

Medeco XT

Intelligent Key System

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Experience a safer
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Medeco XT Access Interface Module (AIM) Installation & User Guide



Medeco XT AIM Installation & User Guide

FCC/CE Compliance Statement

Medeco® XT Access Interface Module (AIM)

Models EA-100193 & EA-100194

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 interferences that may cause undesired operation.



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Medeco Security Locks
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IP-55 Reader Module Compliance Statement

The Medeco XT Access Interface Module (AIM) Reader module is rated for outdoor use compatible with the IP Code, International Protection Marking, IEC Standard 60529 (EN 60529), sometimes interpreted as Ingress Protection Marking.

The Medeco XT AIM Reader is certified to IP-55 rating –

- ✓ Dust Protected
- ✓ Water Jet Resistant

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Record of Revision

Date	Revision History	Revision Class	Comments
February 28, 2019	0.1	Draft	Working draft version
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Getting Started

Introduction – Medeco XT Access Interface Module (AIM)

This guide contains installation instructions, usage & feature information, explanation of functional modes, and settings for your Medeco XT Access Interface Module (AIM).

This guide is available for print, download and online use on the [Medeco XT Access Interface Module \(AIM\) product page](https://www.medeco.com/en/site/medeco/technology/ecylinder/medeco-xt1/medeco-xtaim/product-page). The Medeco XT AIM product page can be found at the following web address:

<https://www.medeco.com/en/site/medeco/technology/ecylinder/medeco-xt1/medeco-xtaim/>

The Medeco XT Web Manager documentation is available from the Help link found in the XT Web Manager Software. The Medeco XT Web Manager documentation provides instructions for overall system use, including programming and scheduling of your XT keys, accessing audit information, and data analytics. Additionally, XT key information and tips, including maintenance and usage, can be found [here](#), or you may visit the following web address:

<https://www.medeco.com/en/site/medeco/technology/ecylinder/medeco-xt1/medeco-xt/medeco-xtkeytips/>

This guide assumes that you are familiar with installing typical locking and security device systems. You should pay special attention to the shaded text used throughout this guide.



Information



Warnings



Tips

These symbols emphasize important information critical to the successful installation of your XT AIM.

About Your Product Box – QR Codes

Your Medeco XT AIM product boxes contains the XT AIM Controller and the XT AIM Reader, packaged separately. The XT AIM product box includes two QR codes for convenient access to the XT AIM Installation & User Guide or the Medeco Technical Support chat line.

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When you scan the XT AIM *Installation & User Guide* QR code with your mobile device, you may be prompted to allow your device to navigate to a web address or allow the guide to download to your device prior to it being displayed. After you scan the Technical Support chat line QR code, you will be prompted to enter your name on the Technical Support chat page to initiate contact.



Medeco Technical Support Chat Line QR code

XT AIM Description

The Medeco XT AIM (Access Interface Module) extends the capabilities of the Medeco XT System to interact with a variety of access control devices often found around the periphery of a door opening such as electric strikes, magnetic locks, alarms, cameras, lights, etc. As illustrated in Figure 1, the Medeco XT AIM consists of a Reader and an Intelligent Controller assembly. The Reader is mounted in an accessible location while the Controller is located in a secure location. The Reader and XT AIM Reader cable function as a communication bridge for the XT key and the Intelligent Controller to exchange data. The Controller contains circuitry and output switches that when authorized by an XT key can enable or disable connected devices.

More information on the XT key can be found on the [Medeco website XT Key Tips page](https://www.medeco.com/en/site/medeco/technology/ecylinder/medeco-xt1/medeco-xt/medeco-xtkeytips/).

<https://www.medeco.com/en/site/medeco/technology/ecylinder/medeco-xt1/medeco-xt/medeco-xtkeytips/>

For an XT AIM Controller configured to any mode, the Control Key type provides a special and unique function. The Control Key type in XT Web Manager is used to retrieve cylinder audits and as a tool to easily replace a cylinder core. An XT key that is both authorized for an XT Lock and programmed as a Control Key type, will open the XT Lock, but the relays will not be activated and the audit record event will be recorded as a Core Change event. You should set your XT Key type to Operator or Operator + Audit for use with the XT AIM.



Information on using the Control Key Type

For a Medeco XT AIM Controller configured to any mode, using an authorized XT Key set to the Control key type will not activate the relays and will record the audit event type as a Core Change XT Key for access. The Operator and Operator + Audit key type should be used instead.

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Figure 1: XT AIM Reader and Controller System

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Using Your XT AIM

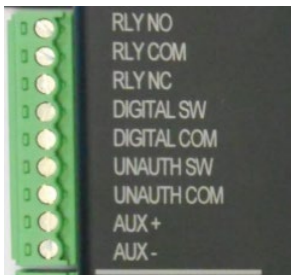
Relay and Power Terminals

On the side of the XT AIM Controller are the 9 Position Input/output (I/O) and 5 Position External Power Terminals used to connect external devices and to provide auxiliary power.

