Advanced Operation Instructions
for washers
LOGI CONTROL

GIRBAU, S.A.
Crta de Manlleu, km. 1
08500 VIC (Barcelona) • SPAIN
Tel. 34 93 8861100
Fax 34 93 8860785
girbau@girbau.es
www.girbau.com

For USA & CANADA:

CONTINENTAL GIRBAU Inc.
2500 State Road 44
WI 54904 Oshkosh • USA
Tel. 1(920) 231-8222
Fax 1(920) 231-4666
info@cont-girbau.com
www.cont-girbau.com

LOGI
Advanced

Cod. 429597
Rev. 01/0106

Model	From serial #
High Speed	
HS-6008	2.080.001
HS-6013	2.110.001
HS-6017	2.120.001
EH020	1.430.001
EH030	1.460.001
EH040	1.470.001
Medium Speed	
MS-610	2.020.001
MS-613	2.030.001
MS-617	2.040.001
MS-623	2.050.001
EM025	1.370.001
EM030	1.380.001
EM040	1.390.001
EM055	1.400.001

SAFETY INSTRUCTIONS

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NOTE
For the contents of SAFETY INSTRUCTIONS, chapters 1. DESCRIPTION, 2. OPERATING INSTRUCTIONS, 4. TROUBLESHOOTING, 5. MAINTENANCE and 6. SERVICE REMOVAL, see ***Operation*** *Instructions* ***LOGI CONTROL****, supplied with the washer or request it to the manufacturer: girbau@girbau.es, (USA/CANADA: info@cont-girbau.com).*

3. ADVANCED USE MODE.

There is an advanced use mode: the **MOD** mode. This mode includes five different menus through which, each user can personalise the operation of the washing machine.

Menus for advanced use mode:

MENU	PURPOSE
Pro	Modification of the program contents
INFO	Information menu
Mod	Modification of operation parameters
Ncod	Modification of the access code
HOUR	Adjustment of the system time

3.1. Access to MODIFICATION mode

Connect the washer and open the door. The display shows ***door.***
Hold **MOD** key until the display shows ***Cod.***
Enter the access code to the menus pressing, without interruption, the sequence of eight keys of the code. In basic configuration (when the machine is delivered) the access code to **MODIFICATION** mode is: **12341234.**

Numerical correspondence of each key

KEY	CORRESPONDENCE
MOD	1
▲	2
ACCEL	3
▼	4

If the sequence set is correct, report ***Pro*** will be showed in the display, corresponding to the first menu.
Keys ▲ and ▼ allow the selection of the precedent table menus. The menu selected is showed in the display following its key word. To enter in it, press the **MOD** key when displaying it.

If wished to skip the **MODIFICATION** mode, press **STOP** and machine will return to programs execution mode.

Disconnecting the electrical supply to the washing machine can also exit the **MODIFICATION** mode.

3.2. Modification of programs contents. Pro menú.

In its original configuration, the washing machine has eight wash programs with content adapted to a wide range of usage. However, the content of each program can be modified to be adapted to the specific needs of different situations.
The modifications will always be carried out starting from a MASTER PROGRAM that understands the programmable parameters and the maximum and minimum values of certain options.
The master program is composed of nine phases. At the start of each phase, a parameter of the value ***PH-Y / Ph-N*** (execute **YES** phase / execute **NO** phase) will allow the user to determine if the accessed phase should be executed or, on the contrary, be omitted.

Once the phase is defined as to be executed, proceed to the display and modification (if desired) of the parameters or values of the phase.

