

EXPANDABLE MULTIFUNCTION CONTROL PANEL

Omnia

Approved by several P.T. offices



KEYPAD PROGRAMMING MANUAL

V4.2 BUK 2.0 151298



Omnia/S
DAT n. U0805



BENTEL
SECURITY



CONFORMITY DECLARATION

We certify that the expandable multifunction control panels

Omnia and Omnia/S

comply with the guidelines as given in the following standards

Emission:

➤ **EN 50081-1/1992**

Immunity:

➤ **EN 50082-1/1992**

Low voltage:

➤ **EN 41003:1997**

➤ **EN 60950:1992 + A1:1993 + A2:1993 + A3:1995 + A4:1996**

Intruder alarm system:

➤ **CEI 79/2 2nd Ed. 1993: security grading II**

*These devices are **approved** by Italian "Ministero delle Poste e delle Telecomunicazioni" with approval certificates:*

➤ **OMNIA: IT/97/TS/007**

➤ **OMNIA/S: IT/97/TS/006**



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DAT n. U0805

Grottammare (AP)
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Keypad programming manual: Expandable multifunction control panel **Omnia**
V4.2 BUK 2.0 151298

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




PARAMETER PROGRAMMING

Parameter programming determines control panel functioning. The parameters are described in detail in the INSTALLATION MANUAL under "PROGRAMMING".

Parameter programming is reserved for installer, and is accessible from the INSTALLER MENU.


Follow the procedure below to access Parameter programming.

	From the <i>INSTALLER MENU</i> ...	
1	Press key  or  until Parameter progr. is displayed.	 :  
2	Press  .	 

General rules for programming from Keypad

The parameter programming consists of programming a certain number of data blocks, each block represents the definition of a particular panel function.

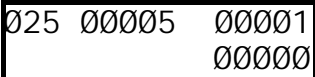
On entering this stage, as already indicated, the display shows:



The control panel will request the parameter or block of parameters required for programming.

- + The parameter blocks are numbered 1 through 81.

After entering the block number (e.g. 00025) the following field will be displayed:



From left to right, the upper row of this display will show:

- the sequential number of the block to be programmed (025);
- the number of programmable items in the selected block (00005);
- the sequential number of the item being programmed (00001).

The lower row shows the current value of the item, enter the new value in this field.



Enter the most suitable parameter form in the lower row.





Flags8 A **Flags (8 or 16)**-type parameter is a sequence of 8 or 16 + and – symbols. For example parameter 2 (Key readers in configuration) is a Flags8-type and is displayed as follows:


002 00001 00001
+-----

The symbols mean:

+ = yes, present, active, available;

– = no, not present, not active, not available.


Use key  or  to move on the parameter field (the flashing character shows the position of the cursor), the parameters are set by entering + by means of the  key – by means of the  key.

 saves the setting and moves to the next data block item (if present); otherwise, it returns to the block selection stage.

Number The **Number**-type parameter is a 5-digit number. For example, parameter 11 (zone Cycles) is a Number type and is displayed as follows:

011 00080 00001
00255

This type of programming is used for numbers. This value varies according to the parameter.

Enter 5 digits for this parameter setting, press the  key to save, quit and move to the next data block item (if present).

Logic A **Logic**-type parameter is a logic value (0 or 1). For example, parameter 30 (Jump other answering devices) belongs to this type and when selected the display will show:

030 00001 00001
00000

This type of parameter is used to set yes/no options; the values for this field are 00000 or 00001 and mean:

00000 = no, not active;

00001 = yes, active.

+ Values lower than 59999 are read as 00001.

Enter 5 digits for this parameter setting, press the  key to save and quit.




Configuration

Key readers

Block no.	00001
Length	00001
Type	FI ags16

This block specifies the Key readers in configuration: the character on the left indicates address 1, the character on the right address 16.

Enter 5 digits for this type of parameter setting, press the  key to save and quit.

Example

001 00001 00001
++-+-----

Indicates that Key readers on addresses 1, 2 and 4 are assigned to the system.

Keypads

Block no.	00002
Length	00001
Type	FI ags8

This block specifies which Keypads are in configuration: the character on the left indicates address 1, the character on the right address 8.

Example

002 00001 00001
++-----

Indicates that Keypads on addresses 1 and 2 are assigned to the system.

Input expanders

Block no.	00003
Length	00001
Type	FI ags16

This block specifies the Input expanders in configuration: the character on the left indicates address 1, the character on the right address 16.

Example

003 00001 00001
+++++-----+

Indicates that Input expanders on addresses 1, 2, 3, 4, 5 and 16 are assigned to the system.



Output expanders

Block no.	00004
Length	00001
Type	FI ags8

This block specifies the Output expanders in configuration: the character on the left indicates address 1, the character on the right address 8.

Example

004 00001 00001 +-----+-

Indicates that Output expanders on addresses 1 and 7 are assigned to the system.

Power stations

Block no.	00005
Length	00001
Type	FI ags8

This block specifies the Power stations in configuration: the character on the left indicates address 1, the character on the right address 8.

+ Addresses 1 and 2 are available, as it is possible to have 2 Power stations only.

Example

005 00001 00001 +-----

Power station on address 1 is assigned to the system.

Keypad Area enabling

Block no.	00006
Length	00008
Type	FI ags8

The enabled Areas are specified for each Keypad.

Programming for Keypads that do not configure is ignored.

