

Memory Defaulting

Memory Configuration Options

There are a range of Memory Configurations available in the Model 3000/4000. The actual numbers of various items available in any of the options will also depend on the size and version of the Memory Chip fitted to the Control Module. eg. The "Enlarged" option is not available with the 32K Memory Chip set.

The configurations currently available are:

Standard	Provides a balance of item numbers allowing for larger security installations with a moderate number of access controlled doors and/or lifts.
Access	Still provides for large security installations, but expands the access control capabilities by a small reduction in the number of Areas, User Types, Groups, Func. Zones & Calculated Auxiliaries. 512k configuration supports 8 Intelligent 4 Door Access Modules.
Enlarged	<u>128k and 512k configurations.</u> This option decreases the number of access control features such as Doors, Door Lists, Access Modules and Interlocks but expands input/output functionality by increasing the number of Counters, Menu Groups, Home Zones, 32 Zone Expanders, 16 Zone Expanders, Mini Expanders, Analogue Modules and SpreadNet Modules. (Note: For maximum input/output capability see the "Alarm" configuration.) <u>32k configuration.</u> This option provides 2 Intelligent 4 Door Access Modules in addition to 2 Single Door / 2 Door Access Modules providing up to 12 Doors in total. Zone Expansion is limited to 2 Mini Expanders and 8 Areas are supported.
V2 Standard	This option allows a database created under the "Standard" Memory Configuration of version 2 firmware to be imported into a similar memory configuration of version 3 firmware or later. This upgrade path is designed to provide some of the additional features of the V3 firmware without the need to modify data. Only a V2 Standard configuration database should be imported into this option. Do not import a database created under any other configuration without first seeking advice from your Technical Support Centre. To do so may result in loss of data.
V2 Access	This option allows a database created under the "Access" Memory Configuration of version 2 firmware to be imported into a similar memory configuration of version 3 firmware or later. This upgrade path is designed to provide some of the additional features of the V3 firmware without the need to modify data. Only a V2 Access configuration database should be imported into this option. Do not import a database created under any other configuration without first seeking advice from your Technical Support Centre. To do so may result in loss of data.
Special	This option has been devised for special needs identified in each of the three Memory Size options. In 32k: Oriented toward Domestic applications with additional Home Auxiliaries, Home Zones and DTMF Control Codes. In 128k: Additional Mini Expanders supported for installations where Mini Expanders are the most suitable form of expansion. Support for Intelligent 4 Door Access Module (V3.5 or later) In 512k: Similar to 512k Access but with additional PIN Codes, User Names, LCD Terminals and support for Intelligent 4 Door Access Modules (V3.5 or later). Has slightly fewer Doors, less standard Reader Modules and less Card Only Users.

Alarm

This option has been devised for supporting larger numbers of 32 Zone Expander Modules to maximize the input / output capability of the system.

In 32k: Not supported.

In 128k: Similar to "Enlarged" but supports 15 Big (32 Zone) Expanders by a reduction in 16 Zone Expanders, Mini Expanders and SpreadNet. Supports 2 Intelligent 4 Door Access Modules (V3.5 or later)

In 512k: Similar to "Enlarged" but supports 64 Big (32 Zone) Expanders and 8 SpreadNet Modules by a reduction in 16 Zone Expanders, 1/2 Door Access Modules, and Doors, etc. Supports 8 Intelligent 4 Door Access Modules (V3.5 or later)

Refer to the "Memory Configurations" section of this manual for complete details of all configurations.

Memory Defaulting

CAUTION: IMPORTANT INFORMATION. This screen is used to completely erase all options programming in the system and re-set it back to factory default settings. Exercise extreme care - once erased, programming cannot be recovered unless an up-to-date copy is stored in an Upload/Download program.

Memory Default-> Don't default

This option is used to select which Memory Configuration is to be used in this system.

Press the Right Arrow key until the required configuration is displayed.

Note that you cannot change memory configurations without erasing all programming unless an Upload/Download software is used.

Memory Default-> Standard

When the required configuration is displayed, press the OK key.

