
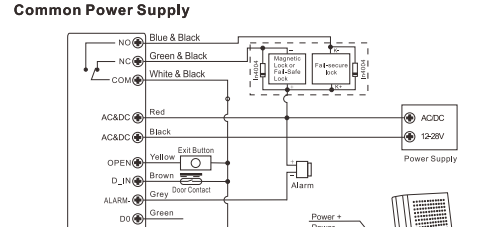
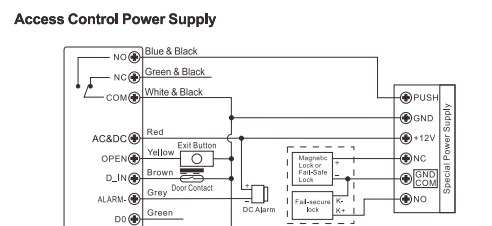
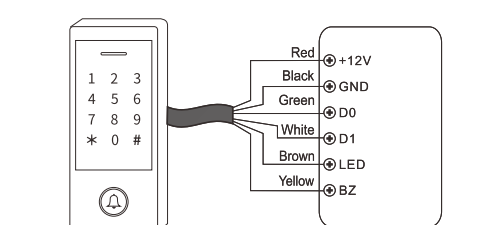
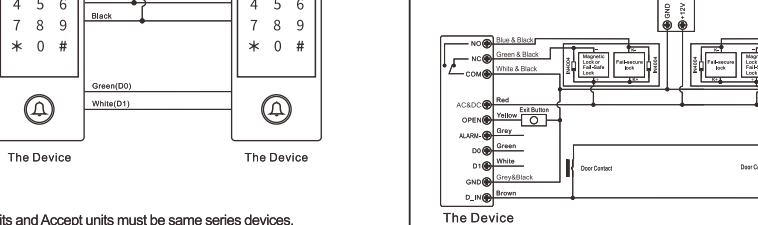


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<p><b>INTRODUCTION</b></p> <p>The device is a single door multifunction standalone access controller or a Wiegand output reader. It uses Atmel MCU ensuring stable performance. The operation is very user-friendly, and low-power circuit makes it long service life.</p> <p>The device supports 1,000 users (988 common users + 2 panic users + 10 visitor users), all user data can be transferred from one to another. It supports multi access modes (1 card access, PIN access, card + PIN, access or multi cards/PINs access. It has extra features including block enrollment, interlock, Wiegand input &amp; output interface....etc.</p> <p>Two Versions Optional: The device with Bluetooth function is optional. The device with big user capacity is optional.</p> <p><b>Features</b></p> <ul style="list-style-type: none"> <li>&gt; Touch key</li> <li>&gt; Metal case, anti-vandal</li> <li>&gt; Waterproof, conforms to IP66</li> <li>&gt; One relay, 1,000 users (988 common + 2 panic + 10 visitor)</li> <li>&gt; PIN length: 4-6 digits</li> <li>&gt; EM card, Mifare Card optional</li> <li>&gt; EM card version: Wiegand 26-44 bits input &amp; output</li> <li>&gt; Mifare card version: Wiegand 26-44bits, 56bits input &amp; output</li> <li>&gt; Can be used as Wiegand reader with LED &amp; buzzer output</li> <li>&gt; Card block enrollment</li> <li>&gt; Tricolor LED status display</li> <li>&gt; Integrated alarm &amp; buzzer output</li> <li>&gt; Pulse mode, Toggle mode</li> <li>&gt; User data can be transferred</li> <li>&gt; 2 devices can be interlocked for 2 doors</li> <li>&gt; Built-in light dependent resistor (LDR) for anti tamper</li> <li>&gt; Backlit keypad, can set automatic OFF after 20 seconds</li> </ul> <p><b>Specifications</b></p> <table border="1"> <tr> <td>User Capacity</td> <td>1000</td> </tr> <tr> <td>Common User</td> <td>988</td> </tr> <tr> <td>Panic User</td> <td>2</td> </tr> <tr> <td>Visitor User</td> <td>10</td> </tr> <tr> <td>Operating Voltage</td> <td>12-26V A/C/DC</td> </tr> <tr> <td>Working Current</td> <td>≤150mA</td> </tr> <tr> <td>Idle Current</td> <td>≤60mA</td> </tr> </table> <p>- 01 -</p>	User Capacity	1000	Common User	988	Panic User	2	Visitor User	10	Operating Voltage	12-26V A/C/DC	Working Current	≤150mA	Idle Current	≤60mA	<p><b>Proximity Card Reader</b></p> <p>Radio Technology: 125KHz / 13.56MHz</p> <p>Read Range: 2-6cm</p> <p><b>PIN Length:</b> 4-6 digits</p> <p><b>Relay Output, Exit Button, Alarm, Door Contact, Wiegand Input, Wiegand Output</b></p> <p>One (NO, NC, Common)</p> <p>Adjustable Relay Output Time: 0-99 Seconds (5 seconds default)</p> <p>Lock Output Load: 2 Amp Maximum</p> <p><b>Wiegand Interface</b></p> <p>EM card version: Wiegand 26-44 bits Input &amp; Output (Factory Default: Wiegand 26bits)</p> <p>Mifare card version: Wiegand 26-44bits, 56bits input &amp; output (Factory Default: Wiegand 4bits)</p> <p><b>4 bits, 8 bits(ASCII), 10 digits Virtual Number</b> (Factory Default: 4 bits)</p> <p><b>Environment</b></p> <p>Operating Temperature: -40°C ~ 60°C (-40°F ~ 140°F)</p> <p>Operating Humidity: 0%RH-95%RH</p> <p><b>Physical Dimensions</b></p> <p>Zinc-Alloy</p> <p>Colour: Silver &amp; Black</p> <p>Dimensions: 114x5 x W68 x D25 (mm) Ellipse</p> <p>Unit Weight: 500g</p> <p>Shipping Weight: 500g</p> <p><b>Carton Inventory</b></p> <p>Dia. 10mm: Diode 1N4004 (For relay circuit protection)</p> <p>Wall Anchors</p> <p>Self Tapping Screws: Φ4×25mm</p> <p>Screw Driver</p> <p>Master Card</p> <p>- 02 -</p>	<p><b>INSTALLATION</b></p> <p>&gt; Remove the back cover from the unit</p> <p>&gt; Drill 2 holes(A,C) on the wall for the screws and one hole for the cable</p> <p>&gt; Fix the supplied rubber bumps to the screw holes(A,C)</p> <p>&gt; Thread the cable through the cable hole(B)</p> <p>&gt; Attach the unit to the back cover</p>  <p>- 03 -</p>	<p><b>Sound and Light Indication</b></p> <table border="1"> <thead> <tr> <th>Operation