Example

006 00008 00002 -++++++

Indicates that Keypad on address 2 is enabled on all Areas except Area no. 1.

Key reader Area and mask enabling

Block no.	00007
Length	00048
Type	FI ags8



Specify the following for each of the 16 Key readers:

- the **enabled** Areas;
- the type of arming associated with the **amber** LED;
- the type of arming associated with the **green** LED.

Therefore, 16 blocks of 3-data each should be programmed.

- + Programming carried out for Key readers which are not in configuration is ignored.

Example

007 00048 00001
+++++++

The Key reader on address 1 is **enabled** on all the Areas;

007 00048 00002
+++-----

the type of arming associated with the **amber** LED, arms Areas no. 1, 2 and 3 and disarms all other Areas;

007 00048 00003
--++++--

the type of arming associated with the **green** LED, arms Areas no. 3, 4 and 5 and disarms all others.

Zones

■ Balancing and Sensitivity

Block no.	00008
Length	00080
Type	FI ags8

This block specifies the **Balancing** and **Sensitivity** for each Zone.

For a **Standard Sensitivity** Zone, enter the data as follows:

1	2	3	4	5	6	7	8
Within			Pulses		-	Balancing	

For a **Low Sensitivity** Zone, enter the data as follows:

1	2	3	4	5	6	7	8
Pulse length					+	Balancing	

The **Within**, **Pulses** and **Balancing** parameters are codified as follows:

7	8	BALANCING
-	-	Normally open
+	-	Double balanced
-	+	Balanced
+	+	Normally closed



4	5	PULSES
-	-	1 pulse
+	-	1 pulse
-	+	2 pulses
+	+	3 pulses

1	2	3	WITHIN
-	-	-	4 seconds
+	-	-	8 seconds
-	+	-	12 seconds
+	+	-	16 seconds
-	-	+	20 seconds
+	-	+	24 seconds
-	+	+	28 seconds
+	+	+	32 seconds

The **Pulse length** parameter is a 5 bit binary-number, where bit no. 1 is the least significant. The **Pulse length** in seconds, is given by the formula:

➤ **Pulse length** = [(5 bit value) + 1] * 30.

The 5 bit binary number is calculated as follows.

By numbering symbols 1 through 5 starting from the one on the far left and considering that $S_n = 0$ for symbol - and $S_n = 1$ for symbol +, the resultant number will be:

➤ **5 bit value** = $(S_1 * 1) + (S_2 * 2) + (S_3 * 4) + (S_4 * 8) + (S_5 * 16)$.

Some examples are listed below.

1	2	3	4	5	PULSE LENGTH
-	-	-	-	-	$1 * 30 = 30$ seconds
+	-	-	-	-	$2 * 30 = 60$ seconds
⋮					⋮
-	+	+	+	+	$31 * 30 = 930$ seconds
+	+	+	+	+	$32 * 30 = 960$ seconds

Example

008 00080 00003
---+---+-

Indicates that Zone no. 3 is programmed as:
Standard Sensitivity, Single Pulse, Double balanced.



■ Type

Block no.	00009
Length	00080
Type	FI ags8

This block specifies the **Type** of operation for each Zone.

The programmed setting indicates whether a Zone is an **Alarm** or **Command** Zone and specifies the operating mode.

If this is an **Alarm** Zone, enter **-** in position 8 and **+** in the required positions for Zone Type:

1	2	3	4	5	6	7	8
Entry delay	Entry path	Exit delay	Last exit zone	24h	Fire		-

Please note the following programming restrictions:

- if the **Fire** Type is selected, other Types must not be selected;
 - if **24h** Type is selected, other Type must not be selected;
 - if the Type is neither **24h** nor **Fire**, more than one Type may be selected from the remaining four.
- +
- If **+** is not entered, the Zone results **Immediate**.

For a **Command** Zone, enter **+** in position 8, and **+** in the position which specifies the command the Zone must carry out:

1	2	3	4	5	6	7	8
Arm Disarm	Only arm	Only disarm	Area reset	Panel reset	Clear calls		+

- +
- If more than one **+** sign is entered, only the first to the right is considered.

Example

009 00080 00002
+ - + - - - -

Indicates that Zone no. 2 is programmed as:
Alarm Zone, Entry delay, Exit delay.

■ Attributes

Block no.	00010
Length	00080
Type	FI ags8

This block specifies the **Attributes** assigned to each Zone.



Enter + in the positions which correspond to the **Attributes** required, according to the following table:

1	2	3	4	5	6	7	8
Not Bypassable	Chime	Test	Autobypassable				

+ These **Attributes** are not for **Command Zones**.

Example

010 00080 00001

Indicates that no **Attribute** has been assigned to zone no. 1.

Cycles

Block no.	00011
Length	00080
Type	Number
Validity	0. . 255

This block specifies the number of times the Zone can signal alarm before being bypassed. Value **255** means **Repetitive**.

Example

011 00080 00001
00005

Indicates that Zone no. 1 can signal a maximum of 5 alarms.

