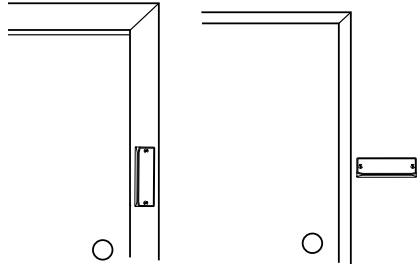


Access Control Module II

Instructions for Mounting Access Control Module II

Step 1. Determine where the unit will be mounted. A template is provided to help you plan the mounting position. Tape the template to the desired location.

The unit is bi-directional. It will read bar codes in either direction. This gives you a great deal of flexibility in mounting.



Step 2. The unit is configured for a side or rear cable exit. If you prefer to run the cable into the wall behind the unit, drill a 1/4" hole for the cable, using the template.

Step 3. Drill two holes 3.9" apart for the #10-32 mounting screws using the template.

Step 4. Mount the unit using the two #10-32 screws provided.

Step 5. Connect the unit to the control box. Depending on the connection method, the unit can output the bar code in Wiegand, mag stripe (ABA Track II), or TTL level ASCII format.

To connect for Wiegand:

To connect for Mag Stripe
(ABA TRACK II) emulation:

To connect for
TTL level ASCII output:

To connect for
ABA/Wiegand:

Wiegand Mode

ABA Track II Mode

TTL ASCII Mode

ABA/Wiegand

Color	Function	Color	Function	Color	Function	Color	Function
Red	+5 to +12 Volts**	Red	+5 to +12 Volts**	Red	+5 to +12 Volts**	Red	+5 to +12 Volts**
Black	Ground	Black	Ground	Black	Ground	Black	Ground
Green	Data 0	Green	Clock	Green	TTL ASCII (1200 BPS)	Green	Data 0
Purple/ White	Data 1	Purple/ White	Data	Purple/ White	Buffer hold*	Purple/ White	Data 1
Blue	Buffer hold*	Blue	Buffer hold*	Blue	Not connected	Blue	Buffer hold*
Orange	Not connected	Orange	Card present*	Orange	Ground	Orange	Ground
Yellow	Not connected	Yellow	Ground	Yellow	Not connected	Yellow	Ground
Brown	LED control*	Brown	LED control*	Brown	LED control*	Brown	LED control*
Shield	Ground	Shield	Ground	Shield	Ground	Shield	Ground

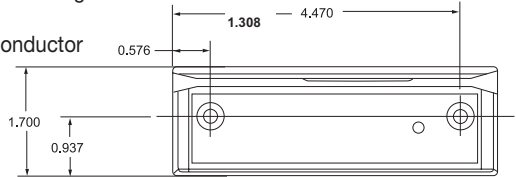
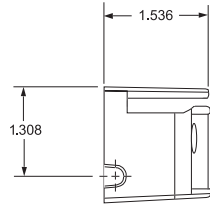
*If this function is not used by the controller, the wire may be left unconnected.

**+5 to 5.5V DC regulated
+5.6 to 12V DC unregulated

Specifications

General

- External dimensions: 5.05" x 1.70" x 1.54"
- Weight: 6 ounces
- Housing material: Carbon Fiber filled Polycarbonate
- Finish: Natural (Black)
- Mounting hardware: Two 1/2" #10-32 pan head screws
- Operating temperature: -30°C to +70°C
- Operating voltage: +5 to +5.5V DC regulated
+5.6 to 12V DC unregulated
- Power consumption: 50 mA
- Cable type: Shielded 8 conductor plus drain, 24 AWG
- Cable length: 6 ft.



Bar Code Input

- Maximum resolution: 5 mils (.005")
- Read head optics: Infrared (visible light by special order)
- Scanning speed: 3 to 30 in./sec. with 7 mil bar code
- Bar code center line: .450" from bottom of bar code card
- Bar code symbologies: Most bar code symbologies are supported, including Code 39, Interleaved 2 of 5, Codabar, UPC-A, UPC-E, EAN, Code 11, Code 93, Code 128, MSI
- Bar code decoding: Bidirectional, autodiscriminating

Output Selection for Wiegand Type Modules

The connection of the ASCII Select and BCD Select wires determines the output mode.
The output of Data 1 and Data 0 varies depending on the output mode selected.

