The definition of an experience is something that **happens to you** that affects how you feel. A true experience is an event that addresses the senses, creates emotion and in doing so, is **memorized**.

Nexmosphere products are used to create interactive **Xperiences** with technology. These Xperiences impact someone’s in-store experience by inviting them to explore merchandise, providing more info through visual or audio content and offering selection guidance while setting the right atmosphere with beautiful lighting effects and communicating a brand’s story.

**ELEMENTS**
Nexmosphere Elements are our collection of sensors and actuators, such as pick-up sensors, presence sensors or LED. By combining different Elements on our Xperience controllers, interactive experiences can be created.

**CONTROLLERS**
Xperience controllers are used to combine Elements onto and connect them to any Digital Signage player or PC. The controller is the part of the system that translates the communication coming from the Elements to the connected device and vice versa. Some of the controllers have additional functionalities embedded into them such as LED control or audio switching.

**X-TALK**
The connection method between Nexmosphere’s Elements and controllers is called X-talk. Calculate the number of X-talk channels needed by adding up the number of Elements used and pick the right Controller model for the job.
<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>sensors and actuators</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Eye Range</td>
<td>people tracking 5</td>
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<td>RFID pick-up sensors 6</td>
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<tr>
<td>XF Range</td>
<td>wireless pick-up sensor 7</td>
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<td>animated LED lighting 8</td>
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<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTROLLERS</th>
<th>connecting Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>XN Range</td>
<td>nano Xperience controllers 18</td>
</tr>
<tr>
<td>XC Range</td>
<td>compact Xperience controllers 19</td>
</tr>
<tr>
<td>XM Range</td>
<td>modular Xperience controllers 21</td>
</tr>
</tbody>
</table>
**X-EYE RANGE** | **people tracking**

The Nexmosphere XY range offers a variety of sensors that detect and analyze presence, distance and demographics of the people in front of your digital signage or POS installation. Whether you want to increase the impact by triggering the right content at the right time, want to program attractive lighting changes and increase engagement, or want to collect valuable data, the XY range has a sensor which provides the input to do so.

**X-EYE PRESENCE & PROXIMITY**

The X-Eye Presence sensors are narrow-beam IR proximity sensors that detect if an object or person is present and indicate the distance to the person from the sensor.

**X-EYE MOTION**

The X-Eye Motion sensor detects the amount of motion in its detection field. It can be installed behind any non-metal surface, resulting in an invisible embedded sensor solution.

**X-EYE HEATMAP**

The X-Eye Heatmap casts an invisible floor grid while locating people and tracking their movement within the grid using GDPR-compliant technology.

**X-EYE GENDER**

The X-Eye Gender sensor detects the gender and age range of a person. It does not require network connectivity and doesn’t store video data, making it 100% GDPR-compliant.

---

**XR RANGE** | **RFID pick-up sensors**

The Nexmosphere XR range offers the products needed to build wireless pick-up sensors using RFID technology. The antenna driver detects a tag as soon as its close to the antenna and communicates the number of the tag back to the Xperience controller. Adhere the tags under the displayed merchandise and trigger the associated video content when the products are picked-up or placed down.

**XR ANTENNAS**

The XR antenna is a slim, easy to built-in RFID antenna. It can be hidden behind a variety of non-metallic design materials like acrylics, wood, glass and stone. Define your detection surface area and match it with the right shape and size antenna for your product and application.

**XR ANTENNA DRIVER**

The XR Antenna driver receives and processes the signals coming from the connected antenna and the RFID tag. It generates the triggers that are sent to the connected Xperience controller. It can be used in combination with any of the antenna, and -controller models.

**RFID TAGS**

The standard tags for use with this product range, are industry standard tags that can be ordered already programmed with their respective numbers, or as empty tags that still require programming and labeling.