Push '9' key to Confirm Default

When this screen is displayed you have 10 seconds to push the "9" key to confirm that you wish to default the memory to the configuration selected.

IMPORTANT NOTE: Once the "9" key is pressed all programming will be erased in a fraction of a second and the memory defaulted to the required configuration.

Pressing any other key will abort the process and leave the current programming and configuration intact.

Memory Expansion or Re-configuration.

The following procedures must be followed in order to expand an existing system to that of a different Memory Size and/or Configuration.

NOTE: If upgrading the Control Module firmware Version, (with or without expanding the Memory) refer to "Firmware Upgrade" following the Diagrams.

1. You will need a PC or Laptop loaded with:
 - IRPC3 V1.02b for Version 1 Control Module firmware.
 - PC DIRECT V2.00c for Version 2 Control Module firmware.
 - PC DIRECT V3.00 (or later), or Wdirect V3.00 (or later) for Version 3 or later Control Module firmware.
2. You will also need:
 - A Programmer's manual of the same Version as the Control Module firmware.
 - Previous training and experience uploading and downloading to 3000/4000 product. If you are unsure during any stage of the upgrade STOP and consult your distributor, as data may be lost.
3. Perform a full upload of the system as it exists using the relevant copy of Upload/Download software.
 - If V1 firmware use IRPC3 V1.02b. If V2 firmware use PCDirect V2.00c.
 - If V3 firmware use PCDirect V3.00 or Wdirect V3.00 (or later)
 - If V3.5 firmware or later use Wdirect V3.50 (or later)
4. IF fitting Memory Expansion, power the panel down and disconnect the battery.

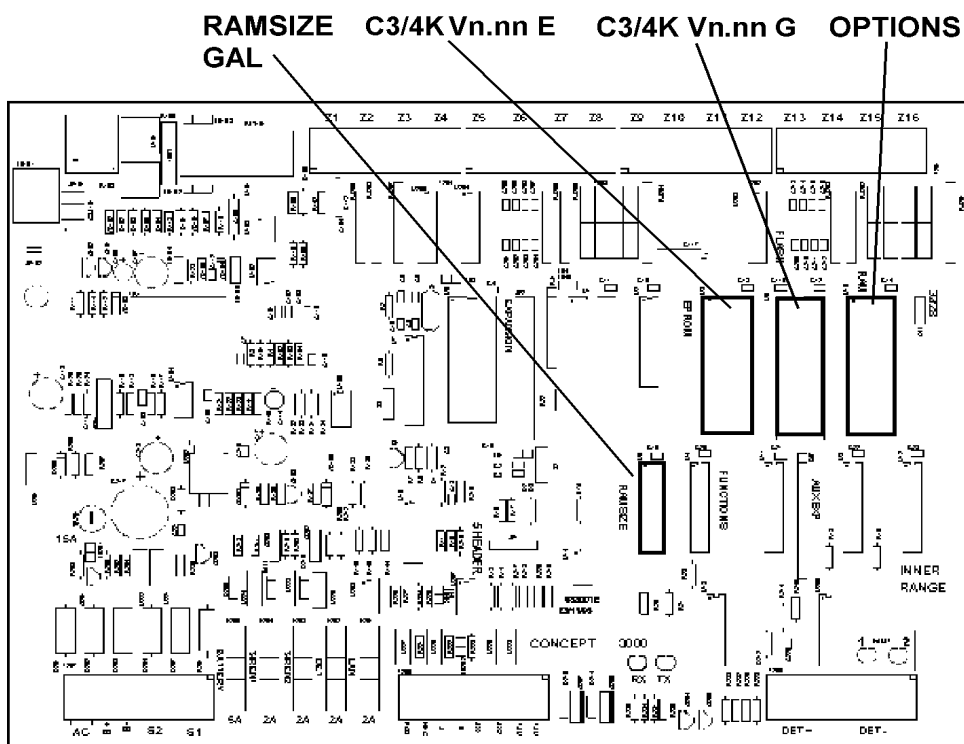
(NOTE: Damage may occur to the panel if power is not removed when changing chips).
5. IF fitting Memory Expansion remove the existing OPTIONS chip and RAMSIZE GAL or OPTIONS MICRO CHIP and fit the new OPTIONS and GAL / OPTIONS MICRO chips as shown in:
 - Diagram 1, IF Type 0 PCB. (Older V1 and V2 systems - Australia and New Zealand only)
 - Diagram 2, IF Type 1 PCB. ("Concept Access 4000 REV C" or later)
 - Diagram 3, IF Type 2 (CE) PCB. ("Concept 3K/4K CE. 935001 Rev. ?")

