

INSTRUCTION MANUAL

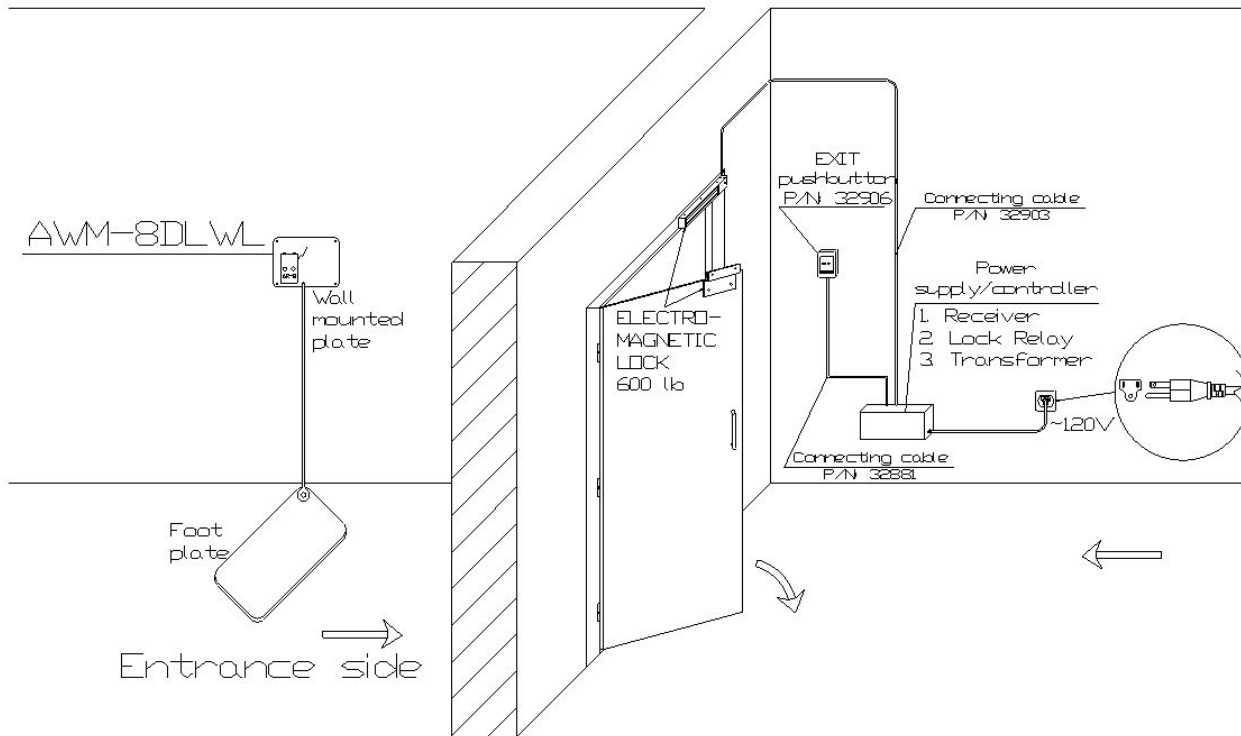
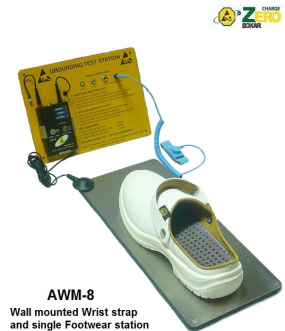
AWM-8DLWL-A KIT

Wall Mounted Wrist Strap and Footwear Tester with a wireless transmitter and a complete hardware set to install a strong (280 KG) Magnetic Door Lock

Product Description:

The Wall Mounted Wrist Strap and Footwear Tester with a wireless transmitter to open a magnetic Door Lock was designed to provide a convenient alternative to ensure personnel in ESD safe areas will be properly protected.

The AR-8DLWL Control Unit has a built-in transmitter which opens a Magnetic Door Lock supplied with the system to allow access to an ESD safe area.



The AR-8DLWL control unit can be pre-programmed to open the door lock in one of three possible modes of operation:

Mode A: The door opens when the wrist strap test is within the specification's limits and control unit indicates "pass"

Mode B: The door opens when both wrist strap and footwear are within the specification's limits and the control unit indicates "pass" for both

Mode C: The door opens when the footwear (ESD shoe or heel strap) is within the specifications limits and the control unit indicates "pass"

AWM-8DLWL-KIT Features:

- * Three-in-one instrument to check wrist straps, footwear and to allow opening a door to an ESD safe area upon positive testing
- * Extremely easy to install and use. Just move your finger from the wrist strap button to the footwear button to complete the test. This two-button design is easier to operate than the typical design that incorporates a switch to toggle testing modes
- * Built with SMT technology for reliability
- * Microprocessor controlled for accuracy
- * Dependable and simple. Can be installed in 2 hours or less.
- * Pass tone is easy to hear.
- * Visual indicators to show pass, low fail, high fail, and low battery condition.
- * High strength Magnetic Lock (280Kg)
- * Low profile EXIT pushbutton
- * Compact power supply/controller with a power cord ready to be plugged into a standard AC supply outlet without requiring a qualified electrician.
- * Supplied with a complete hardware set to allow quick installation using an electric drill, a measuring tape, and a screwdriver.



