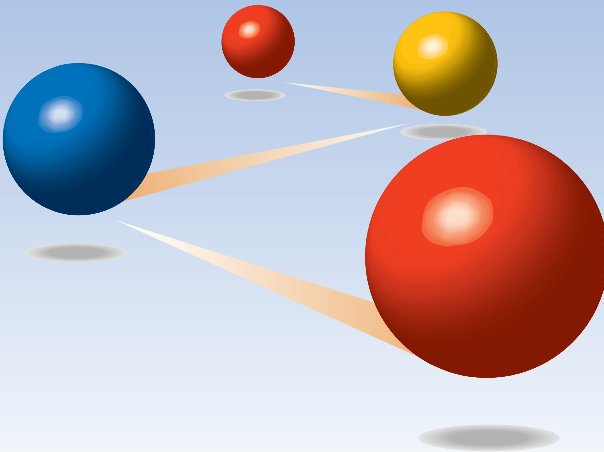


Easi Axxess



Installation & Users Guide



Easy to install, simple to expand

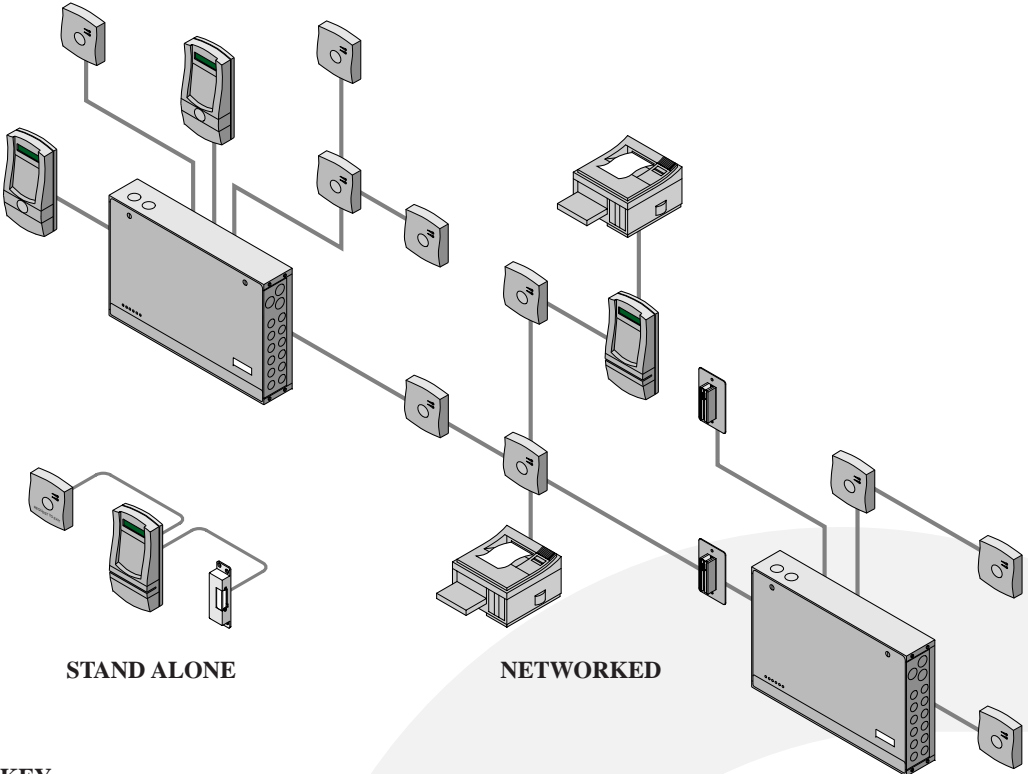
Installation of the EasiAcess system is within the scope of any competent engineer. Each EasiAcess device is given a unique number at manufacture. This unique number is used by the EasiAcess system to virtually self-configure the system on initial start-up. The controller on initial start-up scans the data bus for readers and asks the installer to enter the description for each reader. That's it, no DIP switches to set, no jumpers and certainly no hard coding. Once this has been done, powerful processors built into each device store the system information. This holds the configuration securely even in the event of a complete power failure.

Adding readers, or replacing readers is also just as easy. The EasiAcess system will recognise both new readers and ones that are no longer present and then prompt for confirmation as to whether the new reader is a replacement for one that is missing or an additional reader. If it is a replacement, the controller will give the new reader the same profile as the one it replaced.

Installation of the system is made even easier when the Consilium FTU (Field Termination Unit) is used. The FTU incorporates a 3 amp PSU, and is invaluable on larger installations where there may be remote power requirements. The FTU's are modular and can be wall or rack mounted in groups when the power requirements exceed 3 amps.

The EasiAcess data bus can extend to 1200m using CAT 5 communications cable. If greater data bus distances are required, boosters can be installed within a FTU to give a further 1200m range. This can be repeated as required to give virtually unlimited range capability.

System Overview



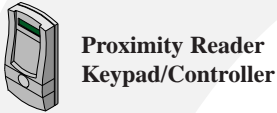
STAND ALONE

NETWORKED

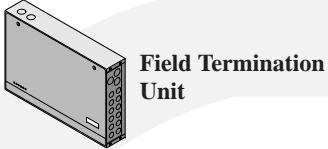
KEY



Magstripe Reader Keypad/Controller



Proximity Reader Keypad/Controller



Field Termination Unit



Request To Exit



Proximity Reader



Semi Flush Magstripe Reader



Lock

STAND ALONE

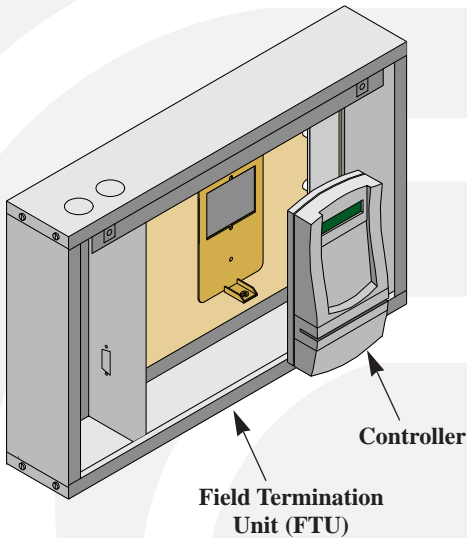
As shown above, the system is able to run in stand-alone mode, which incorporates a management controller, a request to exit as required and a lock. This will enable you to gain access through a door by using either a card swipe, access fob/card or pin number depending on unit purchased.

NETWORKABLE

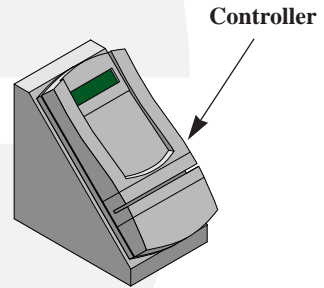
The networkable system is a fully functional door entry system which can incorporate up to 255 devices which include the management reader, The Field Termination Unit can distribute upto 8 additional power sources at 24v d.c. @ 3amps, you also have an additional port for powering a management controller within the Field Termination Unit.

Installation Options

Controller Option

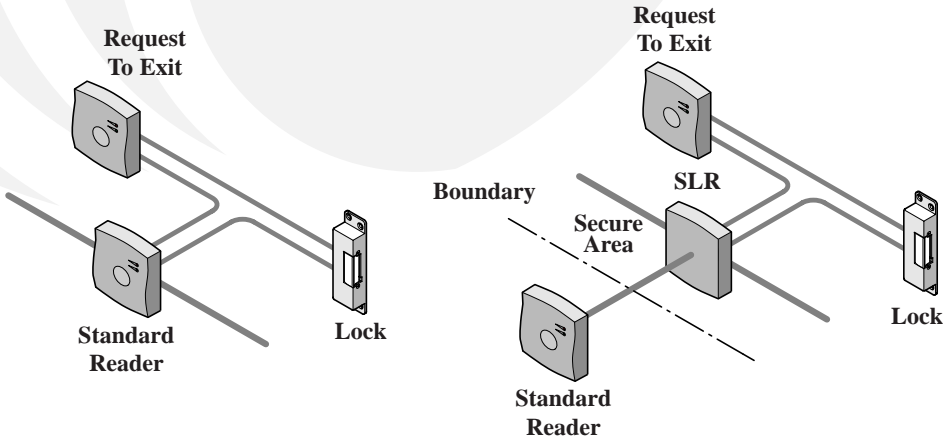


For networked systems the controller can be mounted externally, either surface or semi flush, (See page 7 for Mounting Details) or within the FTU.