---

**X-EYE RANGE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Dimensions</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>XY-11x</td>
<td>IR proximity</td>
<td>05cm - 80cm</td>
<td>Doppler radar</td>
</tr>
<tr>
<td>XY-14x</td>
<td>IR proximity</td>
<td>15cm - 150cm</td>
<td></td>
</tr>
<tr>
<td>XY-17x</td>
<td>IR proximity</td>
<td>50cm - 500cm</td>
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</table>

**XR RANGE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Dimensions</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR-C05</td>
<td>RFID</td>
<td>circular, 50mm</td>
<td></td>
</tr>
<tr>
<td>XR-C10</td>
<td>RFID</td>
<td>circular, 100mm</td>
<td></td>
</tr>
<tr>
<td>XR-A45</td>
<td>RFID</td>
<td>rect., 297x148mm</td>
<td></td>
</tr>
<tr>
<td>XR-A50</td>
<td>RFID</td>
<td>rect., 210x148mm</td>
<td></td>
</tr>
<tr>
<td>XR-A55</td>
<td>RFID</td>
<td>rect., 210x74mm</td>
<td></td>
</tr>
<tr>
<td>XR-A60</td>
<td>RFID</td>
<td>rect., 148x106mm</td>
<td></td>
</tr>
<tr>
<td>XR-A66</td>
<td>RFID</td>
<td>rect., 148x52mm</td>
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<tr>
<td>XR-A70</td>
<td>RFID</td>
<td>rect., 105x74mm</td>
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<tr>
<td>XR-A80</td>
<td>RFID</td>
<td>rect., 74x52mm</td>
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<tr>
<td>XR-C05</td>
<td>RFID</td>
<td>100mm cable</td>
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---

**XR ANTENNAS**

<table>
<thead>
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<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR-C05</td>
<td>circular, 50mm</td>
<td>50cm - 50cm</td>
<td></td>
</tr>
<tr>
<td>XR-C10</td>
<td>circular, 100mm</td>
<td>100cm - 100cm</td>
<td></td>
</tr>
<tr>
<td>XR-A45</td>
<td>rect., 297x148mm</td>
<td>297x148mm</td>
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<tr>
<td>XR-A55</td>
<td>rect., 210x74mm</td>
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<td>XR-A60</td>
<td>rect., 148x106mm</td>
<td>148x106mm</td>
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<tr>
<td>XR-A66</td>
<td>rect., 148x52mm</td>
<td>148x52mm</td>
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<tr>
<td>XR-A70</td>
<td>rect., 105x74mm</td>
<td>105x74mm</td>
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<tr>
<td>XR-A80</td>
<td>rect., 74x52mm</td>
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**RFID TAGS**

<table>
<thead>
<tr>
<th>Model</th>
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<th>Dimensions</th>
<th>Technology</th>
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</thead>
<tbody>
<tr>
<td>XNR tag</td>
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</tr>
<tr>
<td>XNB tag</td>
<td>unprogrammed</td>
<td>26mm</td>
<td></td>
</tr>
<tr>
<td>all</td>
<td>IC S50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
XW RANGE | animated LED Lighting

The Nexmosphere X-Wave range consists of a variety of animated LED lighting products. They allow incorporating creative lighting effects in your installations that enhance interactivity. Use animated lighting to attract, highlight, contrast, indicate and guide.

**X-WAVE**

The X-Wave is a rigid linear LED board fitted with RGB LEDs. Set any RGB color to match or contrast merchandising or brand style. Settings as dimming speed, light output and sinus repetition can be adjusted to match the required lighting behavior and effect.

**X-WAVE LINEAR INTERFACE**

The X-Wave Linear interface enables Wave LED control over flexible pixel LED strips. Each interface allows connection to one LED strip. Strips can be divided into segments over which the X-Wave animations can be executed.

**X-WAVE SELECTION INTERFACE**

The X-Wave Selection interface enables Selection LED control over flexible pixel LED strips. Each interface allows connection to one LED strip. It allows splitting up LED strips into segments that can be illuminated to indicate products that correspond to selection inputs given by the shopper.

**X-WAVE COLOR**

The X-Wave Color LED is an X-Dot housed product fitted with one RGB pixel LED. It can be programmed in any color and fade from one color to another. Use it as a visual indicator to mark a certain spot or product of interest.

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XF RANGE | wireless pick-up sensors

The Nexmosphere XF range offers an innovative way to use wireless pick-up sensors without the need for installing any hardware within your POS furniture or shelving. The battery-powered sensors can be placed in, or under your merchandising and facilitate triggering the programmed content and/or lighting effects on the Xperience controller when the merchandising is interacted with by the shopper. Use this technology to easily transform existing store installations into interactive ones with minimal effort.

