



NESS

PR



WWW.NESS.COM.AU

*“Australia’s largest
designer and
manufacturer of
high quality security
products”*

HEAD OFFICE:

Ness Security Products Pty Ltd
ACN 069 984 372
4 / 167 Prospect Hwy
Seven Hills NSW 2147 Australia
Ph +61 2 8825 9222
Fax +61 2 9674 2520
ness@ness.com.au

SYDNEY
02 8825 9222

MELBOURNE
03 9878 1022

BRISBANE
07 3343 7744

PERTH
08 9328 2511



NESS SECURITY PRODUCTS
Australian Communications Authority
TELECOMMUNICATIONS COMPLIANCE

PRO-LX USER MANUAL

REV2 Oct 1993
Electronic version, June 2002

Document Part Number: 890-034

For product:
PRO-LX dialler control panel

© 2002 Ness Security Products Pty Ltd ABN 28 069 984 372

Specifications may change without notice.

CONTENTS

Glossary	1
INTRODUCTION	
Getting Started	3
Your Security System	3
Output Devices	3
Input Devices	3
The Control Panel	4
Keypad	5
Audible indications (sounds)	6
Visual Indications	7
Zone and status Indicators	7
Operating the Panel	9
Area Operation	10
DETECTING INTRUDERS	
Zones	11
Arming	11
Disarming	13
Alarms	14
Monitor Mode	15
Warnings Given While Armed	17
REPORTING EMERGENCIES	
Emergency Alarms	18
OPERATION	18
View Alarms	22
View Power	23
View Memory	24
Exclude	26
Include	27
Automatic Zone Test	28
Test Mode	28
AREA OPERATION	
Area codes and Administrator codes	30
Area awareness	30
Extra instructions for administrators	31
Overlapping areas	32
PROGRAMMING	
Who may program?	33
Program mode 1 entry	33
Programming codes	34
Programming procedure	34
Programming codes	35, 36
Viewing and Changing Codes	37
Viewcode	37
Changingcode	37
Entry delay time	39
Exit delay time	39
DIALLER OPERATION	
Dialler activity	40
Call Duration	41
Telephone Equipment	41
Telephone Line Fault	41
Client program record	backpage

Glossary

Access Code - A 3 to 6 digit number needed to disarm the Panel or silence the siren when an alarm is occurring. It may be used to arm the Panel or exclude zones as well. In a system split into areas, the access code may operate only one area.

Arm - Set the Panel to detect an intruder. This operation must be performed before you leave the premises.

Auto-Exclude - A zone may be excluded if it is **unsecure** at the end of exit time. In this case it is reported by a sounding of a short burst on the siren instead of giving the normal alarm for a zone. The state of this zone is also reported to the Central Station.

Central Station - A remote monitoring **centre** which receives reports by telephone from the Panel.

Disarm - Restore an armed Panel to normal operation or act on an alarm to silence the siren.

Entry Delay-When the Panel is armed, and you enter the premises in the normal manner, the Panel does not report the intrusion immediately. This entry delay gives you time to disarm the Panel and prevent an alarm occurring.

Exclusion - To disable a zone so that a faulty detector does not generate an alarm. Inclusion of a zone enables it to alarm again. Other inputs may also be excluded.

Exit Time - When the Panel is armed, there is a delay before the premises are made fully secure to allow normal locking up and departure to occur. This delay is called the exit time.

Lockout - A zone or other input which has caused the siren to sound will normally be prevented from **re-starting** the siren until the Panel is attended.

Medical Alarm Delay - The time allowed to lapse between Medical Button presses before an alarm is generated. **If the** delay is set to zero, then pressing the Medical Button creates an alarm immediately.

Monitor Mode - The Panel is set to detect intruders in an unoccupied area within the premises.

Plug Pack - A small power unit which plugs directly into a power point. It converts mains supply to a safe low voltage supply.

Satellite - A box with a siren, battery and other alarm output devices which is more secure than a siren alone.

Siren Reset Time - The maximum time the siren sounds continuously before being switched off.

View - Examine the state of the Panel, zones and other inputs or the memory which records the most recent Panel events.

Zone - An input which is connected to one or more detection devices to protect an area such as the front door, corridor, windows etc. Detectors such as fire detectors and panic buttons must be able to generate an alarm at all times and are assigned to 24 hour zones.

INTRODUCTION

INTRODUCTION

Congratulations on selecting the PRO-LX Control Panel which combines

advanced security features with ease of operation. This manual is intended to help you operate the PRO-LX and become familiar with its significant security features. You may also find it a handy reference to remember little-used features or understand incidental warnings or alarms.

This manual introduces you to the PRO-LX, describing its parts and the features which are useful to people who operate it. The early chapters contain “essential reading” for everyone.

The chapter, GETTING STARTED introduces you to the PRO-LX. It explains what the system consists of and the controls you will use to operate it, with a focus on the keypad.

There are then two chapters on what the PRO-LX does best, Detecting INTRUDERS and REPORTING EMERGENCIES. Finally, FEATURES completes the “essential reading” section in which you will discover some useful operations to assist in day-to-day running of the PRO-LX.

The next 3 chapters cover features that may not be relevant to all readers.

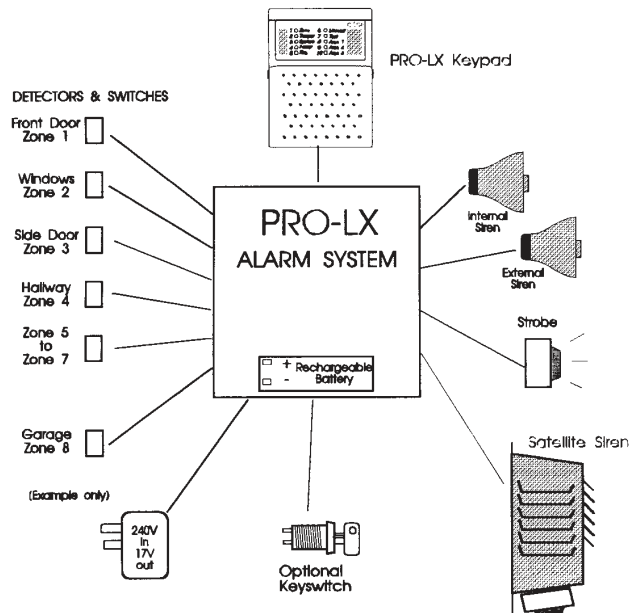
If your system is divided into separate security areas then AREA OPERATION is appropriate. If you are responsible for who has access to the premises then PROGRAMMING will be relevant. Finally, the chapter DIALLER OPERATION is important if you are taking advantage of the PRO-LX Dialler features.

