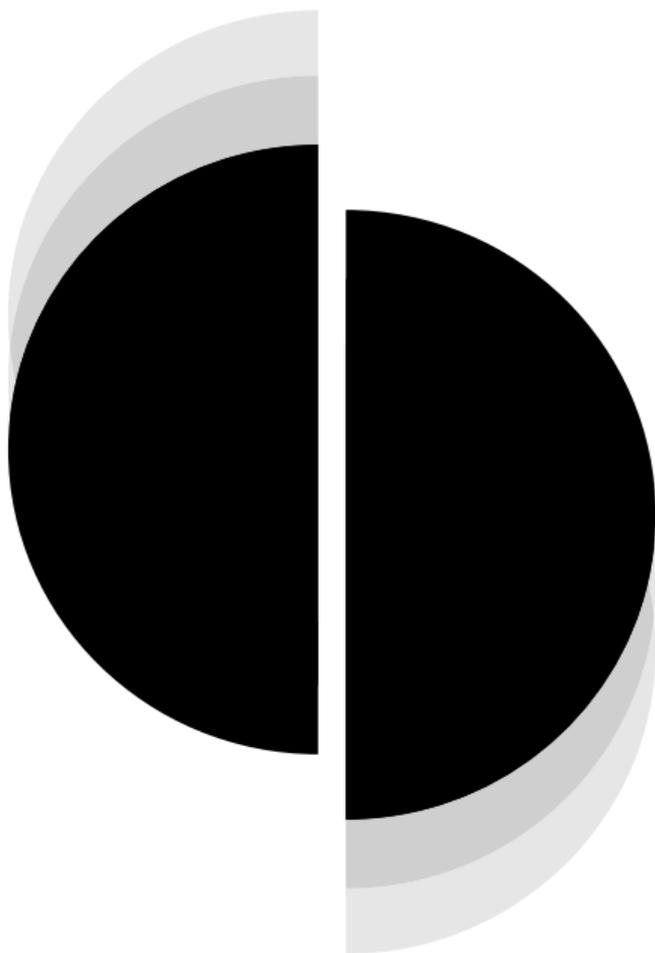


# INSTALLATION GUIDE



R SERIES

LATCH

# Welcome to your smartest install yet.

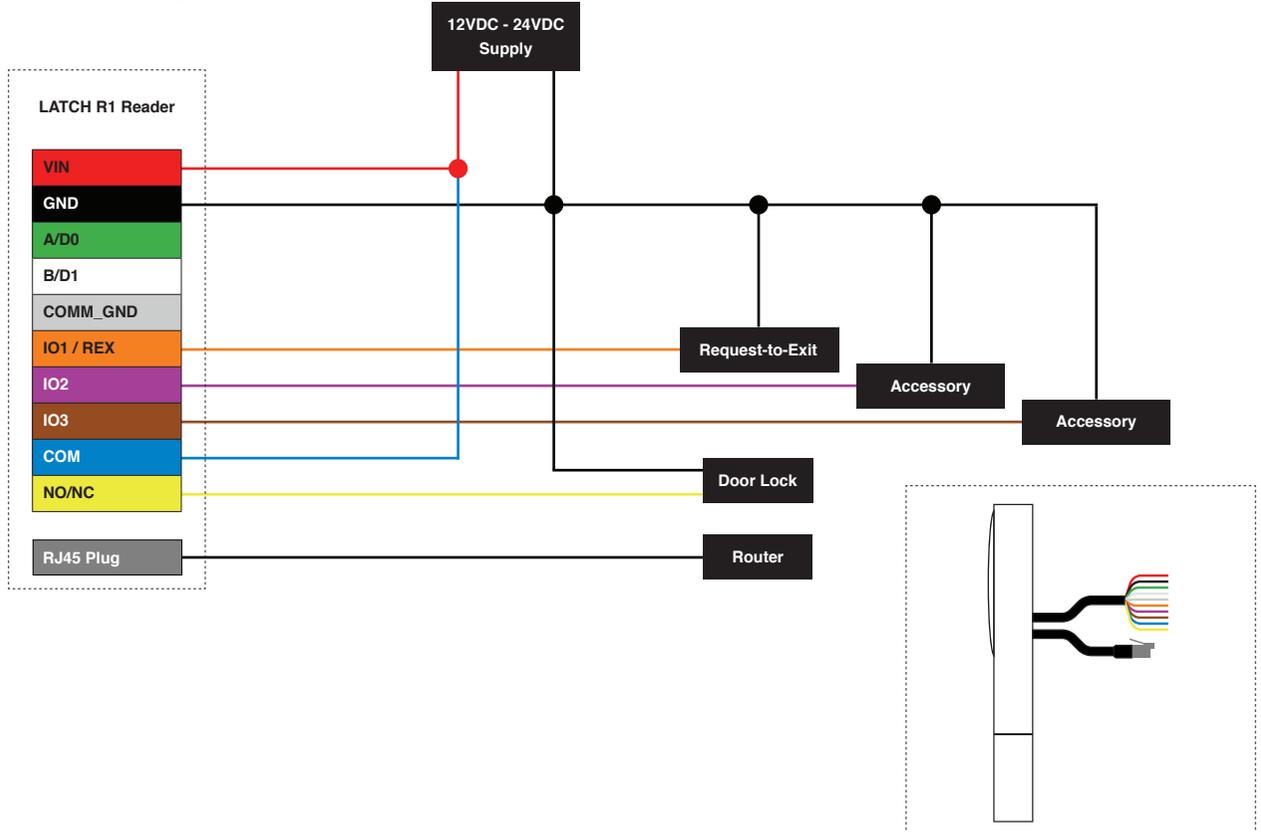
**Latch R** is a proximity reader, keypad, and wireless entry system, that can be operated as a standalone device or be connected to a panel as part of a wider system.

## Things you should know

- 1** Only use screws provided. Other screws can cause Latch R to disengage from the mounting plate.
- 2** The relay will revert to an open state in the event of power failure. Take precautions when wiring fail-safe locking hardware.
- 3** Apply power only after all devices have been properly connected.
- 4** Transient voltage protection devices are recommended to avoid damage to electrical devices.
- 5** Configuration requires the iOS Manager App running on an iPhone 5S or newer.
- 6** Troubleshoot at [support.latch.com](https://support.latch.com)