**P3 WIRELESS PICK-UP SENSOR**

The P3 sensor is a battery-powered pick-up sensor that can be placed in, or under merchandising. The sensor detects any change of positioning when the shopper interacts with the merchandising on display and translates this into triggers that are sent towards the controller unit that can be invisibly installed at distance from the actual sensor.

- **Pick-up detection (accelerom.)**
- **Wireless comm.** 2.4GHz ANT+
  - **XF-P3W**: white housing
  - **XF-P3B**: black housing
  - **XF-P3N**: no housing
  - **all**: 2 years avg. battery life
  - **8-10m range**
  - **32mm diameter**

**EM-F WIRELESS X-TALK INTERFACE**

The EM-F Extension Modules receive the signals coming from the P3 sensors after these have been paired with a wireless X-talk interface. Each P3 sensor connects to its own wireless X-talk interface on the EM unit. Combine a maximum of 5 EM units onto the controller unit, allowing up to 40 sensor connections on one single controller. All EM modules only work in combination with an XM Xperience Controller.

- **Wireless X-talk receiver**
  - **EM-F1**: 1 channel
  - **EM-F4**: 4 channel
  - **EM-F8**: 8 channel

**XF-P3W** white housing
**XF-P3B** black housing
**XF-P3N** no housing

new product consult timing and availability

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XZ RANGE | object detection

The Nexmosphere XE range offers a variety of sensors that detect the status of the objects on which they are applied. By detecting the object status, we enable the possibility to log and communicate these values, as well as actively respond to critical threshold values.

HUE COLOR SENSOR

The XZ- Hue color sensor can detect the color of objects that are held against or placed upon the sensor. Any color can be detected and communicated back to any Xperience controller. To be used in applications where the required content trigger is linked to the color of an object.

**Color sensing**
- XZ-H60 (Hue, Saturation, Brightness)

**Object Pick-up detection**
- XZ-L20 (adj. trigger values)

**Light sensor**
- XZ-A40 (3-axis orientation, adj. trigger positions)

**Angle orientation detection**
- XZ-A40 (3-axis orientation, adj. trigger positions)

**Light sensor**
- XZ-H60 (Hue, Saturation, Brightness)

**Angle orientation detection**
- XZ-A40 (3-axis orientation, adj. trigger positions)

**Angle orientation detection**
- XZ-A40 (3-axis orientation, adj. trigger positions)

XE-RANGE | environmental sensing

The Nexmosphere XE range offers sensors that analyze and communicate environmental conditions. By detecting the surrounding circumstances, we enable the possibility to log and communicate these values, as well as actively respond to certain critical threshold levels such as high temperature.

AMBIENT LIGHT SENSOR

The XE- Ambient light sensor detects the amount of light in its surroundings and communicates the amount of lux back to the Xperience controller, facilitating adjustment of lighting levels based on environmental light conditions.

**Ambient light sensor (lux)**
- XE-A20 1-120.000 lux

**Temperature sensor**

The XE- Temperature sensor detects temperature and humidity levels and can be adhered to heat sensitive objects. Triggers can be used to build a log file for warranty evaluation and to send messages to centralized systems to help protect installations. This simplifies compliance to a growing body of regulations within the digital signage industry.

**Temperature detection**
- XE-T50 -25°C  - +75°C temp

**Humidity detection**
- XE-T50 1 - 99% Humidity
**X-SNAPPER RANGE | wired pick-up sensors**

The Nexmosphere X-Snapper range offers magnetic pick-up sensors that can also be used as active security devices. Merchandise is mounted onto the sensor and when lifted or placed back, the X-Snapper sends a trigger to the connected Xperience controller, facilitating content triggering and measurement of pick-up durations. The security function sends triggers whenever merchandising is removed, the wire is cut or pulled out. This sensor is specially designed to attach to handheld devices of different sizes and shapes.

**XS SERIES**

The XS-Snapper detects either release from, or connection with, its passive counter block and sends triggers to the connected Xperience controller accordingly, both registering pick-ups and place downs. Use the XS-Snapper for presenting smaller, handheld devices such as shavers, toothbrushes or phones.