Areas

Block no.	00012
Length	00080
Type	FI aqs8

For an **Alarm Zone**, this parameter indicates the Area the Zone is assigned to:

1	2	3	4	5	6	7	8	ASSIGN.	1	2	3	4	5	6	7	8	ASSIGN.
-	-	-	-	-	-	-	-	Area no. 1	-	-	+	-	-	-	-	-	Area no. 5
+	-	-	-	-	-	-	-	Area no. 2	+	-	+	-	-	-	-	-	Area no. 6
-	+	-	-	-	-	-	-	Area no. 3	-	+	+	-	-	-	-	-	Area no. 7
+	+	-	-	-	-	-	-	Area no. 4	+	+	+	-	-	-	-	-	Area no. 8

For a **Command Zone**, enter + in the position corresponding to the Areas to be affected by the command.

Example

012 00080 00005
++-----

Indicates that Zone no. 5 is assigned to Area no. 4.



■ Voice messages

Block no.	00013
Length	00160
Type	Number
Validity	0. . 14

Enter 2 numbers for each Zone: the first for the **Voice message** assigned to the **Standby** status, and the second for the **Voice message** assigned to the **Alarm** status.

Setting **0** means **no message**.

Example

013 00160 00009	
00003	
013 00160 00010	
00004	

Indicates that Zone no. 5 has Voice message no. 3 for the **Standby** status and Voice message no. 4 for the **Alarm** status.

Outputs

■ Off time

Block no.	00014
Length	00001
Type	Number
Validity	0. . 255

This block specifies the **Off time** for the alarm cycles generated by any Output programmed as **Monostable**; the value should be entered as follows:

- VALUE = T_{OFF} (seconds) * 2.

Example

014 00001 00001	
00010	

Sets the **Off time** at 5 seconds.

■ Type

Block no.	00015
Length	00036
Type	Logic

This block specifies the **Bistable** or **Monostable** operating mode of an Output:

0 for **Bistable**;

1 for **Monostable** (cyclical).



Example

015 00036 00002 00001	Sets Output no. 2 as Monostable .
--------------------------	--

■ **Reserved (for manual commands)**

Block no.	00016
Length	00036
Type	Logic

This block specifies whether an Output is **Reserved** for manual commands or is activated by events. Set:

0 = not Reserved (can be activated by events);

1 = **Reserved** for manual commands.

Example

016 00036 00004 00001	Sets Output no. 4 as Reserved for manual commands.
--------------------------	---

■ **Attribute and Timing**

Main unit outputs programming

Block no.	00017
Length	00005
Type	Number

For the four Outputs on the Main unit, the five data represent:

- 1 - **Attributes** of the four Outputs (**Normally open** or **Normally closed**);
- 2 - **Timing** for Output no. 1;
- 3 - **Timing** for Output no. 2;
- 4 - **Timing** for Output no. 3;
- 5 - **Timing** for Output no. 4.

Attribute The following procedure is for the **first value**. By setting **0**, all the four Outputs are **Normally open**; to program an Output as **Normally closed**, add:

- 1 for Output no. 1;
- 2 for Output no. 2;
- 4 for Output no. 3;
- 8 for Output no. 4.

Timing The **remaining four values**, that indicate the **On time** of each Output, are expressed as follows.

If a short length is requested (from 0 to 25.4 **Sec.**) the value to be entered is:

➤ $VALUE = T_{ON}(\text{seconds}) * 5;$

in this case enter a value of 0 through 127.



If a long length is requested (from 1 to 128 **Min.**), the value should be:

➤ VALUE = T_{ON}(minutes) + 127;

in this case enter a value of 128 through 255.

+ **On time** programming is for **Monostable** Outputs only.

Example

017 00005 00001 00003	Sets Outputs no. 1 and 2 as Normally closed and Outputs no. 3 and 4 as Normally open .
017 00005 00002 00130	Assigns 3- Min. On time to Output no. 1.
017 00005 00003 00130	Assigns 3- Min. On time to Output no. 2.
017 00005 00004 00025	Assigns 5- Sec. On time to Output no. 3.
017 00005 00005 00025	Assigns 5- Sec. On time to Output no. 4.

Expander no. 1 output programming

Block no.	00018
Length	00005
Type	Number

Same as block 17 for the Outputs no. 5, 6, 7 and 8 on Expander no. 1.

Expander no. 2 output programming

Block no.	00019
Length	00005
Type	Number

Same as block 17 for the Outputs no. 9, 10, 11 and 12 on Expander no. 2.

Expander no. 3 output programming

Block no.	00020
Length	00005
Type	Number

Same as block 17 for the Outputs no. 13, 14, 15 and 16 on Expander no. 3.

Expander no. 4 output programming

Block no.	00021
Length	00005
Type	Number

Same as block 17 for the Outputs no. 17, 18, 19 and 20 on Expander no. 4.



Expander no. 5 output programming

Block no.	00022
Length	00005
Type	Number

Same as block 17 for the Outputs no. 21, 22, 23 and 24 on Expander no. 5.

Expander no. 6 output programming

Block no.	00023
Length	00005
Type	Number

Same as block 17 for the Outputs no. 25, 26, 27 and 28 on Expander no. 6.

Expander no. 7 output programming

Block no.	00024
Length	00005
Type	Number

Same as block 17 for the Outputs no. 29, 30, 31 and 32 on Expander no. 7.

Expander no. 8 output programming

Block no.	00025
Length	00005
Type	Number

Same as block 17 for the Outputs no. 33, 34, 35 and 36 on Expander no. 8.

Areas

Entry time

Block no.	00026
Length	00008
Type	Number

Enter 8 values to specify the **Entry times** on the eight Areas. The values are calculated as follows:

➤ $VALUE = T_{ENTRY}(\text{seconds}) / 1.2.$

Example

026	00008	00001
		00025

Sets the **Entry time** for Area no. 1 at 30 seconds.



