

Model 3000 & Access 4000

Memory Configurations V8.20

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CONCEPT 3000 / ACCESS 4000 MEMORY CONFIGURATIONS. V7.84

A significant feature of the Concept 3000/Access 4000 products is the ability to adapt the memory to suit the requirements of the particular system installation.

Memory Size.

Definitions: The Memory (RAM) installed in Concept 3000 / Access 4000 Control Modules has traditionally been specified in Bytes. Some manufacturers choose to specify memory capacity in Bits, thereby making the memory size sound much larger. (There are 8 Bits in a Byte of memory) This can create confusion for the specifier or installer.

In order to allow memory capacity to be compared in different products, use the following table as a guide:

Concept "32k" = 32kByte = 256kBit	Concept "128k" = 128kByte = 1MBit
Concept "Expanded Users" = 256kByte = 2MBit	Concept "512k" = 512kByte = 4MBit

Initially, the Installer must choose the appropriate Memory Size to suit the size of the installation.

The Concept 3000 is fitted with 32k (256kBit) Memory in the factory, but can be upgraded with the "128k" (1MBit) Upgrade kit, "Expanded Users" Upgrade kit (V7.8 or later only) or "512k" (4MBit) Upgrade kit, as required.

The Access 4000 is fitted with 128k (1MBit) in the factory but can be upgraded with the "Expanded Users" Upgrade kit (V7.8 or later only) or the "512k" (4MBit) Upgrade kit, when necessary.

Memory Configuration

Secondly, the Installer has the option to choose an appropriate Memory Configuration so that the available memory is utilized in the most effective way for each particular system. In most cases the "Standard" configuration offers a practical mix of modules and items for the majority of installations. The other configurations cater for systems that have a greater emphasis on particular applications, while maintaining the concept of fully integrated systems.

Determining the Memory (RAM) Size and Configuration.

System Information can be viewed at an LCD Terminal by Pressing <MENU>, <2> while logged off (or just <MENU> if V2 or earlier). The Memory (RAM) information is provided in the following format:

RAM: 128K-00-06.21

This string represents:

- a) - The RAM size. **32K, 128K, 256K** or **512K**. See Note 1 regarding the "256K" option.
- b) - The Current Memory configuration:

00 = Standard.	01 = Access.
02 = Enlarged.	03 = Apartments. (Formerly V2 Std)
05 = Special.	06 = Alarms.
08 = IP Door. See Note 4.	09 = LX Lite. See Page 12.
	04 = Access 2. (Was V2 Access)
	07 = XDoor (Extra Door)
	0A = NZ Access.
- c) - The Firmware version used when Memory configured (defaulted) e.g. V6.21. See Notes 2 & 3.

- Notes:
- 1) The 256K "Expanded Users" Memory size option is only available in Firmware V7.8 or later. Note that this option utilizes a 512K RAM Chip, but is shown as "256K" RAM size in the System Information screen in order to indicate the amount of memory actually utilized and to differentiate the Expanded Users configurations from the 512K Configurations.
 - 2) If the Firmware Version is 00.00, then the configuration was performed before this feature was added.
 - 3) If not 00.00, Firmware Version in this information string must match Firmware version fitted to Panel.
 - 4) The "IP Door" Configuration is only relevant to 128K and 512K Memory Size options.

Choosing the right configuration.

The Memory Configuration Selection Guide tables on the following pages provide a summary of the different configurations in each memory size, providing suggested applications and numbers of the basic modules and items.

Full Memory configuration details are also provided for each of the four memory sizes in the larger tables that follow the summaries. Once a configuration is chosen with the summary information, the full table should be checked to ensure that the configuration is suitable for all aspects of the system.

IMPORTANT NOTES:

- 1) The following system features are only available in the “Access 4000” version of the product, regardless of Memory size installed:

-“Card only” Users.	-Dedicated Door Interlocking logic.
-Lift Access Control.	-Dedicated, Zoned Air-conditioning control logic.
- 2) Potentially, a maximum of 250 Modules can be connected to the LAN in 512k (4MBit) Memory configurations. Note that the total numbers of Modules currently available in some 512k (4MBit) configurations may exceed this figure. (In practice, the maximum number of modules installed in a single system will be determined by the module types used and the amount of system activity generated)

Memory configuration changes

The following lists provide details of when the Memory Configurations were changed and a summary of the changes. The configurations currently available for each Memory size are:

“Standard”	“Access”	“Enlarged”
“Apartments”	“Access-2”	“Special”
“Alarms”	“XDoor”	“IP Door” (128k & 512k only)
“LX Lite” (32k LX Control Modules only)	“NZ Access” (512k only)	

V8.20 Changes

Changes were made in V8.2 to implement the “NZ Access” Configuration. This configuration can only be selected if a 512K Memory Upgrade kit has been fitted, or if the PIC Options Micro Type 27 has been fitted (New Zealand Only). The database for this configuration is currently identical to the 256K Expanded Users “Access” configuration

V7.84 Changes

Changes from V7.82 to V7.84 were made to implement the “Concept 4000 LX” Control Module. (Australia only) This product provides an entry-level Concept 4000 Control Module offering integrated Alarm and Access Control which makes an ideal replacement for the Concept 2000 Controller.

The memory in an LX Control Module is a single, fixed configuration and supports a limited range of Module types. i.e. LCD Terminals, Reader Modules, Universal Expanders (“E” type), a Touchscreen and an RF Expander.

Some advanced features of the Concept 3000/4000 range are not supported.

See page 12, and the “Concept 4000 LX Installation Manual Supplement” (P/N: 635001LX) for full details.

V7.8 Changes

Changes from V7.4 to V7.8 were made to implement the “Expanded Users” (256k) Memory Size Option. This option enables selection of a range of Memory Configurations similar to the 128k Configurations, but with an expanded User database of 12,000 Cards, 4096 PIN codes, 128 User Types, 64 Door Lists, 64 Floor Lists and up to 3000 Review Events. NOTE: This option utilizes a 512K RAM Chip, but is shown as “256K” RAM size in the System Information screen.

