



Let's
create
a
story

ABOUT AVONIC

With over ten years of experience in the ProAV field, Avonic is a leading manufacturer of PTZ cameras, and has been innovating in the industry to bring unique, high quality audio-visual capture solutions to many hundreds of different applications.

Based in the beautiful city of Delft, the Netherlands, we set ourselves apart by developing products marked by their pristine image quality, outstanding reliability, ease of integration and affordability. Furthermore, we recognise that clients are not merely looking for a bag of camera tricks, but a full support service that will help them to pick the right tool for their application. We are able to guide clients in the purchase decision, installation process, and act as an ongoing support service throughout their video capture activities. It is our quality of service that sets us apart just as much as our innovative product development.

We specialise in the provision of PTZ cameras for markets including education, healthcare, worship, video conferencing, webcast studios and webinars. However, we recognise that the limit of PTZ application is only a lack of imagination, and our engineers and support staff pride themselves on the ability to deliver responsive, in-depth and flexible solutions for almost every PTZ application. Whatever story you want to tell, we have a way for you to tell it.

Represented by a worldwide network that stretches across Europe, the Americas, Africa, Australia and Asia, we maintain the warmth of a local company, and the expertise and reach of an international one.

And when we're not busy delivering industry-leading innovation and service in the PTZ market? Well, you'll probably find us having a little lego competition in the offices, or wandering the peaceful waterways and cobbled squares of beautiful Delft.



Government

Accessible and Accountable



Worship

Broadcast of ceremonies and services



Webcasting

Easy and high end production



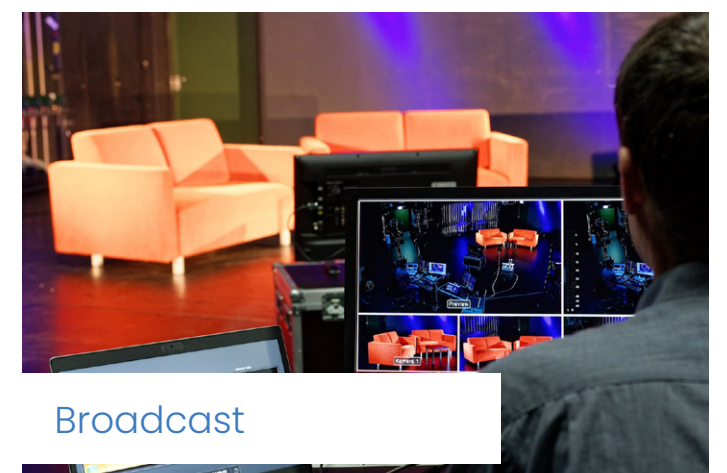
Video Conference

Easy and high quality interaction



Education

The future lecture and classroom



Broadcast

Streamlined and Agile

VIDEO CONFERENCING

CM22, 4K USB3.0 Huddle Camera with HDMI Output

The Avonic CM22-VCU boasts a 4K, wide angle lens up to 120 degrees FOV that makes sure you can capture all attendees. Its smart automatic and fully user configurable modes guarantee crystal clear video even under the most challenging light conditions. Built in user configurable dual microphones allow for easy audio capture. A true integration product with a discrete design and mount developed for PRO-AV installations. It can be easily mounted either on top of or below a screen for optimal line of sight during a meeting. The mount can be used in combination with modern thin-bezel screens.

- Lens:** Fixed focus lens with 120° Horizontal Field of View FOV)
- Crystal Clear Image:** 4K Progressive CMOS sensor 2160P ultraHD
- Output:** HDMI and USB3.0 up to 4K30 or 1080p30 on USB 2.0
- Audio:** Built-in dual noise-cancelling microphones with 4-meter pickup range
- Control:** Control the camera via any UVC based videoconference application or the included IR remote control
- Presets:** 10 user-definable presets with Digital Pan Tilt and Zoom including startup preset
- Mount:** Detachable integration mount with the ability to secure and mount the camera above and below thin-bezel screen.



High School gets hybrid classroom with CM22 and PTZ Cameras

Hyperion High School in Romania was looking for a hybrid solution in order to meet the Covid-19 restrictions. The setup needed to give a natural experience for the students and should be able to cope with challenging light conditions since they were changing during the day.

What setup was being used?