Exit time

Block no.	00027
Length	00008
Type	Number

Enter 8 values to specify the **Exit times** for the eight Areas. The values are calculated as follows:

➤ $VALUE = T_{EXIT}(\text{seconds}) / 1.2.$

Example

027	00008	00003
		00050

Sets the **Entry time** for Area no. 3 at 60 seconds.

Last exit time

Block no.	00028
Length	00008
Type	Number

Enter 8 values to specify the **Last exit times** on the eight Areas.

The values are calculated as follows:

➤ $VALUE = T_{LAST\ EXIT}(\text{seconds}) / 1.2.$

Example

028	00008	00002
		00005

Sets the **Last exit time** for Area no. 2 at 6 seconds.

Depends on

Block no.	00029
Length	00008
Type	FI ags8

Enter 8 values to specify the dependency between Areas. Enter + in correspondence to the Areas of dependency for the Area being programmed.

Example

029	00008	00001

029	00008	00002

029	00008	00003
		++-----

Area no. 3 is set as **Depending on** Areas no. 1 and 2.



Telephone

Jump other answering devices

Block no.	00030
Length	00001
Type	Logic

Jumps other answering devices. Enter:

1 to enable;

0 to disable.

Example

030 00001 00001	Enables <i>jump other answering devices</i> .
00001	

Rings

Block no.	00031
Length	00001
Type	Number

Enter the number of rings, 1 through 10, that Omnia must allow before answering a telephone call.

+ This parameter is ignored if **Jump other answering devices** is enabled.

Example

031 00001 00001	Sets the answer device to answer after 4 Rings .
00004	

Dial

Block no.	00032
Length	00002
Type	Logic

Enter two logic values; to select **disable tones check** enter 1 as the first value; the second value selects the dialling type used:

0 = DTMF;

1 = pulses.

Example

032 00002 00001	The line tone check is disabled and the DTMF dial is set.
00001	

032 00002 00002
00000



Answer message

Block no.	00033
Length	00001
Type	Number
Validity	0. . 14

Assigns one of the 14 available Vocal messages to the answer device.

0 means no message.

Example

033 00001 00001
00014

The selected answer-device message is no. 14.

Pulse communicator

Attempts

Block no.	00034
Length	00001
Type	Number
Validity	0. . 255

This block specifies the number of **Attempts** the panel will make for each failed Pulse communicator number, before clearing the call request from the telephone queue.

Example

034 00001 00001
00008

*If a Pulse communicator call is unsuccessful, 8 **Attempts** will be made.*

Numbers to dial, Customer code and Protocol

Block no.	00035
Length	00024
Type	Number

Enter a block of 6 values for each of the 4 Central stations the Pulse communicator can call.

- **The first value** specifies the **Number to dial** selected from the 32 programmed telephone numbers:

Number to dial no. = Telephone number no. - 1

- **The next 4 values** indicate the **Customer code**: if the **Customer code** includes the hexadecimal characters B, C, D or F, enter them as 11, 12, 13, 14 and 15 respectively, 0 is to be entered as 10.



- **The sixth value** indicates the communication **Protocol** according to the following table:

PROTOCOL	SIXTH VALUE
ADEMCO/SILENT KNIGHT - Slow 10 baud	00000
ADEMCO/SILENT KNIGHT - Slow 20 baud	00001
FRANKLIN/SESCOVA/DCI/VERTEX - Fast 20 baud	00002
RADIONIX - 40 baud	00003
SCANTRONIC - 10 baud	00004

Example Set the following data for the first Central Station receiving data from the Pulse communicator:

035 00024 00001
00015

Number to dial: Telephone number no. 16.

035 00024 00002
00002

Customer code: 205B.

035 00024 00003
00010

035 00024 00004
00005

035 00024 00005
00012

035 00024 00006
00004

Protocol: Scantronic 10 baud.

■ Actions

- Definition of actions 1..32 of the Pulse communicator**

Block no.	00036
Length	00192
Type	Number

For each one of the 32 Pulse communicator actions, enter 3 values for sub-action A and 3 for sub-action B. The 3-value block is formed as follows.

- **The first 2 values** refer to the **Event code**: if the **Event code** includes the hexadecimal characters B, C, D or F, enter them as 11, 12, 13, 14 and 15; 0 is entered as 10.
- **The third value** indicates the Central station to be called. No Central station is called if 0 is entered. Enter the sum of the values assigned to the Central stations to be called, as follows:
 - 1 to call Central station no. 1;
 - 2 to call Central station no. 2;
 - 4 to call Central station no. 3;
 - 8 to call Central station no. 4.



For example if 15 is entered (1 + 2 + 4 + 8 = 15) it indicates that all the 4 Central stations will be called.

By adding 128, **All** numbers will be called, even successful calls.

Example The following data are set for action no. 1 of the Pulse communicator.

Sub-action A		
036 00192 00001	Event code: 20;	00002
036 00192 00002		00010
036 00192 00003	Central stations to be called: no. 1, 2; recall on success (All option): NO.	00003
036 00192 00004		00002
036 00192 00005	Event code: 21;	00001
036 00192 00006		00131
	Central stations to be called: 1, 2; Recall on success (All option): YES.	

