

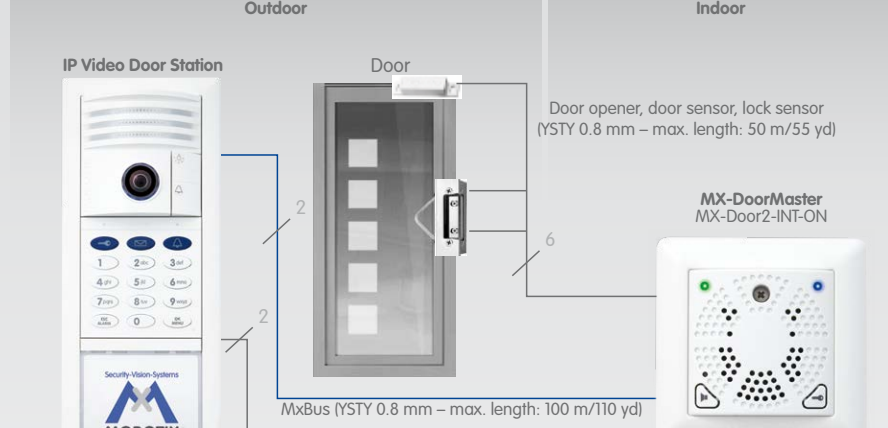
Security Door Opener with
Access Code Storage

Controls door openers via encrypted MxBus communication and provides a doorbell for indoor installation (includes backup power supply for bell features and door opener) and blind cover for hidden installation

MOBOTIX MX-DoorMaster
MX-Door2-INT-ON

includes 2 additional frames (concave, angular), on-wall socket, blind cover, various cable plugs and mounting supply

- Open door, doorbell off/on, change melody
- Door indicator (open, closed, locked)
- Status LEDs for signaling
- Backup power supply with rechargeable battery
- Connection for door opener, door sensor and door lock sensor

Standard Connection: MX-DoorMaster with
IP Video Door Station, Door Opener and Door Sensors

For additional information on the other connection variants and for installing, see the *IP Video Door Station System Manual Part 1* on www.mobotix.com > Support > Manuals.



Supported Door Openers

Standard door openers with 6 to 12 V AC (min. 16 Ω internal resistance) can be attached directly to the MX-DoorMaster; such a door opener is powered by the integrated battery pack. In this case, you do not need an additional power supply for the door opener. As an alternative, you can also connect door openers

with up to 24 V AC/DC (max. 1 A) using an external power supply (relay operation) or a self-locking door lock ("Mediator"; see *IP Video Door Station System Manual Part 1*, Section 2.5, «Installing the MX-DoorMaster»).

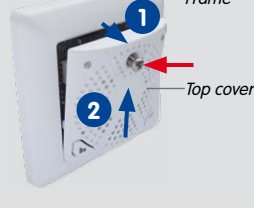


Installing the MX-DoorMaster

Special care should be taken to make sure that none of the wires connected to MX-DoorMaster carries any current!

1. Remove top cover

- Remove the screw of the top cover (red arrow) using a Phillips screwdriver (PH 1).
- Remove the top cover (pull back top 1, then pull upward 2).
- Gently pull the frame off of the main unit.



2. Install the on-wall socket

- Decide on where to install the product. Make sure that the underground is strong enough to carry the MX-DoorMaster. The two gray arrows at the bottom are indicating the top of the housing.
- Mark the holes for the screws or dowels (if required) using the drilling template (see back). Drill the holes and insert the supplied dowels.
- Guide the connection cables from behind to the on-wall socket. If the cables are coming from the side, cut or break out one of the cable guides in the wall of the on-wall socket (red arrows in figure on the right).
- Push the wires of the connection cables through the installed eight-wire plugs or replace these plugs by one of the supplied plugs for sheathed cables.
- Lead the connection cable through the break-out and use the delivered screws to affix the on-wall socket at the designated position.