For this setup our they've used 6 x CM70-IP-B PTZ cameras, 8 x CM22-VCU, 1 x CON300-IP and 8 x AV-UEX150. One pair of classrooms was setup with CM-70-IP-B – USB out to videoconference platform combined with an audio capture solution and a 50" monitor for video return from video conference for the teacher. In order to cope with social distancing for the students the counterpart classroom has a CM22-VCU with the correspondent laptop for video conference. For controlling the CM70-IP-B they have installed a monitoring room for all the cameras to asingle local IP infrastructure in order to switch the camera preposition from the teachers to the blackboard and an overview position. Combined with BlueJeans Meetings which complies with the audio/video setup and security requirements. The only platform that is using Dolby audio. In this case providing the best experience from teacher to its students and the other way around.

A TV-like experience

Bringing the, as we like to call it, "TV-like experience" is becoming the new standard. A teacher giving class to both students who are physically attending and in the back of the room and screens that show those who are participating from home. Getting the teacher to interact with both audiences and also the students to feel involved is the challenge of today's installations.



CM40 Video Conference Camera Series

The Avonic CM40 Video Conference Camera series exists from high-quality USB video conferencing PTZ camera with a discrete design. The extreme silent cameras obtain pristine video quality even under challenging light conditions. With IP control and plug & play design, these cameras take video conferencing to a higher level.



CM41

Lens: High-quality glass lens, 12x optical zoom and 70.4° horizontal field of view.



CM44

Lens: High-quality glass lens, 5x optical zoom and 83.7° horizontal field of view.

Low light: High SNR CMOS combined with digital noise reduction, the picture is clear even under low illumination (0.5 lux @ F1.8) conditions.

Full HD 1080p30: With 1/2.8"high-quality CMOS sensor (2.07 Megapixel) the camera has a resolution of 1920 x 1080p30 and achieves a picture of great quality.

Output: USB 2.0 up to 1080p30.

Control: Control the camera with common protocols: VISCA over IP (RJ45), Visca and Pelco-D/P (RS232/RS485) or IR remote control (included).

Presets: Up to 255 presets with 0.1° accuracy.



The National Council for Human Rights (NCHR) is a Norway human rights organization established in 2003 with a mission of promoting and maintaining human rights in Norway. The NCHR publishes annual reports concerning the current status of human rights within the country.

A flexible, multidisciplinary crystal clear solution

The all-in-one solution

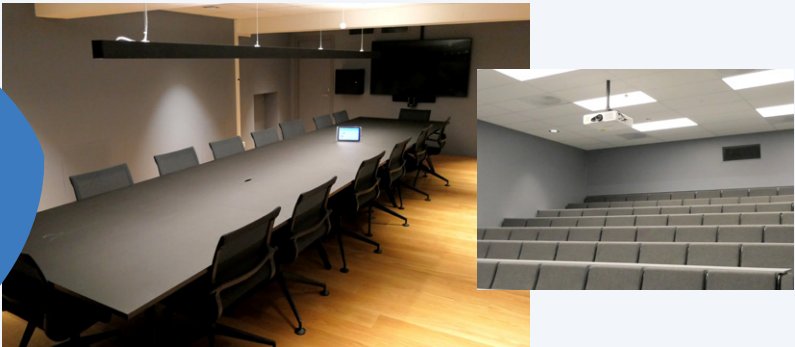
When seeking new AV solutions to enhance its work in the field of Human Rights research, the National Council for Human Rights (NCHR) looked for a comprehensive suite of high-level solutions which would allow them to record, broadcast and videoconference their activities with a global team of academics and professionals.

High-quality for everyone to use

Core to the solution was the integration of high-quality PTZ cameras which would be able to capture crystal clear footage of the speeches, debates and classes which took place within the main NCHR auditorium. All of the cameras in the Avonic range demonstrate an exceptional level of image quality that ensures client satisfaction every time, bringing high professionalism to the productions of research institutes. The strong interoperability and compatibility offered by Avonic products mean that integrators (and end-users) can be sure they will work effectively with other components of fully bespoke solutions, and can be integrated without undue complication. The ease-of-use and reliability of Avonic PTZ cameras mean that the end user will not need significant levels of post-installation support, and are thus suitable for use by those with only modest AV experience.

What setup was being used?

The installation covered two meeting rooms and a lunch and meeting space, as well as the main auditorium. The main auditorium added a further layer of complexity, because the room could function either as one large venue, or be subdivided into two smaller rooms. Within the meeting rooms and meeting space, individual CM44 series PTZ cameras were integrated along with Panasonic displays, ceiling microphones and a Biamp Devio collaboration tool, all of which was controlled using a simple touch panel user interface on the table. Internal meetings also made use of AV-over-IP – again demonstrating the flexibility of network type and data transfer offered when Avonic products are integrated into AV solutions.





