or „Plus" key the beverage keys can be changed or reallocated. Press product key to be changed and press the Plus key until the desired product appears on the display. Note: It is possible to assign 2 of the same beverage products to different product selection keys As an example if the milk key is not used a second Cappuccino, coffee or tea beverage can be programmed. Important: If a new product is assigned the basic parameters will automatically default to the factoy setting. The basic values, such as water quantity must be reprogrammed.	x	x	x	x	x
18.	**Key text**	**Function not available**	x	x	x	x	x
19.	**Powder quantity** M1 1 cup	In the menu Powder Quantity M1 1 cup you can change the powder quantity of grinder 1 by pressing the „Minus" or „Plus" key. Press the product key you wish to change. Then by pressing the Plus key you increase the powder quantity, alternatively by pressing the „Minus" key you reduce the powder .					
20.	**Powder quantity** M1 2 cups	Example to reduce the amount of ground coffee If you adjust the Powder Quantity do not change value by more than 2 units at the time. For example if the value on the scale says 30, (appr. 12 gr), press the „Minus" key back to 28. Exit program parameter and pull 4 test coffees for tasting. If the taste is not satisfactory return to the parameter Powder Quantityt and repeat the process, i.e decrease the value from 28 down to 26.					
21.	**Powder quantity** M2 1 cup		x	x	x	x	x
22.	**Powder quantity** M2 2 cups	Test Product: If you press and hold the respective product button for 2 seconds a test product will automatically be produced to check the programmed values. Note: By double-clicking the respective product button it will automatically grind the amount of time programmed to weigh out the ground coffee.					

Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool

Adjustments
„Prebrew time", „Relax Time", „After Press" must also be programmed on double products for the second grinder.

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
23.	Prebrew time M1 1 cup	By pressing the „Minus" or „Plus" key the time can be reduced, increased or deactivated.					
24.	Prebrew time M1 2 cups						
25.	Prebrew time M2 1 cup		X	X	X	X	X
26.	Prebrew time M2 2 cups						
27.	Prebrew time POD						
28.	Relax time M1 1 cup	By pressing the „Minus" or „Plus" key the relax time can be reduced.					
29.	Relax time M1 2 cups						
30.	Relax time M2 1 cup		X	X	X	X	X
31.	Relax time M2 2 cups						
32.	Relax time POD						

Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
33. Press after M1 1 cup	By pressing the „Minus" or „Plus" key the relax time can be reduced.					
34. Press after M1 2 cups						
35. Press after M2 1 cup		x	x	x	x	x
36. Press after M2 2 cups						
37. Mill change	In the parameter Mill Change by pressing the „Minus" or „Plus" key the beverage key can be assigned to grinder 1 or grinder 2. Press the selected beverage button, then press the „Plus" key and the beverage will be produced from grinder 2. By pressing the „Minus" key the beverage is produced from grinder 1. Note: The factory default setting has all coffee beverages programmed to be pulled from grinder 1. A beverage button that is programmed on grinder 2 is fixed on grinder 2. The grinder default change to grinder 1 is not possible. However it is possible to pull a beverage from grinder 2 that is assigned to grinder 1.	x	x	x	x	x
38. Cappuccino mode	In the parameter Cappuccino Mode by pressing the respective product beverage key with the „Minus" or „Plus" key the sequence of the milk/coffee cycle can be programmed, such as coffee before milk, milk before coffee or milk and coffee simultaneously. Note: For the best quality of milk froth we recommend the setting Milk before Coffee.			x	x	x
39. Milk mode	In this menu the milk mode (Foam or milk) can be assigned to the corresponding beverages with milk.			x	x	