There is also a desk mounted option available.

Reader Options



The system has been designed to give a maximum security option if required. The main lock wires can be contained within the secure area, with only minimal connection to the reader.

System Design Guide

Within the network option, the controller is capable of handling up to 255 devices.
The guide below will indicate how many FTU's will be required to power your network.

Item	Qty		Current (mA)		Sub - Totals
Controller	1	X	150	=	150
Reader		X	50	=	
PIN Reader		X	100	=	
RTE Unit		X	10	=	
ES350/12V		X	175	=	
ES350/24V		X	88	=	
ES100/12V		X	250	=	
ES100/12V		X	187	=	
		X		=	
		X		=	
Grand Total				=	

LOCK S

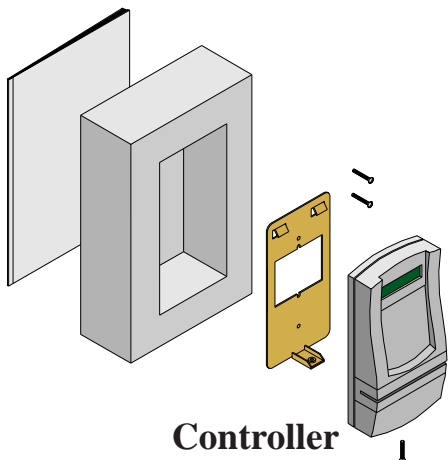
- Fill-in the quantity boxes for each item of equipment you have.
- For each item, multiply the quantity by the current to give a sub-total.
- Add all the sub-totals to give a grand total.
- Check that the grand total does not exceed 2700mA (2.7 Amps).
- If the total current exceeds this value, you must add further FTU(s) and divide the devices between these FTUs so that each FTU is within it's limits.

System Recommendations

What to do/what not to do...10 tips.

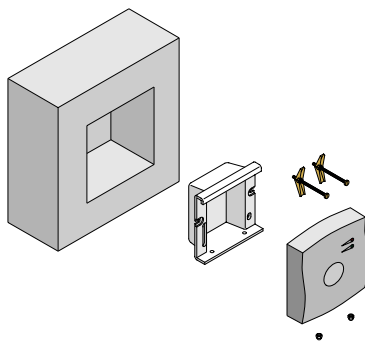
- 1. Do NOT put proximity readers too close together! This will affect the units operation, as they produce a magnetic field, these fields if placed too close together WILL INTERACT, thus the affecting the operation of the units. An acceptable distance is 30mm from each other, however if the readers are on two sides of a wall, offset them to achieve this distance.*
- 2. Ensure that the locks used are below the maximum rating for the units themselves. (See specification section). If the lock current (which is larger on start-up due to inrush current) exceeds the maximum specified, the unit will shut down to protect itself. Once excessive load has been released however the unit will recover on it's own.*
- 3. Do not remove OR add power to or from the system without having the 0v connection made first. THIS WILL DAMAGE THE UNITS!*
- 4. YOU may “mix and match” proximity readers and magnetic swipe card readers on the same system at any ratio upto up-to the maximum 255 unit total, be aware however that the code lengths should match (10 Byte data on magnetic cards).*
- 5. When fitting a reader, remember that it will NOT become active until it has been found by the system controller and received a database.*
- 6. Normal cards issued will not be recognised by the system controller if presented/swiped. ONLY management and “SUPER USER” will be recognised, unless the system controller is a member of the same group as the card being presented, i.e. if the card is for “cleaners”, in order for it to be recognised at the controller, the controller itself must be a member of the GROUP “cleaners”*
- 7. Remember that the maximum allowable data transfer distance for the system is 1.2km. if this distance is exceeded then data integrity cannot be guaranteed. If you require a distance greater than this consult Technical Support at Consilium.*
- 8. Where used, remember to seal the external VR reader with silicone sealant into the back box once fitted and configured, this will prevent ingress from moisture and prolong the life of the unit.*
- 9. Always use the correct wire insertion tool for the connectors on the rear of the units, it is not acceptable to use a screwdriver or any other tool for this operation as it will damage the connector block, and possibly the circuit board underneath.*
- 10. If you experience a large voltage drop across the system, double or triple up on the cores used, high resistance cable is good for data transfer, but not so good for power transfer. We recommend the use of high quality CAT5 twisted pair UTP or STP cable for use with the system. The more cores you use, the greater the cross sectional area of the copper and so it is easier for the current to flow over long distances.*

Unpacking Box/Contents



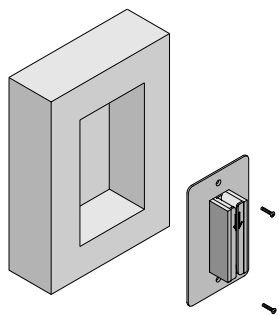
Controller

- Controller
- Screw x 1
- Instruction Booklet
- Mounting Plate
- Screw x 2



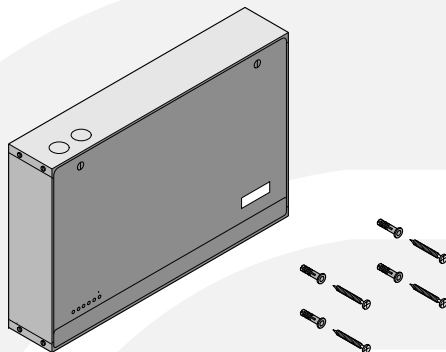
Reader/Request to Exit

- Reader/Request to Exit
- Domed Nut x 2
- Mounting Box
- Screw x 2



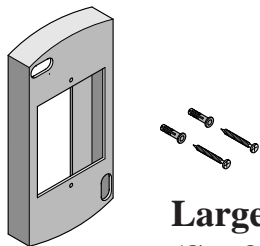
Magnetic Swipe

- Magnetic Swipe
- Screw x 2



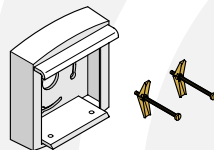
Field Termination Unit

- FTU
- Screw x 4
- Rawplug x 4



Large Housing (Surface Mounting)

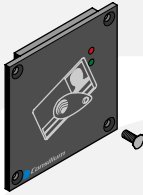
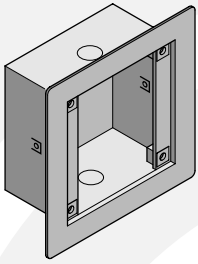
- Large Mounting Box
- Screw x 2
- Rawplug x 2



Small Housing (Surface Mounting)

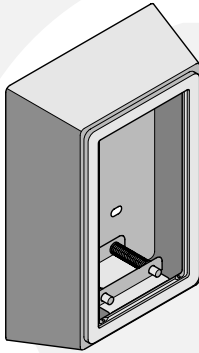
- Small Mounting Box
- Screw x 2

● Unpacking Box/Contents



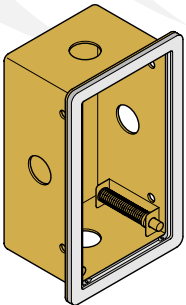
IP Rated Panel Proximity Reader

- Reader
- Mounting Box
- Screw x 4



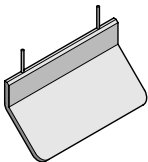
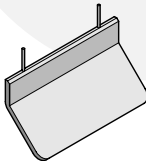
IP Rated Mag Reader with Pin & Display (Surface Mounting)

- Reader
- Large Surface Mounting Box
- Reader Release Key



IP Rated Mag Reader with Pin & Display (Flush Mounting)