BOX CAMERA



CM60-IPX-BOX

The Avonic AV-CM60-IPX-BOX is a high-quality Box camera with 20x optical zoom and 60.7° horizontal field of view. A camera designed for fixed installations with the ability to deliver outstanding quality under low light conditions, thanks to its high SNR CMOS sensor. The camera delivers Full HD 1080p60 video and comes with simultaneously IP and 3G-SDI output. Control the camera over IP or RS485 with any controller with VISCA or PELCO support.

Lens: High quality TAMRON glass lens, 20x optical zoom and 60.7° horizontal field view.

Low light: High SNR CMOS combined with digital noise reduction, the picture is clear even under low illumination (0.05 lux @ F1.8) conditions.

Full HD 1080p60: With 1/2.7" high quality CMOS sensor (2.07 Mega pixel) the camera has a resolution of 1920 x 1080p60 and achieves a picture of great quality.

IP-features: The camera can be accessed by webGUI. Controlled by VISCA over IP and stream the video.

DUAL IP-Stream: H265, H264 and MJPEG compression at a bitrate up to 8Mbit enabling Full HD video stream by ultra low bandwidth over RTSP, RTMP and Multicast.

Outputs: 3G-SDI and IP simultaneously.

Control: Control the camera with common protocols: VISCA, Pelco-D/P, RS485, IP (VISCA).

Presets: Up to 255 presets with 0.1° accuracy.

PTZ CAMERAS

CM40 Avonic PTZ Camera 20x Zoom

The Avonic AV-CM40 is a high-quality PTZ camera with 20x optical zoom and a 54.7° horizontal angle view. Its High SNR CMOS combined with digital noise reduction makes this camera extremely silent and delivers a pristine video quality even under very low light conditions. The camera is designed for fixed installations and has the ability to install up to 255 presents with 0.1° accuracy.

- Low light:** High SNR CMOS combined with digital noise reduction, the picture is clear even under low illumination (0.5 lux @ F1.8) conditions.
- Full HD 1080p30:** With 1/2.8"high-quality CMOS sensor (2.07 Megapixel) the camera has a resolution of 1920 x 1080p30 and achieves a picture of great quality.
- Output:** USB 2.0 up to 1080p30.
- Control:** Control the camera with common protocols: VISCA over IP (RJ45), Visca and Pelco-D/P (RS232/RS485) or IR remote control (included).
- Presets:** Up to 255 presets with 0.1° accuracy.



Cultural Center installs CM40 PTZ cameras

The DRU Cultuurfabriek – located in the beautiful old ironworks of Uft is a central meeting place for cultural and creative activities. There is a council chamber, along with theatre hall, pop venue, grand café, library, music school, archaeological association and Turkish cultural centre. With 250,000 visitors, it is a key cultural resource to its municipality.

