The EntryCheck™ 920P Indoor/Outdoor Keypad is a surface-mount digital keyless entry system designed for access control applications. The backlit keys are bright and easy-to-read. A heavy cast vandal resistant housing design with mounting plate allows the 920P to be mounted on a rugged surface or on a standard single-gang electrical box.

The 920P has a capacity of 500 users. Users can be assigned to use 4 to 6 digit PIN codes and/or HID 125kHz proximity access credentials. An authenticated access can be programmed to activate one or both of the relay outputs.

The timed “anti-passback” feature prevents using the same credentials twice before a programmed waiting period has elapsed.

Two long lasting solid state LED indicators show the status of the system. The left bi-color indicator lights red to indicate power, then green when a relay is active (access grant, etc.). The right indicator flashes yellow to indicate that the keypad is in programming mode.

An internal sounder can be programmed to beep each time a key is pressed or when an output is activated. An internal jumper sets the sounder volume high or low.

The SENSE input can be configured two ways through programming. When configured for “Door Sense”, the input is wired to a normally closed door position switch to detect when the door is opened or closed. Forced entry or door ajar situations can then be detected. The “Auto-relock” feature can also be used to turn off the Main Relay output immediately when the door is closed after access has been granted to prevent “tailgating”.

When the SENSE input is configured for “Inhibit”, the input can be wired to a normally open “service” switch or automatic timer that will disable access while the switch is closed.

The REQUEST-TO-EXIT input can be wired to a normally open pushbutton to provide codeless activation of the Main Relay, Auxiliary Relay, Output #3 or Output #4 (programmable).

The ALARM SHUNT signal is available when access is granted. This signal can be programmed to activate any of the relays or solid state outputs to shunt alarm contacts on the access door/gate preventing the triggering of an alarm when an authorized access occurs.

The 920P EntryCheck™ is powered from a 12 or 24V AC or DC source. The non-volatile EEPROM memory retains entry codes and programming when power is removed. An internal jumper is provided to reset the master code. The Main Relay has a 5 Amp capacity. The Auxiliary Relay has a 2 Amp capacity. Two solid state outputs, capable of sinking 100 mA to common are programmable for alarm shunting, or to signal forced entry, door ajar, keypad lockout, request-to-exit, and keypad active conditions.

Features
- Keypad programmable
- 500 user codes
- 3 User Modes
  - PIN or Card
  - Card Only
  - Card and PIN
- 4 to 6 digit user codes
- 4 independent outputs
- 4 independent timers
- 2 Form C relay contacts
- 2 solid state open collector outputs
- Program entry codes to activate one or two relays
- Disable input
- Door sense input
- Request-to-exit/Reception input
- Keypad tamper lockout
- Timed anti-passback
- Anti-tailgate
- Two LED status indicators
- Tactile key feel
- Audible code entry verification
- 12V or 24V, AC or DC operation

SPECIFICATIONS

Mechanical
Dimensions: 3.00" W x 5.75" H x 1.375" D (1.4375" wall projection)

Electrical
Input Voltage: 12/24 Volts AC or DC
Operating Current: 30 mA typical, 150 mA max

Output Ratings
Main Relay: Form “C” 5 Amps @ 28 Volts max
Auxiliary Relay: Form “C” 2 Amp @ 28 Volts max
Type: Solid state outputs (Outputs #3 & #4)
Short-to-common 100 mA @ 24 VDC maximum

Environmental
Temperature: -4°F to 140°F (-20°C to 60°C)
Humidity: 5% to 95% non-condensing
QuickStart Programming

You must first enter programming mode to perform any function. The yellow indicator will blink slowly showing that the 920P EntryCheck™ is in programming mode. Use the option codes to program each function. After the new data entry is complete for each function, the yellow indicator will flash quickly while the data is being stored and the green indicator will light briefly if the programming has been accepted. The red indicator will light if any programming data is entered incorrectly or the function is rejected. If a red indicator is seen, the entire function (option code + data) will have to be fully re-entered. The keypad will remain in programming mode until ** # is pressed or after 30 seconds of inactivity.

