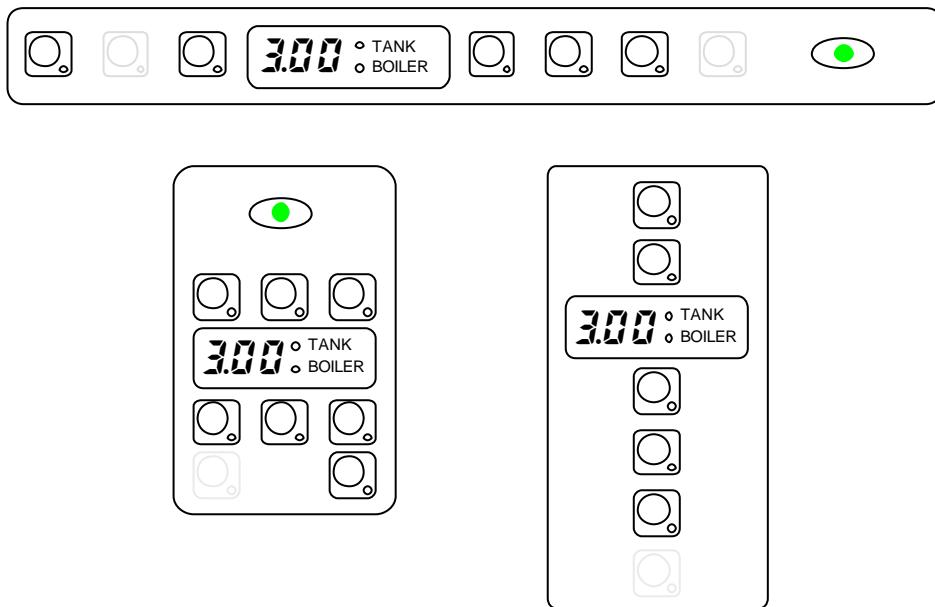


SERVICE MANUAL v.3.00



CONTENTS:

This document contains the instruction to change parameter settings of electronic board by means of user interface.

EDITION:

09.2002



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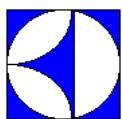
9. MAIN BOARD CONFIGURATION

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1. KEYBOARDS

1.1. HOOD TYPE Style

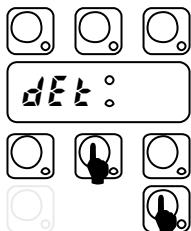


Fig. 1.1
Detergent dispenser
Manual Activation.

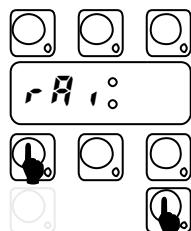


Fig. 1.2
Rinse Aid Dispenser
Manual Activation.

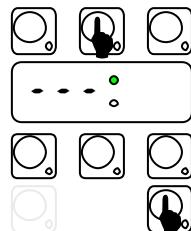


Fig. 1.3
Rinse Pump
Manual Activation
(used to EMPTY BOILER)

SETTING MODES:

To enter into one setting mode (Fig.1.4, Fig.1.5) the appliance should be in stand-by: switch on the appliance, no cycles selected. Is useful keep door open to avoid start cycle in case of not simultaneously pressure of the two keys.

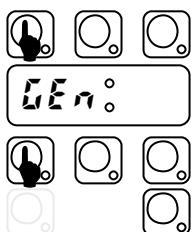


Fig. 1.4
Enter into General Parameters
(Hold down buttons for at least
five seconds).

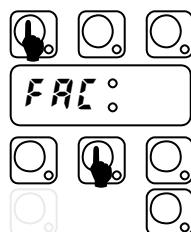


Fig. 1.5
Enter into Factory Parameters
(Hold down buttons for at least
five seconds).



Fig. 1.6
Next Parameter Family OR
Increase Parameter Value
(In setting mode only)

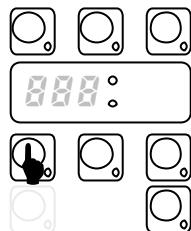


Fig. 1.7
Decrease Parameter Value
(In setting mode only)

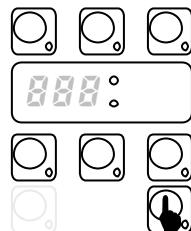
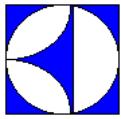


Fig. 1.8
Confirm Value and go
to next Parameter
(In setting mode only)



1.2. UNDERCOUNTER Style

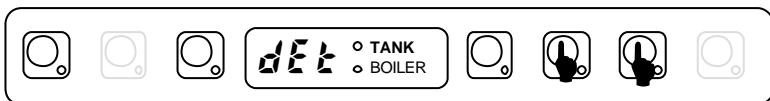


Fig.1.1
Detergent dispenser
Manual Activation

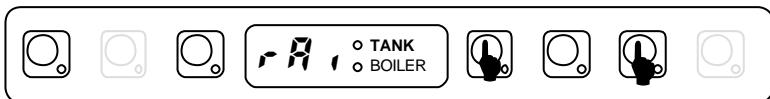


Fig.1.2
Rinse Aid Dispenser
Manual Activation

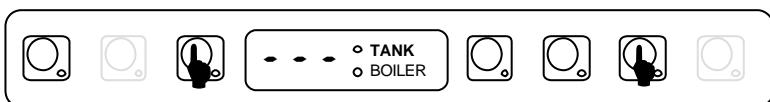


Fig.1.3
Rinse Pump
Manual Activation
(used to EMPTY BOILER)

SETTING MODES:

To enter into one setting mode (Fig.1.4, Fig.1.5) the appliance should be in stand-by: switch on the appliance, no cycles selected. Is useful keep door open to avoid start cycle in case of not simultaneously pressure of the two keys.

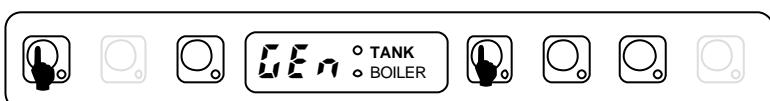


Fig. 1.4
Enter into General Parameters
(Hold down buttons for at least five
seconds).

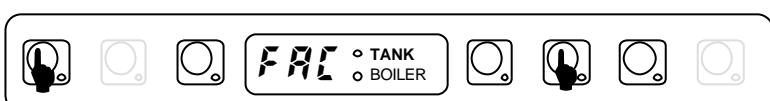


Fig. 1.5
Enter into Factory Parameters
(Hold down buttons for at least five
seconds).

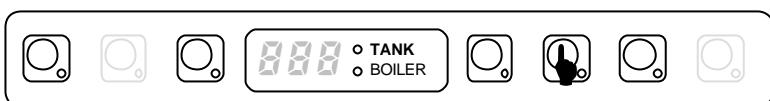


Fig.1.6
Next Parameter Family
OR
Increase Parameter Value
(in setting mode only)

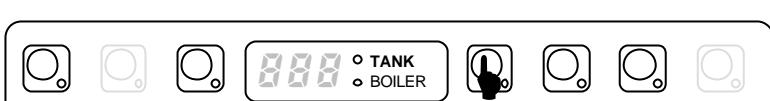


Fig.1.7
Decrease Parameter Value
(In setting mode only)

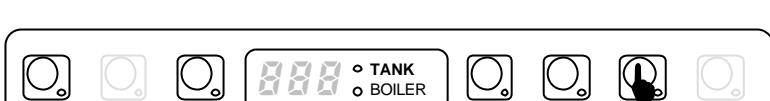


Fig.1.8
Confirm Value and go to next Parameter
(in setting mode only)



2. MANUAL ACTIVATION OF DETERGENT AND RINSE AID DISPENSERS

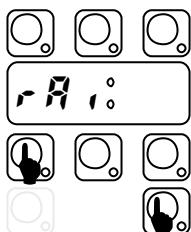
When replacing detergents may be necessary activate the dispensers to fill hoses. In the following paragraphs is explained how activate the dispensers via User Interface.

2.1. Detergent Dispenser Activation



Switch on the dishwasher.
Press and hold down CYCLE_2 and CYCLE INFINITE keys, after two 'beep' the detergent dispenser starts work for 20 sec.

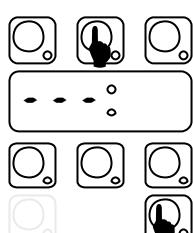
2.2. Rinse Aid Dispenser Activation



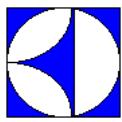
Switch on the dishwasher.
Press and hold down CYCLE_1 and CYCLE INFINITE keys, after two 'beep' the rinse aid dispenser starts work for 40 sec.

3. RINSE PUMP MANUAL ACTIVATION

Use this function to empty the boiler (if the dishwasher is not to be used for a long time, for maintenance operation: ex. before replacing main board).



Switch on the dishwasher.
Close the door and press and hold down DRAIN and CYCLE INFINITE keys. A buzzer signal indicates the rinse pump activation and the display shows three blinking lines. Three beeps indicate the cycle end.



4. DETERGENT AND RINSE AID DOSAGE

In this paragraph is explained how to set the working time for the detergent and rinse aid dispensers. For each dispenser there are two parameters: the initial time and the time during cycle execution.

LEN General Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
d _{in}	Initial Detergent Dosage (during filling tank)	[s]	0	240	90
r _{in}	Initial Rinse Aid Dosage (starts when tank filled)	[s]	0	180	10
d _{ET}	Detergent Dosage During Cycle Execution (during wash phase)	[s]	0	182(*)	8
r _R	Rinse Aid Dosage During Cycle Execution (when refilling boiler)	[s]	0	62 (*)	4

How change the duration:

- Switch OFF and switch ON the dishwasher;
- Enter into the USER SETTING mode by pressing and hold down ON/OFF and CYCLE_1 keys for at least five seconds the display shows **LEN** (Fig.3.1);
- Press CYCLE_INFINITE. The display shows alternatively the symbol **d_{in}** and the duration in seconds (Fig.3.2 and 3.3); NOTE: If User Interface v.3.00 tank led is on if value correspond to factory default (Default 1, HOOD TYPE).
- Use CYCLE_1 key to decrease the duration and CYCLE_2 key to increase (Fig.3.3);
- After settled the duration press CYCLE_INFINITE key to store value. The display shows the next parameter (Fig.3.4) and the corresponding value (Fig.3.5);
- In the same way is possible to change the other duration; when finished switch OFF and switch ON.

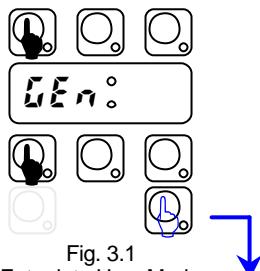


Fig. 3.1
Enter into User Mode
(press for 5 sec.).

