







p26 camera body und lenses B036 to B237 for self-mounting

p26 camera, lens B016-B237

MxIOBoard-IC for signal input/output (accessories)

- Mx6 system platform with H.264 and ONVIF compatibility
- Includes MxAnalytics video analysis tools out-of-the-box
- Recording on internal MicroSD card (SDXC, SDHC pre-installed)
- Signal Input/Output via optional MxIOBoard-IC
- Audio package variant (with microphone and speaker) available
- Sensor for temperature integrated
- Installation is as simple as installing a ceiling spotlight

# Compact and Flexible Indoor Camera for Ceilings

MOBOTIX 6MP camera for flexible use in indoor applications, install as complete Indoor Camera p26 (Day or Night) with selected lenses or as camera module p26 (Day or Night) with separate lens (MX-B036 to MX-B237).

More information: www.mobotix.com > Products > Indoor Cameras > p26

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## MOBOTIX

#### Variants of the p26





Mx-p26A-6Day	Mx-p26A-6Night		
(3072x2048) Color	(3072x2048) Black&White	Variant	
Mx-p26A-6D Mx-p26A-AU-6D	Mx-p26A-6N Mx-p26A-AU-6N	p26 camera module with/without audio package, for lenses MX-B036 to MX-B237 (f/1.8, 103° bis 15°)	
Mx-p26A-6D016 Mx-p26A-AU-6D016	Mx-p26A-6N016 Mx-p26A-AU-6N016	p26 with/without audio package with Fisheye lens MX-B016 (f/2.0, 180° horiz. angle of view)	
Mx-p26A-6D036 Mx-p26A-AU-6D036	Mx-p26A-6N036 Mx-p26A-AU-6N036	p26 with/without audio package with ultra-wide-angle lens MX-B036 (f/1.8, 103° horiz. angle of view)	
Mx-p26A-6D061	p26A-6D061         self-mounting only         p26without audio package with wide-angle lens MX-B063           60° horiz. angle of view)         60° horiz         60° horiz		
Mx-p26A-6D079	Mx-p26A-6D079         self-mounting only         p26 without audio package with standard lens MX-B079 45° horiz. angle of view)		
Mx-p26A-6D119	self-mounting only	p26 without audio package with tele lens MX-B119 (f/1.8, 31° horiz. angle of view)	
Mx-p26A-6D237	self-mounting only	p26 without audio package with distance tele lens MX-B237 (f/1.8. 15° horiz. angle of view)	

#### Standard Delivery



ltem	Count	Part Name
1.1	1	Housing with spring clips and tiltable camera receptacle (installed)
1.2	1	Back cover (installed)
1.3	1	Main board with lens mount (installed)
1.4	1	Lens (only installed in camera models listed in <i>«Variants of the p26»</i> )
1.5	1	Blind cover (only when self-mounting the lens)
1.6	1	Ethernet patch cable, 50 cm/19.7 in, black (installed)
1.7	1	MicroSD card pre-installed (SDHC installed, SDXC supported)
1.8	1	Flat-head screwdriver, blue
1.9	1	Lens wrench red (not with hemispheric variants with lens B016)
1.10	1	Allen wrench 1.5 mm

### Connecting the p26



For information on **connecting** the p26, please see the *M25 Camera Manual*, section *«Network and Power Connection, Additional Cables»*.



Regarding the **initial operation** of the p26, please see the *M25 Camera Manual* in *Chapter 3, «Initial Operation»*.

### Installing the Lens (Not for Hemispheric Variants with Lens B016)

The steps listed below are only required if the p26 has been ordered with separate lens for self-mounting (see «Variants of the p26»).

#### 1. Remove the blind cover

Remove the blind cover that protects the image sensor during shipping from the lens mount. This should be done in a relatively dust-free environment.



#### 2. Install the lens

Screw the lens into the lens mount. Depending on the physical length of the lens, you can use your hand and then the red lens wrench (item 1.9). After initial operation of the camera, remember to adjust the focus of the lens (see *«Initial Operation of the p26»*).



#### Removing/Installing the Back Cover

The steps listed below are only required if you need to access the inside of the camera housing. *Make sure the power supply to the camera is disconnected before opening the housing!* 

**Caution:** In order to avoid damage from electrostatic discharge, you should touch a grounded device before opening the housing of the camera (e.g., the blank metal at the back of a computer). This will remove any static electricity that may have built up.