Set default parameters (first time use)

Step 1. Enter: ** # 123456 # Enter programming mode (default master code=123456)
Step 2. Enter: 03 # 4 # Set the entry code length to 4 digits
Step 3. Enter: 21 # 5 # Set the main relay activation time for 5 sec.
Step 4. Enter: ** # Exit programming mode

Assign a user (Card only)

Step 1. Enter: ** # 123456 # Enter programming mode (default master code)
Step 2. Enter: 06 # 002 # 9876 # 9876 # 1 # (Present card) Assign card to User 002 with a PIN code of ‘9876’. Activate the main relay when validated.
Step 3. Repeat Step 2 to enter another unique user & card, or continue to Step 4.
Step 4. Enter: ** # Exit programming mode.

Assign a user (PIN only)

Step 1. Enter: ** # 123456 # Enter programming mode (default master code)
Step 2. Enter: 01 # 003 # 2580 # 2580 # 1 # Assign User 003 with a PIN code of ‘2580’. Activate the main relay when entered.
Step 3. Repeat Step 2 to enter another unique user & PIN or continue to Step 4.
Step 4. Enter: ** # Exit programming mode.

Test your new user

Present your card or enter an authorized PIN code + #. The green indicator should illuminate and the main relay should activate, unlocking the door for 5 seconds.

Deleting a user code

Step 1. Enter: ** # 123456 # Enter programming mode (default master code)
Step 2. Enter: 02 # 002 # 002 # User 002 has been deleted.
Step 3. Enter: ** # Exit programming mode

CAUTION

IF THE UNIT IS AC POWERED, MAKE SURE THAT THE SECONDARY OF THE SYSTEM IS ISOLATED FROM EARTH GROUND.
KEYPAD WIRING

See Fig. 3 for an example of a basic door installation. The keypad is mounted adjacent to the door. An electric door strike is mounted in the door jamb to release the door lock. A door contact switch is mounted on top of the door jamb for detecting when the door is open.

Use the following steps to wire the keypad. Refer to the wiring diagram shown in Fig. 4 to assist in the wiring.

**Note:** For lock power, use 18 AWG wire or larger (depending on load). Use 22 AWG or larger for signal connections. Refer to lock manufacturer’s documentation for lock power requirements.

**Output Connection**

Install a low-voltage fail-secure electric door strike at the door to be controlled. Route 2 wires from the door strike to the keypad. Connect an MOV across the coil wires of the strike. Connect the (+) door strike wire to the keypad’s MAIN RELAY N.O wire (yellow). Connect the other door strike wire to the keypad’s PWR(+) wire (black). Connect the keypad’s MAIN RELAY COM wire (white) to the keypad’s PWR(+) wire (red).

**Power Connection**

Connect the power supply’s output terminals to the keypad’s PWR(+) wire (red) and PWR(-) wire (black). If using a DC supply, observe wiring polarity. If an AC transformer is being used, polarity does not matter.

**Caution:** If the unit is AC powered, make sure the secondary of the system transformer is **isolated** from earth ground.

**Earth Ground**

To avoid damage to the unit from static discharges, this unit must be connected to a proper earth ground point. Suggested wiring size is 18 AWG for earth ground.

**Sense Input**

RE Note: The SENSE input (gray wire) can be programmed as either a door sense or inhibit input. Both features cannot be used at the same time. If you are not using the sense input, program this input for inhibit.

Door Sense: (Detect forced entry or door ajar conditions) Install a normally closed door switch on the door and route two wires from the switch to the keypad. Connect the door switch to the keypad’s SENSE wire (gray/ E8) and COM wire (any black wire).

Inhibit: (Disable access) If an inhibit switch or timer is going to be used for temporarily disabling the keypad, route two wires from the switch or timer to the keypad. Connect the inhibit switch/timer’s normally open contacts to the keypad’s SENSE (gray/ E8) and COM (black) wires terminal.

