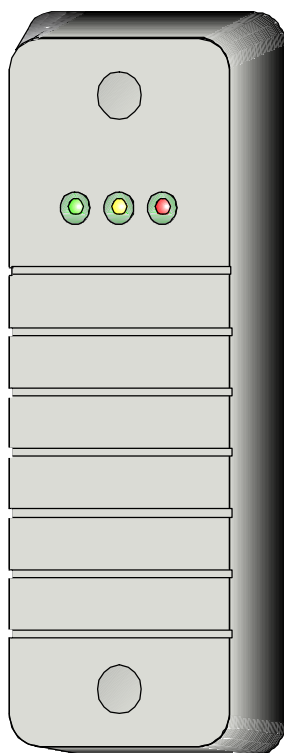




Access Control Products



Microtag 100 Mullion Reader User Manual

Version A1 July '01

Microtag 100

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1. GENERAL INFORMATION

1.1 DESCRIPTION

Microtag 100M is a highly integrated stand-alone proximity access control reader and controller for up to 100 users. Microtag 100M is easily programmable on site using the master Token provided. Microtag 100M is fully potted against the ingress of moisture, and is therefore suitable for use outdoors. The narrow profile of the Microtag 100M makes it particularly suitable for mullion mounting. Microtag 100 though simple in operation, provides many advanced features, normally associated with much larger systems.

1.2 APPLICATIONS

The Microtag 100M is primarily intended for access control applications. Its custom software is designed for ease of use, and provides a wide range of features. Microtag 100M is ideally suited as a...

- * DOOR ENTRANCE ACCESS SYSTEM
- * CAR PARK ACCESS SYSTEM
- * KEYPAD/ZONE SHUNT FOR ALARM SYSTEMS
- * AIR-LOCK ACCESS SYSTEM
- * LIFT USER ACCESS SYSTEM.

Microtag 100M is housed in a durable ABS enclosure. The unit is fully potted against the ingress of moisture. The unit is designed to be surface mounted, the narrow profile making it particularly suitable for mullion fitting.

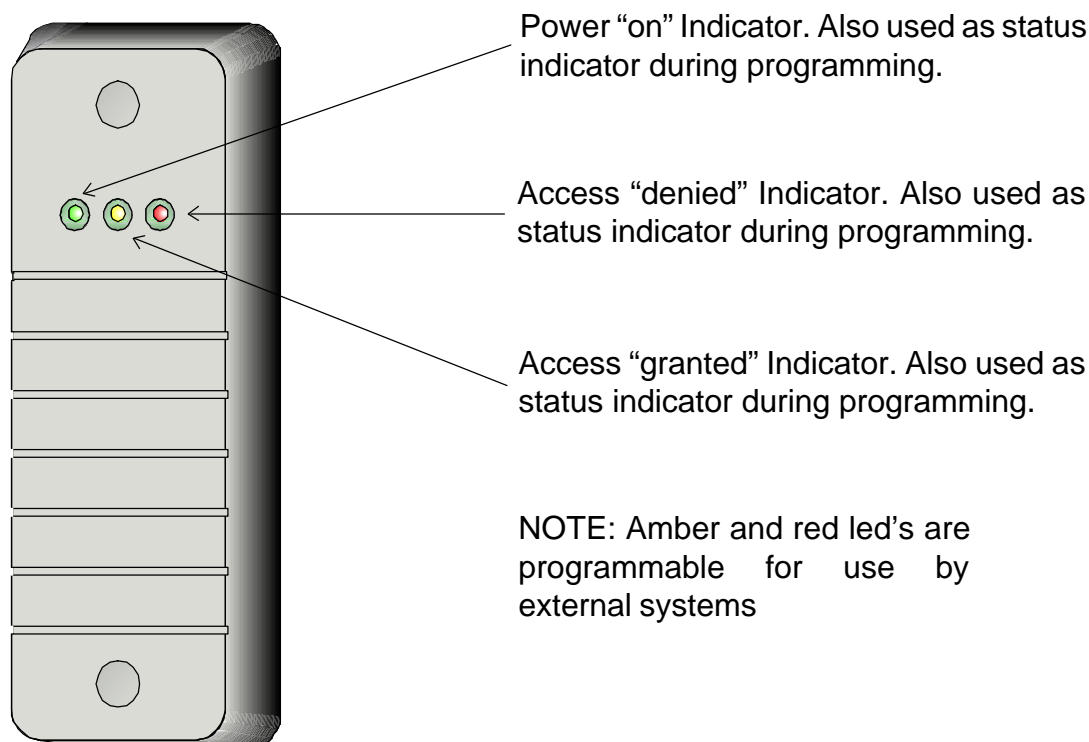
1.3 CARDS/TAGS (TOKENS)

Microtag 100M can accommodate up to 100 proximity Cards/Tags (Tokens), a MASTER (Programming) Token is provided with the unit. Any Token may be assigned to operate any combination of three programmable outputs. Any Token may be assigned to an external timer (time slot), or may be assigned temporary status (remains valid for 24 hours). The MASTER (Programming) Token is the only device that allows access to the programming functions. The USER TOKEN can only operate the system. All Tokens can be changed at any time by using the MASTER (Programming) Token.

1.4 PROGRAMMING

Microtag 100M is programmed on site using the MASTER (Programming) Token provided with the unit. Programming is simple, and is assisted visually by means of the three status LEDs and audibly by the buzzer.

Refer to the following figure for the position of the LED indicators.



1.5 HOW TO REPLACE A LOST MASTER TOKEN

- [1] REMOVE POWER
- [2] TEMPORARILY DISCONNECT IN#1 AND IN#2 (BROWN & ORANGE)
- [3] JOIN IN#1 AND IN#2 WIRES TOGETHER (AWAY FROM OTHER WIRING)
- [4] RESTORE POWER
- [5] UNIT SOUNDS... ALL LEDS → ON
- [6] PRESENT NEW MASTER TOKEN
- [7] UNIT SOUNDS... GREEN LED → ON
- [8] RE-CONNECT INPUTS REMOVED IN [2] ABOVE