The 9 Position I/O Terminal consists of the input and output terminals for the 4 relays. The 5 Position Power Terminal provides the fused and non-fused external power source connection points. An AC or DC power supply up to 24V can be connected to the Controller. The number of available I/O terminals allows for a wide range of possible configurations for custom applications.

The XT AIM Controller contains a high power electro-mechanical relay and two low power digital relays that provide safe and fully isolated control of external power sources. A control input is also provided for external override of the relays. The following summarizes the type and function of the various XT AIM Controller relays.

Nine Position I/O Terminal



Electro-Mechanical Relay, Position (POS) 1/2/3

The electro-mechanical relay is single-pole-double-throw (SPDT) with both Normally Open (**RLY NO**) and Normally Closed (**RLY NC**) contacts to a Common Contact (**RLY COM**). In the inactive state, the normally open terminal (POS 1) is open and the common terminal (POS 2) is connected to the normally closed terminal (POS 3). When the relay is activated the common terminal (POS 2) is switched to the opposite state.

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The electro-mechanical relay contacts are rated at 250V and up to 2 amps. The DC load breaking capacity of the mechanical relay is 60 watts, i.e. 30 volts at 2amps. For inductive loads, an external appropriately sized snubber diode must be installed across the load.

Digital Relays, POS 4/5 and POS 6/7

The two digital solid-state relays are single-pole-single-throw (SPST) normally open contacts. One solid-state relay **DIGITAL SW/DIGITAL COM**, (POS 4/5) is activated during authorized key access events and the other relay **UNAUTH SW/UNAUTH COM**, (POS 6/7) is activated during unauthorized events. The digital relays can switch up to 24V AC or DC at 100 mA.

AUX Relays, POS 8/9

The **AUX+** and **AUX-** inputs for the AUX function provide an external override for deactivating the relays. When 3V or greater is applied across **AUX+** and **AUX-**, the mechanical and digital relays de-energize immediately. If the AUX function is not used, POS 8/9 should be shorted together.

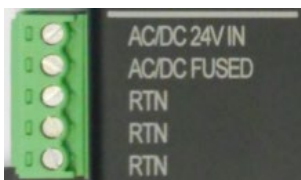


Information on the AUX Terminals

If the AUX function is not used, POS 8 & 9 terminals should be shorted together.

Five Position External Power Terminal

The XT AIM can be powered via an external AC or DC power sources. The DC input voltage range is between 7V and 24V. The AC input voltage range is between 18 and 24Vrms. The XT AIM input current requirement is 30mA maximum.



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AC/DC24V/IN POS 1/RTN

The 5 position external power terminal is used for connecting an external power supply to the XT AIM Controller. If used, external power is connected between the **AC/DC 24V IN** terminal and any of the **RTN** terminals. The XT AIM is protected by an overvoltage protection circuit which is triggered when current greater than 2 amps is drawn. If the overvoltage protection circuit is triggered, the circuit remains open until the current drops to 2 amps or below, at which time the circuit closes and the XT AIM resumes normal operation.



Information on the Overvoltage Protection Circuit

*Connecting a voltage greater than 24V to the **AC/DC 24VIN** terminal will trigger the overvoltage protection circuit. When the XT AIM detects current greater than 2 amps, the circuit is triggered. When current drops to 2 amps or less, the circuit is closed.*



Warning –Connecting External Power to XT AIM Reader

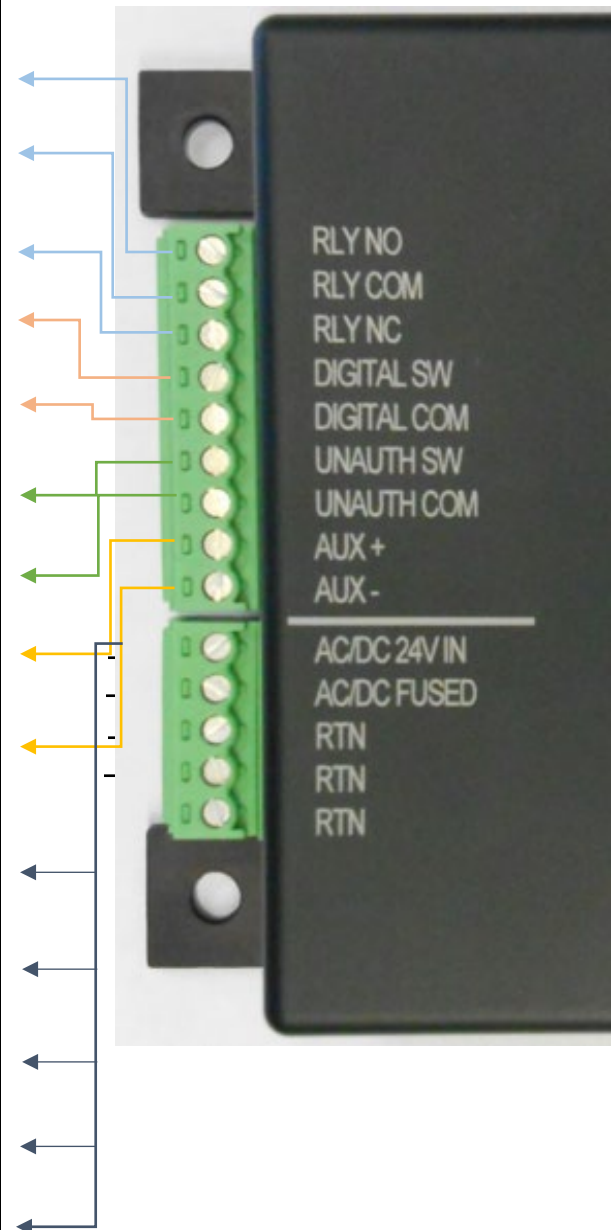
DO NOT Apply voltages above 60V as this may damage the Controller and may render the XT AIM inoperable.

