FCC Compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two 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.

Product can be used without license conditions or restrictions in all European Union countries, including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, United Kingdom, as well as other non-EU countries, including Iceland, Norway, and Switzerland.

This device complies with Industry Canada licence-exempt RSS standard(s). 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.

Cet appareil est conforme à Industrie Canada exempts de licence standard RSS (s) . Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas provoquer d'interférences et (2) ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by Keyscan could void the user's authority to operate the equipment.

Keyscan Inc. A Member of the Kaba Group
901 Burns St. E., Whitby, Ontario, Canada L1N 0E6
1.888.539.7226 (toll free Canada/USA)
905.430.7226 (elsewhere)
www.keyscan.ca
Technical Support
Hours — 9:00 AM to 6:30 PM Eastern Time
K-SMART3 Installation Guide (Document # KD10085-1017)

KABA® BEYOND SECURITY

K-SMART3 Bluetooth Proximity Reader

Installation Guide

This guide outlines how to install the K-SMART3 Bluetooth proximity reader. This reader has dedicated function LEDs and enhanced security features designed for Keyscan access control systems with compatible firmware. Enhanced security and LED features may not function with non-Keyscan control boards. See K-SMART3-ACU Compatibility on page 3.

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Parts List

K-SMART3 Reader	1
Wall Switch Plate	1
Mullion Mount Box	1
6-32 x 1/4" Phillips Screw	1
6-32 x 1/4" Security Screw	1
6-32 x 1" Screws	2
#6 x 1" Screws	2

K-SMART3 Features

- Uses proven digital radio frequency identification technology
- Has dedicated access and power LEDs
- Designed for indoor or outdoor use
- Suitable for mullion or single-gang mounting
- Electronics sealed in tamper-resistant epoxy potting
- Bluetooth functionality

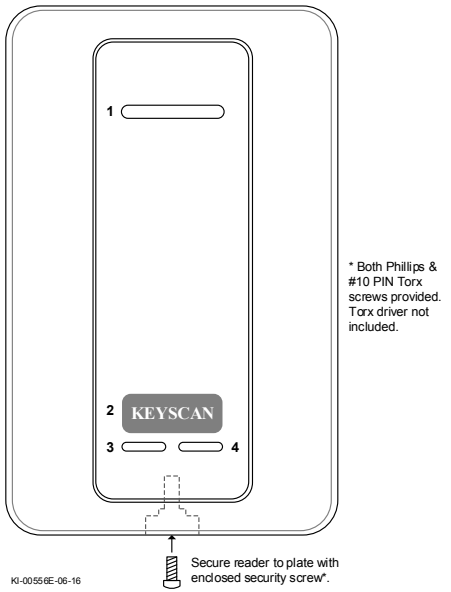
Enhanced Features

- Has dedicated Present3 and Global Lockdown LEDs
- Offers physical and cable anti-tamper capability for enhanced security (tamper switch not included)
- Has innovative heartbeat to detect wiring faults and/or reader damage

K-SMART3 Overview

LEDs and Security Features

The K-SMART3 has 4 distinct LEDs to report the state of a system-specific function. In addition, the K-SMART3 has an anti-tamper capability and a heartbeat for enhanced reader security. The following sub-headings review the K-SMART3's LED, anti-tamper and heartbeat functions. Control boards require System PROM version 9.39 or higher when connected to a K-SMART3 reader for full functionality; for example, using LED 3 for Present3 or LED 4 for Global Lockdown.



LED 1—Door Lock State

- Red—indicates the door is locked / remains red on an Access Denied
- Green—indicates the door is unlocked / green during Relay Unlock Time On and Access Granted

The control board must be configured for Reader LED (Red/Green Enabled) mode.

LED 2—Power

The backlit Keyscan logo indicates reader power:

- Not illuminated—indicates the reader does not have power
- Illuminated blue—indicates the reader has power

LED 3—Present3

The Present3 mode can trigger a door lock and change time zone schedules. When configured for operation at the reader, LED 3 functions as follows:

- Not illuminated—Present3 is off/Door Toggle - locked/Schedule - time zone is on
- Illuminated amber—Present3 is on/Door Toggle - unlocked/Schedule - time zone is off

LED 4—Global Lockdown

LED 4 indicates when a Global Lockdown is in effect as follows:

- Not illuminated—a Global Lockdown is not in effect
- Illuminated red—a Global Lockdown is in effect

The reader must be connected to a control board that has Global Lockdown configured.