1.6 DEFAULT CONDITIONS (FACTORY SETTINGS)

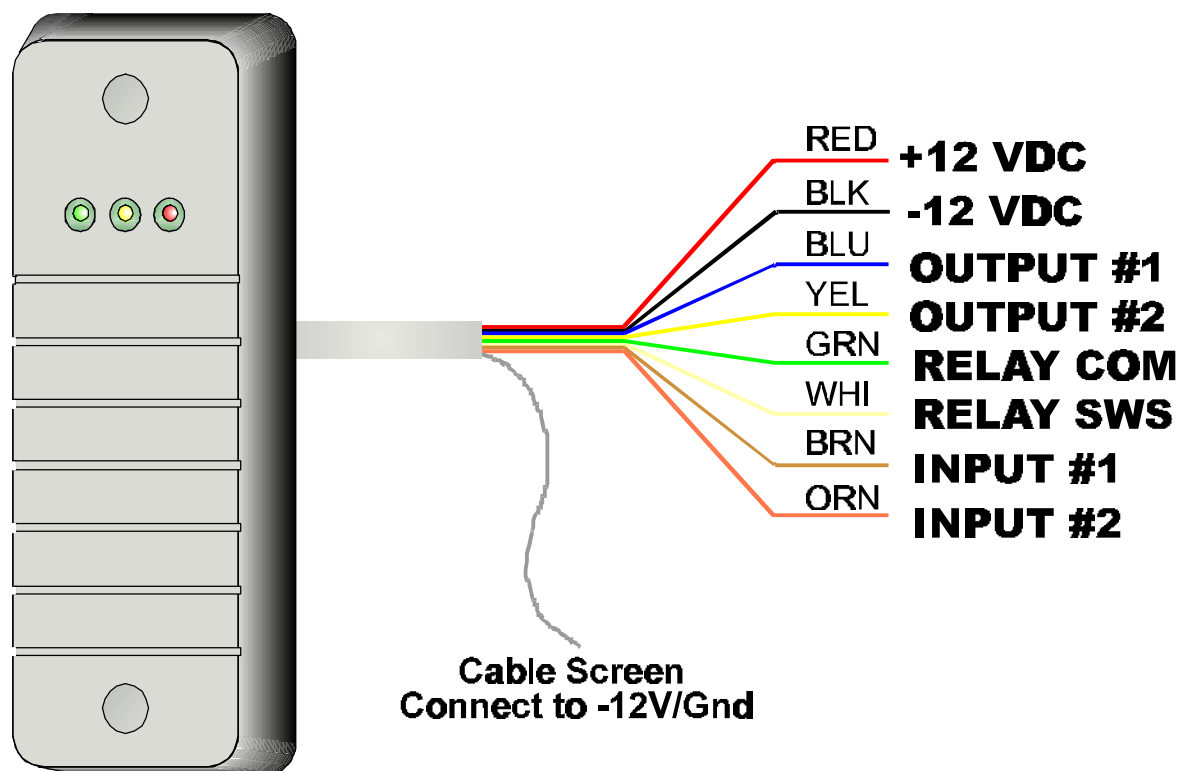
Microtag 100M Default settings when leaving the factory are as follows:

1. USER OPTION [A]	ALL TOKENS OPERATE
2. USER OPTION [B]	ALL OUTPUTS OPERATE
3. OUTPUTS 1,2 AND RELAY	5 SECONDS
4. INPUT #1	ACTIVATES RED LED
5. INPUT #2	REQUEST TO EXIT

NOTE: Replacing a lost master as in 1.5 above does not restore Microtag 100M to the factory conditions. See under Programming... function [9].

1.7 CABLE WIRE COLOUR ASSIGNMENTS

The following are the cable colour assignments in Microtag 100M...



2. FEATURES

- * 100 CARD/TAG (TOKEN) CAPACITY
- * PROGRAMMED ON SITE USING MASTER TOKEN
- * NON VOLATILE MEMORY FOR TOKENS /PROGRAMMING
- * TEMPORARY (24 HOUR) TOKEN FACILITY
- * PROGRAMMABLE ANTI-TAMPER SWITCH
- * RELAY OUTPUT N/O AND N/C SELECTABLE
- * THREE PROGRAMMABLE TRANSISTOR OUTPUTS
- * PROGRAMMABLE CROSS INTERLOCK INPUT/OUTPUT
- * OUTPUTS 1 SECOND TO 99 MINUTES OR LATCHED (TOGGLE)
- * RED LED PROGRAMMABLE FOR USE WITH EXTERNAL SYSTEMS
- * AMBER LED PROGRAMMABLE FOR USE WITH EXTERNAL SYSTEMS
- * TWO PROGRAMMABLE INPUTS
- * EXTERNAL KEY CONTROL INPUT
- * EXTERNAL TIME CONTROL INPUT
- * DOOR LEFT OPEN MONITOR INPUT
- * ANTI-TAILGATE FUNCTION
- * DOOR FORCED ALARM OUTPUT
- * FIRE ALARM INPUT
- * OPEN DOOR (REQUEST TO EXIT) FACILITY
- * PROGRAMMABLE CLOCK AND DATA OUTPUT
- * FULLY POTTED ELECTRONICS
- * uEM 125 KHz CARD/TAG COMPATIBLE
- * MULLION MOUNTING

3. SPECIFICATION

POWER SUPPLY :	10.5-16 V DC REGULATED
CURRENT CONSUMPTION :	60 m/A MAX (STANDBY)
RELAY OUTPUT :	VOLTAGE FREE N/O OR N/C CONTACTS RATED 2.0A @ 24V DC. PROGRAMMABLE MOMENTARY OR LATCHED
OUTPUT 1 :	OPEN COLLECTOR TRANSISTOR MAX. SINK CURRENT 100mA.
OUTPUT 2 :	OPEN COLLECTOR TRANSISTOR MAX. SINK CURRENT 100mA.
OUTPUT 3 :	OPEN COLLECTOR CROSS-LOCK (INPUT)/OUTPUT.
PROXIMITY CARDS/TAGS	uEM FORMAT COMPATIBLE FREQUENCY 125 KHz
I.P. RATING :	IP 4.6 (WITH BUZZER SEALED)
OPERATING TEMPERATURE :	-30 C TO +50 C 0-90% RH (NON-CONDENSING)
CONSTRUCTION :	ABS ENCLOSURE, ELECTRONICS FULLY POTTED
WEIGHT :	APPROX. 200g
SIZE :	WIDTH 44mm, HEIGHT 115mm, DEPTH 22mm

4. OPERATION

4.1 GENERAL

Microtag 100M requires a suitable power supply. This supply must be well regulated, with very low supply ripple. The proximity reader contains a very sensitive RF receiver, and care should be taken to keep the unit away from sources of electrical noise. Proximity cards/tokens should be uEM format 125KHz compatible. Depending on the type of card/token in use, read range can be up to 150mm. Microtag 100M may decode other proximity card/token formats with reduced read range.

Proximity readers should be kept at least 1 metre away from each other to avoid mutual interference.

4.2 USER CARDS/TAGS (TOKENS)

The USER TOKENS (#1 to #100) may be individually programmed to operate any output combination. The PROGRAMMING TOKEN (supplied) is used to introduce/delete all other tokens, and all other programmable options.