Status</th> <th>LED</th> <th>Buzzer</th> </tr> </thead> <tbody> <tr> <td>Stand by</td> <td>Red light bright</td> <td>---</td> </tr> <tr> <td>Enter into programming mode</td> <td>Red light shines</td> <td>One beep</td> </tr> <tr> <td>In the programming mode</td> <td>Orange light bright</td> <td>Three beeps</td> </tr> <tr> <td>Operation error</td> <td>---</td> <td>---</td> </tr> <tr> <td>Exit from the Programming mode</td> <td>Red light bright</td> <td>One beep</td> </tr> <tr> <td>Open lock</td> <td>Green light bright</td> <td>One beep</td> </tr> <tr> <td>Alarm</td> <td>Red light flashes quickly</td> <td>Beeps</td> </tr> </tbody> </table> <p><b>Basic Configure</b></p> <p><b>Enter and Exit Program Mode</b></p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>Enter Program Mode</td> <td>*(Master Code) # (Factory default is 123456)</td> </tr> <tr> <td>Exit Program Mode</td> <td>*</td> </tr> </tbody> </table> <p><b>Set Master Code</b></p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. 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(Factory default mode) --- 7 7 #</p> <p><b>Connection Diagram</b></p> <p><b>Common Power Supply</b></p>  <p><b>Attention:</b> Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)</p> <p><b>Access Control Power Supply</b></p>  <p>- 05 -</p>	<p><b>Programming</b></p> <p>Programming will be varied depending on access configuration. Follow the instructions according to your access configuration.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>&gt; <b>User ID number:</b> Assign a user ID to the access card / PIN in order to track it.</li> <li>The Common User ID: 0-987</li> <li>Panic User ID: 988-999</li> <li>Visitor User ID: 990-999</li> </ul> <p><b>IMPORTANT:</b> User IDs do not have to be proceeded with any leading zeros. Recording of User ID is critical. Modifications to the user requires the User ID to be available.</p> <p>&gt; <b>Proximity Card:</b> Proximity Card: 125KHz; EM card or 13.56MHz; Mifare card</p> <p>&gt; <b>PIN:</b> Can be any 4-6 digits except 8888 which is reserved.</p> <p><b>Add Common Users</b></p> <p>PIN Card user ID: 0-987; PIN length: 4-6 digits except 8888</p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. Enter Program Mode</td> <td>*(Master Code) #</td> </tr> <tr> <td>2. Add Card</td> <td>1 (User ID) # (Read Card) / Input 8 / 10 / 17 Digits Card Number #</td> </tr> <tr> <td>OR</td> <td></td> </tr> <tr> <td>2. Add PIN</td> <td>1 (User ID) # (PIN) #</td> </tr> <tr> <td>3. Exit</td> <td>*</td> </tr> </tbody> </table> <p><b>Add Panic Users</b></p> <p>User ID number is 988, 989; PIN length: 4-6 digits except 8888</p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. 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Select Specific ID (Allows manager to define a specific User ID to associate the PIN to)</p> <p>1 (PIN) #</p> <p>The PINs can be added continuously</p> <p>1 (User ID) # (PIN) #</p> <p>3. Exit *</p> <p><b>Tips for PIN Security (Only valid for 6 digits PIN):</b></p> <p>For higher security we allow you to hide your correct PIN with other numbers up to a max of 10 digits.</p> <p><b>Example PIN:</b> 123434 You could use *(123434)* or *(123434) (** can be any numbers from 0-9)</p> <p><b>Add Panic Users</b></p> <p>User ID number is 988, 989; PIN length: 4-6 digits except 8888</p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. Enter Program Mode</td> <td>*(Master Code) #</td> </tr> <tr> <td>2. Add Card</td> <td>1 (User ID) # (Read Card) / Input 8 / 10 / 17 Digits Card Number #</td> </tr> <tr> <td>OR</td> <td></td> </tr> <tr> <td>2. Add PIN</td> <td>1 (User ID) # (PIN) #</td> </tr> <tr> <td>3. 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OR																																																																																																																																																																													
2. Delete User - By Card number	2 (input 8 / 10 / 17 Digits Card Number) #																																																																																																																																																																												