V7.4 Changes

Changes from V6/V7 to V7.4 were primarily made to:

- Implement support for a 2nd Insight Comms Task in 128k and 512k configurations. This required small reductions to one or two items on most 128k configurations and 8 items in the 512k Standard configuration.
- Rectify a problem with Touchscreen Terminal layouts in the 512k Apartments configuration.
- Increase Aux Lists to 80 and reduce Comms Tasks to 8 in the 512k Alarms configuration.

Continued on the following page.

V6 Changes

Changes from V5.6 to V6 were primarily made to:

- Implement the new Touchscreen Terminal and associated Touchscreen Layouts in all 512k, and most 128k configs.
- Add Lift Car names and Floor names to all 128k and 512k configurations. (Except for "IP Door")
- Remove Airconditioning from most 128k configurations.
- Remove Wireless Network Modules (SpreadNet/Inovonics) from 128k Standard. (Note: RF Expanders not affected)
- 512k IP Door configuration: Increase the number of Cards to 48,000 / Reduce Review to 4000 Events.

V5.6 Changes

Changes from V5.2 to V5.6 were primarily made to:

- Implement the Timed Anti-passback option.
- Implement EN Review. (Relevant to firmware with EN50131 processing enabled only. e.g. "UK" firmware)
- Introduce the "128k XDoor" Memory Configuration. (2000 Users with Extra Door/Extra Door List options)
- Introduce the "512k IP Door" Memory Configuration.
 - Same as 128k IP Door but 32000 Users and 6500 Review events for IP 4 Door Controller 512k Upgrade kit.
- Increase number of Process Groups from 16 to 32 in all 32k configurations.
- Increase number of Mini Expanders in 32k and 128k "Apartments" configurations.

V5.23 Changes

Changes from V5.1 to V5.23 were primarily made to:

- Introduce the "128k IP Door" Memory Configuration.
 - 4 Reader Modules/4 Terminals/8 Doors/10 Areas/10000 Users for IP 4Door Controller.
- Introduce the "32k XDoor" Memory Configuration. (20 Doors, 500 Users, 10 Reader Modules and No Expanders)

V5.1 Changes

Changes from V5 to V5.1 were primarily made to:

- Implement RF Expander Modules supporting RF Wireless Detectors and RF Wireless 4-button Fobs.

V5 Changes

Changes from V4.5 to V5 were primarily made to:

- Implement the IR-IP Communications Tasks for communication with Inner Range "Insight" Software products. ("IR-IP", "IR-IP IModem" and "IR-IP EModem")
- Add SIA Dialer Reporting format. Remove EarthNet and Pacom formats.
- Rework of "Apartments" & "XDoor" configurations for Extra Door/Extra Door List assignment in User database.
- Increase number of PIN Users in 512k Special to 4096.
 - (Eliminates the gap in the User numbering between PIN Users and Card Only Users)

V4.5 Changes

Changes from V4 to V4.5 were primarily made to:

- Addition of "Apartments" and "Access 2" configurations. (Replaces the "V2 Std" and "V2 Access" configs)
- Increase the number of Auxiliary Lists in the 32k (256kBit) "Special" configuration to 8 for domestic applications.
- Add Automation Interface Auxiliaries (formally "C-Bus" Auxiliaries) to all 128k (1MBit) configurations.
- Add LAN Power Supply Modules to all 128k (1MBit) and 512k (4MBit) configurations.
- Increase the number of Telephone numbers to 32 for all 512k (4MBit) configurations for SMS List applications.
- Ability to cater for Extra Door/Extra Door List assignment in User database.

Continued on the following page.

V4 Changes

Changes from V3.5 to V4 were only made in 512k (4MBit) configurations to:

- Add C-Bus Auxiliaries to all 512k (4MBit) configurations.
- Increase the Zone Input, Standard Door, Intelligent Door and Lift Car List capacity of the 512k (4MBit) “Special” configuration. (Providing a configuration that supports 128 Intelligent Doors & 96 Standard Doors)
- Provide for up to 8 Intelligent Doors, 64 Calculated Auxiliaries and 48 Lift Car Lists in the 512k (4MBit) “Enlarged” configuration.

For Sites upgrading from V2 where it is important to preserve the V2 Memory configuration, the “V2 Standard” and “V2 Access” Memory configurations are available. These options largely maintain the V2 configurations and add a token amount of the newer V3 to V4 options where possible. Full details of the “V2” configurations can be found on the Inner Range Website.

Note that in all 32k (256kBit) and 128k (1MBit) configurations there is no difference between V3.5 and V4, and that the changes in the 512k configurations are minimal as detailed above and in the tables.

V3.5 Changes

Changes from V3 to V3.5 were primarily made to:

- Accommodate the Analogue Input Module and the Intelligent 4 Dr Access Module in 32k (256kBit) Memory configurations.
- Add the “Alarms” configuration to 128k (1MBit) and 512k (4MBit) configurations. This provides more Zone Inputs by increasing the number of “B” type Expanders (32 Zone Expanders) in each configuration. The 512k (4MBit) “Alarms” configuration also provides more TimeZones, Auxiliary Lists, Menu Groups, Phone Numbers and Function Zones and still allows for 128 Doors via a combination of Standard and Intelligent Reader Modules.

V3 Changes

Changes from V2 to V3 were primarily made to:

- Accommodate the Analogue Input Module and Intelligent 4 Door Access Module (Avail. V3.5) options.
- Add Home Zones, Counters and DTMF Remote Control.
- Provide more flexibility in all three Memory size options with some changes to the existing configurations and the utilization of the “Special” configuration for field use.

V2 Changes

In addition to the changes listed above, other changes made when V2 was released also need to be taken into account. The main changes made from V1 to V2 were to:

- Accommodate the 16 Zone (E type) and 32 Zone (B type) Expander module options. (Note that there is no physical difference between E and B type Expanders. A DIP switch is used to select whether the Expander will support 16 Zones/Auxiliaries or 32 Zones/Auxiliaries.)
- Add in support for 24,576 Card only Users (512k [4MBit] Access)
- Add Mini Expanders, SpreadNet, Interlocks and Airconditioning control.
- Provide more flexibility in the 32k (256kBit) and 512k (4MBit) Memory size options.