3.2.1. Master program

PHASE	EXECUTION	LEVEL	TEMP.	DOSING	ROTATION	ROTATION TIME	COOL DOWN	PAUSE	EXTRACT	EXTRACT TIME
	Ph	***L***	***C / F***	***d***	***r***	***rt***	***c***	***rh***	***E***	***Et***
1	Y / N	1…4	0 ... 40 32 ... 104	0 / 1	1...3	1...8	n.p.	n.p.	1	n.p.
2	Y / N	1…4	0 ... 40 32 ... 104	0 / 1	1...3	1...8	n.p.	n.p.	1	n.p.
3	Y / N	1…4	0 ... 40 32 ... 104	0 / 1	1...3	1...8	n.p.	n.p.	1...3	n.p. 2...4
4	Y	1…4	0 ... 90 32 ... 194	2	1...3	1...20	0 / 1	n.p.	0...2	n.p. 2...3
5	Y / N	1…4	0 ... 40 32 ... 104	0 / 3	1...3	1...8	n.p.	n.p.	1...3	n.p. 2...4
6	Y / N	1…4	n.p.	n.p.	1...3	1...8	n.p.	n.p.	1	n.p.
7	Y / N	1…4	n.p.	n.p.	1...3	1...8	n.p.	n.p.	1	n.p.
8	Y / N	1…4	n.p.	n.p.	1...3	1...8	n.p.	n.p.	1	n.p.
9	Y	1…4	0 ... 40 32 ... 104	0 / 4	1...3	1...8	n.p.	0 / 1	1...6	n.p. 2...9

Refer to *section 3.2.5* for the definition of functions and programmable values of each phase.

3.2.2. Programs contents. General application.

PR - 1. EXTRA HEAVY SOIL - WHITE 65 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	Y	2	20	1	1	4	- - -	- - -	1	- - -
2	Y	2	40	0	1	2	- - -	- - -	1	- - -
3	Y	2	60	1	1	6	- - -	- - -	3	3
4	Y	1	80	2	1	12	0	- - -	2	2
5	Y	2	40	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 2. HEAVY SOIL - WHITE 59 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	Y	2	20	0	1	4	- - -	- - -	1	- - -
2	N	2	0	0	1	2	- - -	- - -	1	- - -
3	Y	2	30	1	1	6	- - -	- - -	3	3
4	Y	1	60	2	1	10	0	- - -	2	2
5	Y	2	40	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 3. MEDIUM SOIL – WHITE 51 MIN

Ph		L	C	d	r	rt	cd	rh	E	Et
1	N	2	30	0	1	4	- - -	- - -	1	- - -
2	N	2	0	0	1	2	- - -	- - -	1	- - -
3	Y	2	30	1	1	6	- - -	- - -	3	3
4	Y	1	50	2	1	8	0	- - -	2	2
5	Y	2	30	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 4. LIGHT SOIL – WHITE 37MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	30	0	1	4	- - -	- - -	1	- - -
2	N	2	0	0	1	2	- - -	- - -	1	- - -
3	N	2	30	1	1	6	- - -	- - -	3	3
4	Y	1	40	2	1	6	1	- - -	0	- - -
5	Y	2	30	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 5. HEAVY SOIL – COLOR 51 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	40	0	2	4	- - -	- - -	1	- - -
2	Y	2	0	0	2	4	- - -	- - -	1	- - -
3	Y	2	30	1	2	6	- - -	- - -	3	3
4	Y	1	40	2	1	10	0	- - -	2	2
5	Y	3	0	0	2	2	- - -	- - -	3	3
6	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	2	2	- - -	- - -	1	- - -
9	Y	2	0	4	2	4	- - -	0	6	7

PR - 6. MEDIUM SOIL – COLOR 40 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	30	0	2	4	- - -	- - -	1	- - -
2	N	2	0	0	2	2	- - -	- - -	1	- - -
3	Y	2	30	1	2	4	- - -	- - -	2	2
4	Y	1	40	2	1	8	0	- - -	2	2
5	Y	3	0	0	2	2	- - -	- - -	3	3
6	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	2	2	- - -	- - -	1	- - -
9	Y	2	0	4	2	4	- - -	0	6	7

PR - 7. SYNTHETICS 30 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	3	30	0	2	4	- - -	- - -	1	- - -
2	N	3	0	0	2	2	- - -	- - -	1	- - -
3	N	2	40	1	2	4	- - -	- - -	2	2
4	Y	1	40	2	2	6	0	- - -	2	2
5	Y	3	0	0	2	2	- - -	- - -	3	3
6	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	2	2	- - -	- - -	1	- - -
9	Y	2	0	4	2	4	- - -	0	6	6

