



PAC-BLUTM
SIMPLIFIED ACCESS CONTROL
by **PACLOCK**[®]

Welcome to PAC-BLU™

The Future of Access Control



**Simple & Quick
Installation**



**Economical, Cloud-
Based Access Control**



**Adaptable & Innovative
System**

The future of Access Control is built upon secure mobile credentials and simple-to-install devices – all connected together in a cloud-based ecosystem that enables complete management at your fingertips.

With PAC-BLU, that future becomes a reality.

Beginning with the installation process, PAC-BLU makes an installer's life simple by saving time and money. There's no need to pull Ethernet cables, connect or setup Wi-Fi networks, or install external readers. Simply run power to the PAC-BLU controller, connect it to your locking mechanism of choice, and complete the simple-to-use setup process. Whether you electrify one door, or thousands of doors, PAC-BLU keeps everything effortless and scalable.

PAC-BLU is more capable than any other access control system because it has the ability to control electric-strikes, drop-bolts, solenoids, electromagnetic locks, and even DC motors running forwards and backwards! If your application demands significant power, then connect PAC-BLU to a relay and in no time at all your large door is now controlled via a smartphone.

You can connect multiple sensors, auto-door openers, a secondary power source, or our "TFB2" and build the best access control setup simply and easily. Managing all of your users and devices, as well as seeing real-time auditing, is done through "Sentinel," PAC-BLU's Cloud-Based Management platform. Create an unlimited number of users, add an unlimited number of doors, and leverage "Device Groups" to simplify management tasks all within Sentinel. PAC-BLU's simple yet scalable design is perfect for small and large organizations alike.

Problems with users losing keys, sharing keys, or duplicating keys all go away! Smartphone credentials let you know exactly who is coming and going and when.

We're excited for the future of security. In the last 10 years, we've grown our American manufacturing footprint and are eager to continue supporting the American worker. We're reshaping and rethinking what true security means and how it's delivered to the masses.

Join us as we simplify security and usher in the Future of Access Control.

Gregory B. Waugh
President & CEO
gwaugh@paclock.com
Ext. 102

Ryan Martin
PAC-BLU Program Manager
rmartin@paclock.com
Ext. 101



PAC-BLU™ Simplified Access Control

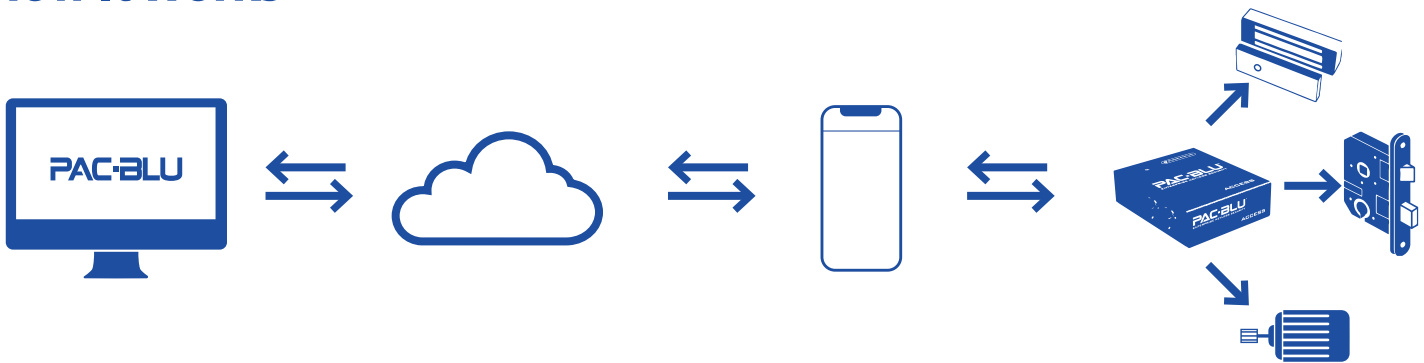


PAC-BLU redefines industry standards by **lowering up-front system costs** and **simplifying installation**. With simplicity and security in mind, PAC-BLU is the easiest way to setup Cloud-Based Access Control for your company or organization.