3. Connect the main unit

- Make sure that you are using one of the supported door openers (see Section «Supported Door Openers»).
- Connect the MxBus wires and the other wires as described in the *IP Video Door Station System Manual Part 1*, Section 2.5, «Installing the MX-DoorMaster».



4. Install the main unit

- Insert the plug of the battery pack as shown in the figure on the right (cabling not shown).
- Place the main unit with the cabling onto the socket and affix the main unit using the four small Phillips screws with washers (PH 1 – blue arrows). Make sure that the screw hole on the main unit (red arrow) is pointing upward.
- Place the frame onto the socket, insert the top cover and tighten the screw or install the blind cover instead.



5. Connect to the IP Video Door Station

Connect the wires as described in the *IP Video Door Station System Manual Part 1*, Section 2.5, «Installing the MX-DoorMaster».

Notes

After installing and running the product for the first time, make sure to create a **configuration backup** (see Section «Replacing the MX-DoorMaster»).

In order to change the **operating mode of the installed door opener** (relay, self-powered, Mediator), proceed as outlined in Section «Setting the Signal Output Mode».

Initial Operation/Charging the Battery Pack

Once you have installed and connected the MX-DoorMaster, you need to charge the battery pack without interruption for at least 12 hours. The IP Video Door Station and its PoE power supply automatically charge the module via the MxBus two-wire connection. Note that you should not use

the MX-DoorMaster to open doors during this time (except for a short functional test). This ensures that you can extend the life cycle of the high-quality NiMH battery pack (heavy-duty industrial grade) to several years (given normal usage).



Replacing the Battery Pack

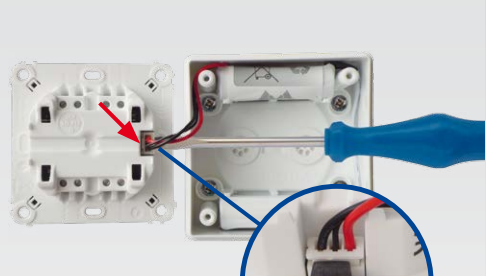
1. Remove top cover/blind cover

- **Top cover:** Unscrew the Allen screw (red arrow), remove the top cover (tilt forward 1, then pull upward 2), then remove the frame.
- **Blind cover:** Remove the screw (red arrow) and take off the blind cover.
- Remove the four screws with washers and take off the main unit.



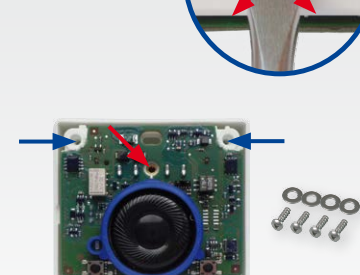
2. Replace the battery pack

- Remove the plug of the battery pack (cabling not shown) using a wide flat screwdriver (gently turn the screwdriver to the left and right to lift the plug out of its socket).
- Remove the two blocks of the battery pack by gently pulling them out of their seats.
- Insert the new battery pack and push its plug into the socket in the main unit.



3. Install the main unit

- Place the main unit with the cabling onto the socket and affix the main unit using the four small Phillips screws with washers (PH 1 – blue arrows). Make sure that the screw hole on the main unit (red arrow) is pointing upward.
- Place the frame onto the socket, insert the top cover and tighten the screw or install the blind cover instead.



Operation: Buttons and Signaling

MOBOTIX MX-DoorMaster
MX-Door2-INT-ON

Backup power supply of BellRFID/KeypadRFID and door opener upon power failure for up to 60 hours!