Definition of actions 33..64 of the Pulse communicator

Block no.	00037
Length	00192
Type	Number

Same as block 00036 for actions no. 33 through no. 64 of the Pulse communicator.

Definition of actions 65..96 of the Pulse communicator

Block no.	00038
Length	00192
Type	Number

Same as block 00036 for actions no. 65 through no. 96 of the Pulse communicator.

Definition of actions 97..128 of the Pulse communicator

Block no.	00039
Length	00192
Type	Number

Same as block 00036 for actions no. 97 through no. 128 of the Pulse communicator.



Definition of actions 129..160 of the Pulse communicator

Block no.	00040
Length	00192
Type	Number

Same as block 00036 for actions no. 129 through no. 160 of the Pulse communicator.

Definition of actions 161..192 of the Pulse communicator

Block no.	00041
Length	00192
Type	Number

Same as block 00036 for actions no. 161 through no. 192 of the Pulse communicator.

Definition of actions 193..224 of the Pulse communicator

Block no.	00042
Length	00192
Type	Number

Same as block 00036 for actions no. 193 through no. 224 of the Pulse communicator.

Definition of actions 225..250 of the Pulse communicator

Block no.	00043
Length	00156
Type	Number

Same as block 00036 for actions no. 225 through no. 250 of the Pulse communicator; in this case the block length is 156 because 26 actions are defined and not 32 as in the previous cases.

Dialler

Attempts

Block no.	00044
Length	00001
Type	Number
Validity	0. . 255

This block specifies the number of **Attempts** the panel will make for each failed Dialler number, before clearing the call request from the telephone queue.

Example

044 00001 00001
00008

8 **Attempts** are set for the Dialler calls.



Recall on success

Block no.	00045
Length	00001
Type	Logi c

If set on **1**, all numbers will be recalled according to the set number of **Attempts**, even if the telephone call results successful (answered).

Example

045 00001 00001
00000

The **Recall on success** is not set.

Repetition time and Telephone numbers

Block no.	00046
Length	00048
Type	Number

Enter a block of 3 values for each of the 16 Telephone numbers assigned to the Dialler.

- **The first two values** indicate the **Repetition time** of the sent message.
The values should be calculated according to the following logic:
 - perform the operation $T_{REPETITION}(\text{seconds}) * 0.13$;
 - the resulting whole number is the **second value** to be entered;
 - the **first value** is the portion following the decimal point multiplied by 256.
 For example, if the **Repetition time** is 90 seconds, follow this procedure:
 - $90 * 0.13 = 11.7$;
 - $VALUE\ 1 = 0.7 * 256 = 179.2 = 179$;
 - $VALUE\ 2 = 11$.
- **The third value** is one of the 32 programmed Telephone numbers:
 $3^{rd}\ VALUE = \text{Telephone number no.} - 1$

Example

046 00048 00001
00179

The **Repetition time** for Dialler telephone number no.1 is set at 90 seconds.

046 00048 00002
00011

The first **Telephone number** assigned to the Dialler is Telephone number no. 1.

046 00048 00003
00000



■ Actions

Block no.	00047
Length	00096
Type	Fl ags8

Enter 3 values for each of the 32 **Dialler actions**. The first two values indicate the numbers to be called, from the 16 numbers assigned to the Dialler; the third value is the number of the message to be sent.

- **Value 1:** enter + in the positions corresponding to the numbers to be called (Numbers 1 through 8).
- **Value 2:** enter + in the positions corresponding to the numbers to be called (Numbers 9 through 16); for example + in position 2 refers to number 10.
- **Value 3:** select the message according to the following table:

MESSAGE	1	2	3	4	5	6	7	8	MESSAGE	1	2	3	4	5	6	7	8
no. 1	+	-	-	-	-	-	-	-	no. 8	-	-	-	+	-	-	-	-
no. 2	-	+	-	-	-	-	-	-	no. 9	+	-	-	+	-	-	-	-
no. 3	+	+	-	-	-	-	-	-	no. 10	-	+	-	+	-	-	-	-
no. 4	-	-	+	-	-	-	-	-	no. 11	+	+	-	+	-	-	-	-
no. 5	+	-	+	-	-	-	-	-	no. 12	-	-	+	+	-	-	-	-
no. 6	-	+	+	-	-	-	-	-	no. 13	+	-	+	+	-	-	-	-
no. 7	+	+	+	-	-	-	-	-	no. 14	-	+	+	+	-	-	-	-

Example Dialler action no. 2 is defined as follows.

047 00096 00004 ++++-----

047 00096 00005 -----

047 00096 00006 +-----

Vocal message no. 1 will be sent to Telephone numbers no. 1, 2, 3 and 4.

Teleservice

- Enable security recall and Test call

Block no.	00048
Length	00002
Type	Logi c

Enter 2 values. If the **first value** is on 1, the **Security recall** is **enabled** for teleservice. If the **second value** is on 1, it **enables** the **Test Call** when the **Test** event occurs.



Example

048 00002 00001
00001

Enables the Security recall.

048 00002 00002
00000

Disables the Test call.

Attempts

Block no.	00049
Length	00001
Type	Number
Validity	0. . 255

This block specifies the number of **Attempts** made by the Control Panel, in the event of an unsuccessful Teleservice call, before clearing the call request from the telephone queue.

Example

049 00001 00001
00008

8 Attempts are set for teleservice calls.

Enabling of Teleservice numbers

Block no.	00050
Length	00001
Type	FI ags8

Sets the **Enabled** Telephone numbers, from the 4 numbers assigned to Teleservice.