Choosing PAC-BLU means **investing in a future** where access control is seamless, security is uncompromisable, and business operations are more efficient. It's an ideal solution for any organization looking to modernize their access control and embrace the digital transformation of security.

- Mobile Credentials
- Unlimited Users & eKeys
- Offline Access Mode
- Cloud-Based Management
- Customizable Access Levels
- AES-128 Bit Encryption
- No Ethernet Required
- Instant Access Revocation
- Biometric Authentication
- Detailed Audit Trails
- Time-Based eKeys
- Scalable System Design

How It Works



Web App

Your portal for managing user permissions, assigning eKeys and viewing audit trails for all devices throughout your company.

Cloud

PAC-BLU's cloud-based technology secures your data with TLS asymmetric cryptography and AES-128 bit encryption standards.

Mobile App

Your phone becomes your key. Bluetooth Low Energy allows for energy savings and extended-range communication.

Controller

The Access controls electric strikes, drop bolts, DC motors, electromagnets, cabinet locks, and other endpoints.

TRADITIONAL *Access Control Problems*



User-UNfriendly

Traditional systems are outdated, cumbersome and non-intuitive, making daily management and usage a hassle for administrators and users alike.



Complex Installs. Rising Costs.

Traditional Access Control systems involve complex installations with extensive wiring “home-runs,” hubs, permits, and IP connectivity requirements. Keypad and card-reader installations add to the complexity and system cost. Ongoing expenses can mount quickly with traditional access systems due to damaged readers or keypads and licensing fees for adding new users or devices.



Copied, Lost, and Stolen Keys

Physical keys, fobs, and RFID cards can be duplicated, shared, and even stolen – preventing you from knowing exactly who opened your doors and when.

PAC-BLU™ *is the solution*



Simple. Easy. Powerful.

PAC-BLU transforms your smartphone into powerful mobile credentials, removing the reliance on traditional card readers, cards, and fobs. Additionally, no PoE requirements means less installation time and associated costs, while still providing powerful, cloud-based management features in the Sentinel web app.



Low Cost. High-Tech.

PAC-BLU is the easiest solution to transition from a traditional key system into a keyless access control system – complete with audit trails, eKey management, and a myriad of features only possible with electronic access control. PAC-BLU's "hub-less" design offers lower installation costs, while providing increased versatility and scalability.



Secure Mobile Credentials

Far more secure and convenient, mobile credentials are the antidote to traditional access methods, putting an end to key duplication and RFID "sniffing" attacks. Advanced encryption and authentication protocols ensure your data is protected while keeping user management simple and easy.

Applications & Industries

PAC-BLU is versatile in any environment, including corporate offices, educational institutions, healthcare facilities, and manufacturing plants, offering a scalable, secure access control solution that meets the dynamic needs of modern workspaces and secure areas.



Education & Institutional

- ✓ Lower administration costs and decrease credential deployment time
- ✓ View detailed audit trails throughout your organization



Offices & Administration

- ✓ Assign date and time-based eKeys
- ✓ Simple installation process significantly reduces costs



Healthcare Environments

- ✓ Secure access to schedule II drugs
- ✓ Quickly assign or remove credentials



Commercial & Manufacturing

- ✓ Lower administration costs and credential deployment time.
- ✓ No CAT5 or Ethernet cable runs



Off-the-Grid Installations

- ✓ Continuous operation without an internet connection
- ✓ Significantly reduced installation costs versus a traditional system



Transportation Industry

- ✓ View detailed audit trails on all assets
- ✓ Continuous operation without an internet connection



Mobile Access Control







Designed to secure anything, PAC-BLU excels in non-traditional Access Control environments like long-haul transportation and isolated facilities.

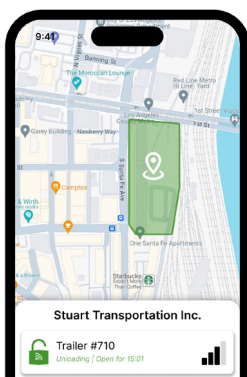
Roll-Up Doors

Replace the padlocks on your Todco or Whiting door handles with a lock that provides you with valuable information and higher security. This cutting-edge solution empowers transportation industry leaders with data insights to enhance security and streamline operations.