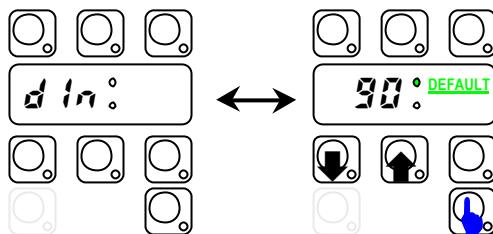


Fig. 3.2
Initial detergent dosage

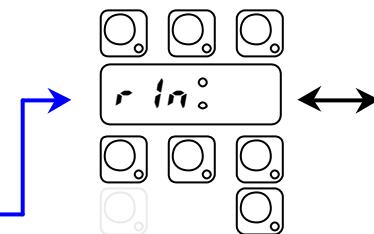


Fig. 3.4
Initial rinse aid dosage

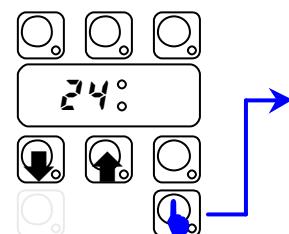


Fig. 3.5
Change duration

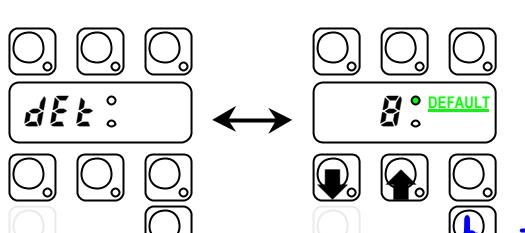


Fig. 3.6
Cycle detergent dosage

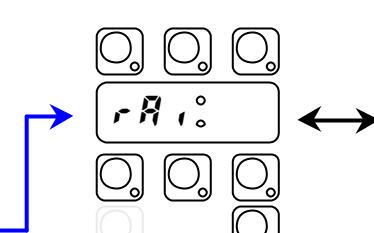


Fig. 3.8
Cycle rinse aid dosage

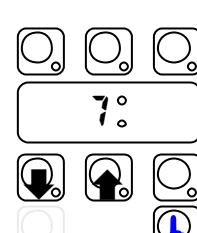
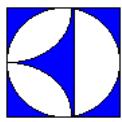


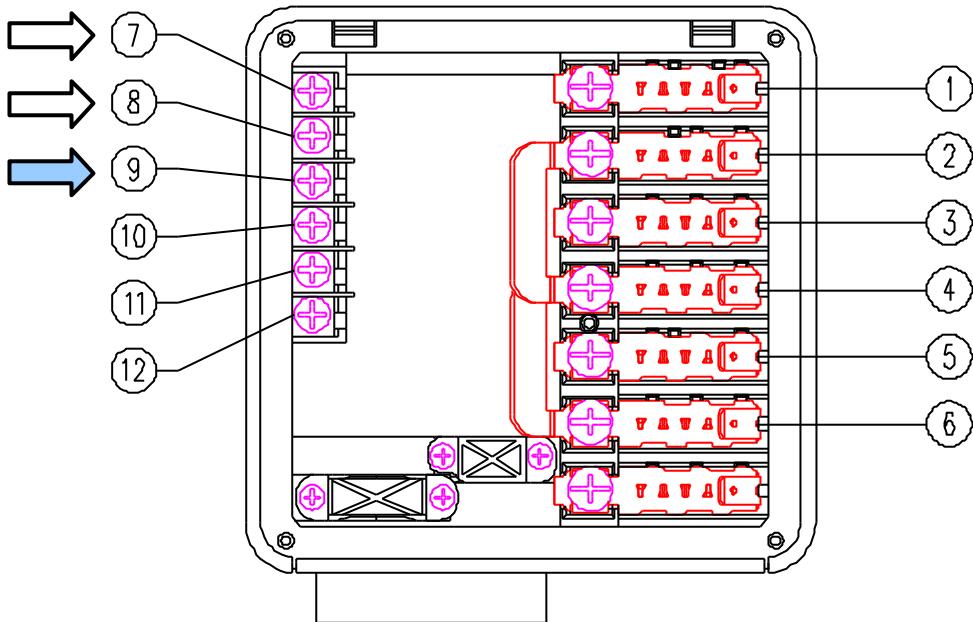
Fig. 3.9
Change time activation



(*) Note for external dispensers:

- If **dEz = 1B1** the **detergent dispenser** works when **WASHING PUMP** is being activated; at the same time voltage is supplied between connectors **L1₇-L1₉** (main terminal box);
- If **dEz = 1B2** the **detergent dispenser** works when **LOADING EV** is being activated to re-fill boiler level; at the same time voltage is supplied between connectors **L1₇-L1₉** (main terminal box);
- If **rRz = 51** the **rinse aid dispenser** works when **LOADING EV** is being activated to re-fill boiler level; at the same time voltage is supplied between connectors **L1₈-L1₉** (main terminal box);
- If **rRz = 52** the **rinse aid dispenser** works when **WASHING PUMP** is being activated; at the same time voltage is supplied between connectors **L1₈-L1₉** (main terminal box);

- For electrical connections refer to electric diagram -

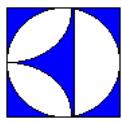


Example

Suppose there is connected an **external detergent dispenser** with a probe into the tank. A typical setting could be:

dInz = 0 the dispenser is not activated during filling tank;

dInz 1B1 the dispenser is supplied during washing phase and the probe automatically dose the right detergent amount.



5. COUNTERS

This Parameter Family collects cycle counters and water consumption counters.

For water consumption counters a flow meter must be installed. See **PPL** (calibration parameter) into **dPR** section (§ Other Parameters).

Ent Counters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
CYC	Cycles performed counter. CYC symbol and two numbers blink consecutively. The cycle number is obtained by joining the two numbers. Ex. CYC → 0 10 → 042 means 10042 cycles executed.		-	-	-
cyc	Cycle counter (resettable). This counter is similar to CYC but is resettable by user (see r5t parameter below).		-	-	-
nnC	Water Consumption. Counts m ³ of water consumption.	[m ³]			
L	Water Consumption. Counts litres of water consumption.	[l]			
L1t	Water Consumption: resettable counter. Counts the litres of water and is resettable by user (see r5t parameter below).	[l]			
r5t	Reset resettable counters: cyc and L1t . To reset put 1 this parameter, switch off and then on again: cyc and L1t will show zero. Note that cyc is used to count cycles for ER11 message (see next parameter, nCY).		-	-	-
nCY	Store thousand of cycles after that ER11 message appears on display. Ex. If this parameter is settled to 20, ER11 message appears when cyc reach 20.000 cycles.		-	-	-
drc	Drain/Cleaning cycles performed. Similar to CYC but counts Cleaning Cycles.		-	-	-

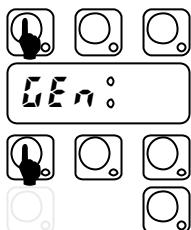


Fig.4.1
USER setting mode
(press for 5s)

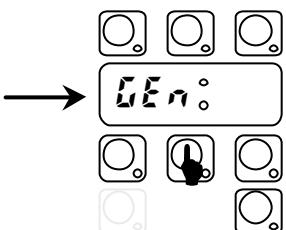


Fig.4.2
Next Family

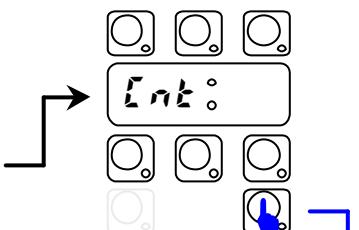


Fig. 4.3
Counters Fam.: ENTER

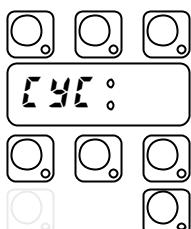


Fig. 4.4
CYCLES

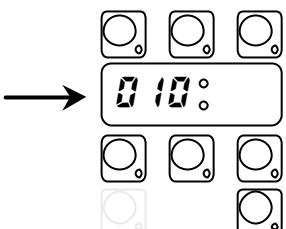


Fig. 4.5
Thousand.

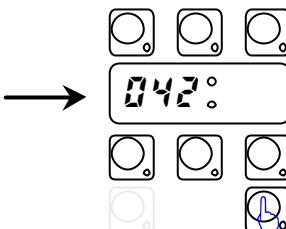


Fig. 4.6
Units.

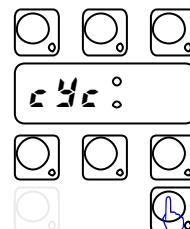
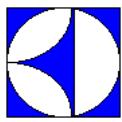


Fig. 4.7
Next counter.

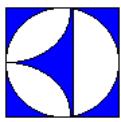


6. TEMPERATURE SETTING

In this paragraph is explained how to change temperature thresholds and all parameters related to boiler and tank.

FPC Factory Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
bTC	Boiler Temperature: THRESHOLD. When boiler temperature reaches this value, heaters switch off.	[°C]	45	95	76
bTH	Boiler Temperature HISTERESIS, (represent dead band). Heater switch on if tank temperature is below: bTC - bTH	[°C]	2	10	2
bH ,	Boiler Temperature: HIGH LIMIT. When boiler temperature reaches this value L Z alarm appears. Put 0 to disable L Z alarm.	[°C]	0	98	96
bLo	Boiler Temperature: LOW LIMIT. During boiler warm-up, temperature must increase at least bLo °C otherwise E Z warning appears. Put 0 to disable E Z warning.	[°C]	0	10	1
bFL	Boiler Filling Timeout. If filling time is longer than bFL , R I alarm appears. Put 0 to disable R I alarm.	[min]	0	42	5
bRJ	Boiler Temperature Adjust.	[°C]	0	7	4
bP	Boiler Priority (enable boiler wait function) 0=disabled 1=enabled	-	0	1	1
b5t	Booster Function Overheat gap over Boiler Temperature Threshold	[°C]	0	15	4
bTd	Boiler temperature negative differential: when the dishwasher is in standby, boiler threshold becomes: bTC - bTd (Used to save energy during machine inactivity by keeping boiler water at a lower temperature).	[°C]	0	20	0
tTC	Tub Temperature: THRESHOLD When tank temperature reaches this value, heater switch off.	[°C]	40	85	63
tTH	Tub Temperature: HISTERESIS, (represent dead band). Heater switch on if tank temperature is below: tTC - tTH	[°C]	2	30	5
tH ,	Tank Temperature: HIGH LIMIT. When tank temperature reaches this value L Z alarm appears. Put 0 to disable L Z alarm.	[°C]	0	95	75
tLo	Tank Temperature: LOW LIMIT. During tank warm-up, temperature must increase at least tLo °C otherwise E Z warning appears. Put 0 to disable E Z warning.	[°C]	0	10	1
tFL	Tank Filling Timeout. If filling time is longer than tFL , R I alarm appears. Put 0 to disable R I alarm.	[min]	0	42	20



To modify thresholds do the following:

- Switch OFF and switch ON the dishwasher;
- Enter into the FACTORY SETTING mode by pressing and hold down ON/OFF and CYCLE_2 keys for at least five seconds (Fig.4.1);
- Press CYCLE INFINITE. The display shows alternatively the symbol **bE_L** (Fig.5.2) and the corresponding value **75** (Fig.5.3);
- Use CYCLE_1 key to decrease the value and CYCLE_2 key to increase (Fig.4.3);
- Press CYCLE INFINITE key to confirm. The display shows the next parameter (Fig.4.4) and the corresponding value (Fig.4.5);
- In the same way is possible to change the other parameters; when finished switch OFF and switch ON.



Fig. 5.1
Factory setting mode

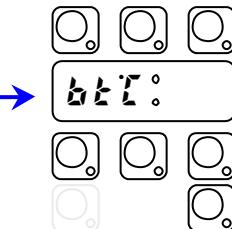


Fig. 5.2
Boiler temp. threshold

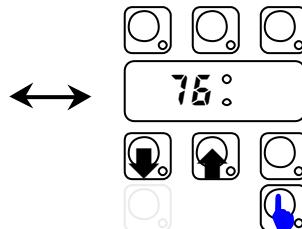


Fig. 5.3
Change value & Store

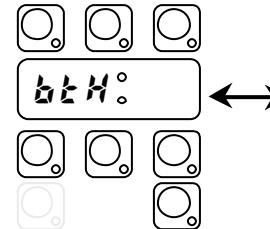


Fig. 5.4
Boiler Temp Hysteresis

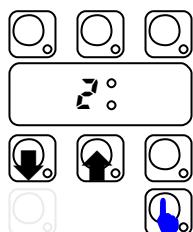


Fig. 5.5
Change value & Store

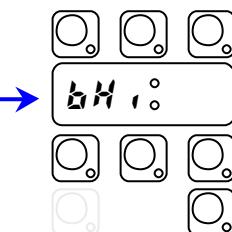


Fig. 5.6
Tank temp. High limit.

