

POLYSOUDE S.A.

**Z.I. du Bois Briand
2, rue Paul Beaupère
44300 NANTES
FRANCE**

Tel. (33) 2 40 68 11 00

Fax (33) 2 40 68 11 11

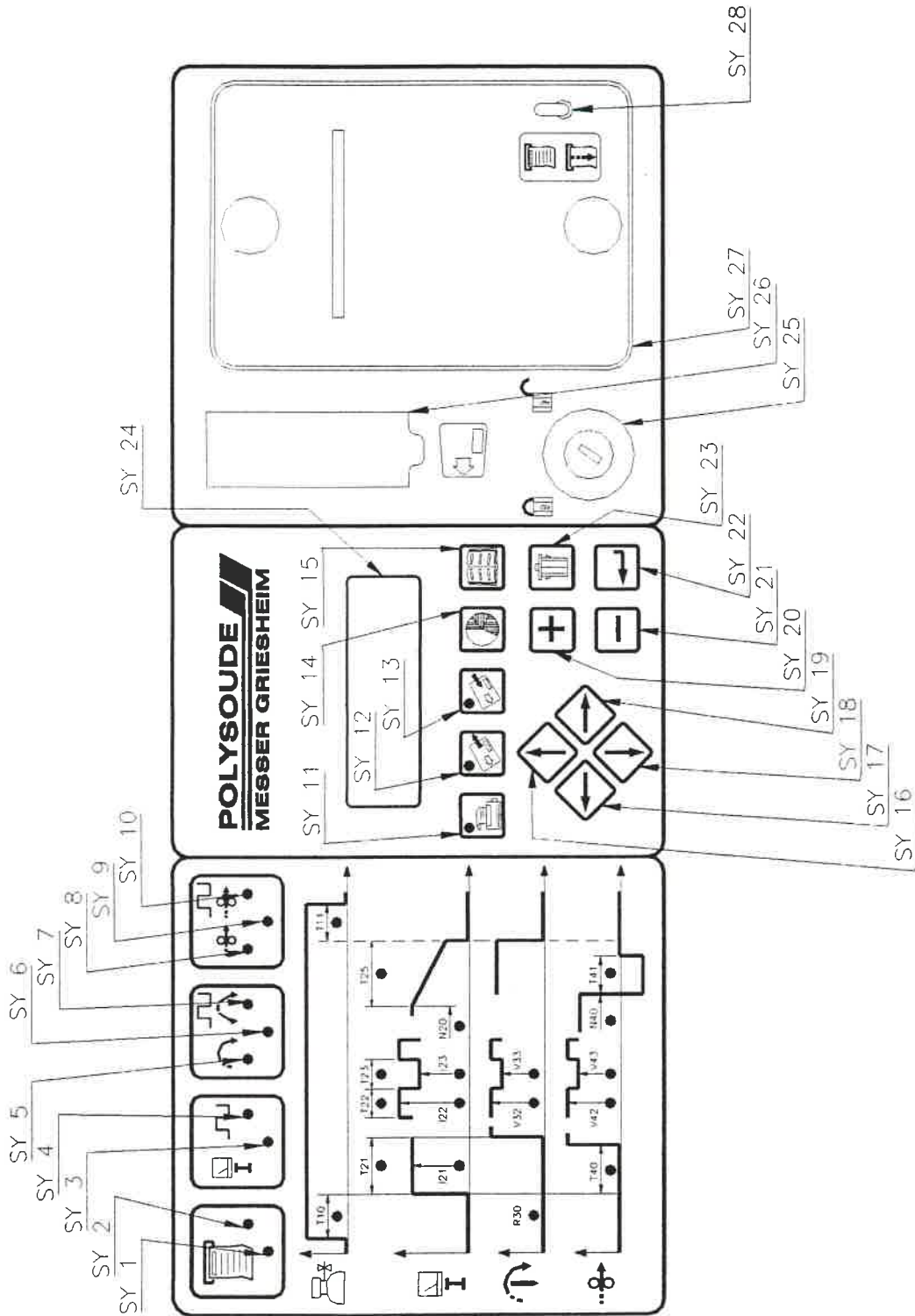
**PROGRAMMING MANUAL
POWER SOURCE
PS 204 / PS 254**

INDEX
PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254
(Page 1/1)

	Page
1 - CONTROLS AND COMPONENTS	1
2 - LIST OF ACTIONS/CONTROLS; WELDING PARAMETERS	2
3 - EXPLANATION OF SYMBOLS USED	3
4 - ENTERING THE PROGRAM NAME	4
5 - MODIFYING THE PROGRAM NAME	6
6 - CHOICE OF A BUILT-IN PROGRAM	10
7 - PROGRAMMING AND MODIFYING THE WELDING PARAMETERS	12
7.1 - Configuration	12
7.2 - Gas	14
7.3 - Prefusion	16
7.4 - Current	17
7.5 - Downslope	18
7.6 - Rotation; weld head reference numbers and calculation of travel speed V32 and V33	19
8 - PROGRAMMATION OF SECTORS: WELDING PARAMETERS	23
8.1 - Rotation	23
8.2 - Wire	26
9 - MODIFICATION OF SECTOR START POSITION	28
10 - DELETING A SECTOR	29
11 - DELETING A PROGRAM FROM THE SOURCE MEMORY	30
12 - SAVING A PROGRAM	31
13 - LOADING A PROGRAM	32
14 - PRINTING A PROGRAM	33
15 - ENTERING THE TIME AND DATE	34
16 - ENTERING/MODIFYING THE COMPANY NAME	37
17 - NOTES	41

PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254










1 - CONTROLS AND COMPONENTS

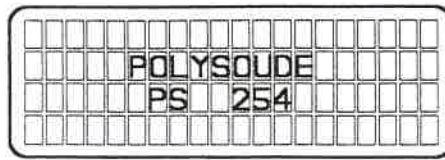


2 - LIST OF CONTROLS / ACTIONS; WELDING PARAMETERS

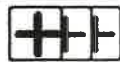
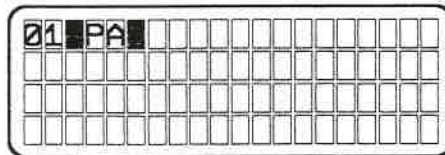
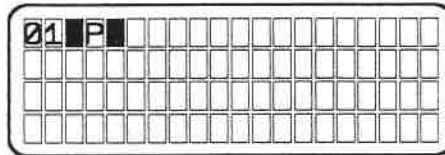
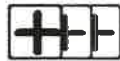
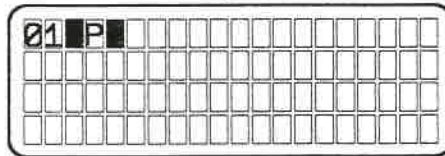
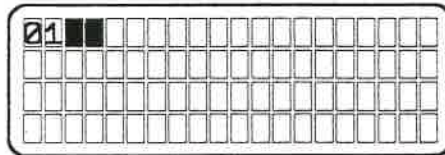
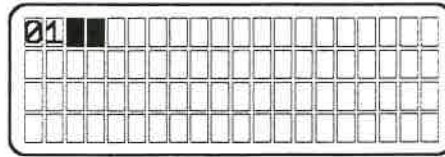
SY 1	Indicator "Printer mode"
SY 2	Indicator "Print report when weld cycle is finished"
SY 3	Indicator "Current mode"
SY 4	Indicator "With pulsed current"
SY 5	Indicator "Forward rotation"
SY 6	Indicator "Rotation mode"
SY 7	Indicator "Pulsed rotation speed"
SY 8	Indicator "With wire "
SY 9	Indicator "Wire pushing mode"
SY 10	Indicator "Pulsed wire speed"
SY 11	Print a program key and indicator "Printing in process"
SY 12	Loading a program from the memo card key and indicator "Loading in process"
SY 13	Saving a program on the memo card key and indicator "Saving in process"
SY 14	Key to program sector positioning or for entering the date and time
SY 15	Key to choose built-in programs from the machine memory
SY 16 to SY 19	Keys for moving inside the synoptic
SY 20	Key for increasing parameter values
SY 21	Key for decreasing parameter values
SY 22	Enter key
SY 23	Key for deleting programs or sectors (dust-bin)
SY 24	Screen
SY 25	Key operated switch "Modification permitted or not"
SY 26	Port for memo card
SY 27	Printer
SY 28	Paper advance / reprint weld cycle report
Reference	Welding parameter
T10	Pregas time (Purge time for shielding gas before arc starts)
T11	Postgas time (Time for shielding gas after arc stops)
T21	Time of preffusion (Arc is established to melt a puddle, no travel speed, no wire)
I21	Prefusion current
T22	Time of pulse current period
T23	Time of background current period
I22	Pulse current
I23	Background current
N20	Start of downslope (To avoid an end crater, the weld current is reduced continuously during the downslope until the arc stops).
T25	Time of downslope
R30	Weld-head reference No. See tables chapter 7.6 for values of R30
V32	Travel speed during pulse current period
V33	Travel speed during background current period
T40	Wire start
V42	Wire speed during pulse current period
V43	Wire speed during background current period
N40	Wire stop
T41	Wire retract (Time during wire is retracted)

3 - EXPLANATION OF SYMBOLS USED

Symbol	Meaning
	Press once to increase
	Press and hold to increase
	Press once to decrease
	Press and hold to decrease
	Press once
$\geq 2s$ 	Press and hold for at least 2 seconds
	Indicator not illuminated
	Indicator flashing
	Indicator illuminated