#### 1. Remove the cover

Insert a small screwdriver into one of the holes at the side as shown in the figure and gently press inward to release the lock. Repeat the process for the two other locks and lift the back cover from the housing.





Follow the procedures for the work inside the housing as described in the sections listed below:

- $\rightarrow$  Inserting/Exchanging the SD Card
- → Installing the MxIOBoard-IC



Insert the back cover, so that the large arrow (highlighted blue in the figure) is positioned in the viewing direction of the camera. Make sure the cables and wires are guided properly thought the cable guide, then carefully press the back cover into the housing until it clicks into place.

3. If required, enlarge the cable guide

If the cable guide is not large enough for addi-

tional cables, enlarge the guide accordingly.

Depending on the size required, break out either one or two elements of the cable guide using





#### Inserting/Exchanging the SD Card

All camera models can use the integrated microSD card to record video data. In order to exchange the microSD card, please proceed as outlined in the following instruction. For information on reliable SD cards, please see the MOBOTIX website **www.mobotix.com > Support > MX Media Library > Planning** in the document *MicroSD Card Whitelist for MOBOTIX Cameras*.

When replacing the SD card, make sure that recording has been deactivated in the browser (*Admin Menu > Storage > Storage on External File Server / Flash Device*; activate recording again in the same dialog). Follow the instructions in section «*Removing/Installing the Back Cover*» to access the inside of the camera and to close it again after inserting the SD card.

#### 1. Remove the SD card

If a microSD card has been installed, gently press with your finger as indicated by the arrow until you hear a *click*. Then release the SD card. The card is protruding slightly and can be easily removed.



#### 2. Insert the SD card

Insert the microSD card and gently press with your finger as indicated by the arrow until you hear another *click*.

Make sure that the SD card is fully inserted.



#### Installing the MxIOBoard-IC

For the p26, you can use the optionally available MxIOBoard-IC to attach external sensors using the signal inputs and to switch other devices via the signal outputs. To facilitate the installation of the module, you should attach the connection wires before inserting the module.

Follow the instructions in section *«Removing/Installing the Back Cover»* to access the inside of the camera and to close it again after inserting the module.

#### 1. Attach the connection cables

Attach the connection cables as shown in the terminal connector overview.

Terminal Connectors						
MX- MX+	The MxBus functionality can only be used with a later hardware version of the camera.					
Outl A	Output 1 A	Relay	-			
Out1 B /GND	Output 1 B/GND	free	Output 1 12 V	Outputs		
Outl 12V	Output 1 12 V	-				
Out2 A	Output 2 A	Relay	-			
Out2 B/GND	Output 2 B/GND	free	Output 2			
Out2 12V	Output 2 12 V	-	12 V			
IN1 -	Input 1 –					
IN1 +	Input 1 +	Inputs				
IN2 - 🗲 🗑	Input 2 –					
IN2 + 🔨	Input 2 +					

#### 2. Insert the MxIOBoard-IC

Hold the MxIOBoard-IC with attached connection wires over the receptacle on the main board (red arrow in figure).

Use one finger to carefully press the board of the module onto the receptacle. Make sure that the green terminal connector block is pointing upward (towards the SD card, see red arrow in figure below).

 ${\it Make \, sure \, that \, the \, MxIOBoard-IC \, is \, fully \, inserted.}$ 

Please also make sure that the connection wires are guided through the housing without tension and in a loop so that the cables do not lift the module out of its receptacle when adjusting the camera tilt (see figure).



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### Installing the p26

Use the drilling template on the back for this purpose (red circle) or draw a circle with 105 mm/4.13 in diameter for the cut-out. Cut out the hole for the camera, then guide the cables (network cable, USB cable, MxBus and signal input/output wires) through the hole.

#### 1. Install the p26

Press the spring clips back and insert the p26 into the hole for the camera. The spring clips will snap outwards, thus firmly holding the camera in place.

Make sure that you only press back the spring clips as shown in the image. Do not press them back any further as the springs may snap out of their fixtures otherwise.



#### 2. Roughly align the p26

Turn the camera until it roughly points into the intended direction; once it is running, you will adjust the camera according to the live image (see «Initial Operation of the p26»).



#### Removing the p26

#### 1. Pull out the camera

Pull the camera from its position by gently pulling the camera downward on one side, then the other side. Take care to NOT let the spring clips snap forward (risk of injury!).