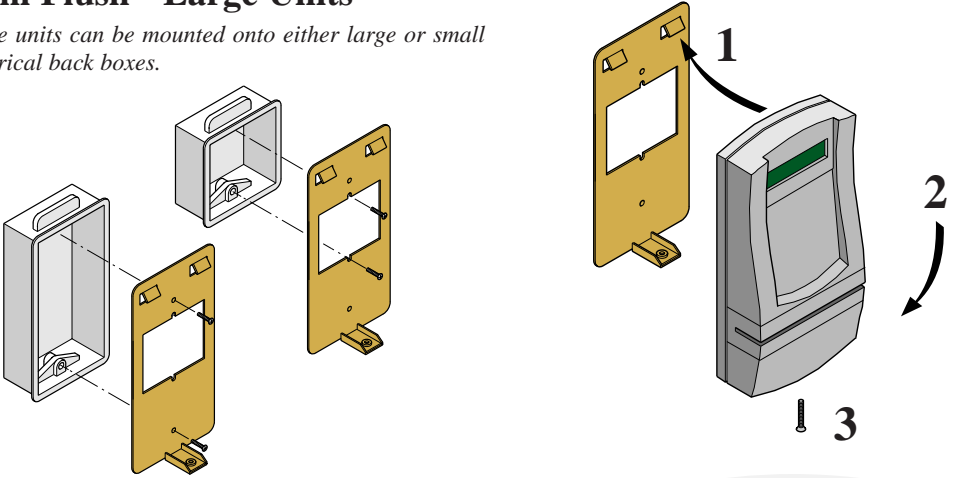
- Reader
- Large Flush Mounting Box
- Reader Release Key



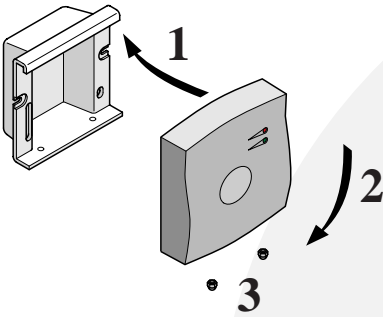
Both Controllers and Readers have been designed to be semi-flush mounted directly to the wall using standard electrical back boxes or surface mounted using Consilium's own mounting boxes.

Semi Flush - Large Units

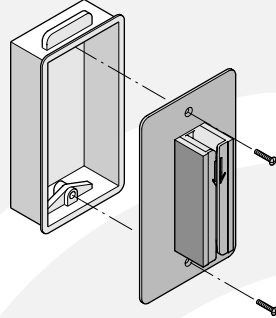
Large units can be mounted onto either large or small electrical back boxes.



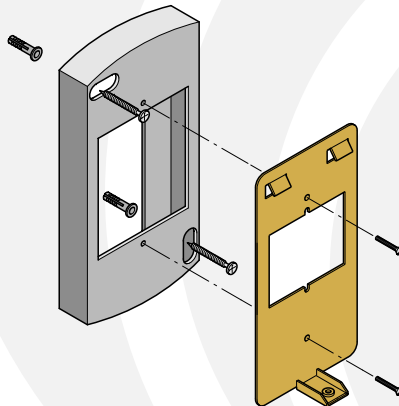
Semi Flush - Small Units



Semi Flush - Magnetic Swipe Reader



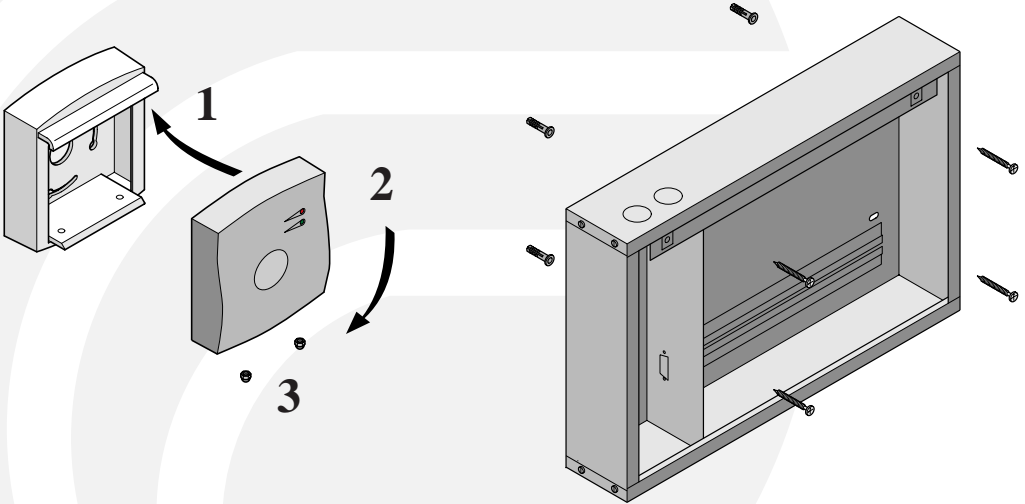
Surface Mount - Large Housing



Surface Mount - Small Housing

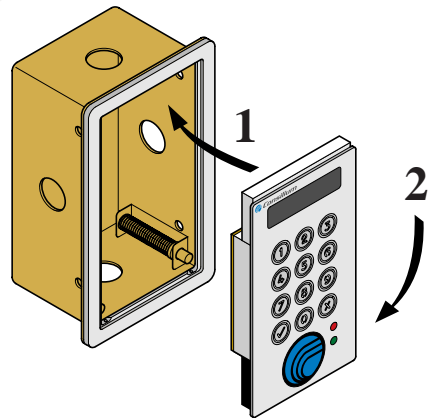
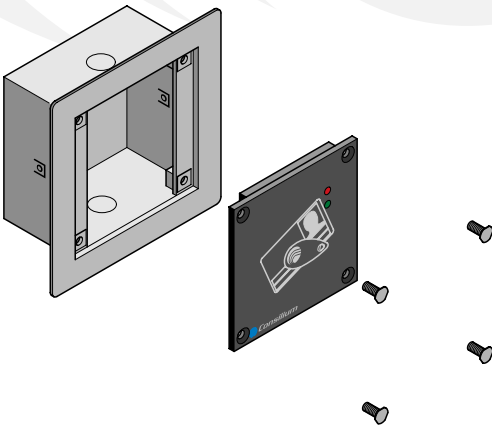
Surface Mount - FTU

The circuit board will need to be removed prior to mounting.



Mount - IP Rated Panel Proximity Reader

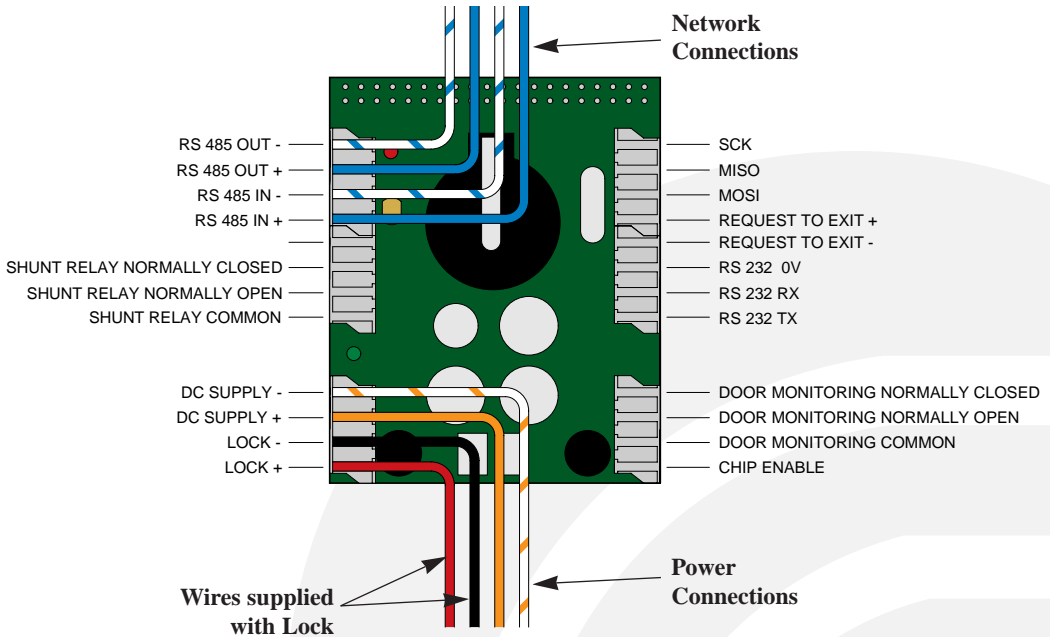
Mount - IP Rated Mag Reader with Pin & Display



NB. The reader can be released by inserting the reader release key into the 2 holes located on the underside of the mounting box frame.