Available Q3'24



-  Offline Access Mode
-  Quick & Easy Installation
-  Extended Battery Life
-  Detailed Audit Trails
-  Easy eKey Management
-  AES-128 Bit Encryption



Location-Based eKeys

eKeys not only offer role-based and time-specific access, but also the added advantage of location-based restrictions. This innovation grants fleet managers precise control over the locations where trailer doors can be opened, enhancing security and oversight.



PB-ACCESS



Simplified Installation

No hub required – the Access communicates directly with the users smartphone via Bluetooth. No need for lengthy cable runs.



Powerful Versatility

Control a variety of endpoints, ensure uninterrupted access with dual power inputs, easily wire a REX, and monitor door status with multiple sensors.



Enterprise-Ready

Expand your system with as many Access controllers as needed. No extra costs for extra users, add as many as needed.



No Reader Required

Don't hassle with extra installation time. Simply mount the Access and assign eKeys to your user's smartphones.

Intelligent Bluetooth Opening Controller

Mobile credentials and cloud-based access control are the future and the Access is the simplest way to move into the future from a **keyed** system to a **keyless** system. Simple to install and easy to administer, each Access is managed from a web-based portal anywhere in the world. Powerful configuration and management features give you complete control of your doors.

Customize with scheduled opens, configurable auto-locking, and proximity permissions.

Open virtually any electronic device, including electromagnets, strikes, DC motors, drop bolts, and cabinet locks.

Push-in wire connectors simply installation and decrease project complexity.

Simplified Access Control

The Access is intuitive, small, and extremely powerful, providing industry-leading technology and capabilities. Best of all, “electrifying” a door no longer requires “home-running” that door to a central closet or even tying into a Wi-Fi network. Both of those options can be expensive and prohibitive because of delays due to permitting.





Backup Power Inputs

Keep your systems running on backup power when hard-line power goes down.



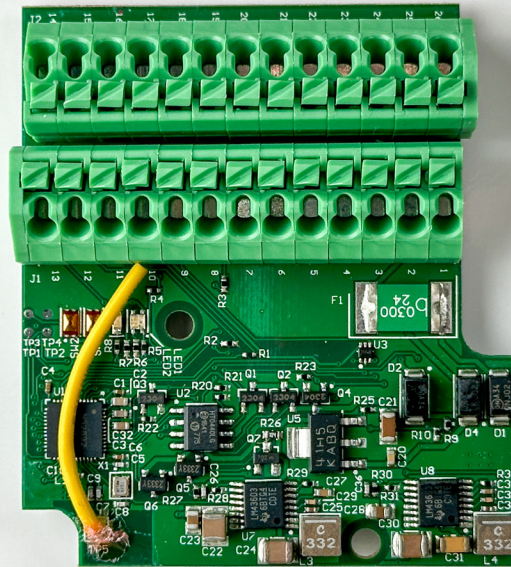
Multi-Sensor Support

Monitor door status with versatile sensor compatibility.



Advanced Endpoint Control

Open virtually any electronic device, including magnets, strikes, DC motors, drop bolts, and cabinet locks.



Push-In Connectors

Save installation time and money with user-friendly plug-and-play connectors.



Mobile Credentials

Conveniently manage access permissions via smartphones using Bluetooth technology.



REX Support

Ensure compliance with safety regulations using the Request to Exit override.

FEATURES

Specifications

General

- Single Door/Device Controller
- BLE v5 2.4 GHz Communication
- Assigned Users: Unlimited
- Assigned eKeys: Unlimited
- Dimensions: 2.8 in x 3.4 in x 1.1 in
- Weight: 0.52 lbs

Connectivity/Power

- 6 to 24 VDC Input Power
- 3A Maximum Output

In The Box

- Access Controller
- Wiring Diagram
- Scan-able QR Support Docs

Security

- AES 128-bit Encryption
- PKI Technology with Cryptographic Key Exchange Protocol
- Unique BLE Session Tokens
- Two-Factor Authentication
- Web-Based Session Token Authentication
- Intrusion Detection



The PAC-BLU System



Sentinel

- Web-Based, Cloud Management
- Add, Remove, and Manage Users
- Full-Access, Time-Based, or One-Time eKeys
- View Audit Trails and Activity Logs



NexGen App

- Mobile Smartphone App
- Installers can setup and modify PB-Access's
- End Users use eKeys as mobile credentials



SENTINEL eKey Management

Access Control. Anywhere.