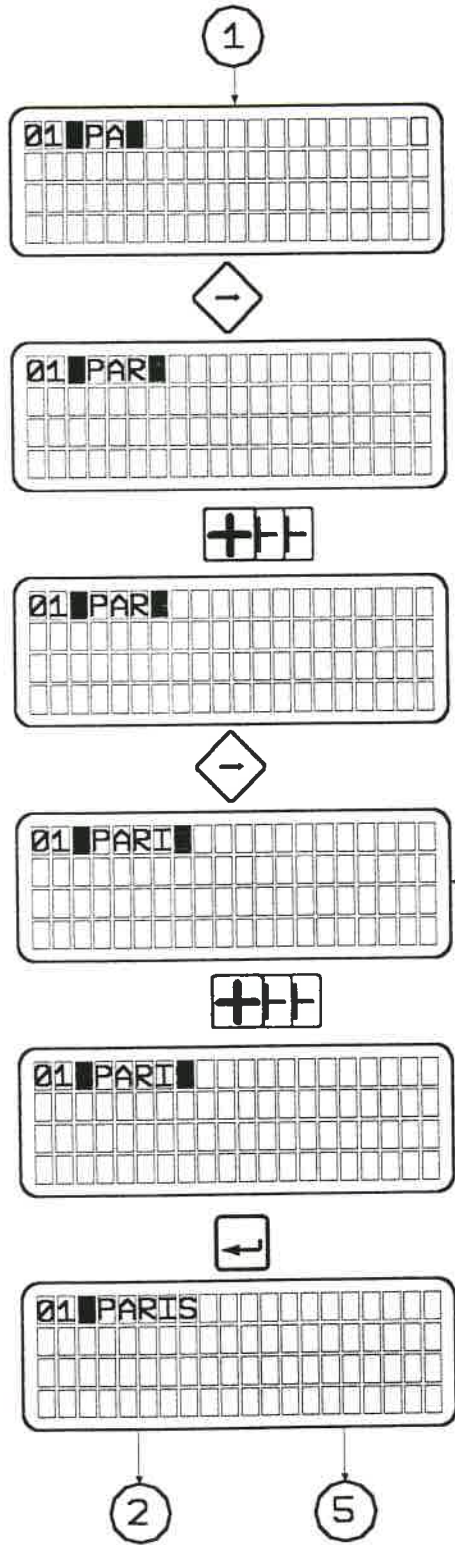
4 - ENTERING THE PROGRAM NAME

To choose the number of the program, the switch BT 4 on the remote control pendant has to be used

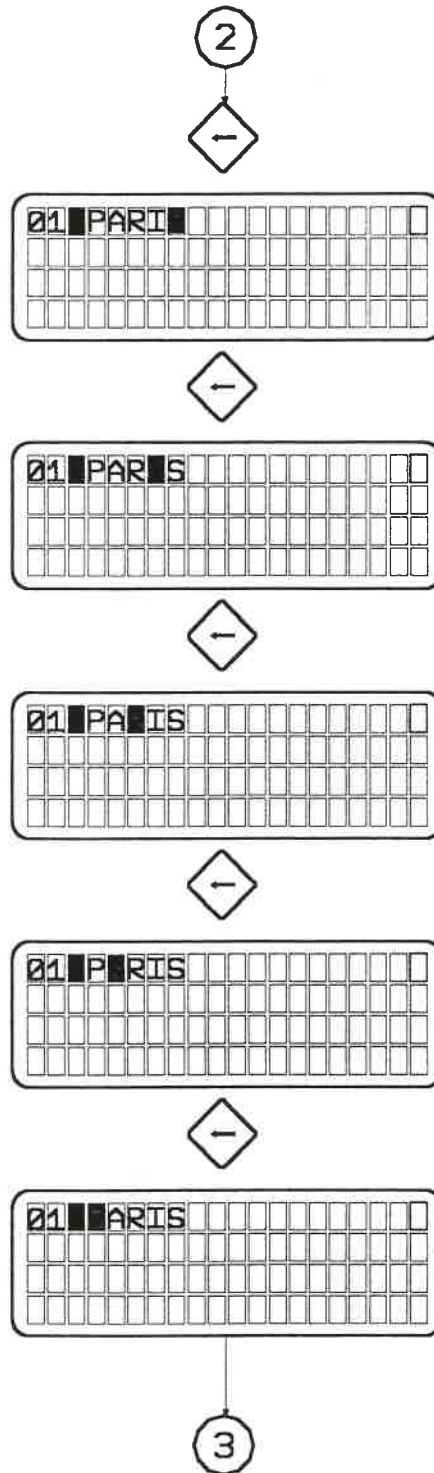


PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

ENTERING THE PROGRAM NAME

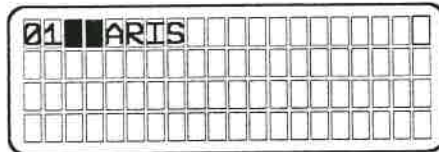
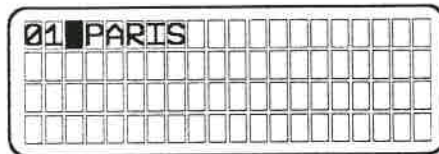
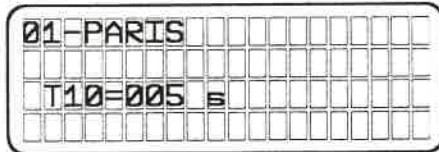