The last chapter, CONFIGURATION, contains information about how your PRO-LX has been set up and it is needed by service people responsible for maintaining your system. Therefore it may be a good idea to keep this manual in a safe place for future reference. You may also refer to this part of the manual to find out what options describe in this manual have been selected for your system.

Getting Started

Your Security System

At the hub of your security system is a gray box with lots of wires running into it. This is the PRO-LX Control Panel and it uses computer technology to constantly monitor your property and provide advanced security features. Only service personnel will need to touch the Panel.



What you will see and use is the PRO-LX Keypad which is set up for you to control the Control Panel and view indicators to find out what is happening. In addition to the keypad may be a key switch or other controls such as push buttons. Your installer will explain the function of all such controls and you will also find them mentioned in the next two chapters.

Various electrical devices are connected to the Control Panel in order for it to function. What these are and how they are arranged is different for every installation. They will either input information about intruders and emergencies or output reports by making distinctive sounds and visual warnings.

Output Devices

It is almost certain that a box with siren and strobe (flashing light) is placed in some highly visible outside position. By being there it advertises that your property is protected by a security system and it provides audible and visible reports of important alarms. Sometimes large sites have one or more satellite sirens installed. These are self-contained units with their own security features.

Input Devices

Various sensors are located at strategic locations around your property to perform security monitoring, which may include detection of

- movement
- opening of windows and doors
- shattering of glass
- excess heat or smoke

and so on. These will be unobtrusive if not out of sight.

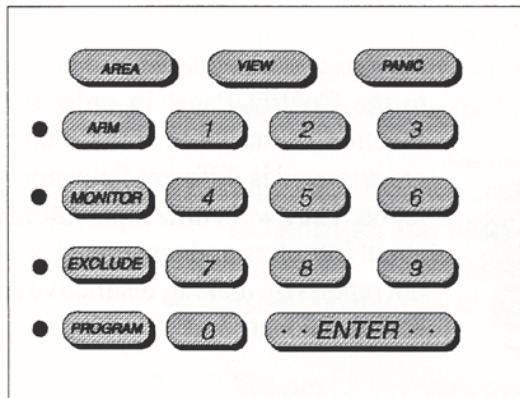
As well, your property will be divided into zones with each zone having sensors installed in such a way that the area may be sealed (that is made totally secure).

The Control Panel

The Control Panel is normally powered from the mains using a plug pack, (transformer which plugs directly into a power point). Inside the box is a battery which is on stand-by in case of mains power failure. This arrangement allows the Panel to operate continually and give warnings of mains supply loss. You are also warned about the battery losing its charge.

The telephone dialler, if this option is used, is also placed inside the Panel. By arrangement, it reports alarms to an organization you have chosen to render assistance or investigate intrusion incidents. These reports go to a communications centre which, in this manual, is called the Central Station. More information may be found in the DIALLER chapter.

Keypad



The keypad provides an easy means to control your security system and find out its state. The keypad keys and indicators are shown here so you will recognize them where they occur in the manual.

The 3 most important questions about operating the PRO-LX Control Panel are:

How do I arm the Panel?

How do I disarm the Panel?

What do I do when the siren sounds?

You may operate the Panel once you know the answer to these 3 questions. But to get the best out of your security system you need to view alarms and view memory. Other features such as exclusion and programming are intended to be used occasionally but may be important in solving certain problems such as dealing with a faulty sensor or remembering a forgotten access code.

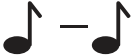
Keys

There are a total of 18 keys. Each key has basically one function which is identified by a single label:

Digits 1 2 3 4 5 6 7 8 9 0	Enter access codes select view, area, zone etc change program setting
ENTER	Complete digit entry or cancel current operation
ARM	Put system in high security mode prior to departure
MONITOR	Put only part of system in security mode
EXCLUDE	Exclude alarm (temporarily disable it) commence exclude selection
PROGRAM	Change the way system is set up
AREA	Commence area selection
VIEW	Commence view selection progress to next memory event
PANIC	Emergency

Audible indications (sounds)

Every key press gets an audible response which helps to keep you informed on your progress:

-  1 short bip - key press acknowledged
-  3 short bips - entry accepted
-  1 long bee-eep - entry invalid, try again

You may also hear warnings:

1 bip every half second

entry onto property when Panel is armed
intrusion into Monitor area
low level alarm

1 bip every second

Medical Alarm warning tone

Continuous Bips

Power Problems eg. mains fail, low battery

Visual Indications

There are 3 types of visual indicators:

- 1 ○ **zone** - digit + green light
- TAMPER

label - word back-illuminated by red light
- ARM

status - red light + key

These allow quick recognition of alarms and Panel status indications.

Zone Indicators

These indicate the state of a group or alarms (zone, tamper, system, power) . The lights show one of 3 states:

- OFF - no alarm
- ON - alarm warning (no report)
- ⚙ FLASHING -alarm reported

Label and Status Indicators

These are used to show what operations are in progress, the state of the Panel and, in association with the zone indicators, the status of the inputs. Summarized below are the various indications that are a unique feature of the PRO-LX. You find them explained in greater detail in the following chapters.

Generally, there are degrees of urgency conveyed by these indicators depending on if and how they are illuminated:

- OFF - nothing happening
- ON -routine operation or warning
- ⚙ SLOW -important reminder of past event
- ⚙ FAST -alarm

These are the label indicators:

- ZONE
Individual Zones being displayed
- ⚙ ZONE (fast)
Zone group alarm
- TAMPER
Individual Tamper alarms being displayed
- ⚙ TAMPER (fast)
Tamper group alarm

- SYSTEM
Individual System alarms being displayed
- ⚙ SYSTEM (fast)
System group alarm
- POWER
Individual Power alarms being displayed
- ⚙ POWER (fast)
Power group alarm
- FIRE
Fire warning
- ⚙ FIRE (fast)
Fire alarm
- MEMORY
View selection when VIEW key pressed
Memory mode indication while viewing memory
- ⚙ MEMORY (fast)
New alarm in memory
- TEST
Automatic test procedure (option only)
- AREA1
Area 1 armed
- ⚙ AREA1 (slow)
Area 1 monitor
- AREA2
Area 2 armed
- ⚙ AREA2 (slow)
Area 2 monitor
- AREA3
Area 3 armed
- ⚙ AREA3 (slow)
Area 3 monitor

The following status indicators turn on when the operation identified by the adjacent key is active:

- ARM
Panel disarmed
- ARM
Panel armed

- ⚙ MONITOR (slow)
Panel in Monitor mode
- EXCLUDE
Panel in Exclude mode
- ⚙ EXCLUDE (slow)
Zone or other alarm excluded
- PROGRAM
Panel in Program Mode 1
- ⚙ PROGRAM (fast)
Panel in Program Mode 2 (Installation mode)

Operating the Panel

The most often-used features of the PRO-LX are provided with a variety of ways to operate them to suit different situations. The possible alternatives are:

- > one button
- > two button
- > code
- > key switch

In most cases there are just 2 alternatives provided and you will only use one as directed by the person who installed your system.