**Request-to-Exit Input** (wiring shown on page 3, fig. 4)

If a request-to-exit pushbutton is going to be used, route two wires from the keypad box to a normally open pushbutton mounted on the secure side of the door. Connect the wires to the pushbutton and to the keypad’s REX wire (violet/ E6) and COM (black wires) terminals.

**Solid State Outputs**

The two solid state outputs (Outputs #3 & #4) can be programmed to activate during various conditions. These “open collector” outputs can be used to activate indicators or sounders. See fig. 5 for wiring examples using the solid state outputs.

**Fig. 3 Basic Door Installation**

**Fig. 4 Basic Door Installation Wiring**

**Fig. 5 Using Solid State Outputs**
**FACTORY DEFAULTS**

Master Programming Code…………………………………….123456
Entry Code Length…………………………………………4 digits
Entry Mode…………………………………………Card or PIN
Request-to-exit Output Relay………………………….No Output
Alarm Shunt Output…………………………………Disabled
Forced Entry Output………………………………………No Output
Door Ajar Output……………………………………….No Output
Main Relay On Time………………………………......02 Seconds
Auxiliary Relay On Time……………………………...02 Seconds
Solid State Output #3 On Time…………………………02 Seconds
Solid State Output #4 On Time…………………………02 Seconds
Door Sense/Inhibit Input…………………………Door Sense
Keypad Lockout Output…………………………………Disabled
Keypad Active Output……………………………………Disabled
Beeper Sounds When Key Pressed……………………Yes
Beeper Sounds During Output #1…………………………No
Beeper Sounds During Output #2…………………………No
Beeper Sounds During Output #3…………………………No
Beeper Sounds During Output #4…………………………No
Keypad Lockout Count……………………………………3 Tries Before Lockout
Anti-Passback Time………………………………………No Anti-Passback
Auto-Relock………………………………………………On

**BASIC PROGRAMMING**

When the 920P EntryCheck™ is in Programming Mode the yellow indicator will blink slowly. After a programming command is selected, the yellow indicator will flash rapidly while the keypad is waiting for user input data. The green indicator will light if the data is accepted. The red indicator will light if any programming data is entered incorrectly, and the command will have to be re-entered. IMPORTANT!: Cards & Codes are stored by User #. It is imperative that the User numbers and their assigned personnel entered. IMPORTANT!: Cards & Codes are stored by User #. It is imperative that the User numbers and their assigned personnel are managed in the event a specific user ever needs to be deleted.

**Entering Programming Mode**

The 6-digit Master Programming Code (default = 123456) is used to enter Programming Mode.

**Press:** # 9 # Master Code #

**Master Code = the current 6-digit Master Programming Code**

**Exiting Programming Mode**

**Press:**  ***

The red indicator will light after exiting Programming Mode.

**Note:** The 920P will automatically exit Programming Mode after 30 seconds of inactivity.

**Re-entering a Command After a Mistake**

If the red indicator lights, signaling an incorrect entry, or an incorrect key is pressed during programming, to clear the keypad and re-enter the command:

**Press:** # 9 #

**Setting Entry Code Length**

**Default:** 4 digits

**Press:** 03 # Length #

**Length = 1-6 for entry code length**

**Note:** If the Entry Code Length is going to be changed from the factory default of 4 digits, make this change first before programming any entry codes.

**Select Entry Mode**

**Default:** Card or PIN

Sets the entry mode for the 920P.

**Press:** 05 # Mode #

**Mode=Operating Mode (1-3)**

1=Card or PIN; 2=Card Only 3=Card and PIN

**Adding a New User**

**User PIN Only Access (No Card)**

**Press:** 01 # User # Code # Code # Relay #

--- Or ---

**User Card or PIN Access**

**Press:** 06 # User # Code # Code # Relay # Present Card

**User=3-digit User number to be added: 001-500**

**Code=The new entry code: 1-999999, depending on code length**

**Relay=Relay output entry code will activate:**

1=Main Relay 2=Auxiliary Relay 3=Both Relays
10=Relay #1, toggled 20=Relay #2, toggled 30=both Relays toggled
12=Relay #1 toggled; Relay #2 timed open
21=Relay #1 timed open; Relay #2 toggled

The yellow indicator will flash quickly while the 920P stores the new user information in memory. The green indicator will light when the new code and card are accepted. If the user number already exists or an entry error has been made, the red indicator will light. Delete the user and re-enter the new information again.