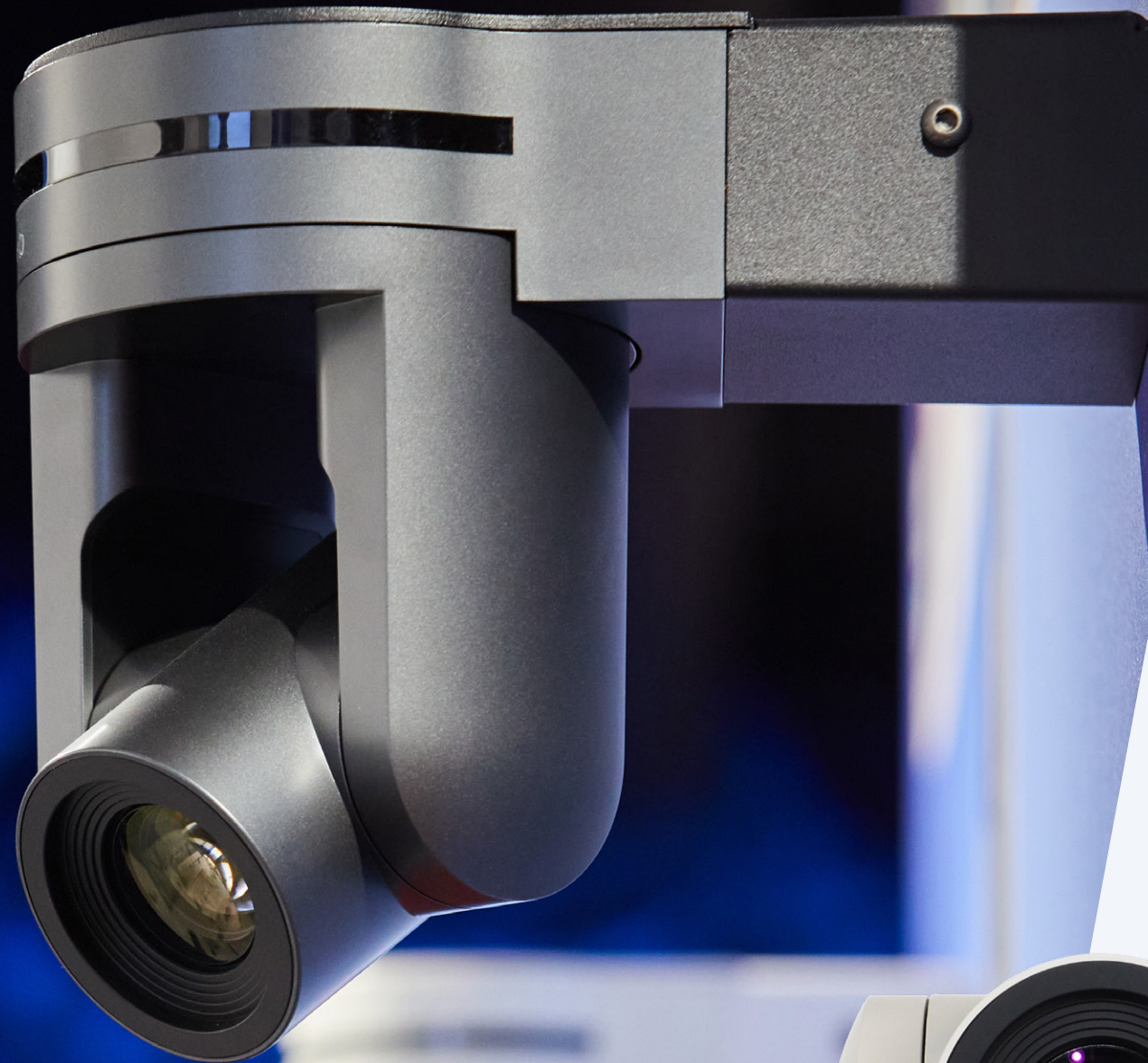
The answer to a hybrid interaction

One of its key functions is public meetings, but the DRU recognized that not everybody has the capacity to attend these meetings live. In pursuit of transparency, openness, democracy and cultural access, the DRU Cultuurfabriek recognized that there was a need to be able to broadcast these proceedings to those within the municipality, and further afield. By using Avonic CM40 PTZ cameras, viewers enjoy optimum image quality and thus feel more directly involved in the proceedings.

What setup was being used?

Key was the need for a product that had high levels of third-party interoperability: specifically, with the VMix software for live registration. By using the VMix software and an Avonic CON300-IP PTZ controller with a number of Avonic CM40 PTZ cameras in an SDI setup with serial control, the integrator was able to deliver a system that gave the video director easy command, allowing for a quick selection of presets, easy switching, and the provision of appropriate titles.





High-quality PTZ cameras with endless possibilities

The Avonic CM70 series consists of high-quality PTZ cameras, with concurrent HDMI, 3G-SDI, USB 2.0 and IP stream ethernet outputs. The camera is designed for fixed installations in less than optimal light conditions. The PTZ cameras within the CM70 range include a rich featureset usually found on broadcast-grade cameras, including a user-adjustable Colour Matrix and SRT streaming (licensed premium functions). All with the ability to deliver outstanding quality under low light conditions, thanks to its high SNR CMOS sensor. The sensor delivers Full HD 1080p60 video.

Low light: High SNR CMOS combined with digital noise reduction for a clear picture even under very low light conditions.

Full HD 1080p60: The camera has a Full HD resolution of 1920 x 1080p60 and achieves a pristine image quality.

IP-features: The camera can be powered using PoE (802.3af) and can be accessed by webGUI, controlled by VISCA over IP/ Onvif and stream the video.

DUAL low latency IP-Stream: H265, H264, optional SRT and MJPEG compression at a bitrate up to 40Mbit enabling Full HD video stream by ultra-low latency over RTSP, RTMP, UDP, Unicast and Multicast.

Outputs: 3G-SDI, HDMI, USB 2.0 (1080p30) and IP.

Control: Control the camera with common protocols: VISCA, Pelco-D/P via RS232, RS485, IP(VISCA), Onvif or IR. Supports up to 255 presets with 0.1° accuracy and High Speed Pan Tilt function.

Audio embedding: Balanced audio input with embedding into IP stream, SDI and HDMI outputs. Includes configurable audio offset.

Optional Premium features: SRT streaming, Tally light, configurable Color Matrix. License AV-LC70-1 sold separately.