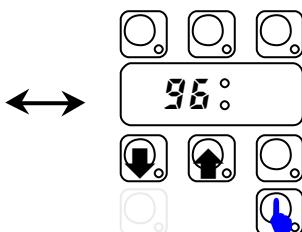
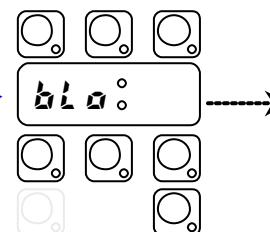


Fig. 5.7
Change value & Store



At the end the display will show again **FAC** and by pressing CYCLE_2 key (Fig.4.9) is possible to change cycle duration (see next paragraph).



Fig. 5.9
Factory setting mode

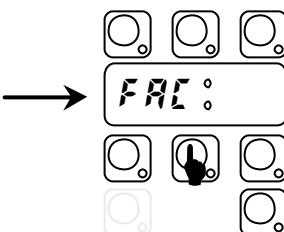


Fig. 5.10
Next Family

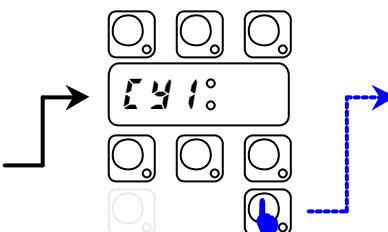
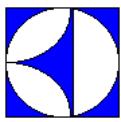


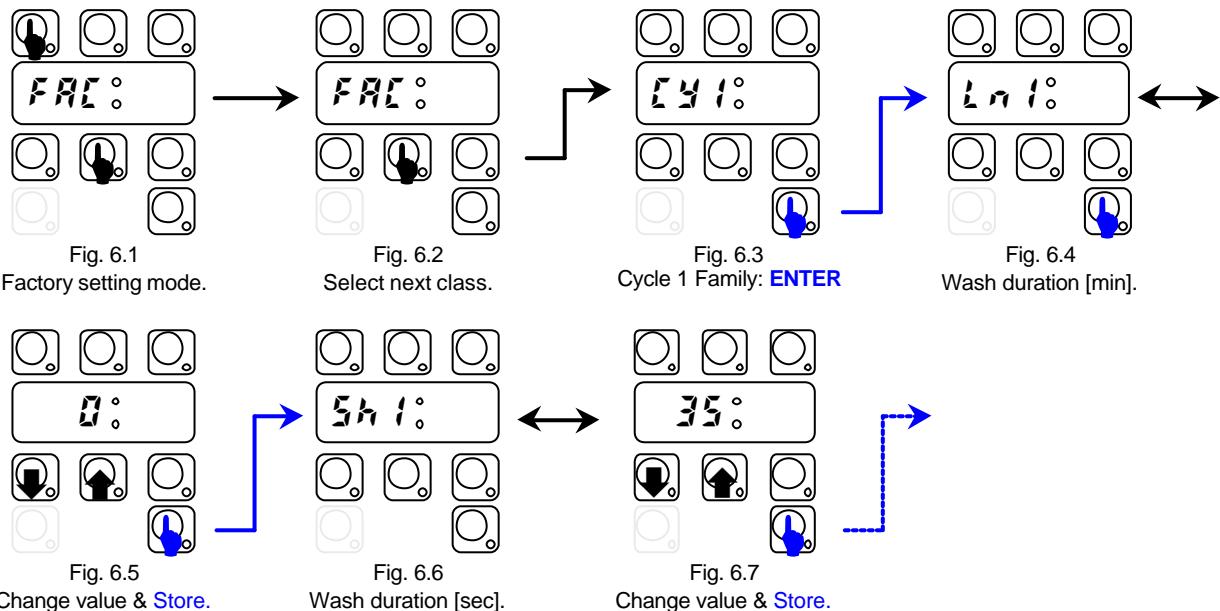
Fig. 5.11
Cycle 1 Family: **ENTER**



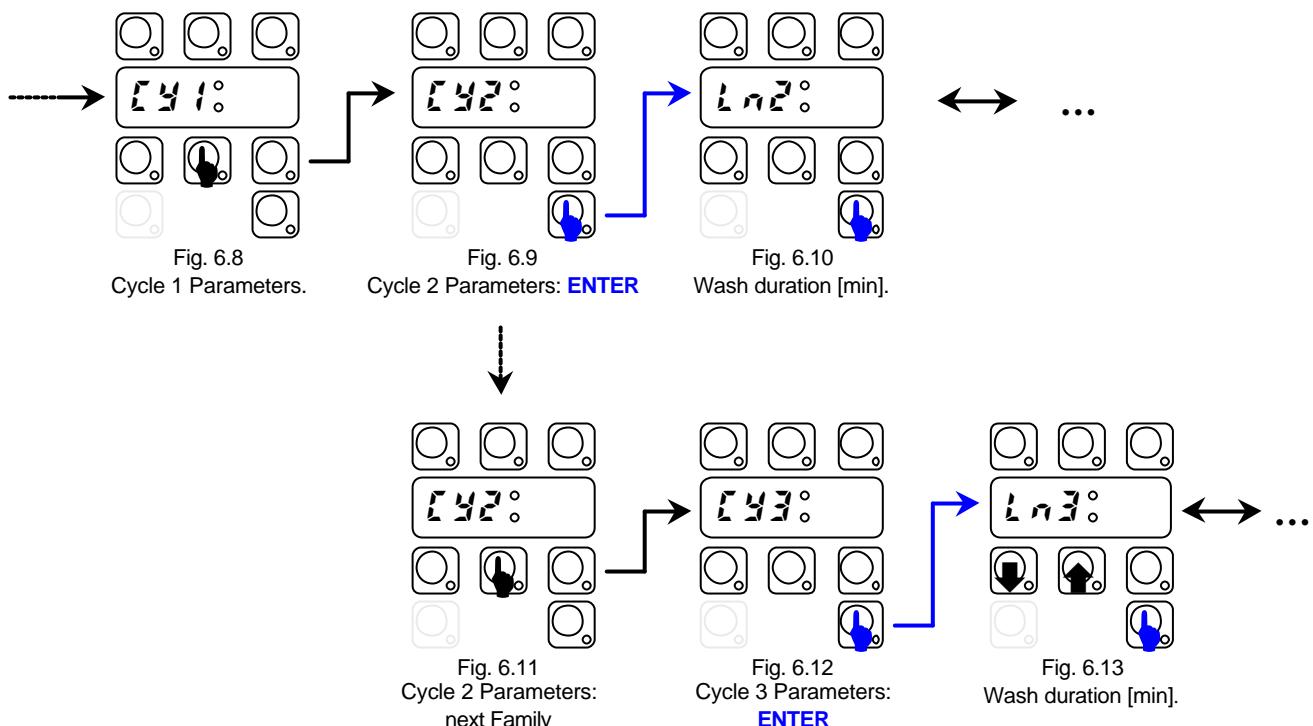
7. CYCLE SETTING

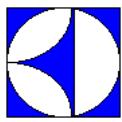
In this paragraph is explained how to change cycle phases duration (see Tab.1 next page).

- Switch on the dishwasher;
- Enter into the FACTORY SETTING mode: press and hold down ON/OFF and CYCLE_2 keys for at least **5 seconds** (Fig.5.1);
- Press CYCLE_2 key to select cycle 1 parameters.
- Press CYCLE INFINITE. The display shows alternatively the symbol (Fig.5.2) and the corresponding value (Fig.5.3);
- Use CYCLE_1 key to increase the value and CYCLE_2 key to decrease (Fig.5.3);
- Press CYCLE INFINITE key to confirm. The display shows the next parameter (Fig.5.4) and the corresponding value (Fig.5.5);
- In the same way is possible to change the other parameters;

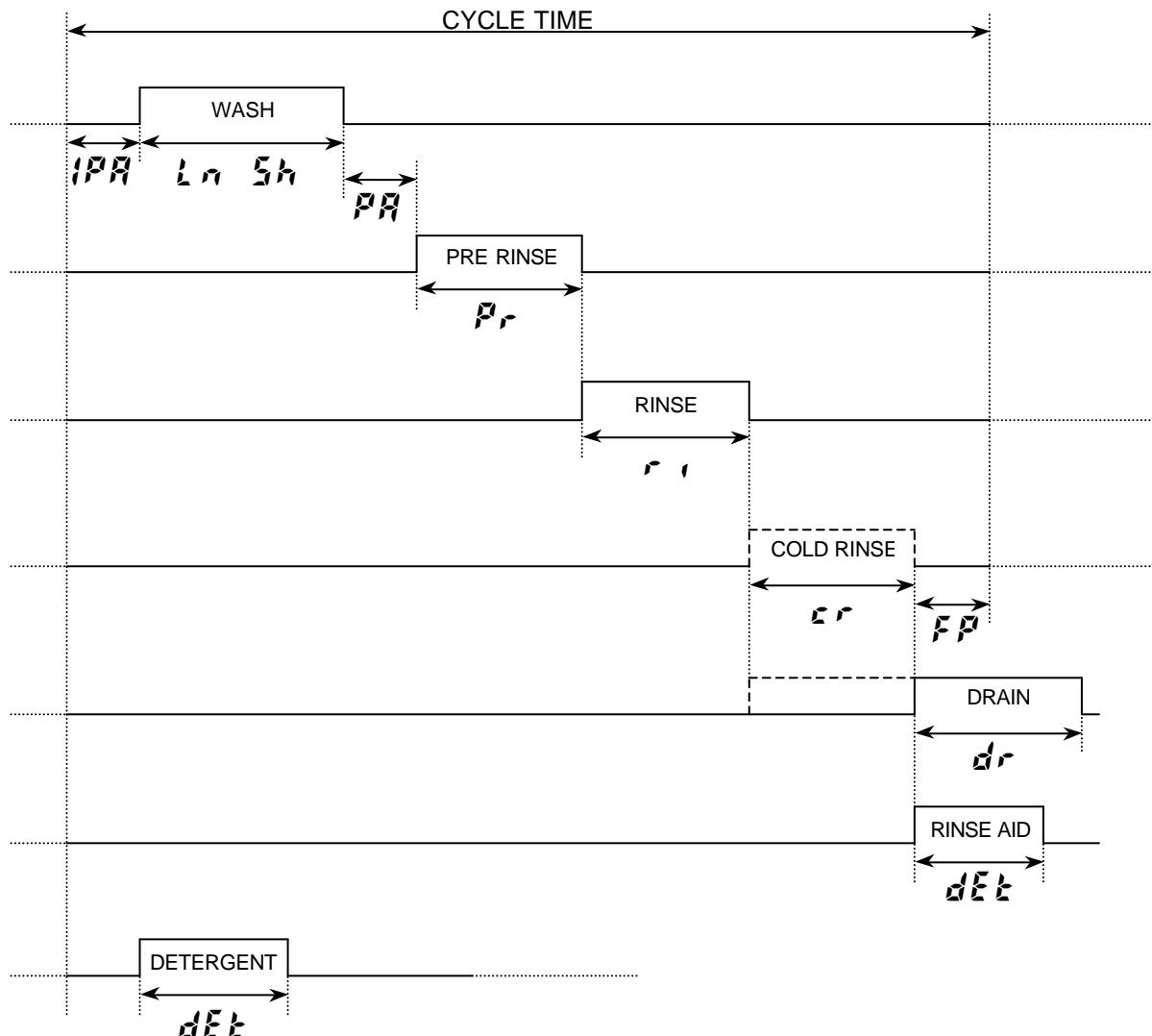


After settled all parameters referring Cycle 1, by pressing CYCLE_2 key is possible to change the Cycle 2 parameters (Fig.5.8, 5.9) and so on.