PR - 8. WOOL AND DELICATES 32 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	3	0	0	3	4	- - -	- - -	1	- - -
2	N	3	0	0	3	2	- - -	- - -	1	- - -
3	Y	3	0	1	3	4	- - -	- - -	1	- - -
4	Y	2	30	2	2	8	1	- - -	1	- - -
5	Y	3	0	0	3	2	- - -	- - -	1	- - -
6	N	3	- - -	- - -	3	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	3	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	3	2	- - -	- - -	1	- - -
9	Y	3	0	4	3	4	- - -	0	4	3

3.2.3. Programs contents. USA / CANADA application.

PR - 1. EXTRA HEAVY SOIL - WHITE 27 MIN

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	2	104	1	1	4	- - -	- - -	1	- - -
2	N	2	32	0	1	2	- - -	- - -	1	- - -
3	N	2	104	1	1	6	- - -	- - -	3	3
4	Y	1	113	2	1	9	0	- - -	1	- - -
5	Y	2	32	3	1	2	- - -	- - -	3	2
6	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
8	Y	2	- - -	- -	1	1	- - -	- - -	1	- - -
9	Y	2	32	4	1	2	- - -	0	6	5

PR - 2. HEAVY SOIL - WHITE 22 MIN

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	2	104	0	1	4	- - -	- - -	1	- - -
2	N	2	32	0	1	2	- - -	- - -	1	- - -
3	N	2	104	1	1	6	- - -	- - -	3	3
4	Y	1	104	2	1	6	0	- - -	1	- - -
5	Y	2	32	3	1	3	- - -	- - -	3	2
6	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
9	Y	2	32	4	1	2	- - -	0	6	5

PR - 3. MEDIUM SOIL – WHITE 22 MIN

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	2	86	0	1	4	- - -	- - -	1	- - -
2	N	2	32	0	1	2	- - -	- - -	1	- - -
3	N	2	104	1	1	6	- - -	- - -	3	3
4	Y	1	86	2	1	6	0	- - -	1	- - -
5	Y	2	32	3	1	3	- - -	- - -	3	2
6	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
9	Y	2	32	4	1	2	- - -	0	6	5

PR - 4. LIGHT SOIL – WHITE 20 MIN

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	2	86	0	1	4	- - -	- - -	1	- - -
2	N	2	32	0	1	2	- - -	- - -	1	- - -
3	N	2	86	1	1	6	- - -	- - -	3	3
4	Y	1	68	2	1	4	1	- - -	1	- - -
5	Y	2	32	3	1	3	- - -	- - -	3	2
6	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	1	1	- - -	- - -	1	- - -
9	Y	2	32	4	1	2	- - -	0	6	5

PR - 5. HEAVY SOIL – COLOR 22 min

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	2	104	0	2	4	- - -	- - -	1	- - -
2	N	2	32	0	2	4	- - -	- - -	1	- - -
3	N	2	104	1	2	6	- - -	- - -	3	3
4	Y	1	104	2	1	8	0	- - -	1	- - -
5	Y	2	32	0	2	1	- - -	- - -	3	2
6	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
9	Y	2	32	4	2	2	- - -	0	6	5

PR - 6. MEDIUM SOIL – COLOR 21 min

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	2	86	0	2	4	- - -	- - -	1	- - -
2	N	2	32	0	2	2	- - -	- - -	1	- - -
3	N	2	104	1	2	4	- - -	- - -	2	2
4	Y	1	104	2	1	6	0	- - -	1	- - -
5	Y	2	32	0	2	1	- - -	- - -	3	2
6	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
9	Y	2	32	4	2	3	- - -	0	6	5

PR - 7. SYNTHETICS 18 MIN

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	3	32	0	2	4	- - -	- - -	1	- - -
2	N	3	32	0	2	2	- - -	- - -	1	- - -
3	N	2	32	1	2	4	- - -	- - -	2	2
4	Y	1	86	2	2	4	0	- - -	1	- - -
5	Y	2	32	0	2	1	- - -	- - -	3	2
6	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	2	1	- - -	- - -	1	- - -
9	Y	2	32	4	2	2	- - -	0	6	5