Fixed Installations

Avonic PTZ cameras are specially designed for fixed installations markets including:

- Government
- Education
- Broadcast
- Webcast
- Video Conference
- Worship
- Esports



CAMERA OVERVIEW

CM20 series

Wall & Screen Mountable
4K • USB & HDMI • Digital PTZ
Dual Microphone



CM22

HDMI • USB 3.0
FOV 120°
●
Perfect for video conferencing

CM40 series

Cost Effective • Simultaneous
Outputs • IP Control



CM41

12x Optical Zoom
USB 2.0 • FOV 70.4°
Full IP control
●
Perfect for video conferencing



CM44

5x Optical Zoom
USB 2.0 • FOV 83.7°
Full IP control
●
Perfect for video conferencing



CM40

20x Optical Zoom
3G-SDI • HDMI • USB 2.0
FOV 54.7°
●○

CM60 series

Cost Effective • Simultaneous
Outputs • IP Control
IP Streaming



CM60-IPX-box

20x Optical Zoom
3G-SDI
FOV 60.7°
○



CM70-IP

20x Optical Zoom
3G-SDI • HDMI • USB 2.0
FOV 55.2°
●○



CM71-IP

12x Optical Zoom
3G-SDI • HDMI • USB 2.0
FOV 70.4°
○



CM73-IP

30x Optical Zoom
3G-SDI • HDMI • USB 2.0
FOV 58.9°
●○



CM70-NDI

20x Optical Zoom
3G-SDI • HDMI • USB 2.0
NDI®|HX • FOV 55.2°
●○

NDI®|HX



CM70

Lens: High-quality glass lens, 20x optical zoom and 55.2° horizontal field of view.

Available in black and white.



CM73

Lens: High-quality glass lens, 30x optical zoom and 58.9° horizontal field of view.

Available in black and white.

CM71

Lens: High-quality glass lens, 12x optical zoom and 70.4° horizontal field of view.



High-profile event with CM70-IP PTZ Cameras

Pristine image quality combined with silent operation

Avonic cameras became a fundamental part of the AV solutions provided for the NATO Military Committee conference. Avonic cameras proved to be ideal for temporary conference installation. The high image quality combined with exceptional usability and easy integration, which is of obvious importance in a temporary installation where setup needs to be achieved quickly and without risk of failure. The installation had cameras placed right in front of delegates, so silent operation and sleek design were also important considerations.

The conference saw NATO Chiefs of Defense from across the world meet to discuss key issues of global military strategy and defense. Held at the Grand hotel UNION – Grand Union hall in Ljubljana, a temporary conference installation was required to facilitate communication both within the conference, but also to allow for AV capture and external distribution during and after the event.

What setup was being used?

Five Avonic's CM70-IP PTZ cameras with full IP streaming, POE and IP control were provided. A core principle of Avonic PTZ technology is interoperability, and Avonic products integrate a range of hardware and software connectivity, which can include IP, HDMI, 3G-SDI and CVBS outputs, and control over IP, RS232 or RS485 using any controller with VISCA or PELCO support. This meant that integrating Avonic cameras with the wider Bosch conference system could be done quickly and with a minimum of technical fuss – both on a hardware and software level.

The second key requirement was the ability to exercise complete and precise control over camera movement, using preset values to automate movement and ensure that all details of the conference were recorded smoothly. The five PTZ cameras were designed with exactly this level of automation and presetting in mind, and are fully controllable through third party software systems such as MVI Engineering. With full IP streaming, POE and IP control, the entire setup was achieved over IP, thus reducing cabling clutter and complexity.