CYCLE DIAGRAM





C 41 Cycle 1 Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
L _{n1}	Wash Phase Long	[min]	0	20	0
S _{h1}	Wash Phase Short	[s]	1	60	35
P _{R1}	Pause	[s]	0	20	4
P _{r1}	Pre-rinse Duration	[s]	0	30	0
r ₁₁	Rinse Phase Duration	[s]	10	45	16
c _{r1}	Cold Rinse Phase Duration	[s]	0	50	0
d _{r1}	Drain	[s]	0	40	16
F _{P1}	Final Pause at End of Cycle	[s]	0	10	0

C 42 Cycle 2 Parameters

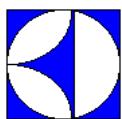
Sym.	Parameter Description	Unit	Min	Max	Factory Default
L _{n2}	Wash Phase Long	[min]	0	20	0
S _{h2}	Wash Phase Short	[s]	1	60	45
P _{R2}	Pause	[s]	0	20	4
P _{r2}	Pre-rinse Duration	[s]	0	30	0
r ₁₂	Rinse Phase Duration	[s]	10	45	16
c _{r2}	Cold Rinse Phase Duration	[s]	0	50	0
d _{r2}	Drain	[s]	0	40	16
F _{P2}	Final Pause at End of Cycle	[s]	0	10	0

C 43 Cycle 3 Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
L _{n3}	Wash Phase Long	[min]	0	20	1
S _{h3}	Wash Phase Short	[s]	1	60	40
P _{R3}	Pause	[s]	0	20	4
P _{r3}	Pre-rinse Duration	[s]	0	30	0
r ₁₃	Rinse Phase Duration	[s]	10	45	16
c _{r3}	Cold Rinse Phase Duration	[s]	0	50	0
d _{r3}	Drain	[s]	0	40	16
F _{P3}	Final Pause at End of Cycle	[s]	0	10	0
b _{t3}	Boiler Temperature Threshold: only for Cycle 3. This parameter allows having a different rinsing temperature for the third cycle. Only values above 45°C are allowed.	[°C]	0	95	0

d_r Drain/Cleaning Cycle Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
I _{dr}	Initial Drain Phase Duration	[s]	0	240	40
F _{dr}	Final Drain Phase Duration	[s]	0	240	60



8. OTHER PARAMETERS

dPR Dishwashing Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
<i>IPR</i>	Initial Pause before start washing (for ALL cycles)	[s]	0	10	0
<i>DL5</i>	Delay for the 2 nd wash pump (PW only)	[s]	0	10	3
<i>Pdr</i>	Active a drain phase at the end of washing phase.	[s]	0	40	0
<i>C_F</i>	Celsius/Fahrenheit selection 0 = Celsius 1 = Fahrenheit	-	0	1	0
<i>r_tk</i>	Rinse Temperature Display. Enable rinse temperature probe (if installed). 0 = during rinse phase the display shows boiler temperature; 1 = during rinse phase the display shows rinse temperature;	-	0	1	0
<i>PPL</i>	Pulse Per Litre. This parameter must be settled in according to flow meter installed.	[p/l]	0	255	0
<i>PL1</i>	Pressure sensor threshold 1 (present in previous releases).	-	0	255	140
<i>PHS</i>	Pressure sensor histeresis 1 (present in previous releases).	-	0	255	50
<i>PL2</i>	Pressure sensor threshold 2 (present in previous releases).	-	0	255	140
<i>ZHS</i>	Pressure sensor histeresis 2 (present in previous releases).	-	0	255	50

Note: *PL1*, *PHS*, *PL2*, *ZHS* parameters emulates a two levels pressure switch, keep in mind that value doesn't correspond to a physical quantity.

roN Read Only Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
<i>rEL</i>	Main Board Firmware Release	-	-	-	-
<i>ERI</i>	When <i>ERI</i> message appears, the parameter value becomes 1. After maintenance, to clear <i>ERI</i> message, insert 0.	-	-	-	-
<i>EB</i>	When <i>EB</i> alarm appears, the machine is frozen and this parameter is 1. After maintenance (see alarm codes document), insert 0 to enable the machine.	-	-	-	-

HCP HACCP Parameters

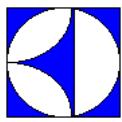
Sym.	Parameter Description	Unit	Min	Max	Factory Default
<i>SeR</i>	Serial Device 0 = 8N1 1 = PC connection (DAAS 8E1) 7 = HACCP network (ECAP 8E1+LK485) (LK485 board is necessary) 16 = HACCP printer (8N1) 32 = MODEM GSM (DAAS 8N1) 33 = MODEM GSM (DAAS 8E1) 48 = Hyper Terminal (8N1)	-	0	63	1
<i>Adr</i>	Address. This parameter specifies the address of the appliance into the 'HACCP_network'. Works only if 'HACCP network' is selected (see above parameter).	-	0	255	1
<i>Prn</i>	Print parameter table.	-	0	1	1
<i>bt</i>	HACCP 'Basic' (printer) Boiler temperature: high limit.	[°C]	45	95	90
<i>bH</i>	HACCP 'Basic' (printer) Boiler temperature: gap below high limit.	[°C]	0	20	10
<i>tt</i>	HACCP 'Basic' (printer) Tank temperature: high limit.	[°C]	35	75	68



LH	HACCP 'Basic' (printer)	[°C]	0	20	10
	Tank temperature: gap below high limit.				

CFG Configuration Parameters

Sym.	Parameter Description	Unit	Min	Max	Factory Default
LSP	Dishwasher Model: 0 = HOOD TYPE & UNDERCOUNTER 1 = POT WASHER 2 = AUTOMATIC POT WASHER	-	0	2	0
bo	Boiler type: 0 = ATMOSPHERIC BOILER 1 = PRESSURE BOILER 2 = EXTERNAL BOILER	-	0	2	0
do	Door type: 0 = AUTOMATIC HOOD 1 = MANUAL HOOD 2 = FRONT LOADING	-	0	2	1
dfl	Default model (see <i>Default tables</i>): 1 = HOOD TYPE 2 = POT WASHER 3 = UNDERCOUNTER	-	0	3	-
trc	Solid State Relay (TRIAC). 0 = not enabled; 1 = SOFT START enabled; (works only on boards with Solid State Relay).	-	0	1	0
btk	Boiler/Tank heating swap: 0 = boiler heaters and tank heater can work simultaneously; 1 = swap enabled: tank heating starts only boiler temperature is reached; (Note: disabling this function changes the global electrical power of appliance; before enabling this function check available power, supply cable section, fuses in according to User Manual).	-	0	1	1
btF	Tank Filling Mode Enable filling tank by means of rinsing cycles. Ex: btF = 75 means that boiler water is heated at 75°C, then follows a rinse phase and so on until tank is full. If btF = 0 the tank is filled by solenoid valve in the traditional way.	[°C]	0	85	75
les	Detergent Level Switches 0 = level switches not enabled; 1 = enable detergent level switches;	-	0	1	0
ui	USER INTERFACE MODEL 1 = hood type, under counter,... 5 = LS5 with atmospheric boiler; 7 = LS5 with pressure boiler (user interface without display);	-	0	7	1
rlr	ALARMS ENABLE 0 = alarms disabled (to disable also warnings see bla and bla); 1 = alarms enabled; If this function is disabled, faults can be detected so display do not shows any alarm code.	-	0	1	1



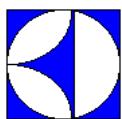
9. MAIN BOARD CONFIGURATION

When receiving an electronic board (spare part) may be necessary to configure it in according to the machine where has to be replaced.

1. With the machine **CODE** enter into the following table and read the corresponding **Prog.** number;
2. Follow the instructions reported into the corresponding **Prog.XXX** sheet (next pages).

9.1. CODE→Prog. TABLE

MODEL	CODE	Prog.	MODEL	CODE	Prog.
LS 10	504100	002	LS 12 INS	504120	001
LS 10 UK DP	504102	002	LS 12	504121	001
LS 10/60Hz	504105	002	LS 12 DP	504122	001
LS 10 CW	504107	002	LS 12 60Hz	504125	001
LS 10 INS	504108	002	LS 12 CW	504128	001
LS 10 N	504111	002	HT 1200 DEK	504129	001
LS 10 DP	504114	002	LS14EA/ASIA	504131	009
LS 10 HD	504115	008	LS14EA/G	504133	001
LS 10 UK1	504118	002	WT 60 DP	504134	001
LS 10 UK3	504119	002	WT 60	504135	001
LS10EA	504142	002	WT 60 CW	504136	001
HT 1000	698051	002	WT 60 UK DP CW INS	504137	001
HT 1000 INS	698052	002	WT 60 INS	504138	001
HT 1000 DP	698054	002	WT 60 CW INS	504139	001
LS10 INS DP	S36220	002	WT 60 AU CW	504140	004
LS 10 INS	S37858	002	WT 60 AU N	504141	004
LS 10	S39968	002	WT 60/60HZ	504145	001
LS 10/fiera	S42549	002	WT 60/60HZ CW	504146	001
LS 10 INS	S43062	002	WT 60 N	504151	001
LS 10	S43327	002	WT 60 N INS	504152	001
HT 1000	S475CH	002	LS 12 HD	504153	007
LS 10 CW	S47APN	002	LS14EA/DD	504155	001
LS 10 CW	S47CF5	002	WT65E	504156	001
LS 10 CW	S47DU4	002	WT65EB	504157	001
LS 10 CW	S47DU7	002	WT65EI	504158	001
LS 10 CW	S47DUA	002	WT 60 AU DP	504159	004
LS 10 CW	S47DUF	002	LS 12 UK/3 CW	504161	001
LS 10 CW	S47E17	002	WT 60 UK CW	504162	001
LS 10 CW	S47E2C	002	LS 12 AU	504163	004
LS 10 CW	S47E2H	002	LS 12 UK DP CW	504164	001
LS 10 CW	S47E2M	002	ECOTEMP 12 SW	504165	001
LS 10 CW	S47E2R	002	WT65EBI	504166	001
LS 10 UK1	S47E50	002	WT65EBIA	504167	004
LS 10 CW	S47E6M	002	WT65EIA	504168	004
LS14EA	504101	001	WT65E60	504169	001
ECOTEMP 12	504104	003	WT65EB60	504170	001
HT 1200 ins DEK	504109	001	WT 60 U/400	504171	006
LS14EA/INS	504110	001	WT 60 U/440	504172	006
LS14EA/AU	504116	004	WT65EBIDG	504173	001
LS14EA/60	504117	001	WT65EBASIA	504174	009