One Button

If you have a one button system, then most features are available to you at a single key press.

Keys affected:

ARM
MONITOR
EXCLUDE
PANIC
VIEW

Press one key to make any selection. eg ARM to arm, MONITOR to monitor, EXCLUDE to exclude, etc.
(This is the default system setting.)

Two button

A two button system requires you to press ENTER to make a selection. eg ARM ENTER to arm, MONITOR ENTER to monitor, EXCLUDE ENTER to exclude. The same keys are affected as in one button operation.

INTRODUCTION

Code

A code is a secret number which identifies who is trying to operate the Panel. A code is entered as a 3 to 6 digit number followed by ENTER.

eg. 5463 ENTER

An access code is needed to disarm the Panel. You may select to arm the PRO-LX with this codes as well. You may also select to enter exclude mode by code only.

Keyswitch

If your system is not split into areas, you may elect to arm and disarm the Panel by keyswitch. This is in addition to any other alternative.

Area Operation

You will notice boxes with the words **AREA OPERATION** above them. You may safely disregard them if your system is **not** split into areas or you are reading this manual for the first time. Area operation involves slight variations to what is required to work a single system, so it is best to use these boxes as a quick reference after reading the rest of the manual.

DETECTING INTRUDERS

Zones

Intruders are sensed by a variety of special devices. These are checked repeatedly by the Panel and are identified by which part of the property they secure. We call this a **zone**.

Not everyone detected in a zone is an intruder! It depends on whether that zone is meant to be **unoccupied** at the time. Therefore, we need some way to inform the Panel that we want zones to be secure.

In fact there are 3 **levels of security** normally required of zones:

- > Premises vacant, total security required. We **arm** the Panel to get this level of security.
- > Premises fully occupied, only emergency reporting required. We **disarm** the Panel in this case.
- > Premises partially occupied, warnings of intrusions into certain areas required. We put the Panel into **monitor mode** to provide this level of security which is in between armed and disarmed.

The following sections explain how to arm, disarm, and monitor. They describe what happens when there is a security breach.

Arming

When leaving the property, ensure all zones are sealed and then arm the Panel as follows:

- | | |
|---|------------------------------|
| (one button) | ARM |
| (two button) | ARM ENTER |
| (code) | ARM code ENTER |
| (keyswitch) | Insert key, turn and release |
| ○ ARM  | |

You now have a fixed time in which to leave. This is called the **exit delay**. If you are still within the area secured by the Panel at the end of this time, then you will be treated as an intruder! If you discover that all zones are not sealed or you have to go back to get something, then it is best to disarm the Panel, attend to the problem, and then arm again.

Note that the exit delay may be changed. Refer to the chapter titled PROGRAMMING.

If you get a long bee-eep when you attempt to arm, then check this list of things that prevent arming:

- Siren sounding when ARM hit
- Attempt to arm one button or two button when code mandatory
- Code keyed incorrectly
- Already armed
- In program or exclude mode

AREA OPERATION

To arm an area assigned to a code:

ARM code ENTER

- AREA1  -or-
- AREA2  -or-
- AREA3 

To arm one area with an administrator code:

AREA1 ENTER ARM code ENTER -or-

AREA2 ENTER ARM code ENTER -or-

AREA3 ENTER ARM code ENTER

To arm more than one area., enter a list of areas.

For example, to arm all three areas:

AREA1 ENTER 2 ENTER 2 ENTER ARM code ENTER

- AREA1
- AREA2
- AREA3 

Disarming

When the Panel is disarmed the security level is reduced to only reporting emergencies. To disarm the Panel, enter your access code:

code ENTER

- ARM 

Be aware that entering your property while the Panel is armed may cause an alarm **unless** you disarm within a fixed time. This time is called the *entry delay*.

Note that the entry delay may be changed, but in the interest of security it is best to keep this short as practical. Refer to the chapter titled PROGRAMMING.

If you get a long bee-eep when you attempt to disarm, then check this list of things that prevent arming:

- Code keyed incorrectly
- Already disarmed
- In exclude mode

AREA OPERATION

To disarm an area assigned to a code:

code ENTER

- AREA1  -or-
- AREA2  -or-
- AREA3 

To disarm one area with an administrator code:

AREA 1 ENTER code ENTER -or-

AREA 2 ENTER code ENTER -or-

AREA 3 ENTER code ENTER

To disarm two areas, add another area entry.

For example to disarm areas 1 and 2:

AREA 1 ENTER 2 ENTER code ENTER

- AREA2
- AREA3 

To disarm all areas with administrator code:

code ENTER

Alarms

A zone that alarms while the Panel is armed may sound the siren, flash the strobe light and report to the Central Station through the dialler. (These details depend on how your system is equipped and set up, but some sort of **urgent** report should be given.)

Any alarm should be reset as soon as possible. To reset an alarm, enter a valid code:

code ENTER

⚙ MEMORY 🎵🎵 (fast)

At the same time, siren and strobe turn off and flashing zone indicators change to off or steady.

Notice that to reset an alarm while Panel is armed also disarms the Panel as explained in the previous section. Indeed, it is likely that you will not know that an alarm has happened until you are about to disarm.

To quickly determine where the security breach has occurred during an alarm, look for flashing indicators on the keypad. These stop flashing upon reset, but don't worry, you will get a better idea of what happened by viewing memory. The **MEMORY** indicator flashes after reset as a reminder. See **FEATURES** chapter for more details.

Note that the siren will sound for no longer than a set time (the *Siren Reset Time* which is shown in the **CONFIGURATION** chapter).