CM70-NDI

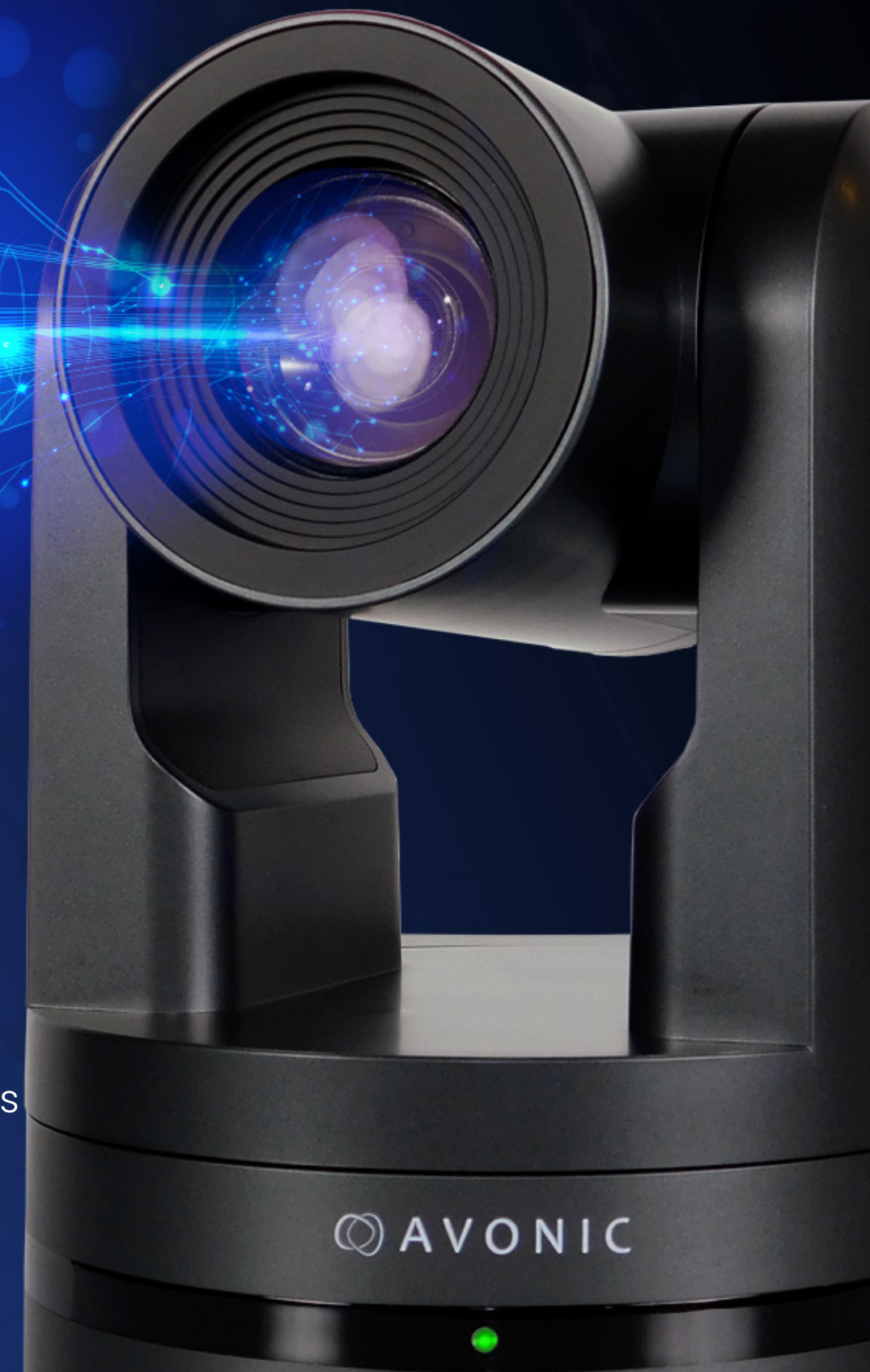
The CM70-NDI is a high-quality PTZ camera with concurrent HDMI, 3G-SDI, USB 2.0 and IP stream ethernet outputs. The CM70-NDI is equipped with high-efficient IP technology called NDI®|HX.

This all-in-one PTZ camera from Avonic allows the move to an all IP infrastructure even for mobile applications. With IP deployment on existing networks all cameras detected within your network become directly available for use without complex configuration. Video, audio, control and power all with PoE connecting your CM70-NDI camera to hundreds of systems, devices and applications that support NDI®.

The CM70-NDI includes a rich feature set known from the CM70 series and has the ability to deliver outstanding quality even under low light conditions. The combination of a high-quality PTZ camera with a protocol that improves every live production give the CM70-NDI endless possibilities.

The CM70-NDI is also capable of receiving and processing PTZ controls over NDI®.

NDI®|HX



CM70-NDI

Endless possibilities

NDI®|HX

AVONIC

CamDirector®

Teacher Tracker Software

Avonic's CamDirector® Teacher Tracker is the first tracking solution that creates automatic multi camera video registrations of lectures.



Plug & Play



All room sizes



Multi Camera



Ai Powered

CamDirector® Teacher Tracker Software

Avonic's CamDirector® Teacher Tracker is a unique tracking solution that creates automatic multi camera video registrations of lectures. It can automatically find the teacher in a room with students and provides elegant close-ups of the teacher, even in large lecture halls and auditoriums.

The live video output automatically switches between overview shots of the classroom and close-ups of the teacher. With the CamDirector® Teacher Tracker Software Avonic sets the new standard for automated lecture recordings.



FOLLOW



OVERVIEW

FEATURES



Hassle-free lectures
The system runs automatically when a lecture starts without the need to wear distracting equipment. Let teachers focus on teaching instead of technology.