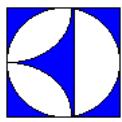


MODEL	CODE	Prog.	MODEL	CODE	Prog.
WT65EIM50	504175	006	HT1200	S46002	001
WT65EIM60	504176	006	WT 60 CW INS	S46880	001
WT 60 MX 220/60	504177	001	HT 1000	S4734M	002
LS 12 CW INS	504178	001	WT 60/9	S47539	001
LS 12 ASIACW	504190	009	WT 60/9	S4756O	001
WT 60 ASIACW	504191	009	WT 60/9	S4756P	001
LS 12 ASIANB	504192	009	WT60 INS	S475GJ	001
WT60ASIANB	504193	009	WT60 INS	S475GY	001
HT 1200	698050	001	WT 60 CW	S476HA	001
HT 1200 INS	698053	001	LS 12 HD	S4775E	007
HT 1200 DP	698055	001	HT1200	S4777U	001
ECOTEMP 12 UK	698056	001	LS 12 CW INS	S477BM	001
LS 12 CW	D04713	001	WT 60 AU CW	S477JR	004
LS 12 CW	S34369	180bst00	WT 60 INS	S477M1	001
WT 60 giappone	S34377	001	WT 60 INS	S477M1	001
WT 60 giappone	S34378	001	WT 60 N INS HACCP	S477MB	001
WT 60 giappone	S35178	001	WT 60/60HZ DP	S477QB	001
WT 60 giappone	S35179	001	LS 12 CW INS	S477V7	001
LS 12 CW	S35246	001	WT 60 DP	S47811	001
HT1200	S35330	001	WT 60/9	S4781D	001
WT 60 giappone	S36384	001	WT 60/60HZ DP	S4781I	001
WT 60 giappone	S36385	001	WT 60/9 INS	S4786P	001
LS 12 CW	S36846	001	WT 60 U/230	S478KF	006
LS 12 CW	S36847	001	LS 12 CW INS	S478LV	001
HT1200	S39964	001	WT 60 CW INS	S478SP	001
HT1200	S40472	001	LS 12 CW INS	S479VE	001
ECOTEMP 12	S40785	003	WT 60	S479Z3	001
WT 60/9 INS	S41170	001	WT 60	S479Z9	001
HT1200	S41185	001	WT 60 AU CW	S47AP80	004
LS 12 INS	S42032	001	LS 12 CW	S47APP	001
WT 60/60HZ	S42170	001	HT 1200	S47B9I	001
LS 12/fiera	S42550	001	LS 12 UK/3 CW	S47BJI	001
WT 60/60HZ	S42617	001	LS 12 CW	S47C1Z	001
WT 60 N	S43119	001	WT 60 CW	S47C6B	001
LS12 CW	S43488	001	LS 12 CW	S47CCS	001
LS 12 INS	S43563	001	WT 60	S47CCY	001
LS 12 DP CW	S43734	001	WT 60 CW	S47CEA	001
LS 12 CW	S43806	001	WT 60/9	S47CEH	001
LS 12 CW	S43830	001	WT 60/9	S47CEI	001
WT 60 CW INS	S44421	001	WT 60	S47CKD	001



MODEL	CODE	Prog.
WT 60 CW INS	S47CPB	001
WT 60 CW INS	S47CQS	001
ECOTEMP 12 SW	S47CVG	001
ECOTEMP 12 SW	S47CVH	001
WT 60 CW INS	S47D9Y	001
WT 60	S47DCA	001
LS 12 CW	S47DE0	001
LS 12 CW	S47DMM	001
WT 60	S47DSK	001
WT 60	S47DWC	001
WT 60	S47DWD	001
WT4	400007	021
WT4B	400008	020
WT4D	400009	021
WT4DB	400015	020
WT46	400016	020
WT4G	400017	022
WT4DG	400018	022
LS5/1	400100	021
LS5/1 DP	400102	021
LS5/3	400112	020
LS5/3 DP	400113	020
LB5G	400118	022
LB5GDP	400119	022
FL5	690004	020
FL5DP	690005	020
LS6EP	502003	013
LS6EP/DD	502004	013
LS6EA/DD	502005	011
LS6EA/DD/DP	502006	011
LS6EA/UK	502030	011
LS6EA/UKDP	502031	011
LS6EA/60	502041	011
WT 38DD	502110	011
WT 37	502111	011
WT 38	502112	011
WT 37/4.5	502117	011
WT 38/UK	502217	011
WT 38/4.5	502118	011
WT 37/UK	502122	011

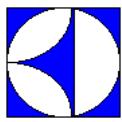
MODEL	CODE	Prog.
WT 37/J60	502218	011
WT 37/J50	502219	011
WT 38/60	502321	011
WT 38/M60	502322	015
WT 37MED	502323	014
LS6EA	502520	011
LS6EA/DP	502521	011
FL 620EP	698003	013
FL 620EA	698070	011
FL 620EADP	698071	011
Ecotemp 5	698076	016
Ecotemp 5 S	698077	016
FL 620EP/DD	698078	013
FL 620EA/DD	698079	011
FL 620EADP/DD	698080	011
LS6EA	S477BL	011
WT 37	S4784U	011
LS6EA	S4787B	011
FL 620EA	S478BN	011
LS9P	505022	019
LS9P DD	505033	019
LS9A UK	505034	018
LS9P60	505035	019
HT900P	698022	019
PPW1 M	506010	005
PPW1 M UK	506011	005
PPW1 60 Hz	506012	005
PPW1 MH	506013	005
WT830 M	506018	005
WT830 M UK	506019	005
WT830 60 Hz	506020	005
WT830 MH	506026	005
PW100 M	698040	005
PW100 MH	698043	005
WT830 MH	S46881	005
PPW1 M	S4758V	005
WT830 MH	S476YZ	005
PPW1 MH	S477IT	005
WT830 M	S479QS	005
PPW1 M UK	S47BKQ	005



Electrolux

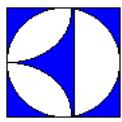
FSE - Dishwashing Platform
Electrolux Professional

Electronic Dishwasher SERVICE MANUAL

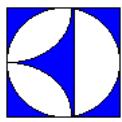


9.2. PROGRAMMING SHEETS

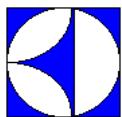
LS12 – LS14 / WT60 - 65		Prog. 001
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters.	
	tYP 0 Hood Type like working cycles. ba 1 Atmospheric boiler. doo 1 Manual Hood. dFL 1 Default values for Hood Type models. trc 0 (for this appliance SOFT START is NOT possible). b_t 1 Tank heater works only if boiler temperature reached. bTF 75 Enable filling tank by means of rinsing cycles. LES 0 Detergent level switches not enabled. ui 1 Select user interface hood type model. ALr 1 Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Factory parameters family bTC 78 Boiler Temperature Threshold.	
5.	Switch OFF and then switch ON the machine.	



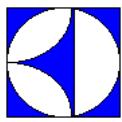
LS10		Prog. 002
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters:	
	tYP 0	Hood Type like working cycles.
	ba 0	Atmospheric boiler.
	doo 1	Manual Hood.
	dFL 1	Default values for Hood Type models.
	trc 0	(for this appliance SOFT START is NOT possible).
	b_t 1	Tank heater works only if boiler temperature reached.
	bTF 75	Enable filling tank by means of rinsing cycles.
	LES 0	Detergent level switches not enabled.
	ui 1	Select user interface hood type model.
	ALr 1	Alarms enabled.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Factory parameters family	
	bTC 78	Boiler Temperature Threshold.
5.	Modify Cycle parameters:	
	CY1 Cycle 1	
	Sh1 45	Short Wash Phase [s]
	CY2 Cycle 2	
	Lw2 1	Long Wash Phase [min]
	Sh2 40	Short Wash Phase [s]
6.	Switch OFF and then switch ON the machine.	



ECOTEMP12		Prog. 003
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters:	
	tYP <input checked="" type="checkbox"/> Hood Type like working cycles.	
	bo <input checked="" type="checkbox"/> Atmospheric boiler.	
	do <input type="checkbox"/> Manual Hood.	
	dFL <input type="checkbox"/> Default values for Hood Type models.	
	trc <input checked="" type="checkbox"/> (for this appliance SOFT START is NOT possible).	
	b_t <input checked="" type="checkbox"/> Boiler heaters and tank heater can work simultaneously. .	
	bTF <input checked="" type="checkbox"/> The tank is filled into the traditional way.	
	LES <input checked="" type="checkbox"/> Detergent level switches not enabled.	
	ui <input type="checkbox"/> Select user interface hood type model.	
	ALr <input type="checkbox"/> Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Factory parameters family	
	bTC <input checked="" type="checkbox"/> 65 Boiler Temperature Threshold.	
	bTA <input checked="" type="checkbox"/> 2 Boiler Temperature Adjust.	
5.	Switch OFF and then switch ON the machine.	



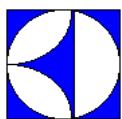
LS12 AU / WT60 - 65 AU		Prog. 004
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters:	
	tYP 0 Hood Type like working cycles. bo 1 Atmospheric boiler. doa 0 Automatic Hood. dFL 1 Default values for Hood Type models. trc 0 (for this appliance SOFT START is NOT possible). b_t 1 Tank heater works only if boiler temperature reached. bTF 75 Enable filling tank by means of rinsing cycles. LES 0 Detergent level switches not enabled. UI 1 Select user interface hood type model. ALr 1 Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Factory parameters family bTC 78 Boiler Temperature Threshold.	
5.	Modify the other parameters:	
	CY1 Cycle 1 FP1 2 Final Pause [s] CY2 Cycle 2 FP2 2 Final Pause [s] CY3 Cycle 3 FP3 2 Final Pause [s] DPR Dishwashing parameters family. IPR 2 Initial Pause	
6.	Switch OFF and then switch ON the machine.	



PW 1 - 2 / WT830 - 850		Prog. 005
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters:
	tYP	1 Pot Washer.
	ba	0 Atmospheric boiler.
	doo	2 Front loading function.
	dFL	2 Default values for Pot Washer models.
	brc	0 (for this appliance SOFT START is NOT possible).
	b_t	1 Tank heater works only if boiler temperature reached.
	btf	75 Enable filling tank by means of rinsing cycles.
	LES	0 Detergent level switches not enabled.
	ui	1 Select user interface hood type model.
	ALr	1 Alarms enabled.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC	Factory parameters family
	btc	78 Boiler Temperature Threshold.



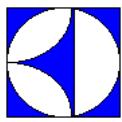
WT60 - 65 USPH		Prog. 006
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters:	
	typ <input checked="" type="checkbox"/> Hood Type like working cycles. bo <input checked="" type="checkbox"/> Atmospheric boiler. doa <input type="checkbox"/> Manual Hood. dfl <input type="checkbox"/> Default values for Hood Type models. trc <input checked="" type="checkbox"/> (for this appliance SOFT START is NOT possible). b_t <input type="checkbox"/> Tank heater works only if boiler temperature reached. btf 75 Enable filling tank by means of rinsing cycles. les <input checked="" type="checkbox"/> Detergent level switches not enabled. ui <input type="checkbox"/> Select user interface hood type model. alr <input type="checkbox"/> Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Factory parameters family	
	btc 78 Boiler Temperature Threshold.	
5.	Modify the cycle parameters:	
	CY1 Enter into Cycle 1 parameters family.	
	r_1 25 Rinse Phase Duration [s] dr_1 25 Drain [s]	
	CY2 Enter into Cycle 2 parameters family.	
	r_2 25 Rinse Phase Duration [s] dr_2 25 Drain [s]	
	CY3 Enter into Cycle 3 parameters family.	
	r_3 25 Rinse Phase Duration [s] dr_3 25 Drain [s]	
6.	Select Fahrenheit :	
	dpr Enter into Dishwashing parameter family.	
	c_f <input type="checkbox"/> Select Fahrenheit degrees.	
6.	Switch OFF and then switch ON the machine.	