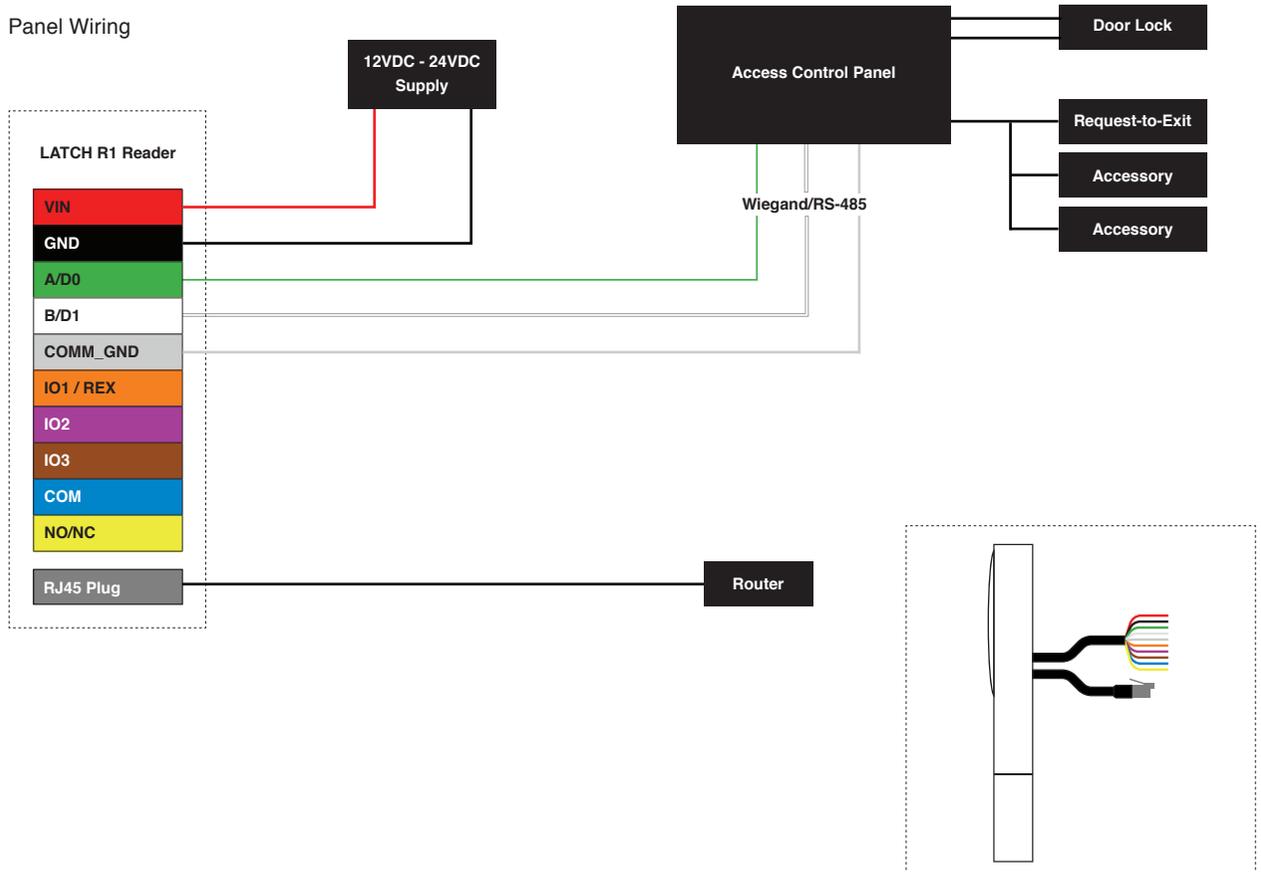
# Wiring

## Standalone Wiring



# Wiring

## Panel Wiring



## Wiring

### Standard Reader Connections

	Wire Color		Name	Description	Rating
1	GREEN		A/D0	RS-485 A, Wiegand DATA0	25mA max drive, 5VDC
2	WHITE		B/D1	RS-485 B, Wiegand DATA1	25mA max drive, 5VDC
3	GRAY		COM_GND	Return for A/D0, B/D1 wires	5VDC
4	YELLOW		NO/NC	Relay contact	1.5A, 24V DC or 16V AC max
5	BLUE		COM	Relay contact	1.5A, 24V DC or 16V AC max
6	ORANGE		IO1 / REX	IO1 / REX	0.35A, 24VDC Max
7	PURPLE		IO2	Flexible IO2 - input or output	0.35A, 24VDC Max
8	BROWN		IO3	Flexible IO3 - input or output	0.35A, 24VDC Max
9	RED		VIN	12VDC to 24VDC power input	0.25A @12VDC, 0.12A @24VDC
10	BLACK		GND	Return for power input	0.25A @12VDC, 0.12A @24VDC

### Ethernet Connections

	Wire Color		Name
11	GREEN/WHITE		TX+
12	GREEN		TX-
13	ORANGE/WHITE		RX+
14	BLUE		SPR1
15	BLUE/WHITE		SPR2
16	ORANGE		RX-
17	BROWN/WHITE		SPR3
18	BROWN		SPR4

# Technical Specifications

## Mechanical

- Dimensions: 5.49" x 3.18" x 0.76"

## Wireless Communication

- Near Field Communication (NFC): ISO 14443A
- NFC Card Type: Mifare Classic
- Bluetooth: 4.0 BLE (iOS and Android compatible)
- Wi-Fi: 802.11 b/g/n