At the heart of PAC-BLU is the “Sentinel” web management platform. Unlike traditional access control solutions, PAC-BLU’s Sentinel offers easy management of thousands of PAC-BLU devices and end-points - saving installers and administrators time and money.

Unlike many other systems out there, PAC-BLU has no limit on the number of users or devices connected into an enterprise system. Sentinel also centralizes management and assignment of users, eKeys, and time schedules. The system is easy to use and has a clean user experience.

Cloud-Based Security

With advanced capabilities to easily modify access schedules, grant access, and revoke access for a group of users, the web portal elegantly bypasses the need to scroll through lists of users to make quick changes. “Sentinel” also powerfully links access with accountability. It enables proactive monitoring of your locks’ access history, ensuring users are held in compliance with your enterprise policies for authorized access.

Powerful Management Tools



Detailed Audit Trails

View a comprehensive record of all access events, with detailed monitoring and analysis of security data in real time.



Device Groups

Organize devices to streamline management and save time on deploying assign new credentials for users.



Access Levels

Define and manage access levels within Sentinel and assign full-access, time-based, user-based, or one-time eKeys.



Mobile Credentials

Never cut a key again! Turn smartphones into keys and remove the hassle of traditional access control systems.



Global Settings

Implement uniform security policies and configurations across your entire network, ensuring consistent access control and system behavior.



AUDIT TRAILS

From Date To Date From Time To Time FILTER REMOVE FILTER

Date	Time	Activity	Trigger	Triggered By	User	Device/Device Group
03/25/2024	10:36:30	Device Re-Locked	Device	-	-	Server Room
03/25/2024	10:36:30	Sensor 1 Opened	Device	-	-	Server Room
03/25/2024	10:36:28	User Unlock Sequence Triggered	App	Charlie	-	Server Room
03/25/2024	10:36:25	User Logged In	App	Charlie	Charlie	-
03/25/2024	08:55:47	Sensor 1 Closed	Device	-	-	Server Room
03/25/2024	08:54:52	Device Re-Locked	Device	-	-	Server Room
03/25/2024	08:54:51	Sensor 1 Opened	Device	-	-	Server Room
03/25/2024	08:54:51	User Unlock Sequence Triggered	App	Kazansky, Tom	-	Server Room
03/25/2024	08:47:18	User Logged In	App	Kazansky, Tom	Kazansky, Tom	-
03/24/2024	20:00:00	Scheduled Relock Sequence Triggered	Device	-	-	Server Room
03/24/2024	06:00:00	Scheduled Unlock Sequence Triggered	Device	-	-	Server Room

Get Accurate Data

In traditional access control environments, keys and fobs can be stolen, shared, or duplicated – leading to inaccurate audit trails.

PAC-BLU utilizes mobile credentials to provide security managers with accurate activity logs, empowering them to promptly take action on accurate data. Audit trails record a history of all types of events including unlocks, relocks, eKey assignments, and device modifications.

eKey Flexibility

In PAC-BLU, administrators wield unparalleled control through customizable eKey capabilities. Whether granting full access privileges, establishing time-based restrictions, enabling one-time use keys, or setting expiration and start dates, administrators tailor access permissions to match specific needs.

This granular control ensures optimal security and flexibility, empowering administrators to adapt access permissions seamlessly to evolving requirements.