Consistent and accurate tracking
By harnessing the strength of the two-camera approach, the CamDirector® 99% of the time provides an accurate and consistent tracking solution.



Privacy Guaranteed
The CamDirector® Teacher Tracker is built around privacy. All image processing is done locally without the need to be connected to the internet. We give you the tools to set privacy settings according to your own standards.



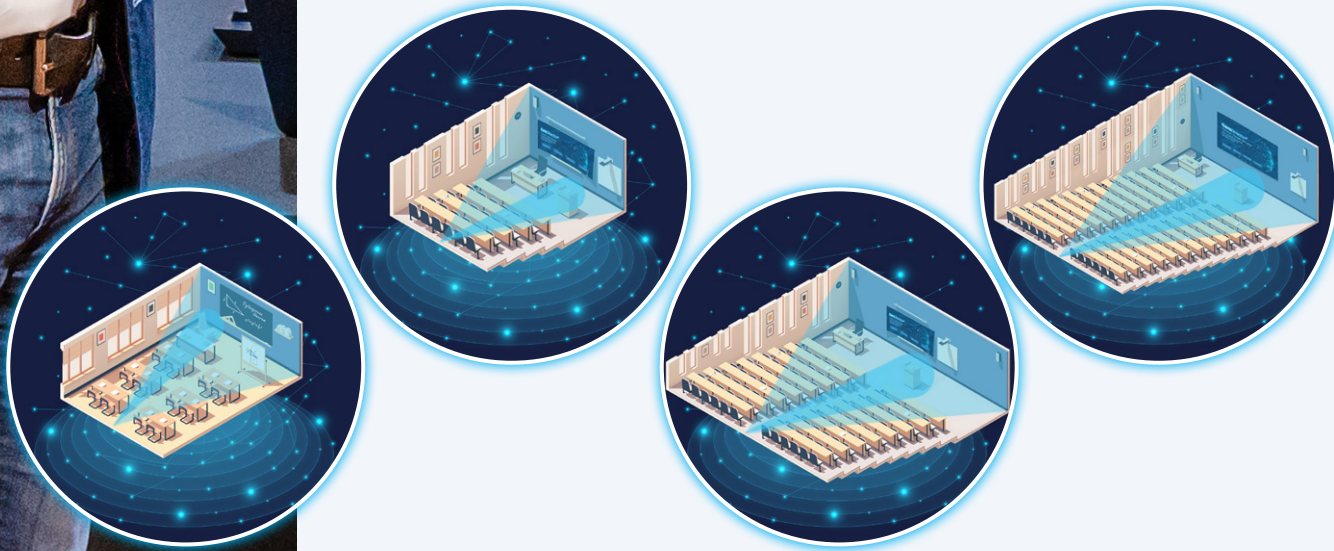
An ever-evolving AI solution
Avonic's patented machine learning algorithms let the teacher tracker improve over time by learning from every lecture it records.



Track and Switch TV-like experience
CamDirector® Teacher Tracker's close-up camera follows the teacher's movement in a calm and natural way, while the overview camera provides shots of the room to give the viewers the experience of being present.



From small classrooms to large auditoria
The CamDirector® Teacher Tracker supports perfect tracking of a presenter even in the largest lecture halls and auditoriums.



SCAN THE QR CODE
to learn more about
Avonic's CamDirector®
Teacher Tracker.





CONTROLLERS

CON100: Avonic PTZ Camera Controller



The Avonic CM-CON100 is a compact PTZ camera controller. With this controller it is possible to control up to 255 camera's and using up to 255 pre-sets. The controller supports the Visca, Pelco-D and Pelco-P protocol and can be connected with RS232/485. The Avonic CM-CON100 is therefore compatible with the Avonic camera's as well with other brands that supports these protocols. Switch easily between auto and manual focus, save and load presets, and connect multiple controllers to multiple camera's.

Number of presets: With this compact controller, it is possible to control up to 255 cameras and use up to 255 presets.

Connection: Easy to connect with RS232, RS485

Control: Every setting of the camera can be controlled by accessing the OSD of the camera through the controller. Directly control the camera's Pan, Tilt, Zoom and Focus.

CON300-IP: Avonic IP PTZ Camera Controller

The Avonic AV-CON300-IP is an advanced IP PTZ camera controller and compatible with the Avonic cameras as well with other brands that supports VISCA, Visca over IP, Pelco-D and Pelco-P protocols. Switch easily between auto and manual focus, Aperture and white balance settings, save and recall presets and connect multiple controllers to multiple cameras.



