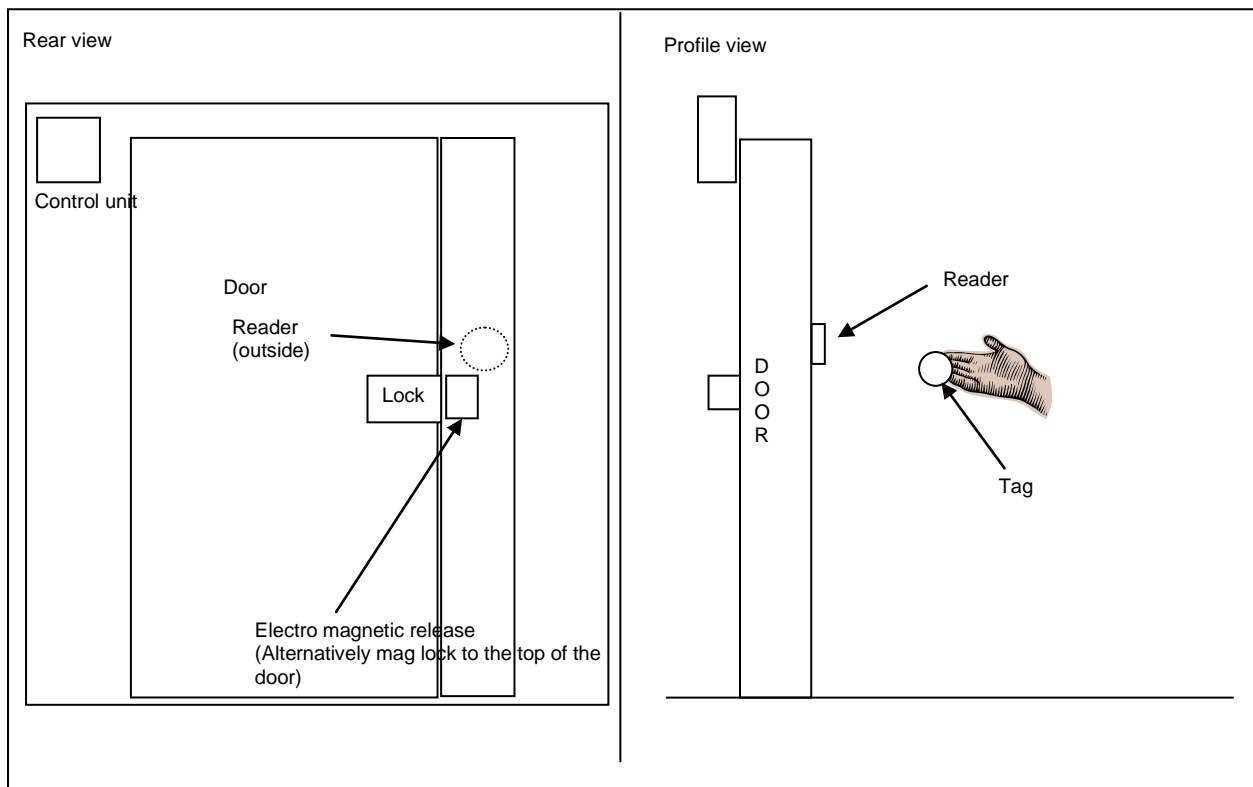


SETTING UP THE STAND ALONE SYSTEM

The installed SYSTEM comprises of:

- A control unit on each door (plus a 12V DC supply)
- A reader on each door.
- A master tag.
- A number of user tags.
- A lock (a variety of electro mechanical or magnetic locks can be specified when ordering).



If a number of doors are to be controlled each door can have its own **Master TAG** or all doors can utilise the same **Master TAG**; this needs to be specified before setting up.

The **Master TAG(s)** for any system will not operate as a user tag. The **Master TAG** should be stored by the system administrator and only be used for setting up the system and for any subsequent changes. If the master tag is lost **Access Control Direct (ACD)** should be contacted.

The first Tag presented to a reader following set up will become the master Tag for that unit, this Tag should be labelled accordingly and stored safely for future use. In some cases, if agreed before despatch, this Master Tag will have been generated by ACD and the unit set up.

The stand alone unit allows the following functions to be managed at the unit:

1. Specifying which user **TAGs** can operate which doors.
2. How long the door lock will be released after the **TAG** has been presented.
3. Removing a user **TAG** access from a door
4. Removing all user **TAGs** accessing a door
5. Fail open or fail closed operation (Fail safe or fail secure lock)

It is recommended that administrators should fully familiarise themselves with the use of the unit by reading this document fully and by undertaking all the operations contained herein before setting the unit up. A summary is included in appendix 1.

Please contact **ACD** if you are unsure of any aspect of the system.

1 General terminology:

TAG – A plastic contactless “key”, each one has a unique number stored electronically within it. In normal use it is virtually indestructible.

Master TAG – The tag which is used to change any parameters at the control box.

Standby Mode – The normal status of the control unit.

Add Mode – A mode whereby the control unit status has been changed, from that of **Standby**, to a mode to allow the administrator to add user **TAGs** which are able to release the lock attached to the unit. If the tag is authorised to release the lock on a door it is termed “**enabled**”.