Note: LED 3—Present3 and LED 4—Global Lockdown are unique features for Keyscan control boards and require System PROM firmware version 9.39 or higher.

K-SMART3 Enhanced Features

K-SMART3 enhanced features, which include Heartbeat and Tamper, are turned on by default. With the purchase of the K-PC2 programming card, K-SMART3 enhanced features can be toggled on and off. This will enable backwards compatibility with previous versions of Keyscan ACUs, even if they do not have the required firmware 9.39 or higher to work with other manufacturer's access control systems.

If the K-SMART3 enhanced features are used on an un-supported access control board, the reader will produce a Card Not in ACU alarm approximately every 60 seconds. This will not affect the reader's ability to read cards.

Keep this programming card close at hand for future use with any K-SMART3 reader to toggle the enhanced features on or off. K-PC2 programming cards are available in packages of 5 individual cards.

Specifications

Dimensions:
Mullion: 11.5 cm x 4.49 cm x 1.7 cm (4 7/16" x 1 11/16" x 11/16")
Wall Plate: 12 cm x 7.6 cm x 1.6 cm (4 3/4" x 3" x 5/8")

Power Requirements
12 VDC, 125mA

Read Range (with typical clamshell card)
Off Metal: up to 3 cm
On Metal: up to 3 cm

Cable
18" wire pigtail standard
Wiegand interface—22 AWG 6 conductor shielded cable, 152 metres/500 ft. maximum

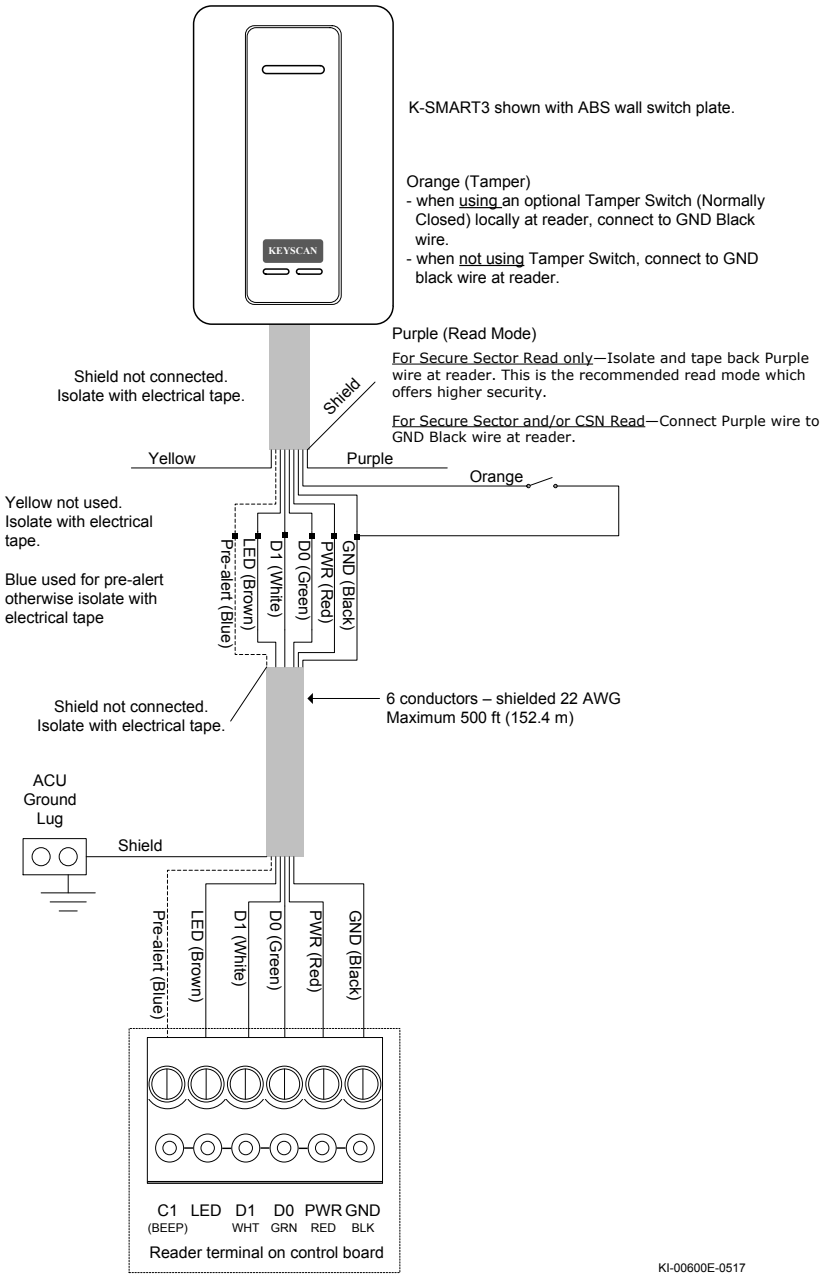
Environmental
Operating Temperature: -40 to 66 °C (-40 to 150.8 °F), 93% RH