## Wired Communication

- Ethernet 10/100Mbps, RJ45 Plug
- Serial: RS-485, 5VDC drive
- Wiegand (26-bit/32-bit/etc.): Data0, Data1, 5VDC 25mA source each

## Power

- Class 2 Isolated, UL Listed Power Supply
- Supply Voltage: 12VDC to 24VDC
- Operating Power: 3W (0.25A @12VDC, 0.12A @24VDC)

## Interface

- 1 x Lock Relay: Configurable NO 1 Form A Solid-State Relay (1.5A @ 24V DC or 16V AC max)
- 1 x IO/REX
- 2 x configurable IOs
- Input: active low – internal pull-up (0-24VDC)
- Output: open collector (24VDC 300mA max sink)

## Camera

- 172 degree wide capture

## Environmental

- Temperature: Operating / Storage -30°C to 70°C
- Operating Humidity: 95%, non-condensing
- Environmental: IP65

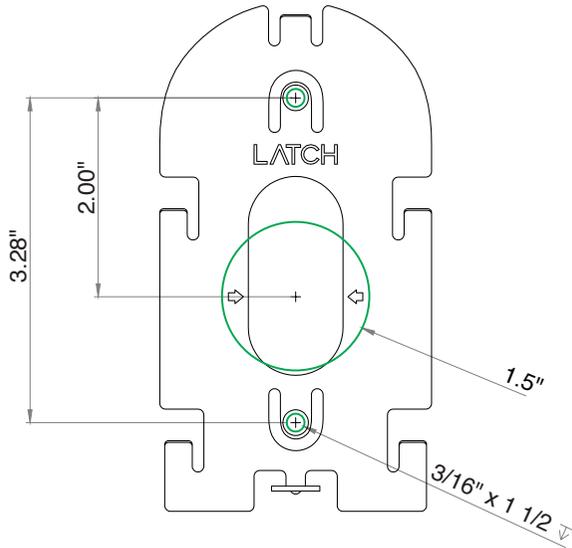
## Compliance

- Certification: FCC Part 15 (US), IC RSS (Canada), RoHS

## Warranty

- 1-year limited warranty on electronics, 5-year limited warranty on mechanics

## Drill



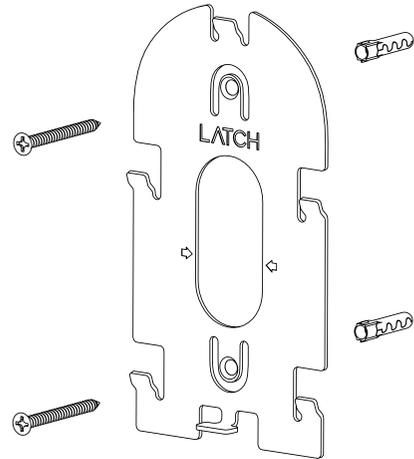
# 1

Prepare holes using mounting plate as a template and drill.

## Screw



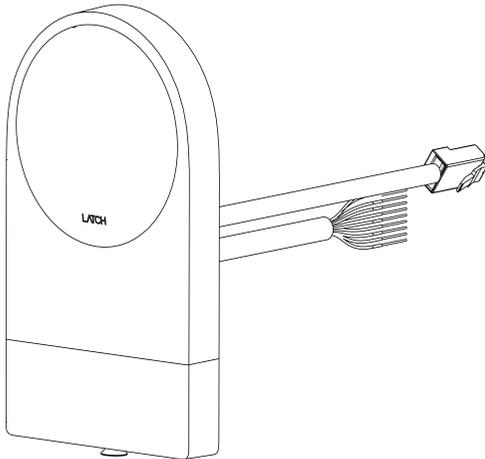
**Important:** Use the provided screws or #6 flathead screws to avoid mounting failure.



# 2

Screw mounting plate in using the correct screws.

