dormakaba

E-Plex 7900 for Partner Integrations
Commercial application playbook

Welcome

Setting up a site to use an E7900 system is a simple straightforward process when the deployment is carefully planned, and all responsible parties understand the system and know their respective roles. Without active preparations, a site may experience undesirable issues including lock failure, wireless connectivity issues, and reduced battery life. Review this document to prepare for success.

System overview

The E7900 system is comprised of E7900 Electronic Locks, Gateways, Repeaters, and tools such as the M-Unit.

- **Electronic locks** are available in Cylindrical, Mortise or Exit trim and are highly configurable to meet end user needs and preferences.

- **Gateways** act as a wireless access point and are connected physically to the local area network via ethernet. They are powered by AC power or POE. Gateways provide bi-directional communication between the access control system/network and locks or wireless repeaters.

- **Wireless repeaters** can be used to extend wireless range and coverage to locks. These communicate wirelessly with a Gateway. They can be powered by AC power or POE*.

- An **M-Unit** is a hand-held device tool central to conducting a site survey prior to system installation. It may also be used for lock diagnostics or firmware updates.

- Each site will need a set of **configuration cards** compatible with the credential used on site. These cards are used for lock commissioning and provide additional optional features.

*Note for purchasing: Wireless repeaters are gateways which have been configured to act as repeaters
For more information on nomenclatures, list pricing and available configurations please see our price list.

Roles and responsibilities

🔵 Site Representative / End User	• Represents the site where the solution will be deployed • Works with the Integrator to devise concept and design • Provides detailed site plans (door locations, access points, relevant IT details, and other site specific details)
🔴 Integrator	• Implements site concept and design • Responsible for software installation and overall site commissioning • Informs End User about any network or IT requirements and deficiencies • Creates a site map of where each lock and gateway is located on the property • Performs site survey to determine gateway location(s) • Tier one technical support for End User
⚫ Installer Technician	• Installs the locks at the installation site • Ensures proper mechanical functionality
⚪ Software Provider or Aggregator	• Provides integrator with software and licenses necessary for site setup, and deployment. • Tier one technical support for Integrators

Eplex System Guidelines
E7900 Systems can support up to 100 gateway hierarchies per network

Per Gateway Hierarchy
Up to 100 locks per Gateway Hierarchy*
    Up to 32 locks connected directly to Gateway
    Up to 8 Repeaters per Gateway
        Up to 32 locks connected per Repeater
    Locks can be up to 2-Hops
    (2 repeaters, from gateway)
        Example : Gateway -> Repeater1 ->
        Repatater2 -> Lock

*Limit gateway hierarchies to 100 locks. While more are technically possible, dormakaba strongly recommends staying at or below 100 to maintain performance and avoid system lag.

Conducting a site survey

A site survey ensures reliable wireless coverage and optimal placement of gateways or repeaters before installation.

Tools needed:

- E7900 Gateway
- M-Unit

Site survey tips

- Place the powered gateway near its final installation location. A USB power bank can help with portability.

- Use the M-Unit to check signal strength at each door and record measurements across the site.

- Use this data to map out gateway and repeater placement for consistent coverage.

- Test under varying conditions (e.g., during class and off-hours in schools) to account for environmental changes.

Note to Integrators: Best-in-class site surveys would include a separate wireless channel survey. Third-party devices are available to help check for optimal open wireless channels.

Partner Playbook

New site setup guide

1 Door schedule ●●●
- Identify the following:
  - Number of doors and location
  - Door handing
  - Cylindrical, mortise, or exit trim
  - Finish
  - Lock backset and function
  - Lever style
- Recommended: Do a physical door mockup to confirm doors and jambs are prepped for proper hardware installation. Verify the core/key program if using mechanical override.

See price book for all configurable options

2 Site survey ●
- Perform detailed site survey
- Site survey kits are available from dormakaba if needed
- Identify gateway position to ensure best possible wireless coverage to doors

See E7900 installation manual for full instructions on performing a site survey

3 Installation plan ●●●
- Review lock installation, system installation and commissioning plan with all responsible parties to ensure alignment
- Double check that the door prep (drilling) has been performed correctly
- Ensure correct hardware has been obtained
- Ensure correct software and licenses have been obtained
- Ensure post-installation technical support plan is in place
- Identify minimum software requirements are known and can be met

4 Software installation ●
- Install necessary drivers and software
- Ensure all minimum software and system requirements are known and followed
- Software Integrator/installer should provide all necessary information and instructions

5 Software (system) setup ●
Setting up the system could include the following:
- Adding users or credential holders
- Generating schedules or holidays
- Creating door and user groups

Software integrator/installer should provide all necessary information and instructions

6 Lock/Gateway installation ●●
- Install lock hardware
- Check lock hardware and key override for proper functioning
- Install gateways and connect to power source

See E7900 installation manual for full instructions

7 Lock commissioning ●
- Connect locks to gateways
- Utilize command cards
- Ensure locks/gateways are visible in software
- Ensure locks/gateways are communicating

See E7900 installation manual for full instructions

8 System check ●
- Check lock responsiveness
- Check wireless connectivity (signal strength)
- Ensure audits are being reported
- Ensure all hardware is properly commissioned in the software system
- Test system operation as throughly as possible

9 Add repeaters (where necessary) ●
- If any areas or doors have less than adequate signal strength, consider adding a repeater(s)

See E7900 installation manual for full instructions

Training
dormakaba requires all system integrators and lock installation providers to be trained and certified by dormakaba.

Please contact your dormakaba sales team or electronic sales engineer for details on certification training.

dormakaba will only provide technical support to integrators that have received certified training or to end user sites with an active certified integration partner

Support roles to end user
1. **Tier 1:** Support owned by Integrator
2. **Tier 2:** Software provider or aggregator provides support to integrators as requested
3. **Tier 3:** dormakaba provides support to software providers and aggregators as requested

Reminder: end users should always engage their integrator as the first level of support. Support can be escalated to Tier 2 or 3 as needed.

dormakaba Technical Support
T: 1-800-849-8324 Prompt #2
KWSTechnicalSupport.AMER@dormakaba.com

Any questions? We would be happy to advise you.
Contact us at: +1 (866) 367-6252 | ONEdormakaba@dormakaba.com