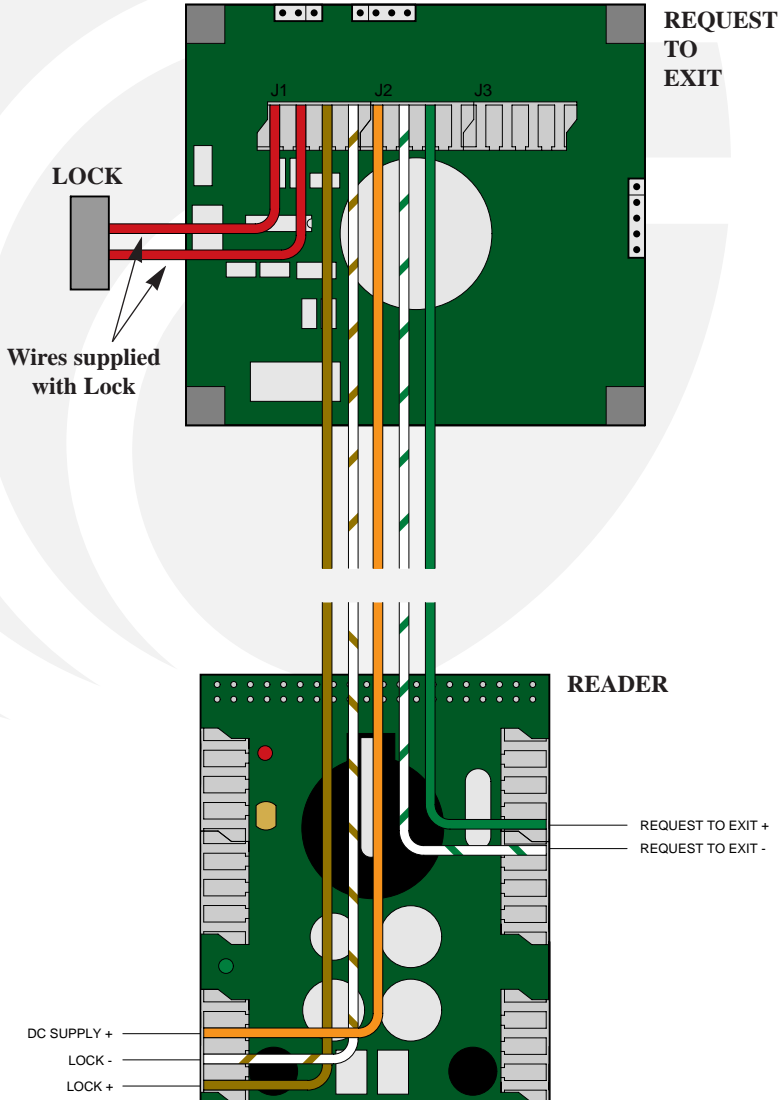
Typical Controller/Reader Connections

The diagram below shows a typical wiring board used for readers and controllers.
Use the wiring connections as required for your system.



● Connection Details

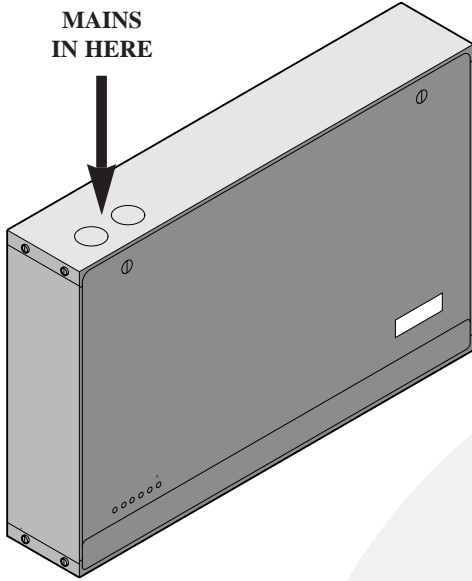
Request To Exit to Reader Connections



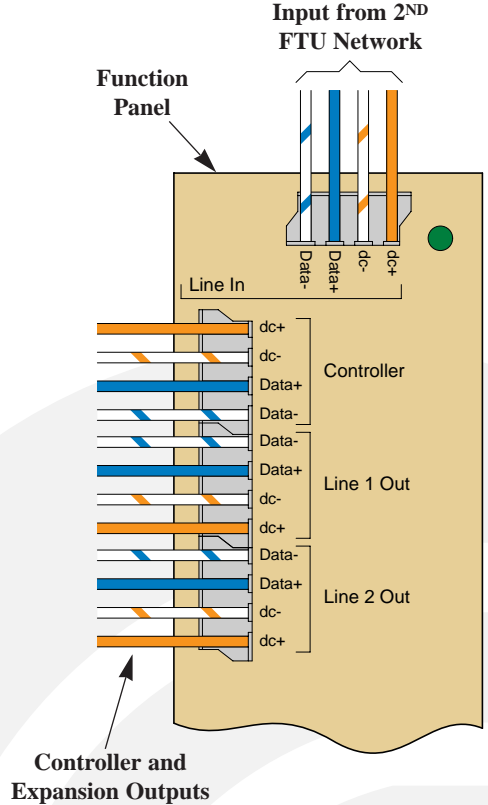
Connection Details

FTU Connections

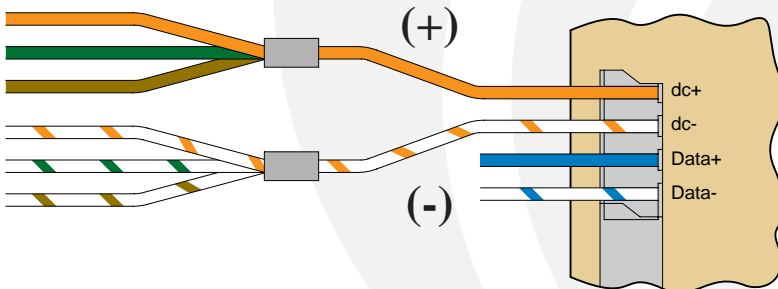
Plugs are provided for connection to a 240V or 24V power supply.



The network cabling is fed to the function panel within the FTU. There is capacity for 8 network circuits plus the controller.

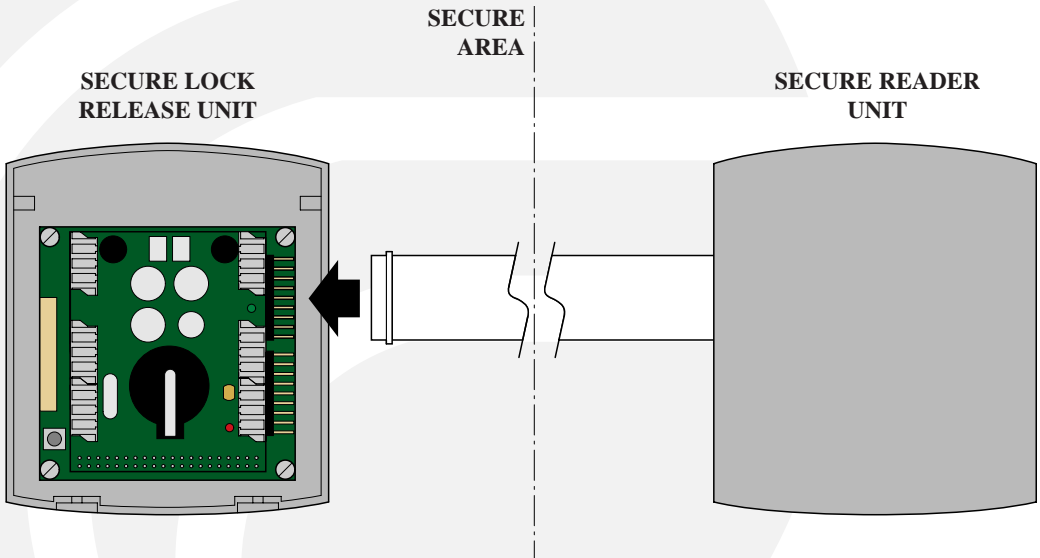


In order to increase the efficiency of signal transmission over long cable runs, use the wiring as detailed.

