



INSTALLATION INSTRUCTIONS

920PW EntryCheck™



The *EntryCheck™* 920PW indoor/outdoor Wiegand proximity reader with integral digital keypad is designed to interface with most Access Control Systems. It offers a 125KHz HID-compatible proximity reader with standard 26-bit Wiegand output. The built-in keypad may be programmed to output 26-bit Wiegand data, or a 4-bit word for high-security applications that require dual authentication (Card + PIN).

The backlit keys are bright and easy-to-read. A heavy cast, vandal resistant housing design with mounting plate allows the 920PW to be mounted on a rugged surface or on a standard single-gang electrical box.

Two long lasting solid state LED indicators show the status of the system. The left bi-color indicator lights red to indicate power, or green to indicate an authorized access (controlled externally by host). The right indicator flashes yellow to indicate that the keypad is in programming mode.

Features

- 12 key illuminated 3x4 digital keypad with configurable illumination: always on, timed, off
- Supports HID (125KHz RFID) proximity protocols
- Suitable for Indoor/Outdoor use: Weather & vandal resistant
- Standard 26-bit Wiegand output for universal compatibility
- Programmable Site Code
- Programmable Keypad Operation:
 - 26-bit Wiegand, or
 - 4-bit word
- Surface or single-gang mount
- Built-in tamper switch
- Two LED status indicators
- Audible annunciation of keystrokes with adjustable sound level: normal, low, off
- Tactile metal keys
- Includes wiring harness
- Optional privacy & rain shroud available

Specifications

- Operating Voltage: 5 - 16 Volts DC
- Current Consumption: 30mA (typical), 60 mA (max)
- Operating Temperature: -4° to 140°F (-20° to 60°C)
- Humidity: 5% to 95% non-condensing
- Dimensions (H x W x D): 5.75" x 3" x 1.375", (1.4375" wall projection)
- Housing: Weather-resistant cast metal
- Cabling: 6" wiring harness
- Reader Output: 26-bit Wiegand
- Keypad Output: 26-bit Wiegand or 4-bit word
- Max. Cable Distance to Host: 328ft (100m) @12VDC, 100ft (30m) @ 5VDC, using 18AWG cabling
- Recommended Cable (shielded, multi-conductor) or equal:
 - Belden 5504FE (6 Cond)
 - Belden 5506FE (8 Cond, for Tamper Switch)
- Tamper switch: Form "C", 1A @ 30VDC