ASSIGN EKEYS

Assign/Modify eKeys

Select Device or Device Group
Server Room

Full Access Custom Access One-Time Access

Start Date: 03/28/2024 End Date: Never Expires

Mon Tue Wed Thu Fri Sat Sun

All Day 08:00 x 17:40 x Zone: America/Chicago

ASSIGN EKEY

DEVICE GROUPS

PAC-BLU Device Groups

Hide Inactive

Full Name	Display Name	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Start Time	End Time
Admin Group	Admin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-
Building 100	B100_E	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-
Building 700	B700_W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-
Machining A-Shift	MG_SA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	08:00	16:00
Machining B-Shift	MG_SB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16:00	00:00
Machining C-Shift	MG_SC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	08:00

1 row selected Rows per page: 25

Save Time Assigning eKeys

Device Groups save time by simplifying eKey distribution for system administrators. For instance, administrators can create groups based on working shifts, ensuring that employees have access to the required areas during their designated hours. Alternatively, groups can be organized by building, allowing seamless access management tailored to different locations within a facility.

This flexibility empowers administrators to optimize access control strategies according to specific operational needs, enhancing efficiency and security across diverse environments.

NexGen™ Mobile App

Simplified Credential Process

Save time and money by remotely distributing credentials through Sentinel's Web Management portal and securely store eKeys directly on an individual's phone.

Instant and Easy Access

NexGen provides users with quick and seamless access to secure areas. Mobile credentials are assigned in real time to immediately provide or remove access from individuals.

In-App Configuration

Users assigned "Installer" permissions in Sentinel have the ability to change lock type's, set dwell time, auto-relock timers, and more customizations directly in the app.

Enhanced Security Posture

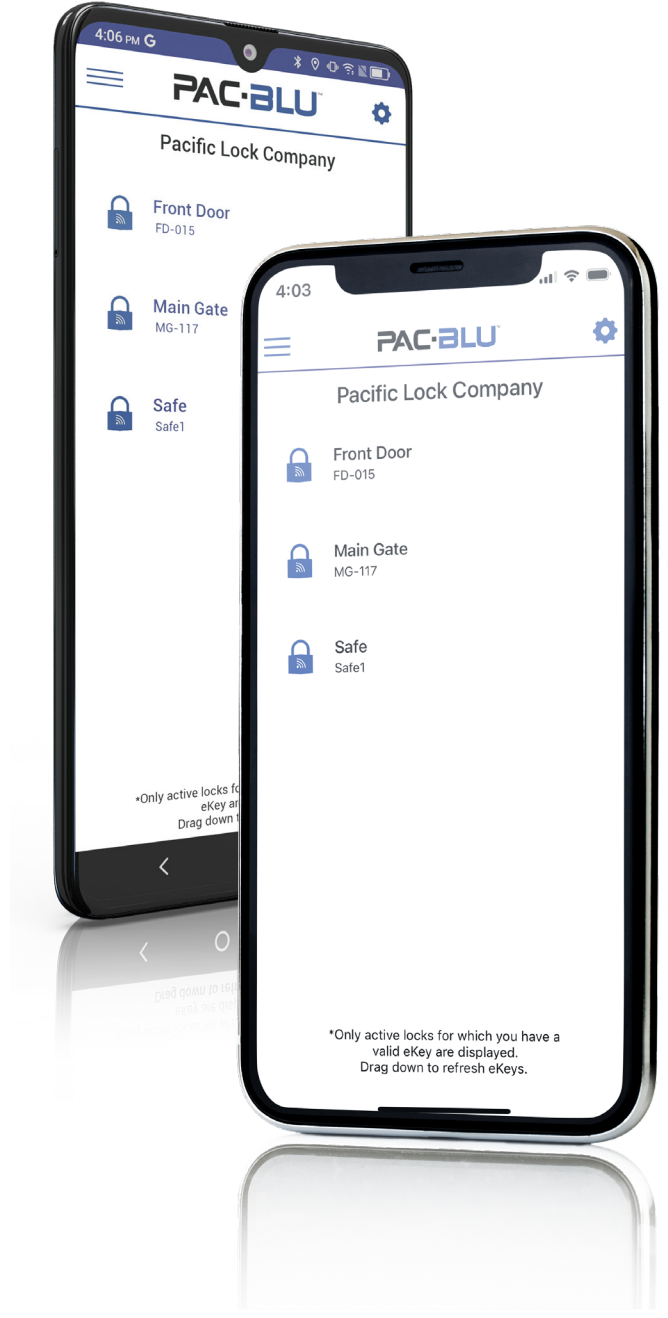
Utilizing AES-128 bit encryption, unique session tokens, PKI technology, and cryptographic key exchange, NexGen provides end-to-end security for all users.

