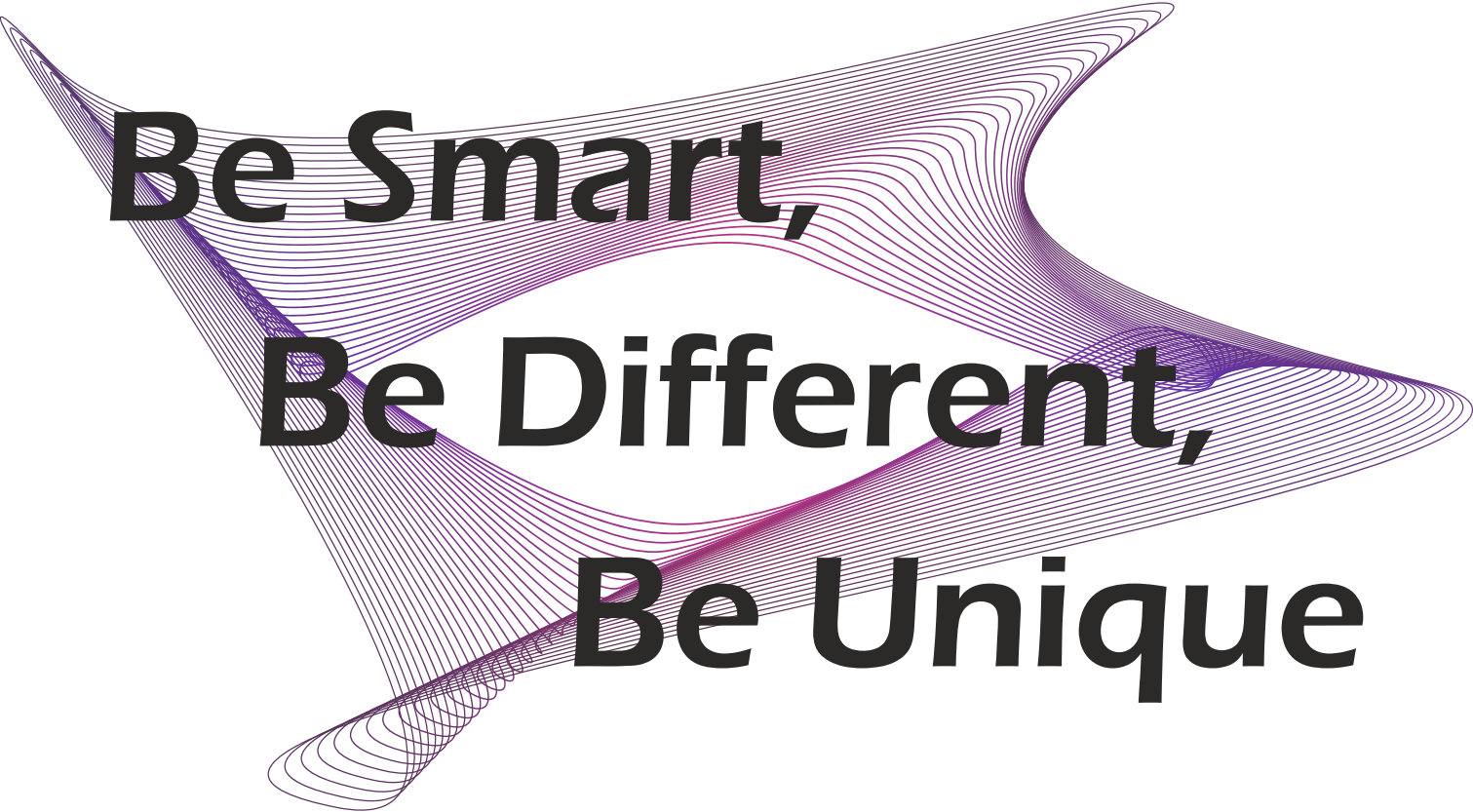


An abstract graphic consisting of numerous thin, overlapping lines in shades of purple and pink. These lines form a complex, wavy, and somewhat triangular shape that frames the central text. The lines are more densely packed in some areas, creating a sense of depth and movement.