NB: Ensure the jumper setting of the 28/32 Pin Link on the Control Module reflects the number of pins on the RAM chip.
6. Power the panel up. The Control Module will run a short internal diagnostic test and illuminate LED 2 on the Control Module board to signify that the RAM has not yet been initialised. This is to be expected. To initialise the RAM, short the pins on LK4 on the Control Module board. The new RAM chip may then be defaulted it to a suitable Memory Configuration <MENU>, 7, 5, 2.

If Memory Expansion has just been fitted, the Memory configuration chosen should match the nature of the system's original database. (Standard, Access, etc.) See the relevant Programmers manual for Memory configuration details.
7. Set up a Comms Task in the panel for "PC Direct". If the previous database had a PCDirect Comms Task, keep the PCDirect Comms Task number in the new database the same as that of the previous database. Using the Version of PCDirect/WDirect used to Upload from the panel in Step 3, download the database back into the panel.
 - If panel has V1 firmware use IRPC3 V1.02b. If panel has V2 firmware use PCDirect V2.00c.
 - If panel has V3 firmware use PCDirect V3.00 or Wdirect V3.00 (or later)
 - If panel has V3.5 firmware or later use Wdirect V3.50 (or later)

8. When communications is first initiated, it will fail on the configuration comparison. This is because the new Memory size and/or configuration will have some different structures than the original Memory size and/or configuration. By viewing the communications report you may check the differences between the database (PC) and panel (upload configuration). As long as the panel configurations are larger than those in the database, no entries will be lost. In the event that any databases in the upload configuration are smaller, entries will be automatically deleted.
9. Assuming the panel has been defaulted to the best match configuration in Step 6, choose "USE UPLOAD CONFIGURATION" and then choose "Yes" at the database size warning. Once the Download is complete, a LAN initialize and Secure must be done. <MENU>, 7, 8, 1.
10. Do a complete upload into a version of PC Direct/WDirect that matches the panel firmware version again. This will now become the new client database for this site.

Diagram 1



3000 / ACCESS 4000 CONTROL MODULE, TYPE 0.