Enter **+** in the positions corresponding to the numbers to be **Enabled**.

Example

050 00001 00001
++-----

Teleservice telephone numbers no. 1 and 2 are **Enabled**.

Numbers to dial

Block no.	00051
Length	00004
Type	Number
Validity	0. . 31

4 Telephone numbers from the 32 programmed, should be assigned to Teleservice.

➤ **Number to dial no.** = Telephone number no. - 1



Example

051 00004 00001
00028
051 00004 00002
00029
051 00004 00003
00030
051 00004 00004
00031

Telephone numbers no. 29, 30, 31 and 32 are assigned to Teleservice.

Customer code

Block no.	00052
Length	00004
Type	Number
Validity	0. . 9

Enter the 4 figure **Customer code** for Teleservice.

Example

052 00004 00001
00009
052 00004 00002
00001
052 00004 00003
00000
052 00004 00004
00005

9105 is set as **Customer code** for Teleservice calls.

Event - Actions

Output actions

Alarm on zone events

Block no.	00053
Length	00080
Type	Number
Validity	0. . 36

Enter a value, for each of the 80 Zones, indicating the Output for the **Alarm on zone** event. Enter 0 to indicate no Output.



Example

053 00080 00008
00004

The event **Alarm on zone 08** is sent to Output no. 4.

Tamper on zone events

Block no.	00054
Length	00080
Type	Number
Validity	0. . 36

Enter a value, for each of the 80 Zones, indicating the Output for the **Tamper on zone** event. Enter 0 to indicate no Output.

Example

054 00080 00006
00003

The event **Tamper on zone 06** is sent to Output no. 3.

General events (Part 1)

Block no.	00055
Length	00112
Type	Number
Validity	0. . 36

A value indicating the event Output must be entered for each of the 112 **General events-Part 1**. Enter 0 to indicate no Output. For the list of these events, see the "General events (Part 1)" paragraph.

Example

055 00112 00063
00008

General event (Part 1) 63 (**Warning mains failure**) is sent to Output no. 8.

General events (Part 2)

Block no.	00056
Length	00107
Type	Number
Validity	0. . 36

A value indicating the event Output must be entered for each of the 107 **General events-Part 2**. Enter 0 to indicate no Output. For the list of these events, see the "General events(Part 2)" paragraph.

Example

055 00107 00100
00007

General event (Part 2) 100 (**Timer 1**) is sent to Output no. 7.



Spot events

Block no.	00057
Length	00062
Type	Number
Validity	0. . 36

A value indicating the event Output must be entered for each of the 62 Spot events. Enter 0 to indicate no Output. For the list of these events, please refer to paragraph "Spot events".

Example

057	00062	00013
		00006

Spot event 13 (**Super key 3**) will be sent to Output no. 6.

Actions on Pulse communicator and Dialler when event occurs

Alarm on zone events

Block no.	00058
Length	00160
Type	Number

Enter two values for each of the 80 Zones, to specify:

- the action to be carried out on the Pulse communicator when the **Alarm on zone** event occurs, selected from 128 available actions (enter 0 through 128, 0 = no action);
- the action to be carried out on the Dialler when the **Alarm on zone** event occurs, selected from 32 available actions (enter 0 through 32, 0 = no action).

Example

058	00160	00015
		00008

The event **Alarm on zone 08** activates action no. 8 of the Pulse communicator and no action Dialler.

058	00160	00016
		00000

Tamper on zone events

Block no.	00059
Length	00160
Type	Number

Enter two values for each of the 80 Zones, to specify:

- the action to be carried out on the Pulse communicator when the **Tamper on zone** event occurs, selected from 128 available actions (enter 0 through 128, 0 = no action);
- the action to be carried out on the Dialler when the **Tamper on zone** event occurs, selected from 32 available actions (enter 0 through 32, 0 = no action).



Example

059	00160	00003
		00000
059	00160	00004
		00002

The event **Tamper on zone 02** activates action no. 2 on the Dialler and no action on the Pulse communicator.

General events (Part 1)

Block no.	00060
Length	00224
Type	Number

Enter two values for each of the 112 **General events-Part 1** (see paragraph) to specify:

- the action to be carried out on the Pulse communicator when the event occurs, selected from 128 available actions (enter 0 through 128, 0 = no action);
- the action to be carried out on the Dialler when the event occurs, selected from 32 available actions (enter 0 through 32, 0 = no action).

Example

060	00224	00101
		00008
060	00224	00102
		00001

The General event-Part 1 no. 51 (**Burglar alarm on panel**) activates action no. 8 of the Pulse communicator and action no. 1 of the Dialler.

General events (Part 2)

Block no.	00061
Length	00214
Type	Number

Enter two values for each of the 107 **General events-Part 2** (see paragraph) to specify:

- the action to be carried out on the Pulse communicator when the event occurs, selected from 128 available actions (enter 0 through 128, 0 = no action);
- the action to be carried out on the Dialler when the event occurs, selected from 32 available actions (enter 0 through 32, 0 = no action).

Example

061	00214	00001
		00000
061	00214	00002
		00000

The General event-Part 2 no. 1 (**Bypass zone 01**) does not activate any telephone action on the Pulse communicator or on the Dialler.