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
40.	Bypass 1 cup	In the parameter Bypass by pressing the „Minus" or „Plus" key the percentage of the water can be programmed to bypass the coffee cake. Press the desired product key. By pressing the „Minus", (less), or „Plus", (more) key, the percetage of tha water passing the ground coffee compared to the total water quantity is programmed. Adjustable range is 0-99% amount of water passing through the ground coffee, respectively no Bypass. Note: For example if a percentage of 30% is programmed it means that 70% of the total amout of water passes throught the ground coffee, where as 30% as hot water bypassing the ground coffee.					
41.	Bypass 2 cups		x	x	x	x	x
42.	Multiple	In the parameter Multiple by pressing the „Minus" or „Plus" key Mulitple beverages can be produced. The multiple feature can be programmed to each beverage. . Example: If you assign to a beverage product key 3 mulitple beverages, by pressing the product key once it will automatically produce 3 beverages one after the other. Multiple beverages can also be produced by using the default button Multiple. Example: If one of the product keys is programmed with „Multiple" it is possible by using the Double Product Key 2-9 to program multiple or double products.	x	x	x	x	x
43.	Filter x not active	In the parameter Filter with the „Minus" or „Plus" key it is possible to program the amount of water to be dispensed until the filter cartridge must be replaced. Note: Once the filter cartridge is replaced pressing the Double product key 3 times will reset the counter to 0. The reset is confirmed by „OK" shown on the display. The programmed credit is rest to 0 and the amount of water is reconfirmed before the next filter replacement is due.	x	x	x	x	x
44.	Service counter x	In the parameter „Service counter" the total of all brew cycles will be displayed since the machine was in operation. This counter cannot be reset.	x	x	x	x	x
45.	Milk temp xx°C xxx°F	In the parameter Milk Temperature by pressing the Minus or Plus key the milk temperature can be programmed. - CTMF5/10: 54 - 89 °C (129 - 188°F) - CTS: 55 - 98°C (131 - 208°F) - The default value is 73 °C		x	x	x	
46.	Milkreadylevel xx°C xxx°F	By pressing the „Minus" or „Plus" key in the parameter Milk Ready Level it can be programmed what minimum temperature must be reached before the beverage production is released. If the milk temperature is below the programmed minimum temperature the beverage is not released before the foamer is heated up to the reference temperature. Is the display reads Milk cold. The temperature can always be set between 50 to 64 degrees C, (122-147F), however it will be always minimum 4 degrees C below the programmed milk temperature. The adjustment range is proportional to the programmed milk temperature.				x	x

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
47.	Calibratesensor xx°C xxx°F	In the parameter Calibrate Sensor the milk temperature can be calibrated. A digital thermometer is needed for this process to make sure that the correct temperature is measured.		x			
48.	Grounds 800g	By pressing the „Minus" or „Plus" key in the parameter Grounds the number of coffee pucks can be programmed before the message Empty Drawer will be displayed. The basic value can be programmed between Not Active up to 1600 gramms. The basic factory default value is set at 800 gramms. Note: Due to hygenic reason if the coffee machine is not used ofteen it is recommended to set the parameter to a lower value to make sure the drawer is frequently emptied. The setting Not Active is used when no puck drawer is used in Self-Service operation where the used coffee grounds fall through the bottom opening of the coffee machine's chassis, directly into a waste bin.	x	x	x	x	x
49.	Coffeerevolution 1300rpm (1/min)	**This menu must not be changed (disappears in future)!**	x	x	x	x	x
50.	Tearevolution 900rpm (1/min)	**This menu must not be changed (disappears in future)!**		x			
51.	Fillrevolution 1500rpm (1/min)	**This menu must not be changed (disappears in future)!**		x			
52.	Milkrevolution 900rpm (1/min)	**This menu must not be changed (disappears in future)!**					x
53.	Foamrevolution 1500rpm (1/min)	**This menu must not be changed (disappears in future)!**					x
54.	Turn off heater before Milkbeverage end 2000 ms	**This menu must not be changed (disappears in future)!**					x
55.	Minimal Rinsetime after Milkbeverage 500 ms	**This menu must not be changed (disappears in future)!**					x
56.	Rinsetime after Milkbeverage hot 5000 ms	**This menu must not be changed (disappears in future)!**					x
57.	Rinsetime after Milkbeverage cold 3000 ms	**This menu must not be changed (disappears in future)!**					x