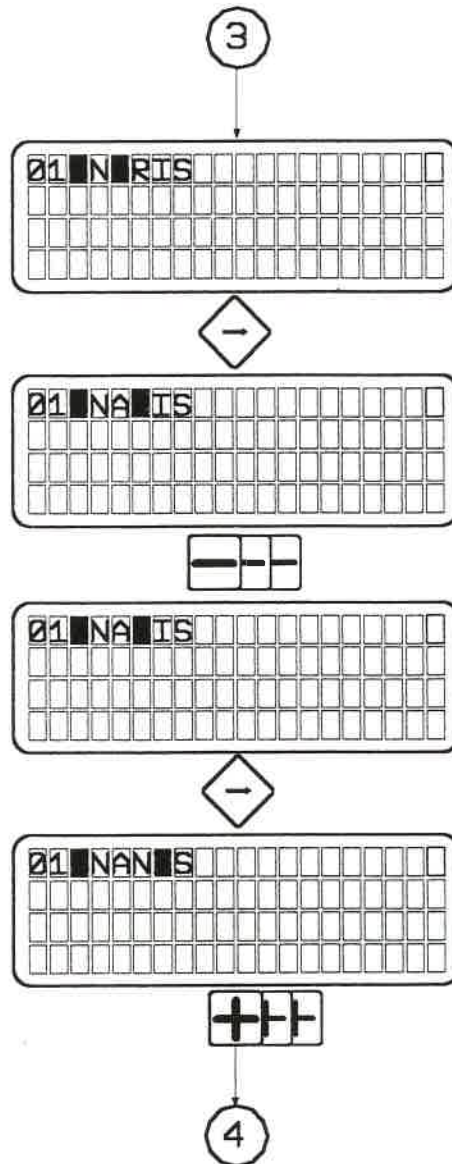
5 - MODIFYING THE PROGRAM NAME



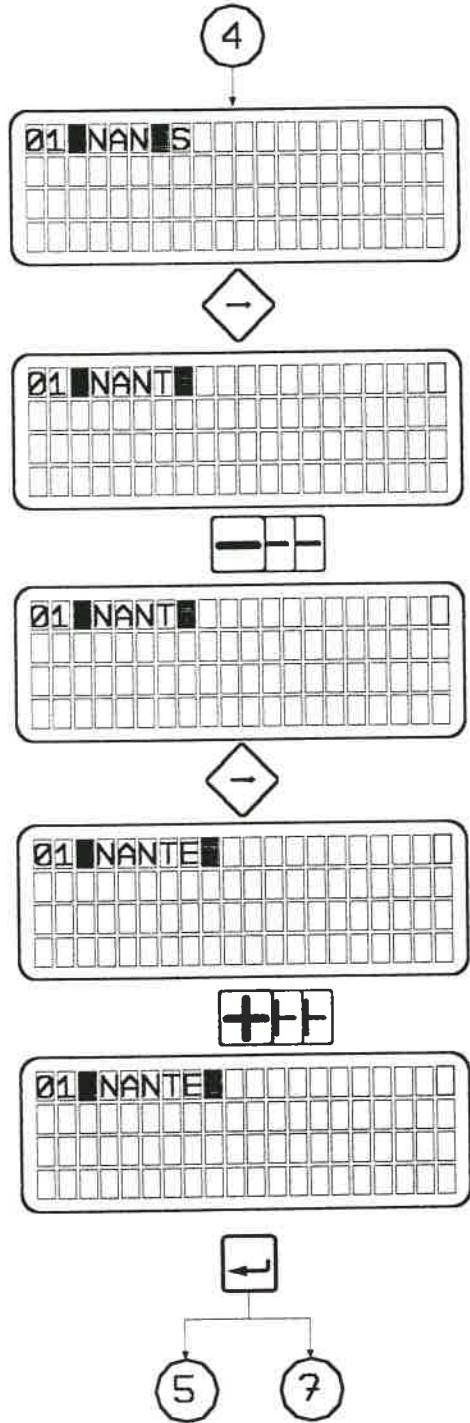
PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

MODIFYING THE PROGRAM NAME



MODIFYING THE PROGRAM NAME

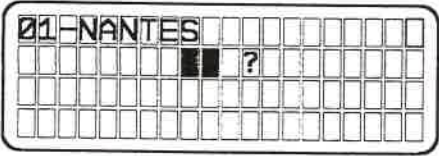
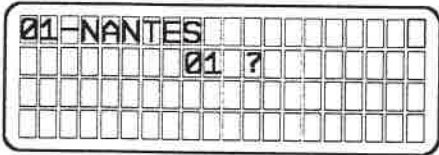
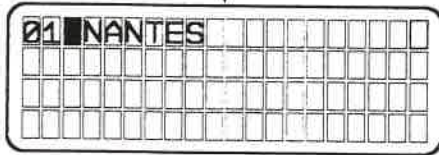
MODIFYING THE PROGRAM NAME



PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

6 - CHOICE OF A BUILT-IN PROGRAM

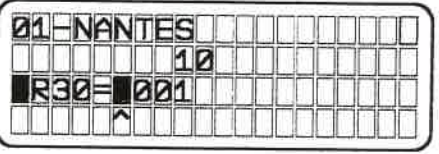
5



The choice of a built-in program is only possible after a program name is entered.