Spot events

Block no.	00062
Length	00124
Type	Number

Enter two values for each of the 62 **Spot events** (see paragraph); to specify:

- the action to be carried out on the Pulse communicator when the event occurs, selected from 128 available actions (enter 0 through 128, 0 = no action);
- the action to be carried out on the Dialler when the event occurs, selected from 32 available actions (enter 0 through 32, 0 = no action).

Example

062	00124	00001
		00020
062	00124	00002
		00000

*Spot event no. 1 (**Test**) activates action no. 20 on the Pulse communicator and no action on the Dialler.*

Actions on Pulse communicator and Dialler when event ends

Alarm on zone events

Block no.	00063
Length	00160
Type	Number

Same as block 00058 for end of **Alarm on zone** event.

Tamper on zone events

Block no.	00064
Length	00160
Type	Number

Same as block 00059 for end of **Tamper on zone** event.

General events (Part 1)

Block no.	00065
Length	00224
Type	Number

Same as block 00060 for end of **General events-Part 1**.

General events (Part 2)

Block no.	00066
Length	00214
Type	Number

Same as block 00061 for end of **General events-Part 2**.



DTMF communicator

Enable

Block no.	00067
Length	00001
Type	Logi c

Enables the DTMF communicator, if set on 1.

Example

067 00001 00001 00000

The DTMF communicator is disabled.

Channel definition

Block no.	00068
Length	00009
Type	Number
Validity	0. . 376

Enter 9 values indicating the assigned event for each of the 9 DTMF communication channels.

For event numbering, see the INSTALLATION MANUAL under "Event description". Please note that event numbering begins from 0. Therefore,

➤ VALUE = Event number - 1

For example, VALUE for **Alarm zone 01** is 0.

+ Spot events cannot be specified.

Example

068 00009 00001 00208

*Assigns the **Fire alarm on panel** event to Channel 1 of the DTMF communicator.*

Polarity change

Block no.	00069
Length	00009
Type	Fl ags8

Selects the channels where the polarity must be inverted in order to trigger the DTMF communicator.

Enter + on the channels to be inverted.

Example

069 00001 00001 -----++

*Sets **Polarity change** for Channels 7 and 8 of the DTMF communicator.*



Recall on success

Block no.	00070
Length	00001
Type	Logi c

When set on 1 the DTMF communicator option **Recall on success** is enabled.

Example

070 00001 00001
00001

Sets the **Recall on success** option for the DTMF communicator.

Attempts

Block no.	00071
Length	00001
Type	Number
Validity	0. . 255

This block specifies the number of **Attempts** the control panel will make for each available DTMF communicator number, for an unsuccessful call, before clearing the call request from the telephone queue.

Example

071 00001 00001
00008

If a DTMF communicator call is unsuccessful, there will be a maximum of 8 **Attempts**.

Enabling of the telephone numbers

Block no.	00072
Length	00001
Type	Fl ags8

This block specifies which of the 4 DTMF communicator telephone numbers must be **Enabled**.

Enter + in the positions corresponding to the numbers to be **Enabled**.

Example

072 00001 00001
---+-----

Telephone numbers no. 3 and 4 of the DTMF communicator are **Enabled**.

Numbers to dial, Customer code and Protocol

Block no.	00073
Length	00024
Type	Number



Enter a 6-value block for each of the 4 telephone numbers of the DTMF communicator, as follows.

- **The first value** is one of the programmed Telephone numbers:
1st VALUE = Telephone number no. - 1
- **The following 4 values** indicate the **Customer code**: enter a value of 0 through 9;
- **The sixth value** indicates the communication **Protocol**, according to the following table:

PROTOCOL	VALUE TO BE ENTERED
ADEMCO MF	00000
SCANTRONIC MF	00001

Example The following data are set for the first Central station to receive data from the DTMF communicator.

073 00024 00001 00014	Number to dial: no. 15 on the Telephone number list.
073 00024 00002 00000	Customer code: 0091.
073 00024 00003 00000	
073 00024 00004 00009	
073 00024 00005 00001	
073 00024 00006 00001	Protocol: Scantronic MF.

Test event

- Initialization

Block no.	00074
Length	00001
Type	Logi c

When **1** is entered, at the end of programming from the Keypad, the panel zeroes the timer to generate the **Test** event.

Example

074 00001 00001 00001	<i>The timer is zeroed to generate the Test event.</i>
--------------------------	---



Test event parameters

Block no.	00075
Length	00005
Type	Number

Enter the following 5 values for the test event.

- **Enabled:** enter 0 to disable and 1 to enable the **Test** event.
- **Hour:** enter the hour for the **Test** event (0 through 23).
- **Minute:** enter the minute for the **Test** event (0 through 59).
- **First Test delay:** indicates after how many **Days** the **Test** event will be generated for the first time (0 through 99).
- **Repeat Test event:** enter the period, in days, of the **Test** event (0 through 99).

Example

074 00005 00001 00001	<i>The Test event is Enabled.</i>
074 00005 00002 00023	<i>The Test event will be at 23:30;</i>
074 00005 00003 00030	
074 00005 00004 00003	<i>starting 3 days after the Initialization;</i>
074 00005 00005 00007	<i>every 7 days.</i>

Clock

Date and time

Block no.	00076
Length	00007
Type	Number

Enter the following 7 values to set the system date and time.