4.3 OUTPUTS

Microtag 100M provides the installer with 3 separate timed outputs circuits, ensuring maximum flexibility. The Relay output is voltage free, link selectable as N/C or N/O (the relay contacts are connected to the green and white wires). Outputs #1 and #2 are transistor outputs. All three outputs are programmable for momentary or latched operation, (the links for the relay output are in the N/O position leaving the factory, refer to section 4.6)

Momentary outputs activate each time the correct code is entered. When the programmed time has elapsed the output deactivates. Momentary outputs are programmable from 1 to 99 seconds, or 1 to 99 minutes, the default is 5 seconds.

Latched outputs activate and remain activated when the correct code is entered. The output deactivates when the correct code is again entered.

Outputs #1 and #2 are multi-purpose outputs, some conflict in desired useage may, therefore, be unavoidable.

Output #3 is the "Cross Lock" connection, and is combined with input #2 (orange wire) Two or more Microtag 100M units may be interconnected to provide mutually exclusive access to a chosen area(s). Under these circumstances, when one lock is activated, the other units are locked out. The lock-out condition is indicated by flashing the Amber LED. Any attempt to operate a locked out Microtag will generate a warning (3 seconds of intermittent beeps). For further information refer to section **5.6 Microtag 100M CROSS INTERLOCKED**.

If Microtag 100M has been programmed for Clock & Data output (magnetic card format), **Output #1** (the blue wire) is the **CLOCK** output, and **Output #2** (the yellow wire), is the **DATA** output. The software overrides all other output #1 and #2 options.

A cabinet tamper switch protects the unit. This switch may be programmed to operate **Output #2**. This output should be used to activate the premises security panel tamper loop circuit (an external relay may be necessary).

4.4 INPUT #1

IN#1 is programmable from the following options :

- * INPUT UNUSED
- * DOOR MONITOR INPUT
- * ACTIVATE RED LED (factory default)
- * FIRE MONITOR INPUT
- * KEYSWITCH INPUT

4.4.1 INPUT #1 UNUSED

If input #1 is not being used, selecting this option will de-activate the input.

4.4.2 DOOR MONITOR INPUT

If Input #1 is programmed as door monitor, a N/O switch, closed when the door is closed should be connected between **IN#1** and **COM**. When this switch is activated (door opens), the following functions are enabled...

(1) DOOR LEFT OPEN MONITOR

If the door is left open for more than 30 seconds, the Microtag 100M buzzer activates, and **Output #2** is asserted (programmable option). Closing the door clears and resets the alarm.

(2) DOOR FORCED ALARM

If the door is opened without a valid Microtag 100M activation, the door is assumed to have been forced, and **Output #2** is activated (programmable option).

(3) ANTI-TAILGATING

When a valid token is presented, and the relay is activated. This function will reduce the programmed “lock open” time, as soon as the door switch had been detected as having opened. This feature prevents another person from entering during any remaining “lock open” time, hence the term “tail-gating”.

4.4.3 ACTIVATE RED LED

If this option is selected, external control of the **RED** (“denied”) led is available. The **RED** led will be normally off , and illuminated if **IN#1** (the brown wire) is connected to **COM** (active low or negative applied). NOTE: the unit itself has priority over the external command.

4.4.4 FIRE MONITOR INPUT

If this option is selected, **The Relay** is activated, and held activated as long as **IN#1** is connected to **COM** (active low or negative applied)

4.4.5 KEYSWITCH INPUT

Input #1 may be programmed for use with a keyswitch. This should be a normally open switch connected between **IN#1** and **COM**. When operated, **The Relay** will be activated for the programmed time. This facility is used in conjunction with the external time-slot. The keyswitch input is only active while the time-slot is valid. This facility is primarily intended to provide restricted postman access in certain countries. Tokens assigned to time-slot control will also be active when the keyswitch facility is in use.

4.5 INPUT #2

IN#2 is programmable from the following options :

- * INPUT UNUSED
- * REQUEST TO EXIT BUTTON (factory default)
- * ACTIVATE AMBER LED
- * EXTERNAL TIME SLOT

4.5.1 INPUT #2 UNUSED

If input #2 is not being used, selecting this option will de-activate the input.

4.5.2 REQUEST TO EXIT BUTTON

If this option is selected, a normally open push button should be connected between **IN#2** and **COM**. Momentarily pressing the button will activate **The Relay** for the programmed time.

4.5.3 ACTIVATE AMBER LED

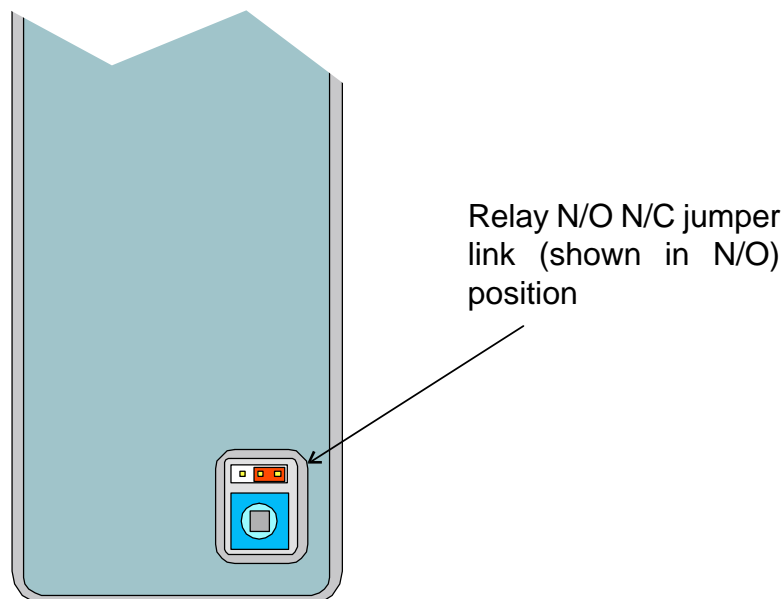
If this option is selected, external control of the **AMBER** (“granted”) led is available. The **AMBER** led will be normally off, and illuminated if **IN#2** (the orange wire) is connected to **COM** (active low or negative applied). NOTE: the unit itself has priority over the external command.

4.5.4 EXTERNAL TIME SLOT

An external timer may be connected to **IN#2**. This input may then be programmed to function as a “time slot”. Access for tokens assigned to this time slot, is allowed only when **IN#2** is connected to **COM**. Microtag 100M will give 3 seconds of intermittent beeps if access is attempted by a valid token outside the time-slot.

4.6 RELAY N/O N/C LINK

The relay in Microtag 100M is a single pole change over type (form “C”). A jumper link is provided to allow selection of the N/O or N/C pair. Refer to the diagram below. The N/C contact position is normally used for magnetic locks, and the N/O contact position is normally used for solenoid locks.



4.7 SYSTEM OPTIONS

Microtag 100M system options provide additional control functions. The following provides an explanation of the operation of the various options. The programming of these options is explained in section **6.8 PROGRAM SYSTEM OPTIONS**.