Monitor Mode

Use Monitor Mode to guard an unattended part of the property while occupying the rest. Your system may be programmed so that have the choice of arming two different monitor areas (dual monitor mode), otherwise there is only one monitor area (single monitor mode).

Single Monitor Mode:

Ensure all zones in the monitor area are sealed and then partially arm the Panel as follows:

(one button)	MONITOR
(two button)	MONITOR ENTER
(code)	MONITOR code ENTER
⚙ MONITOR (slow)	🎵🎵🎵

Dual Monitor Mode:

Ensure all zones in the monitor area are sealed and then partially arm the Panel as follows:

(one button)	MONITOR 1 -or- MONITOR 2
(two button)	MONITOR 1 ENTER -or- MONITOR 2 ENTER
⚙ AREA1 (slow)	🎵🎵🎵 -or-
⚙ AREA2 (slow)	🎵🎵🎵

There is now a fixed time for anyone in the monitor area to leave. This is the same exit delay as occurs upon full arming.

If, when you attempt to arm, you get a long bee-eeep, then check this list of things that prevent arming:

- Siren sounding when MONITOR hit
- Attempt to arm one button or two button when code mandatory
- Code keyed incorrectly
- Already armed
- In program or exclude mode

A zone that alarms while the Panel is in monitor mode may sound the keypad(s) with a beep every half second. This will continue for a time equal to the entry delay. If the alarm is not reset within this time, then the siren will sound for a 2 second burst. (These details depend on how your

system is equipped and set up, but some **sort** of **non-urgent** report should be given.)

Note that pressing any keypad key will silence the beeping, but only successfully resetting the alarm will prevent the siren burst.

AREA OPERATION

To put an area assigned to a code into monitor mode:

MONITOR code ENTER

⚙ AREA1 (slow) 🎵🎵 -or-

⚙ AREA2 (slow) 🎵🎵 -or-

⚙ AREA3 (slow) 🎵🎵

To put one area into monitor mode with an administrator code:

AREA 1 ENTER MONITOR code ENTER -or-

AREA 2 ENTER MONITOR code ENTER -or-

AREA 3 ENTER MONITOR code ENTER

To put more than one area into monitor mode, enter a list of areas.

For example, to put all three areas into monitor mode:

AREA 1 ENTER 2 ENTER 3 ENTER

MONITOR code ENTER

⚙ AREA1 (slow)

⚙ AREA2 (slow)

⚙ AREA3 (slow) 🎵🎵

Warnings Given While Armed

1. Entry Beeps (optional)

Your system may be programmed to give a reminder upon entry to your property that the Panel is armed. This consists of a beep every half second until a key is pressed.

2. Zones Unsealed Warning (optional)

Another option determines how any unsecured zones are treated upon arming the Panel. At end of exit delay these zones will either -

- a. alarm
- b. give a warning and *auto exclude* (refer glossary)

For full arming, the warning a is a 2-second siren burst, while for monitor mode, the keypad(s) beep for 2 seconds.

3. Battery Low

The battery in the Panel is tested when ARM key pressed. This may, if the battery is low, result in POWER indicator lighting up. See **FEATURES** chapter on how to view this alarm.

REPORTING EMERGENCIES

Emergency Alarms

The PRO-LX Control Panel handles a variety of emergencies which need to be reported and dealt with urgently. In most cases, these emergencies may happen at any time, not just when the Panel is armed.

Some emergency alarms are associated with threats to your security equipment, such as tampering (ie, trying to prevent the system from working) or trying to find access codes by trial and error.

Other alarms are activated at the press of a button by people needing assistance in a threatening situation. It pays to be ready for such emergencies by learning thoroughly the correct procedure to deal with them. The alarms provided for getting assistance are Panic (danger, fire, etc), Duress (hold up), Medical (health), Key-or-Button-activated 24-hour Zone (any emergency).

An interesting alternative to the way you may operate the Medical alarm is to report if the button is **not** pressed within a certain time. See the section devoted to the Medical alarm for more details.

Finally, there are zones which are **always** in a high-security state. These include fire doors, smoke detectors, equipment failure monitors, and so on. Your system may have such zones set up, in which case, be sure you understand how these report alarms and what to do about them.

Now lets see how emergency alarms operate generally before taking a closer look at some of them.

Operation

An alarm creates an urgent report by such means as sounding the siren. The alarm is indicated on the keypad(s) and stays there until a code is entered to reset the Panel. The siren sounds for no longer than the *Siren Reset Time*. However, the tone of the siren is usually distinct from a zone intrusion report.

That's it in a nutshell. However, there is more to the story.. .

If the alarm is not generated by a zone then it cannot be indicated at the keypad as zone alarm. What you will see initially is one of the following labels flashing:

TAMPER
SYSTEM
POWER
FIRE

Of course, if you generated the alarm by pressing a button then you **know** what the alarm is anyway! Otherwise you may find out what the particular alarm is by viewing the Panel inputs (refer to **FEATURES** chapter). Note that there is only one type of **FIRE** alarm.

Another important point is that there is likely to be differences in reporting which reflect the nature of the emergency. A Medical alarm, for example, should be sent to the Central Station but **not** sound the siren.

You also **cannot** prevent an emergency alarm **repeating** by simply entering a code. The repetition may be the result of faulty equipment or unusual circumstances (for example, people temporarily forced to use a fire door for access). You may stop the alarm from reporting by performing an operation called *exclusion* (see **FEATURES** chapter). This measure is cancelled if you arm the Panel and later disarm it.

Another optional measure which normally is selected for you automatically prevents an ill-behaved alarm from repeatedly sounding the siren, but the indicators work as usual (*lockout* option).

Now for some details on particular emergency alarms. Please note it is important to know about **Access Code**, **Tamper** and **Panic** alarms.

Access Code

Access codes should be kept secret since they are used to disarm the Panel. Your system may be programmed to prevent someone trying to discover access codes by trying random numbers and seeing if they work. This is done by reporting more than a certain number wrong codes being entered one after another. This report will sound the siren and bring up the **SYSTEM** label on the keypad.

The number of wrong code entries allowed before there is an alarm is normally set to 3. This may be increased to 10, or made unlimited if you

do not want code alarm to happen at all. Remember that this alarm is reset as soon as a correct code is entered, so if you cause it to happen because you are trying to remember your code, its worthwhile to keep trying.

If you forget your access code then you may either find out what it is or set up a new one following the procedures described in the PROGRAMMING chapter.