Support Sustainability

Transitioning to digital credentials with NexGen significantly reduces the environmental impact associated with traditional physical access systems

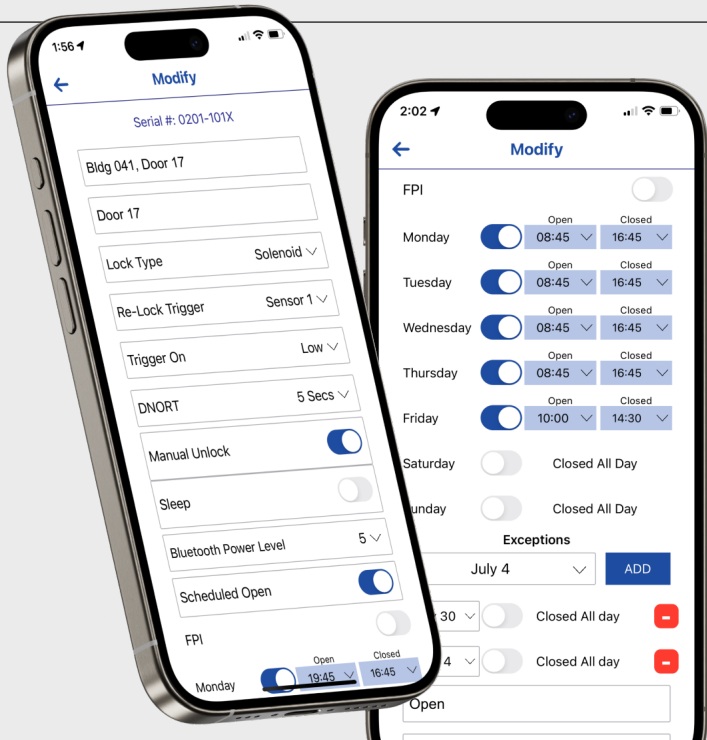
Unlimited Scalability

Digital badges and remote management capabilities make NexGen an ideal solution for growing businesses and organizations, offering a lower cost for larger organizations that use traditional keys, fobs, or cards.



[Download Here](#)





Complete Control. From Your Phone.


Purposefully designed to be the simplest electronic device you own, PAC-BLU simplifies the way you setup and make changes to your locks by giving you access directly from your phone.

Once a user is assigned "Installer" permissions in Sentinel, they have the ability to add, modify, and remove locks from your organization. Lock names, lock types, scheduled opens, re-lock triggers, sensor configuration, and schedule exceptions can all be managed from the NexGen app.