AC/DC FUSED POS 2/RTN

Power to control external devices must be provided. The **AC/DC FUSED** terminal may be used for this purpose. The voltage applied to **AC/DC 24V IN** is made available at the **AC/DC FUSED** terminal through a resettable fuse (PTC). The PTC fuse trip rating is 2 amps.

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9 Position Terminals		
Terminal Number	Terminal Name	Terminal Function
1	RLY NO	Relay Normally Open (NO)
2	RLY COM	Relay Common Contact
3	RLY NC	Relay Normally Closed (NC) contact
4	DIGITAL SW	Authorized solid-state relay common
5	DIGITAL COM	Authorized solid-state Relay switch, normally open (NO)
6	UNAUTH SW	Unauthorized solid-state Relay common
7	UNAUTH COM	Unauthorized solid-state Relay switch, normally open (NO)
8	AUX+	AUX inputs
9	AUX-	
5 Position Terminals		
1	AC/DC 24V IN	External power input (7-24V DC; 18-24VRMS AC)
2	AC/DC Fused	External power out (Fused at 2 amps)
3	RTN	External power return (all returns are internally connected)
4	RTN	External power return
5	RTN	External power return



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XT AIM Controller Modes

Your XT AIM can be configured to function in one of the following five (5) primary modes;

- Standard Mode, Key Power Mode
- Standard Mode, External Power Supplied
- Toggle Mode
- Time Delay Mode
- Dual User Authentication Mode

When the XT AIM Controller is shipped from the Medeco factory, the Controller is set to Standard, Key Power mode. Prior to installation, ensure that the XT AIM Controller is configured to the functional mode desired. The functional mode is set using the four DIP switches located back side of the Controller.

Information on the functional modes is described below and the corresponding DIP switch settings are shown on the [DIP switch settings table](#) in the [Setting the Functional Mode section](#) of this document.



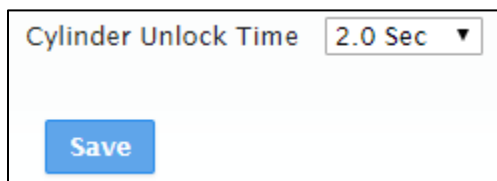
Warning – XT Web Manager Key Types

*The Control Key type should not be used for XT keys assigned to daily users or key holders who only use an XT Key for access. The **Operator** and **Operator + Audit** key type should be used instead. Your XT AIM Controller will not perform as intended if an authorized XT Key set to the Control Key type is used.*

Standard Mode, Key Power

In the Standard Mode with Key Power Only, the XT key provides the only source of power to the XT AIM Reader and Controller. In this mode, the mechanical relay remains activated as long as the key is securely inserted into the key port, up to the Cylinder Unlock Time setting. The cylinder unlock time can be configured in the Medeco XT Web Manager Software. The digital relay remains activated as long as the key is securely inserted into the key port, up to 2 seconds. If the key breaks insertion contact anytime within the unlock time setting, then the relays deactivate. The maximum time that the digital contact will remain activated is 2 seconds.

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Cylinder Unlock Time 2.0 Sec ▼

Save

Figure 2: Cylinder Unlock Time Setting from the Administration Page of the XT Web Manager Software

When your XT AIM Controller is operating in Key Power mode, the XT AIM Reader LED Indicator will remain unlit until an authorized XT key is inserted into the key port. If the XT key is authorized, the XT AIM Reader will display a solid green light.



UNAUTH Relay, Additional Information

*Any time an XT key is inserted into the Reader and the key fails to authenticate, the **UNAUTH** relay will close.*

In order to enable this mode, you should refer to the [DIP switch settings](#) table in the [Setting the Functional Mode](#) section of this document.