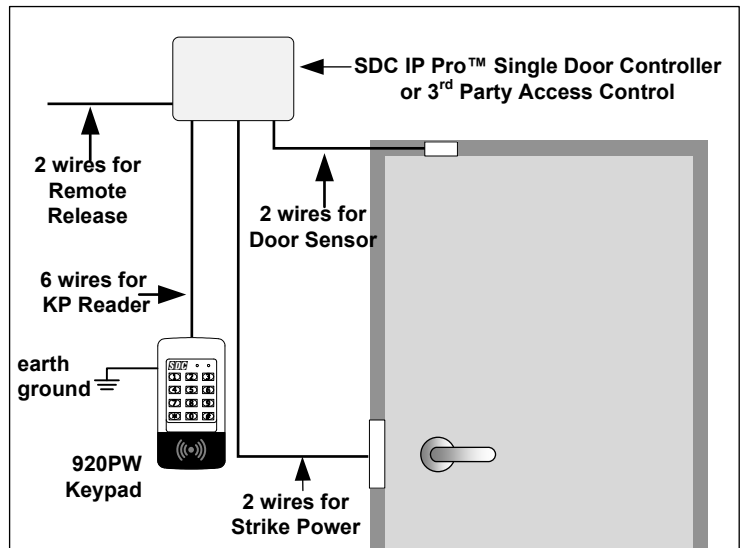
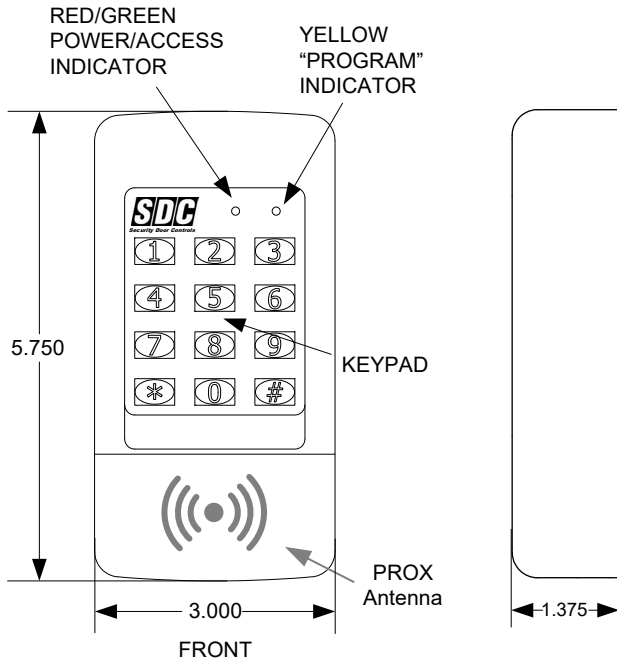
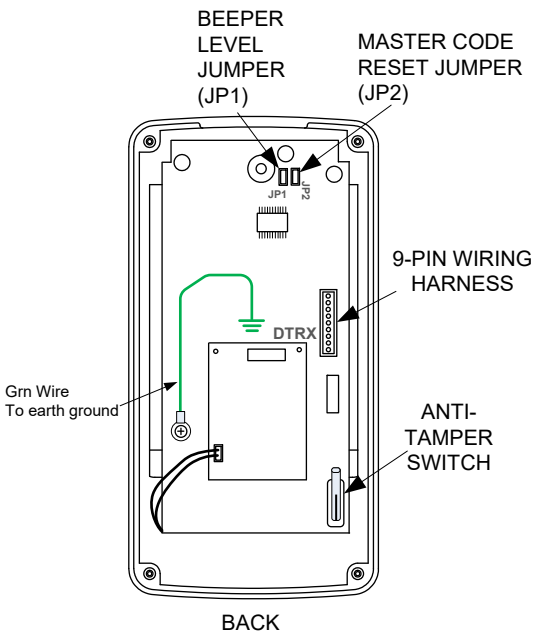


Fig. 3 Basic Door Installation

920 PW Wiring Harness Connections	
Wire Color	Designation
RED	+VDC (5-16V)
BLACK	GND
WHITE	WIEGAND D1
GREEN	WIEGAND D0
ORANGE	GREEN LED CONTROL
YELLOW	BUZZER CONTROL
BLUE	TAMPER (N.O.)
SALMON	TAMPER (COM)
VIOLET	TAMPER (N.C.)

Fig. 4 Wiring Harness Connections



920PW WIRING & GROUNDING

See Fig. 3 for an example of a basic door installation. The 920PW is mounted adjacent to the door. An electric door strike is mounted in the door jamb to release the door lock. A magnetic switch is mounted on top of the door jamb for detecting when the door is open. The access host controller is located at a maximum distance of 300ft of the keypad reader, depending on the reader voltage provided.

Refer to the Fig. 4 or Fig. 5 for wiring details.