Slot Number – Each door control unit has the potential to remember the identity of 999 tags. Each **TAG** which is enabled at a door will be assigned a **slot number** on that door. This **slot number** may be different on different doors. The **slot number** is not the unique electronic number of the **TAG**.

Delete Mode – A mode whereby the control unit status has been changed, from **Standby**, to a mode which allows the administrator to delete **TAGs** which have previously been **enabled**. A deleted **TAG** will be **Denied** access at the door controlled by that unit. Once deleted the **Slot number** that was occupied by a **TAG** will become available for other **TAGs**.

Release time - The period of time for which the lock on the door will remain open after an **enabled TAG** has been presented to the antenna.

LED – The red display panel on the control unit

In normal operation the control unit is in **Standby mode**. In this mode the LED is blank with a red dot flashing approximately every 3 seconds.

2 Administering the system

It is recommended the sheet attached (appendix 2) is maintained, by the system administrator, to keep a record of which personnel have access at which door.

To manage **TAG** access, the following actions need to be undertaken by the administrator. To carry out these tasks the administrator should be able to see the LED display on the doors control unit whilst presenting tags to the antenna. In installations where access to the control box and the antenna at the same time is not possible, please contact **ACD**.

To “present” a **TAG** to the antenna, the **TAG** should be held within 30mm of the antenna.

2.1 ADDING A TAG – (ADD mode)

- Briefly (less than 2 seconds) present the **master TAG** to the reader and then remove it.
- Confirm the LED has the word “ADD” displayed, to confirm it is in add mode.
- Within 5 seconds present a user **TAG**, to be **enabled**, to the reader.
- The display will show the “**slot number**” assigned to that tag on that door.
- Further tags can be added if presented within 5 seconds of the previous tag.
- The control unit will return to Standby mode if a tag is not presented within 5 seconds.

Notes:

Slot 0 is not a user slot, it is utilised by the master tag, this slot can not be deleted in **DELETE mode**.

In **Standby mode**, when the **Master TAG** is presented to the reader, the control box **LED** will display the number of user **TAGs** which are enabled on that unit.

Once the unit has returned to **Standby mode**, when an **enabled TAG** is presented to the antenna it will release the attached lock for the time specified in “**t mode**”. Whilst a user **TAG** is presented the LED, the control unit will display the slot number of that **TAG**.

2.2 Deleting a tag – (DELETE mode)

- Briefly present the **master TAG** to the reader and remove it to go to **ADD mode**
- Within 4 seconds present any user **TAG** to the reader and remove it, then **immediately**, (within 0.5 seconds) present the **master TAG** to the reader. The LED will display the message “DEL”, remove the **master TAG** (do not leave presented for more than 2 seconds) The LED display will progressively scroll through the numbers of the **TAGs enabled** on that unit.
- When the **slot number** of the **TAG** to be **deleted** is visible, present the **master TAG** to the antenna **and** hold it there.

- The **slot number** will flash for approximately 5 seconds and then go blank.
- Remove the **master TAG**, the unit will revert to **standby mode**.
- The user **TAG** whose slot number was deleted will no longer be **enabled** at that door.

Notes:

The numbers will scroll through twice if the **Master TAG** is not presented to the reader during the scrolling.

For control units where there are more than 10 **TAGS** enabled please see appendix 3 for a fuller explanation of **Delete mode**.

2.3 Setup mode

In addition to **Standby**, **ADD** and **DELETE** modes there is one further mode which is used – **SETUP mode**.

SETUP mode is only used for:

2.3.1 Deleting all tags (excluding the master tag) from that control unit (**d.ALL mode**)

2.3.2 Changing the time for which the release is operated (**t mode**)

2.3.3 Changing the configuration (active output state) of the lock (**A mode**) – This will only need to be set up at installation or when the lock type is changed see appendix 4.

To enter **SETUP mode**

- Briefly present the **master TAG** to the unit to go to **ADD mode**
- Within 4 seconds present any user **TAG** to the antenna and remove, then immediately, within 0.5 seconds, present the **master TAG** to the antenna.
- The LED will display the message “DEL”, do not remove the **master TAG**, leave it presented for ~ 5 seconds, until “etc” is displayed
- Withdraw the **Master TAG**,
- The display will scroll through the 3 options, **d.ALL**, **t** and **A mode**.
- After **A** is displayed “on”, “off” or “tog” will be displayed this should not normally require changing after installation.
- After **t** is displayed a value 0.1 to 120 will be displayed, this is the period of time for which the release will be operated.

2.3.1 To delete all tags (**d.All mode**)

- After **etc** is displayed as above, when **d.All** is displayed present the **Master TAG** to the antenna and hold for 5 seconds until the display goes blank.
- Remove the **Master TAG** from the display
- All user **TAGs** will have been deleted
- Individual user **TAGs** can then be enabled again by adding a **TAG** in **ADD mode**.