The following system options are available:

- * **[1] CLEAR ALL OPTIONS**
- * **[2] ANTI TAIL-GATE ACTIVE**
- * **[3] USE INPUT #2 FOR CROSSLOCK**
- * **[4] USE O/P #1 AND #2 FOR CLOCK & DATA**
- * **[5] USE O/P #2 AS TAMPER WARNING**
- * **[6] USE O/P #2 AS DOOR FORCED WARNING**
- * **[7] USE O/P #2 AS DOOR LEFT OPEN WARNING**

4.7.1 CLEAR OPTIONS

Selecting the “clear options” function resets all options to the factory settings (page 3).

4.7.2 ANTI-TAILGATING

This option activates the anti-tailgate function. Note that Input #1 must be programmed as door monitor, and a N/O switch, closed when the door is closed should be connected between **IN#1** and **COM**. for the anti-tailgate function to operate.

When a valid Token is presented, and the relay is activated. This function will reduce the programmed “lock open” time, as soon as the door switch had been detected as having opened. This feature prevents another person from entering during any remaining “lock open” time, hence the term “tail-gating”.

4.7.3 CROSS INTERLOCK

Two or more Microtag 100M proximity units may be interconnected to provide mutually exclusive access to a chosen area(s). Under these circumstances, when one unit is activated, the other unit(s) are locked out. The lock-out condition is indicated by flashing the “granted” LED. Any attempt to operate a locked out Microlok 100M will generate a warning (3 seconds of intermittent beeps). For further information refer to section **5.6 MICROTAG 100M CROSS INTERLOCKED**.

4.7.4 CLOCK AND DATA OUTPUT

This option, when selected, programs Microtag 100M to generate standard magnetic card format output for all entered codes/presented tokens. When a code is entered/token presented, **Output #1** (the blue wire) is the **CLOCK** output, and **Output #2** (the yellow wire) is the **DATA** output. The software overrides all other output #1 and #2 options. See wiring diagram section 5.7 Page #16.

NOTE: Valid tokens presented at the unit will operate as normal. All presented tokens, valid or not, will be transmitted as Clock & Data. The card loaded signal **CLS** is not emulated.

PACKING FORMAT IS... **[B][000000][NNNNNNNNNN][F][L]**

[B] is the magnetic card format start sentinel **HEX \$0B**

Then 6 leading zeros are transmitted to pack the total transmission out to 16 Characters.

[NNNNNNNNNN] is the decoded card/tag code (converted to decimal if necessary). leading zeros are added (if necessary) to pack out the length to 10 digits.

[F] is the magnetic card format end sentinel **HEX \$0F**

[L] is the magnetic card format longitudinal checksum.

4.7.5 TAMPER/LOCKOUT WARNING

This option programs Microtag 100M to generate a warning by activating **Output #2**, if the tamper switch is activated.

4.7.6 DOOR FORCED WARNING

This option programs Microtag 100M to generate a “door forced” warning output. With this option set, If the door is opened without a valid Microtag 100M activation, the door is assumed to have been forced, and **Output #2** will be activated.

NOTE: The door forced warning is cleared by a valid Token presentation.

4.7.7 DOOR LEFT OPEN WARNING

This option programs Microtag 100M to generate a “door left open” warning output. With this option set, If the door remains open for more than 30 seconds, **Output #2** will be activated.

NOTE: The door left open warning is cleared by a valid Token presentation.

5. INSTALLATION

5.1 MOUNTING Microtag 100M

Remove the two retaining screws from the housing. Using the housing as a template, mark the locations of the two mounting holes. If the back-tamper facility is being used, ensure that the activating spring bears upon a smooth surface.

5.2 CABLE ROUTING

If not wired correctly, excess moisture, due to condensation and/or water wicking down/through the cables, may build-up within the unit causing malfunction. To protect against this it is recommended that the unit is wired with the cable entering from below. If the cable has to be routed from above, form a loop in the cable before entering the enclosure, to allow excess moisture to fall harmlessly from the cable.

In totally exposed conditions a bead of silicon rubber seal may be applied where Microtag 100M meets the fixing surface.

Connect the wiring cable as per drawings on Pages #13 to #16. When replacing the retaining screws, check that the wiring/cable is not pinched or trapped, and that all swarf has been removed, **do not over tighten**. The two protective screwcaps should only be fitted **AFTER** the unit has been tested.

5.3 WIRING MICROTAG 100M

Connect the wiring cable board as follows:

1. Connect the power supply to RED (+12V) and BLK (-12V/COM). Do not exceed the specified voltage range. (see under specifications section #3 page #5)
2. Connect the Relay and outputs as required (see drawings on Pages #13 to #16). Care should be taken not to exceed the rated values.
3. Connect inputs as required to IN#1 and/or IN#2.
4. NOTE:- The AMBER and RED led's may be programmed for activation by external equipment. The relevant input will be **Active Low** or **Negative Applied**, i.e. the input should be connected to -12V(COM) to illuminate the LED.