**Note:** Leading zeros (zeros before the code number, i.e.0001) do not need to be entered when programming a new code. The 920 will internally add any zeros to fill digits determined by the entry code length setting. Leading zeros will have to be entered by the user when entering their code to gain access.

**Output Toggle Mode**

When an output is programmed for Toggle Mode, the output alternates from OFF to ON or from ON to OFF each time it is accessed. When an output is toggled on, the green LED remains solid until toggled off.

The rules for a toggle output are:

- If the output is OFF, it will turn ON and stay on until the next activation.
- If the output is ON, it will turn OFF and stay off until the next activation.
- An authorized PIN, Card, or REX input programmed to momentarily activate that same relay will reset the relay to its normal state.

**Adding Multiple Sequential Cards**

**Press:** 08 # 1st User # Code # Code # Relay # Number of users # Present 1st card

**Number of users = Total number of consecutive cards to add**

After presenting the 1st card, the green indicator will light as cards are added. NOTE: The “Code” will be the same for all users, but may be changed for each user using Function 04 below.

**Adding Multiple Non-Sequential Cards**

**Press:** 07 # 1st User # Code # Code # Relay # Number of users # Present 1st card, Present 2nd card, ..., Present last card

**1st User =Starting user number to add**

**Number of users = Total number of consecutive cards to add**

**Changing a User PIN**

**Press:** 04 # User # New Code # New Code #

**User =The user number whose PIN will be changed**

**Erasing a Single User**

**Press:** 02 # User # User #

**User =The user number to delete 001-500**

The yellow indicator will flash quickly while the 920P erases the user from memory. The green indicator will light when the code is erased.
Configure Sense Input  Default: INHIBIT

The Sense Input (gray wire) can be programmed for either DOOR SENSE or INHIBIT.

Press: 01 # User # 1 2 3 4 # 1 2 3 4 # 1 #
01=Programming Step; 1234=Entry Code; 1=Main Relay

Press: 01 # User # 5 6 7 8 # 5 6 7 8 # 2 0 #
01=Programming Step; 5678=Entry Code; 20=Auxiliary Relay toggle

Erasing Multiple Users (Sequential)
Press: 09 # 1st User # Number of users #
1st User = Starting user number to delete
Number of users = Total number of consecutive users to delete

The yellow indicator will flash quickly while the 920P erases the user from memory. The green indicator will light when the code is erased.

Select Keypad Lockout Output  Default: No Output
Sets which output activates when the keypad is "locked out" after too many incorrect entry code attempts. The lockout time is 60 seconds.

Press: 13 # Output #
Output=Output to Activate (0-4)
1=Main Relay; 2=Auxiliary Relay; 3=Output #3; 4=Output #4;
0=No Output / Lockout Disable

Select Keypad Active Output  Default: No Output
Sets which output activates when any keys are pressed. This output is timed. If toggle mode is selected for the output, the timer value defaults to 2 seconds.

Press: 14 # Output #
Output=Output to Activate (0-4)
1=Main Relay; 2=Auxiliary Relay; 3=Output #3; 4=Output #4;
0=No Output

Select Alarm Shunt Output  Default: No Output
Sets which output activates during the time access is granted. (Use this output to shunt alarm contacts attached to the access door.) This output may be timed or toggled.

Press: 15 # Output #
Output=Output to Activate (0-4)
1=Main Relay; 2=Auxiliary Relay; 3=Output #3; 4=Output #4;
0=No Output

Select Request-to-Exit Output  Default: No Output
Sets which output activates when the Request-to-Exit input is grounded. This output may be timed or toggled.

Press: 16 # Output #
Output=Output to Activate (0-4)
1=Main Relay; 2=Auxiliary Relay; 3=Output #3; 4=Output #4;
0=No Output

Anti-Tamper Output  Default: No Output
Sets which output activates when the Anti Tamper switch on the back of the keypad is activated.

