



Access Management Keypad



Installation Guide

Please call
ZTR IIoT Technical Support
With any questions:
1-888-320-8332



**Access Management Keypad
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ZTR Control Systems – K1 (Keypad) Device
Regulatory and Compliance Statements – FCC/ISED

ISED Regulatory Statements
IC: 22769-112015

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Regulatory Statements
FCC ID: 2AL9H-112015

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital 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.



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1. Introduction

**** PLEASE READ THESE INSTALLATION INSTRUCTIONS THROUGH FIRST TO BECOME FAMILIAR WITH THE INSTALLATION, WIRING AND TESTING PROCEDURES. THIS WILL SAVE INSTALLATION TIME AND BETTER PREPARE YOU FOR TESTING ****

This manual includes instructions for installation of the ZTR Access Management Keypad.

The following instructions and any accompanying documentation, drawings and specifications are the property of ZTR CONTROL SYSTEMS. They are issued in strict confidence and shall not be reproduced, copied or used as the basis for sale or manufacture of any apparatus without prior written permission from ZTR CONTROL SYSTEMS.

2. Installation Requirements

For reference during the installation of the keypad, please be sure to bring along the following documents for your reference as needed:

- Schematics of the equipment you are working on, if applicable

3. Supplies

a. What Comes in the Kit:

- Access Control Keypad
- M7 Interface Harness
- Access Control Harness
- Installation Guide



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b. What is Not Included in the Kit:

The following are supplies that are **not** provided in this kit which you will need to use during the installation of the Access Control Keypad:

- Cable Tie's
- 2 x #8 Hex Machine screws
 - Length to be determined based on mounting surface thickness + ½ in.
- 2 x #8 Nylon lock nuts
- 3/8 in. Dia. Split Loom, 3 feet

****Please be sure to meet your company's Standard Safety Protocols for Installations****

4. Considerations before Installation

The ideal way to ensure a trouble-free installation is to consider your options and make some decisions before starting the install. Take a good look at the asset (machine or equipment) to determine how to best install the Access Control Keypad.

Some factors to consider when planning the installation are:

- Mounting Considerations for the keypad are:
 - Should not be mounted close to radiating heat
 - Should be mounted in spaces where it will not be exposed to undue damage
 - Should be mounted in an area where it does not interfere with regular operations of the equipment/asset or the operator
 - Should be mounted in close proximity to the M7 based on the length limits of the patch cable provided to connect the M7 to the keypad harness
 - Keypad harness itself is 3 feet long
 - Should be mounted on a flat surface such that the keypad is on a slight angle
- Copy and Record the ESN # (Serial Number) from the label on the keypad for reference. (see Figure 1)



Figure 1: Keypad Serial Number Label

5. Keypad Mounting

Refer to Figure 2, 3 and 4 below to understand how the keypad should be mounted on the surface selected in section 3. Take the following steps to complete the keypad mounting.



Figure 2: Front View of Keypad Mounted

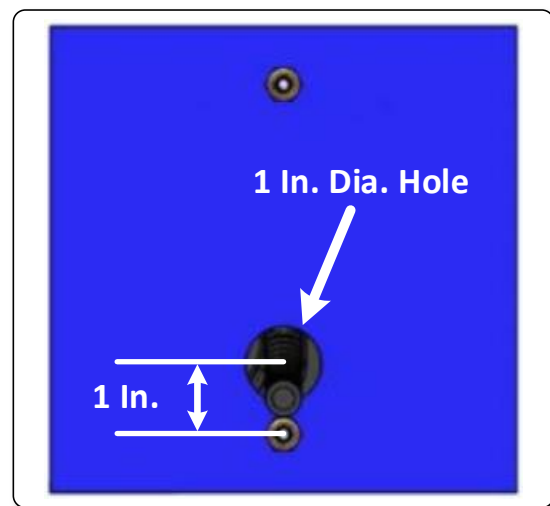


Figure 3: Rear View of Keypad Mounted

- a. With the keypad harness tucked into the channel on its back side, place and hold the keypad on the mounting surface to mark the location of the mounting holes to be drilled (**Figure 2, 5**)

- b. Mark a center point about 1 inch up from the bottom mounting hole as the landmark for where to drill the 1 in. dia. hole that the keypad harness must pass through (**Figure 3**)
- c. Wrap the 3/8 in. dia. split loom around the keypad harness and slide it up into the notch at the back of the keypad (**Figure 4, 5**)
- d. With all holes drilled and split loom in place, slide the keypad's harness through the 1 in. dia. hole and place the keypad flush to the mounting holes (**Figure 4**)
- e. Install the appropriate length of #8 machine screws and secure the keypad using #8 nylon lock nuts

CAUTION: Do not over tighten. Do not exceed torque limit of 23 In-lb or 2.6 N.m.