Installation
Installation and wiring of systems must be in accordance with the National Electrical Code, ANSI/NFPA 70.

Connections
Connections must be in accordance with NFPA 70. Reader and/or control unit power sources must not be connected to a receptacle controlled by a switch.

Certifications
UL-294 - Fifth Edition, CAN/ULC-S319-5 - First Edition, FCC ID: WFW-KSMART3 & IC: 5241A-KSMART3, ETSI EN 301 489-1 V2.1.1 (2017-02), ETSI EN 301 489-3 V2.1.1 (2017-03), ETSI EN 301 489-17 V3.1.1 (2017-02), EN 55032: 2012/AC:2013, ETSI EN 300 330 V2.1.1 (2017-02), ETSI EN 300 328 V2.1.1 (2016-11), Canadian Industrial Design Certificate of Registration: 169,198 and 169,199.

K-SMART3 Connections with a PC109x Control Board



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Anti-Tamper Capability

When connected to an anti-tamper switch (not supplied), the K-SMART3 offers an enhanced level of security. Connect the K-SMART3's orange conductor as follows:

- With tamper switch—connect the orange wire to the optional tamper switch (normally closed) locally at the reader and connect to GND black wire at the reader
- Without tamper switch—connect the orange wire to GND black wire at the reader

In the event of tampering, the Client software reports a reader tamper alarm. Refer to the wiring diagram on page 6.

Heartbeat

The K-SMART3 has an innovative heartbeat that detects wiring faults and/or reader damage. The heartbeat is sent by the reader to the ACU every 45 seconds. In the event that 3 consecutive heartbeats are not received by the ACU (approx. 180 seconds), the Client software reports a reader communication failure alarm.

K-SMART3—ACU Compatibility

The K-SMART3's enhanced features—Present3 LED, lockdown LED, heartbeat and orange tamper conductor—require PC1097 control boards with firmware version 9.39 or higher. The K-SMART3 is backwards compatible with PC1094, PC1095 and previous green ACU/ECU control boards. The K-SMART3 can be used with other access control systems, but the enhanced features will not be available. To configure the K-SMART3 for backwards compatibility with the listed control boards or other manufacturer's control boards, an optional programming card (not supplied) Part # K-PC2 is required. See details on page 7.

K-SMART Credential Compatibility

The K-SMART reader keypad is compatible with the following credential formats: K-SECURE 1k & 4k cards, K-SF-1K key fobs, K-TX2-1K — Four Button RF Transmitter, 14443A Credentials (CSN only).

Bluetooth Functionality

The K-SMART3 is a Bluetooth-enabled reader and is capable of working with Keyscan mobile credentials. The default read state out of the box is Polling Mode — Short Range.

K-BLE Mobile Credential

This reader uses K-BLE mobile credentials loaded on any supported mobile device (contact Keyscan for ordering information). This mobile credential can be used in conjunction with physical credentials used with proximity readers. Download the "Keyscan Mobile" App from either the App Store on IOS-based devices or Google Play on Android-based devices. K-BLE mobile credentials are not sold through distribution. Only available for purchase directly from Keyscan.

