

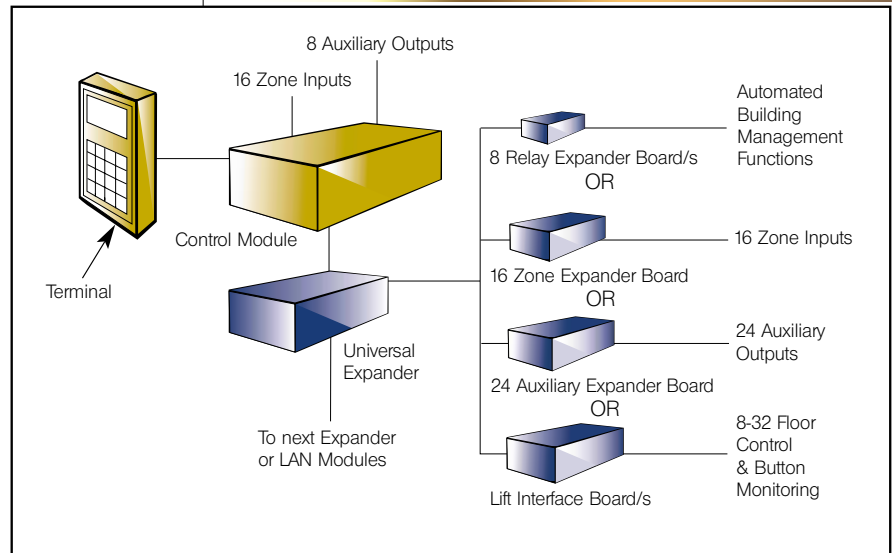
Universal Expander Module 993004

The Universal Expander Module connects to either a Concept 3000, Access 4000 or Concept 2000 system to provide an additional 16 Zone inputs, 8 Auxiliary outputs and 2 Siren drivers. Up to 64 Expander modules can be installed in a Concept 3000 or Access 4000 system, depending on the memory option fitted to the Control Module. Up to 5 Universal Expanders can be installed in a Concept 2000 system. The optional Lift Interface board enables extensive control and monitoring of Lift Car operation and floor access, if used within a Concept 3000 or Access 4000 system.



The Concept 3000 and Access 4000 systems use the Universal Expander to its full potential:

- 16 Zone inputs, expandable to 32 by use of the optional 16 Zone Expander board (993006)
- 8 Auxiliary outputs, expandable to 32 by use of the optional 24 Auxiliary Expander board (993007)
- 2 independent Siren driver outputs
- Up to 32 Floors may be controlled and monitored per Universal Expander using up to 4 optional Lift Interface boards (994020) and a Lift Interface Extension Cable (605020)
- Up to 3 x 8 Relay Expander boards (993082E) may be "daisy chained" within the Universal Expander using the optional Relay Interface Extension Cable (995019)
- On-board diagnostic LED's to assist with troubleshooting
- Fuse protection of LAN, Detector and Siren outputs
- Fuse protection of Battery circuit
- Separate Cabinet Tamper connection
- Cabinet Tamper and Siren Tamper monitoring via System inputs
- System inputs monitor Power Supply, Fuse and Battery Status



The Universal Expander offers incredible flexibility

The Universal Expander enables the installer to configure an Access 4000 system to virtually any application. The number of Expanders and the combinations of Zone Inputs, Auxiliary Expanders and Relay boards offer infinite possibilities