**Wired pick-up sensor (HALL)**

**Active security**

- **white housing**
  - XSW-X16: pick-up only
  - XSW-X26: security only
  - XSW-X36: pick-up and security
  - XSW-N0S: counter block

- **black housing**
  - XSB-X16: pick-up only
  - XSB-X26: security only
  - XSB-X36: pick-up and security
  - XSB-N05: counter block

**all** | coiled cable

**XL SERIES**

The XL-Snapper detects either release from, or connection with, its passive counter block and sends triggers to the connected Xperience controller accordingly, both registering pick-ups and place downs. Use the flat XL-Snapper for presenting larger devices like tablets and the curved model for hair stylers.

**Wired pick-up sensor (HALL)**

**Active security**

- **white housing, flat cover**
  - XLFW-X16: pick-up only
  - XLFW-X26: security only
  - XLFW-X36: pick-up and security
  - XLFW-N0S: counter block

- **black housing, flat cover**
  - XLFB-X16: pick-up only
  - XLFB-X26: security only
  - XLFB-X36: pick-up and security
  - XLFB-N05: counter block

**all options also available with curved cover. E.g.:**

- XLFW-X36: pick-up and security
- XLCW-X36: pick-up and security

**X-SNAPPER ACCESSORIES | pedestals, holders & spares**

The Nexmosphere X-snapper range is complemented by accessories and spare parts specifically designed for instore use. This makes completion and installation of POS designs fast and easy while providing a professional finish.

**X-SNAPPER DOUBLE**

The X-Snapper double consists of two magnetic X-snapper blocks attached to a single continuous spiral cable. This double snapper is not attached to an Xperience controller and does not send triggers. It can be used to securely display products and make sure they are not misplaced after use.

**X-SNAPPER STAND**

The X-Snapper stand is a pedestal designed for use with the X-Snappers. The stand is screw fixed in the POS furniture and the X-Snappers are installed on top of its surface. It allows placement of the merchandize at an angle facing the shopper, giving a ‘floating’ appearance while the stand itself remains visually hidden behind the merchandise.

**X-SNAPPER SPARE TAPE**

The X-Snapper spare tapes can be used when merchandising is replaced on the POS because of maintenance reasons or the renewal of merchandise during seasonal rotation.

**PRICE TAG HOLDER**

The price tag holder is designed for use with the X-Snapper stand. It can be screwed in place using the screw fixation of the X-snapper stand. This leaves dedicated space to the side of the X-snapper stand where you can place price and product information.

**Double-sided tape**

- **Passive merchandize security**
  - XSW-X1S: 100mm cable
  - XSW-X2S: 200mm cable
  - XSW-X3S: 300mm cable
  - XLFW-X1S: 100mm cable, XL
  - XLFW-X2S: 200mm cable, XL
  - XL versions also available with curved cover

- **Merchandise placement**
  - XAT-HL2: 25°, low height
  - XAT-HL4: 45°, low height
  - XAT-HM2: 25°, medium height
  - XAT-HM4: 45°, medium height
  - XAT-HH2: 25°, high height
  - XAT-HH4: 45°, high height
  - all | transparent

- **Double-sided tape**
  - XAS-TS1: 10-pack
  - XAS-TS5: 50-pack
  - XAS-TS9: 1365 roll
  - all | double-sided industrial standard

- **Double-sided tape**
  - XAT-PLS: low, short length
  - XAT-PLL: low, long length
  - XAT-PHL: high, short length
  - XAT-PLH: high, long length
  - all | 20° viewing angle transparent
The Nexmosphere X-Dot range offers a variety of functions divided into two subdivisions: easy interfacing and wired pick-up sensors. They share their ultra-small form factor and the cable design that offers the flexibility of both bottom and side feed installation. Giving the option to use the Elements directly on a surface or to hide the cable from sight. They’re easy to install, use and maintain due to the non-marking double-sided installation tape and high-quality finishing.

**X-DOT SERIAL INTERFACE**

The X-Dot Serial interface connects a USB or serial port from a 3rd party device—such as a screen—to any Nexmosphere controller. This enables bi-directional communication between the connected 3rd party device and the Nexmosphere Controller.

**X-DOT I/O INTERFACE**

The X-Dot I/O is a versatile interface to be used with industry-standard push buttons with an embedded LED ring or with any other generic I/O device. The onboard LED controller offers full control over the LED behavior.