 Lock Type Selection

 Configurable Auto-Locking

 Manage Scheduled Opens

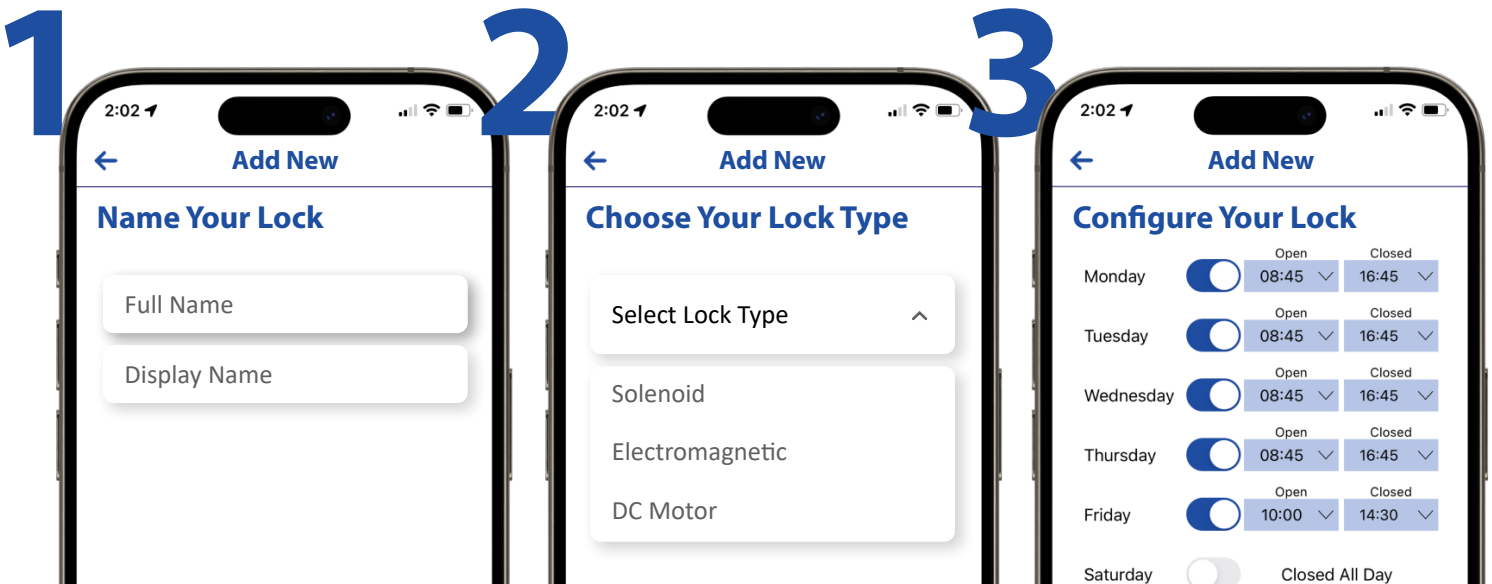
 Request-to-Exit Setup

 Create Holiday Exceptions

 Control Unlock Distance

Easy Device Setup

Installing and configuring a PAC-BLU device is quick and easy. After connecting your lock to both power and your locking endpoint, open the mobile app to view the device you'd like to add to your company. Simply "tap" the lock to add it to your company and follow the simple instructions to turn your smartphone into a key for any door with a PAC-BLU device! Adding a request-to-exit buttons or door sensor is as easy as wiring it in and enabling it in the app.



TFB2

Tri-Function Unit

Backup Power Input, LED, & Wake Button Support

Ensure uninterrupted system operation during power outages with the TFB2, a versatile accessory for the Access Series. Simply connect a 9V battery to the terminal for continued power until power is restored.

Moreover, the TFB2's wake button can be used to activate your Access from its low-power sleep mode, extending battery life in battery-operated systems. The TFB2 also ensures users can easily monitor the lock's status with a multi-color LED, providing added assurance and peace of mind.



*TFB2 shown with optional surface mount accessory.
**Battery not included.



9V Battery Terminal

Emergency 9V battery terminals allow you to easily re-power your device in case of power loss.



LED Indicator

Receive immediate visual feedback from the LED indicator as your Access device performs actions.



Reset/Wake Button

Wake your Access Series device from sleep mode with the push of a button. Alternatively, hold down the button to reboot the device.



Increased Reliability

Forget about power outages. With the TFB2, you'll prevent operational downtime from a lockout.



IP65 Weatherproof

Designed for reliability, the TFB2 is built to be operational even in the toughest weather conditions.



Off-Grid Solutions

Running your system on battery power? Enable sleep mode and use the wake button to increase the lifespan of your battery.



Specifications

General

- IP65 Rated All-Weather Cover
- 4-Color LED Indicator
- Easy-Connect 9V Terminals
- Dimensions: 1.3" x 1.3" x 1.3"
- Dimensions: 2.5" x 2.5" x 1.7"

In The Box

- TFB2
- Installation Instructions

Surface Mount Kit (Optional)

- Surface Mount
- Mounting Hardware

All trademarks, service marks and company names are the property of their respective owners.

Frequently Asked Questions

What is PAC-BLU?

