

proxy

UX Guide

# Proxy Mobile Reader Pro

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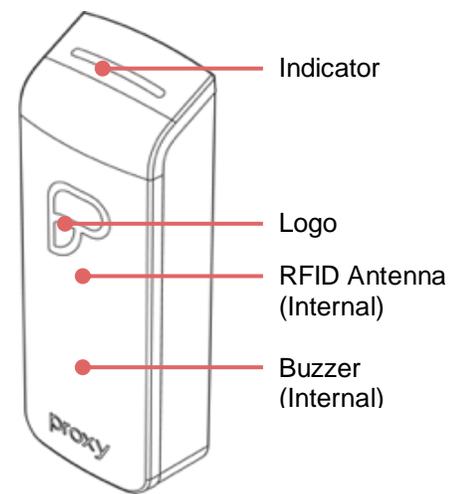
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This document deals with the User Experience (UX) provided by the Proxy Mobile Reader Pro. The guide explains each of the Mobile Reader Pro's audio and visual signals and outlines expected device behaviors. This guide is intended for installers, operators, and support staff.

## Components and Terminology

The pieces that make up a Mobile Reader Pro system, as well as elements of the Mobile Reader Pro itself:

- **Mobile Reader Pro:** Our mobile and RFID access reader.
  - **Indicator:** Located at the top of the Mobile Reader Pro, the Indicator can light up several different colors. It provides feedback in response to requests for access, configuration commands, as well as the state indicated by the Access Controller.
  - **Logo:** The logo located on the front face of the Mobile Reader Pro is illuminated.
  - **Buzzer:** Located inside the Mobile Reader Pro, the buzzer provides auditory feedback to requests for access and configuration commands. It can also be controlled directly by the Access Controller.
  - **RFID Antenna:** Located inside the Mobile Reader Pro, the RFID Antenna is used to read RFID Access Cards.
- **Access Controller:** There are many compatible Access Controllers on the market. Currently Proxy supports Access Controllers that accept control via a Wiegand or OSDP data interface. Access Controllers respond to access requests by unlocking connected locks and provide access feedback via signal lines. In addition to responding to requests for access, Access Controllers can access status at any time.
- **Lock:** Most installations include a lock mechanism of some kind to control access. The lock will be connected to and controlled by the Access Controller.
- **Mobile Access:** Gaining access via a smartphone or wearable using the Proxy ID App or Apps developed with the Proxy SDK to request access from a Mobile Reader Pro.
- **RFID Card Access:** Using a RFID card to request access from a Mobile Reader Pro.
- **Proxy API:** The Proxy service that orchestrates secure access to Mobile Reader Pro devices. The Proxy API can be controlled by the Mobile Access Manager, or via the Proxy API directly by customer developers.



- **Mobile Access Manager:** Web-based interface that controls the Proxy API and is used for creating, managing, and reporting on access control policies.

## Installation

In order to function properly and generate all required data, ensure the Mobile Reader Pro is installed correctly. Refer to your Proxy Installation Guide for details about mechanical requirements and guidelines. One important part of the installation process is ensuring the Mobile Reader Pro is wired to the Access Controller correctly. The following table provides detailed information about the function enabled by each wire and recommendations for correct wiring.

Wire Color		Function	Recommendation
Red		+VDC 12V (nominal)	Required for Operation
Black with White Line		Ground	Required for Operation
Green		Wiegand Data 0	Required for Operation
White		Wiegand Data 1	Required for Operation
Orange		Green LED	Connect to Green LED signal from Access Controller—required to indicate Access Granted and Access Denial.
Yellow		Buzzer	Connect to Access Controller alarm output to use the Mobile Reader Pro buzzer to signal access alarms.
Blue		Hold	Connect to Access Controller to allow it to disable access. When this signal is asserted, the Mobile Reader Pro will not send commands to the Access Controller.
Brown		Red LED	Currently unsupported, connecting this signal has no impact.
Grey		RS485 -	For use when connecting to Access Controller on RS485.
Pink		RS485 +	For use when connecting to Access Controller on RS485.
Violet		Tamper Output	Connect this signal to the tamper detection input on your Access Controller to monitor attempts to tamper with the Mobile Reader Pro. (Active Low)
Black		Shield Ground	Connect to Cable Shielding if present, connect to Ground if not.