PR - 8. WOOL AND DELICATES 17 MIN

Ph	Ph	L	F	d	r	rt	cd	rh	E	Et
1	N	3	32	0	3	4	- - -	- - -	1	- - -
2	N	3	32	0	3	2	- - -	- - -	1	- - -
3	N	3	32	1	3	4	- - -	- - -	1	- - -
4	Y	2	68	2	2	6	1	- - -	1	- - -
5	Y	2	32	0	3	1	- - -	- - -	1	- - -
6	N	3	- - -	- -	3	1	- - -	- - -	1	- - -
7	N	3	- - -	- -	3	1	- - -	- - -	1	- - -
8	N	3	- - -	- -	3	1	- - -	- - -	1	- - -
9	Y	2	32	4	3	2	- - -	0	4	3

3.2.4. Programs contents. Great Britain application.

PR - 1. HEALTHCARE 49 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	40	1	1	4	- - -	- - -	1	- - -
2	Y	2	0	0	1	2	- - -	- - -	1	- - -
3	Y	2	0	1	1	2	- - -	- - -	3	3
4	Y	1	65	2	1	12	0	- - -	2	2
5	Y	2	40	3	1	6	- - -	- - -	1	- - -
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 2. HEAVY SOIL – WHITE 59 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	Y	2	20	0	1	4	- - -	- - -	1	- - -
2	N	2	0	0	1	2	- - -	- - -	1	- - -
3	Y	2	30	1	1	6	- - -	- - -	3	3
4	Y	1	60	2	1	10	0	- - -	2	2
5	Y	2	40	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 3. MEDIUM SOIL – WHITE 51 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	30	0	1	4	- - -	- - -	1	- - -
2	N	2	0	0	1	2	- - -	- - -	1	- - -
3	Y	2	30	1	1	6	- - -	- - -	3	3
4	Y	1	50	2	1	8	0	- - -	2	2
5	Y	2	30	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 4. LIGHT SOIL – WHITE 37MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	30	0	1	4	- - -	- - -	1	- - -
2	N	2	0	0	1	2	- - -	- - -	1	- - -
3	N	2	30	1	1	6	- - -	- - -	3	3
4	Y	1	40	2	1	6	1	- - -	0	- - -
5	Y	2	30	3	1	6	- - -	- - -	3	3
6	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	1	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	1	2	- - -	- - -	1	- - -
9	Y	2	0	4	1	4	- - -	0	6	7

PR - 5. HEAVY SOIL – COLOR 51 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	40	0	2	4	- - -	- - -	1	- - -
2	Y	2	0	0	2	4	- - -	- - -	1	- - -
3	Y	2	30	1	2	6	- - -	- - -	3	3
4	Y	1	40	2	1	10	0	- - -	2	2
5	Y	3	0	0	2	2	- - -	- - -	3	3
6	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	2	2	- - -	- - -	1	- - -
9	Y	2	0	4	2	4	- - -	0	6	7

PR - 6. MEDIUM SOIL - COLOR 40 MIN

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	2	30	0	2	4	- - -	- - -	1	- - -
2	N	2	0	0	2	2	- - -	- - -	1	- - -
3	Y	2	30	1	2	4	- - -	- - -	2	2
4	Y	1	40	2	1	8	0	- - -	2	2
5	Y	3	0	0	2	2	- - -	- - -	3	3
6	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	2	2	- - -	- - -	1	- - -
9	Y	2	0	4	2	4	- - -	0	6	7

PR - 7. SYNTHETICS **30 MIN**

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	3	30	0	2	4	- - -	- - -	1	- - -
2	N	3	0	0	2	2	- - -	- - -	1	- - -
3	N	2	40	1	2	4	- - -	- - -	2	2
4	Y	1	40	2	2	6	0	- - -	2	2
5	Y	3	0	0	2	2	- - -	- - -	3	3
6	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	2	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	2	2	- - -	- - -	1	- - -
9	Y	2	0	4	2	4	- - -	0	6	6