Upgrading or Re-configuring the Memory

Note: Memory Size, Memory configuration and Control Module PCB Type can be checked from an LCD Terminal. See “System Information” in the System Overview section for details.

Type 2 Control Module Boards.

Two IC chips are supplied to upgrade the Memory Size; the “RAM” chip itself and the “PIC Micro chip” (U14) to enable the additional memory. This table provides details of the chipsets for each Memory size and can be used to ensure that the correct PIC Options Microchip is fitted.

If features unique to Access 4000, or other special features are required, this table can also be used to ascertain whether the Control Module is configured as a Model 3000 or Access 4000, or has any special options enabled.

Size	Product	SRAM [^]	PIC Micro Chip		Notes
Factory PICs:			Up to V1.09	V1.15 or later	
32k	Concept 3000	DS1230	CEPIC_1	CEPIC_1	Standard 3000
128k	Concept 3000 with 128k Memory	DS1245	CEPIC_2	N/A	Use Std Access 4000
512k	Concept 3000 with 512k Memory	DS1245	CEPIC_3	CEPIC_2	Standard Access 4000
128k	Concept Access 4000	DS1250	CEPIC_4	N/A	Use Access 4000 512k
512k	Access 4000 with 512k Memory	DS1250	CEPIC_5	CEPIC_3	Includes Prog Site Code
Special PICs:					
512k	Access 4000 Lift HLI	DS1250	CEPIC_6	CEPIC_4	High Level Lift I/F.
128k	Access 4000 Inovonics	DS1245	N/A	CEPIC_5	Inov Wireless 96 Zones
512k	Access 4000 Inovonics	DS1250	N/A	CEPIC_6	Inov Wireless 208Zones
128k	Access 4000 with Prog Site Code	DS1245	N/A	CEPIC_8	Prog Site Code
128k	IP Door Cont -10,000 Cards	DS1245	N/A	CEPIC_13	PIC V1.16 or later only.
512k	IP Door Cont -48,000 Cards	DS1250	N/A	CEPIC_14	PIC V1.18 or later only.
128k	4000 with Pacom RTU I/F	DS1245	N/A	CEPIC_18	PIC V2.14 or later only.
512k	4000 with 512k & Pacom RTU I/F	DS1250	N/A	CEPIC_19	PIC V2.14 or later only.
512k	4000 with 512k & 10k EOL	DS1250	N/A	CEPIC_20	PIC V3.12 or later only.
512k	4000 Adv Automation 256 Zones	DS1250	N/A	CEPIC_21	PIC V3.12 or later only.
512k	4000 Adv Automation 512 Zones	DS1250	N/A	CEPIC_22	TBA
128k	4000 with 10k EOL	DS1250	N/A	CEPIC_24	PIC V3.13 or later only.
512k	4000 with Expanded Users	DS1250	N/A	CEPIC_25	PIC V3.13 or later only.
128k	Concept 4000 LX upgrade	DS1245	N/A	CEPIC_26	PIC V3.14 or later only.
512k	Concept 4000 NZ Access	DS1250	N/A	CEPIC_27	PIC V3.15 or later only.

[^] ST Brand equivalent: DS1230 = M48Z35 DS1245 = M48Z128 DS1250 = M48Z512

Type 0 (Australia & NZ only) and Type 1 Control Module Boards.

Two IC chips are supplied to upgrade the Memory Size; the “RAM” chip itself and the “Memory Size GAL” chip (U5) to enable the additional memory. This table provides details of the chipsets for each Memory size and can be used to ensure that the correct GAL is fitted. If features unique to Access 4000 are required, this table can also be used to ascertain whether the Control Module is configured as a Model 3000 or Access 4000 by checking the Options GAL - U4.

Memory Size	Product	SRAM [^]	Mem. Size GAL (U5)	Options GAL (U4)
32k (256kBit)	3000	DS1230	U5-2	U4-0
128k (1MBit)	3000	DS1245	U5-5	U4-0
128k (1MBit)	Access 4000	DS1245	U5-5	U4-1
512k (4MBit)	3000	DS1250	U5-6	U4-0
512k (4MBit)	Access 4000	DS1250	U5-6	U4-1

General Information.

When upgrading the Memory size or choosing a new Memory configuration for an existing system, care must be taken to ensure that any existing programming that must be preserved, is not lost.

The *Programmer's Reference* section of the manual provides details of the procedures for upgrading and/or re-configuring the memory. This information can be found under “Memory Defaulting” [<MENU>, 7, 5, 2]. The procedure will require a PC with Upload/Download software installed.

Upgrading the Control Module Firmware

On some occasions, when upgrading or re-configuring the Memory, you may also be required to Upgrade the Control Module Firmware Version.

Before attempting to upgrade Control Module Firmware, the following information should be taken into account.

Type 0 and Type 1 Control Module Hardware.

Type 0 Control Modules can only be upgraded to V2.

Type 1 Control Modules can only be upgraded to V4.

V1 to V5 or later.

Extreme care should be exercised if also upgrading the Control Module firmware from V1 to V5, as the Memory configurations now differ quite significantly and the Control Module PCB will also have to be upgraded from Type 0 to Type 2 or later. (Australia and NZ only)

V2 to V5 or later.

If upgrading from V2 to V5 there are also configuration changes that will need to be checked and the Control Module PCB will also have to be upgraded from Type 0 or Type 1 to Type 2 or later.

Custom Memory Configurations.

If a Control Module Firmware Upgrade is required on a system that has a Custom Memory Configuration, a new Custom Memory Configuration must be purchased.

A Custom Memory Configuration is structured for a particular Firmware Version and must therefore be re-done if the Firmware Version is upgraded.

Control Module PCB Type and Firmware Version number can be checked from an LCD Terminal.

Press MENU, 2 while logged off.

See “System Information” in the System Overview section for details.