AR-8DLWL Wrist and Footwear Tester with built-in wireless transmitter

The complete system includes:

- AWM-8DLWL-A Wrist strap and Footwear Tester with lock activation transmitter
- Wall mounted Exit Pushbutton P/N 32906
- Magnetic Door Lock (600lb or 280Kg) P/N 32882
- Set of mounting brackets (Z and L) to conveniently mount the magnetic lock P/N 32883
- 12V DC power supply to connect the Exit pushbutton to the 120V power outlet P/N 32911
- Connecting cables set P/N 32907 includes:
 - Cable to connect Exit Pushbutton with Power supply/Controller (10ft-3m) P/N 32881
 - Cable to connect Magnetic Door Lock with the power supply (20ft-6m) P/N 32903
- Key Chain transmitter (Bypass the AWM-8DLWL tester if access is needed in an emergency) P/N 32925
- Manual and Warranty Card



P/N 32906



P/N 32882 and P/N 32883



P/N 32911



P/N 32907
(connecting cables set)



P/N 32925

Modes of Operation A, B and C.

Pre-Programming the Mode of Operation: (When to deactivate the lock and allow the door to open)

Mode A: Wrist strap only

- If the resistance range is correct when pressing the **WRIST STRAP** button, the green LED lights up. At the same time, the transmitter sends the signal to deactivate the magnetic door lock for a pre-programmed number of seconds. The sound duration lasts for 2 seconds to let the operator know that the wrist strap checked "OK" and that the door can be opened. 10 seconds after the door lock closes, the system returns to its normal waiting state.

Mode B: Wrist strap + Footwear

- If resistance range is correct when pressing **WRIST STRAP** button, the green LED lights up and the sound is heard for one second. The system allows 5 seconds for the operator to test footwear. During these 5 seconds, the operator must press the **FOOTWEAR** button to complete the test.

BOKAR International 650 Scranton Pocono Hwy., Covington Twp., PA 18444 USA

www.bokar.com Tel: (570) 842-2812 E-mail: bokar@bokar.com

If the footwear resistance is within the correct range, the green LED lights up and stays lit. At the same time the transmitter sends the signal to de-activate the magnetic lock. The sound duration lasts for 2 seconds to let the operator know that the wrist strap and the footwear strap (heel strap or toe strap) checked "OK" and the door can be opened. 10 seconds after the door lock closes, the system returns to its normal waiting state.

Mode C: Footwear only

- If the resistance range is correct when pressing the **FOOTWEAR** button, the green LED lights up and stays lit for as long as the test button is pressed. At the same time, the transmitter sends the signal to deactivate the magnetic door lock for a pre-programmed number of seconds. The sound duration lasts for 2 seconds to let the operator know that the footwear checked "OK" and that the door can be opened. 10 seconds after the door lock closes, the system returns to normal waiting state.

The Mode of Operation is shown momentarily by corresponding LED, each time when any of the test buttons is pressed.

The corresponding LED (**Red** for wrist strap only, **Green** for both wrist strap and heel strap and **Yellow** for heel strap only) will light-up for 1/2 second. Then the battery check light will blink momentary before the measurement of the wrist/heel straps starts.

If the **Red** "Hi-Fail" LED illuminates for 0.5sec at the beginning of the test, it means that the AR-8 is in **Mode A**

If the **Green** "Pass" LED illuminates for 0.5sec at the beginning of the test, it means that the AR-8 is in **Mode B**
Factory setting is Mode B

If the **Yellow** "Lo-Fail" LED illuminates for 0.5sec at the beginning of the test, it means that the AR-8 is in **Mode C**

Mode of Operation Pre-programming Instructions:

- hold the wrist strap pushbutton for about 30 sec until all 3 LED's light up
- release the pushbutton within 3 sec. from the illumination of the LEDs and then press it again
- When holding down the button, the LED's will illuminate in sequence
- Release the pushbutton while the lit LED corresponds to a desired MODE of operation

Once again, it is important to release the pushbutton when a particular LED is illuminated.

Hi –Red LED = Mode A

Pass – Green LED = Mode B

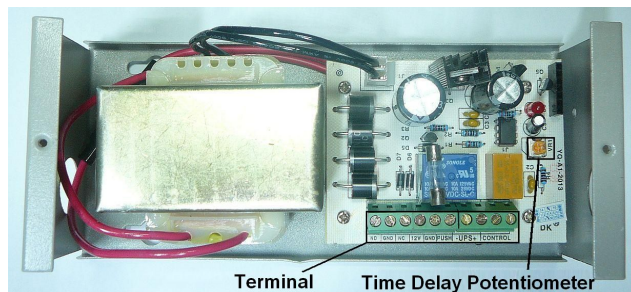
Lo – Yellow LED = Mode C

How to pre-program time period for which the door is open after magnetic lock de-activation

The lock de-activation time is adjustable from 3-30 sec. The Factory setting is 10 sec.