PR - 8. WOOL AND DELICATES **32 MIN**

Ph	Ph	L	C	d	r	rt	cd	rh	E	Et
1	N	3	0	0	3	4	- - -	- - -	1	- - -
2	N	3	0	0	3	2	- - -	- - -	1	- - -
3	Y	3	0	1	3	4	- - -	- - -	1	- - -
4	Y	2	30	2	2	8	1	- - -	1	- - -
5	Y	3	0	0	3	2	- - -	- - -	1	- - -
6	N	3	- - -	- - -	3	2	- - -	- - -	1	- - -
7	N	3	- - -	- - -	3	2	- - -	- - -	1	- - -
8	Y	3	- - -	- - -	3	2	- - -	- - -	1	- - -
9	Y	3	0	4	3	4	- - -	0	4	3

3.2.5. Phases definition.

PHASES	DEFINITION
1, 2, 3	**Soaking and pre-washes**. Optional execution phases. Water heating is permitted only in machines with heating.
4	**Washing**. Obligatory execution phase. The mixing of hot and cold water and/or water heating is permitted.
5	**First Rinse**. Optional execution phase. The mixing of hot and cold water is permitted and/or water heating. Dosing of bleach included in some programs.
6 - 8	**Second, third and fourth rinses**. Optional execution phase.
9	**Final Rinse**. Obligatory execution phase. The mixing of hot and cold water is permitted and/or water heating. Dosing of softener included and final extract.

3.2.6. Definition of programmable functions and values for each phase

PARAMETER	CONCEPT	OPTIONS	
Ph	Phase execution	***Ph-Y***	Phase able to be executed
		Ph-N	Phase unable to be executed
L	Bath level	***L-1***	Low level
		L-2	Medium level
		L-3	High level (Level not programmable in machines with pump drain)
		L-4	Extra high level (Level not programmable in machines with pump drain)
C / F	Bath temperature	***0 / ✳✳***	Programmable range in Centigrade degrees
		32 / ✳✳✳	Programmable range in Fahrenheit degrees
		n.p	Not possible to program temperature in phase
d	Dosing	***d-0***	Phase without dosing
		d-1	Dosing of pre-wash detergent
		d-2	Dosing of wash detergent
		d-3	Dosing of bleach
		d-4	Dosing of softener or neutraliser
		n.p.	Not possible to program dosing in phase
r	Type of rotation	***r-1***	Heavy-duty rotation: 25 sec. ON - 5 sec. OFF
		r-2	Normal rotation: 15 sec. ON - 15 sec. OFF
		r-3	Delicate rotation: 5 sec. ON - 25 sec. OFF
rt	Rotation time (in minutes)	***1...8***	Programmable range in soak, pre-wash and rinse phases
		1...20	Programmable range in wash phase
c	Progressive cool down	***0***	Without progressive cool-down
		1	Progressive cool-down in wash phase
		n.p	Option not programmable
rh	Program stop in final rinse	***0***	Without stop in final rinse
		1	Stop in final rinse
		n.p	Option not programmable
E	Bath drain	***0***	Phase without drain
		1	Drain + wash speed
		2	Drain + positioning speed
		3	Drain + low extract speed
		4	Drain + medium extract speed
		5	Drain + medium/high extract speed
		6	Drain + high extract speed
Et	Extract time	✳✳	In minutes

3.2.7. Modification of a program

Access the **MODIFICATION** mode *(section 3.1)* The display will indicate ***Pro***.
Press the **MOD** key to access the **PROGRAMMING** menu.
The display will indicate ***Pr-1***. Ready to modify program 1. The ▲ / ▼ keys are used to select another program. Press the **MOD** key to access the modification of the displayed program.
The display will indicate ***Ph-1***. Ready to modify phase 1. The ▲ / ▼ keys are used to select another phase. Press the **MOD** key to start the modification to the values of the selected phase.
When the number of the phase is displayed (start of phase), the **STOP** key is used to finalise the program modification.