Tamper

Various means are built into your PRO-LX Control Panel and accessories for detecting attempts to penetrate and disable the system. Any such incident is reported as a tamper alarm and the part of the system under attack is identified by number. For example, opening the lid of the Control Panel box generates Tamper 2.

If you get a tamper alarm, reset the Panel, identify the unit generating the report (see FEATURES) and then go and have a look at it. If there is evidence of damage or the tamper alarm keeps repeating, then your security system may require a service by a qualified person.

Panic

Be sure you know how your system has been set up to report panic as it may be used for a wide range of emergencies. Typically, it causes the siren to sound to frighten away intruders and draw in people to assist you.

To generate panic alarm:

(one-button) PANIC - press for half a second

(two-button) PANIC ENTER

⚙ SYSTEM (fast) 🎵

Duress

Duress alarm is reported when **you disarm** the Panel in a special way. That is:

9 code ENTER

● ARM 🎵

The 9 digit indicates that you are being forced to disarm the Panel and need assistance. This alarm may then be reported to the Central Station.

Note: Your installer may have changed your Duress digit from 9 to another number. 9 comes programmed standard in your Panel.

Medical

The medical alarm is operated by pressing a button accessible to anyone who may need assistance. This alarm may be used in one of two ways:

- > the alarm is reported immediately.
- > the alarm is reported only if the medical button is not pressed within a set time called the *Medical Alarm Delay*.

For example, if this delay is set to 24 hours, then an alarm will only be reported if the button is **not** pressed within 24 hours of the previous press.

When only 20 minutes of the time remains and the button has still not been pressed, then all keypads will beep as a reminder. This will be repeated 10 minutes later as a last reminder.

If the Medical Alarm Delay option is being used, an immediate emergency alarm can be transmitted by pressing the button twice within a 12 second period. On the first press, all keypads beep once a second until the end of the 12 second. If the button is pressed twice, this beep rate doubles to indicate to the caller that the emergency alarm is being reported and help is on the way.

Fire

If there are sensors in the building which detect the presence of smoke and heat, then they will be connected to a special 24 hour zone which gives an additional indication as shown.

⚙ FIRE (fast)

FEATURES

The features described here start with **WHEN**, **WHY**, and **HOW** to give you a quick overview. You will find the following procedures:

- > View Alarms
- > View Memory
- > Exclude
- > Include
- > Automatic Zone Test
- > Outputs Test

View Alarms

WHEN?:

At any time

WHY?:

To find out what zones and other inputs are reporting an alarm, or ensure that inputs are ready prior to arming the Panel.

HOW?:

The PRO-LX Keypad normally views zones while idle. When you are in some other mode you enter view mode and immediately view zones. You may then select another alarm group.

View zones:

(one button) VIEW 1 or (two button) VIEW 1 ENTER

● ZONE 🎵🎵🎵

Zone indicators show state of zones 1 to 8, and possibly one or more other labels flashing to indicate other alarms.

View tampers:

(one button) VIEW 2 or (two button) VIEW 2 ENTER

● TAMPER 🎵🎵🎵

Zone indicators show the state of tamper inputs 1 to 4. This is what equipment to check when you get a tamper alarm:

Tamper 1 - External devices (check with installer)

Tamper 2 - Control Panel

Tamper 3 - Keyswitch, sensors and wiring to sensors

Tamper 4 - Satellite (optional)

Tamper 5 - Radio Board

View Systems:

(one button) VIEW 3 or (two button) VIEW 3 ENTER

○ SYSTEM 

Zone indicators show the state of system inputs 1 to 8. These are the system inputs:

System 1 - 24 hour zone

System 2 - Dialler line fault

System 3 - Keypad or satellite connection fault

System 4 - Control panel fault

System 5 - Duress emergency alarm

System 6 - Panic emergency alarm

System 7 - Medical emergency alarm

System 8 - Access code alarm

Note that an alarm on System inputs 2, 3 and 4 indicate the Panel has a problem that needs attention from a service person.

View powers:

(one button) VIEW 4 or (two button) VIEW 4 ENTER

○ POWER 

Zone indicators show the state of power inputs 1 to 4 and 7. These are the power alarms and suggestions on how to deal with them:

Power 1 - No mains power

Check mains power point, plug pack and plug pack lead. If all these seem in order, the Panel may need a service.

Power 2 - Battery low

Stand-by battery in Panel requires charging. This may be the result of a long power blackout or interruption caused by blown fuse or tripped circuit breaker or even plugpack accidentally unplugged. If the cause of the problem is unknown, then get a service person to check the Battery.

Power 3 - DC supply failed

This may cause serious system malfunctions and should be attended to as soon as possible.

Power 4 - Zone reference supply failed

This may result in zones either giving false alarms or not to alarm at all. Get this attended to as soon as possible.

Power 7 - Satellite Battery low

Stand-by battery in Satellite requires charging. This may be the result of power loss back at the Panel (see Power 2). If the cause of the problem is unknown, then get a service person to check the Satellite Battery.

Power 9 - Radio detector battery low

The battery in one of your detectors is low and needs replacing. An associated numbered light will tell you which one.

Power 0 - Radio pendant battery low

The battery in one of your pendants is low and needs replacing. An associated numbered light will tell you which one. After replacing the battery, press your OFF button on the pendant to clear the power warning.

View Memory

WHEN?:

At any time, but especially when indicator is flashing to indicate memory contains new information.

WHY?:

To find out the most recent events and the sequence in which they happened.

HOW?:

Select view memory feature. Step through memory by pressing VIEW button. At each step the keypad indicators display an event such as arming, disarming or an alarm. The memory progresses backwards from the most recent event to end of memory. You may quit before reaching end of memory.

Select View Memory:

(one button) VIEW 6 or (two button) VIEW 6 ENTER

○ MEMORY 

Other indicators show the most recent event (or the second most recent event if you have just disarmed the Panel).

Read Event:

You will see one of the following types of events:

Arming

There are a number of indications depending on the particular operation:

○ ARM

Panel armed

⚙ MONITOR (slow)

Panel in monitor mode

⚙ AREA1 (slow)

Area 1 monitor

⚙ AREA2 (slow)

Area 2 monitor

AREA OPERATION

- AREA1
Area 1 armed
- AREA2
Area 2 armed
- AREA3
Area 3 armed
- ⚙ AREA3 (slow)
Area 3 monitor

Disarming

- ZONE

Panel disarmed. The zone indicators show zones which were unsecure at the time.