Number of presets: With this controller it is possible to control up to 255 cameras and up to 10 presets per camera.

Connection: The CM300-IP controller supports the VISCA, Visca over IP, Pelco-D and Pelco-P protocol and can be connected to RS232/485 or via LAN ethernet connection.

Direct Control: This controller gives you direct control over the most important camera settings like Pan, Tilt, Zoom. But also PTZ speed, Focus, Iris, Brightness, White Balance and R/B color correction can be controlled easily. Access all other settings of the camera easily through the OSD of the camera using the controller.

Mix 'n match serial and IP control: Due to the added IP functionality the AV-CON300-IP is a true hybrid solution for new and existing installations.



MOUNTS

MT-250: Ceiling Mount for CM40 and CM70-series

The Avonic MT250-W is a solid ceiling mount suitable for the CM40 and CM70 series. Its discrete design matches the silent operation of Avonic PTZ cameras. The MT250 is equipped with two VESA75 mounting possibilities. The double VESA75 holes serve a dual purpose; it ensures optimal compatibility with standard VESA mounts and it makes finding a suitable ceiling location to mount the MT250 easy. When mounted to the ceiling, the clever MT250 design allows to have your hands free for easy installation of the camera.



MT200: Wall Mount for CM40- and CM70-series

The Avonic MT200-B is a solid wall mount suitable for the CM40 and CM70 series. Its discrete design matches the silent operation of Avonic PTZ cameras. Accessories include a heavy-duty 30mm steel ring specifically designed to mount the MT-200 on a truss clamp. Available in black and white to match our PTZ cameras.



CM-WMW-BOX: Wall Mount for Box series

Sturdy aluminium wall mount which can be used in combination with the CM60-IPX-BOX. The adjustable mount is easy to install and allows for the box camera to be positioned in the correct angle.



RECORDERS , CONVERTERS & EXTENDERS



REC200: Recorder & Encoder with HDMI & SDI input

The Avonic AV-REC200 is the ideal standalone USB/ SD Card recorder and web/streaming device. Users can simply connect an HDMI or SD/HD-SDI input and in a few simple steps, they will be streaming and/or recording. With support for UDP/HLS/RTMP/RTSP live output and USB/SD card recording the REC200 it enables corporate streaming, live streaming to various platforms and live high bitrate full HD 1080P60 recording. A simple to use webinterface and IP control enable ease of use and full integration with 3rd party control systems.

Inputs: HDMI, 3G-SDI

Outputs: HDMI Out, USB storage, SD-card storage, RTSP via RJ45



CAP100 - Capture Device HDMI to USB3.0

The Avonic AV-CAP100 is a HDMI to USB3.0 Video Capture Dongle, capable of capturing one HDMI source in 1080p60. It converts any HDMI input to a YUV2 4.2.2. USB 3.0 stream, compatible with the UVC and UAC standards. The AV-CAP100 is recognized by the computer itself as a video input, without the need for installing additional drivers. Any source connected to the AVCAP100 can be used in many applications, like video editing suites, video conferencing applications like Skype for Business and for online webinars.

Inputs: HDMI

Outputs: USB3.0



UEX150: USB 2.0 extender

The Avonic AV-UEX150 is a convenient USB 2.0 Extender over CAT6a S/FTP cabling. The set exists of a transmitter and a receiver which is powered by the provided power supply. The small form factor allows for easy integration. This extender kit supports the full 480Mbps which is required for 1080p30 video over USB 2.0. Cameras and speakerphones over a minimum distance of 5 meters and a maximum of 50 meters are supported. The UEX-150 is plug & play and does not require any additional drivers.

Extension: Extend up to 50 meters over Cat6a S/FTP.

USB Compliance: Full USB 2.0 480Mbps compliant.

Plug and Play: Does not require any drivers.

Extra USB port: easy filesharing of USB thumbdrives (no HDD), KVM applications or connection of an Avonic USB 2.0 Speaker/ microphone.



CV150: Avonic Converter 3G-SDI to HDMI with loop-out

The Avonic AV-CV150 converts SD-SDI, HD-SDI and 3G-SDI signals to HDMI, while ensuring a fast signal transmission without any loss. Resolutions up to 1080p60 are supported. Thanks to the loop-through 3G-SDI design it is not only a converter, but also a splitter.

Inputs: 3G-SDI

Outputs: HDMI, 3G-SDI

TECHNOLOGY PARTNERS



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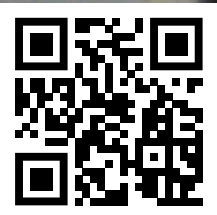


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