Once finalised the modification of a program, the display will show the ***Pr-***✳ report. (modified program). A pulsation on key **STOP** allows to access at the superior level of the menu. Two consecutive pulsations allow exiting the **MODIFICATION** mode.

Activation of the phase
Allows programming the execution of the selected phase.
Once the desired phase to be modified has been selected, press the **MOD** key. The display will indicate ***Ph-***✳***.***

OPTIONS	MEANING
Ph-Y	Availability of the phase to be executed
Ph-N	Unavailability of the phase to be executed

The ▲ key will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Bath level.
Allows the selection of bath level inside the washer.

OPTIONS	MEANING
L-1	Low level
L-2	Medium level
L-3	High level
L-4	Extra high level

For safety, the options ***L-3*** and ***L-4*** are not programmable in machines with pump drain.
The ▲ / ▼ keys will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Bath temperature
Allows modifying the water temperature in the phases in which this function is available. In other phases, it is not possible to program the water temperature.

OPTIONS	MEANING
C-00 ... C-40 ***F 32 ... F 104***	Range of programmable temperature in soak, prewash and rinses phases. **C-** ✳✳**:** Centigrade degrees **F**✳✳✳**:** Fahrenheit degrees
C-00 ... C-90 ***F 32 ... F 194***	Range of programmable temperature in wash phase. **C-** ✳✳**:** Centigrade degrees **F**✳✳✳**:** Fahrenheit degrees

The ▲ / ▼ keys will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Dosing.
Permits to activate or deactivate dosing that appear in the master table.

OPTIONS	MEANING
d-0	Without dosing
d-1	External dosing of soak and pre-wash detergent
d-2	External dosing of wash detergent
d-3	Bleach dosing
d-4	Softener or neutraliser dosing
n.p.	Not possible to program dosing in the phase

The first executed soak or pre-wash phase doses the deposited detergent in the pre-wash compartment of the washer dispenser. In these phases water enters through this compartment.
The wash phase doses the product located at the wash compartment of the washer dispenser. In the wash phase the water enters through this compartment.
Options **d-1** and **d-2** only control the external product dosing.
Options **d-3** and **d-4** control the entry of water into the corresponding compartment of the dispenser and the external product dosing.

The ▲ key will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Rotation
The mechanical action of the washing machine regarding the laundry is different according to the selected rotation.
Time **ON**: drum in rotation
Time **OFF**: drum stopped.

OPTIONS	MEANING
r-1	Heavy duty rotation **ON**: 25 sec. **OFF**: 5 sec.
r-2	Normal rotation **ON**: 15 sec. **OFF**: 15 sec.
r-3	Gentle rotation **ON**: 5 sec. **OFF**: 25 sec.

The ▲ key will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Rotation time
Rotation time programmed in the phase. It is valued in minutes.
This time is started once the programmed temperature and level are reached.

OPTIONS	MEANING
1 ... 8	Programmable range in the soak, pre-wash and rinse phases
1 ... 20	Programmable range in the wash phase

The ▲ / ▼ keys will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Progressive cool down
Progressive cool-down of the water is done by adding cold water until a temperature of 45ºC (113ºF) is reached.
This function will appear only in the wash phase if the programmed temperature is over 50ºC (122ºF).

OPTIONS	MEANING
c-0	Progressive cool-down deactivated
c-1	Progressive cool-down activated

The ▲ key will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Crease guard stop
All the functions of the washing machine stop, maintaining the water inside, with a light rotation of the drum at 15 minute intervals. This is only programmable in the final phase of the program.
This function is designed to avoid the laundry remaining for a long time inside the drum, once the final spin is finished, thus avoiding the appearance of creases.

OPTIONS	MEANING
rh-0	Crease guard stop OFF
rh-1	Crease guard stop ON

The ▲ key will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Bath drain
The draining of the water from the washing machine is done through the activation of the drain system, either by pump or by gravity at the same time the drum is rotating.
Option **E-1** implies an unchangeable time value. The duration of options **E-2 – E-6** is programmable within a determined range.