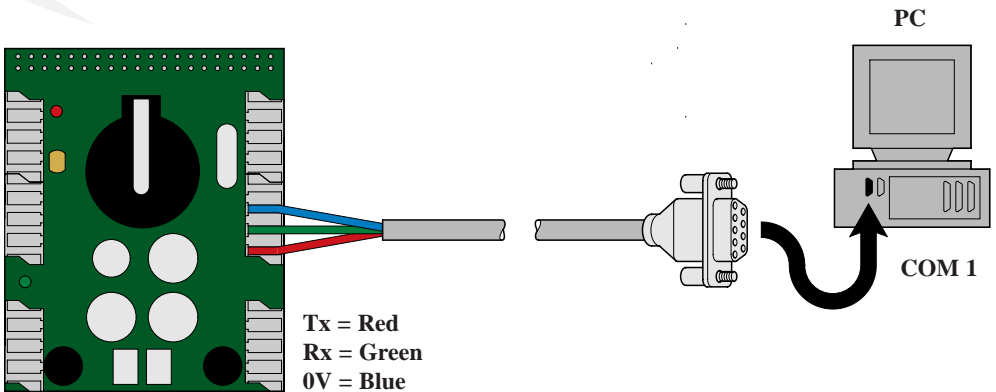


● Connection Details

Secure Reader Unit to Secure Lock Release Connections



Network Interface to PC Connection (Optional)



Using the System

To explain the use of the system, it has been broken down into 4 modules with Users, Devices and Time profiles revolving around Groups.

The example below shows an engineering business, with a number of factory workers, a small sales team and a managing director.

Users, devices and time profiles are associated to Groups to determine which user has access to which device and during which time profile.

We have setup Groups called General, Management, Sales & Production, and have shown which Users, Devices and Time profiles are associated to each Group.

The MD needs access to all areas 24 hrs a day, the sales team need access to the front door and the sales office only from 9am to 5pm, and the workforce needs access to the front door and the factory from 6am to 6pm.

GROUPS

General

Devices: 1
 Users: MD
 Sales Team
 Workers
 Time Profile: 24hrs

Management

Devices: 2, 3, 4
 Users: MD
 Time Profile: 24hrs

Sales

Devices: 3
 Users: Sales Team
 Time Profile: Working Day

Production

Devices: 2
 Users: Workers
 Time Profile: Prod. Time

USERS



MD




Sales Team




Workers

member of: 

General Management

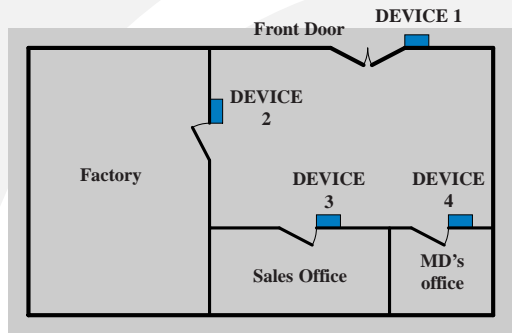
member of: 

General Sales

member of: 

General Production

DEVICES



TIME PROFILES



Working Day
(9am - 5pm)



24 hrs
(24 hrs)



Prod. Time
(6am - 6pm)

Using the System

Adding a new user



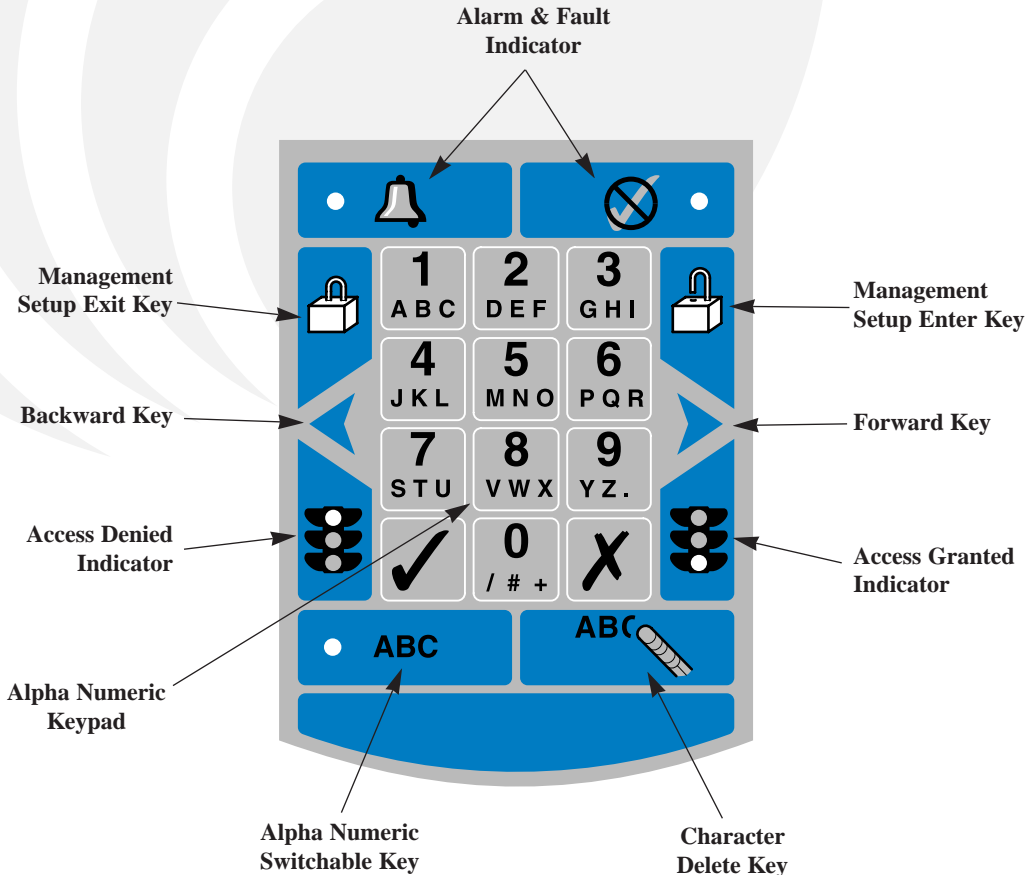
Tea Boy

member of:
General
Sales
Production



To add a new user to the system we need to determine which areas he needs access to, and at what times. So our “Tea Boy” will need access to the front door, the factory and the sales office, but not the MD’s office. He will therefore need to be a member of the General group, for access to the front door 24 hrs, the Sales group for access to the sales office between 9am and 5pm, and to the Production group for access to the Factory between 6am and 6pm.