The *Programmer's Reference* section of the manual provides details of the procedures for upgrading and/or re-configuring the memory. This information can be found under “Memory Defaulting” [<MENU>, 7, 5, 2]. The procedure will require a PC with Upload/Download software installed.

Memory Configuration Selection Guide

32k Summary. 7.4 - V7.8 (For earlier Versions refer to relevant Version of Programmer's manual)

V7.8x Config.	Description	Users.	Areas.	Standard / Intelligent Drs. (Total Doors)	LCD Terminals	Total Zones on Expander Modules. (Wired Zones)	RF Expander Zones (Wireless)
32K (256kBit) Standard	-Intruder alarm: 4 Expanders/1 Mini Exp. -4 Door Access control. -Extra Areas (24) -Extra DTMF codes (8)	100. 50 names	24	4 / 0 (4)	8	88	0
32K (256kBit) Access	-8 Door Access control. -Intruder Alarm: 3 Expanders/No Mini Exp. -Extra Review Memory (550 Events)	100. 50 names	16	8 / 0 (8)	8	64	0
32K (256kBit) Enlarged	Similar to Access. -Up to 8 Intelligent Doors. -2 Mini Expanders only.	100. 50 names	8	4 / 8 (12)	8	32	0
32K (256kBit) Apartments	-Intruder alarm: 8 Mini Expanders. -32 RF Exp Zones * -4 Door Access control. -Extra Areas (16) -100 Users.	100. 50 names	16	4 / 0 (4)	8	64	32
32K (256kBit) Access 2	-8 Door Access control. -Intruder Alarm: 3 Expanders/No Mini Exp. -100 Users with names.	100.	16	8 / 0 (8)	8	64	0
32K (256kBit) Special	-Extra Auxiliary Lists (8) DTMF codes (8) Home Auxes (16) HomeZones (16) (for Domestic installations) -4 Door Access control. -Intruder Alarm: 2 Expanders/3 Mini Exp. -32 RF Exp Zones *	50.	16	4 / 0 (4)	8	72	32
32K (256kBit) Alarms	More Zone Inputs. -Intruder alarm: 4 Expanders. -32 RF Exp Zones * -4 Door Access control.	50.	16	4 / 0 (4)	8	96	32
32K (256kBit) XDoor †	-20 Door Access control. -500 Users. -Extra Review Memory (400 Events)	500. 10 names	8	20 / 0 (20)	4	0	0
32K (256kBit) LX Lite ‡	Dimensions and feature set emulates Concept 2000. -5 Expanders. ("E" type only) -32 RF Exp Zones * -8 Door Access Control. -100 Users with names.	100	16	8 / 0 (8)	4	80	32

NOTES: 1) * RF Expander Modules are available for:
and i) Paradox; V7.62 or later only.
ii) Visonic; V5.1 or later only.

2) † "XDoor" configuration only relevant to V5.23 or later.

3) ‡ "LX Lite" configuration only available in LX Lite Control Modules (V7.84 or later / Australia Only)
See page 12 for details.

128k & Expanded User (256k) Summary. V7.4 - V7.8**(For earlier Versions refer to relevant Version of Programmer's manual)**

V7.8 Config.	Description	Users †	Areas	Total Doors. Total Lift Cars.	Standard Doors.	Intelligent Doors.	LCD Terminals	Total Zones on Expander Modules.
128K (1MBit) Standard	-Large intruder alarm 10 Expanders. 5 Mini Expanders. -64 RF Exp Zones * -32 Door Access control -Extra User Codes (2000)	2000. 100 names	96	32 3	32	0	32	Wired: 264 Wireless: 64
128K (1MBit) Access	-64 Door Access control. -Intruder Alarm 8 Expanders. 4 Mini Expanders. -32 RF Exp Zones *	1000	32	64 6	64	0	16	Wired: 192 Wireless: 32
128K (1MBit) Enlarged	-Enlarged Intruder alarm 14 Expanders. 10 Mini Expanders. -SpreadNet/Inovonics Wireless Zones (96) -16 Door Access control -Extra Menu Groups (16) -Extra HomeZones (64)	1000. 100 names	96	16 3	16	8	32	Wired: 400 S'Net/Inov. Wireless: 96
128K (1MBit) Apartments	-Large intruder alarm 3 Expanders. 25 Mini Expanders. -64 RF Exp Zones * -48 Door Access control -6 LAN Pwr Sup Modules	500	48	48 4	48	16	32	Wired: 264 Wireless: 64
128K (1MBit) Access 2	-64 Door Access control. -Intruder Alarm 6 Expanders. 4 Mini Expanders. -64 RF Exp Zones * -Extra Access Groups -6 LAN Pwr Sup Modules	1000	32	64 6	64	0	16	Wired: 160 Wireless: 64
128K (1MBit) Special	-48 Door Access control. -Intelligent Reader module option* (Up to 32 Doors) -Intruder Alarm with additional Mini Expanders 3 Expanders. 16 Mini Expanders. -64 RF Exp Zones *	1000	32	48 4	16	32	16	Wired: 192 Wireless: 64
128K (1MBit) Alarms	-Enlarged Intruder alarm 15 Expanders. ("B" type) 4 Mini Expanders. -64 RF Exp Zones * -16 Door Access control -Extra Menu Groups (16) -Extra HomeZones (64)	1000. 100 names	64	16 3	16	8	32	Wired: 512 Wireless: 64
128K (1MBit) XDoor	-Large Intruder alarm 4 Expanders 8 Mini Expanders. -64 RF Exp Zones * -48 Door Access control -Extra Door/Door List assignment option for all Users.	2000 100 names	32	48 4	32	32	16	Wired: 160 Wireless: 64

NOTES: 1) † The User Database in all "Expanded User (256K)" Memory Configurations shown above consists of: 12,000 Users, 4096 PIN Codes and a minimum of 200 User names.

2) * RF Expander Modules are available for: i) Paradox; V7.62 or later only. ii) Visonic; V5.1 or later only.