Diagram 2

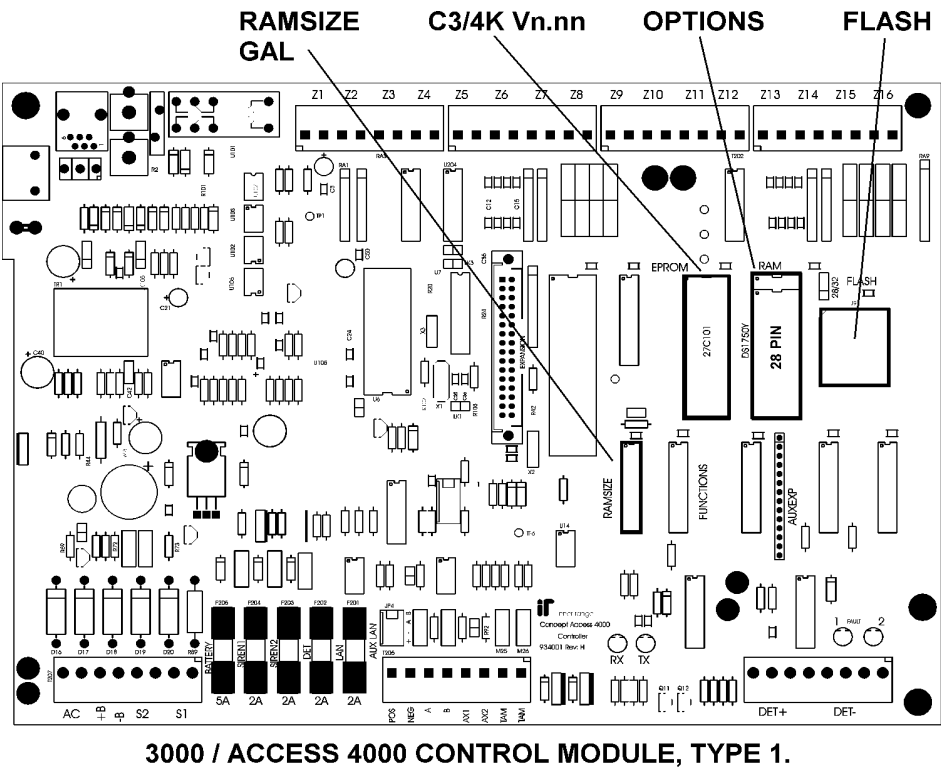
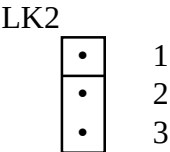
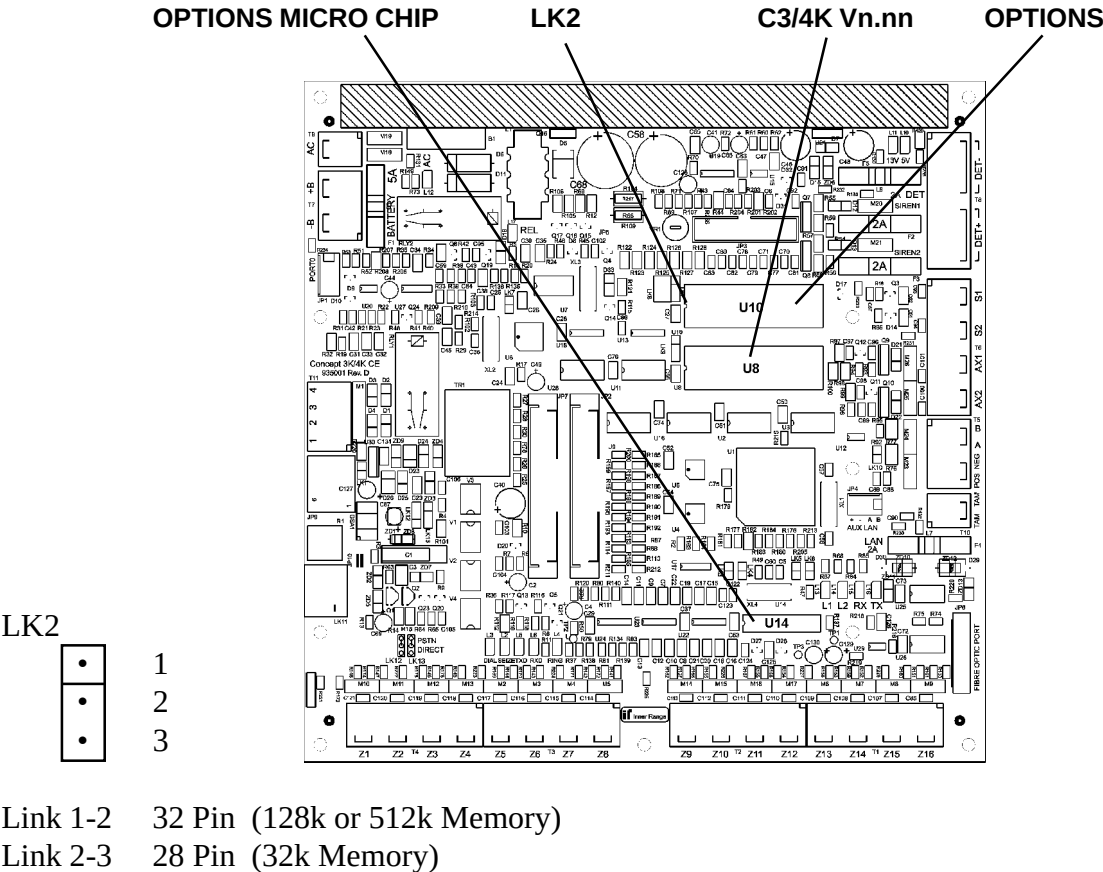


Diagram 3



Link 1-2 32 Pin (128k or 512k Memory)
Link 2-3 28 Pin (32k Memory)

Firmware Upgrade.