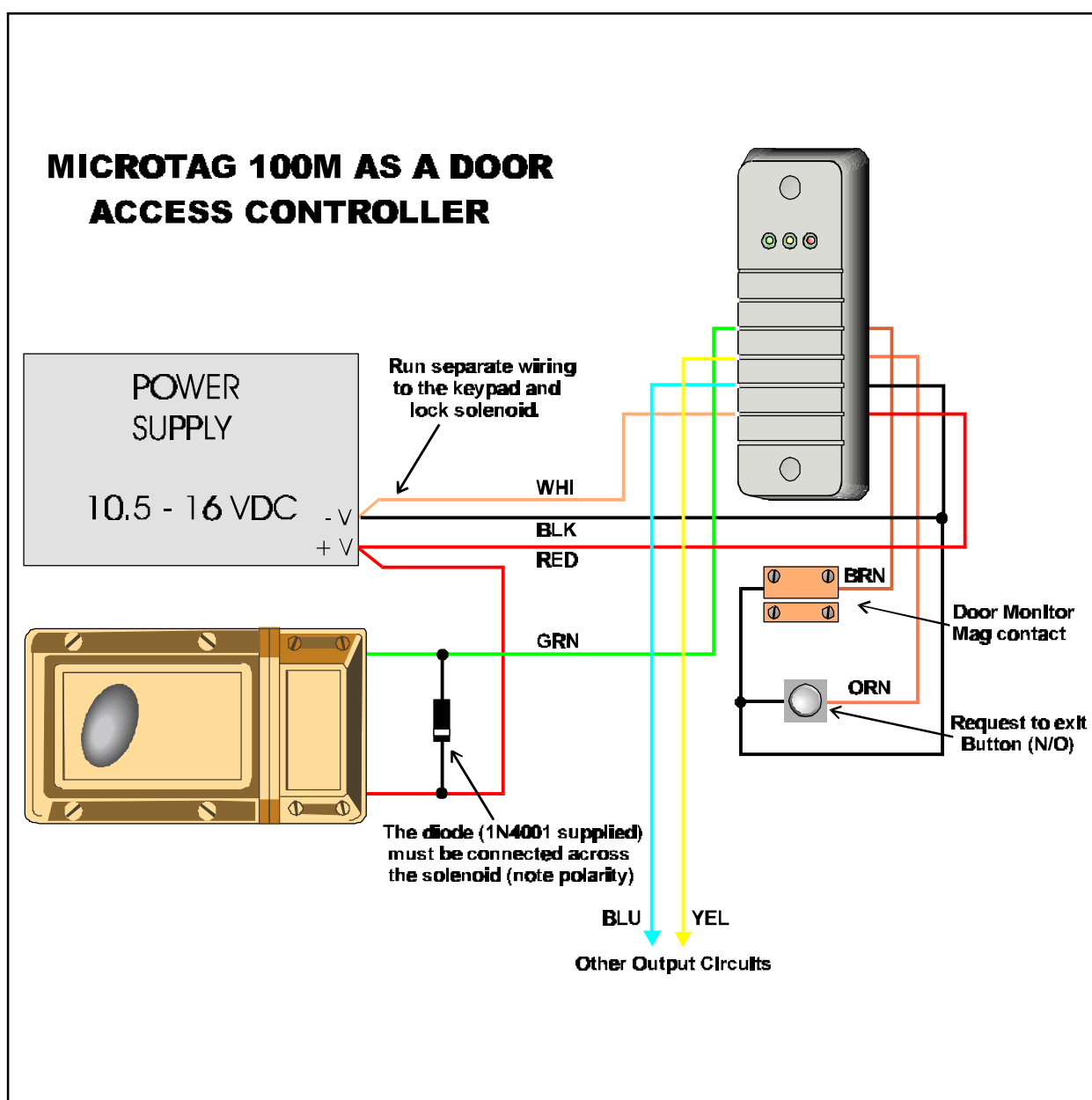
The internal logic/software has priority over the external input.

5.4 MICROTAG 100M AS A DOOR ACCESS CONTROLLER

Where the Microtag 100M is used as a Door Access Controller, a typical installation is wired per the diagram below.

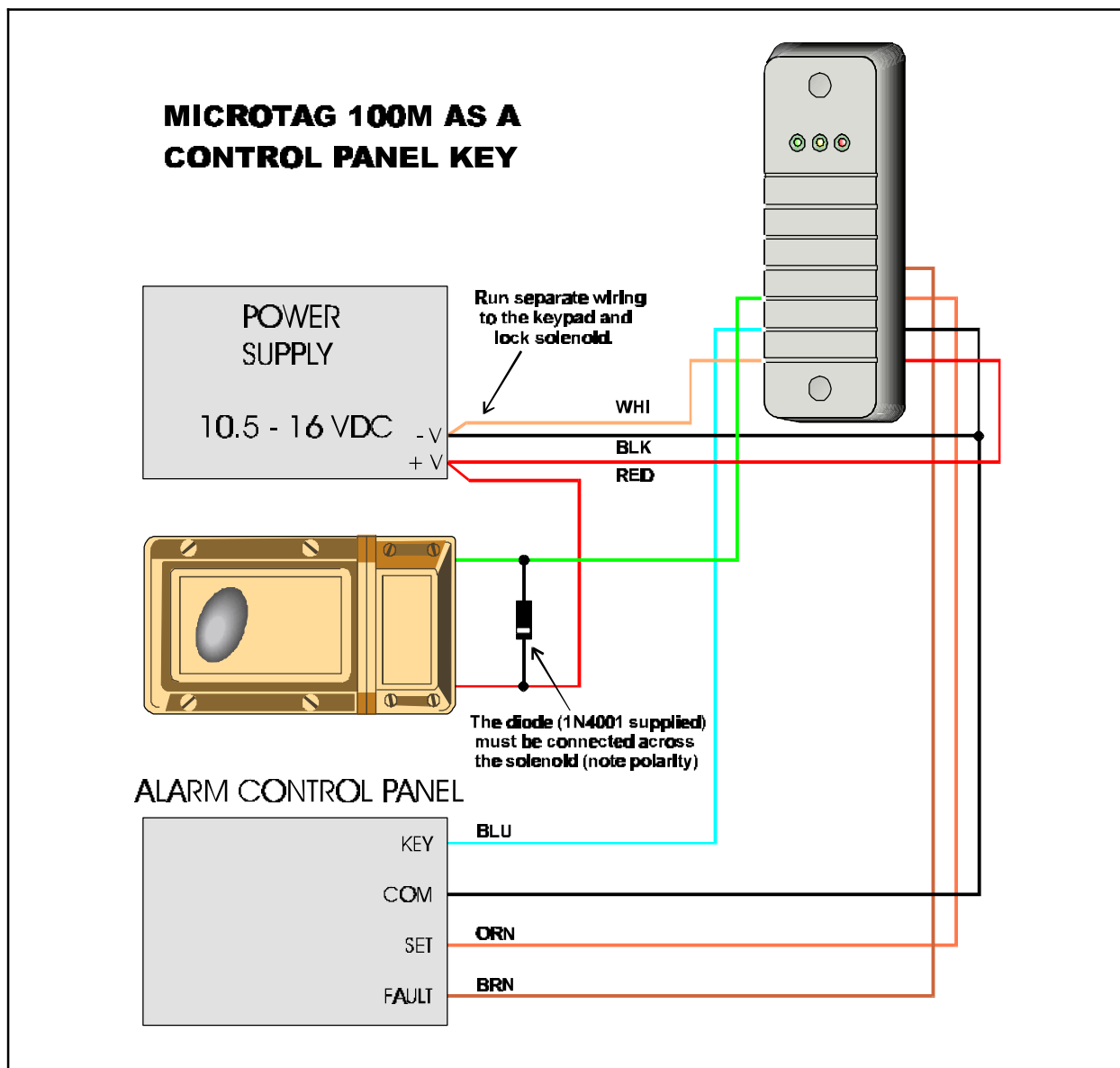
NOTE: Avoid long power supply runs. Always run separate wiring to power the lock/maglok and the Microtag 100.

NOTE: Ensure the solenoid/maglok is correctly suppressed.... use a diode (1N4001 supplied) if the supply is D.C., and/or a varistor (supplied) if the lock supply is A/C.