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
58.	Milksuckintime normal 4000 ms	**This menu must not be changed (disappears in future)!**					x
59.	Milksuckintime after milkrinse 7000 ms	**This menu must not be changed (disappears in future)!**					x
60.	Cleanfill Time 32 s	**This menu must not be changed (disappears in future)!**					x
61.	Pump Time Clean cycle 20 s	**This menu must not be changed (disappears in future)!**					x
62.	Pump Time rinse cycle 50 s	**This menu must not be changed (disappears in future)!**					x
63.	Pump Time during cleaning not active	**This menu must not be changed (disappears in future)!**					x
64.	Milchniveau Control Niv1 on Niv2 off	In this menu the milk level control can be activated or deactivated. For two kinds of milk both can be setted several. Possible settings: Niv1 on Niv2 on Niv1 off Niv2 off Niv1 on Niv2off Niv1 off Niv2 on					x
65.	Debit / Credit Off	The machine ahs a galvanically separated serial a connection. In the parameter Debit/Credit by pressing the „Minus" or „Plus" key the following option can be selected. „Off" = Dthe machine shows product control through daily counter „KMI" = Connection via interface in beverage systems „CBox"= Aconnection via interface on cashier systems „Card" = Waiter Card „Saldo"= Cash-Card „MDB" = Connection via interface MDB2 on cashier systems, coin changer etc.. The basic default value is OFF.	x	x	x	x	x
66.	Machine type normal	By pressing the „Minus" or „Plus" key in the parameter Machine type the mode of operation Normal or Self- Service can be programmed: The basic factory default is set to Normal. - Normal - Selfservice Note: In case a coin validator is connected to the coffee machine it makes sense to set the machine to operation „Self-Servce". With this selection the keys M2, 2X, Clean as well as the POD functions will be disabled.	x	x	x	x	x

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
67.	Keyboard 8 key	By pressing the „Minus" or „Plus" key in the parameter „Keyboard" the amount of active keys can be programmed. You can choose between 12 (all) or 8 keys. If the setting „8 key" is selected, the upper four keys on the keyboard are inactive.	x	x	x	x	x
68.	Service interval 50000p	By pressing the „Minus" or „Plus" key in the parameter Service Interval the service level can be programmed in number of 1,000 cycles. The basic factory default is set at 50'000 cycles. After the service on the coffee machine is performed the service counter must be reset by pressing the Double Product Key 3 times rapidly. The display confirms that the counter has been reset to zero by display the message "OK. Note: The coffee machine must be serviced regularly. It must be descaled and checked for proper functionality as well as that it corresponds to all safety regulations. Basically the periodic maintenance of the coffee machine depends on its use but must be done at least every six months by an authorized service technician.	x	x	x	x	Y
69.	Rinse interval Coffee not active Rinse interval Milk 5min	By pressing the „Minus" or „Plus" key in the parameter Rinse Interval it can be programmed after which standby time an automatic short rinse cycle should be activated. The adjustment range can be set between Not Active up to 60 minutes. The basic factory default is for coffee: „not active" for milk: „5min". Note: If no milk product is produced for 5 minutes starting from the last cycle an automatic quick rinsing is activated. If another 5 minutes elapse a quick internal rinse is automatically activated before the next following product is dispensed.	x	x	x	x	x
70.	Cleaning alarm 1000	By pressing the „Minus" or „Plus" key in the parameter Cleaning Alarm it can be programmed after how many coffee cycles the machine should prompt the Message Clean Appliance to perform a cleaning cycle. The basic value can be set between Not Active up to 1'000 cycles.	x	x	x	x	x
71.	Powermanagement On	By pressing the „Minus" or „Plus" key in the parameter Power Management the setting Power Management can be activated. „Powermanagement ON" The heating of the coffee boiler and the steam boiler/milk foamer is individually activated, i.e. the coffee boiler heats up first and when reaching the programmed temperature the steam boiler and the foamer heating is activated. „Powermanagement OFF" All heating elements of the coffee boiler, steam boiler and foamer are activated simultaneously, (CTS automatic default setting)		x	x	x	
72.	Motorswitch Switch	By pressing the „Minus" or „Plus" key in the parameter „Motorswitch" you can choose between „Switch" (Default) and „Magnetic". This function is applied for a future project and must not be changed!	x	x	x	x	x
73.	Mill position 358	By pressing the „Minus" or „Plus" key in the parameter Mill Position the mill position of the brew chamber can be adjusted. Range can be adjusted between 0-510. In order to verify the correct Mill Position, press the Double Product Key and the brew chamber moves from the micro switch to the grind position. The correct adjustement of the grind position can be verified if the markings on the outside of the brew chamber and the grinder head are completely aligned. If the Double Product Key is pressed again the brew chamber moves back to the home position, (micro switch)	x	x	x	x	x

	Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
74.	Voltagecontrol not active	By pressing the „Minus" or „Plus" key in the parameter Voltage Control the voltage control 0-30% can be adjusted. The operation will be interrupted if the voltage falls below or above the set percentage. As soon as the voltage is back within the programmed tolerance the machine is operational again and the display reads „Ready". If the machine is not in Ready mode the display reads either Voltage Too High or Voltage too Low, respectively, while showing the voltage difference as a percentage. If the voltage changes during a brew cycle out of the programmed tolerance level the cycle will be completed before the machine will display the error message.	x	x	x	x	x

75.	Cold start rinse 1.3 Liter	By pressing thr „Minus" or „Plus" key in the parameter Cold Start Rinse the water quantity during a cold start rinse can be programmed. The basic factory default value is 13 dl. The water quantity can be adjusted between Not Active and 100 dl.
		