**X-DOT MOTION INTERFACE**

The X-Dot Motion interface is to be used with an industry-standard 5V controlled PIR or IR-technology based sensor. Sensor models with various beam angles and detection ranges can be used on this small interface enabling seamless integration.

**X-DOT BUZZER INTERFACE**

The X-Dot Buzzer is a dual interface for 5V buzzer/tweeter devices that can be implemented whenever triggering confirmation sounds is required in an installation. I.e. alarm functionality, beep confirmation of an executed action, or attention requested.

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The X-Dot X is a wired pick-up sensor that can also be used as an active security device. The sensor is mounted onto the merchandise using double-sided tape. When a product is lifted or placed back, the X-Dot sends a trigger to the connected Xperience controller. The security function sends triggers whenever merchandising is removed, the wire is cut or pulled out.

**X-DOT X SPARE TAPES**

The X-Dot spare tapes can be used when merchandising is replaced on the POS because of maintenance reasons or the renewal of merchandise during seasonal rotation.

**Wired pick-up sensor (accelerom.)**

**Active security**

- **white housing:** XDW-X16 pick-up only
- **XDW-X26** security only
- **XDW-X36** pick-up and security
- **XDW-X36C** pick-up and security coiled cable

**black housing:**
- **XDB-X16** pick-up only
- **XDB-X26** security only
- **XDB-X36** pick-up and security
- **XDB-X36C** pick-up & security coiled cable

---

**X-DW I/O INTERFACE**

- **Serial interfacing**
  - XDW-S30 serial over USB
  - XDW-S40 RS-232 serial
  - XDW-S50 TTL serial

**new product consult timing and availability**

**X-DW I/O interfacing**

- **XDW-I36** 3.3V I/O
- **XDW-I56** 5.0V I/O

**X-DW PIR/IR interfacing**

- **XDW-M06** PIR/IR 5V

**X-DW PIR/IR interfacing**

- **XDW-B06** interface only
- **XDW-B46** interface incl. beeper

**X-DW Double-sided tape**

- **XAS-TX1** 10-pack
- **XAS-TX5** 50-pack
- **XAS-TX9** 2750 roll

**all double sided industrial standard**
The Nexmosphere X-Touch range can be applied when looking to integrate buttons. The implementation of buttons allows conversion from static digital signage into interactive and responding presentations by having the shopper give input choices and selection options. Buttons that are fitted with programmable LEDs can invite the shopper to start interacting and make the shopper journey intuitive by giving visual feedback on the selected options.

**TOUCH BUTTONS**

The X-Touch buttons are capacitive and detect a person’s touch on the button or an overlying material. The technology works with multiple non-metal overlay materials, such as acrylic, glass, cardboard, and wood. They can be integrated into furniture without visually drawing away from the design. The button sensitivity can be adjusted, and they are available in various sizes and configurations.

**Capacitive touch**
**LED control**
- XT-4FW6: 4 small buttons, linear
- XT-4GW6: 4 small buttons, rect.
- XT-1EW6: 1 small button
- XT-1GW6: 1 large button

  All fitted with button LEDs

**PUSH-BUTTON INTERFACE**

The X-Touch button interface is a 4-channel push-button interface with LED control and can be used in combination with industry-standard push buttons. It allows the connection of up to four buttons onto a single interface. This results in the connection possibility of up to 9 push buttons even on the smallest Xperience Controller. Programmable LED output options are on, off, slow and fast blink.

**Push-button interface**
**LED control**
- XT-B4N6: 4 interfaces
- 3.3V LED contr.
- easy click-in

**Push buttons** *(accessory item)*
- S-890xxx: 19mm standard
- S-895xxx: 19mm value line
XN-RANGE | nano Xperience controllers

The Nexmosphere XN range offers Xperience Controllers in a small form factor making it ideal to use when space is limited and integration with other systems is required. Connect your Elements of choice and build a unique shopper journey; LED lighting that starts glowing when a shopper approaches, product info showed if a product is placed on an “info platform”. Whichever interactivity suits your brand’s story, create a lasting impression using the XN Xperience controller.

**XN-RANGE ACCESSORIES**

The Nexmosphere Nano range is complemented with the cables needed for communication and power supply. When using XN models with a USB interface, the USB port of the connected device also provides power to the Nexmosphere controller. Most USB ports supply enough power to the Elements without the need for additional power, except when connecting LEDs. When using LEDs consider the use of the USB split cable together with a power supply to provide enough power or consult us for advice. When using the XN models with a serial connection, the use of a power supply is always required.