2.3.2 To change the door release time (**t mode**)

- After **etc** is displayed as above (**setup mode**), when the display scrolls to **t** present the **Master TAG** to the reader, then remove it. The time will scroll, when the desired time is displayed present the master Tag for 5 secs until the display goes blank, that time has now been stored
- Remove the **Master TAG** from the antenna

Notes,

In set up mode the scrolling only takes place once, if an option is not actioned the unit will revert to **standby** mode

After changes are made in **setup** mode, the unit returns automatically to standby mode with any changes input by the administrator.

Appendix 1

	Display
Standby Mode	Blank/flashing dot
ADD mode	
Present Master TAG for ~1 sec	"No of tags enabled"
Remove Master TAG	"ADD"
Present tags to be added	"1 to 999"
Delete mode	
Present Master TAG for ~1 sec	"No of tags enabled"
Remove Master TAG	"ADD"
Present any user tag & remove	"Slot No"
Immediately present Master TAG	"Del"
Remove Master TAG within 2 secs	"Scrolls through allocated slots"
Present Master TAG when no to be deleted is displayed	"Slot no flashing"
Remove Master TAG when flashing stops	"Blank/flashing dot"
Setup Mode	
Present Master TAG for ~1 sec	"No of tags enabled"
Remove Master TAG	"ADD"
Present any user tag & remove	"Slot No"
Immediately present Master TAG	"Del"
Hold Master Tag for ~5 secs	"etc"
Remove Master TAG	"Scrolls D.All, A (state) t (value)"

	Display
d.All Mode (delete all)	
When "d.All" displayed present Master TAG	d.All (flashing)
Hold in place ~5 secs	Blank
Remove	Standby mode

	t mode (door release time)	Display
When "t" displayed present Master TAG		"current t set"
Remove Tag		Time scrolls
Present tag at desired time for 5 secs		"t to be set"



Door ID (Example)

Appendix 2

		Door									
Tag No & Owner	No	Name	Main Entr	Sales	Accounts	etc	
	1	A									
	2	B									
	3	C									
	4	D									
	5	E									
	6	F									
	7	G									
	8	H									
	9	I									
	10	J									
	11	K									
	12	L									
	13	M									
	14	N									
	15	O									
	16	P									
	17	Q									
	18	R									
	19	S									
	20	T									
	21	U									
	22	V									
	23	W									
	24	X									
	25	Y									
	26	Z									

Appendix 3

The control unit has a capacity for 999 tags, each Tag occupies a slot number on the control unit To allow any Tag to be deleted, the digits of the index are set individually.

After entering delete mode, one digits will cycle, restarting at zero each time through the cycle; Which digit cycles first, depends on the highest occupied within the unit.

The Master is used to, to change which digit cycles, set-up each digit in turn, and finally, to de-register the Tag at the selected slot number.

When the Master is presented to the reader the cycling stops and the digit that was cycling starts flashing.

If the Master continues to be presented for about half a second, the flashing will move on to the next digit (in a clockwise fashion, ie hundreds to tens to units and back to hundreds), indicating the digit that will cycle next when the Master is withdrawn.

If the Master continues to be presented, all illuminated digits will start flashing and after a total of 5 seconds, the display will go blank and the Tag at the index flashing will be de-registered. Withdraw the Master; the controller returns to normal mode.

If any digit is allowed to cycle completely twice without the Master being presented, the controller will return automatically, and harmlessly, to normal mode. A Tag can be de-registered only if the Master is presented continuously for 5 seconds.

During each cycle, the display will always cycle through zero. Even though this isn't always necessary to create a valid index, it is a visual aid. Zero is not a valid Tag index. If you try to de-register from an empty index, or index 0, nothing will happen. One display digit will flash while the Master is presented and the controller will alternate the flashing digit, indefinitely.

Example – To delete tag 234

Action	Display
- Enter Delete mode	The “hundred” digit will cycle
- Present master when digit 2 is displayed	2 starts flashing
- Remove master within a second	The “ten” digit will cycle
- Present master when 3 is displayed	3 starts flashing
- Remove master within a second	The “unit” digit will cycle
- Present master when 4 is displayed	4 starts flashing
- Continue presenting master	234 starts flashing
- Hold for 5 seconds	Display stops

234 is deleted

Appendix 4

Active Output State

The base unit can be configured to drive a wide range of locking and control systems. It has 3 selectable active output states: “on”, “off”, and “tog”, which can be used to change the behaviour of the “Lock” output when an authorised tag is presented.

Active Output State	Example use
---------------------	-------------

on	Fail secure release (lock is “locked” when power off)
----	-------------------------------------------------------

off	Fail safe release / maglock (lock is “open” when power off)
-----	-------------------------------------------------------------

tog – the output toggles each time a Tag is presented Barrier systems, shutters, gates, etc.

Example: To make the base unit output toggle each time a *Tag* is presented: Enter Setup mode and wait until the display shows “A”. Re-present the Master; the display starts flashing and changes to show the currently selected active output state. Withdraw the Master. Wait until the display shows “tog”, and then re-present the Master; the display will flash “tog”. Continue to present the Master for 5 seconds, after which the display goes blank and the “tog” setting is saved. Withdraw the Master; the controller returns to normal mode.

NOTE: If the Active Output State has been set to “tog”, the Active Output Time is ignore