Alarm

- 2 ⚙ TAMPER

An alarm is shown as a steady label indicator and flashing zone indicator. Above is an example of Tamper 2 alarm. The alarms are described above (see View Alarms).

Exclusion

Excluding an alarm prevents it sounding the siren. Therefore, it may be important when investigating an intrusion to know what alarms were excluded at the time.

There are two types of exclusion:

- >exclusion operation at the keypad
- >automatic exclusion

The first lasts until the Panel is armed and then disarmed or the operation is reversed at the keypad. The second is an option applying to zones which are unsecure after the Panel has been armed and the exit time expired. Both types of exclusion are recorded and cannot be distinguished from each other when you view memory.

What you see is . . .

- EXCLUDE
 - + one or more zone indicators on
 - + label indicator (ZONE , TAMPER , SYSTEM OR POWER)

The alarm(s) being excluded are described above (see View Alarms).

Step to next event:

Press VIEW button. If there is another event in memory, then the display changes to show it.

If there is nothing left to read out, you get a warning tone and the Panel returns to its normal state of viewing zones.

Note that the display may only seem to flicker but not change. In this case, an alarm repeated. The number of steps to get a different display equals the number of times the alarm repeated.

Exit:

VIEW ENTER

The Panel returns to its normal state of viewing zones.

Exclude

WHEN?: While Panel is disarmed.

(If you use your code the enter exclude mode, you may in fact exclude at any time, but it is unusual to so while the Panel is aimed.)

WHY?: A temporary measure to prevent an alarm report caused by a faulty sensor or from having to use a secure zone for access.

HOW?: Enter exclude mode. Exclude zones or select other alarm group (Tamper, System or Power) and exclude. When finished, exit from exclude mode.

Enter Exclude Mode:

(one button)	EXCLUDE
(two button)	EXCLUDE ENTER
(code)	EXCLUDE code ENTER
○ EXCLUDE	♪♪

Zone indicators reveal excluded zones.

Exclude zones:

zone ENTER zone ENTER . . .
1 ○ ♪♪

Selected zone indicator lights (zone 1 shown as example).

Select other alarms:**tamper**

(one button) EXCLUDE 2

(two button) EXCLUDE 2 ENTER

○ TAMPER 🎵

system

(one button) EXCLUDE 3

(two button) EXCLUDE 3 ENTER

○ SYSTEM 🎵

power

(one button) EXCLUDE 4

(two button) EXCLUDE 4 ENTER

○ POWER 🎵

You see the label for the selected alarm group light up and the zone indicators revealing any excluded alarms.

The alarms are described above (see View Alarms).

Exit exclude mode:

EXCLUDE ENTER

⚙️ EXCLUDE (slow) 🎵

The Panel returns to the normal state of viewing zones. The EXCLUDE indicator also flashes slowly as a reminder that alarms are excluded.

Include
WHEN?:

While Panel is disarmed.

WHY?:

To cancel a previous exclusion.

HOW?:

Enter exclude mode as if to exclude. Include alarms by following the same procedure as used for excluding them in the first place. Zone indicators switch from on to off to show inclusion.

Note that a flashing indicator means the alarm input is unsecure and will report if you exit exclude mode. You may choose to then re-exclude the alarm.

More about Exclusion

If you enter exclusion mode using your code, then any alarms being reported at the time are silenced.

If any alarm occurs while the Panel is in exclusion mode, then the report is delayed until you exit. It may also be excluded to prevent the report.

You are free to view alarms while in exclude mode, but you only get warnings of any that are **unsecure** (indicators steady instead of flashing).

Automatic zone test

This is an option that helps avoid the situation of a zone sensor going faulty or being disconnected without it being noticed. A count is kept of the number of times the Panel is armed and disarmed. Any zone which has failed to detect anything over the past 20 armings is recorded and the TEST indicator also lights up.

When you see the TEST indicator, find out which zones have been dormant:

(one button) VIEW 7

(two button) VIEW 7 ENTER

○ TEST 

The zone indicators show which zones need to be checked. To do this, open doors and windows, walk down corridors or do whatever is required to access each zone in question. When you return, the zone indicators which were on should now be flashing. Any which are still just on need to be checked by a service person.

To exit view test:

VIEW ENTER

Test Mode

WHEN?:

While the system is disarmed and idle - no alarms

WHY?:

To test outputs and devices connected to them - or - control equipment - or - reset fire sensors after they have “latched”.

HOW?:

Enter your access code. The TEST label lights up. Press a digit key to operate an output - see table below. The zone light for the output turns on along with the output. Press the same digit key to turn the output off, or exit by pressing ENTER.

Press any other key to cancel and commence new operation.

KEY	ZONE	OUTPUT
1	1	Siren A - Tone 1 (+ satellite)
2	2	Siren B - Tone 1
3	3	Reset *
4	4	Strobe *
5	5	Auxiliary 1 *
6	6	Auxiliary 2 *
7	7	Keypad Beeps
8	1	Siren A - Tone 2 (+ satellite)
9	2	Siren B - Tone 2
* Refer Installer		

AREA OPERATION

An area is any part of your property that can be sealed off to intruders. If your security system is split into areas, then there are some things to be aware of concerning the operation of the system.

Area codes and Administrator codes

The usual approach to setting up a split system is to give most of the people who operate it access to only one area. These people are allocated an area code, which is an access code to arm and disarm one area. All the procedures described for access codes apply equally to area codes except that you see an area label AR A AR A AR A in place of ARM or MONITOR as appropriate.

The remaining operators of the Panel are able to select any combination of areas they choose to arm and disarm. For this they are given an administrator code, which is an access code for the entire system. If you are a person with an administrator code, then you are in a position of trust, since you may enter any part of the premises at any time.

The procedure for using an administrator code is again the same as for an ordinary access code with an extra preliminary step of selecting the areas you wish to control. This is done by pressing AREA key and then entering the area(s) by number. For example, to arm all 3 areas:

AREA 1 ENTER 2 ENTER 3 ENTER ARM code ENTER

Area awareness

Here are some important points to be aware of with split systems:

- >People need to know when areas are armed so they avoid entering them and creating embarrassing false alarms.
- >Whenever there are people on the premises, someone should be there with an administrator code to deal with alarms. Remember that an area code can only stop the zones belonging to that area from reporting. For example, if a zone in area 2 reports an alarm, and the people present all have area codes, then none of them will be able to stop the siren.
- >Be able to recognise the zones belonging to each area when you view them on the keypad. If you have an area code, you may then check if your area is secure prior to arming. You will also be able to decide if an alarm is in your area.