#### 2. Remove the cables

Remove the cables coming from the building (network cable, USB cable and signal input/output wires). Pull out the camera.

#### Initial Operation of the der p26

The initial operation starts with connecting the power supply (see section «Network and Power Connection, Additional Cables» in the M25 Camera Manual). The first access follows the procedure described in the same manual in the section «Initial Operation of the Camera». All other tasks require access to the camera's user interface in the browser. Enter the camera's IP address into the address bar of the browser.



#### 1. Set installed lens (only when self-mounting)

Open Admin Menu > Hardware Configuration > Lens Configuration dialog and select the installed lens. This step is required to select the proper special functions of the installed lens (e.g., for wide-angle lenses).



#### 2. Adjust lens focus (if required)

This step is only necessary if the lens has been installed for the first time or exchanged. In cameras with an MX-B016 ("Hemispheric") lens, the lens has been focused at the factory.



Check the live image from the camera in the browser.

Activate the focusing aid in the browser (Focusing Aid quick control, Activated value).



Carefully turn the lens in clockwise or counter-clockwise direction using the red lens wrench until the red area of the focusing aid is as small as possible. Remove the lens wrench every time you changed the lens focus. Once the focus is adjusted properly, deactivate the focusing aid again (Focusing Aid quick control, Disabled value).

#### 3. Adjust viewing direction

Turn the image in the ceiling until the live image



Stick the blue screwdriver (item 1.8) into the receptacle for adjusting the camera tilt. Adjust the camera tilt as needed while watching the live image of the camera Lock the camera tilt by slightly tightening the lock screw 2.

#### 4. Configuring and Using the MxIOBoard-IC

The camera will automatically detect an installed MxIOBoard-IC (see Camera Status, System section in browser).

The signal inputs can be used right away in the *signal* input profiles in the Setup Menu > Event Overview. Likewise, the signal outputs can be used in the *sig*nal output profiles in Admin Menu > Hardware Configuration > Signal Out Profiles.



In addition, the signal inputs/outputs have been entered automatically in the **Admin Menu > Assign Wires** dialog and can be used to control doors and lights.

To use one or both signal outputs not as potential-free outputs (for relays), but as 12 Voutputs, open the Admin Menu > Hardware Configuration > Manage Hardware Expansions dialog. In the IO Board section, click on **Connect** for each output you want to use as output.

#### 5. Save the configuration

In the live image of the browser, select the Manage Settings quick control and set Store Entire Configuration as value. The camera stores the configuration in the permanent camera memory so that the settings will be applied at the next camera reboot.



shows the desired viewing direction **1**.

Stick the Allen wrench (item 1.10) into the hole of the lock screw and loosen the screw a bit **2**.

#### **Important Notes**

#### 1. Safety Warnings

#### **Notes on Installing:**

- This product must not be used in locations exposed to the dangers of explosion.
- Make sure that you install this product as outlined above under Install*ing the p26*. A faulty installation can damage the camera!
- When installing this product, make sure that you are only using genuine MOBOTIX parts and MOBOTIX connection cables.
- Only install this product on suitable, solid materials that provide for a sturdy installation of the fixing elements used.
- When removing the camera from the ceiling, make sure that the spring clips do not snap back (**risk of injury!**).
- When attaching modules to the USB connector, the power consumption of all attached modules must not exceed 1 W.

Electrical installation: 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.

Electrical surges: MOBOTIX cameras are protected against the effects of small electrical surges by numerous measures. These measures, however, cannot prevent the camera from being damaged when stronger electrical surges occur. Special

care should be taken when installing the camera outside of buildings to ensure proper protection against **lightning**, since this also protects the building and the whole network infrastructure.

Never touch the lens: Due to the high performance of the p26, the area of the image sensor can get quite hot, especially when the ambient temperature is also high. This does not affect the proper functioning of the camera in any way. For

this reason, the product must not be installed within the reach of persons without the dome.

Power off before opening the camera: Make sure the power supply to the camera is disconnected before opening the camera housing (e.g., when inserting or exchanging lenses, lens units and SD cards).