WIRE		MODE			
Wire Name	Color	Wiegand	ABA Track II	TTL ASCII	ABA/Wiegand
Data 1	Purple/White	Data 1 Output	BCD Data	Not Connected	Data 1
Data 0	Green	Data 0 Output	BCD Clock	TTL ASCII Output	Data 0
ASCII Select	Orange	Not Connected	Card Present Output	Connected to Ground	Connected to Ground
BCD Select	Yellow	Not Connected	Connected to Ground	Not Connected	Connected to Ground

Specifications for Bar Code Cards

Maximum card thickness: .065"

	A	B	C
Standard	.450"	.500" min.	.100" min.



Technical Note: What Bar Codes Will Work in Wiegand Mode?

26-bit Wiegand format translates into an eight digit number consisting of two parts — a three digit site code, and a five digit user code.

The maximum value for the site code is 255. The maximum value for the user code is 65,535. Bar codes which represent Wiegand values must meet this limitation.



In the example above, the site code is 255 and the user code is 00393.

When checking to verify that existing cards will work in a Wiegand system, you should also consider the following:

- The ACM will only read the last eight digits in a bar code. For example, if a bar code has 10 digits, the first two are ignored.
- If the bar code value is less than eight digits, the ACM will pad it with leading zeros. For example, a bar code value of 2883 will be output as 00002883.
- The ACM will ignore any alpha characters in the bar code. For example, a bar code value of 3A45C99 will be output as 00034599 (Note that leading zeros are still added to the output).
- Social Security numbers are nine digits, so they cannot be used in a Wiegand system.

If you need to read more than eight digits, use one of the ABA modes, or the TTL ASCII mode. You will need to verify that the panel you are using accepts one of those input modes.

Limited Warranty

Hardware. The equipment is warranted to be free from defects in materials and workmanship for a period of one year from the date of original purchase. Manufacturer agrees to repair or, at manufacturer's option, replace equipment supplied by manufacturer which proves to be defective in materials or workmanship. This warranty is limited to defects arising under normal usage and does not cover malfunctions or failures resulting from the misuse, abuse, neglect, alteration, modification, or repairs by other than manufacturer's authorized service facility.

To obtain warranty service during the warranty period, you must notify manufacturer of your claim and present proof of purchase. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE BUYER.

THE LIMITED WARRANTY IN THIS AGREEMENT IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, INCLUDING (WITHOUT LIMITATION) ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND EXTENDS ONLY TO THE BUYER. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE EQUIPMENT OR SOFTWARE, REGARDLESS OF WHETHER MANUFACTURER IS ADVISED OF THE POSSIBILITY OF DAMAGES.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Declaration of Conformity

The following Declaration of Conformity complies with ISO/IEC Guide 22 and EN45014. It identifies the product, the manufacturer's name and address, and the applicable specifications that are recognized in the European community.

Declaration of Conformity

according to ISO/IEC Guide 22 and EN45014

Manufacturer's Name: TimeKeeping Systems, Inc.

Manufacturer's Address: 30700 Bainbridge Road
Solon, Ohio 44139
U.S.A.

declares that the product:

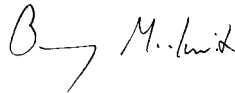
Product Name: EZBarcode Access Control Module II

Model Number: ACM-TKS Product Family

conforms to the following Product Specifications:

EMC: IEN 50082-1
IEN 801-2.1984
IEN 801-3.1984
IEN 801-4.1984
IEN 55022.1987

Supplementary Information: None



Barry Markwitz, Vice President

TimeKeeping
Systems, Incorporated

30700 Bainbridge Road • Solon, Ohio 44139
Phone 216-595-0890 • Fax 216-595-0991 • info@ezbarcode.com • www.ezbarcode.com

© Copyright 2005 TimeKeeping Systems, Inc.