OPTIONS	MEANING
E-0	Phase without drain
E-1	Drain + wash speed
E-2	Drain + positioning speed
E-3	Drain + low extract speed
E-4	Drain + medium extract speed
E-5	Drain + medium/high extract speed
E-6	Drain + high extract speed

R.P.M. FOLLOWING MACHINE MODEL				
OPTIONS	MS-620 EM025	HS-6008 EH020	HS-6013 EH030	HS-6017 EH040
E-0	- - - -	- - - -	- - - -	- - - -
E-1	50	50	49	45
E-2	99	101	100	99
E-3	306	580	400	350
E-4	402	690	600	550
E-5	503	780	800	750
E-6	600	970	1005	950

The ▲ / ▼ keys will modify the displayed option.
The **MOD** key validates the displayed selection and allows access to the following programmable function.

Extract time
Extract time programmed in the phase. It is valued in minutes.

OPTIONS	MEANING
n.p.	Drain time **E-1**
2 ... 4	Programmable range in not final phase of the program
2 ... 9	Programmable range in final phase of the program

The ▲ / ▼ keys will modify the displayed option.
The **MOD** key validates the displayed selection and ends the phase programming.
Display shows the following phase.
When finalising the programming of the last phase of the program, display shows ***Pr-***✳ (modified program)

3.3. Information menu. INFO menu

PARAMETERS	MEANING
LOGI ✳✳✳✳	Type of control Washer's model
EP✳✳	Version of program
Pr	Number of cycles executed
SUD	Number of times the anti-suds function has been activated

Access the **MODIFICATION** menu. *Section 3.1.* Display shows ***Pro.***
Press ▲ key. Display shows ***INFO.***
Press the **MOD** key to sequentially access the listing of the different parameters and the values of the corresponding counters.
Once the last option is listed, press the **MOD** key. Display shows ***INFO***.
The ▲ / ▼ keys allow the access to other menus.
To exit the **MODIFICATION** menu press the **STOP** key.

3.4. Modification of operating parameters. Mod menu.

The **Mod** menu allows the modification of the operation parameters of all the programs.
The modifications carried out from **Mod** menu affects the eight programs.

Summary table of the changeable parameters:

PARAMETER	MODIFICATION OF	OPTIONS		CE	USA
b	Buzzer	***b-0***	Without buzzer		
		b-1	Low buzzer		
		b-2	Normal buzzer	←	←
		b-3	Strong buzzer		
C / F	Temperature unit	***C***	Temperature displayed in Centigrade degrees	←	
		F	Temperature displayed in Fahrenheit degrees		←
AC	Program acceleration	***AC-0***	Without acceleration permission		
		AC-1	With acceleration permission	←	←
SP	Levels of suds prevention	***SP-0***	Without suds prevention	←	←
		SP-1	First level of suds prevention		
		SP-2	Second level of suds prevention		
tS	Wash temperature selection when starting program	***tS-0***	Wash temperature selection disabled.		
		tS-1	Wash temperature selection enabled.	←	←

← Indicates default option following configuration.

3.4.1. Parameters modification

Access the **MODIFICATION** mode. *Section 3.1.* Display shows ***Pro.***
Press key ▲ twice. In the display reports ***INFO, Mod*** are showed successively.
Press the **MOD** key to display the first parameter.

Buzzer
The door safety unlock can be advised by the sounding of a beep. The duration of this warning is programmable.

OPTIONS	MEANING
b-0	Buzzer OFF
b-1	Low buzzer: two beep
b-2	Normal buzzer: four beep
b-3	Strong buzzer: six beep

The key ▲ allows the modification of the option displayed.
The **MOD** key validates the selection on the display and permits the access to the following programmable function.

Temperatura unit
The bath water temperature can be displayed in Centigrade or Fahrenheit degrees.

OPTIONS	MEANING
C	Temperature unit in Centigrade degrees
F	Temperature unit in Fahrenheit degrees

The key ▲ allows the modification of the option displayed.
The **MOD** key validates the selection on the display and permits the access to the following programmable function.