Information on using the XT AIM without a connected power supply

If you do not have a connected external power supply, Key Power mode is the default mode. This is the only functional mode operational without external power.

Standard Mode, External Power

With the XT AIM Controller configured in the Standard Mode with External Power, three operational configurations can be defined. Upon insertion of an authorized XT key, the mechanical relays can be defined to latch for the following durations:

- Cylinder Unlock Time
- For 30 Second Latch
- For 60 Second Latch

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When an authorized XT key is inserted into the Reader, the mechanical and digital relays will immediately activate. In regard to the mechanical relays, the latch duration can be configured to hold for the Cylinder Unlock Time or for either 30 seconds or 60 seconds. For the Digital relays, the latch duration for all noted operational modes is approximately 2 seconds. The [DIP switch settings table](#) provides the specific DIP switch settings necessary to configure your XT AIM Controller to Cylinder Unlock Time, 30 second hold, or 60 second hold in Standard Mode.



Cylinder Unlock Time

The Cylinder Unlock Time is a setting within the Medeco XT Web Manager Software that refers to the maximum duration that the Controller is powered by the XT key. The time can be incrementally adjusted from .8 seconds to 12 seconds. The Cylinder Unlock Time begins when the key is inserted into the Reader. The key must maintain insertion contact during the entire Cylinder Unlock Time period.



UNAUTH Relay, Additional Information

*Any time an XT key is inserted into the Reader and the key fails to authenticate, the **UNAUTH** relay will close.*

When your XT AIM Controller is configured to any of the three available operational configurations in this mode, the XT AIM Reader displays a solid green light. When an authorized XT key is inserted into the key port, the XT AIM Reader will display a brief green flash. The XT key displays a green light when authorized and captures the event, storing it locally as an audit record. More information on the XT key LED indicators can be found in the Medeco XT Web Manager User Guide that is available from the Help link in the Medeco XT Web Manager Software.



Information on power loss in Standard Mode with External Power

Standard mode with External Power will default to Standard Mode with Key Power in the case that external power to the XT AIM Controller is lost. Connected external devices may not operate as intended.

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Toggle Mode

In order to use Toggle mode external power must be connected to the XT AIM Controller. In Toggle Mode, two operational configurations are available.

- Single Authentication
- Dual Authentication

Toggle mode allows the XT key to act as a toggle switch by changing the state of the mechanical relay, **RLY NO** and **RLY NC** each time an authorized XT key is inserted into the XT AIM Reader. The digital relays will activate for 2 seconds each time the mechanical relay changes state.

Single Authentication

In single authentication, an authorized XT key is used to activate and deactivate the relays. In this mode, the mechanical relay is activated when you insert your authorized XT key and the relay remains in this state until the next time an authorized XT key is inserted. The digital switch is activated when your XT key is authenticated *and* when the mechanical relay changes states.



Information on power loss in Toggle mode

In the case of power loss, Toggle mode will operate as Standard Mode with Key Power, however connected external devices may not operate as intended.

Dual Authentication

For dual authentication, two authorized XT key insertions are required for the relay to change state. Any authorized XT key can be used for either the first or second XT key insertions. When the authorized XT key is inserted for the second time, the mechanical relay is activated and remains in this state until the next time authorized XT key insertions are sequentially completed. The digital switch is activated each time the mechanical relay changes state at the second authorized XT key insertion.

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A Note on the AUX Relay

The AUX input can be used as an emergency toggle override to deactivate the mechanical relays without creating an audit record.

With external power being supplied, the XT AIM Reader will display a solid green light indicating the presence of power. When an authorized XT AIM key is inserted into the XT AIM Reader, the light will briefly flash and the XT key will display a green light. In Toggle mode configured for dual authentication, the XT AIM Reader displays a flashing green light after the first XT key is inserted and authenticated to indicate that the XT AIM system is ready for a 2nd authorized XT key to be inserted. The second key must be inserted within 60 seconds. If the second key is not inserted within 60 seconds, the dual authentication cycle expires with no change in the state of the relays.



UNAUTH Relay, Additional Information

*Any time a key is inserted into the Reader and the key fails to authenticate, the **UNAUTH** relay will close.*

The [DIP switch setting table](#) in the [Setting the Functional Mode](#) section of this document provides the switch settings necessary to use your XT AIM Controller in single or dual authentication Toggle mode.

Time Delay Mode

When the XT AIM Controller is configured for Time Delay Mode, four operational modes are available. A connected external power supply is necessary to use your XT AIM in any of the Time Delay operational modes. All Time Delay operation modes require two insertions of the same authorized XT key.