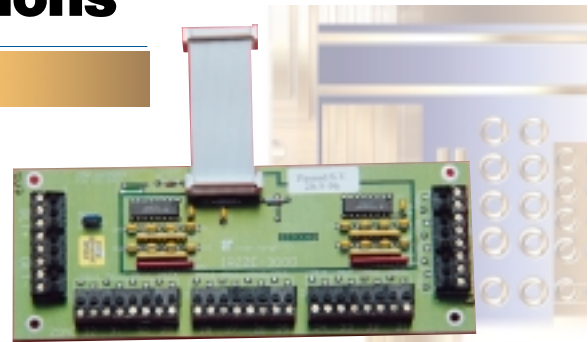
SPECIFICATIONS		
Physical		
Cabinet Dimensions (mm)	415(L) x 225(W) x 100(D)	
PCB Dimensions (mm)	180(L) x 180(W) x 40(D)	
Installation Environment	0°-40°C @ 15% to 85% Relative humidity (non-condensing)	
Electrical		
Power Supply Input	16V AC from Plug Pack supplied. (Optional 16V AC 2.5A)	
Operational Current Min:	55mA (No external load/Detector power)	
Battery Capacity	12V 6.5AH Sealed Lead Acid Battery	
Fuse Protection	Separate fuses for Battery, Siren 1, Siren 2, LAN & Detector Power	
Inputs		
Zone Inputs	16 (Expandable to 32 with optional 16 Zone Expansion board 993006)	
System Inputs	Cabinet tamper	Internal siren tamper
	External siren tamper	AC fail
	Low battery	LAN fuse tamper
	Detector fuse tamper	LAN communication status
	Battery test fail	
Separate Cabinet Tamper Input	Yes	
Outputs		
Sirens Outputs	2 (Internal & External) Max load: 2 x 8 Ohm, 10W siren speakers	
Physical Auxiliaries	8 (Expandable to 32 with optional 24 Auxiliary Expansion board 993007)	
Max. switchable current per Aux.	Aux. 1&2: 500mA Aux. 3-8: 200mA	
Relays	0 (Expandable to 24 with optional 8 Relay Expander boards 993082E-replaces Auxiliaries 9-32)	
Max. combined output current	LAN+, Detector+ & Auxiliaries must not exceed 1A NOTE: May be increased to 2A by using optional 16V 2.5A in-line transformer instead of plug-pack and shorting link JP1	
Total Auxiliaries	32 NOTE: Refer to information supplied with Detectors for current consumption requirements	
Ordering Options		
Standard	993004	993204 with anti-surge protection

Universal Expander Module Options

16 Zone Expander Board 993006

The 16 Zone Expander board provides an additional 16 Zone inputs for the Universal Expander (993004), along with extra detector power supply connections to simplify device wiring. The board is installed within the Universal Expander enclosure and connection is made via the ribbon cable supplied. All communications and power requirements for the board are provided by the host Universal Expander module.

- 16 Zone inputs with full tri-state monitoring (Seal/Alarm/Tamper)
- Utilizes LAN communications from host Universal Expander Module
- Quick and easy installation
- Detector power output required
- No additional enclosure required
- Provides a cost effective Zone expansion option



SPECIFICATIONS	
Physical	
PCB Dimensions (mm)	180(L) x 68(W) x 15(D)
Installation Environment	0°-40°C @ 15% to 85% Relative humidity (non-condensing)
Electrical	
Power Supply Input	Via Host Universal Expander
Operational Current Min:	40mA (not including Detector Power)
Inputs	
Zone Inputs	16
Max. Detector output current	To be included within the constraints of the Host Universal Expander
Ordering Options	
Standard	993006
With Anti-surge Protection	993206

Universal Expander Module Options

24 Auxiliary Expander Board 993007

The 24 Auxiliary Expander board provides an additional 24 Auxiliary outputs for the Universal Zone Expander Module, along with extra power supply connections that may be required for devices connected to the outputs.

- 24 Open Collector outputs
- Utilizes LAN communications from the host Universal Expander Module
- Each output is capable of switching up to 100mA
- Auxiliary power output connections provided
- Quick and easy installation with no additional enclosure required
- Cost effective Auxiliary expansion option

Lift Interface Board 994020

The Lift Interface board provides 8 Opto-isolated Zone inputs and 8 Relay outputs to facilitate connections to Lift control systems for the purposes of controlling and monitoring access to floors.

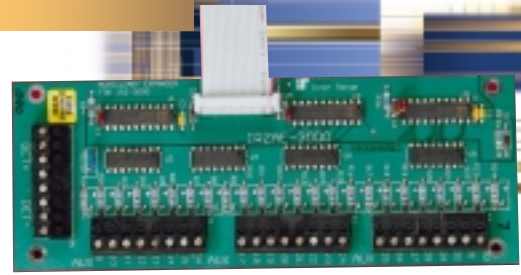
The Concept 3000 system supports lift control without button feedback. Concept 3000 enables specific floor buttons according to the programmed options for that user. The Concept Access 4000 system supports lift control with button feedback. The button feedback feature ensures that only one floor is selected per valid card read. The button pushed and the user's details are recorded to review.