LED Flashing Patterns

Flashing Pattern			
			LED off
			LED on
			LED off with short interruptions
			LED on with short interruptions

General Signals

State	LED Left	LED Signal Left	LED Right	LED Signal Right
Door closed and locked		On		On
Door closed and not locked		On		Off, 1x/2 s briefly on
Door is open		On		Off
Doorbell is currently pressed		Off, 1x/0.5 s briefly on		
Missed doorbell		<5 min: On, 1x/s briefly off >5 min: On, 1x/2 s briefly off		
New mailbox message		Off, 1x/2 s briefly on		

User Actions

Action	Key	LED	LED Signal	Audio Notification
Open door	Press for 3 s	R	Off, 3x in 3 s briefly on, then twice	1 beep/s, then twice (acknowledge)
Doorbell off/on	Press 1x	L	Off, 1x every 5 s briefly on	1 beep (acknowledge)
Doorbell off/on (entire system)	Press briefly 2x	L	Off, 2x every 5 s briefly on	2 beeps (acknowledge)
Acknowledge message indicator	Press briefly 1x			

Adjust Volume

Action	Key	LED	LED Signal	Audio Notification
Start (stop after 5 s inactivity)	Press for 2 s	L	Off, 1x/s briefly on	1 beep, then twice (acknowledge)
Volume -	Press 1x	L	Off	1 beep
Volume +	Press 1x	R	Off, 1x/s briefly on	1 beep

Adjust Doorbell Melody

Action	Key(s)	LED	LED Signal	Audio Notification
Start (stop after 5 s inactivity)	Press for 2 s	L	Off, 1x/s briefly on	1 beep, then twice (acknowledge)
Switch	+ Press briefly 1x	R	Off, 2x/s briefly on	1 beep
Melody -	Press 1x	L	Off	1 beep
Sound +	Press 1x	R	Off, 2x/s briefly on	1 beep

Special/Error States

State	LED	LED Signal
Device error	L	On
Battery is empty	L	Off, 1x every 3 s briefly on
Power failure: Ready	L	Off, 1x every 4 s ultra-briefly on

Replacing the MX-DoorMaster

If the MX-DoorMaster needs to be replaced against all expectations, you need a current backup of the system configuration. This will ensure that you can restore the encryption data later on. Please follow the steps outlined in the *IP Video Door Station System Manual Part 2, Section 5.2, «Backup & Restore»*. To dismount the MX-DoorMaster, follow the steps in the

IP Video Door Station System Manual Part 1, Section 2.4.6, «Removing and Exchanging Modules».



Technical Specifications

Interface to camera	MxBus, max. wire length 100 m/110 yd
Inputs	2 galvanically separated inputs with common ground (AC/DC, self-powered, up to 48 V)
Outputs	1 isolated relay output (AC/DC, 24 V/1 A) or 1 connection to standard door opener (6 to 12 V AC, self-powered) or 1 connection for Mediator door opener (see Section «Setting the Signal Output Mode») or 1 output for MOBOTIX theft protection (12 V DC)
Connection wires	Cross-section 0.14 to 2.5 mm ² , diameter 0.4 to 1.6 mm
Protection class	IP20 (DIN EN 60529)
Operating temperature	-5 to +40 °C (DIN EN 50155)
Power supply	MxBus
Power consumption	Typ. 1 W
Power output	Max. 10 W
Door opener activation time	Max. 5 s
Measurements (height x width x depth)	82 x 82 x 64 mm/3.23 x 3.23 x 2.52 in (with blind cover: depth = 61 mm/2.4 in)

Setting the Signal Output Mode

Depending on the connection type of the door opener used, you need to select the proper mode of the MX-DoorMaster's signal output (see Sections «Installing the MX-DoorMaster» and «Technical Specifications»). To do so, open the user interface of the camera in the browser and click on **Admin Menu > Manage**

MxBus Modules. Use this dialog to set the desired mode (*relay*, *self-powered*, *Mediator*) in the **MX-DoorMaster** section. Close this dialog and store the configuration so that the settings will be applied after the next reboot of the camera.