The following procedures must be followed in order to upgrade an existing system to Version 3.nn firmware or later. This procedure describes the Firmware Upgrade with option for Memory Expansion to be performed at the same time.

NOTES:

- 1) V3 firmware or later cannot be fitted in Type 0 Control Module PCB Hardware. If upgrading a system with Type 0 Control Module to Version 3 or later, the Control Module will have to be replaced with current Type 1 or Type 2 Control Module PCB or later. To check Control Module PCB Type, press <MENU> (or <MENU>, 2 if prompted for a menu option) on the LCD Terminal. The scrolling message will display "PCB: 0" if Type 0, or "PCB: 1" if Type 1, or "PCB: 2" if Type 2 (CE).

Diagrams 1, 2 and 3 on the previous pages will also assist in identifying the PCB Type. (Type 1 PCB has the square "FLASH" RAM socket. Type 2 PCB is surface mount)

- 2) If special firmware is used (eg. Secure Micro or LANkey etc.), upgrade firmware must be of the same type. See "System Information" in the Overview & Introduction section.

PROCEDURE:

1. To maintain the existing programmed database whilst upgrading from V1 or V2 firmware to V3 firmware or later you will need a PC or Laptop loaded with:
 - IRPC3 V1.02b (for upgrade from Version 1) or
 - PC DIRECT V2.00c (for upgrade from Version 2)This software is available from distributors free of charge.
2. Other Requirements:
 - If upgrading to V3, PC DIRECT V3.00 (or later), or Wdirect V3.00 (or later) must be installed on the PC/Laptop.
 - If upgrading to V3.5 or later, Wdirect V3.50 (or later) must be installed on the PC/Laptop.
 - Programmer's manual/s of the same Version/s as the Control Module firmware.
 - Previous training and experience uploading and downloading to 3000/4000 product. If you are unsure during any stage of the upgrade STOP and consult your distributor, as data may be lost.
3. Before proceeding a full upload of the system as it exists must be performed using the relevant copy of Upload/Download software. This is required in case any corruption occurs or data is accidentally lost during the upgrade process.
 - If V1 firmware use IRPC3 V1.02b.
 - If V2 firmware use PCDirect V2.00c.
 - If V3 firmware use PCDirect V3.00 (or later) or Wdirect V3.00 (or later)
 - If V3.5 firmware or later use WDirect V3.50 or later. (WDirect must not be an earlier version number than the firmware)
4. Now, using PCDirect V3.00 (or later) or Wdirect V3.50 (or later), create a new client and take a full Upload from the panel. (This is in addition to the previous Upload)
5. Power the Control Module down and disconnect the battery.
(NOTE: Damage may occur to the panel if power is not removed when changing chips).

6. IF Type 0 PCB:

- a) If upgrading the firmware to V3 or later replace the Type 0 Control Module with a Type 1 or Type 2 Control Module that has V3.nn (or later) firmware fitted.
- b) If upgrading the Memory size, remove the existing OPTIONS chip and RAMSIZE GAL / OPTIONS MICRO CHIP and fit the new OPTIONS and GAL / OPTIONS MICRO chips as shown in diagram 2 or 3 on the previous pages.

NB: Ensure the jumper setting of the 28/32 Pin Link on the Control Module reflects the number of pins on the RAM chip.

IF Type 1 PCB ("Concept Access 4000 REV C" or later):

- a) If upgrading the firmware to V3, remove the existing firmware chip and fit the new V3.nn chip as shown in diagram 2 on the previous page.
- b) If you are upgrading the Memory size, remove the existing OPTIONS chip and RAMSIZE GAL and fit the new OPTIONS and GAL chips as shown in diagram 2 on the previous pages.