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2. Delete ALL Users	2 (Master Code) #																																																																																																																																																																												
3. Exit	*																																																																																																																																																																												
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2. Pulse Mode	3 (1-99) # (factory default)																																																																																																																																																																												
OR																																																																																																																																																																													
2. Toggle Mode	3 #																																																																																																																																																																												
3. Exit	*																																																																																																																																																																												
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2. Card Access	4 0 #																																																																																																																																																																												
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2. Card + PIN Access	4 1 #																																																																																																																																																																												
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2. Multi User Access	4 3 (2-9) # (Only after 2-9 valid users, the door can be opened)																																																																																																																																																																												
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The beep can be stopped by closing the door, master users or valid users, or else, it will continue to keep the same time with the alarm time set.</p> <p><b>Door Forced Open Detection</b></p> <p>When use with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened by force, the inside buzzer and external alarm (if there is) will both operate, they can be stopped by master users or valid users, or else, it will continue to sound the same time with the alarm time set.</p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. Enter Program Mode</td> <td>*(Master Code) #</td> </tr> <tr> <td>2. Disable Door Open Detection</td> <td>6 3 # (factory default)</td> </tr> <tr> <td>OR</td> <td></td> </tr> <tr> <td>2. Enable Door Open Detection</td> <td>6 4 #</td> </tr> <tr> <td>Set Alarm Time</td> <td>5 (0-3) # (factory default is 1 minute)</td> </tr> <tr> <td>3. Exit</td> <td>*</td> </tr> </tbody> </table> <p>The function of Set Alarm Time also apply for anti-tamper alarm</p> <p>- 09 -</p>	Function Description	Operation	Enter the Programming Mode	*(Master Code) # (Factory default 123456 is the factory default master code)	Change the Master Code	0- New Code -# - Repeat the New Code-# (code: 6 digits)	Add Card User	1- Read Card -# (can add cards continuously)	Add PIN User	1- PIN-# (The PIN is any 4-6 digits except 8888 which is reserved)	Delete User	2- Read Card -# (factory default 2- PIN-#)	Exit from the Programming Mode	*	How to release the door	5 (0-3) # (factory default is 1 minute)	Card User	Read Card	PIN User	Input PIN #	Programming Step	Keystroke Combination	1. Enter Program Mode	*(Master Code) #	2. Disable Door Open Detection	6 3 # (factory default)	OR		2. Enable Door Open Detection	6 4 #	Set Alarm Time	5 (0-3) # (factory default is 1 minute)	3. Exit	*	<p><b>Set Audible and Visual Response</b></p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. Enter Program Mode</td> <td>*(Master Code) #</td> </tr> <tr> <td>2. Disable Sound</td> <td>7 0 #</td> </tr> <tr> <td>OR</td> <td></td> </tr> <tr> <td>2. Enable Sound</td> <td>7 1 # (factory default)</td> </tr> <tr> <td>2. LED