### USB cables

<table>
<thead>
<tr>
<th>CA-UM4B</th>
<th>Micro-USB cable, 60cm</th>
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</thead>
<tbody>
<tr>
<td>CA-UM6B</td>
<td>Micro-USB cable, 180cm</td>
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<tr>
<td>CA-USBB</td>
<td>Micro-USB split cable</td>
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### Power supplies

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<tr>
<th>PU-0520EU</th>
<th>EU, 5VDC/2A, USB</th>
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<tr>
<td>PU-0520US</td>
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### Serial cables

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<td>CA-JD9B</td>
<td>Jack 3.5 to Sub-D9</td>
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### RS-232 interface

<table>
<thead>
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<th>XN-180</th>
<th>8x X-talk</th>
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<tbody>
<tr>
<td>XN-135</td>
<td>2x X-talk</td>
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<tr>
<td>XN-185</td>
<td>8x X-talk</td>
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### USB interface

<table>
<thead>
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<th>2x X-talk, 1x Presence interf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>XN-135MB</td>
<td>2x X-talk, 1x X-Wave interf.</td>
</tr>
<tr>
<td>XN-165</td>
<td>2x X-talk, 1x 4 button interf.</td>
</tr>
</tbody>
</table>

---

CONTROLLERS

Xperience controllers are used to combine Elements onto and connect them to any Digital Signage player or PC. The controller is the part of the system that translates the communication coming from the Elements to the connected device and vice versa. Some of the controllers have additional functionalities embedded into them such as LED control or audio switching.

API

Each controller runs Nexmosphere’s API. This API provides full control over all connected Elements to the Digital Signage player to which the controller is connected.

Each time a sensor is triggered, an API command is automatically sent from the Xperience controller to the Digital Signage player. Vice versa, actuators such as LED and audio switches can be easily controlled by sending API commands from the Digital Signage player to the Xperience controller.

All API commands are sent via serial communication. Both controllers with RS-232 serial interfacing as well as Serial-over-USB are available.
The Nexmosphere XC Range offers Xperience Controllers in a compact form factor while offering various onboard functionalities. Choose the right controller series based on the functionality needed, whether this is controlling multiple RGBW LED strips, pixel LED strips or (optical) audio switching. Combine this with Elements connected onto the X-talk channels to build your own unique experience.

**XC-700 SERIES**

The 700 series is equipped with X-wave interfaces which allow connecting flexible pixel LED strips. X-Wave LED technology allows the user to select one of the numerous pre-programmed animation patterns and modify its parameters to fit the exact application, whether it’s a gentle soft glow or a complex running light.

- **X-Wave control**
- **X-Talk interface**
- **USB API interface**

<table>
<thead>
<tr>
<th>Model</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC-720</td>
<td>2x X-Wave interface, 4x X-talk</td>
</tr>
<tr>
<td>XC-741</td>
<td>4x X-Wave interface, 8x X-talk</td>
</tr>
<tr>
<td>XC-748</td>
<td>4x X-Wave interface, 4x X-talk, 2x RGBW LED output</td>
</tr>
<tr>
<td>XC-760</td>
<td>6x X-Wave interface, 4x X-talk</td>
</tr>
</tbody>
</table>

**XC-800 SERIES**

The 800 series is equipped with fully controllable RGBW LED outputs which allow connecting 12/24V LED strips. Transition smoothly between different colors and create just the right atmosphere with subtle lighting use in tailored RGBW LED colors.

- **RGBW LED output**
- **X-Talk interface**
- **USB API interface**

<table>
<thead>
<tr>
<th>Model</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC-820</td>
<td>2x RGBW LED output, 4x X-talk</td>
</tr>
<tr>
<td>XC-841</td>
<td>4x RGBW LED output, 8x X-talk</td>
</tr>
<tr>
<td>XC-848</td>
<td>4x RGBW LED output, 4x X-talk, 2x X-Wave interface</td>
</tr>
<tr>
<td>XC-860</td>
<td>6x RGBW LED output, 4x X-talk</td>
</tr>
</tbody>
</table>

**XC-900 SERIES**

The 900 series is equipped with audio switches to facilitate easy and seamless switching of an incoming audio stream from one speaker, soundbar or headphone to another. Both analog switches (3.5mm jack plug) and optical switches (Mini-Toslink) are available.