Press: 17 # Output #
Output=Output to Activate (0-4)
0=No Output; 2=Auxiliary Relay; 3=Output #3; 4=Output #4;

Main Relay On-time  Default: 02 Seconds
Sets the length of time the Main Relay activates when triggered. Green LED is on when Main Relay is active.

Press: 21 # Seconds #
Seconds=Output time in seconds (1-60)

Auxiliary Relay On-time  Default: 02 Seconds
Sets the length of time the Auxiliary Relay activates when triggered.

Press: 22 # Seconds #
Seconds=Output time in seconds (1-60)
<table>
<thead>
<tr>
<th>Feature</th>
<th>Default</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beep Sounds During Auxiliary Relay</td>
<td>No</td>
<td>Press: 42 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Beep Sounds During Output #3</td>
<td>No</td>
<td>Press: 43 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Beep Sounds During Output #4</td>
<td>No</td>
<td>Press: 44 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Beep Sounds Anti-Tamper Activation</td>
<td>No</td>
<td>Press: 45 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Keypad Lockout Count</td>
<td>3 Attempts</td>
<td>Press: 50 # Attempts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attempts=Number of attempts before lockout (2-7)</td>
</tr>
<tr>
<td>Anti-Pass Back Time</td>
<td>No Anti-Pass Back</td>
<td>Press: 51 # Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minutes=Time in minutes (2-4), 0=No Anti-passback</td>
</tr>
<tr>
<td>Selects mode for Keypad LED Backlight</td>
<td>30 Seconds</td>
<td>Press: 52 # Output</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 = Light always OFF, 1 = 30 sec light when activated (default), 2 = Light always ON</td>
</tr>
<tr>
<td>Door Ajar Timer</td>
<td>60 Seconds</td>
<td>Press: 25 # Seconds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seconds=Held open time in seconds (1-60)</td>
</tr>
<tr>
<td>Beep Sounds on Keystrokes</td>
<td>Yes</td>
<td>Press: 40 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Beep Sounds During Main Relay</td>
<td>No</td>
<td>Press: 41 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Beep Sounds During Auxiliary Relay</td>
<td>No</td>
<td>Press: 42 # Sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sound=1 for Yes, =0 for No</td>
</tr>
<tr>
<td>Solid-state Output #3 On-time</td>
<td>02 Seconds</td>
<td>Press: 23 # Seconds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seconds=Output time in seconds (1-60), 99=Toggle Mode</td>
</tr>
<tr>
<td>Solid-state Output #4 On-time</td>
<td>02 Seconds</td>
<td>Press: 24 # Seconds</td>
</tr>
<tr>
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<td>Seconds=Output time in seconds (1-60), 99=Toggle Mode</td>
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<td>Changing the Beeper Sound Level</td>
<td></td>
<td>The Keypad’s beeper can be set to high or low level. Remove jumper JP1 to reduce beeper sound level.</td>
</tr>
<tr>
<td>Changing the 6-Digit Master Programming Code</td>
<td></td>
<td>Press: 98 # Master Code # Master Code #</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Master Code=The new 6-digit Master Programming Code</td>
</tr>
<tr>
<td>RESETTING KEYPAD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master Reset</td>
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<td></td>
</tr>
<tr>
<td>CAUTION: Performing a master reset will clear the entire memory of the 920P and return all programmable options to the factory default values. ALL ENTRY CODES WILL BE ERASED. NOTE: The Master Code will NOT be reset.</td>
<td></td>
<td></td>
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</tbody>
</table>
5.750
1.375
3.000

MOUNTING TO SINGLE GANG
RECESSED OUTLET BOX

SURFACE MOUNT

4X Mount at holes
With supplied screws and hole expansion anchors

2X Mount at slots
OPTIONAL SHROUD

SURFACE MOUNT (WITH OPTIONAL SHROUD)

POST MOUNT (WITH SHROUD)

4X Mount at holes