5.5 MICROTAG 100M AS A CONTROL PANEL KEY

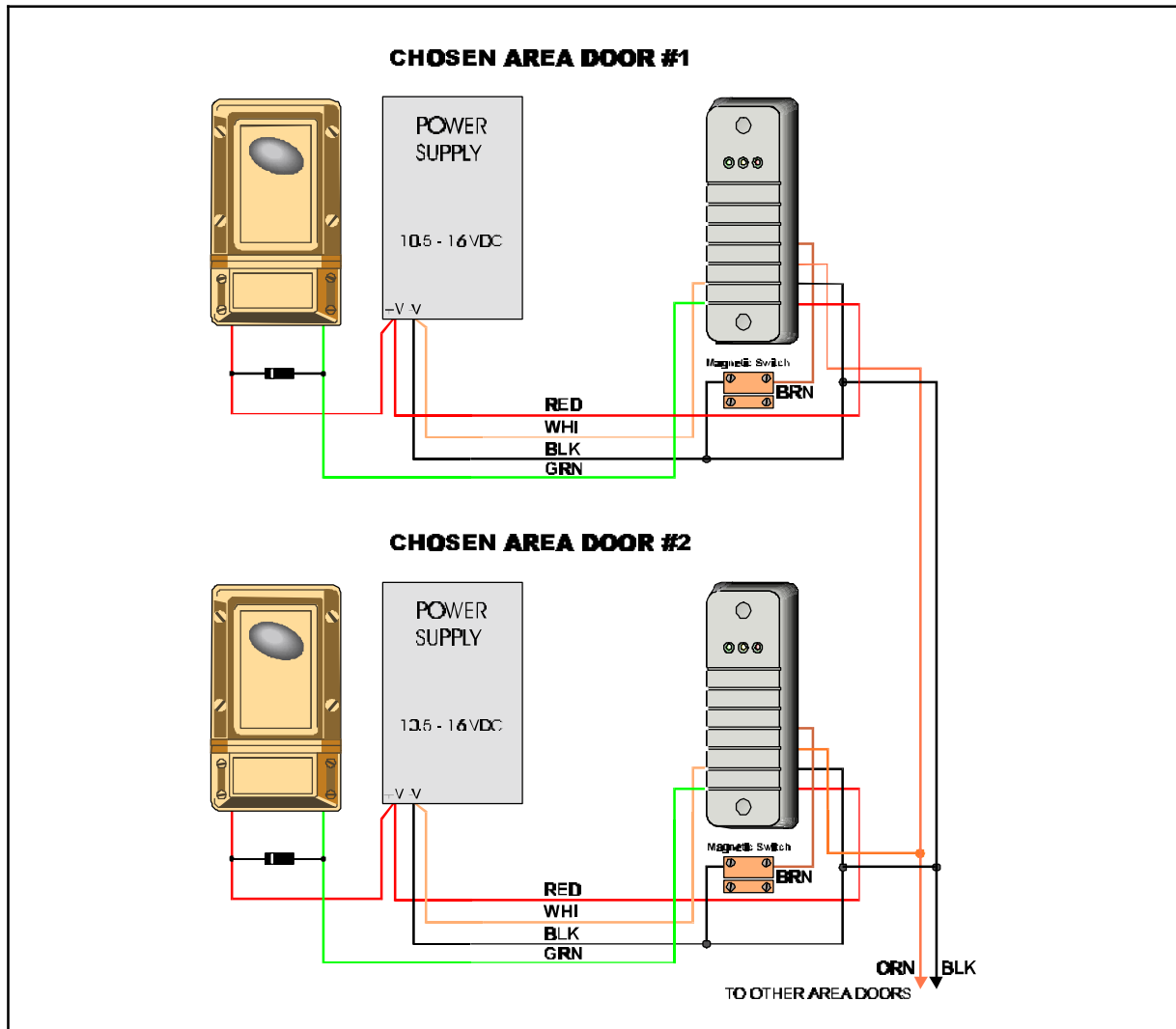
Where the Microtag 100M is additionally used to arm/disarm an alarm control system, the installation is wired per the diagram below.



- (1) The Microtag 100M output #1 is programmed as "latched" i.e., Presenting a token will activate output #1 and arm/set the panel via the "key" input. Presenting the token again will disarm/unset the panel (an external relay may be needed)
- (2) The panel "fault" and "set" outputs are wired to inputs #1(brown) and #2(orange). These inputs should be programmed to operate the Red and Amber LED's respectively, indicating alarm panel status at the Microtag unit.
- (3) A separate power supply is shown, but the alarm panel may have sufficient spare capacity to power Microtag 100M, check the alarm panel supply specification.

5.6 MICROTAG 100M CROSS INTERLOCKED

Microtag 100M may be used to provide mutually exclusive access to a chosen area(s). Two or more Microtag units are connected together, such that if one Microtag 100M is active, the other Microtag 100M(s) is/(are) locked out. Connect the Microtag 100M(s) together per the diagram below. Only two connections, **BLACK** and **ORANGE** are needed between units/doors.