- 1 Minute Time Delay
- 2 Minute Time Delay
- 3 Minute Time Delay
- 5 Minute Time Delay

Your XT AIM Controller can be configured to a 1-minute, 2-minute, 3-minute, or 5-minute time delay. Time Delay mode requires one authorized XT key to be inserted twice into the XT AIM Reader. When the authorized XT key is initially inserted into the XT AIM Reader, a countdown timer is initiated.

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At the end of the time delay, when the second key (must be the same key as the first insertion) is inserted into the XT AIM Reader, the relays are activated.

The mechanical relay remains activated for 5, 15, 30, or 60 seconds, depending on the configured delay time. For a 1 minute time delay, the mechanical relay will remain activated for 5 seconds. The 2, 3, & 5 minute time delay modes will activate the mechanical relay for 15, 30, & 60 seconds, respectively. For all time delay periods, the digital switch is activated after the second authorized XT key is inserted and remains active for approximately 2 seconds.



UNAUTH Relay, Additional Information

*Any time a key is inserted into the Reader and the key fails to authenticate, the **UNAUTH** relay will close.*

The [table](#) in the [Setting the Functional Mode](#) section of this document provides the DIP switch settings for configuring your XT AIM Controller for use in the 1, 2, 3, or 5 minute Time Delay mode.



Information on power loss in Time Delay Mode

In the event of power loss, the XT AIM Controller will operate in Standard Mode with Key Power. Connected external devices may not operate as intended.

Dual User Authentication Mode

With the XT AIM Controller configured in the Dual User Authentication Mode, there are three activation latch times for the mechanical relays to choose, each requiring dual user authentication to activate. The digital relays activate for 2 seconds for any mode selected. The three operational configurations for Dual User Authentication require external power to be supplied to the XT AIM Controller.

- Dual User Authentication, Mechanical Relay Latch, Cylinder Unlock Time
- Dual User Authentication, Mechanical Relay Latch, 30 Seconds
- Dual User Authentication, Mechanical Relay Latch, 60 Seconds

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In Dual Authentication mode, two different authorized XT keys are required. Each XT key must be inserted in sequence to activate the XT AIM Controller relays.

You can configure the XT AIM Controller to activate the relays when the second authorized XT key is inserted and to remain activated for the duration of the Cylinder Unlock Time Setting as configured in the Medeco XT Web Manager Software. If the key breaks insertion contact anytime within the unlock time setting, then the mechanical and digital relays deactivate.

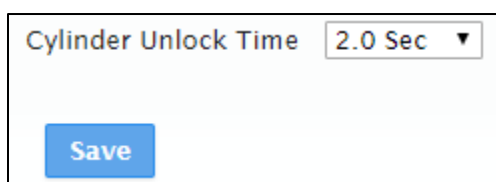


Figure 3: Cylinder Unlock Time Setting from the Administration Page of the XT Web Manager Software



Cylinder Unlock Time

The Cylinder Unlock Time is a setting within the Medeco XT Web Manager Software that refers to the maximum duration that the Controller is powered by the key. The time can be incrementally adjusted from .8 seconds to 12 seconds. The Cylinder Unlock Time begins when the key is inserted into the Reader. The key must maintain insertion contact during the entire Cylinder Unlock Time period.

When configured to a 30 second or 60 second hold, the mechanical relay remains activated for a period of 30 or 60 seconds, respectively, after the 2nd XT key is inserted and authenticated. The Digital relays also activate when the second XT key is inserted and authenticated and will remain activated for 2 seconds.



UNAUTH Relay, Additional Information

Any time a key is inserted into the Reader and the key fails to authenticate, the **UNAUTH** relay will close.

The [Functional Mode DIP switch settings table](#) in the following section provides the DIP switch settings necessary to configure your XT AIM Controller for use in one of the three Dual Authentication modes.

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When your XT AIM Controller is configured to one of the three Dual Authentication operational mode options, the XT AIM Reader displays a continuous solid green light to indicate external power is being supplied. When an authorized XT key is inserted into the key port, the XT AIM Reader will display a brief green flash and the XT key will display a green light. After the first authorized XT key is removed, the XT AIM Reader quickly flashes a green light for sixty seconds to indicate that it is ready for a second authorized XT key to be inserted. If the second authorized XT key is not inserted within 1 minute after removing the first XT key, the first XT key must be reinserted to initiate the process again.



Information on power loss in Dual User Authentication Mode

Dual User Authentication Mode will operate in Standard Mode with Key Power if external power to the XT AIM Controller is lost. Connected external devices may not operate as intended.

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Configuring Your XT AIM

Setting the Functional Mode Selection

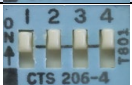
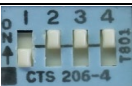
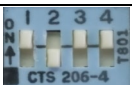
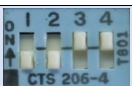
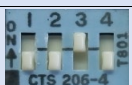
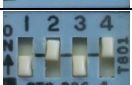
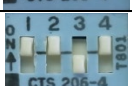
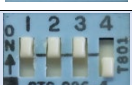
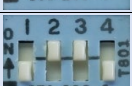
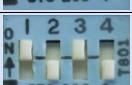
Prior to installation, you should configure the XT AIM Controller by locating the four DIP switches located adjacent to the XT AIM Reader cable inputs on the side of the unit.