**Be Smart,
Be Different,
Be Unique**



RADA Series by ABERMAN is the perfect choice when frameless ceiling speaker is needed. The model range consists of two speaker sizes available with or without back can installed. Housed in specially designed ABS high-durable body, speaker construction is robust and lightweight. The speakers are not required too many over space and could be used when the actual over ceiling space is limited. The frameless metal grill fixing on the magnets ensures the nice looking modern design and makes RADA speakers suitable for any installation and protects speakers' drivers from the dust and external damages. Models with back can give not only additional protection for the speaker elements and construction, but increase the sound quality especially for the low frequencies thanks to body and back can design and acoustic calculations.

RADA speakers enforced with one low-middle range woofer driver and high frequency tweeter. Tweeter could be aimed in the desired direction to ensure the better recognition of the high frequencies in the room. This ensures in wide frequency response and perfect sound quality. Equipped with a 70/100-volt linear high quality transformer with several power taps and 8 Ohm output mode, these speakers are ideal for background music, paging system and other PA applications. The wide dispersion diagram ensures the best acoustic results.

The series starts from RADA62T 40W RMS speaker with 6.5" low-mid range driver and 0.75" high frequency tweeter. When more power is required – RADA82T with 60W output and 8" low-mid driver with 1" high frequency tweeter could be used. The maximum power of this speaker is 100W – strong enough for high ceiling and wide angles.

Each speaker comes with Easy-and-Fast Fixing dog-leg style in ceiling mount rotatable brackets. These features allow installing the RADA speakers from the bottom of the ceiling – connect wires, fix the body, aim the tweeter and setup the magnetic grill in one minute! A very convenient and time-saving method, friendly and comfortable for the installers.

Nice design is made and simple installation allows using these speakers for many of sound reinforcement setups. Speakers used for background music, announcement and many other PA setups worldwide. Recommended for commercial buildings, education classes, conference rooms, hotel lobbies, bars and restaurants - the RADA series will help adding the perfect sound.

ORDERING INFORMATION

Model No.	Product Description
RADA62T	Ceiling Two-Way Speaker 40W, 6.5", w/o back can
RADA62TX	Ceiling Two-Way Speaker 40W, 6.5", w/back can
RADA82T	Ceiling Two-Way Speaker 60W, 8", w/o back can
RADA82TX	Ceiling Two-Way Speaker 60W, 8", w/back can

FEATURES

- Two-way Ceiling Frameless Speakers
- Four models with 6.5" or 8" low-mid drivers
- Free aiming tweeter for precise adjustments
- 8 Ohm Input and Integrated Transformer 70/100V
- Rotary control for operating modes and power taps
- Spring or Euroblock terminal connectors
- Public Address Ready System
- Body Design for high sound quality, deep bass and crisp highs
- Frameless design, white magnet fixing grill
- Durable ABS buffel, special version with protective back can
- Steel Back Can for Speaker elements protection
- Easy-and-Fast Fixing dog-leg brackets



SPECIFICATIONS

Model	62T	62TX	82T	82TX
Driver's Types	6.5"+0.75"		8"+1"	
Sensitivity (1W/1m)	89dB		90dB	
Frequency Response	80Hz-18kHz		80Hz-20kHz	
RMS Power	40W		60W	
Impedance	8Ohm			
70V Taps	2.5/5/10/ 20/40W		3.75/7.5/15 30/60W	
100V Taps	5/10 20/40W		7.5/15 30/60W	
Input Connector	Spring Terminal	Euro Block	Spring Terminal	Euro Block
Body Material	ABS Plastic			
Back Can	Metall			
Grill	Frameless / Steel / Magnet fixing			
Colours Body/Grill	Black / White			
Mounting	Ceiling (dog-leg brackets)			
Cutting Size (mm)	218		262	
Size (DxH)	240x93	242x160	292x106	292x186
Net Weight (kg)	1.2	2.0	1.28	2.68



AVO Series by ABERMAN is one of the best known model of the pendant speaker products on the market. Speakers are available in white and black colors. Housed in specially designed polypropylene high-durable body, speaker construction is robust and provides extra sound quality. Thanks to its design and materials the AVO series are waterproof all weather speakers and comply to IP55 specification and could be used in outdoor environments. Deformation-resistant aluminum or optional steel grille protects speakers drivers from dust and external damage.

AVO speakers enforced with one low-middle range woofer driver and high frequency tweeter. This ensures in wide frequency response and perfect sound quality. Equipped with a 70/100-volt linear high quality transformer with several power taps and 8 Ohm output mode, these speakers are ideal for background music, paging system and other PA applications. More over, AVO speakers are good enough to be used for Hi-Fi tasks as well. The wide dispersion diagram ensures the best acoustic results.