Extra Instructions for Administrators

Shortcut to Disarm all areas

If you have an administrator code, you may take a short cut to disarm all areas at once. You do this by simply entering your code (no area selection = all areas).

To disarm all areas:

code ENTER

Exclusive area

Your system may be set up so administrators have an exclusive area only they may arm.

To arm this area for high security:

ARM code ENTER ○ ARM 🎵🎵

Medium security:

MONITOR code ENTER ○ MONITOR 🎵🎵

Note that there is no shortcut to arming all areas with an administrator code. You must go through the procedure of selecting each area to do this.

Overlapping Areas

Areas in your system may overlap. This usually happens at access points such as entrances and corridors. To determine if this is the case, you simply have to check whether there are any zones which belong to more than one area. When areas overlap, entering and leaving them requires additional caution and your system will be set up in one of two ways to handle this situation:

1. Minimum security approach

When you arm your area, only those zones belonging exclusively to it start to secure straight away. The remaining zones wait until every area to which they belong is armed. This approach leaves access points unsecure until the premises are made vacant.

2. Maximum security approach

When you arm your area all zones in it start to secure. At the end of exit time, they are all secure including those that provide access to other areas. Anyone wanting to enter or leave through the common access zones must use their code.

Make sure you know which approach has been applied to your system. If the maximum security one applies to you, then these are the entry and exit procedures:

- >To go in through a secure area, make your way to the keypad and enter your code.
- >To leave through a secure area, arm your own area before proceeding. (If anyone remains behind, they will have to disarm the Panel again before the end of exit time.)

Note that with both approaches, medium security on common access zones is attainable by using monitor mode.

Minimum security approach:

one area in monitor mode, the rest in monitor mode or armed.

Maximum security approach:

one area in monitor mode, the rest in monitor mode or disarmed.

PROGRAMMING

Programming is changing the way your PRO-LX Control Panel is set up to operate. You may also go into programming mode to discover or remember this information.

Who may program?

Normally programming is restricted to those who really need to do it and are familiar with the procedures. Otherwise the integrity of your security system could be seriously jeopardized.

There are two levels of programming each requiring a code for entry to bar unauthorized access. The first level is described in detail below and allows programming of all access codes and entry and exit times. This is appropriate for the person on the premises most responsible for security.

The second level is provided for installers and service personnel and only a summary of features is provided here.

Program Mode 1 Entry

(User Program Mode)

For starters, you need the Master Code, which is initially set by your installer, but may be changed if required (and in fact should be changed, for security reasons, to a code not known by your installer).

To enter program mode 1:

PROGRAM master code ENTER

○ PROGRAM 

You may now:

- > program or re-program any of a maximum 15 codes
- > re-program entry time(s)
- > re-program exit time(s)
- > enter Program Mode 2 (installer program mode)
(install code may be needed)
- > exit Program Mode

Programming Codes

Program Procedure

Programming a code involves two or three steps, depending on what type of code it is. The first step is to identify it by entering a number. The last step is to enter the new code twice (the second time is a check for correctness). The middle step is needed for certain code types and requires you to enter a single digit, either 0, 1, 2 or 3.

Here is an example of programming the first code to 1234:

PROGRAM 1 ENTER  1234 ENTER  1234 ENTER 

To make it easier to read programming instructions, the abbreviations P for PROGRAM and E for ENTER will now be used. Hence the above example now looks like:

P1E 1234E 1234E

If you get an audible error indication, then check the following advice

A code must contain more than 2 digits and not more than 6. A code may be rejected the first time you enter it because it matches an existing code (or possibly matches a duress code). If you enter a different code the second time, you will also get an error indication. You may try again to enter a valid code or hit ENTER key to cancel.

Install Code

The install code which is used to enter Program Mode 2 and is set initially to six 0's (ie 000000). It may be changed while in Program Mode 2 to prevent unauthorized changes to the system set up apart from those possible in Mode 1.

Access Code

The term access code is a general name for any code used to disarm the Panel upon entry to the premises. It may also be used to arm the Panel. There are 16 access codes, the first being fixed as a master code and the remaining 15 able to be programmed to any of these types:

ordinary
disabled
administrator
area
master

The code type is displayed on indicators ARM, AREA1, AREA2 and AREA3. If the fixed master code has been used to commence programming mode, the actual code is also flashed out at the start of programming a code.

Here are descriptions and indications and programming details for each type:

Ordinary code

- ARM
- AREA1
- AREA2
- AREA3

This is an access code for a system without areas and does not permit the owner entry into programming mode.

To program an ordinary code with code number in the range of 2 to 15:

P code number E code E code E

disabled code

- ARM
- AREA1
- AREA2
- AREA3

Any access code except the fixed master code may be taken out of service by programming its first digit to be 0.

To disable a code with code number in the range of 2 to 15:

P code number E 0 code E 0 code E

Note, all access codes are disabled until programmed for use by people who need to operate the Panel.

AREA OPERATION**Administrator code**

- ARM
- AREA1
- AREA2
- AREA3

An administrator code is able to arm and disarm all areas of a divided system but it is not permitted entry into programming mode.

To program an administrator code with code number 2 to 15:

P code number E code E code E

Area code

- **AREA1**

P code number E 1 E code E code E

- **AREA2**

P code number E 2 E code E code E

- **AREA3**

P code number E 3 E code E code E

Master code

- ⚙ ARM (fast)
- ⚙ AREA1 (fast)
- ⚙ AREA2 (fast)
- ⚙ AREA3 (fast)

This permits access to Program Mode 1 plus allowing the entire system to be armed. The first access code is always a master code and if it is somehow disabled you will not be permitted to exit out of program mode.

(The fixed master code may be disabled if there is loss of configuration data. You will get a warning this has happened by the indicator unexpectedly flashing. In that case, call your installer.)

To program the fixed master code:

P 1 E code E code E

You may have more than one master code as an option.

To program a master code with code number 2 to 15:

P code number E 0 E code E code E

Viewing and Changing Codes

Now that we have introduced the various types of codes and shown how they are programmed, we can now go through some two other procedures:

- a. Find out a forgotten access code
- b. Change an access code type

view code

Enter programming mode 1 using the fixed master code (access code number 1):

PROGRAM fixed master code ENTER

○ PROGRAM 

You may now find any access code with code number from 2 to 15. The code will be flashed out on the zone indicators. Each digit is represented by a zone light turning on for 1 second. There is a 1 second pause in between digits and the 3 bips audible indication is delayed until the final digit is displayed.