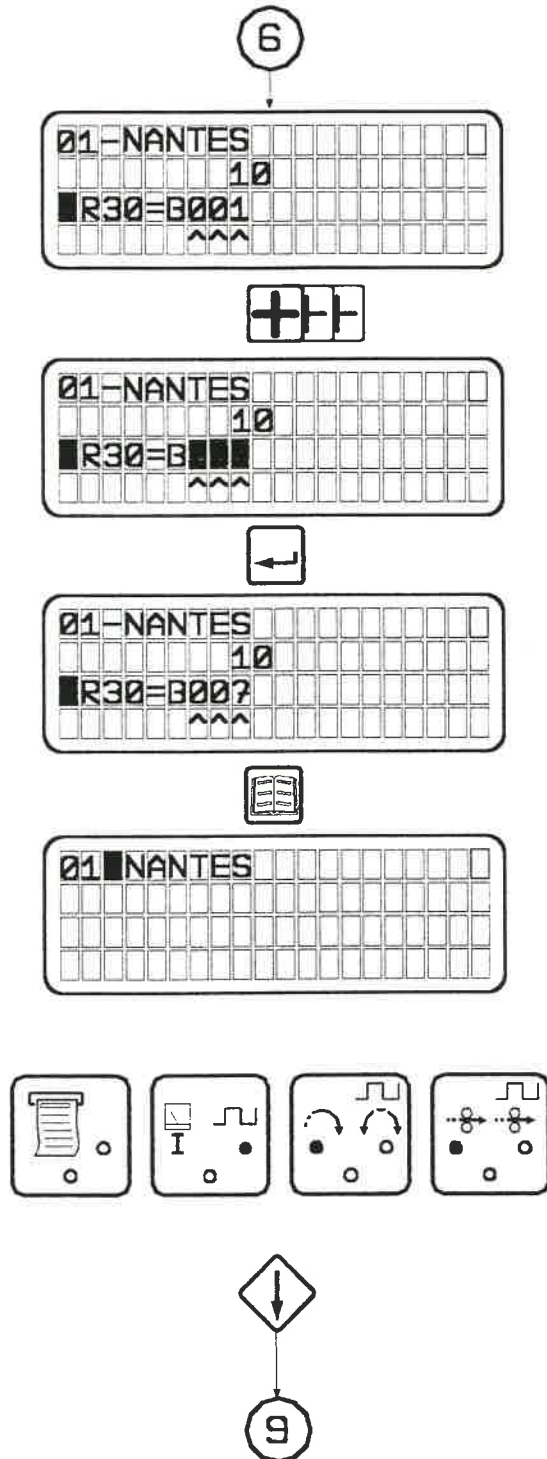


After a built-in program is chosen, the reference number of a weld head must be entered to allow the machine to calculate the travel speed.