PAC-BLU is a simple, cloud-based access control system that turns your smartphone into a key, offering a secure way to unlock doors. It's designed to make access management straightforward and key-free for everyone, while prioritizing security.

How does PAC-BLU work?

PAC-BLU operates through a cloud platform that communicates with installed hardware via a user's mobile phone, allowing users to manage access permissions and monitor entry points from anywhere.

Do I need an internet connection for PAC-BLU?

An internet connection is required for real-time monitoring and system management, but local functionalities remain operational even off-line.

What devices are compatible with PAC-BLU?

PAC-BLU works with iOS and Android smartphones, tablets, and any web-enabled device for monitoring and management.

Do I need to install a credential reader?

No, the Access acts as both the "door controller" and the "credential reader." Mobile credentials are granted access via Bluetooth communication.

Can I use PAC-BLU across multiple locations?

Yes, PAC-BLU's cloud-based system allows you to manage access control for multiple locations from a single dashboard.

Is PAC-BLU secure?

Absolutely. PAC-BLU utilizes AES-128-bit encryption methods, TLS cryptographic standards, and secure data-at-rest protocols to ensure the highest level of security for your data.

What if my power goes out?

PAC-BLU devices are equipped with two independent power inputs, making it easy for you to install a battery backup or use our "TFB2" to provide emergency power with a 9V battery.

Where can I install PAC-BLU?

If a traditional key and cylinder can control access, then PAC-BLU can replace that antiquated solution with a system that grants or removes access in real time.

Can I grant temporary access with PAC-BLU?

Absolutely. PAC-BLU allows you to create temporary or time-limited access permissions for individuals in addition to creating scheduled unlocks to fit your organization's needs.

Does PAC-BLU offer audit trails?

Yes, PAC-BLU provides detailed audit trails, recording every access event to increase your organization's security posture.

How do I manage access permissions with PAC-BLU?

Access permissions can be easily managed through the PAC-BLU web portal, Sentinel, making it easy for you to add, remove, or modify user access rights from anywhere.

Do I need to run Ethernet cables throughout my building?

No, PAC-BLU tremendously simplifies access control installations by only requiring hard-line or battery power to each access point.

How many users does PAC-BLU support?

There is no limit to the number of users you can assign to each access point.

How do I update PAC-BLU software?

Web portal updates are published in real-time to keep your systems up-to-date. Firmware updates are performed Over-the-Air via your mobile device.

Who do I contact if I need support?

Each company's system administrator is the primary support partner. In cases where more support is needed, PAC-BLU authorized installers receive support tickets and work to resolve potential issues.

Does the Access connect to the internet?

Not directly. The Access communicates to an individual's mobile phone securely via the NexGen App and the mobile phone communicates to the internet using Wi-Fi or cellular services.

How do I install PAC-BLU?

PAC-BLU offers a simple installation process. However, we recommend professional installation to ensure optimal setup and integration.

Is there a subscription fee for PAC-BLU?

Yes, as iOS, Android, and web technologies evolve, the PAC-BLU development team works to keep your data safe and secure, along with providing continuous cloud access, updates, and support.



Need A Custom Solution?

The flexibility of PAC-BLU shines in custom security solutions. At PACLOCK, we designing security solutions *uniquely* for each application, instead of creating general designs that do an *OK* job for across an entire industry. If you're searching for a security solution, tailored to your company, we'd love to work with you!



Rapid Prototyping

As a US manufacturer, we can rapidly design and produce prototypes to provide you with excellent solutions.



Custom Integration

Using existing software? We can work with your current software to seamlessly integrate PAC-BLU and improve operational efficiency.



Scalable Solutions

PAC-BLU is designed with the future in mind, employing cutting-edge technologies and a robust architecture to accommodate future growth and expansion.



Cost Savings

Drive down costs associated with access control maintenance, administration, and security breaches by leveraging PAC-BLU

PAC-BLU[™]
SIMPLIFIED ACCESS CONTROL
by **PACLOCK**[®]

Ready to upgrade your business with simple and cost-effective keyless security? Give us a call and secure your organization with PAC-BLU[™] today!