LS12HD

Prog. 007

1.	Switch OFF and then switch ON the machine.													
2.	CFG Enter into CFG parameter family and set the following parameters:													
	t4P <input checked="" type="checkbox"/> Hood Type like working cycles. ba1 <input checked="" type="checkbox"/> Atmospheric boiler. doa <input type="checkbox"/> Manual Hood. dFL <input type="checkbox"/> Default values for Hood Type models. trc <input checked="" type="checkbox"/> (for this appliance SOFT START is NOT possible). b_t <input type="checkbox"/> Tank heater works only if boiler temperature reached. bTF <input checked="" type="checkbox"/> Enable filling tank by means of rinsing cycles. LES <input checked="" type="checkbox"/> Detergent level switches not enabled. ui <input type="checkbox"/> Select user interface hood type model. ALr <input type="checkbox"/> Alarms enabled.													
3.	Switch OFF and then switch ON the machine.													
4.	Modify the cycle parameters:													
	CY1 Enter into Cycle 1 parameters family. <table><tr><td>Pr 1 <input checked="" type="checkbox"/> 20</td><td>Pre-rinse Duration [s]</td></tr><tr><td>dr 1 <input checked="" type="checkbox"/> 36</td><td>Drain [s]</td></tr></table> CY2 Enter into Cycle 2 parameters family. <table><tr><td>Pr 2 <input checked="" type="checkbox"/> 20</td><td>Pre-rinse Duration [s]</td></tr><tr><td>dr 2 <input checked="" type="checkbox"/> 36</td><td>Drain [s]</td></tr></table> CY3 Enter into Cycle 3 parameters family. <table><tr><td>Pr 3 <input checked="" type="checkbox"/> 20</td><td>Pre-rinse Duration [s]</td></tr><tr><td>dr 3 <input checked="" type="checkbox"/> 36</td><td>Drain [s]</td></tr></table>	Pr 1 <input checked="" type="checkbox"/> 20	Pre-rinse Duration [s]	dr 1 <input checked="" type="checkbox"/> 36	Drain [s]	Pr 2 <input checked="" type="checkbox"/> 20	Pre-rinse Duration [s]	dr 2 <input checked="" type="checkbox"/> 36	Drain [s]	Pr 3 <input checked="" type="checkbox"/> 20	Pre-rinse Duration [s]	dr 3 <input checked="" type="checkbox"/> 36	Drain [s]	
Pr 1 <input checked="" type="checkbox"/> 20	Pre-rinse Duration [s]													
dr 1 <input checked="" type="checkbox"/> 36	Drain [s]													
Pr 2 <input checked="" type="checkbox"/> 20	Pre-rinse Duration [s]													
dr 2 <input checked="" type="checkbox"/> 36	Drain [s]													
Pr 3 <input checked="" type="checkbox"/> 20	Pre-rinse Duration [s]													
dr 3 <input checked="" type="checkbox"/> 36	Drain [s]													
5.	Switch OFF and then switch ON the machine.													



LS10HD

Prog. 008

1. Switch OFF and then switch ON the machine.

2. **CFG** Enter into CFG parameter family and set the following parameters:

t4P	<input checked="" type="checkbox"/>	Hood Type like working cycles.
ba1	<input checked="" type="checkbox"/>	Atmospheric boiler.
doa	<input type="checkbox"/>	Manual Hood.
dFL	<input type="checkbox"/>	Default values for Hood Type models.
trc	<input checked="" type="checkbox"/>	(for this appliance SOFT START is NOT possible).
b_t	<input type="checkbox"/>	Tank heater works only if boiler temperature reached.
bTF	75	Enable filling tank by means of rinsing cycles.
LES	<input checked="" type="checkbox"/>	Detergent level switches not enabled.
ui	<input type="checkbox"/>	Select user interface hood type model.
ALr	<input type="checkbox"/>	Alarms enabled.

3. Switch OFF and then switch ON the machine.

4. Modify the cycle parameters:

CY1 Enter into Cycle 1 parameters family.

Sh1	45	Short Wash Phase [s]
Pr1	20	Pre-rinse Duration [s]
dr1	36	Drain [s]

CY2 Enter into Cycle 2 parameters family.

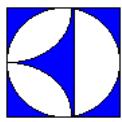
Ln1	<input type="checkbox"/>	Long Wash Phase [min]
Sh2	40	Short Wash Phase [s]
Pr2	20	Pre-rinse Duration [s]
dr2	36	Drain [s]

5. Switch OFF and then switch ON the machine.



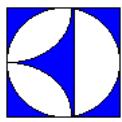
LS12 - 14 / WT60 - 65 ASIA		Prog. 009																														
1. Switch OFF and then switch ON the machine.																																
2. CFG Enter into CFG parameter family and set the following parameters.																																
<table><tbody><tr><td>typ</td><td>0</td><td>Hood Type like working cycles.</td></tr><tr><td>ba</td><td>0</td><td>Atmospheric boiler.</td></tr><tr><td>daa</td><td>1</td><td>Manual Hood.</td></tr><tr><td>dfl</td><td>1</td><td>Default values for Hood Type models.</td></tr><tr><td>trc</td><td>0</td><td>(for this appliance SOFT START is NOT possible).</td></tr><tr><td>bt</td><td>1</td><td>Tank heater works only if boiler temperature reached.</td></tr><tr><td>btf</td><td>75</td><td>Enable filling tank by means of rinsing cycles.</td></tr><tr><td>les</td><td>0</td><td>Detergent level switches not enabled.</td></tr><tr><td>ui</td><td>1</td><td>Select user interface hood type model.</td></tr><tr><td>rlr</td><td>1</td><td>Alarms enabled.</td></tr></tbody></table>		typ	0	Hood Type like working cycles.	ba	0	Atmospheric boiler.	daa	1	Manual Hood.	dfl	1	Default values for Hood Type models.	trc	0	(for this appliance SOFT START is NOT possible).	bt	1	Tank heater works only if boiler temperature reached.	btf	75	Enable filling tank by means of rinsing cycles.	les	0	Detergent level switches not enabled.	ui	1	Select user interface hood type model.	rlr	1	Alarms enabled.	
typ	0	Hood Type like working cycles.																														
ba	0	Atmospheric boiler.																														
daa	1	Manual Hood.																														
dfl	1	Default values for Hood Type models.																														
trc	0	(for this appliance SOFT START is NOT possible).																														
bt	1	Tank heater works only if boiler temperature reached.																														
btf	75	Enable filling tank by means of rinsing cycles.																														
les	0	Detergent level switches not enabled.																														
ui	1	Select user interface hood type model.																														
rlr	1	Alarms enabled.																														
3. Switch OFF and then switch ON the machine.																																
4. Modify Factory parameters:																																
<table><tbody><tr><td>FAC</td><td>Factory parameters family</td></tr><tr><td>btc</td><td>78</td><td>Boiler Temperature Threshold.</td></tr><tr><td>bp</td><td>0</td><td>Boiler Priority Disabled</td></tr></tbody></table>		FAC	Factory parameters family	btc	78	Boiler Temperature Threshold.	bp	0	Boiler Priority Disabled																							
FAC	Factory parameters family																															
btc	78	Boiler Temperature Threshold.																														
bp	0	Boiler Priority Disabled																														
5. Switch OFF and then switch ON the machine.																																

free		Prog. 010

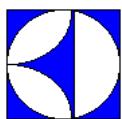


LS6 / WT30 6000W ATM		Prog. 011
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters.
	hyp	0 Hood Type like working cycles.
	bao	0 Atmospheric boiler.
	doa	2 Front loading.
	dfl	3 Default values for Undercounter models.
	trc	1 SOFT START ENABLED.
	bt	1 Tank heater works only if boiler temperature reached.
	btf	75 Enable filling tank by means of rinsing cycles.
	les	0 Detergent level switches not enabled.
	ui	1 Select user interface hood type model.
	rlr	1 Alarms enabled.
3.	Switch OFF and then switch ON the machine.	

free		Prog. 012



LS6 PRESS		Prog. 013
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters.
	tYP 0	Hood Type like working cycles.
	bo 1	Pressure boiler.
	doo 2	Front loading.
	dFL 3	Default values for Undercounter models.
	trc 1	SOFT START ENABLED.
	b_t 1	Tank heater works only if boiler temperature reached.
	bF 75	Enable filling tank by means of rinsing cycles.
	LES 0	Detergent level switches not enabled.
	ui 1	Select user interface hood type model.
	Alr 1	Alarms enabled.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC	Enter into FAC parameter family and change boiler threshold.
	bTC 85	Boiler Temperature Threshold.
5.	Switch OFF and then switch ON the machine.	



WT30 MED

Prog. 014

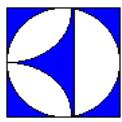
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters.	
	tYP 0	Hood Type like working cycles.
	bo 1	Atmospheric boiler.
	doo 2	Front loading.
	dFL 3	Default values for Undercounter models.
	brc 1	SOFT START ENABLED.
	b_t 1	Tank heater works only if boiler temperature reached.
	bTF 75	Enable filling tank by means of rinsing cycles.
	LES 0	Detergent level switches not enabled.
	ui 1	Select user interface hood type model.
	ALr 1	Alarms enabled.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Enter into FAC parameter family and change boiler threshold.	
	bTC 95	Boiler Temperature Threshold.
	bH 1	Disable boiler high Temperature alarm (L E).
	bSE 0	Booster function not needed.
	bTd 10	During stand-by boiler is kept at lower temperature than Temperature Threshold.
	tTC 65	Tub Temperature Threshold.
	bH 80	Tank high Temperature limit.
5.	Modify the cycle parameters:	
	CY1 Cycle 1 parameters family.	
	Ln1 4	Long Wash Phase [min]
	Sh1 10	Short Wash Phase [s]
	r1 35	Rinse Phase Duration [s]
	dr1 40	Drain [s]
	FP1 15	Final Pause at End of Cycle
	CY2 Cycle 2 parameters family.	
	Ln2 5	Long Wash Phase [min]
	Sh2 10	Short Wash Phase [s]
	r2 35	Rinse Phase Duration [s]
	dr2 40	Drain [s]
	FP2 15	Final Pause at End of Cycle
	CY3 Cycle 3 parameters family.	
	Ln3 5	Long Wash Phase [min]
	Sh3 10	Short Wash Phase [s]
	r3 35	Rinse Phase Duration [s]
	dr3 40	Drain [s]
	FP3 15	Final Pause at End of Cycle
6.	Switch OFF and then switch ON the machine.	



WT30 USPH

Prog. 015

1.	Switch OFF and then switch ON the machine.		
2.	CFG Enter into CFG parameter family and set the following parameters.		
	t4P	0	Hood Type like working cycles.
	ba	0	Atmospheric boiler.
	daa	2	Front loading.
	dFL	3	Default values for Undercounter models.
	trc	0	(for this appliance SOFT START is NOT possible).
	b_t	1	Tank heater works only if boiler temperature reached.
	bTF	75	Enable filling tank by means of rinsing cycles.
	LES	0	Detergent level switches not enabled.
	ui	1	Select user interface hood type model.
	ALr	1	Alarms enabled.
3.	Switch OFF and then switch ON the machine.		
4.	Modify Factory parameters:		
	FAC Enter into FAC parameter family and change boiler threshold.		
	bTC	82	Boiler Temperature Threshold.
	bTd	3	During stand-by boiler is kept at lower temperature than Temperature Threshold.
	bSt	0	Booster Function not necessary.
	tTC	65	Tank Temperature Threshold.
	tH	80	High limit for tank temperature.
5.	Modify the cycle parameters:		
	CY1 Cycle 1 parameters family.		
	Ln1	1	Long Wash Phase [min]
	Sh1	22	Short Wash Phase [s]
	r1	25	Rinse Phase Duration [s]
	dr1	40	Drain [s]
	FP1	4	Final Pause [s]
	CY2 Cycle 2 parameters family.		
	Ln2	2	Long Wash Phase [min]
	Sh2	22	Short Wash Phase [s]
	r2	25	Rinse Phase Duration [s]
	dr2	40	Drain [s]
	FP2	4	Final Pause [s]
	CY3 Cycle 3 parameters family.		
	Ln3	4	Long Wash Phase [min]
	Sh3	22	Short Wash Phase [s]
	r3	25	Rinse Phase Duration [s]
	dr3	40	Drain [s]
	FP3	4	Final Pause [s]



WT30 USPH

Prog. 015

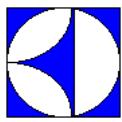
	drn	Drain parameters family.
	ldr	Initial Drain Phase Duration [s]
	dPR	Set other parameters.
	IPR	Initial Pause [s]
6.	C F Fahrenheit.	
6.	Switch OFF and then switch ON the machine.	