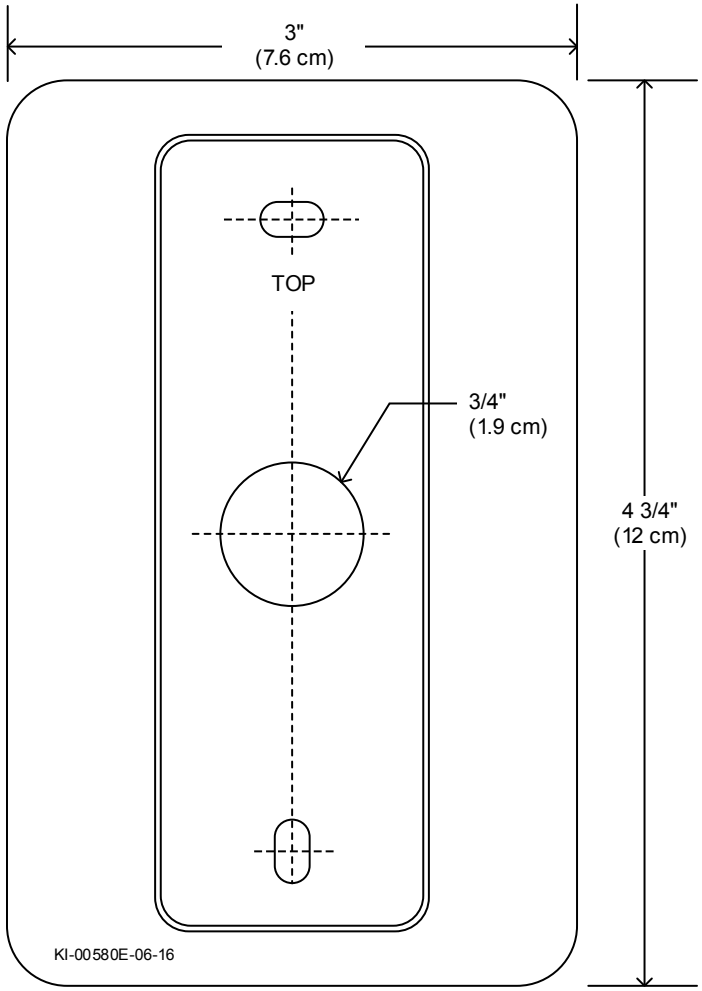
Reader Modes & Reader Ranges

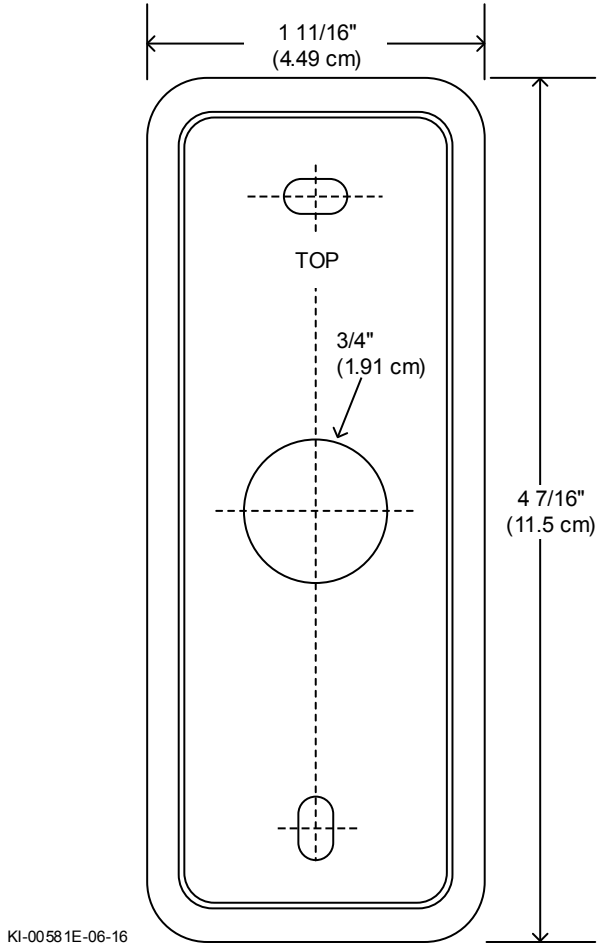
The K-SMART3 has two reader modes: Watch Mode and Polling Mode. Watch Mode has only short range BLE and standard range for physical credentials. Polling Mode can have different ranges: short, medium, long and standard range (for physical credentials). The default reader mode out of the box is Polling Mode (short range). To change reader modes or polling ranges, the purchase of an optional BLE1 Programming Card pack is required.

Note: Read ranges are omnidirectional. Actual BLE mobile read ranges will differ based upon the mobile device manufacturer and model number type; these aspects cannot be specified.

Dimensions—Mounting Template

Wall Plate



Dimensions—Mounting Template

Mullion