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

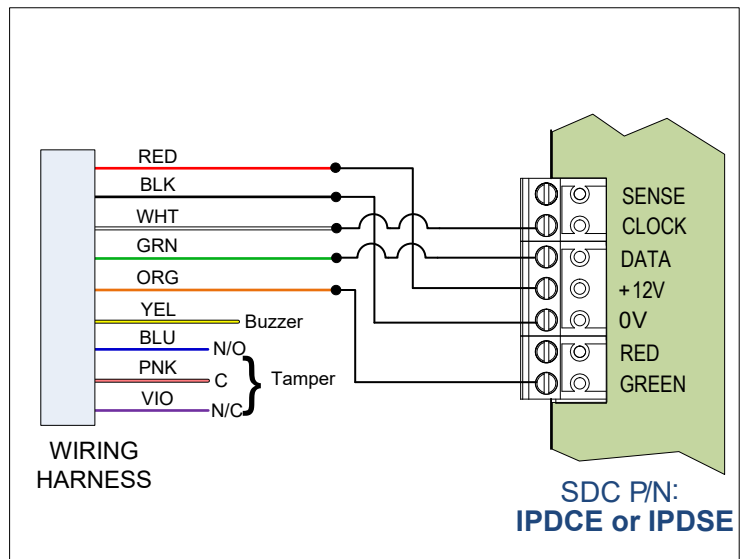


Fig. 5 Installation Wiring to IPDCE Single-Door Controller

FACTORY DEFAULTS

Master Programming Code.....	123456
Keypad Output Mode.....	26-bit Wiegand
Keypad Output Site Code.....	000
Beeper Sounds When Key Pressed.....	Yes
Beeper Volume.....	Normal
Keypad Backlight Mode.....	30 sec after activation
Keypad Timeout.....	5 sec

920PW OPERATION

The 920PW EntryCheck™ integrates an HID proximity reader with a 12-key digital keypad. Presenting a card/fob to proximity reader will transmit the credential's facility (site) code and card number in a standard 26-bit Wiegand output.

The Keypad may operate in one of two modes:

(1) Wiegand Mode (default) – In this mode, the keypad will emulate a reader credential. Entering a 'card' number followed by '#' will transmit the programmed facility code plus the card number as a 26-bit Wiegand output. The card number entered must be > 0 and < 65,535.

(2) PIN Mode – When this mode is enabled, each key press generates a 4-bit sequence. Enable PIN mode if the host controller supports (Card + PIN) mode, and dual authentication is desired.

ERROR ANNUNCIATION (Wiegand Mode only)

Keypad Action	Indication
Key press timeout (in standby)	Double Beep
0, or number >= 65535 is entered	Red LED flash w/ beep (x3)
* is entered	Red LED flash w/ beep (x3)
Master Code error	Red LED flash w/ beep (x3)

BASIC PROGRAMMING

While the 920PW is in Programming Mode the yellow indicator will blink slowly.

After a programming function is selected, the yellow indicator will flash rapidly while the keypad is waiting for user input data. You will have 5 sec. between programming commands once a function is selected. The green indicator will light if the data is accepted. The red indicator will light if any programming data is entered incorrectly, and the function will have to be fully re-entered.

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 920PW will automatically exit Programming Mode after 2 minutes of inactivity

Changing the Beeper Sound Level

The Keypad's beeper can be set to normal or low level. Remove jumper JP1 to reduce beeper sound level.

PROGRAMMING COMMANDS

Enter Programming Mode before performing any of the following commands.

Changing the 6-Digit Master Programming Code

It is recommended that the Master Programming Code be changed after the installation is finalized.

Press: 98 # Master Code # Master Code #

Master Code = The new 6-digit Master Programming Code

Beep Sounds on Keystrokes

Default: Yes

Selects whether or not the keypad beeps as each key is pressed.

Press: 40 # Sound #

Sound=1 for Yes, =0 for No

Selects mode for Keypad LED Backlight

Default: 30 Secs.

Selects whether or not the keypad back light stays OFF, lights for 30 seconds when activated or stays ON.

Press: 52 # Output #

Output = 0, Light always OFF

= 1, 30 sec light when activated (default)

= 2, Light always ON

Change Facility (Site) Code

Default: 000

Selects the Site Code when using the Keypad in Wiegand Mode.

Press: 82 # Site Code #

Site Code = New 3-Digit Site Code (000-255)

Change Keypad Operation Mode

Default: Wiegand Mode

Selects the Keypad Operation Mode.

Press: 83 # Mode #

Mode = 0, Wiegand Mode

= 1, PIN Mode

NOTE: Once the keypad is placed into PIN Mode, it can only be returned to the default Wiegand Mode by following the Master Reset procedure below.

RESETTING THE KEYPAD READER

Master Reset

Resets all programming options. **NOTE:** The Master Code will NOT be reset.

STEP 1 Disconnect power from the keypad.

STEP 2 Press and hold down the * and # keys.