The AVO series enforced with 6.5" low-mid range driver and 1" high frequency tweeter for almost full range coverage. Rated as 40W RMS and 80W maximum output power.

Each speaker comes with removable adjustable ring adapter and steel cord with hooks for Easy-and-Fast Fixing. This allows to fix speaker at desired height to achieve the best angle to cover all the needed area with high sound pressure and perfectly reproduced clear and deep sound.

Nice design is made and simple installation allows to use these speakers for many of sound reinforcement setups. Speakers used for background music, announcement and many other PA setups worldwide. Regardless to the task - commercial building or education class, conference room or house of worship, hotel lobby or park area, swimming pool or open air - the AVO series will help to add perfect sound to the beautiful views.

- FEATURES
- Two-way Pendant High Efficient PA Speaker
 - 40W RMS/ 80W Max Power
 - 6.5" low-mid driver and 1" high frequency tweeter
 - 8Ohm Input and Integrated Transformer 70/100V
 - Rotary control for operating modes and power taps
 - Public Address Ready System
 - Body Design for high sound quality, deep bass and crisp highs
 - Water-resistant driver and tweeter
 - Durable ABS body and aluminum grille for drivers protection
 - IP55 ratted Indoor for Outdoor usage
 - Easy-and-Fast Fixing pendant accessories included
 - Euroblock connection type

SPECIFICATIONS

Model	AVO62
Driver's Types	6.5"+1"
Sensitivity (1W/1m)	91dB
Frequency Response	70Hz-18kHz
RMS Power	40W
Impedance	8Ohm
70V Taps	2.5/5/10/20/40W
100V Taps	5/10/20/40W
Input Connector	Euroblock 4-pin
Ingress Rating	IP55
Body	ABS Plastic
Grill	Aluminum Alloy
Available Colours	Black / White
Mounting	Pendant (mounting accessories included)
Size (DxH)	203x285
Net Weight (kg)	3.15

ORDERING INFORMATION

Model No.	Product Description
AVO62B	Pendant Two-Way IP55 Speaker 40W, 6", Black
AVO62W	Pendant Two-Way IP55 Speaker 40W, 6", White





MUSE Series by ABERMAN is one of the best selling Wall Mount Speaker product on the market. The model range consist of three speaker sizes available in white and black colors. Housed in specially designed polypropylene high-durable body, speaker construction is robust and provides extra sound quality. Thanks to the its design and materials the MUSE series are waterproof all weather speakers and comply to IP66 specification and could be used in outdoor environments. Deformation-resistant aluminum grille protects speakers drivers from dust and external damage.

MUSE speakers enforced with one low-middle range woofer driver and high frequency tweeter. This ensures in wide frequency response and perfect sound quality. Equipped with a 70/100-volt linear high quality transformer with several power taps and 8 Ohm output mode, these speakers are ideal for background music, paging system and other PA applications. More over, MUSE could be used for Hi-Fi tasks as well. The wide dispersion diagram ensures the best acoustic results.

The series starts from MUSE42 20W speaker with 4" low-mid range driver and 1" high frequency tweeter. When more power is required- MUSE62 with 60W output and 6.5" low-mid driver with 1.5" high frequency tweeter could be used. Need bigger one? Select the MUSE82 with up to 120W power rated output, 8" low-mid driver and 1.5" tweeter for almost full range coverage!

Each speaker comes with Easy-and-Fast Fixing wall mount bracket adjustable in horizontal and vertical angles. This allows to aim the speaker into the desired direction to cover all the needed area with perfectly reproduced sound.

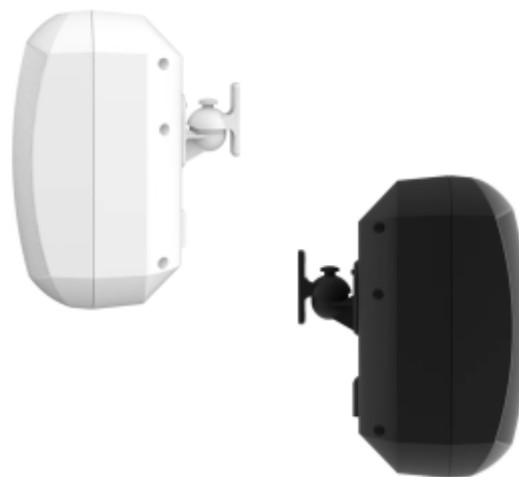
Nice design is made and simple installation allows to use these speakers for many of sound reinforcement setups. Speakers used for background music, announcement and many other PA setups worldwide. Regardless to the task - commercial building or education class, conference room or house of worship, hotel lobby or park area, swimming pool or open air - the MUSE series will help to add perfect sound to the beautiful views.