### **Technical Specifications**

Lens Options	B016 – B237 (180° to 15° hor. angle of view)		
Sensitivity	Color sensor (day): 0,1 k @ 1/60s; 0,005 k @ 1s BW sensor (night): 0,02 k @ 1/60s; 0,001 k @ 1s		
Image Sensor	1/1,8" CMOS, 6MP (), progressive scan		
Max. Image Size	6MP (3072x2048)		
Image Formats	Freely configurable format 4:3, 8:3, 16:9 or customized format (image cropping), e.g., 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)		
Max. Frame Rate	<ul> <li>MxPEG (max.): 42@HD (1280x720), 34@Full-HD, 24@QXGA, 15@5MP, 12@6MP</li> <li>M-JPEG (max.): 26@HD (1280x720), 13@Full-HD, 9@QXGA, 5@5MP, 4@6MP</li> <li>H.264 (max.): 25@Full-HD, 20@QXGA</li> </ul>		
Video Codec	<ul> <li>MxPEG, M-JPEG, JPEG (max. output fromat 6MP)</li> <li>H.264 (max. output fromat QXGA; bandwidth limitation possible)</li> </ul>		
DVR	<ul> <li>Camera-internal via microSD card (SDHC installed, SDXC supported)</li> <li>External on USB device</li> <li>External on NAS</li> <li>Full image recording regardless of live image zoom</li> <li>MxFFS</li> <li>Pre-alarm and post-alarm images</li> <li>DVR monitoring with error notification</li> </ul>		
Software	MxManagementCenter		
Image Processing	MxLEO, backlight compensation, automatic white balance, image distortion correction		

Network security: MOBOTIX products include all of the necessary configuration options for operation in Ethernet networks in compliance with data protection laws. The operator

is responsible for the data protection concept across the entire system. The basic settings required to prevent misuse can be configured in the software and are password-protected. This prevents unauthorized parties from accessing these settings.

#### 2. Legal Notes

Legal aspects of video and sound recording: You must comply with all data protection regulations for video and sound monitoring when using MOBOTIX products. Depending on

national laws and the installation location of the p26, the recording of video and sound data may be subject to special documentation or it may be prohibited. All users of MOBOTIX products are therefore required to familiarize themselves with all applicable regulations and to comply with these laws. MOBOTIX AG is not liable for any illegal use of its products..

#### 3. Disposal

Electrical and electronic products contain many valuable materials. For this reason, we recommend that you dispose

of MOBOTIX products at the end of their service life in accordance with all legal requirements and regulations (or deposit these products at a municipal collection center). MOBOTIX products must not be disposed of in household waste! If the product contains a battery, please dispose of the battery separately (the corresponding product manuals contain specific directions if the product contains a battery).

#### 4. Disclaimer

MOBOTIX AG does not assume any responsibility for damages, which are the result of improper use or failure to comply to the manuals or the applicable rules and regulations. Our General

Terms and Conditions apply. You can download the current version of the General Terms and Conditions from our website at www.mobotix.com by clicking on the **COS** link at the bottom of every page.

ONVIF	Compatible, Profil S with future software version	
PTZ	Digital pan/tilt/zoom; max. zoom 8x (continious)	
Alarm/Events	Temperature sensor, other sensors/IO via MxMessageSystem, notification via email, FTP, VoIP, SIP	
Intelligent Video Analysis	MxActivitySensor, video motion analysis, MxAnalytics	
Audio (only p26 with audio package)	<ul> <li>Microphone and loudspeaker integrated, both 16bit/16kHz (HD wideband audio)</li> <li>Recording with audio</li> <li>VoIP phone, remote controlling using key codes</li> </ul>	
Interfaces	Ethernet 100Base-T (MxRJ45), MiniUSB (MxMiniUSB)	
Security	User/group management, HTTPS/SSL, IP address filter, IEEE 802.1x, intrusion detection, digital image signature, MxFFS	
Certifications	EN55022:2010; EN55024:2010; EN50121-4:2006; EN61000-6-1:2007; EN 61000-6-2:2005; EN61000-6-3:2007+A1:2011; EN61000-6-4:2007+A1:2011; AS/ NZS CISPR22:2009+A1:2010; CFR47 FCC part15B	
Power Supply	Power over Ethernet IEEE 802.3af	
Power Consumption	Typ. 4 W	
Protection Classes	IP20, IK06	
Ambient Temperature	0 to 40 °C/32 to 104°F	
Dimensions/Weight	Height x diameter: 89 x 120 mm/3.5 x 4.72 in; weight: approx. 270 g	
Housing	PBT-30GF, white	



















#### **Dimensions/Drilling Template**



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