Figure 4: Side view of the XT AIM Controller

The following table shows the available modes of operation and their corresponding DIP switch settings. Sliding a switch upward places it in the ON position.

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DIP Switch Settings by Functional Mode					
Functional Mode		Switch 1	Switch 2	Switch 3	Switch 4
Standard, Key power mode No external power connected		ON	ON	ON	ON
Standard mode		ON	ON	ON	ON
Standard mode - 30 second hold		OFF	ON	ON	ON
Standard mode - 60 second hold		ON	OFF	ON	ON
Toggle mode – Single Authentication		OFF	OFF	ON	ON
Toggle mode – Dual Authentication		OFF	OFF	ON	OFF
Time Delay mode 1 minute delay, 5 second hold		OFF	OFF	OFF	ON
Time Delay mode 2 minute delay, 15 second hold		ON	OFF	OFF	ON
Time Delay mode 3 minute delay, 30 second hold		OFF	ON	OFF	ON
Time Delay mode 5 minute delay, 60 second hold		ON	ON	OFF	ON
Dual Authentication mode		ON	ON	ON	OFF
Dual Authentication mode 30 second hold		OFF	ON	ON	OFF
Dual Authentication mode 60 second hold		ON	OFF	ON	OFF

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Installing Your XT AIM

Before You Begin

While your XT AIM Reader can be mounted in any of the 90 degree orientations, this installation guide assumes that you will install the Reader vertically on the unsecured side of an opening or accessible location, with the XT AIM Controller installed on the secure side or inaccessible location.

**Warning – Before you begin mounting & connecting the XT AIM Controller**

Medeco recommends consulting your electrician prior to installing your XT AIM Controller.

Before you begin installing your XT AIM, you should review the desired function and plan your installation. You should note the requirements and specifications for external devices to be connected, desired operation of connected devices, mounting surface, distance between the XT AIM Reader and the XT AIM Controller installation locations.

You should carefully plan your installation and familiarize yourself with the installation instructions, prior to installing the XT AIM. The XT AIM Controller unit can be installed in a double gang box and the XT AIM Reader installed in a single gang box for recessed installation. The XT AIM Reader can be installed indoors or outdoors, however the XT AIM Controller should be installed in a climate controlled environment.

The XT AIM Reader cable accommodates installation of the XT AIM Controller on the opposite and secure side of your opening or inaccessible location within approximately 15-18” of the Reader. However, you may extend the XT AIM Reader cable an additional 98.5’ up to a total of 100’, in order to provide greater flexibility in installation. Standard wire nuts and 22 AWG solid core 4 conductor cable is required, and are not provided with your XT AIM.

**Warning – Indoor and Outdoor Mounting**

The Medeco XT AIM Reader module is rated to IP-55 Ingress Protection standards and is suitable for normal, typical, outdoor applications. However, the XT AIM Controller should only be mounted indoors or in similar environments.

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The XT AIM can be powered via an external AC or DC power sources. For more information, see the section titled [*Five Position External Power Terminal*](#).

If your mounting surface is masonry or is not suitable for the #8x1 sheet metal mounting screws provided, you should obtain the appropriate hardware needed for mounting the XT AIM Controller and any additional tools that may be required.

You should be familiar with the installation instructions and information for any external devices or power source you are connecting to the XT AIM Controller, as well as the XT AIM Controller terminals you are using.



Tip for Configuring your XT AIM Controller before installation

You must configure your XT AIM Controller to the desired functional mode prior to installation.

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What Is Included In the Box?

Medeco XT Access Interface Module (AIM) Controller Product Box	
Part Name	Part Number



Controller Assembly	EA-100194
#8x1" Phillips-head Screws (4)	CP-010561-164
5 Position External Power Terminal	EA-350082
9 Position I/O Terminal	EA-350083

Medeco XT AIM Reader Product Box	
Part Name	Part Number



Reader Port	EA-100218
Reader Port Outer Housing	EA-100214
Escutcheon	EA-300216
Mounting Plate	CP-183170
#6 32x3/8" Reader Mounting Screws (4)	CP-010511-061
#6 32x1" Mounting Plate Screws (2)	CP-010511-160
#2 56x1/4" Outer Housing Screw (2)	CP-010303-041
.050 Hex Key Wrench	CP-284120

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What Tools are Required/Needed?

You will need the following tools to complete the installation of your Medeco XT AIM.