ECOTEMP 5

Prog. 016

1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters.	
	typ 0 Hood Type like working cycles. ba 1 Atmospheric boiler. doo 2 Front loading. dfl 3 Default values for Undercounter models. trc 1 SOFT START ENABLED. b_t 0 Tank and boiler heaters works can work simultaneously. btf 75 Enable filling tank by means of rinsing cycles. les 0 Detergent level switches not enabled. ui 1 Select user interface hood type model. alr 1 Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Enter into FAC parameter family and change boiler threshold.	
	btc 77 Boiler Temperature Threshold. btd 3 During stand-by boiler is kept at lower temperature than Temperature Threshold.	
5.	Modify the cycle parameters:	
	CY1 Cycle 1 parameters family.	
	ln1 1 Long Wash Phase [min] sh1 10 Short Wash Phase [s] r1 25 Rinse Phase Duration [s] dr1 40 Drain [s] fp1 4 Final Pause [s]	
	CY2 Cycle 2 parameters family.	
	ln2 2 Long Wash Phase [min] sh2 22 Short Wash Phase [s] r2 25 Rinse Phase Duration [s] dr2 40 Drain [s] fp2 4 Final Pause [s]	
	CY3 Cycle 3 parameters family.	
	ln3 4 Long Wash Phase [min] sh3 22 Short Wash Phase [s] r3 25 Rinse Phase Duration [s] dr3 40 Drain [s] fp3 4 Final Pause [s]	
	drn Drain parameters family.	
	ldr 30 Initial Drain Phase Duration [s]	
	dpr Set other parameters.	
	ipr 5 Initial Pause [s]	
6.	Switch OFF and then switch ON the machine.	



PW AUTO (to be defined)		Prog. 017
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters.	
	typ <input checked="" type="checkbox"/> Automatic Pot Washer. ba <input type="checkbox"/> Atmospheric boiler. doa <input type="checkbox"/> Automatic Hood. dfl <input checked="" type="checkbox"/> Default values for Hood Type models. trc <input type="checkbox"/> (for this appliance SOFT START is NOT possible). b_t <input type="checkbox"/> Tank heater works only if boiler temperature reached. btF <input checked="" type="checkbox"/> Enable filling tank by means of rinsing cycles. les <input type="checkbox"/> Detergent level switches not enabled. ui <input type="checkbox"/> Select user interface hood type model. rlr <input type="checkbox"/> Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	



LS9 / WT 55 ATM		Prog. 018																														
1. Switch OFF and then switch ON the machine.																																
2. CFG Enter into CFG parameter family and set the following parameters.																																
<table><tr><td>typ</td><td>0</td><td>Hood Type like working cycles.</td></tr><tr><td>bo</td><td>0</td><td>Atmospheric boiler.</td></tr><tr><td>doa</td><td>1</td><td>Manual Hood.</td></tr><tr><td>dfl</td><td>1</td><td>Default values for Hood Type models.</td></tr><tr><td>brc</td><td>1</td><td>SOFT START ENABLED.</td></tr><tr><td>b_t</td><td>1</td><td>Tank heater works only if boiler temperature reached.</td></tr><tr><td>btf</td><td>75</td><td>Enable filling tank by means of rinsing cycles.</td></tr><tr><td>les</td><td>0</td><td>Detergent level switches not enabled.</td></tr><tr><td>ui</td><td>1</td><td>Select user interface hood type model.</td></tr><tr><td>alr</td><td>1</td><td>Alarms enabled.</td></tr></table>		typ	0	Hood Type like working cycles.	bo	0	Atmospheric boiler.	doa	1	Manual Hood.	dfl	1	Default values for Hood Type models.	brc	1	SOFT START ENABLED.	b_t	1	Tank heater works only if boiler temperature reached.	btf	75	Enable filling tank by means of rinsing cycles.	les	0	Detergent level switches not enabled.	ui	1	Select user interface hood type model.	alr	1	Alarms enabled.	
typ	0	Hood Type like working cycles.																														
bo	0	Atmospheric boiler.																														
doa	1	Manual Hood.																														
dfl	1	Default values for Hood Type models.																														
brc	1	SOFT START ENABLED.																														
b_t	1	Tank heater works only if boiler temperature reached.																														
btf	75	Enable filling tank by means of rinsing cycles.																														
les	0	Detergent level switches not enabled.																														
ui	1	Select user interface hood type model.																														
alr	1	Alarms enabled.																														
3. Switch OFF and then switch ON the machine.																																
4. Modify Factory parameters:																																
FAC Enter into FAC parameter family and change boiler threshold.																																
<table><tr><td>btc</td><td>82</td><td>Boiler Temperature Threshold.</td></tr><tr><td>bra</td><td>0</td><td></td></tr><tr><td>bse</td><td>1</td><td></td></tr></table>		btc	82	Boiler Temperature Threshold.	bra	0		bse	1																							
btc	82	Boiler Temperature Threshold.																														
bra	0																															
bse	1																															
5. Modify the cycle parameters:																																
CY2 Cycle 2 parameters family.																																
<table><tr><td>sh2</td><td>55</td><td>Short Wash Phase [s]</td></tr></table>		sh2	55	Short Wash Phase [s]																												
sh2	55	Short Wash Phase [s]																														
CY3 Cycle 3 parameters family.																																
<table><tr><td>ln3</td><td>4</td><td>Long Wash Phase [min]</td></tr></table>		ln3	4	Long Wash Phase [min]																												
ln3	4	Long Wash Phase [min]																														
dpr Set other parameters.																																
<table><tr><td>ipa</td><td>5</td><td>Initial Pause [s]</td></tr></table>		ipa	5	Initial Pause [s]																												
ipa	5	Initial Pause [s]																														
6. Switch OFF and then switch ON the machine.																																



LS9 / WT55 PRESS		Prog. 019
1.	Switch OFF and then switch ON the machine.	
2.	CFG Enter into CFG parameter family and set the following parameters.	
	tYP 0 Hood Type like working cycles. ba 1 Pressure boiler. doa 1 Manual Hood. dFL 1 Default values for Hood Type models. trc 0 (for this appliance SOFT START is NOT possible). b_t 1 Tank heater works only if boiler temperature reached. btF 75 Enable filling tank by means of rinsing cycles. LES 0 Detergent level switches not enabled. ui 1 Select user interface hood type model. ALr 1 Alarms enabled.	
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC Enter into FAC parameter family and change boiler threshold.	
	bTC 84 Boiler Temperature Threshold. bAJ 0 bSF 1 Booster Function.	
5.	Modify the cycle parameters:	
	CY2 Cycle 2 parameters family.	
	Sh2 55 Short Wash Phase [s]	
	CY3 Cycle 3 parameters family.	
	Lw3 4 Long Wash Phase [min]	
	drn Drain parameters family.	
	ldr 30 Initial Drain Phase Duration [s]	
6.	Switch OFF and then switch ON the machine.	



LS5 / WT 4 PRES		Prog. 020
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters.
	tYP 0	Hood Type like working cycles.
	bo 1	Pressure boiler.
	do 2	Front loading door type.
	dFL 3	Default values for Undercounter models.
	brc 1	SOFT START ENABLED.
	b_t 1	Tank heater works only if boiler temperature reached.
	bTF 0	The tank is filled into the traditional way.
	LES 0	Detergent level switches not enabled.
	ui 1	Select user interface without display.
	ALr 0	ALARMS NOT ENABLED.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC	Enter into FAC parameter family.
	bTC 84	Boiler Temperature Threshold.
	bAU 3	
	bSF 2	Booster Function.
5.	Modify the cycle parameters:	
	CY3	Cycle 3 parameters family.
	Ln3 1	Long Wash Phase [min]
	Sh3 40	Short Wash Phase [s]
6.	Switch OFF and then switch ON the machine.	
7.	Modify Detergent dosage:	
	GEN	Enter into GEN parameter family.
	dIn 165	Initial Detergent Dosage.
	rIn 0	Initial Rinse Aid Dosage.
	dEL 182	Detergent dispenser works when LOAD SOLENOID VALVE is activated.
	rA1 51	Rinse Aid dispenser works when LOAD SOLENOID VALVE is activated.
8.	Switch OFF and then switch ON the machine.	

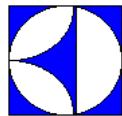


LS5 / WT 4 PRES MONO		Prog. 021
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters.
	tYP 0	Hood Type like working cycles.
	ba. 1	Pressure boiler.
	doo 2	Front loading door type.
	dFL 3	Default values for Undercounter models.
	trc 0	(for this appliance SOFT START is NOT possible).
	b_t 1	Tank heater works only if boiler temperature reached.
	bF 0	The tank is filled into the traditional way.
	LES 0	Detergent level switches not enabled.
	ui 7	Select user interface without display.
	ALr 0	ALARMS NOT ENABLED.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC	Enter into FAC parameter family.
	bTC 82	Boiler Temperature Threshold.
	bAU 3	
	bSF 2	Booster Function.
5.	Modify the cycle parameters:	
	CY3	Cycle 3 parameters family.
	Ln3 1	Long Wash Phase [min]
	Sh3 40	Short Wash Phase [s]
6.	Switch OFF and then switch ON the machine.	
7.	Modify Detergent dosage:	
	GEN	Enter into GEN parameter family.
	dIn 165	Initial Detergent Dosage.
	rIn 0	Initial Rinse Aid Dosage.
	dEL 182	Detergent dispenser works when LOAD SOLENOID VALVE is activated.
	rA, 51	Rinse Aid dispenser works when LOAD SOLENOID VALVE is activated.
8.	Switch OFF and then switch ON the machine.	