6

CHOICE OF A BUILT-IN PROGRAM

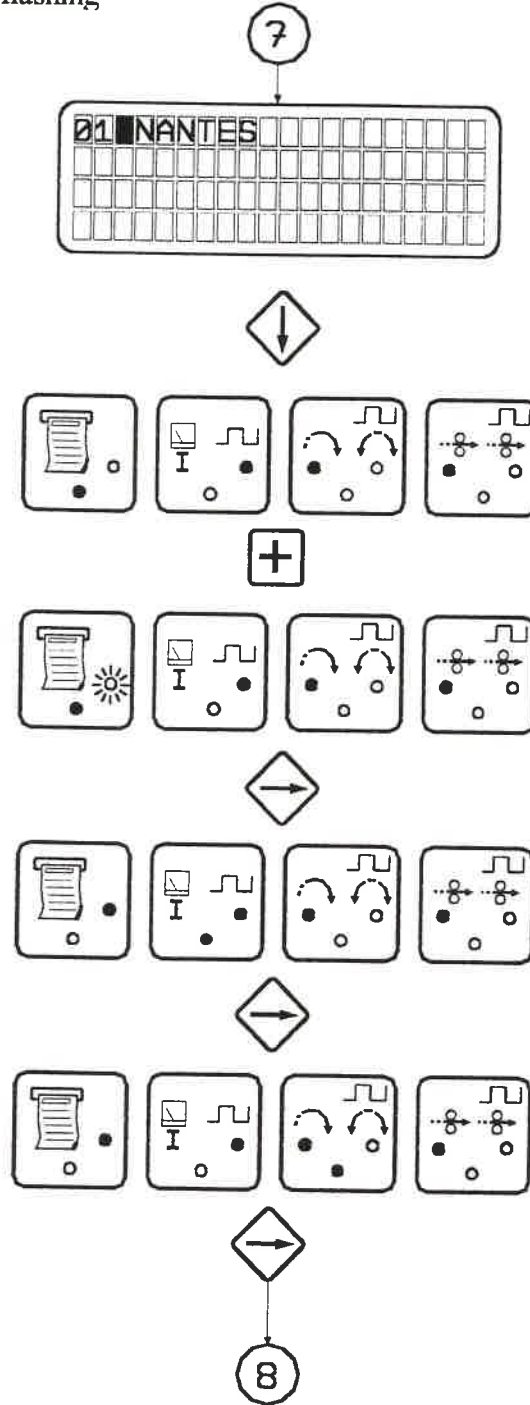


PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

7 - PROGRAMMING AND MODIFYING THE WELDING PARAMETERS

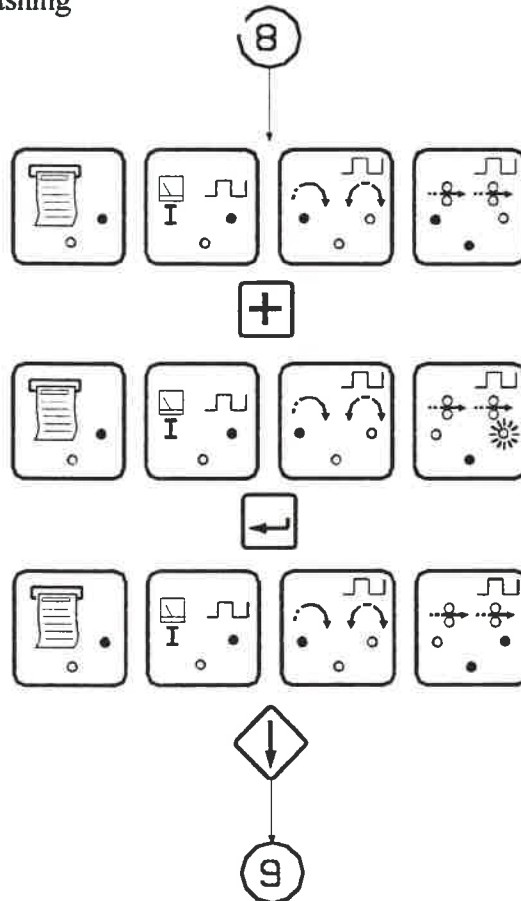
7.1 - Configuration

- Indicator not illuminated
- Indicator illuminated
- ☀ Indicator flashing



PROGRAMMING AND MODIFYING THE WELDING PARAMETERS

- Indicator not illuminated
- Indicator illuminated
- ☀ Indicator flashing

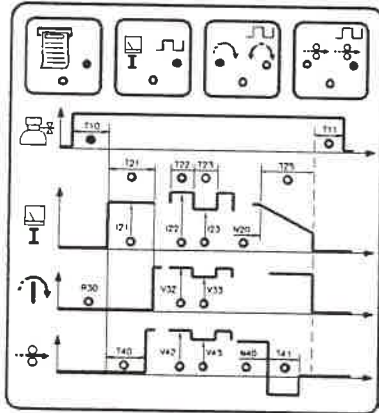


PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

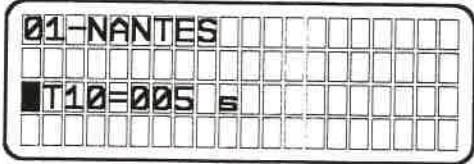
PROGRAMMING AND MODIFYING THE WELDING PARAMETERS

7.2 -Gas

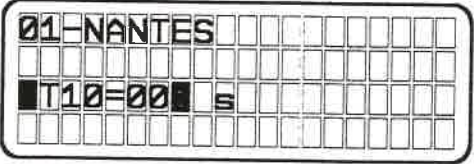
T10 = pregas time



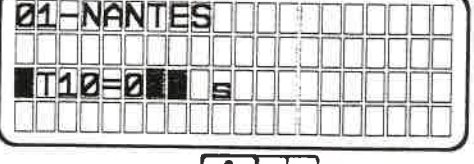
9



+



++



+++



-



A short press of the key (less than one second) increases the value of a parameter by one increment.