- **Audio switching**
- **X-Talk interface**
- **USB API interface**

<table>
<thead>
<tr>
<th>Model</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC-931</td>
<td>4x optical switch, 8x X-talk</td>
</tr>
<tr>
<td>XC-937</td>
<td>4x optical switch, 4x X-talk, 2x X-Wave interface</td>
</tr>
<tr>
<td>XC-938</td>
<td>4x optical switch, 4x X-talk, 2x RGBW-LED output</td>
</tr>
<tr>
<td>XC-941</td>
<td>4x analog switch, 8x X-talk</td>
</tr>
<tr>
<td>XC-947</td>
<td>4x optical switch, 4x X-talk, 2x X-Wave interface</td>
</tr>
<tr>
<td>XC-948</td>
<td>4x analog switch, 4x X-talk, 2x RGBW-LED output</td>
</tr>
</tbody>
</table>

**XC-RANGE ACCESSORIES**

The Nexmosphere Compact range is complemented with the cables needed for communication and power supply. The Compact range controllers require a USB cable for communication and a power supply. Calculate the power consumption of the complete system or consult us for advice to pick the right power supply for your project.

- **Power supplies**
  - PS-1220EU: EU, 12VDC/2A, 2.1mm
  - PS-1220US: US, 12VDC/2A, 2.1mm
  - PS-1250EU: EU, 12VDC/5A, 2.1mm
  - PS-1250US: US, 12VDC/5A, 2.1mm
  - PS-2425EU: EU, 24VDC/2.5A, 2.1mm
  - PS-2425US: US, 24VDC/2.5A, 2.1mm
  - PS-2438EU: EU, 24VDC/3.75A, 2.1mm
  - PS-2438US: US, 24VDC/3.75A, 2.1mm

- **USB cables**
  - CA-UM4B: Micro-USB cable, 60cm
  - CA-UM6B: Micro-USB cable, 180cm
XM-RANGE | modular Xperience controllers

The Nexmosphere XM range offers Xperience Controllers in a configurable and extendable form factor making it ideal to use when functionality combinations which aren’t available in the smaller ranges are required. This series consists of XM controllers and EM extension units, which are mounted together at our production facilities in order to offer you just the right functionality set for your project.

XM CONTROLLERS

The Modular controllers are fitted with 1 X-talk channel on the unit itself and can support up to 5 Extension Modules and 8 Shop Modules. The Controllers are equipped with a USB or RS232 interface to integrate the sensor Elements with your connected device via our API.

**Modular architecture**
**Audio switching**
- EM-1: 1x audio input
- EM-4: 4x audio switching
- EM-30: 1x optical input
- EM-34: 4x optical switching

**Modular architecture**
**LED control**
- EM-2: 1x RGB LED output
- EM-5: 5x mono LED output
- EM-6: 5x RGB LED output

**Modular architecture**
**Wireless X-talk**
- EM-F1: 1x wireless X-talk
- EM-F4: 4x wireless X-talk
- EM-F8: 8x wireless X-talk

**Modular architecture**
**X-talk**
- EM-7: 4x X-talk
- EM-8: 8x X-talk

**EXTENSION MODULES**

The EM modules define the exact specification of the complete XM Xperience controller. Combine any of the modules into one system to make it fit the exact application needs. Different functionalities such as LED control, audio switching or large numbers of Element connections through X-talk channels can all be combined on a single XM controller. The EM modules are pre-assembled onto the XM controllers at our production facilities.

**Modular architecture**
**Audio switching**
- EM-1: 1x audio input
- EM-4: 4x audio switching
- EM-30: 1x optical input
- EM-34: 4x optical switching

**Modular architecture**
**LED control**
- EM-2: 1x RGB LED output
- EM-5: 5x mono LED output
- EM-6: 5x RGB LED output

**Modular architecture**
**Wireless X-talk**
- EM-F1: 1x wireless X-talk
- EM-F4: 4x wireless X-talk
- EM-F8: 8x wireless X-talk

**Modular architecture**
**X-talk**
- EM-7: 4x X-talk
- EM-8: 8x X-talk

**SHOP MODULES**

Shopbus Modules are specifically designed for two reasons: firstly, creating large systems where more interfaces are needed than one XM controller with connected EM modules can provide. And secondly; allowing large interspacing between several control units, when Elements are needed far apart from each other. The Shopbus architecture enables connecting multiple XM-like controller units together, with the possibility of using long cable lengths between the units. All the while, the interfacing towards the connected device can still take place through one serial communication connection.