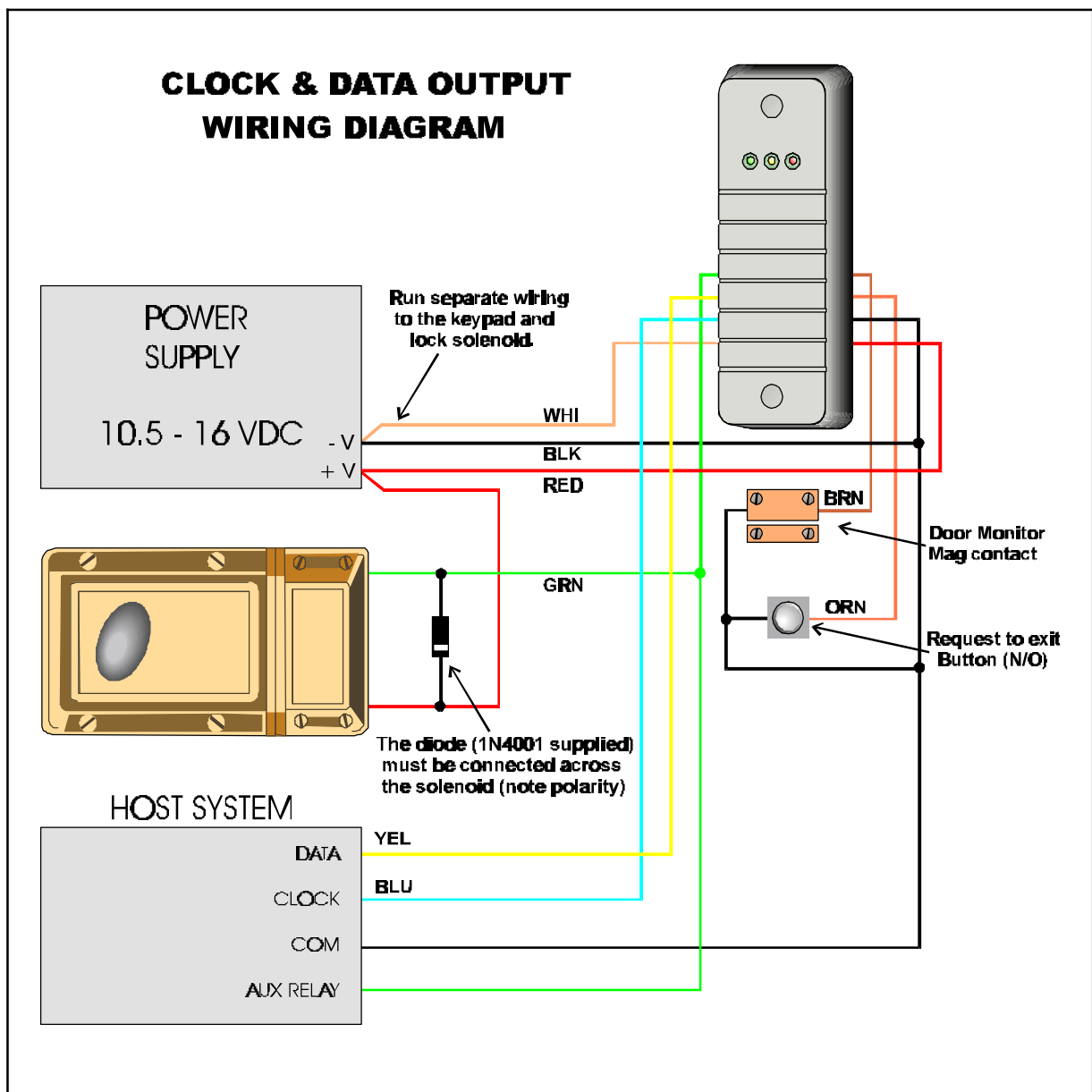
- (1) Program both keypads for cross interlock operation, i.e. set system option **[4]** in section **6.8 PROGRAM SYSTEM OPTIONS**.
- (2) Input #1 must be programmed (on both units) as door monitor, and a N/O switch, closed when the door is closed should be connected between **IN#1** and **COM**. This procedure will ensure that all other doors are disabled if one door is left open.
- (3) If "latched" operation is required, i.e. enter code to operate lock, and enter code again to release lock (the most likely situation). Program the Relay output for "latched" operation.

5.7 MICROTAG 100M CLOCK AND DATA

Where the Microtag 100M is additionally used to generate a Clock & Data (magnetic card format) output, for transmission to a host system, the installation is wired per the diagram below.













NOTE: All Tokens presented (with the exception of the MASTER Token) are transmitted as Clock and Data, whether programmed into the system or not.

NOTE: The card loaded signal (CLS) is not emulated.



6. PROGRAMMING MICROTAG 100M

All programming is implemented by using the master Card/Tag (Token). The procedure is as follows...

- STEP 1: Momentarily present the Master Token to the reader
- Microtag 100M sounds “accept” tone
- The    LEDs are illuminated.... then,
- The    LED starts flashing, and remains flashing for as long as Microtag 100M remains in programming mode.
- Microtag 100M will then emit a series of nine “beeps”, one for each of the programming options below. The    LED’s will illuminate at each “beep”, as a visual confirmation.
- STEP 2: Re-present the Master Token at the beep/    flash for the desired option from the table/menu below
- STEP 3: Follow the procedure for the selected option in the relevant section following...

PROGRAMMING MENU

BEEP [1]	Add new user to System
BEEP [2]	Delete user from System
BEEP [3]	Delete page from System
BEEP [4]	Select User options
BEEP [5]	Program Input #1 options
BEEP [6]	Program Input #2 options
BEEP [7]	Program Output Timers
BEEP [8]	Program System Options
BEEP [9]	Return unit to factory settings

6.1 ADD NEW USER(S) TO SYSTEM

NOTE: The outputs operated by each user, and the options associated with it, are programmable. It is necessary to set these options **BEFORE** programming user(s) into the system. The factory default for these options is... **All users operate all outputs.**

GENERAL: A user Token, and the functions associated with it, are stored in one of 100 "Slots". The 100 slots are arranged in 10 "pages" of 10 slots each. The Master Token is stored separately.

The PAGE... SLOT... number is reported as below. The Buzzer sounds with each flash as audible confirmation.

The  LED will give from 1 to 10 flashes, indicating the PAGE number.

The  LED will give from 1 to 10 flashes, indicating the SLOT number.

ADD NEW USER(S) TO SYSTEM

STEP 1: Present the Master at beep/ flash **[1]** (page 17).

"Accept" tone sounds...

STEP 2: the  LED's start flashing.


STEP3: Present (new) Card/Tag (Token) to the reader

"Accept" tone sounds... LED's are extinguished

If the Code/Token is already in the system, the unit will report the "slot" number, and revert to step 2 above.

If the Code/Token is not in the system, then the first available slot is assigned to it. The unit will sound the "accept" tone, and the slot number is then reported, and the unit reverts to step 2 above waiting for further users to be programmed.

NOTE: If the next and subsequent Codes/Tokens are programmed into successive slots, then only the first new user (as above) will have the slot reported.... this allows Codes/Tokens to be added to the system quickly, without having to wait on the slot to be reported. The slot number can be checked at any time by immediately re-presenting the Token.



Wait for the    LED's to resume flashing before presenting the next Token.

When programming is complete, present no further token(s), Microtag 100M will exit programming mode after approximately 10 seconds....   

6.2 DELETE USER(S) FROM SYSTEM

A user is removed from the system by presenting the token belonging to the user in the slot BELOW the slot number allocated to the user to be deleted. If the token is not available, then it is necessary to delete the "page" of 10 users including the token to be deleted. Follow the procedure in section 6.3

NOTE: Present the Master token to delete the user in slot #1

STEP 1: Present the Master at beep/   flash **[2]** (page 17).

"Accept" tone sounds...

STEP 2: The    LED's start flashing.

STEP 3: Present token from the slot below the token to be deleted.

"Accept" tone sounds... LED's are extinguished.

The user in the slot above the presented token is deleted, and the unit reverts to step 2 above, waiting for further users to be deleted.




When user deleting complete, present no further token(s), Microtag 100M will exit programming mode after approximately 10 seconds...   

6.3 DELETE PAGE OF USERS FROM SYSTEM




A user Token, and the functions associated with it, are stored in one of 100 "Slots". The 100 slots are arranged in 10 "pages" of 10 slots each. This function allows a complete page of 10 users to be deleted from the system.

STEP 1: Present the Master at beep/   flash **[3]** (page 17).

"Accept" tone sounds...

The    LED will flash, and the buzzer will sound 10 times, once for each page number.