# UX Signals

The Mobile Reader Pro uses a number of different combinations of lights and sound to signal different UX events:

- Startup: Mobile Reader Pro has just been powered up or reset.
    - Indicator illuminates Red.
    - Buzzer emits a long beep.
    - Indicator turns off.
    - Logo illumination fades up.
  - Idle: Mobile Reader Pro is powered and ready to receive credentials.
    - Logo is illuminated white.
  - Read Success: A user credential has been read.
    - Indicator flashes Green.
    - Buzzer emits a medium-length buzz.
  - Access Granted: The Access Controller is indicating that access is granted.
    - Indicator stays Green for the duration of Access. This duration is controlled by the configuration of the Access Controller.
    - *Important: This signal is only available if the Green LED line from the Access controller is connected.*
  - Access Denied: Access has been denied.
    - Indicator flashes red twice.
    - Buzzer emits two short buzzes.
    - *Important: This signal is only fully available if the Green LED line from the Access controller is connected.*
  - Identify: Used primarily during installation to differentiate between readers.
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- Indicator slowly flashes purple.
  - Buzzer intermittently beeps for 10 seconds.
- Busy: Mobile Reader Pro is busy—downloading updates, or making an initial connection to a WiFi network.
  - Logo illuminates purple and the illumination rotates.
- System Error: A critical error has occurred, and the Mobile Reader Pro is not functioning correctly.
  - Indicator flashes red continuously.

## UX Flows

These are UX flows that customers will experience:

- Mobile Access - Access Granted by Access Controller
  - Read Success
  - Access Granted
- Mobile Access - Access Denied by Access Controller
  - Read Success
  - Access Denied
- Mobile Access - Access Denied by Proxy
  - Access Denied
- RFID Card Access - Access Granted by Access Controller
  - Read Success
  - Access Granted
- RFID Card Access - Access Denied by Access Controller

- Read Success
- Access Denied
- Mobile Reader Pro is Busy - There are Administrative tasks that can cause the Reader Pro to be busy, which is indicated by the Busy UX signal. When the Reader Pro is busy, mobile access users will not be able to gain entry. The only routine reason for the Reader Pro to be Busy is downloading and applying software updates. Updates can be applied by operators manually to avoid interruption of business or scheduled to take place during off-hours.
  - Busy
  - When an Update or Wi-Fi configuration is complete, the unit will either reboot or return to the Idle state.
- Mobile Reader Pro has encountered a critical error. In the unlikely that an unrecoverable error occurs, the Reader Pro will go into the System Error sequence, with the Indicator flashing red. It may be possible to resolve this issue by power-cycling the device. If that doesn't resolve the issue, or isn't possible, please contact Proxy support.

## Troubleshooting & FAQ

### Why is the Indicator on my Mobile Reader Pro always Green?

This indicates that the Access Controller is asserting the Green LED signal. Customers often use this to indicate that an area doesn't require authorization to enter. This is commonly called "scheduled access" in the Access Controller. For example, this might be used for common spaces during business hours. To change this, please refer to the documentation for your Access Controller.

### Why is the Indicator on my Mobile Reader Pro Flashing Red?

If the Indicator is constantly flashing Red, it indicates a fault was encountered during startup. Please power-cycle your Mobile Reader Pro, and if the issue is not resolved, please contact Proxy Support.

### I'm trying to make the Mobile Reader Pro Indicators go Red to indicate No Access, why doesn't this work?

The Red signal line is not currently supported—attaching it on your Reader Pro will have no effect. We have found that Access Controllers are extremely inconsistent in how this signal is handled, and we are still evaluating how to best handle this functional requirement. We are interested to hear feedback on this issue, so please contact Proxy Support if this is a requirement for your application.

**The Mobile Reader Pro is still displaying the “Busy” indicator long after I applied an update.**

In nearly all cases, the busy indicator will eventually (after 5 minutes) stop displaying the update indicators. If it doesn't stop, you can reset the reader using the Proxy ID app.

**During a software update, my Reader Pro is making a strange clicking or whirring noise. The lights might be blinking a little too.**

This is a known issue in early device revisions. It is harmless, a cosmetic only-issue.

**My Mobile Reader Pro isn't showing the Denied Access signal when I swipe a card.**

First, make sure that the Green LED line is connected. Next, note that when the Reader is first powered up, it doesn't know whether the Green LED line is connected. Once a valid credential is presented, the Green line will signal access. After that first successful access, invalid access attempts will be signaled correctly.