512k Summary. V7.4 - V7.8 (For earlier Versions refer to relevant Version of Programmer's manual)

V7.8 Configs.	Description	Users	Card Only Users	Areas	Total Doors Total Lift Cars.	Standard Doors.	Intelligent Doors.	LCD Term.	Total Zones on Expander Modules.
512K (4MBit) Standard	-Extremely large intruder alarm configuration: 64 Exp./24 Mini Exp -128 Door Access control -128 S'Net/Inovonics Zones -128 RF Exp Zones *	4000	0	240	128 8	128	0	99	Wired: 1536 Wireless: RF Exp: 128 S'N/Inov: 128
512K (4MBit) Access	-240 Door Access control. -Additional Card Users. -Intelligent Doors (Up to 32) -Very Large Intruder Alarm 25 Exp./10 Mini Exp. -64 S'Net/Inovonics Zones -128 RF Exp Zones *	500	24576	128	240 16	150	32	48	Wired: 560 Wireless: RF Exp: 128 S'N/Inov: 64
512K (4MBit) Enlarged	-176 Door Access control -Very Large Intruder alarm 32 Exp./16 Mini Exp. -Max S'Net/Inov Zones (208) -256 RF Exp Zones *	4000	0	128	176 16	128	16	48	Wired: 768 Wireless. RF Exp: 256 S'N/Inov: 208
512K (4MBit) Apartments	-208 Door Access control. -Extra Door/DList for Users -Extra Automation entities. -Intelligent Doors (Up to 48) -32 Analogue Modules -16 LAN Power supplies. -Very Large Intruder Alarm 16 Exp./99 Mini Exp. -128 S'Net/Inovonics Zones -512 RF Exp Zones *	2000	0	128	208 8	198	48	99	Wired: 1176 Wireless. RF Exp: 512 S'N/Inov: 128
512K (4MBit) Access 2	-208 Door Access control. -Additional Card Users. -Intelligent Doors (Up to 192) -Large Intruder Alarm 16 Exp./8 Mini Expanders. -64 S'Net/Inovonics Zones -128 RF Exp Zones * -12 LAN Power Supplies.	2000	16384	64	208 16	16	192	48	Wired: 576 Wireless. RF Exp: 128 S'N/Inov: 64
512K (4MBit) Special	-176 Door Access control. -Additional Card Users. -Intelligent Doors (Up to 128) -Very Large Intruder Alarm 24 Exp./16 Mini Exp. -64 S'Net/Inovonics Zones -128 RF Exp Zones *	4096† 2000 names	8192	128	176 16	96	128	64	Wired: 896 Wireless. RF Exp: 128 S'N/Inov: 64
512K (4MBit) Alarms	-Extremely Large Intruder Alarm 64 "B" Exp./16 Mini Exp. -96 Door Access control. -Intelligent Doors (Up to 32) -Extra TimeZones, Menu Groups & Function Zones. -64 S'Net/Inovonics Zones -256 RF Exp Zones *	4000	0	200	96 12	96	32	75	Wired: 2176 Wireless. RF Exp: 256 S'N/Inov: 64
512K (4MBit) XDoor†	-96 Door Access control. -Additional Card Users. -Extra Door/DList for Users -Intelligent Doors (Up to 96) -32 S'Net/Inovonics Zones -64 RF Exp Zones *	4096 100 names	20904	64	96 12	96	96	16	Wired: 320 Wireless. RF Exp: 64 S'N/Inov: 32

NOTES: 1) † XDoor configuration is only relevant to V4.85 or later. 512k Special has 4000 Users prior to V4.85.

2) * RF Expander Modules are available for: i) Paradox; V7.62 or later only.
and ii) Visonic; V5.1 or later only.

Memory Configuration Tables

The following 5 pages provide full details of all Memory Configurations. Please read the following important notes.

- 1) **Model Variations and Options.** Some features are only available in the Concept Access 4000, or require a special Options Micro Chip to be fitted. e.g. Lift Control, Card Only Users, Door Interlocks, Airconditioning. Refer to page 6 and the “System Overview and Introduction to Programming” section for details.
- 2) **New Configurations.**

32k XDoor introduced in V5.23	128k IP Door introduced in V5.23
128k XDoor introduced in V5.6	512k IPDoor introduced in V5.6
Expanded Users (256K) configurations introduced in V7.8	32k LX Lite introduced in V7.84
- 3) **“IP Door” Configuration. (128k and 512k only)** These configurations are specifically designed for the IP Door Controller products providing a large User/Card database, but with limited Module connectivity. IP Door Controllers provide a network-based access control solution that allows a large number of IP Door Controllers to be connected to Insight software with minimal Panel Licence costs. Note that the special Options Micro Chip fitted in the IP Door Controller only allows the IP Door configuration to be used. The IP Door configuration can be selected in normal Access 4000 Controllers, however, if connecting to Insight, an Insight Panel licence will still be required.
- 4) **Changes from earlier V5 to V7.4/V7.8 firmware.** Where values in V7.4/V7.8 differ from the values in any of the V5.0 to V7.2 configurations, the old values are shown in brackets. For details of Memory configurations in firmware prior to V5, refer to the Website.
- 5) **User Expiry Dates, Extra Area, etc.** Only Users with Names have “Expiry” dates, “Tenancy” (was Ranks), the “NDLEG...” options and “Extra Area”. Insight Express or Insight Professional software provides the User Expiry function for any User.
- 6) **RF Expanders. (Paradox / Visonic)** RF Expander Modules / RF Fobs are available for Paradox in V7.62 or later, and Visonic in V5.1 or later.
- 7) **EN Review Memory.** EN Review Memory is provided in addition to the normal Review Memory in firmware for countries where the Intruder Alarm system is required to meet EN50131 requirements or similar. e.g. UK It provides for the required number of mandatory review events to be logged to meet various classes of EN50131 compliance. This is achieved by dividing the available memory space into two separate Review logs;
 - Mandatory Events. Viewed via MENU, 1, 0.
 - Normal events. Viewed via MENU, 1, 1 as before.
 i.e. To provide EN Review, the number of normal Review events available is reduced.