The Lift Interface Extension Cable (605020) must be used to connect the Lift Interface board/s to the Universal Expander.

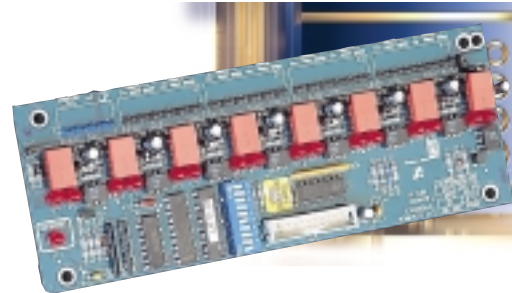
Important Note:

Expansion Options are only Available on

Concept 3000 & Access 4000 Systems



SPECIFICATIONS	
Physical	
PCB Dimensions (mm)	180(L) x 68(W) x 15(D)
Installation Environment	0°-40°C @ 15% to 85% Relative humidity (non-condensing)
Electrical	
Power Supply Input	Via Host Universal Expander
Operational Current Min:	40mA
Physical Auxiliaries	24
Max. switchable current per Aux.	100mA
Max. combined output current	To be included within the constraints of the Host Universal Expander
Ordering Options	
Standard	993007
With Anti-surge Protection	993207



- The security of up to 64 floors can be controlled for a maximum of 32 lift cars
- Lift access readers are interfaced using standard reader modules
- Up to 4 Lift Interface boards may be mounted together with a Universal Expander within an optional enclosure

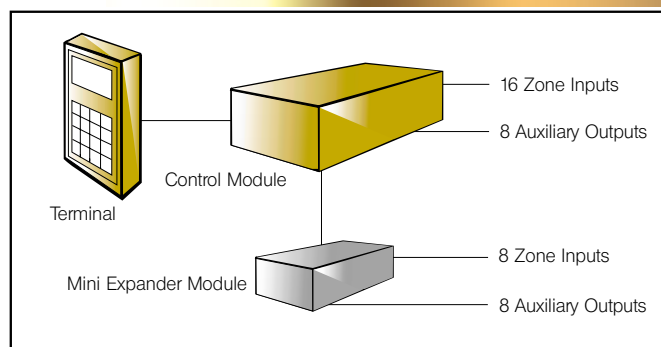
SPECIFICATIONS	
Physical	
PCB Dimensions (mm)	180(L) x 68(W) x 20(D)
Installation Environment	0° to 40° Celsius at 15% to 85% Relative humidity (non-condensing)
Electrical	
Power Supply Input	13.8V DC via Host Universal Expander
Operational Current Min:	45mA (no relays active)
Max:	170mA (all relays active)
Inputs/Outputs	
Zone Inputs	8 (special Opto-isolated button sense inputs)
Button Input Voltage	16-48V DC Full Wave rectified. Non-regulated
Max. Switchable Current per Relay	500mA @ 48V DC/AC RMS
Ordering Options	
Standard	994020

8 Zone Mini Expander Module 993086

The Mini Expander module can be used within the same Concept 3000 or Access 4000 applications as the 16 Zone Universal Expander, providing a cost effective solution whenever a smaller number of zones and auxiliaries are required.

In addition, programmable de-bounce time and input counters are features exclusive to the Mini Expander, further increasing the scope of application and flexibility of the Concept 3000 and Access 4000 systems.