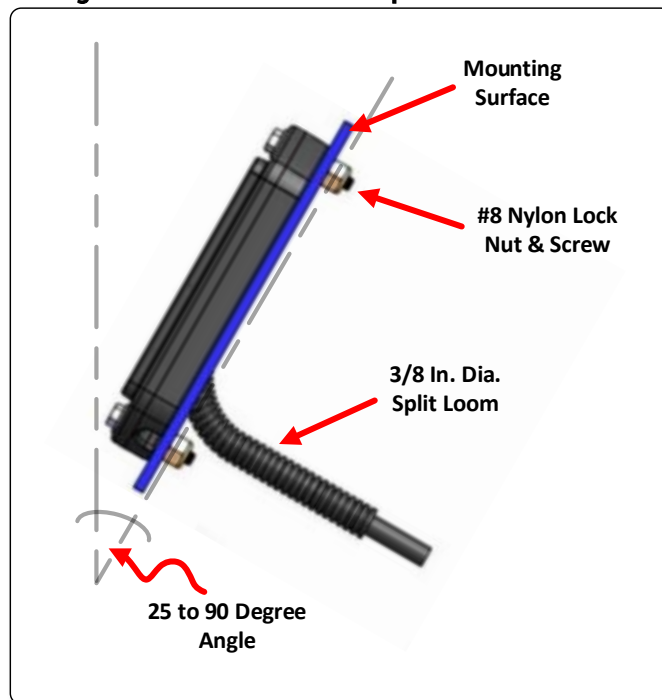


Figure 4: Keypad Mounting Requirements



Figure 5: Keypad Notch and Channel

- f. With the keypad secured, rout the 3 foot keypad harness so it can be connected to the M7 patch cable
- g. Connect the keypad harness and patch cable
- h. Insert the Access Control harness** between the M7 and the main machine harness it is connected to
- i. Connect the Keypad patch harness to the Access Control harness connection reserved for the keypad patch harness

****IMPORTANT NOTE:** The keypad must be protected from the power source using a current and voltage rating of 3A & 80V fuse to ensure safety in the event of a short circuit fault. ZTR can provide an Access Control harness that has built-in fuse protection if the machine does not already provide the proper fuse protection. It is the responsibility of the customer to ensure the appropriate fuse protection is in place either on the machine power source circuit already, or via the use of the specified Access Control harness.

6. Keypad Testing

Execute the following steps to confirm connectivity of the Keypad:

- a. When the harness connection is made, observe the LED's on the keypad
- b. Yellow LED will initially light up to indicate the keypad is connected



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Appendix A: Access Management Keypad LED's

The diagram below illustrates the 3 LED's, their respective color's and designation.

Yellow LED = Power	
Condition	LED
Keypad Awake	ON
Keypad Asleep	OFF

Green LED = Access Status	
Condition	LED
Assessing Credentials	Blinking
Access Granted	ON

Red LED = Diagnostics	
Condition	LED
Error	ON
Normal Operation	OFF






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Appendix B: Label Revision History

This section will illustrate any changes to the product label as a result of a revision/update.

Revision:	Date: (MM/DD/YYYY)	Author:	Reason:
1	01/29/2019	C. Moulton	Initial release
			



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Appendix C: Installation Guide Revision History

This section will detail any changes to the content of this document as a result of a revision/update.

Revision:	Date: (MM/DD/YYYY)	Author:	Reason:
1.0	01/29/2019	C. Boltë	Initial release
2.0	04/17/2019	C. Boltë	Section 5 update
2.1	04/22/2019	C. Boltë	Section 5 update
2.2	04/24/2019	Pierre Wheeler	Section 5 update
2.3	05/09/2019	C. Boltë	FCC & ISED Regulatory Statements
2.4	05/14/2019	C. Boltë	Appendix B - Label Update