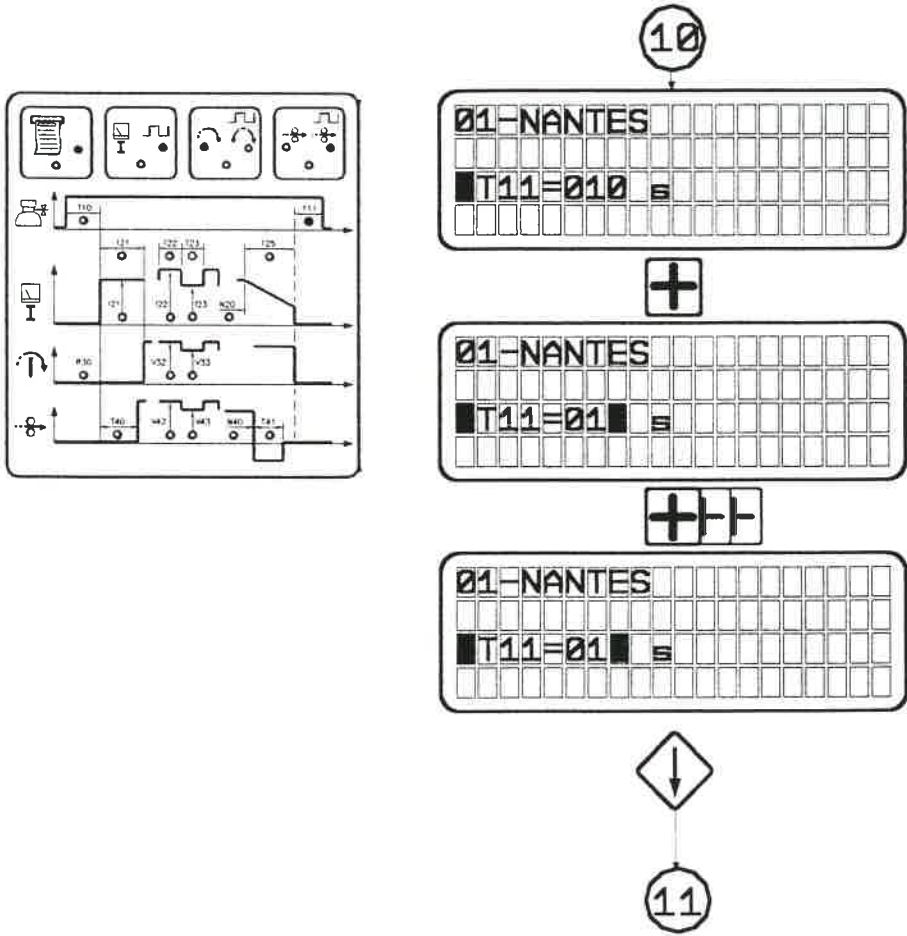
A maintained press of the key increases the value of a parameter by one increment, then after one second the value continues to rise automatically until the key is released. The value rises by one increment until the value 9 is reached, at which point it begins to rise in units of ten.

→
10

PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

PROGRAMMING AND MODIFYING THE WELDING PARAMETERS

T11 = postgas time



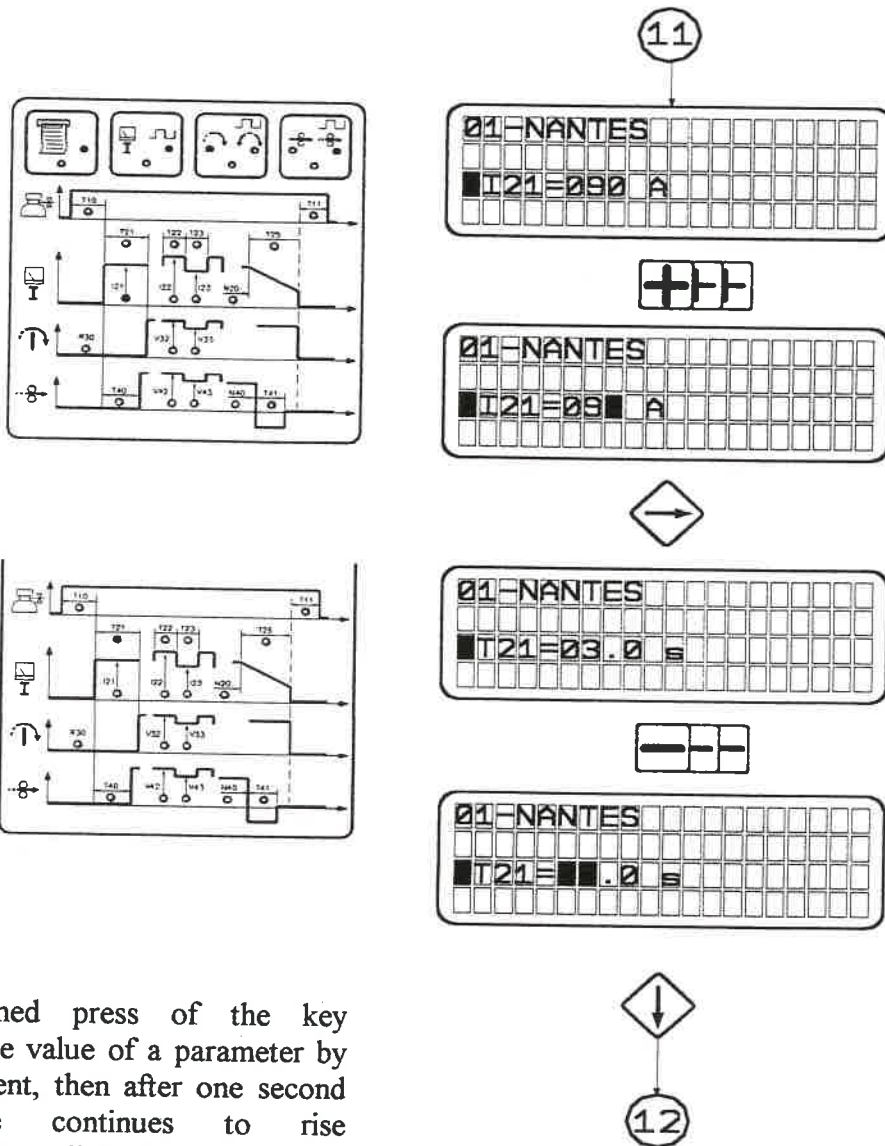
PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

PROGRAMMING AND MODIFYING THE WELDING PARAMETERS

7.3 - Prefusion

During prefusion, a suitable amount of metal shall be molten. Prefusion takes place before travel speed and wire is starting.