- 8 Zone inputs
- 8 Auxiliary outputs
- Supplied in a plastic utility enclosure for easy mounting
- On-board diagnostic LED's to assist with troubleshooting
- Programmable input de-bounce time
- Event counting facility



SPECIFICATIONS

Physical	
Cabinet Dimensions (mm)	238(L) x 118(W) x 72(D)
PCB Dimensions (mm)	141(L) x 93(W)
Installation Environment	0°-40°C @ 15% to 85% Relative humidity (non-condensing)
Electrical	
Power Supply Input	11-14V DC (From LAN or separate Regulated Power Supply)
Operational Current Min:	30mA (No Auxiliaries active)
Max:	85mA (All Auxiliaries active, no external load)
Inputs	
Zone Inputs	8
System Inputs	LAN communication status Low Voltage
Programmable Input De-bounce	5mS to 1250mS, programmable per zone input
Outputs	
Physical Auxiliaries	8
Max. switchable current per Aux.	Aux. 1: 500mA Aux. 2-8: 200mA
Relays	0 (Expandable to 8 with optional 8 Relay Expander Board 993082E - replaces on-board Auxiliaries)
Max. combined output current	To be included within the constraints of the Power Supply source
Total Auxiliaries	8
Ordering Options	
Standard	993086
With Anti-surge Protection	993186

Important Note:

The Mini Expander module is only compatible with Concept 3000 V2.00 or later and Concept Access 4000 V2.00 or later

Exclusive Features

The Mini Expander module has a programmable de-bounce feature for increased sensitivity to inputs such as hold-up buttons, event counting and monitoring of electronic plant equipment. The input counting feature enables accurate monitoring of events or customer activity

GSM Modem

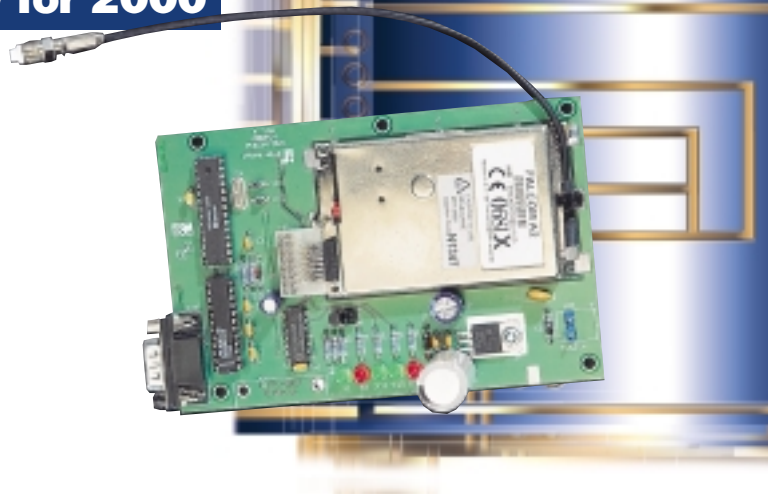
New for 2000

The GSM Digital Mobile Network offers an alternate communication path for alarm transmissions, pager style alarm messages and PC Direct. By connecting an Inner Range GSM Modem to the Concept 3000 or Access 4000 system via a UART port and using the "GSM Data" Comms Task, the Concept system is able to use the GSM mobile phone network to:

- Accept a data call from a PC running PC Direct and communicate at 9600 Baud
- Send IRFast to an FE100 Central Station Receiver as either the main communications path or as a backup task
- Send text alarm information to any GSM mobile phone using the GSM Short Message Service (SMS)
- Accept text commands sent from any GSM (with SMS) mobile phone to control areas, home auxiliaries and zone isolations and to report status changes back to the mobile phone

The status and call progress of the GSM Modem can be followed or inspected via a comprehensive review log, including display of received signal strength to ensure installation is reliable.

Various GSM networks offer competitive rates for data calls and sms services, allowing the "GSM Data" Comms Task to be used as the primary communication path.



Controlling a Concept 3000 / Access 4000 via a GSM mobile phone

The GSM SMS can be used to send short text style commands to the Concept 3000 or Access 4000.

- Turn on/off a home auxiliary
- Turn on a home auxiliary for a specified time in minutes
- Turn on a home auxiliary for a specified time in seconds
- Turn on/off an Area
- Request the current name and status of 6 home auxiliaries
- Request the current name and status of 6 areas
- Isolate/Restore a zone
- Discard pending SMS messages waiting to be sent

All actions are recorded to review and a message is sent back to the GSM mobile phone to confirm the action