Program acceleration
Program acceleration can reduce the time of the programs accessing to functions or subsequent phases, or reducing the times of rotation and spinning. There is also the possibility to increment the rotation times.
The option **AC** enables or disables the utilisation of the **ACCEL** (acceleration) key

OPTIONS	MEANING
AC-0	Acceleration option disabled
AC-1	Acceleration option enabled

The key ▲ allows the modification of the option displayed.
The **MOD** key validates the selection on the display and permits the access to the following programmable function.

Suds prevention program
Certain detergents commonly used in some countries produce large quantities of suds and can complicate the proper functioning of the wash programs.
To mitigate this complication it is advisable to use the anti-suds program.
The anti-suds program consists of TWO levels of prevention. Each level of prevention involves a light increment in the duration of the program and of the consumption of water and energy.
Once programmed, the prevention is activated automatically in the case that the washing machine detects excessive suds within the interior of the drum.

OPTIONS	MEANING
SP-0	Without suds prevention
SP-1	First level of suds prevention
SP-2	Second level of suds prevention

The key ▲ allows the modification of the option displayed.
The **MOD** key validates the selection on the display and permits the access to the following programmable function.

Quick wash temperature selection
This option disables the possibility to modify the wash phase temperature for the following programme.

OPTIONS	MEANING
tS-0	Wash temperature selection disabled.
tS-1	Wash temperature selection enabled.

The key ▲ allows the modification of the option displayed.
The **MOD** key validates the selection on the display. Display shows **Mod**.
The keys ▲ / ▼ allow the access to other menus.
To exit the **MODIFICATION** mode press the **STOP** key.

3.5. Modification of the access code to MODIFICATION mode. Ncod menu.

As it is described in *section 3.1*, the access to **CONFIGURATION** mode is restricted with an access code.
This code can be modified by the user if he wants to.
It must always contain a combination of **EIGHT** keys

Access code modification.
Access the MODIFICATION mode. *Section 3.1.* Display shows ***Pro.***
Press the ▲ key three times. ***INFO, Mod, Ncod*** reports will be showed in the display successively.
Press the **MOD** key to set a new code. All the information of the display goes out.
Enter a combination of eight keys using the four central keys in the control panel.
The key pushed is displayed in the display as follows:

KEY	CORRESPONDENCE
MOD	**1**
▲	**2**
ACCEL	**3**
▼	**4**

At the end of the sequence the ***SURE*** report will be showed.
Confirm the new code with the **ACCEL** key.
If you don't want to validate the code, push the **STOP** key.
Display will show ***Ncod***.
The keys ▲ / ▼ allow the access to other menus.
To exit the **MODIFICATION** mode press the **STOP** key.

NOTE.
If you forget the modified code, call the Service department to restore the original code.

3.6. Clock of the system. Hour menu

The access to this menu is only possible if the option clock is available.
This menu allows the user to enquire and / or modify the hour in the system.
The clock must be at the real time for the proper operation of the starting time.

3.6.1 To set de clock

Access the **MODIFICATION** mode. *Section 3.1.* Display shows ***Pro.***
Press the ▲ key four times. ***INFO, Mod, Ncod, Hour*** reports will be showed in the display successively.
When displaying ***Hour*** push the **MOD** key. The ***SURE*** report will be displayed.
The control of the washing machine asks for the confirmation of the access command for the time modification.
To exit the **Hour** menu, push **STOP**
Push **ACCEL** to access the modification of the clock time.
The hour of the system is showed in the display in the format: hh.mm (hour format: 24 hours).
The changeable parameters are showed flashing.
Push the **ACCEL** key to pass from the minute modification to the hour modification.
Change the selected value with the ▲/▼ keys.
Push the **MOD** key to validate the selection.
STOP allows leaving the menu without validating the modification.
After validating the time selection, ***Hour*** is showed in the display.
The ▲/▼ keys allow the access to other menus.
To exit the **MODIFICATION** mode press the **STOP** key. The washing machine can carry out the programs.