To get access code flashed out on display:

PROGRAM code number ENTER

The code type will also be shown as described above.

Changing code

You may change code type without changing the actual code. However, entering code is an essential part of changing type in some cases, and you then need to re-enter the existing code.

Unlike viewing codes, this may be done regardless of which master code was used to enter programming mode 1. If you start to get the code flashed out, you may proceed without waiting for this to complete and the display will clear immediately.

Here are programming details for conversion to each type:

Ordinary code

To change a master code to an ordinary code with code number from 2 to 15:

P code number E code E code E

AREA OPERATION

Administrator code

To change a master or area code to an administrator code with code number from 2 to 15:

P code number E code E code E

Area code

To change a master or administrator code to area code or re-assign an area code (code number from 2 to 15):

P code number E area E

Master code

To change any code to a master code with code number from 2 to 15:

P code number E 0 E

Entry delay time

Entry delay allows you time to approach the keypad (or key switch) while the Panel is armed in order for you to disarm it. The default value is 20 seconds, and it may be reduced to as short as 1 second or increased up to 99 seconds.

The current value is flashed on the zone indicators when you first select this option. If you program a new value, then this is also flashed out.

To change the entry delay time:

P 17 E delay E

AREA OPERATION

Entry delay may be programmed individually for each area.

To change the entry delay time for particular area:

Area1 - P 171 E delay E

Area2 - P 172 E delay E

Area3 - P 173 E delay E

When zones are assigned to more than one area, then a universal entry delay operates.

To change the universal entry delay time:

P 170 E delay E

Exit delay time

Exit delay allows you time to vacate an area made secure by arming the Panel. The default value is 60 seconds, and it may be reduced to as short as 1 second or increased up to 99 seconds.

The current value is flashed on the zone indicators when you first select this option. If you program a new value, then this is also flashed out.

To change the exit delay time:

P 18 E delay E

AREA OPERATION

Exit delay may be programmed individually for each area.

To change the exit delay time for particular area:

Area1 - P 181 E delay E

Area2 - P 182 E delay E

Area3 - P 183 E delay E

DIALLER OPERATION

The PRO-LX Dialler option allows alarms to be transmitted over a telephone line to a Central Station where appropriate responses can be made on the basis of information received. If you choose to take advantage of this option then the dialler operations will happen automatically. There are, however a few things that are important to know such as:

- >when does the dialler make calls
- >for how long do these calls last
- >how the dialler affects other telephone equipment which shares the same line
- >what happens if there is a fault with the telephone line
- >The PRO-LX carries the AUSTEL permit number A92/03/0361. It should be noted that only devices which carry such a permit may be connected to the Telecom network. Connection of unauthorised devices may render the user liable to prosecution under the Telecommunications Act

These topics are now discussed in turn.

Dialler activity

There are basically 3 situations in which the dialler may call the Central Station:

- >report an event such as an intrusion, emergency, arming, disarming or exclusion
- >perform a regular test call to monitor system integrity
- >installation and maintenance operation involving exchange of information between PRO-LX Panel and a remote service computer

The last situation is not of concern here. The reporting and testing operations go on automatically and there is no way for you to directly influence or control them. These are established when the system is installed and should be set up to fit in with what other things you wish to do with the dialler's telephone line.

The reporting rate depends on operational activity. Typically there is one arming report and one disarming report per day. Intrusions and emergencies are reported as soon as possible and if the dialler is prevented from transmitting them (for example, because of congestion at the telephone exchange), then the dialler will keep trying according to a set error recovery plan.

The test call rate may be set from once an hour to one call every 10 days, or there may be no test calls at all. The default is once a week.

Call Duration

The length of a dialler call depends on a number of factors including how much information is being transmitted. The signalling method (Tone or pulse) also has a significant impact on call duration. Because of all these factors, no typical or average value can be given. However, if you encounter the line being taken by the dialler for approximately 35 seconds, then it is possible that it is dialling a number which is not being answered. This should be checked with the Central Station.

Telephone Equipment

The dialler does not make many calls so it usually shares the telephone line with other equipment including handsets used to make and receive ordinary calls. There are regulations regarding the connection of a dialler to a public telephone line which dictate the manner in which the line is shared with other equipment. This is done in your interest to ensure there is no compromise on security or performance.

What is important for you to know is that the dialler has priority when it needs to call the Central Station and will terminate without warning any call that happens to be in progress at the time. This should not be a problem since the dialler will normally call only when the premises are vacant.

It is also worthy to note that an option does exist which allows incoming calls to be answered by the dialler after a certain number of rings (default = 10 rings or approximately 30 seconds). This is a maintenance option which your installer determines. Otherwise the dialler will answer calls immediately if the Panel is in programming mode.

Telephone Line Fault

The dialler monitors the telephone line for signs that the connection to the exchange is faulty. A System 2 alarm is generated when a line fault is detected and this is indicated initially by SYSTEM indicator flashing and the keypad(s) beeping twice a second. When you view System alarms (see **FEATURES** chapter), you see:

- SYSTEM
- 2 ○

If possible, check connections and telephone cables for damage. Also check whether you receive dial tone when you lift the handset of a telephone sharing the same line as the dialler.

If the cause of the alarm cannot be determined, then your system should be checked by the installer. Should your telephone become inoperative, first check that your dialler is not attempting to dial and if it is not, disconnect the dialler lead. If your phone now operates, leave your dialler disconnected and call your installer for service.

CONFIGURATION

Recorded below are all of the PRO-LX program options that can be accessed by a Master Code. These are limited to the 16 Access Codes and Entry and Exit times. All other options relevant to your system are recorded in the Installation Manual Configuration section.

CLIENT PROGRAM OPTIONS

Master Code

P 1 E code E code E

Access Codes 2 - 16

ID	NAME	ORD.	MASTER P I D E 0 E	AREA1 P I D E 1 E	AREA2 P I D E 2 E	AREA3 P I D E 3 E	ADMIN P I D E 4 E
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

Delays

DELAY	PROGRAM	Default	SET
ENTRY	P17E delay E	20	
EXIT	P18E delay E	60	

Document Part Number: 890-034

Version: 2