STEP 3 Apply power to the keypad, continue holding the keys down until the red indicator starts flashing

STEP 4 Release the keys. The red and yellow indicators will remain lit until the process is complete, then the yellow indicator will go out.

Resetting the Master Code

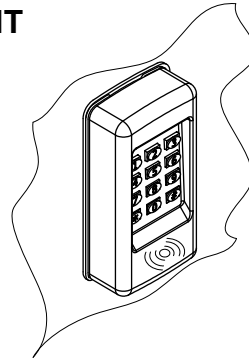
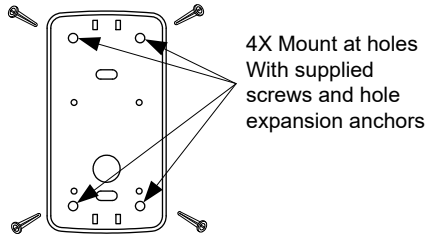
STEP 1 Remove the 920PW from the wall and disconnect power from the keypad.

STEP 2 Locate & remove jumper JP2. Reference page 2.

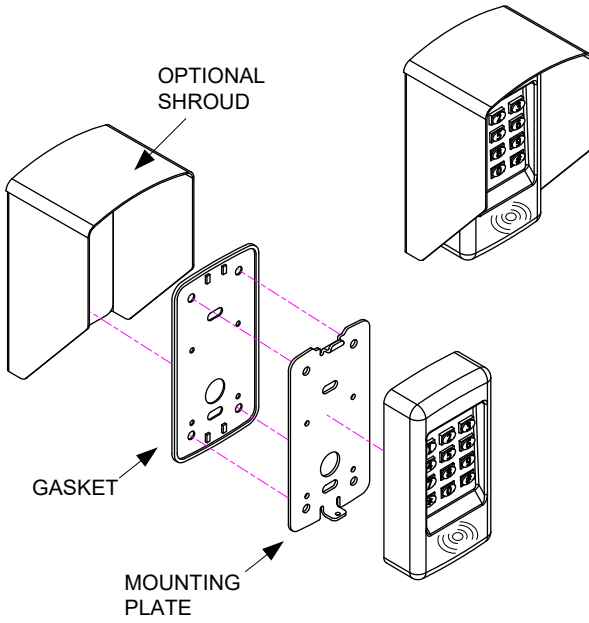
STEP 3 Re-apply power. You will get a single beep and the yellow LED will flash momentarily.

STEP 4 Replace jumper on JP2. The Master Code is now 123456.

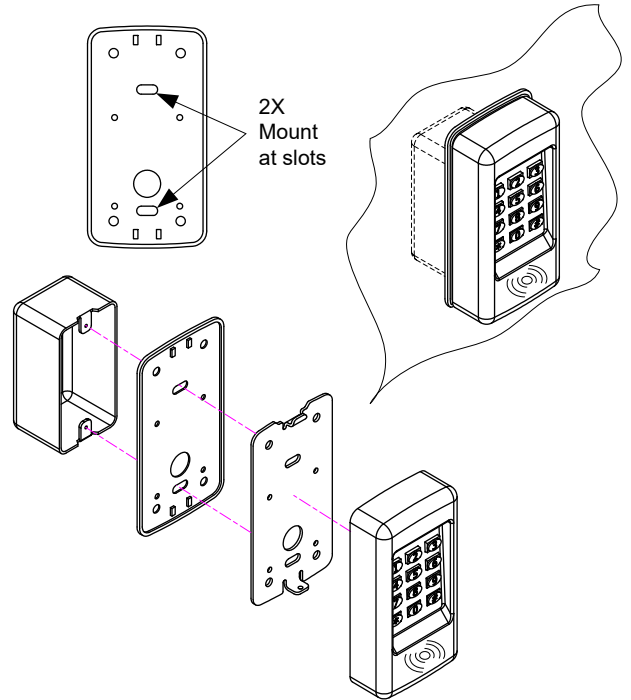
SURFACE MOUNT



SURFACE MOUNT (WITH OPTIONAL SHROUD)



MOUNTING TO SINGLE GANG RECESSED OUTLET BOX



POST MOUNT (WITH SHROUD)