The time can be adjusted inside of the Power supply/Controller.

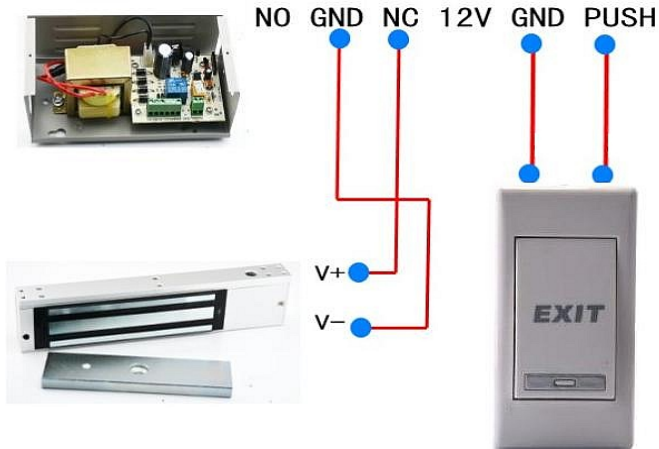
Open the power supply/controller (remove the 2 screws on the top of the controller and remove the top cover)



- to reduce the time to open the lock, turn the Time Delay Potentiometer counterclockwise
- to increase the time to open the lock, turn the Time Delay Potentiometer clockwise

Magnetic Door Lock hardware installation Instructions:

A/ Wiring connections of the subsystems:



B/ How to attach the Magnetic Door Lock Hardware:

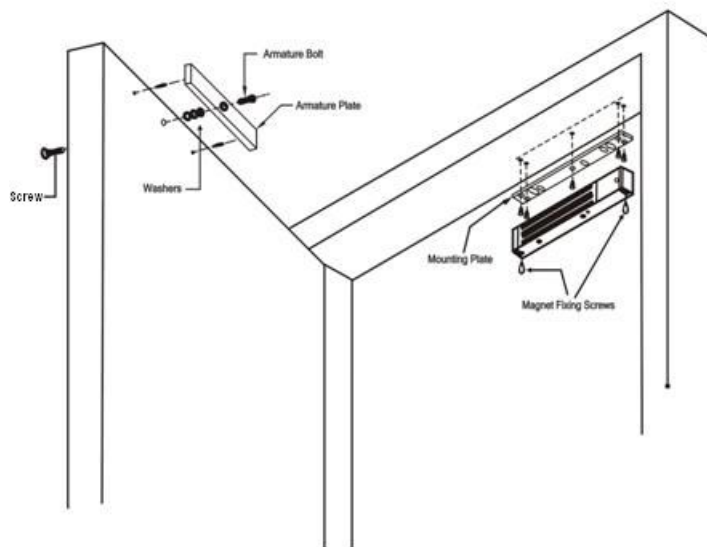
B1: How to attach the electromagnetic element to the door

Important: Please Read Before Installing the Magnetic Lock

- Handle the equipment with care. Damaging the mating surfaces of the magnet or armature plate may reduce locking efficiency.
- The magnet must be strongly attached to the door frame. The armature plate mounts to the door.
- Use the Template when the door is in its normally closed position.
- Before installing, add thread locker to all screws. Firmly tighten the screws to avoid loosening.

Typical Installation:

****Important:** Fix the armature plate loosely, and attach using the two soft washers for flexibility in order to allow the armature plate to automatically adjust to its proper position with the magnet.



MOUNTING INSTRUCTIONS

STEP 1

- Fold Template along dotted line.
- Place Template against the door and the door frame.

- Drill holes as indicated on the template.

STEP 2

- Mount the armature plate to the door using 1 metal washer sandwiched between the 2 soft washers (the washers are installed between the armature plate and door).

STEP 3

- Install the mounting plate
- Adjust the mounting plate so that the plate and the armature plate form a right angle.
- Using the mounting plate as a template, drill the wire hole.
- Drill holes and install the remaining mounting screws.

STEP 4

- Attach the magnet to the mounting plate with the 2 M4 (M6) screws supplied.

STEP 5

- Install electrical wiring

STEP 6

- Test all functions

B2: How to attach the EXIT pushbutton

Drill 2 holes in the wall. Use plastic inserts and the screws to attach the EXIT pushbutton

B3: How to install and connect the Power Supply/Controller

Drill 2 holes in the wall. Use plastic inserts and the screws to attach it to the wall.

Technical specifications:

	AR-8DLWL- A (U.S.A. Parameters)	
	For Wrist Straps	For Footwear
Pass Level	750 kohm-10 Mohm; green light and audible tone	750 kohm-100 Mohm; green light and audible tone
Low Fail	< 750 kohm; yellow light and no tone	< 750 kohm; yellow light and no tone
High Fail	> 10 Mohm; red light and no tone	> 100 Mohm; red light and no tone
Door Lock Power Supply/Controller	Supply: Standard 110V-120V AC, I=5A	
Electro-Magnet	Strengths 600 pounds (280 KG)	
Package dimensions	22" x 17.3" x 4.3" (56 x 44 x 11 cm)	
Packaged weight	14.6 lb (6.6kg)	

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