<table>
<thead>
<tr>
<th>X-talk</th>
<th>X-talk control</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-100: 8x X-talk</td>
<td>SM-110: 8x X-talk, 5x mono LED output</td>
</tr>
<tr>
<td>SM-200: 16x X-talk</td>
<td>SM-115: 8x X-talk, 5x RGB LED</td>
</tr>
<tr>
<td>SM-300: 24x X-talk</td>
<td>SM-120: 8x X-talk, 10x mono LED output</td>
</tr>
<tr>
<td>SM-400: 32x X-talk</td>
<td>SM-125: 8x X-talk, 10x RGB LED</td>
</tr>
<tr>
<td>SM-500: 40x X-talk</td>
<td></td>
</tr>
<tr>
<td>SM-600: 48x X-talk</td>
<td></td>
</tr>
</tbody>
</table>

**XM-RANGE ACCESSORIES**

The Nexmosphere Modular range is complemented with the cables needed for communication and power supply. The XM controllers require a serial connection cable and a power supply. Depending on the Elements connected to the EM modules, additional power supplies might be required on individual EM modules. When using Shopbus modules, Shopbus cables are required between the units. Calculate the power consumption of the complete system or consult us for advice to pick the right power supply for your project.

<table>
<thead>
<tr>
<th>Serial cables</th>
<th>Power supplies (5V, XM controller)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA-9J9B: RJ-9 to Jack 3.5mm</td>
<td>PS-0520EU: EU, 12VDC/2A, 2.5mm</td>
</tr>
<tr>
<td>CA-9D9B: RJ-9 to Sub-D9</td>
<td>PS-0520US: US, 12VDC/2A, 2.5mm</td>
</tr>
<tr>
<td>CA-8U8B: RJ-9 to USB</td>
<td>PS-0550EU: EU, 5VDC/5A, 2.5mm</td>
</tr>
<tr>
<td>CA-8U8B: RJ-9 to USB</td>
<td>PS-0550US: US, 5VDC/5A, 2.5mm</td>
</tr>
<tr>
<td>CA-UM4B: Micro-USB cable, 60cm</td>
<td></td>
</tr>
<tr>
<td>CA-UM6B: Micro-USB cable, 180cm</td>
<td></td>
</tr>
<tr>
<td>ShopBus cables</td>
<td>Power supplies (12-24V, LED modules)</td>
</tr>
<tr>
<td>CAS-N9R: 200cm, red (power)</td>
<td>PS-1220EU: EU, 12VDC/2A, 2.1mm</td>
</tr>
<tr>
<td>CAS-N9B: 200cm, black</td>
<td>PS-1220US: US, 12VDC/2A, 2.1mm</td>
</tr>
<tr>
<td>CAS-NDB: 10m, black</td>
<td>PS-1250EU: EU, 12VDC/5A, 2.1mm</td>
</tr>
<tr>
<td>CAS-NHB: 25m, black</td>
<td>PS-1250US: US, 12VDC/5A, 2.1mm</td>
</tr>
<tr>
<td>CAS-N8B: 24VDC/2.5A, 2.1mm</td>
<td>PS-2425EU: EU, 24VDC/2.5A, 2.1mm</td>
</tr>
<tr>
<td>CAS-N8B: 24VDC/2.5A, 2.1mm</td>
<td>PS-2425US: US, 24VDC/2.5A, 2.1mm</td>
</tr>
<tr>
<td>CAS-N8B: 24VDC/3.75A, 2.1mm</td>
<td>PS-2438EU: EU, 24VDC/3.75A, 2.1mm</td>
</tr>
<tr>
<td>CAS-N8B: 24VDC/3.75A, 2.1mm</td>
<td>PS-2438US: US, 24VDC/3.75A, 2.1mm</td>
</tr>
</tbody>
</table>