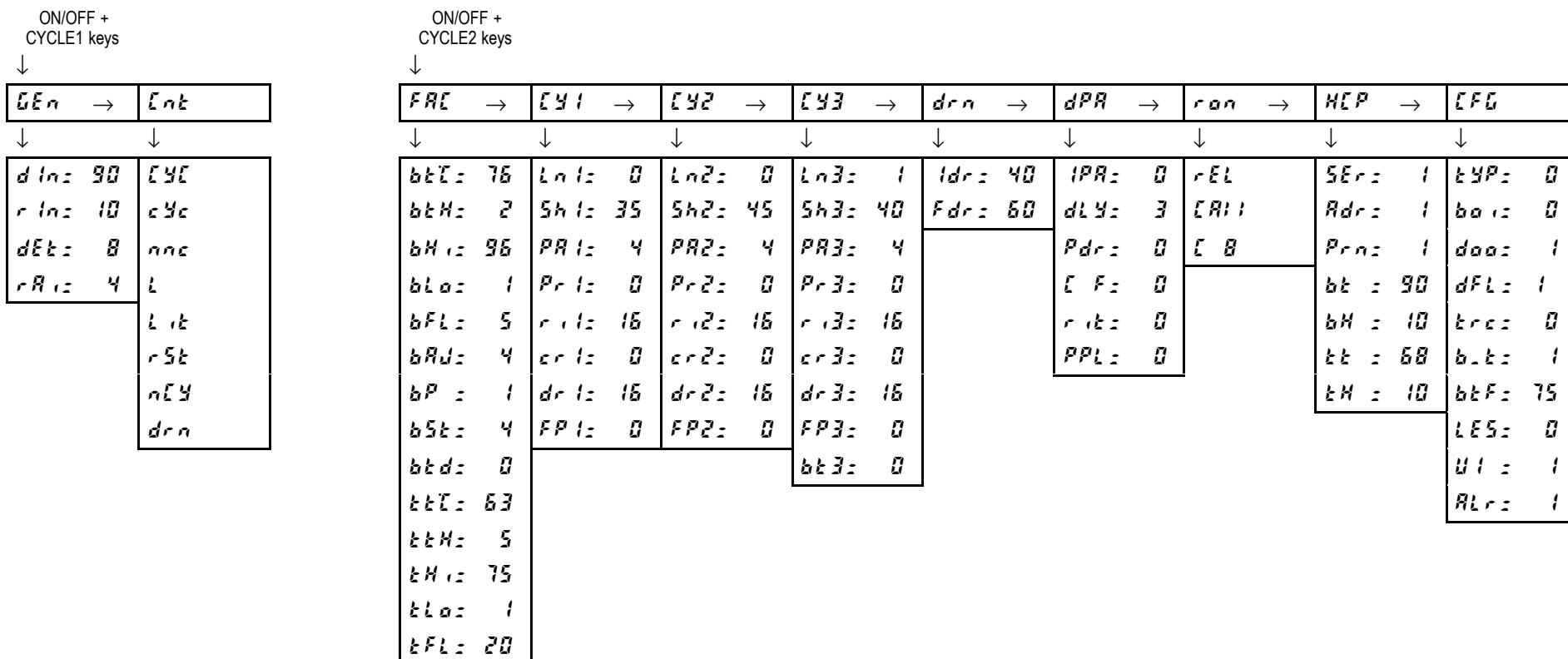
LB5G		Prog. 022
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters.
	EYP	0 Hood Type like working cycles.
	ba1	0 Atmospheric boiler.
	doa	2 Front loading door type.
	dFL	3 Default values for Undercounter models.
	trc	1 SOFT START ENABLED.
	b_t	1 Tank heater works only if boiler temperature reached.
	btf	0 The tank is filled into the traditional way.
	LES	0 Detergent level switches not enabled.
	ui	5 Select user interface for LS5.
	ALr	1 ALARMS ENABLED.
3.	Switch OFF and then switch ON the machine.	
4.	Modify Factory parameters:	
	FAC	Enter into FAC parameter family.
	btc	85 Boiler Temperature Threshold.
	bra	0
	bse	2 Booster Function.
5.	Modify the cycle parameters:	
	CY3	Cycle 3 parameters family.
	Ln3	1 Long Wash Phase [min]
	Sh3	40 Short Wash Phase [s]
6.	Switch OFF and then switch ON the machine.	

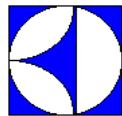
ECOTEMP5 EAG		Prog. 023
1.	Switch OFF and then switch ON the machine.	
2.	CFG	Enter into CFG parameter family and set the following parameters.
	EYP	0 Hood Type like working cycles.
	ba1	0 Atmospheric boiler.
	doa	2 Front loading door type.
	dFL	3 Default values for Undercounter models.
	trc	1 SOFT START ENABLED.
	b_t	1 Tank heater works only if boiler temperature reached.
	btf	75 Enable filling tank by means of rinsing cycles.
	LES	0 Detergent level switches not enabled.
	ui	1 Select user interface hood type model.
	ALr	1 ALARMS ENABLED.
3.	Switch OFF and then switch ON the machine.	



10.DEFAULT VALUES

Default 1 – Hood Type





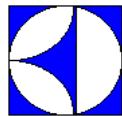
Electrolux

FSE - Dishwashing Platform
Electrolux Professional

Electronic Dishwasher
SERVICE MANUAL

Default 2 - POT WASHER -

ON/OFF + CYCLE1 keys		ON/OFF + CYCLE2 keys									
↓	↓	↓									
<i>Gen</i> →	<i>Ent</i>	<i>FRC</i> →	<i>CY1</i> →	<i>CY2</i> →	<i>CY3</i> →	<i>drcn</i> →	<i>dPR</i> →	<i>ranc</i> →	<i>HCP</i> →	<i>CFG</i>	↓
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
<i>dInz</i> : 240	<i>CYC</i>	<i>bETz</i> : 76	<i>Ln1z</i> : 2	<i>Ln2z</i> : 5	<i>Ln3z</i> : 8	<i>Idrz</i> : 40	<i>IPRz</i> : 2	<i>rEL</i>	<i>SErz</i> : 1	<i>tYPz</i> : 1	
<i>rInz</i> : 18	<i>cyc</i>	<i>bEHz</i> : 2	<i>Sh1z</i> : 34	<i>Sh2z</i> : 34	<i>Sh3z</i> : 34	<i>Fdrz</i> : 60	<i>dLYz</i> : 3	<i>CR11</i>	<i>Adrz</i> : 1	<i>ba1z</i> : 0	
<i>dEtz</i> : 16	<i>nnz</i>	<i>bHz</i> : 96	<i>Pr1z</i> : 4	<i>Pr2z</i> : 4	<i>Pr3z</i> : 4		<i>Pdrz</i> : 0	<i>C8</i>	<i>Pnz</i> : 1	<i>doaz</i> : 2	
<i>rR1z</i> : 7	<i>L</i>	<i>bLoz</i> : 1	<i>Pr1z</i> : 0	<i>Pr2z</i> : 0	<i>Pr3z</i> : 0		<i>C_Fz</i> : 0		<i>btz</i> : 90	<i>dFLz</i> : -	
	<i>L1t</i>	<i>bFLz</i> : 5	<i>r1lz</i> : 20	<i>r2lz</i> : 20	<i>r3lz</i> : 20		<i>r1tz</i> : 0		<i>bHz</i> : 10	<i>trecz</i> : 0	
	<i>r5t</i>	<i>bRDz</i> : 4	<i>cr1z</i> : 0	<i>cr2z</i> : 0	<i>cr3z</i> : 0		<i>PPLz</i> : 0		<i>ttz</i> : 68	<i>b1tz</i> : 1	
	<i>nCY</i>	<i>bPz</i> : 1	<i>dr1z</i> : 20	<i>dr2z</i> : 20	<i>dr3z</i> : 20				<i>bHz</i> : 10	<i>bETz</i> : 75	
	<i>drcn</i>	<i>bStz</i> : 4	<i>FP1z</i> : 0	<i>FP2z</i> : 0	<i>FP3z</i> : 0	<i>bt3z</i> : 0			<i>LESz</i> : 0	<i>U1z</i> : 1	
		<i>bEdz</i> : 0							<i>RLrz</i> : 1		
		<i>ttCz</i> : 63									
		<i>ttHz</i> : 5									
		<i>tHz</i> : 75									
		<i>tLoz</i> : 1									
		<i>tFLz</i> : 40									



Electrolux

FSE - Dishwashing Platform
Electrolux Professional

Electronic Dishwasher
SERVICE MANUAL

Default 3 - UNDERCOUNTER -

ON/OFF +
CYCLE1 keys



<i>DEn</i>	→	<i>Ent</i>
↓	↓	↓

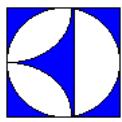
<i>dInz</i> 50	<i>Cyc</i>
<i>rInz</i> 10	<i>cyc</i>
<i>dEtz</i> 8	<i>nnz</i>
<i>rRiz</i> 4	<i>L</i>
<i>Lik</i>	
<i>rSt</i>	
<i>nEy</i>	
<i>drr</i>	

ON/OFF +
CYCLE2 keys



<i>Frc</i>	→	<i>Cy1</i>	→	<i>Cy2</i>	→	<i>Cy3</i>	→	<i>drr</i>	→	<i>dPR</i>	→	<i>ran</i>	→	<i>HEP</i>	→	<i>CFG</i>
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

<i>bEc</i> 80	<i>Ln1z</i> 1	<i>Ln2z</i> 1	<i>Ln3z</i> 3	<i>ldr</i> 30	<i>IPR</i> 0	<i>rEL</i>	<i>SEr</i> 1	<i>tYp</i> 0
<i>bEH</i> 2	<i>Sh1z</i> 10	<i>Sh2z</i> 40	<i>Sh3z</i> 40	<i>Fdr</i> 60	<i>dLY</i> 3	<i>CR11</i>	<i>Adr</i> 1	<i>ba1z</i> 0
<i>bH1z</i> 96	<i>PR1z</i> 4	<i>PR2z</i> 4	<i>PR3z</i> 4		<i>Pdr</i> 0	<i>C_B</i>	<i>Prnz</i> 1	<i>daaz</i> 2
<i>bLaz</i> 1	<i>Pr1z</i> 0	<i>Pr2z</i> 0	<i>Pr3z</i> 0		<i>C_F</i> 0		<i>bk</i> 90	<i>dFL</i> 3
<i>bFLz</i> 5	<i>r11z</i> 16	<i>r12z</i> 16	<i>r13z</i> 16		<i>r1kz</i> 0		<i>bH</i> 10	<i>trcc</i> 1
<i>bRdz</i> 0	<i>cr1z</i> 0	<i>cr2z</i> 0	<i>cr3z</i> 0		<i>PPL</i> 0		<i>EE</i> 68	<i>b1Ez</i> 1
<i>bPz</i> 1	<i>dr1z</i> 30	<i>dr2z</i> 30	<i>dr3z</i> 30				<i>EH</i> 10	<i>bEF</i> 75
<i>b5tz</i> 4	<i>FP1z</i> 0	<i>FP2z</i> 0	<i>FP3z</i> 0				<i>LES</i> 0	
<i>btdz</i> 3			<i>bt3z</i> 0				<i>U1</i> 1	
<i>bEc</i> 63							<i>RLrz</i> 1	
<i>bEH</i> 5								
<i>bH1z</i> 75								
<i>bLaz</i> 1								
<i>bFLz</i> 20								



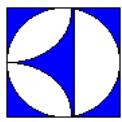
11. ALARM MESSAGES

A Alarms that stop the dishwasher

	Want of water	
	- Is the tap opened ?	

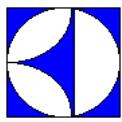
B Alarms that don't stop the dishwasher

	Drain not efficient	
	- Has the siphonspillway been extracted ? - Drainpipe obstructed. - Drain pump rotor blocked.	
	Overflow alarm	
	- Drain obstructed. - Load electric valve blocked. (E1 - LOAD_EV) - Load electric valve relay welded. (RL8 - LOAD_EV)	



C Alarms that stop the functioning and suggest to call the service

L 1	Boiler temperature rise too fast	
	- The boiler may be empty. Boiler level sensor not efficient.	
L 2	Boiler temperature too high	
	- Boiler relay welded/melted (see RL2,RL3,RL4). - Boiler level sensor not efficient.	
L 3	Tank temperature too high	
	- Tank relay welded/melted (RL5 - TUB_HEAT). - Rinse water too hot.	
L 4	Tank temperature sensor out of order	
	- Sensor broken or disconnected (NT1).	
L 5	Tank temperature sensor out of order	
	- Sensor short-circuited (NT1).	
L 6	Boiler temperature sensor out of order	
	- Sensor broken or disconnected (NT2).	
L 7	Boiler temperature sensor out of order	
	- Sensor short-circuited (NT2).	
L 8	During rinse phase boiler doesn't empty	
	- Rinse pump not efficient. - Rinse arms obstructed. - Boiler level sensor out of order.	
L 9	Automatic hood out of order	
	- Hood blocked, motor overload. - End switch out of order.	



D Alarms that don't stop the functioning, but suggest to call the service

E 1	Communication error	
	- Check connection between MB and UI.	
E 2	Tank temperature low	
	- Tank heater not efficient.	
E 3	Boiler temperature low	
	- Boiler heater/heaters not efficient.	