Safety Warnings

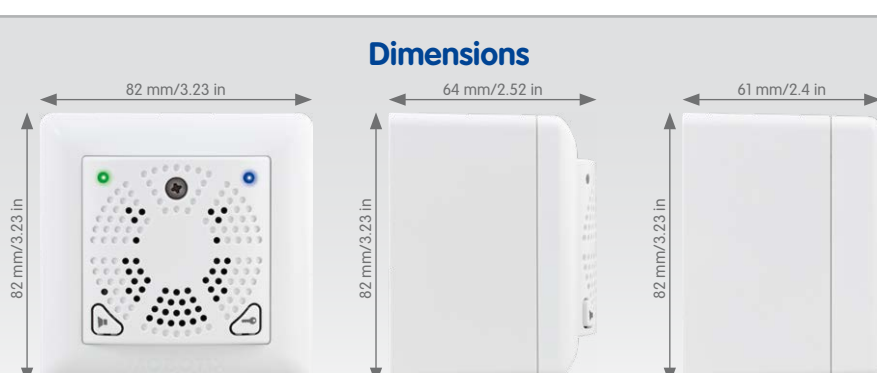
- This product must not be used in locations exposed to the dangers of explosion.
- Make sure that you install this product as outlined in the installation instructions in this document and in the notes and operating instructions in the *IP Video Door Station System Manual (www.mobotix.com > Support > Manuals)*. This document also contains the wiring diagrams for the different connection variants.
- The MOBOTIX MX-DoorMaster is to be used only for door opener features for MOBOTIX cameras in IP20 environments.
- For MOBOTIX cameras with MxBus connector and software version MX-V4.1.4.11 or higher.
- Electrical systems and equipment may only be installed, modified and maintained by a qualified electrician or under the direction and supervision of a qualified electrician in accordance with the

applicable electrical guidelines. Make sure to properly set up all electrical connections.

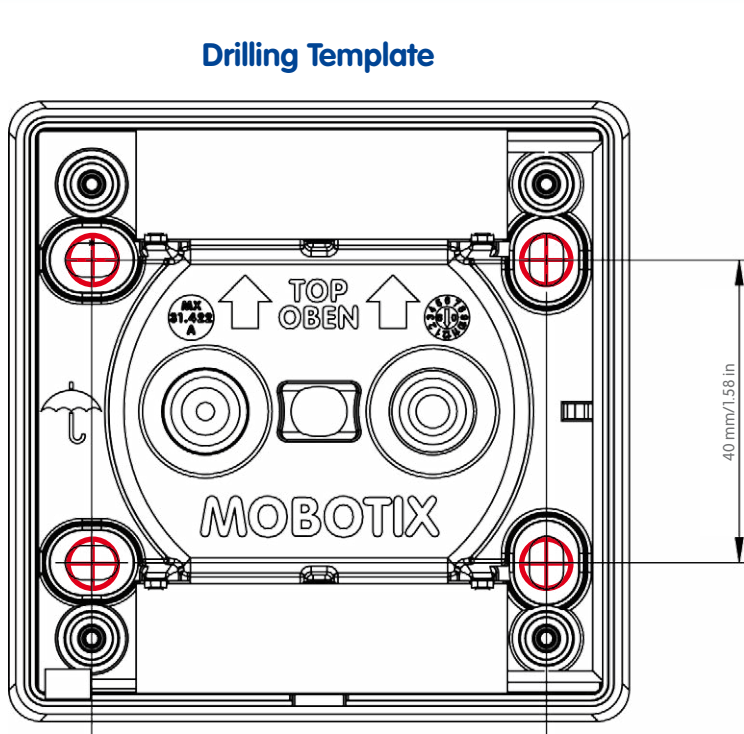
- Make sure that you adhere to all relevant laws, regulations and that you fulfill all certification requirements for the intended use.
- Make sure to properly dispose of the rechargeable battery pack in this product.
- Only replace the battery pack using MOBOTIX order no. MX-Door2-BAT!
- Torque for all screws: 0.4 Nm.
- Press the white cable plugs (eight-wire plug or cable plugs 3 to 5 mm or 5 to 7 mm) into the socket in such a way that the rims stick out equally on both sides.

- The length of the entire MxBus wiring must not exceed 100 m/110 yd.
- The length of each signal input line must not exceed 50 m/55 yd.

Dimensions



Drilling Template



Innovations – Made in Germany

The German company MOBOTIX AG is known as the leading pioneer in network camera technology and its decentralized concept has made high-resolution video systems cost-efficient.

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