FEATURES

- Two-way Wall Mount Speakers
- Three models with 4", 6.5" or 8" low-mid driver
- 8Ohm Input and Integrated Transformer 70/100V
- Rotary control for operating modes and power taps
- Public Address Ready System
- Body Design for high sound quality, deep bass and crisp highs
- Water-resistant driver and tweeter
- Durable polypropylene body
- Aluminum grille for drivers protection
- IP66 rated Indoor or Outdoor use
- Easy-and-Fast Fixing Mounting bracket included
- Vertical and horizontal aiming adjustments

SPECIFICATIONS

Model	MUSE42	MUSE62	MUSE82
Driver's Types	4"+1"	6.5"+1.5"	8"+1.5"
Sensitivity (1W/1m)	87dB	89dB	91dB
Frequency Response	80Hz-20kHz	70Hz-20kHz	50Hz-20kHz
RMS Power	20W	60W	120W
Impedance	8Ohm		
70V Taps	1.25/2.5/5 10/20W	3.75/7.5/15 30/60W	6.25/12.5 25/50/100W
100V Taps	2.5/5/10 20W	7.5/15/30 60W	12.5/25/50 100W
Input Connector	Spring Terminal x1		
Ingress Rating	IP66		
Body	Polypropylene		
Grill	Aluminum Alloy		
Available Colours	Black / White		
Mounting	Wall (adjustable bracket included)		
Size (WxDxH)	146x138x238	200x190x330	260x230x400
Net Weight (kg)	1.8	3.3	5.6



ORDERING INFORMATION

Model No.	Product Description
MUSE42B	Wall Mount Two-Way IP66 Speaker 20W, 4", Black
MUSE42W	Wall Mount Two-Way IP66 Speaker 20W, 4", White
MUSE62B	Wall Mount Two-Way IP66 Speaker 60W, 6.5", Black
MUSE62W	Wall Mount Two-Way IP66 Speaker 60W, 6.5", White
MUSE82B	Wall Mount Two-Way IP66 Speaker 120W, 8", Black
MUSE82W	Wall Mount Two-Way IP66 Speaker 120W, 8", White



NOIRE D Series by ABERMAN is the most compact version of this family. Regardless to its small sizes D Series speakers are providing high sound pressure levels along with a wide dynamic range and amazing quality of sound - same as other NOIRE series column speaker. The elegant design that combines sleekness and modern aesthetics is made by Audio Creation Xperts department of our European Engineering Team. The high quality speaker components especially focused on the music and voice reproduction for sound reinforcement tasks. The NOIRE Series column speaker series are one of the best choices you can make for your project.

The D Series is the smallest size version of NOIRE column speaker model range. It uses two inch low-mid drivers and providing maximum performance, power and sound quality.

D Series contains of three different models - D4, D8 and D12. Each speaker model uses different quantity of 2" high efficient one way full range frequency drivers and one silk dome tweeter. This product range gives a perfect way to choose the best solution for different environments, setups and occasions. The wide range of mounting accessories helps not only to do mounting fast and easy, but reliably and flexible to match many of different challenges and scenarios.

NOIRE D series offers maximum quality with high sound sensitivity and coverage, being able to reach between 89db to 95db depending on the model, with 90° x 30° working angle.

The NOIRE column speakers could be used in multiple configurations using optional accessories. Speakers of this size are ideal for a wide variety of applications, from conference rooms and lecture halls to shopping malls, clubs, and much more, ideal for indoor use.

The NOIRE speakers are simple and powerful solution for virtually every audio need. Whether it's a small installation or even if you need acoustic power the D series are an ideal choice for your project.