When using the tables on the following pages:

 - Only use the “Review Memory” row if the firmware for your country does not have EN Review available.
 - Only use the “EN Review Memory” row if the firmware for your country has EN Review available.
- 8) **Automation Auxiliaries.** Automation Auxiliaries are used in conjunction with the Clipsal C-Bus, Dynalite and HPM iControl Comms Tasks to define the links between Concept Auxiliaries and the 3rd party product entities.
- 9) **Wireless Network Modules. (Inovonics/Spreadnet)** An Options Micro Chip upgrade is required to support more than 32 Inovonics Wireless Zones, regardless of the Memory Size fitted.
- 10) **Touchscreen Terminals.** The number of Touchscreen Terminal layouts available is equal to the number of Touchscreen Terminals in the configuration plus one. e.g. If there are 2 Touchscreen Terminals, there will be 3 layouts available. This allows for a unique layout for each Touchscreen if required, plus an extra layout for testing, prototyping, etc. NOTE: The “512k Apartments” configuration has 32 Touchscreen Terminals, but only 31 Layouts available.
- 11) **“LX Lite” Configuration. (32k only)** This configuration is specifically designed for the Concept 4000 LX Control Module (Australia only), and cannot be used with any other Control Module type. See page 12 for details.

32k LX Lite Memory Configuration. V7.84 (Australia Only) Please read notes on p10.

The Concept 4000 LX is an entry-level Concept Control Module. Expandable to 96 physical zones, 32 wireless zones and 8 Doors, it makes an ideal replacement for the Concept 2000 Controller.

Some advanced features of the Concept 3000/4000 range are not supported.

See “Concept 4000 LX Installation Manual Supplement” (P/N: 635001LX) for full details.

The memory in an LX Control Module is a fixed configuration and supports a limited range of Module types. i.e. LCD Terminals, Reader Modules, Universal Expanders (“E” type), a Touchscreen and an RF Expander.

If further expansion and/or additional features are required, a special 128k LX upgrade chipset can be purchased (P/N: 995015P26) to provide full Concept 4000 functionality and memory configuration options.

SUMMARY

Users	100
User Names	100
User Expiry Dates	100
Areas	16
Doors (Total)	8
- Standard	8
- Intelligent	0
Lifts	0
LCD Terminals	4
Touchscreen Terminals	1
Reader Modules	4
Expanders (“E” type)	5
RF Expanders	1
Wired Zones (Total)	96
- Control Module Zones	16
- Expander Zones (“E” type)	80
Wireless Zones	32

NOTES:

1. A Concept 4000 LX cannot be upgraded to a Standard 32k Concept 3000, or a 512k Memory Expansion.
2. Touchscreen Terminals. As there is only one Touchscreen Terminal Module provided in the LX configuration, only a single Touchscreen layout is provided.

DETAILS

Firmware: V7.84	RAM: 32k (256kBit)	LX Lite
Configuration ID:		09
Users		100
User Names		100
User RF Fobs		12
User Types		10
Card Only Users		0
Areas		16
Doors		8
Lift Cars		0
Site Codes		2
TimeZones		5
Holidays		8
Diaries		5
Counters		0
Area Lists		10
Doors Lists		4
Siren Lists		8
Floor Lists		0
Lift Car Lists		0
Auxiliary Lists		2
Menu Groups		8
Access Groups		4
Process Groups		16
Interlock Groups		0
Comms Tasks		5
Phone Numbers		4
DTMF Controls		0
Function Zones		5
Calculated Auxes		5
Home Auxiliaries		0
Home Zones		0
Automation Auxiliaries		0
LCD Terminals		4
Touchscreen Terminals		1
Expander Modules 32Z		0
Expander Modules 16Z		5
Reader Modules		4
Mini Expander Modules		0
Analogue Modules		0
Intelligent 4Dr Access Modules		0
Wireless Network Modules		0
RF Expander Modules		1
AirCon Control		0
Review Memory.		300

32k Memory Configurations. V7.4 - V8.2*Please read notes on p10.*

V7.4 - V7.8 32k (256kBit)	Standard	Access	Enlarged	Apartments	Access 2	Special	Alarm	XDoor
	00	01	02	03	04	05	06	07
Users	100	100	100	100	100	50	50	500
User Names	50	50	50	50 (100)	100	50	50	10
User RF Fobs	0	0	0	10	0	10	10	0
User Types	16	16	16	16	16	8	8	16
Card Only Users	0	0	0	0	0	0	0	0
Areas	24	16	8	16	16	16	16	8
Doors	4	8	16	4 (8)	8	4	4	20
Lift Cars	0	0	0	0	0	0	0	0
Site Codes	3	3	3	3	3	3	3	3
TimeZones	8	8	8	8	8	8	8	8
Holidays	8	8	8	8	8	8	8	8
Diaries	5	5	5	5	5	5	5	4
Counters	4	0	0	4	0	4	4	0
Area Lists	16	16	8	16	16	16	16	4
Doors Lists	8	16	16	8 (16)	16	8	8	16
Siren Lists	8	8	2	4	8	8	8	4
Floor Lists	0	0	0	0	0	0	0	0
Lift Car Lists	0	0	0	0	0	0	0	0
Auxiliary Lists	2	2	2	8	2	8	2	2
Menu Groups	8	8	8	8	8	8	8	8
Access Groups	8	8	8	8	8	8	8	8
Process Groups	24 (16)	24 (16)	24 (16)	24 (16)	24 (16)	24 (16)	24 (16)	24 (16)
Interlock Groups	0	0	0	0	0	0	0	0
Comms Tasks	5	5	5	5	5	5	5	4
Phone Numbers	6	6	6	6	6	6	6	6
DTMF Controls	8	4	4	4	4	8	4	4
Function Zones	32	16	16	16	16	32	32	16
Calculated Auxes	16	16	16	16	16	16	16	16
Home Auxiliaries	8	8	8	8	8	16	16	8
Home Zones	8	0	0	0	8	16	0	8
Automation Auxiliaries	0	0	0	0	0	0	0	0
LCD Terminals	8	8	8	8	8	8	8	4
Touchscreen Terminals	0	0	0	0	0	0	0	0
Expander Modules 32Z	1	1	0	0	1	1	2	0
Expander Modules 16Z	3	2	0	0 (2)	2	1	2	0
Reader Modules	2	4	2	2 (4)	4	2	2	10
Mini Expander Modules	1	0	2	8 (1)	0	3	0	0
Analogue Modules	0	0	1	0	0	0	0	0
Intelligent 4Dr Access Modules	0	0	2	0	0	0	0	0
Wireless Network Modules	0	0	0	0	0	0	0	0
RF Expander Modules	0	0	0	1	0	1	1	0
AirCon Control	0	0	0	0	0	0	0	0
Review Memory. *	300	550	500	400	400	300	300	400
EN Review: ^ Normal	150	300	150	150	150	150	100	150
Mandatory	250	250	250	250	250	250	250	250