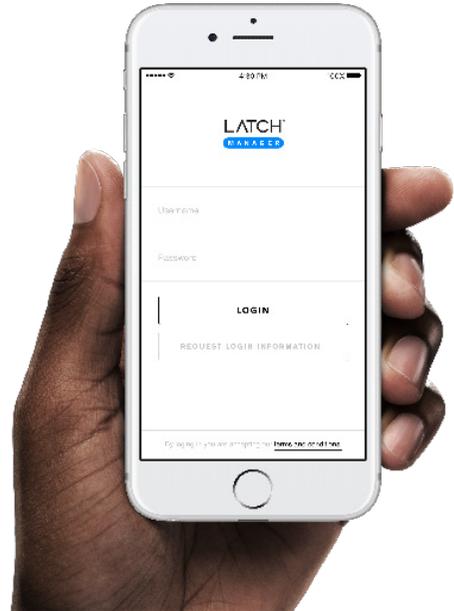
## Connect



# 3

Connect based on wiring diagrams.

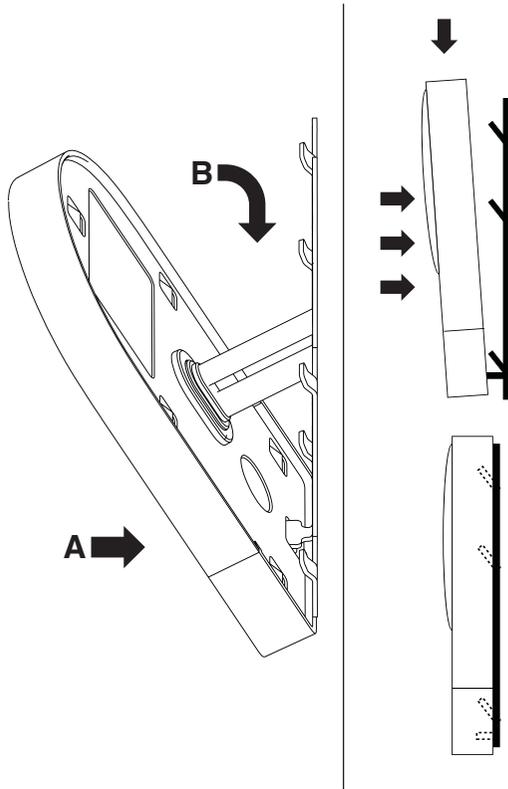
## Configure



# 4

Download Latch Manager App from the iOS App Store to configure Latch R and test that everything works. Requires iPhone 5S or newer. Learn more at [support.latch.com](https://support.latch.com)

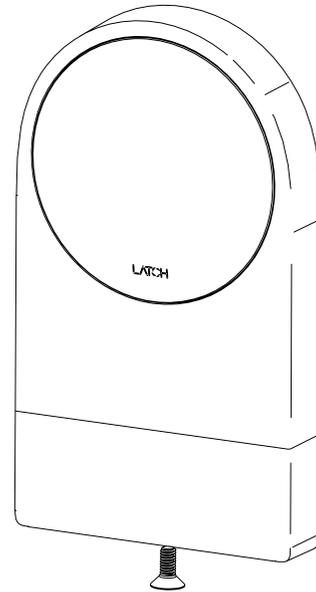
## Mount



# 5

- A** Insert bottom peg of mounting plate into Latch R.
- B** Place Latch R flush with mounting plate and slide down until all mounting pegs fit snugly.

## Secure



# 6

- Adjust security screw to secure.

# Regulatory Compliance

## Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION:** Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

## Industry Canada (IC) Compliance Statement

Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

To satisfy RF exposure requirements, this device and its antenna must operate with a separation distance of at least 20 centimeters from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage, et
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pour remplir les conditions requise sur l'exposition des fréquences radios, cet appareil et les antennes doivent fonctionner avec une distance minimum de 20 centimètres avec toutes les personnes et ne doivent pas être placés ou fonctionner en conjonction avec tout autre antenne ou émetteur.

LATCH

v.7.0