- **Hour:** enter 0 through 23.
- **Minutes:** enter 0 through 59.
- **Day:** enter 1 through 31.
- **Month:** enter 1 through 12.
- **Century:** enter 0 through 99.
- **Year:** enter 0 through 99.
- **Day of the week:** enter 0 through 6 (0 = Monday, 6 = Sunday).



Example The system date and time is set as follows:

076 00007 00001 00017	Hour: 17
076 00007 00002 00000	Minutes: 00
076 00007 00003 00009	Day: 9
076 00007 00004 00007	Month: July
076 00007 00005 00019	Year: 1998
076 00007 00006 00098	
076 00007 00007 00003	Day of the week: Thursday

Date format

Block no.	00077
Length	00001
Type	Logi c

This block specifies the data format:

0 = European standard (DD/MM/YYYY);

1 = American standard (YYYY/MM/DD).

Example

077 00001 00001 00000	<i>European standard.</i>
--------------------------	---------------------------

Filter times

Mains

Block no.	00078
Length	00001
Type	Number
Validity	0. . 65000

This block specifies the delay for mains-failure recognition. The value to be entered is calculated by multiplying the delay expressed in minutes by 1000:

VALUE = Delay(minutes) x 1000.

Example

078 00001 00001 30000	<i>Recognition delay set at 30 minutes.</i>
--------------------------	---



Lock Keypad on invalid code

Block no.	00079
Length	00003
Type	Number

Enter 3 values in this block.

- **The first value** refers to the number of times a wrong Code may be entered before Keypad lock-out. The function is disabled by entering 0.
- The **Lock time in seconds** is expressed by **the second and third value**; follow the procedure below to calculate the two values to be entered:
 - perform the $T_{Lock}(\text{seconds}) \times 0.13$ operation;
 - the resulting whole number is **the third value** to be entered;
 - **the second value** is the portion following the decimal point multiplied by 256.

For example, to enter a 65 seconds **Lock time**, follow the procedure below:

 - $65 \times 0.13 = 8.45$;
 - $VALUE\ 1 = 0.45 \times 256 = 115.2 = \mathbf{115}$;
 - $VALUE\ 2 = \mathbf{8}$.

Example

078	00003	00001
		00005
078	00003	00002
		00230
078	00003	00003
		00003

The **Keypad lock** is set at 30 seconds if 5 wrong Codes are entered.

General options

Block no.	00080
Length	00008
Type	Logi c

8 logic values are entered for each of the 8 options described below. If set on **1** the following are the resulting functions:

- 1 - **Maintain Zone Test Attribute;**
- 2 - **Disable welcome message;**
- 3 - **LED's OFF on Key reader;**
- 4 - **Bypass tamper on zone;**
- 5 - **Disable arming on battery trouble;**
- 6 - **Disable tamper memory reset with User code;**
- 7 - **Disable alarm memory reset with Installer code;**
- 8 - **Enable panel-alarm stop with valid Electronic key.**



Example The general options may be set as follows:

080 00008 00001 00001	<i>Zone in test logged even when the Area is disarmed;</i>
080 00008 00002 00000	<i>welcome message enabled;</i>
080 00008 00003 00001	<i>Key-reader LED's disabled in absence of an Electronic key;</i>
080 00008 00004 00001	<i>Tamper alarm disabled on bypassed Zones;</i>
080 00008 00005 00000	<i>arming possible even with battery trouble;</i>
080 00008 00006 00000	<i>Tamper alarm reset enabled for User code;</i>
080 00008 00007 00000	<i>Alarm reset enabled for Installer code;</i>
080 00008 00008 00000	<i>Panel alarm stop enabled by means of a valid Electronic key.</i>

Lock Installer code

Block no.	00081
Length	00001
Type	Logi c

When **1** is set for this parameter, the Installer code (PIN) is **locked** and cannot be recovered by restoring the factory default.

Example

081 00001 00001 00001	<i>The Installer code is locked.</i>
--------------------------	---



EVENT TABLES

□ General events (Part 1)

Number	Event	Number	Event
1..8	Fire alarm on Area	61	Warning fuse BPI1
9..16	24h alarm on area	62	Warning fuse BPI2
17..24	Burglar alarm on area	63	Warning mains failure
25..32	Generic alarm on area	64	Warning low battery
33..40	Tamper alarm on area	65	Warning power trouble
41..48	Generic+Tamper alarm on area	66	Warning mains failure on Power station
49	Fire alarm on Panel	67	Warning low battery on Power station
50	24h alarm on Panel	68	Warning power trouble on Power station
51	Burglar alarm on Panel	69	Warning generic
52	Generic alarm Panel	70	Trouble on BPI
53	Tamper alarm on Panel	71..78	Armed area
54	Generic+Tamper alarm on Panel	79..86	Exit time on area
55	Tamper on Main unit	87..94	Entry time on area
56	Balanced tamper	95..102	Valid key on area
57	Tamper on BPI devices	103	Valid key on panel
58	False key on Key reader	104..111	Alarm stop on area
59	Warning fuse +F	112	Alarm stop on panel
60	Warning fuse +B		

□ General events (Part 2)

Number	Event	Number	Event
1..80	Bypass zone	98	Error serial printer
81..88	Not ready to arm area	99	Error parallel printer
89	Telephone line trouble	100..107	Timers
90..97	Time-out-to arm		

□ Spot events

Number	Event	Number	Event
1	Test	11..20	Super key
2..9	Reset on area	21..28	Chime on area
10	Reset on panel	29..60	Recognized user code