* Applies only to Non EN firmware types. See Note 7.

^ Applies only to EN firmware types. See Note 7.

128k Memory Configurations. V7.4 - V8.2*Please read notes on p10.*

V7.4-V7.8 128k (1MBit)	Standard	Access	Enlarged	Apartments	Access 2	Special	Alarms	XDoor	IP Door
	00	01	02	03	04	05	06	07	08
Users	2000	1000	1000	500	1000	1000	1000	2000	4096
User Names	100	1000	100	500	1000	1000	100 (200)	100	10
User RF Fobs	25	25	0	25	25	25	25	25	0
Extra Door/DList for Users	0	0	0	0	0	0	0	2000	0
User Types	32	64	32	64	64	64	48	64	64
Card Only Users	0	0	0	0	0	0	0	0	5904
Areas	96	32	96	48	32	32	64	32	10
Doors	32	64	16	48	64	48	16	48	8
Lift Cars	3	6	3	4	6	4	3	4	0
Site Codes	6	5	6	6	5	6	5	6	8
TimeZones	32	32	32	32	32	32	32	32	16
Holidays	16	16	16	16	16	16	16	16	16
Diaries	10	10	10	10	10	10	10	10	5
Counters	8	8	16	4	4	8	8	8	0
Area Lists	96	32	96	48	32	32	64	32	64
Doors Lists	48	64	32	48	64	48	32	48	64
Siren Lists	32	16	32	16	16	8	32	8	1
Floor Lists	24	48	24	32	32	32	24	32	0
Lift Car Lists	6	12	6	6	6	8	6	8	0
Auxiliary Lists	32	32	32	16	32	32	32	32	4
Menu Groups	16	8	16	8	8	8	16	8	4
Access Groups	16	12	16	12	16	16	8	16	8
Process Groups	32	24	32	32	32	32	32	32	24
Interlock Groups	16	32	12	8	16	16	8	8	4
Comms Tasks	6	6	6	6	6	6	8	6	4
Phone Numbers	8	8	8	12	12	8	12	8	4
DTMF Controls	16	16	16	8	8	16	16	16	0
Function Zones	32	16	32	32	16	16	32	16	4
Calculated Auxes	32	16	32	32	16	16	32	16	4
Home Auxiliaries	48 (64)	32	64	32	32	32	64 (32)	32	0
Home Zones	32	16	64	16	16	16	64	16	0
Automation Auxiliaries	16	16	16	16	16	16	16	16	0
LCD Terminals	32	16	32	32	16	16	32	16	4
Touchscreen Terminals	2	2	2	0	2	2	2	0	0
Expander Modules 32Z	4	2	6	1 (2)	2	1	15	2	0
Expander Modules 16Z	6	6	8	2 (8)	4	2	0	2	0
Reader Modules	16	32	8	24 (32)	32	8	8	16	4
Mini Expander Modules	5	4	10	25 (5)	4	16	4	8	0
Analogue Modules	2	3 (4)	4	2	2	4	4	2	0
Intell. 4Dr Access Modules	0	0	2	4	0	8	2	8	0
LAN Pwr Supply Modules	2	2	2	6	4 (6)	2	2	2	0
Wireless Network Modules	0	0	6	0	0	0	0	0	0
RF Expander Modules	2	1	0	2	2	2	2	2	0
AirCon Control	0 (2)	0 (2)	4 (2)	0 (2)	0 (2)	0 (2)	4 (2)	0 (2)	0
Review Memory. *	1800 (2000)	1800 (2000)	1800 (2000)	1800 (2000)	1800 (2000)	1600 (2000)	2000	1800 (2000)	875 (1000)
EN Review: ^ Normal Mandatory	1300 500	1200 500	1300 500	1300 500	1200 500	1000 500	1500 500	1300 500	375 500

* Applies only to Non EN firmware types. See Note 7.

^ Applies only to EN firmware types. See Note 7.

Expanded Users (256k) Memory Configurations. V7.8-V8.2 *Please read notes on p10.*