- #2 Phillips head screwdriver
- 3/32" slot-head screwdriver
- Tape measure or scale with fractional increments

Optional:

- Drill for preparing mounting surface for new installation
- Masonry screws or other installation specific hardware not included.
- If the XT AIM Reader is to be mounted more than 18" away from the XT AIM Controller, additional length of 22 AWG solid core 4 conductor cable is required. Wire nuts and a wire stripper are needed to attach the extended wire length to the existing 18" Reader cable are needed.
- An XT Test key is recommended for testing the installation of the XT AIM Controller.



XT AIM Reader and Controller Mounting, Distance

The XT AIM Reader is supplied with an 18" cable extension for connecting to the XT AIM Controller. For longer distances, an additional cable length can be spliced onto the 18" cable length for a maximum total distance of 100'.



Warning – Before you begin mounting & connecting the XT AIM Controller

Medeco recommends consulting your electrician prior to installing your XT AIM Controller. Your electrician should perform or supervise the steps pertaining to the connecting of external power.

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Installation – Mounting the XT AIM Reader

1. For new installations, the specifications for mounting your XT AIM Reader are shown below. The diagram is not to scale.

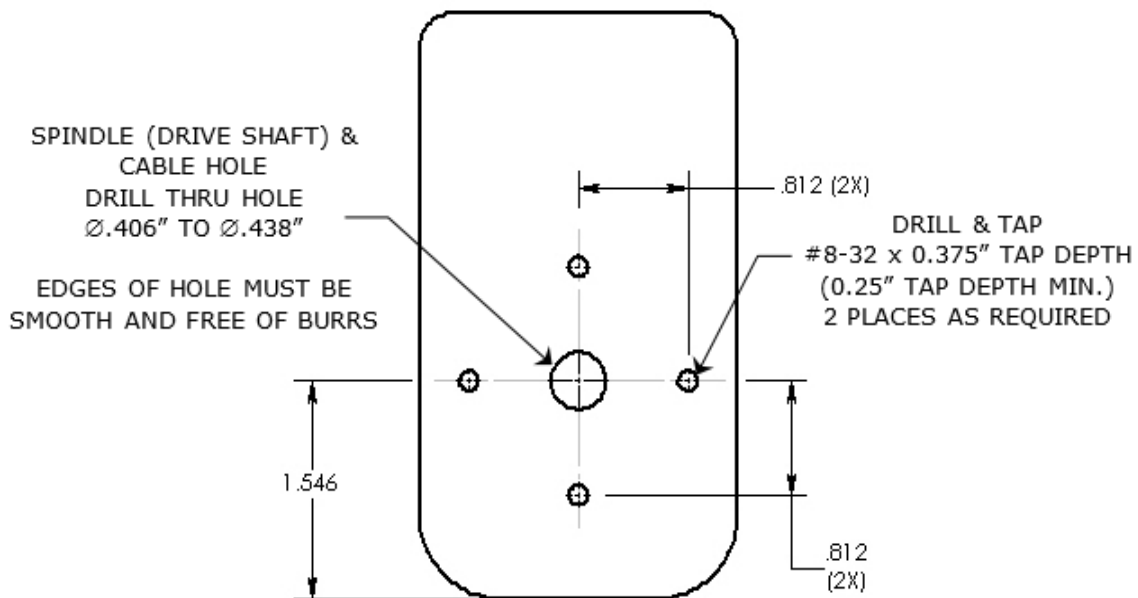


Figure 5: XT AIM Reader Mounting Specifications

2. Locate the mounting plate and the two (2) provided #6-32x1" mounting plate screws, noting the orientation of the top and bottom of the mounting plate (shown in Figure 6).

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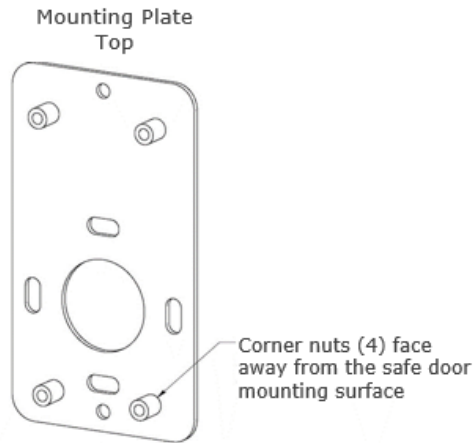


Figure 6: Mounting Plate

3. Attach the mounting plate on the accessible side of the desired location using the two (2) provided #6-32x1" mounting plate screws.
4. The mounting plate is now installed.
5. Locate the XT AIM Reader assembly.
6. Remove the outer housing on the XT AIM Reader assembly and set it aside for later installation.
7. Locate the escutcheon and the four (4) #6 - 32x3/8" Reader mounting screws (see Figure 7).
8. Mount the Reader to the previously installed mounting plate by feeding the XT AIM Reader cable end through the escutcheon and mounting plate to the secure or inaccessible side of your mounting location.
9. Align the two extending tabs at the back of the Reader assembly with the two slots in the escutcheon to properly insert the Reader into the escutcheon.