IF Type 2 PCB ("Concept 3K/4K CE" or later):

- a) If upgrading the firmware to Vn.nn, remove the existing firmware chip and fit the new Vn.nn chip as shown in diagram 3 on the previous page.
- b) If you are upgrading the Memory size, remove the existing OPTIONS chip and OPTIONS MICRO CHIP and fit the new OPTIONS and OPTIONS MICRO chips as shown in diagram 3 on the previous pages.

- 7. Power the panel up and default it to the appropriate Memory Configuration <MENU>, 7, 5, 2. (If upgrading the firmware, pick the configuration best suited to the previous Version of firmware). See the Default Memory configurations tables in the "Memory Configurations" section of this manual for details of all Memory configurations.
- 8. NOTE: If upgrading the firmware from Version 1, the "E" type expanders in V1.nn are now "B" type expanders. All zones and relevant auxiliaries previously programmed as an "E" will be automatically converted to a "B" and saved in their original position. However, it should be noted that in most configurations in V3 there are now less "B" type expanders than in V1.nn.
- 9. Set up a Comms Task in the panel for "PC Direct". If the previous database had a PCDirect Comms Task, keep the PCDirect Comms Task number in the new database the same as that of the previous database. Using the Version of WDirect (or PCDirect) used to Upload from the panel in Step 4, download the database back into the panel.
- 10. When communications is first initiated, it will fail on the configuration comparison. This is because V3.nn has many more structures than V1.nn or V2.nn. It may also be because you have fitted Memory Expansion. By viewing the communications report you may check the differences between the database (PC) and panel (upload configuration). As long as the panel configurations are larger than those in the database, no entries will be lost.

However, should any database in the upload configuration be smaller, entries will be automatically deleted. An example is the panel when fitted with V1.07 with a 128k ram was defaulted to Access, giving 1000 users with names. When fitted with V3.nn it was defaulted to standard which has 2000 users but only 100 with names, consequently 900 user names are deleted. This is why a backup copy is always recommended.

11. Assuming the panel has been defaulted to the best match configuration in Step 7, choose "USE UPLOAD CONFIGURATION" and then choose "Yes" at the database size warning. Once the Download is complete, a LAN initialize and Secure must be done. <MENU>, 7, 8, 1.
12. Do a complete upload into PC Direct (or Wdirect) again. This will now become the new client database for this site.

IMPORTANT: Please read the notes on Upgrading from specific Versions on the following page.

IF UPGRADING FROM V1.nn to V3.nn or later.

After the download is complete, a <MENU> 7, 8, 9 system reset must be performed. Once this has been completed a LAN initialize and Secure must be performed again.

After this is done open a new client within PC direct and do a full upload. This will set all TimeZones within the Upload to the new type.

The TimeZones must then be checked and altered by the installer to match the parameters that were set in the previous version of firmware to achieve the same operation. (TimeZone structures were changed after V1)

If this is not performed, the original TimeZone data will not be able to be viewed or edited.

Once this is achieved, a full system check must be done to ensure correct operation of the entire system and all communications. Once this is confirmed the first upload client in PC DIRECT may be deleted as it is no longer needed.

OTHER CHECKS

After upgrading from V1 or V2 to V3, check the settings of the following options to ensure they are set as required:

1. "Summary" option in Input Programming. May be set to Yes. Set to No unless specifically required.
2. "Single Hit" in the Comms options in Process Groups. May be set to Yes. Set to No unless specifically required.
3. "Review" in the "Options Access" options in Menu Groups.
New option. Will need to be set to Yes in any Menu Groups that are to allow access to Review. (MENU, 1, 1)
(Note that the "Review & Info Menu" option in the "Menu" options, must also be set to Yes)
4. Interlock Groups assigned to Doors. Check that unwanted Interlock Groups have not been assigned.
5. Lift Programming. Check all programming for Lifts.