		Note:
		1) The Cold Start Rinse is only activated after a Cold Start
		2) It is possible to interrupt the Cold Start Rinse :
		    By pressing the Clean Key for 2 seconds. The display will read to repeat the Cold Start Rinse.
		3) It is also possible to cancel the Cold Start Rinse:
		    Press the Minus, the Plus and Clean key simultaneously for 2 seconds.
		    The display reads Please Wait, Boiler Heating.
			x	x	x	x	x

76.	Autofill Funct. active	MRU: This function motions the MRU function. The menu must be deactivated for machines without MRU.				x	x
77.	Level range extended on	MRU: on: Customer can choose between 5 MRU milk levels off: Customer can choose between MRU off and MRU on				x	x
78.	Leveldisplay MRU on	MRU: Customer can set if the milk level (1-5) is shown or not on the display.				x	x
79.	Autoclean active	Programming of cleaning the milk system It can be selected Active or Not Active. active: The filling of the milk container for the cleaning cycle is done automatically by the coffee machine. not active: The filling is activated by the operator.					
80.	Milk_purge active	In the program parameter „Milk_purge" by pressing the „Minus" or „Plus" key it can be set whether the Milk purge shall be activated. Function: Press and hold 2 milk beverage keys and the pump will activate after 3 seconds.				x	x

Menu	Description	CT	CTS	CTMF	CTMF MRU	CTM cool
81. **Boilerpurge** / Off	By pressing the „Minus" or „Plus" key in the parameter Boiler Purge „ON/OFF" it can be programmed whether the autoamtic boiler purge shall be activated. ON: If the puck drawer needs to be emptied, (display will read Empty Drawer), every time after the drawer is put back into the machine the dispaly will read „Boiler Purge /Press Clean Key. The water in the steam boiler will be replenished with fresh water during 30 seconds running water out of the hot water tap. During the boiler purge function no coffee products can be produced. This function is not active when the coffee grounds are set to Not-Active/OFF **The factory default setting is OFF**		x			
82. **Standby Temp.** / not active	In this parameter the Standby Temperature can be set from Not-Active to 15 degrees C. If no coffee is dispensed for 3 minutes after the last coffee was produced the Standby Temperature is activated, i.e the boiler temperature is increased by the value programmed to make sure the next coffee beverage has the correct temperature.	x	x	x	x	x
83. **Water** / normal	By pressing the „Minus" or „Plus" key in the parameter Water Normal/Tank the type of water connection can be selected: - Normal means that the tea and internal rinse is activated by line pressure - Tank means that the line pressure will be supplied by an external booster water pump. The factory default value is set at Normal Note: The location of the water tank must not be below the level of the coffee machine.	x	x	x	x	x
84. **Option counter** / On	By pressing the „Minus" or „Plus" key in the parameter Option Counter the option to access of the counter in normal operation can be activated or deactivaed. If the Option Counter is ON the Supplies Total, (number of beverages), during normal operation can be read as follows: Simultaneously press the „Minus" and „Clean" key for 5 seconds. The display reads Option Counter. In order to return back to normal operation press the „Clean" key again. The counter can only be read but not reset.	x	x	x	x	x
85. **Drawer** / Time 5s	The factory default for the minimum time delay to empty the drawer is set to 5 seconds. By pressing the „Minus" or „Plus" key the time dealy can be selected between 5 to 60 seconds. The factory default is set to 5 seconds.	x	x	x	x	x
86. **Milkstarttemp.** / High	In this parameter it can be programmed at which milk temperature a milk beverage can be produced. Pressing the „Minus" or „Plus" key the adjustment „low" (appr. 45 degrees C), and "high", (appr. 65 degrees C), can be selected. The factory default valus is set to „high" Note: This parameter is only active when there is no FT sensor, (no option Turbo Heating).				x	

Modifications, changes as well as adjustments can be memorized on the supplied „Data Card".