STEP 2:

Present token when the    LED is on indicating the page to be deleted.










“Accept” tone sounds. Page is deleted.

The unit immediatly exits programming mode...  




6.4 PROGRAM USER OPTIONS



















There are two sets of user options. The first set    selects the “restrictions” a user must operate under. The second set    selects the outputs that are activated by that partigular user.

The following    user options are available:

- *    /BEEP [1] THIS CARD/TAG ALWAYS OPERATES
- *    /BEEP [2] THIS CARD/TAG IS TEMPORARY
- *    /BEEP [3] THIS CARD/TAG USES THE TIMER INPUT

The following    user options are available:
















   /BEEP	OUTPUT CONTROL		
	Relay	O/P #1	O/P #2
1	Yes	Yes	Yes
2	No	Yes	Yes
3	Yes	No	Yes
4	No	No	Yes
5	Yes	Yes	No
6	No	Yes	No
7	Yes	No	No
8	No	No	No













- STEP 1: Present the Master at beep/ flash **[4]** (page 17).
- “Accept” tone sounds...
- The  LED flashes up to 3 times for the first option.
- STEP 2: Re-present the Master when the  LED is illuminated for the option chosen.
- “Accept” tone sounds... option is accepted.
- The  LED flashes up to 8 times for the second option.
- STEP 3: Re-present the Master when the  LED is illuminated for the option chosen.
- The unit immediatly exits programming mode...**

6.5 PROGRAM INPUT #1 OPTIONS

Microtag 100M has two input terminals, this procedure will program the function of input #1 (brown wire).

INPUT #1 is programmable from the following options :













- *  /BEEP **[1]** INPU/T UNUSED
- *  /BEEP **[2]** DOOR MONITOR INPUT
- *  /BEEP **[3]** ACTIVATE RED LED (factory default)
- *  /BEEP **[4]** FIRE MONITOR INPUT
- *  /BEEP **[5]** KEYSWITCH INPUT

- STEP 1: Present the Master at beep/ flash **[5]** (page 17).
- “Accept” tone sounds...
- The  LED flashes up to 5 times for IN#1 options.
- STEP 2: Re-present the Master when the  LED is illuminated for the option chosen.
- “Accept” tone sounds... option is accepted.
- The unit immediatly exits programming mode...**

6.6 PROGRAM INPUT #2 OPTIONS




Microtag 100M has two input terminals, this procedure will program the function of input #2 (orange wire).




INPUT #2 is programmable from the following options :

- *    /BEEP [1] INPUT UNUSED
- *    /BEEP [2] REQUEST TO EXIT BUTTON (factory default)
- *    /BEEP [3] ACTIVATE AMBER LED
- *    /BEEP [4] EXTERNAL TIME SWITCH

STEP 1: Present the Master at beep/   flash [6] (page 17).

“Accept” tone sounds...

The    LED flashes up to 4 times for IN#2 options.







STEP 2: Re-present the Master when the    LED is illuminated for the option chosen.

“Accept” tone sounds... option is accepted.

The unit immediatly exits programming mode...   

6.7 PROGRAM OUTPUT TIMERS







Microtag 100M has three programmable outputs. It is possible to program each output as timed (momentary) or latched. The default setting for all three outputs is 5 seconds timed. The outputs activated by each user are as selected under section 6.4.


There is a separate timer for the relay output, and for (transistor) outputs #1 and #2. Each of these timers is programmable from 00 to 99 seconds, or from 00 to 99 minutes. The    LED will flash [6] times to allow timer Relay, #1, or #2, and either seconds or minutes to be selected. Then the    LED will flash [10] times for the “tens” selection, and [10] times for the “units” selection.

(1) A selection **MUST** be made for each sequence... if no selection is made, Microtag 100M will exit programming mode..


(2) if [0][0] is chosen for the time selection, then that output will be “latched” i.e. The output will toggle between **ON/OFF** at each Token presentation.


There are [6]  options:

- * /BEEP [1] PROGRAM RELAY TIMER IN SECONDS (00 - 99)
- * /BEEP [2] PROGRAM OUTPUT TIMER #1 IN SECONDS (00 - 99)
- * /BEEP [3] PROGRAM OUTPUT TIMER #2 IN SECONDS (00 - 99)
- * /BEEP [4] PROGRAM RELAY TIMER IN MINUTES (00 - 99)
- * /BEEP [5] PROGRAM OUTPUT TIMER #1 IN MINUTES (00 - 99)
- * /BEEP [6] PROGRAM OUTPUT TIMER #2 IN MINUTES (00 - 99)


STEP 1: Present the Master at beep/ flash [7] (page 17).


“Accept” tone sounds...

The  LED flashes up to 6 times for timer options.


STEP 2: Re-present the Master when the  LED is illuminated for the option chosen.


“Accept” tone sounds... option is accepted.

The  LED now flashes 10 times for the “tens” of seconds/minutes.

STEP 3: Re-present the Master when the  LED is illuminated for the desired number of “tens” seconds/minutes.

“Accept” tone sounds... “tens” are accepted.

The  LED now flashes 10 times for the “units” of seconds/minutes.

STEP 4: Re-present the Master when the  LED is illuminated for the desired number of “units” seconds/minutes.








“Accept” tone sounds... “units” are accepted.

The unit immediatly exits programming mode...

6.8 PROGRAM SYSTEM OPTIONS


The following system options control the operation of Microtag 100M. The individual functions are described in **Chapter 4... "Operation"**. The factory settings for all options is "OFF" (inactive). This program function activates the individual options. Options "toggle" ON/OFF each time they are accessed, and only one option may be accessed each time.


There are [7] options available:

- *  /BEEP [1] RESET OPTIONS TO FACTORY SETTINGS
- *  /BEEP [2] ANTI TAIL-GATE ACTIVE
- *  /BEEP [3] USE INPUT #2 FOR CROSSLOCK
- *  /BEEP [4] USE O/P #1 AND #2 FOR CLOCK & DATA
- *  /BEEP [5] OUTPUT #2 IS TAMPER WARNING
- *  /BEEP [6] OUTPUT #2 IS DOOR FORCED WARNING
- *  /BEEP [7] OUTPUT #2 IS DOOR LEFT OPEN WARNING

STEP 1: Present the Master at beep/ flash [8] (page 17).

"Accept" tone sounds...

The  LED flashes 7 times for the system options

STEP 2: Re-present the Master when the  LED is illuminated for the option chosen.

"Accept" tone sounds... option is "toggled".

The unit immediately exits programming mode...

6.9 RESTORE MICROTAG 100M TO FACTORY SETTINGS

STEP 1: Present the Master at beep/ flash [9] (page 17).

"Accept" tone sounds...

THE  LED'S ILLUMINATE

STEP 2: Present the Master **AGAIN**

The unit resets to factory settings

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