Keypad



System Power up

When the power is switched on the unit you will see momentarily the following display

Consilium
Security Systems

Then the following message is displayed

Sat. 01 Jan 2000
00:00

To enter the management setup commands press this button on the keypad



You will then receive a message asking you for your management key as follows

Management
Key Required

Then either swipe your super users card or your super users job then you will receive the following Message

Access Granted
Super User

Do you want to ?
Set Time & Date

From this command by pressing the following keys on the keypad you can scroll through the Management commands Forward, Backwards



To exit at any time from the management section just press this button on the keypad



Management Commands - Setup Time & Date

◀ Do you want to ?
Set Time & Date ▶



Do you want to ?
Set System Time



Enter New Time
00:00:00



Clock
Changed

Do you want to ?
Set System Date



Enter New Date
00/00/00



Enter Day(1=Sun)
Current Day = 7

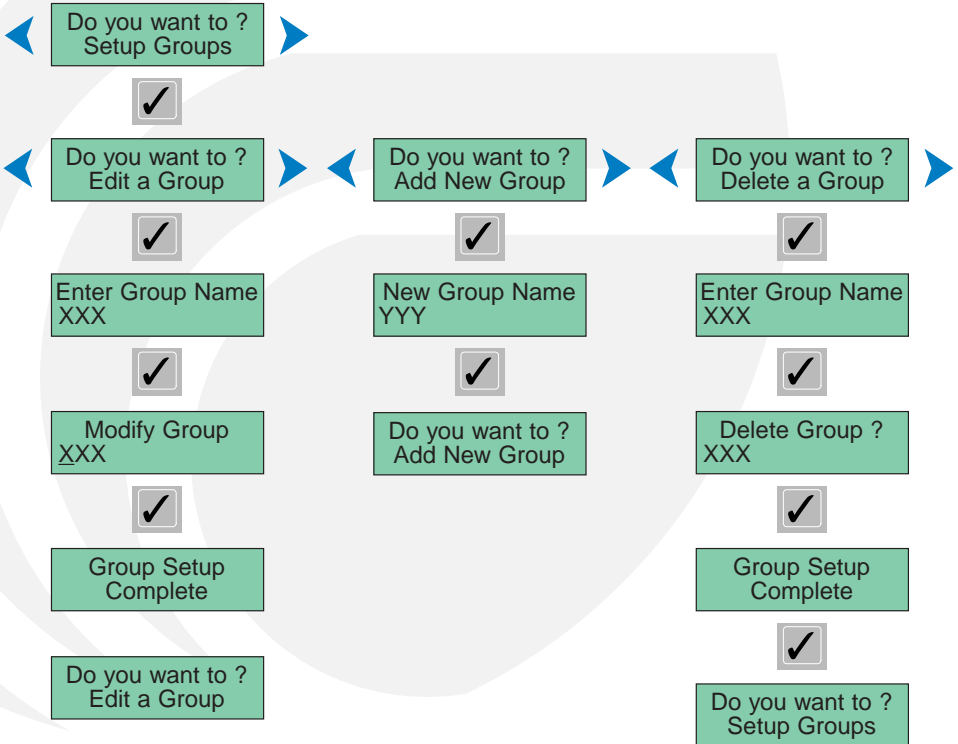


Clock
Changed

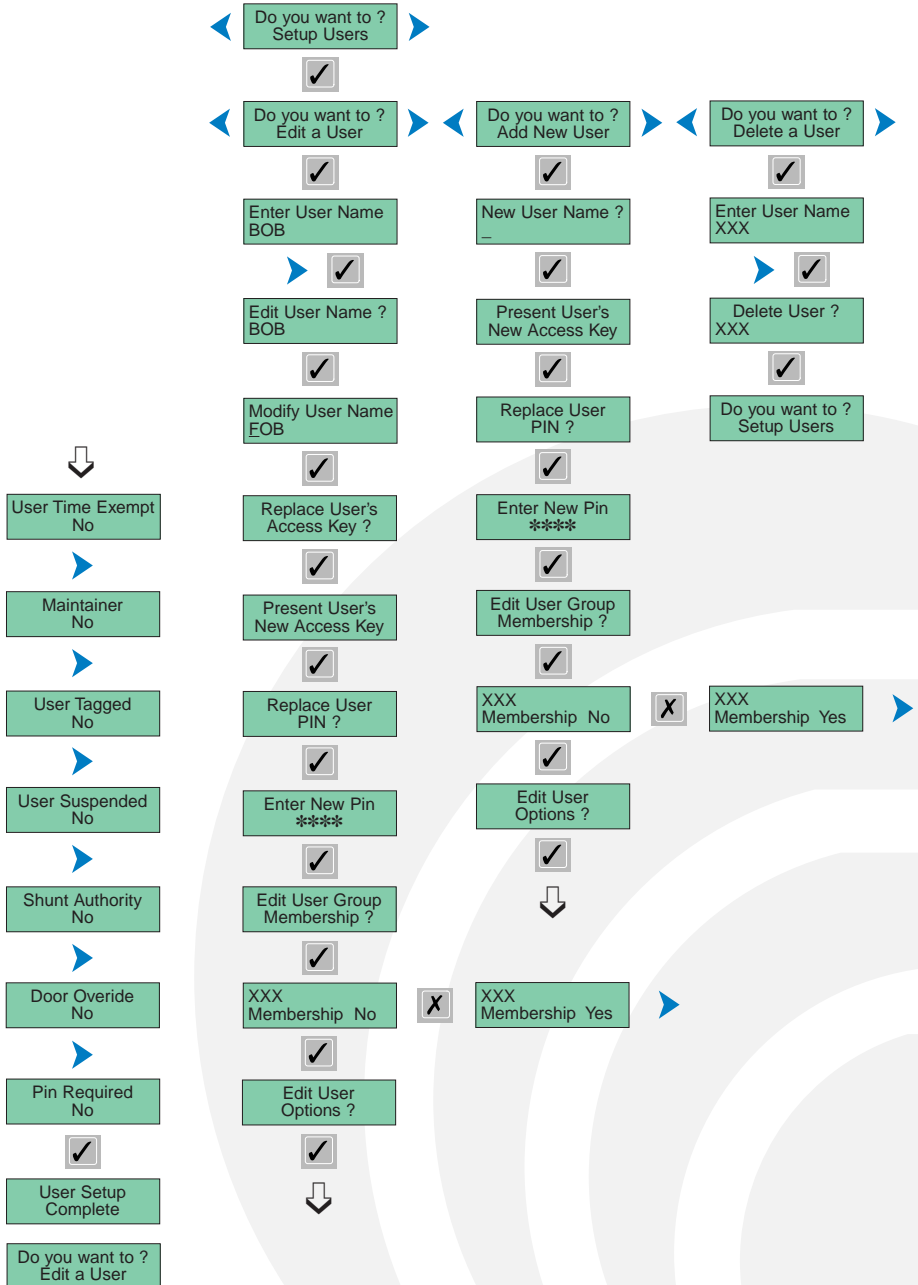
Do you want to ?
Set System Time

Using the System

Management Commands - Setup Groups

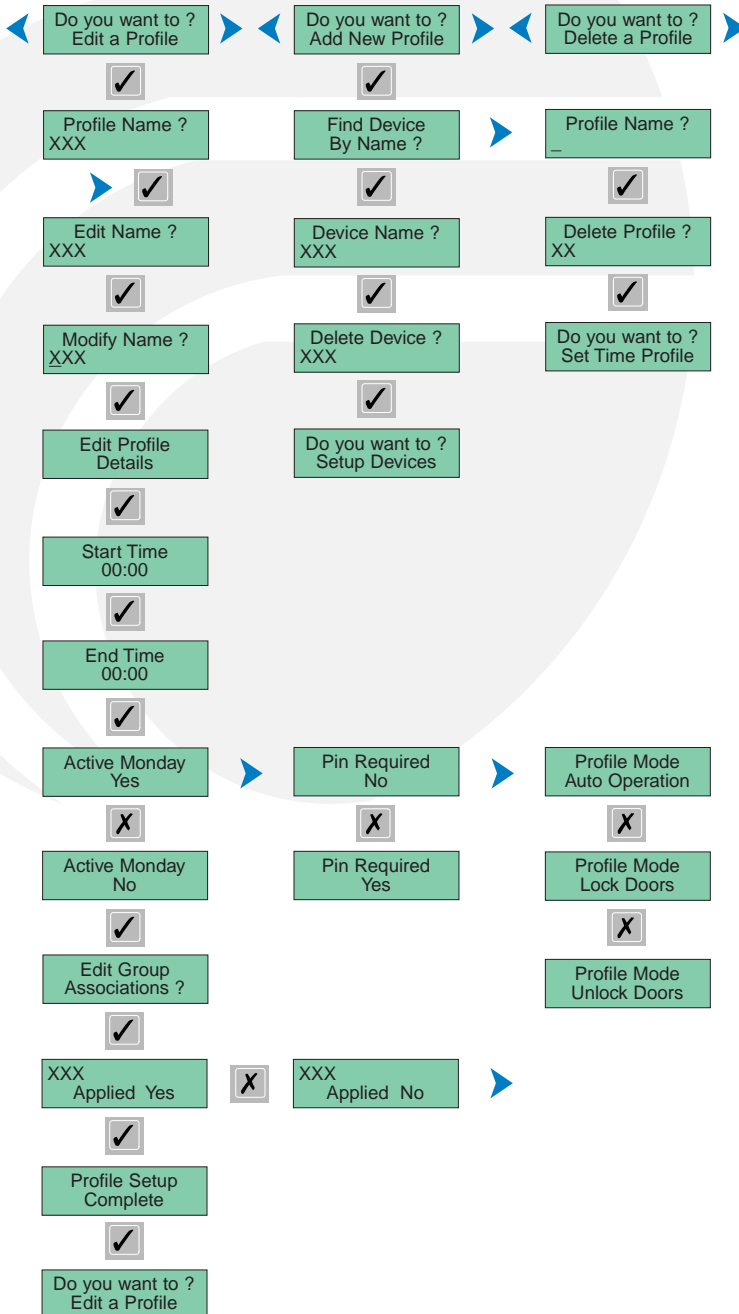


Management Commands - Setup Users

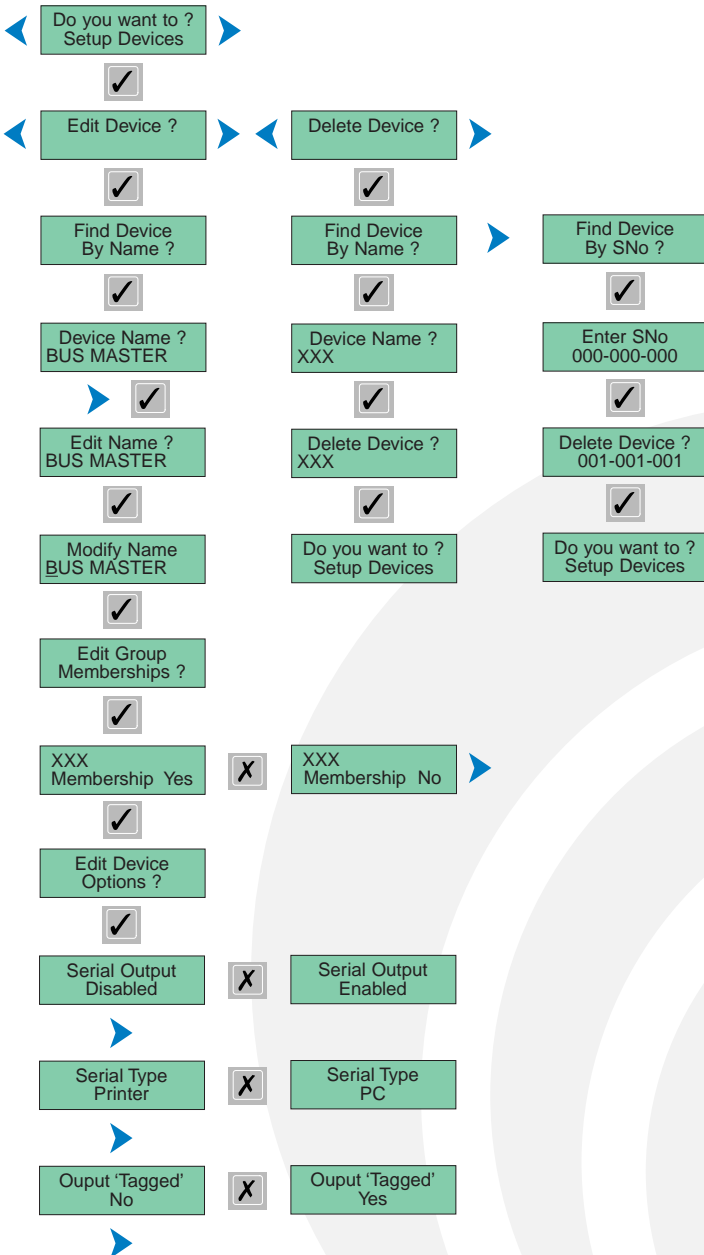


Using the System

Management Commands - Setting Up Time Profiles



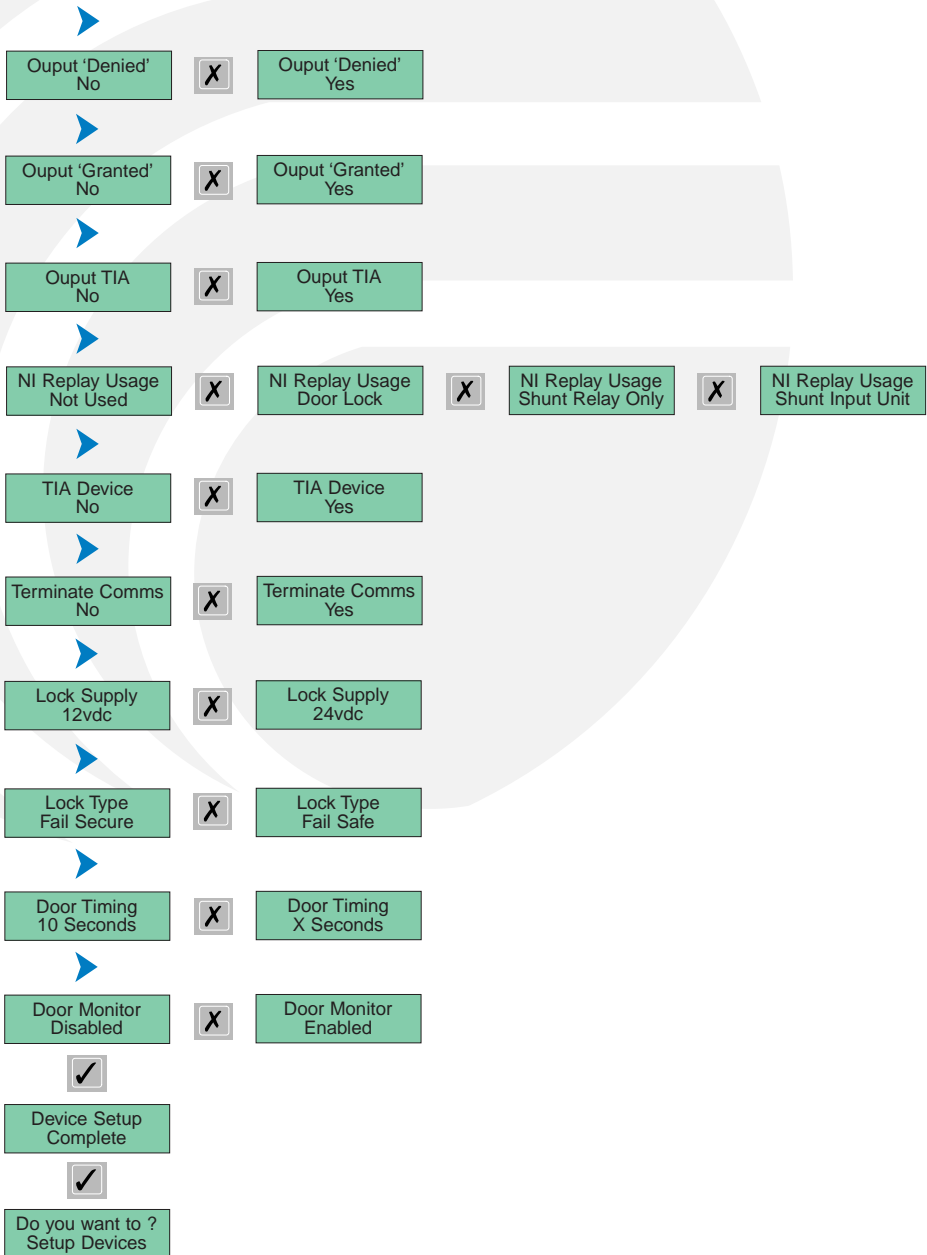
Management Commands - Setting Up Devices



.....continued

Using the System

Management Commands - Setting Up Devices



Below is a list of all the equipment and spares available within the EasiAxxess range.