V7.8 Expanded Users	Standard	Access	Enlarged	Apartments	Access 2	Special	Alarms	XDoor	IP Door
	00	01	02	03	04	05	06	07	08
Users	4096	4096	4096	4096	4096	4096	4096	4096	4096
User Names	200	1000	200	500	1000	1000	200	200	10
User RF Fobs	25	25	0	25	25	25	25	25	0
Extra Door/DList for Users	0	0	0	0	0	0	0	12000	0
User Types	128	128	128	128	128	128	128	128	64
Card Only Users	7904	7904	7904	7904	7904	7904	7904	7904	5904
Areas	96	32	96	48	32	32	64	32	10
Doors	32	64	16	48	64	48	16	48	8
Lift Cars	3	6	3	4	6	4	3	4	0
Site Codes	6	5	6	6	5	6	5	6	8
TimeZones	32	32	32	32	32	32	32	32	16
Holidays	16	16	16	16	16	16	16	16	16
Diaries	10	10	10	10	10	10	10	10	5
Counters	8	8	16	4	4	8	8	8	0
Area Lists	96	32	96	48	32	32	64	32	64
Door Lists	64	64	64	64	64	64	64	64	64
Siren Lists	32	16	32	16	16	8	32	8	1
Floor Lists	64	64	64	64	64	64	64	64	0
Lift Car Lists	12	12	12	12	12	12	12	12	0
Auxiliary Lists	32	32	32	16	32	32	32	32	4
Menu Groups	16	8	16	8	8	8	16	8	4
Access Groups	16	12	16	12	16	16	8	16	8
Process Groups	32	24	32	32	32	32	32	32	24
Interlock Groups	16	32	12	8	16	16	8	8	4
Comms Tasks	6	6	6	6	6	6	8	6	4
Phone Numbers	8	8	8	12	12	8	12	8	4
DTMF Controls	16	16	16	8	8	16	16	16	0
Function Zones	32	16	32	32	16	16	32	16	4
Calculated Auxes	32	16	32	32	16	16	32	16	4
Home Auxiliaries	48	32	64	32	32	32	64	32	0
Home Zones	32	16	64	16	16	16	64	16	0
Automation Auxiliaries	16	16	16	16	16	16	16	16	0
LCD Terminals	32	16	32	32	16	16	32	16	4
Touchscreen Terminals	2	2	2	0	2	2	2	0	0
Expander Modules 32Z	4	2	6	1	2	1	15	2	0
Expander Modules 16Z	6	6	8	2	4	2	0	2	0
Reader Modules	16	32	8	24	32	8	8	16	4
Mini Expander Modules	5	4	10	25	4	16	4	8	0
Analogue Modules	2	3	4	2	2	4	4	2	0
Intell. 4Dr Access Modules	0	0	2	4	0	8	2	8	0
LAN Pwr Supply Modules	2	2	2	6	4	2	2	2	0
Wireless Network Modules	0	0	6	0	0	0	0	0	0
RF Expander Modules	2	1	0	2	2	2	2	2	0
AirCon Control	0	0	4	0	0	0	4	0	0
Review Memory. *	3000	3000	3000	3000	3000	3000	3000	2500	875
EN Review: ^ Normal	2000	2000	2000	2000	2000	2000	2000	1500	375
Mandatory	1000	1000	1000	1000	1000	1000	1000	1000	500

* Applies only to Non EN firmware types. See Note 7.

^ Applies only to EN firmware types. See Note 7.

512k Memory Configurations. V7.4 - V8.2 *Please read notes on p10.*

V7.4-V7.8 512k (4MBit)	Standard	Access	Enlarged	Apartments	Access 2	Special	Alarms	X Door	IP Door
	00	01	02	03	04	05	06	07	08
Users	4000	500	4000	2000	2000	4096	4000	4096	4096
User Names	4000	500	4000	2000	2000	2000	4000	100 (500)	100
User RF Fobs	50	50	100	100	50	50	50	50	0
Extra Door/DList for PINs	0	0	0	2000	0	0	0	4096	0
Extra Door/DList for Cards	0	0	0	0	0	0	0	20904	0
User Types	128	250	250	128	128	250	200	250	128
Card Only Users	0	24576	0	0	16384	8192	0	20904	43904
Areas	240 (250)	128	128	128	64	128	200	64	16
Doors	128	240	176	208	208	176	96	96	8
Lift Cars	8 (12)	16	16	8	16	16	12	12	0
Site Codes	16	16	32	8	16	16	16	8	8
TimeZones	64	64	64	64	32	64	96	64	64
Holidays	32	16	16	16	16	16	16	16	16
Diaries	24 (32)	32	32	16	16	32	16	16	16
Counters	16	16	32	128	16	16	16	16	4
Area Lists	240	128	128	128	128	128	200	64	128
Doors Lists	128	240	240	128	128	240	96	250	128
Siren Lists	128	64	64	32	16	64	64	16	1
Floor Lists	64 (96)	200	250	128	64	250	64	128	0
Lift Car Lists	12 (16)	32	48	16	16	64	16	16	0
Auxiliary Lists	32	32	32	32	16	32	80 (64)	16	8
Menu Groups	32	32	32	16	16	32	32	16	16
Access Groups	16 (32)	32	32	16	16	32	16	16	16
Process Groups	48 (64)	64	64	32	32	64	48	32	32
Interlock Groups	16	64	64	8	48	64	16	16	4
Comms Tasks	8	8	8	8	8	8	8 (10)	8	8
Phone Numbers	32	32	32	32	32	32	32	32	32
DTMF Controls	16	16	16	16	16	16	16	16	16
Function Zones	64	32	32	128	48	32	128	64	16
Calculated Auxes	64	32	64	128	32	32	64	64	32
Home Auxiliaries	96	128	128	128	64	128	128	32	16
Home Zones	32	32	128	32	32	32	48	32	16
Automation Auxiliaries	48	48	64	128	48	64	64	64	16
LCD Terminals	99	48	48	99	48	64	75	16	8
Touchscreen Terminals	8	8	8	32	8	8	8	4	2
Expander Modules 32Z	20	5	8	8 (4)	16	16	64	0	0
Expander Modules 16Z	44	20	24	8 (16)	0	16	0	16	0
Reader Modules	64	75	64	99	8	48	48	48	4
Mini Expander Modules	24	10	16	99	8	16	16	8	1
Analogue Modules	8	8	8	32	8	8	8	8	1
Intell 4Dr Access Modules	0	8	4	12	48	32	8	24	0
LAN Pwr Supply Modules	8	8	8	16	16	8	4	4	4
Wireless Network Modules	8	4	13	8	4	4	4	2	0
RF Expander Modules	4	4	8	16	4	4	8	2	0
AirCon Control	2 (4)	4	4	4	4	4	4	4	0
Review Memory. *	6500	6500	6500	6500	6500	6500	6500	6500	4000
EN Review: ^ Normal	5500	5500	5500	5500	5500	5500	5500	5500	3000
Mandatory	1000	1000	1000	1000	1000	1000	1000	1000	1000

* Applies only to Non EN firmware types. See Note 7.

^ Applies only to EN firmware types. See Note 7.