I21 = prefusion current
T21 = time of prefusion



A maintained press of the key increases the value of a parameter by one increment, then after one second the value continues to rise automatically until the key is released. The value rises by one increment until the value 9 is reached, at which point it begins to rise in units of ten.

PROGRAMMING MANUAL FOR POWER SOURCE PS 204 / PS 254

PROGRAMMING AND MODIFICATION OF THE WELDING PARAMETERS

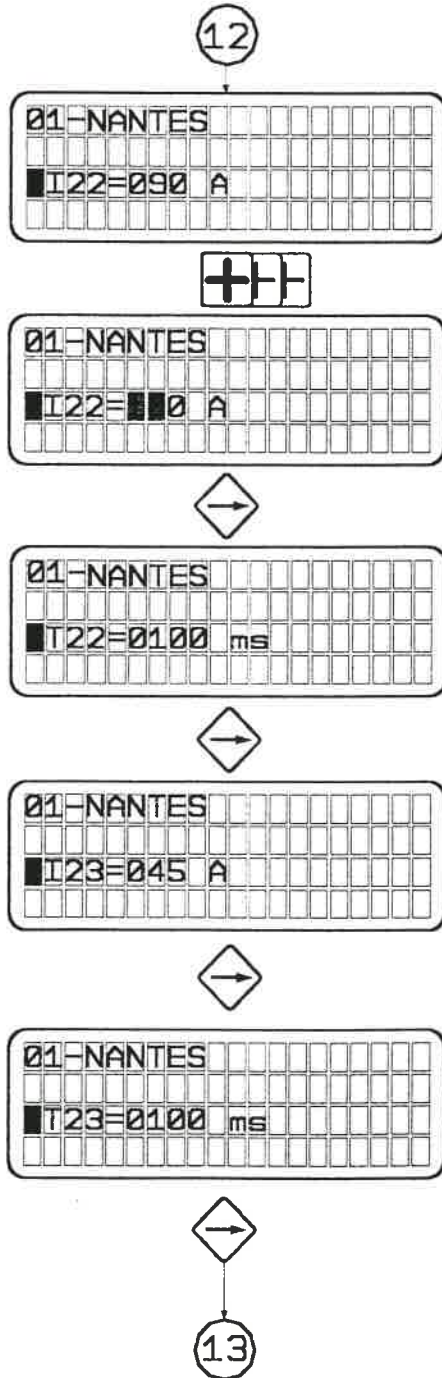
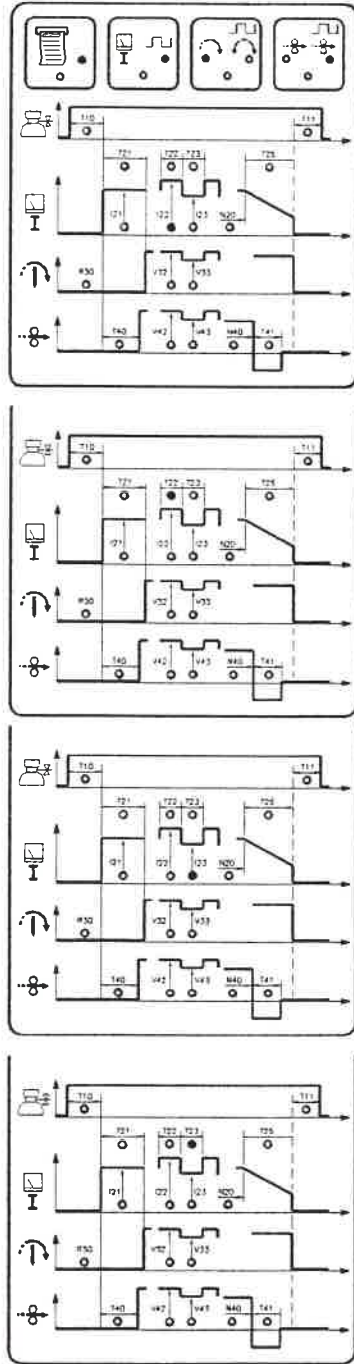
7.4 - Current

I22 = pulse current

T22 = time of pulse current

I23 = background current

T23 = time of background current



PROGRAMMING AND MODIFICATION OF THE WELDING PARAMETERS**7.5 - Downslope**

To avoid an end crater, the weld current is reduced continuously during the downslope until the arc stops.

N20 = start of downslope

T25 = time of downslope