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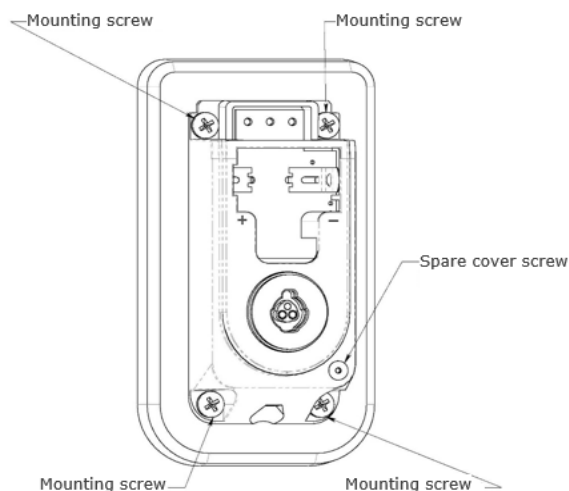


Figure 7: XT AIM Reader Mounting Screws

10. Attach the Reader and escutcheon to the mounting plate using the 4 #6-32x3/8" Reader mounting screws.
11. After the Reader is attached to the surface of the accessible location, carefully pull the XT Reader cable to remove any slack that remains inside the Reader assembly.
12. Locate the plastic outer Reader housing.
13. Locate the provided #2-56x1/4" outer housing (hex socket) screw.
14. Place the outer Reader housing over the mounted inner housing. For easy placement, first place the upper back edge of the outer Reading housing against the upper back edge of the mounted inner Reader housing and then lower the outer housing into place with a hinge motion.



Information on the location of the spare screw

A spare #2-56x1/4" outer housing screw is located in the XT AIM Reader.

15. Locate the .050 hex key wrench.
16. Using the .050 hex key wrench, install the #2-56x1/4" outer housing screw upwards into the lower end of the outer housing in order to fasten the outer housing to the inner housing.
17. Installation of your XT Reader is now complete. You are now ready to install your XT AIM Controller.

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Installation – Mounting & Connecting the XT AIM Controller

1. Locate the XT AIM Controller and the 4 #8x1" Philips-head screws.
2. If your installation requires it and you have not done so already, ensure that any pre-drilled holes align with the holes in the mounting brackets on the XT AIM Controller.



Warning – Before you begin mounting & connecting the XT AIM Controller

Medeco recommends consulting your electrician prior to installing your XT AIM Controller. Your electrician should perform or supervise the steps pertaining to the connecting of external power.



Figure 8: XT AIM 4-wire terminal for connecting power supply & DIP switch bank

3. Using a Phillip's-head screwdriver, mount the controller on the desired surface in the secure location.
4. You should now connect the XT AIM Reader cable from the XT AIM Reader to the 4-wire terminal on the back of the XT AIM Controller, paying careful attention to the wire color designation on each of the 4 ports (shown in Figure 8).



Warning – Connecting the XT AIM Reader Cable

You should pay careful attention to correctly insert the correct wire into each of the 4 labelled inputs on the XT AIM Controller's Reader Cable port. The white wire should be placed in the port marked "W", the black wire placed in the port marked "B", the green wire in the port labelled "G", and the red wire in the port labeled "R".

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5. You should now connect the XT AIM Reader cable from the XT AIM Reader to the 4-wire terminal on the back of the XT AIM Controller, paying careful attention to the wire color designation on each of the 4 ports (shown in Figure 8).
6. Connect the 4-wire XT AIM Reader cable to the XT AIM Controller by carefully aligning the green wire with the corresponding opening marked “G”, insert the wire into the port until the wire “catches” and cannot be pulled out.
7. Repeat step 5 with the red wire by carefully aligning and inserting it into the corresponding port marked “R” on the side of the XT AIM Controller.
8. Repeat step 6 with the black and white wires, carefully aligning and inserting them into the openings marked “B” and “W”, respectively.
9. You have completed the XT AIM Controller installation and are now ready to connect the external devices.

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Contacting Medeco

Contact Medeco Technical Support

If you have any questions or issues regarding your Medeco XT AIM, contact the online Technical Support chat line or call 800-548-8472.

The QR code, shown below, can be scanned for immediate access to the Technical Support chat line. Depending on your specific mobile device, a QR scanning app may be needed and cellular service supporting data transmission or internet connectivity is required. When you scan the Technical Support chat line QR code, a window displaying the URL opens, and after you select it, you are directed to the Technical Support chat form where you can initiate the chat.



Medeco Technical Support Chat Line QR code



Information on installation questions

If you have any questions or issues regarding the installation of your Medeco XT AIM, contact the online Technical Support chat line or call 800-548-8472.