Part Number	Description
ACCM-UN	MAGNETIC SWIPE CONTROLLER
ACCP-UN	PROXIMITY CONTROLLER
ACFTU	FIELD TERMINATION UNIT
ACPR-UN	PLASTIC HOUSED PROXIMITY READER
ACPR-NN	PLASTIC HOUSED READER - NO NETWORKING
ACPR-PD-UN	PLASTIC HOUSED READER WITH PIN & DISPLAY
ACPR-PD-NN	PLASTIC HOUSED READER WITH PIN & DISPLAY - NO NETWORKING
ACMR-UN	MAGNETIC SWIPE READER
ACMR-NN	MAGNETIC SWIPE READER - NO NETWORKING
ACPR-V-UN	IP RATED PROXIMITY READER
ACPR-V-NN	IP RATED PROXIMITY READER - NO NETWORKING
ACPR-VPD-UN	IP RATED READER WITH PIN & DISPLAY
ACPR-VPD-NN	IP RATED PROXIMITY READER WITH PIN & DISPLAY - NO NETWORKING
ACPR-VRD-UN	IP RATED MAG READER WITH PIN & DISPLAY
ACPR-VRD-NN	IP RATED MAG READER WITH PIN & DISPLAY - NO NETWORKING
ACPR-VPL-UN	IP RATED PANEL PROXIMITY READER
ACPR-VPL-NN	IP RATED PANEL PROXIMITY READER - NO NETWORKING
ACRTE	REQUEST TO EXIT UNIT
ACSLU	SECURE LOCK RELEASE UNIT
ACSLU-RTE	SECURE LOCK RELEASE UNIT C/W RTE
ACLSM	LARGE SURFACE MOUNT BOX
ACSSM	SMALL SURFACE MOUNT BOX
ACEMT	PROXIMITY TOKEN
ACMC	MAGNETIC CARD
ACEMC	PROXIMITY CARD
ACSI	SERIAL INTERFACE UNIT
ACTT	TERMINATION TOOL
ACPU	PALMTOP PROGRAMMING UNIT
ACCSW	MS WINDOWS CONFIGURATION SOFTWARE
ACCSW-CE	MS WINDOWS CE CONFIGURATION SOFTWARE
ACLSW	MS WINDOWS LOGGING SOFTWARE
ACTSW	MS WINDOWS TIME IN ATTENDANCE SOFTWARE
XXXX	DESKTOP MOUNTING BOX
Spares / Exchange	
STD128	UNICON STANDARD 128k
ACNI485	UNET NETWORK INTERFACE
ACNI-BM-UN	UNET BUS MASTER NETWORK INTERFACE
ACP	PROXIMITY PCB + COIL
ACSMR	MAGNETIC CARD READER ASSEMBLY
ACLCD16X2	16 X 2 LCD DISPLAY
ACLB	LARGE WALL MOUNTING BRACKET
ACSB	SMALL WALL MOUNTING BRACKET

Troubleshooting

In the unlikely event that you do experience any problems with the EasiAcess system, this section is intended to help you diagnose in the first instance what might be wrong.

You can tell a lot about the system status from both the Controller display (it is programmed to tell you as far as it can what is wrong on the system to save you time and energy), as well as observing the LED (red and green lights on the units on the system).

SYSTEM POWER.

Always firstly check that there is sufficient power to all the units on the system, see page XXX, but a good indicator that you do have power to the units is: -

At the rear of all the EasiAcess units there is a power OK LED.....a small green light next to the mounting holes on the back of the units electronics, with the unit off the wall, this is clearly visible and should be brightly lit, if not check that the connections are good and no fuses have blown at the power supply.

POWER “RAMPING”.

If the power supply chosen is insufficient to “cold start” the system, i.e. it does not have enough power to start all the readers and locks at the same time, you may see what is called “SUPPLY RAMPING”, this is only visible on switch mode power supplies.

What you will see is when the system is powered on for the first time, say following a power cut, the readers red LED's on the front of the unit will flash rapidly.

This is the unit trying to start, but is being turned on and off in quick succession by the ramp effect of the supply.

This should not damage the units, as they are protected against this, but they should not be exposed to it for too long.

ACTION: -

At the FTU you will have a number of supply lines marked d.c. + running the power to the readers on the system. Lift off the d.c. + lines one by one until the ramping stops., then you can put them back again one at a time, and the system will power up properly.






NOTE: - ENSURE THAT THE DC (-) IS ALWAYS CONNECTED AS DAMAGE WILL RESULT TO THE SYSTEM IF NOT.

Also

That this state will ONLY occur if the power supply is not sufficient to cold start the system.

The following is a basic guide to the patterns you will expect to see.

LED PATTERN DIAGRAM: -

<i>NO LIGHTS</i>		<i>SWITCHED OFF!</i>
<i>BOTH ON SOLID</i>		<i>RESET</i>
<i>BOTH FLASHING</i>		<i>WAITING FOR NETWORK</i>
<i>RED ON</i>		<i>NORMAL (DOOR LOCKED)</i>
<i>RED FLASHING</i>		<i>DOWNLOADING DATABASE (FAST) OR BLANK (SLOW)</i>

Troubleshooting

“NO RESPONSE” (SHOWN AT CONTROLLER).

Action: reset individual unit, then controller.

COMMUNICATIONS ERROR “NO NETWORK”

Possible Causes: -

CABLE BREAK SOMEWHERE ON SYSTEM

POOR CONTACT ON THE DATA BUS CONNECTORS
(485+ AND 485-) at the controller or the FTU.

Action: - check and remake connections.

Reset system controller.

DOWNLOADING: -

The download is shown at the controller as “updating Dbase access suspended”, and after a few seconds you will see the red traffic light on the left hand side of the controller keypad flash at a rate of about once a second, also any other devices on the system will mimic this flashing at the same rate, which shows they are getting the Database download from the controller. This will usually take about 60 seconds to update the system, irrespective of the number of devices.

SLOW DOWNLOAD: -

When you change the system configuration, the controller distributes the changes to all of the devices on the system, if the red traffic light on the controller keypad is flashing slowly, it is probable that there is a device on the system that isn't responding to the controller.

Action:

One the download has finished, you will see a solid red traffic light on the controller keypad. If there is no error message such as “NO RESPONSE SERVICE DOOR”, then check the devices for their polling LED, this is on the rear of the unit, and to do this you will have to remove the unit from the wall. The polling (red) LED on the back of the unit, should be flashing in the following sequence

ON.... PAUSE.... ON BRIGHT...ON...OFF...and cycle like this round and round.

If the units polling LED is not flashing in this manner, then reset the unit, if it fails to come on-line then reset the controller.

If you do experience any problems with EasiAcess equipment, that you cannot solve by the above, please email techsupport@consilium.co.uk.

- *Maximum of 255 readers on the system = maximum of 255 doors.*
- *1.2km maximum data transport length.*
- *1A Max. Lock supply current from each reader on the system @ 12v.d.c. / 24v.d.c. with over current protection.(subject to overall power supply current capabilities, and allowing for voltage drops over long distance cables).*
- *Device supply 12v.d.c. to 36v.d.c. @ 85 to 100mA.*
- *On-board 2A auxiliary relay.*
- *Power and communication status indicators*
- *Read range of passive tokens upto 80mm, subject to environmental conditions.*
- *Remote data termination*
- *Plug and Play.*
- *No jumpers or DIP switches to set.*
- *Name based references.*
- *Menu or PC based configuration.*
- *Each device has it's own unique serial number programmed at manufacture.*
- *Photosensitive tamper alarm output. Disables door access in the event of device being tampered with.*
- *Real time SPI clock Y2k compliant to 2100 A.D. with battery back-up.*
- *Printer output from any point on the system.*

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