Always OFF</td> <td>7 2 #</td> </tr> <tr> <td>OR</td> <td></td> </tr> <tr> <td>2. LED Always ON</td> <td>7 3 # (factory default)</td> </tr> <tr> <td>2. Keypad Backlit Always OFF</td> <td>7 4 #</td> </tr> <tr> <td>OR</td> <td></td> </tr> <tr> <td>2. Keypad Backlit Always ON</td> <td>7 5 #</td> </tr> <tr> <td>Keypad Backlit Automatic OFF</td> <td>7 6 # (factory default)</td> </tr> <tr> <td>Keypad Backlit Automatic ON</td> <td>Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)</td> </tr> <tr> <td>3. Exit</td> <td>*</td> </tr> </tbody> </table> <p><b>Master Card Usage</b></p> <p>Using Master Card to add and delete users</p> <p>Add Card / PIN Users</p> <ol style="list-style-type: none"> <li>Input (Master Code)</li> <li>Input (Card) or (PIN #)</li> <li>Repeat step 2 for additional users</li> <li>Input (Master Code) again</li> </ol> <p>Delete Card / PIN Users</p> <ol style="list-style-type: none"> <li>Input (Master Code Twice within 5s)</li> <li>Input (Card) or (PIN #)</li> <li>Repeat step 2 for additional users</li> <li>Input (Master Code) again</li> </ol> <p><b>Users Operation &amp; Reset to Factory Default</b></p> <ul style="list-style-type: none"> <li>&gt; Open the door: Read valid user card or input valid user PIN #</li> <li>&gt; Remove Alarm: Enter Master Code # or Master Card or valid user card / PIN</li> </ul> <p>- 10 -</p>	Programming Step	Keystroke Combination	1. Enter Program Mode	*(Master Code) #	2. Disable Sound	7 0 #	OR		2. Enable Sound	7 1 # (factory default)	2. LED Always OFF	7 2 #	OR		2. LED Always ON	7 3 # (factory default)	2. Keypad Backlit Always OFF	7 4 #	OR		2. Keypad Backlit Always ON	7 5 #	Keypad Backlit Automatic OFF	7 6 # (factory default)	Keypad Backlit Automatic ON	Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)	3. Exit	*	<p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>&gt; When set into Wiegand Reader mode, nearly all settings in Controller Mode will become invalid, and Brown &amp; Yellow wires will be redefined as below: - Brown wire: Green LED light control - Yellow wire: Buzzer control</li> <li>&gt; If you need to connect Brown/Yellow wires: When the input voltage for LED is low, the LED will turn into Green, and when the input voltage for Buzzer is low, it will sound.</li> </ul> <p><b>Set Wiegand Output Formats</b></p> <p>Please set the Wiegand output formats of Reader according to the Wiegand input formats of the Controller.</p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. Enter Program Mode</td> <td>*(Master Code) #</td> </tr> <tr> <td>2. 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It is of two devices for two doors, and mainly used for banks, prisons, and other places where a higher level security is required.</p> <p><b>Connection Diagram:</b></p>  <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>&gt; The Master units and Accept units must be same series devices.</li> <li>&gt; The Master Codes of the Master Unit and the Accept Unit must be set to the same.</li> <li>&gt; Program the transfer operation on Master Unit only.</li> <li>&gt; If the Accept Unit is already with the users enrolled, it will be covered after transferring.</li> <li>&gt; For full 1000 users enrolled, the transfer takes about 30 seconds.</li> </ul> <p><b>Set Transferring on Master Unit:</b></p> <table border="1"> <thead> <tr> <th>Programming Step</th> <th>Keystroke Combination</th> </tr> </thead> <tbody> <tr> <td>1. Enter the programming mode</td> <td>*(Master Code) #</td> </tr> <tr> <td>2. Set transferring</td> <td>9 8 #</td> </tr> <tr> <td>3. Exit</td> <td>*</td> </tr> </tbody> </table> <p><b>Interlock:</b> If enable interlock, when and only door 2 is closed, the user can read the valid fingerprint/card or input PIN on Reader A, door 1 will open; then when and only door 1 closed, read valid fingerprint/card or input PIN on Reader B, door 2 will open.</p> <p>- 14 -</p>	Programming Step	Keystroke Combination	1. Enter the programming mode	*(Master Code) #	2. Set transferring	9 8 #	3. Exit	*																																																																										
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