ORDERING INFORMATION

Model No.	Product Description
NOIRE-D4	4x2" Two Way Column Loudspeaker, Black
NOIRE-D8	8x2" Two Way Column Loudspeaker, Black
NOIRE-D12	12x2" Two Way Column Loudspeaker, Black
NOIRE-D4W	4x2" Two Way Column Loudspeaker, White
NOIRE-D8W	8x2" Two Way Column Loudspeaker, White
NOIRE-D12W	12x2" Two Way Column Loudspeaker, White

SPECIFICATIONS

Model	D4	D8	D12
Middle Drivers' Types	4x2"	8x2"	12x2"
Tweeter Types	1x1"	2x1"	
Sensitivity (1W/1m)	89dB	92dB	95dB
Max SPL	107dB	113dB	118dB
Coverage	90° x 30°		
Frequency Response	120Hz-20kHz		
Impedance (Ω)	4	8	12
RMS Power	60W	120W	180W
Input Connector	Neutrik Speakon x2 Euro Block 4-pin		
Available Colours	Black / White		
Mounting	Wall/Pendant		
Sizes (mm)			
Width x Deep	79 x 83		
Height	548	860	1124
Net Weight (kg)	3.3	5.0	6.3



NOIRE T Series by Aberman is unique column speakers where the high output power, amazing clarity of the sound reproduction and compact sizes - all meet in the one product. Speakers design is made by Audio Creation Xperts department of our European Engineering Team. The high quality speaker components especially focused on the music and voice reproduction for sound reinforcement tasks. The NOIRE Series column speaker series are one of the best choices you can make for your project.

The T Series is middle size version of NOIRE column speaker model range. It uses three inch low-mid drivers and providing maximum performance, power and sound quality. T Series contains of three different models - T4, T8 and T12. Each speaker model uses different quantity of 3" high efficient one way full range frequency drivers and one aluminum ribbon tweeter. It is really simple to make a choice - four low-mid drivers for T4, eight drivers for T8 and twelve for T12. This product range gives a perfect way to choose the best solution for different environments, setups and occasions. The wide range of mounting accessories helps not only to do mounting fast and easy, but reliably and flexible to match many of different challenges and scenarios.

NOIRE T series offers maximum quality with high sound sensitivity and coverage, being able to reach between 94db to 98db depending on the model, with 90° x 40° working angle. The NOIRE column speakers could be used in multiple configurations. Thanks to link ports and optional mounting plates several speakers could be stacked one to another to achieve more power and sound pressure.

The NOIRE speakers are simple and powerful solution for virtually every audio need. Whether it's a small installation or even if you need aggressive power - T series are an ideal choice for your project.

ORDERING INFORMATION

Model No.	Product Description
NOIRE-T4	4x3" Full Range Column Loudspeaker, Black
NOIRE-T8	8x3" Full Range Column Loudspeaker, Black
NOIRE-T12	12x3" Full Range Column Loudspeaker, Black
NOIRE-T4W	4x3" Full Range Column Loudspeaker, White
NOIRE-T8W	8x3" Full Range Column Loudspeaker, White
NOIRE-T12W	12x3" Full Range Column Loudspeaker, White



SPECIFICATIONS

Model	T4	T8	T12
Middle Drivers' Types	4x3"	8x3"	12x3"
Tweeter Types	1x3"	1x4"	
Sensitivity (1W/1m)	94dB	96dB	98dB
Max SPL	114dB	119dB	122dB
Coverage	90° x 40°		
Frequency Response	110Hz-20kHz		
Impedance (Ω)	8	4	
RMS Power	100W	200W	300W
Input Connector	Neutrik Speakon x2 Euro Block 4-pin		
Available Colours	Black / White		
Mounting	Wall/Pendant		
Sizes (mm)			
Width x Deep	124 x 148		
Height	660	1072	1382
Net Weight (kg)	6.3	11.1	14.1



NOIRE Q Series are high power speakers with amazing clarity of the sound reproduction. Speakers' design is made by Audio Creation Xperts department of our European Engineering Team. The high quality speaker components especially focused on the music and voice reproduction for sound reinforcement tasks. The NOIRE Series column speaker series are one of the best choices you can make for your project.

NOIRE Q Series is Aberman's most powerful version of NOIRE column speaker model range providing the maximum performance, high sound pressure with clear and crisp sound.

The NOIRE Q Series contains of four different Models - Q1, Q2, Q4 and Q8. Each model enforced with different quantity of 4" high efficient one way full range frequency drivers. It is really simple to make a choice - Q1 with one driver, need more power? - Q2 with two drivers, still not enough? - Q4 and so on. This product range gives a perfect way to choose the best solution for different environments, setups and occasions. The wide range of mounting accessories helps not only to do mounting fast and easy, but reliably and flexible to match many of different challenges and scenarios.

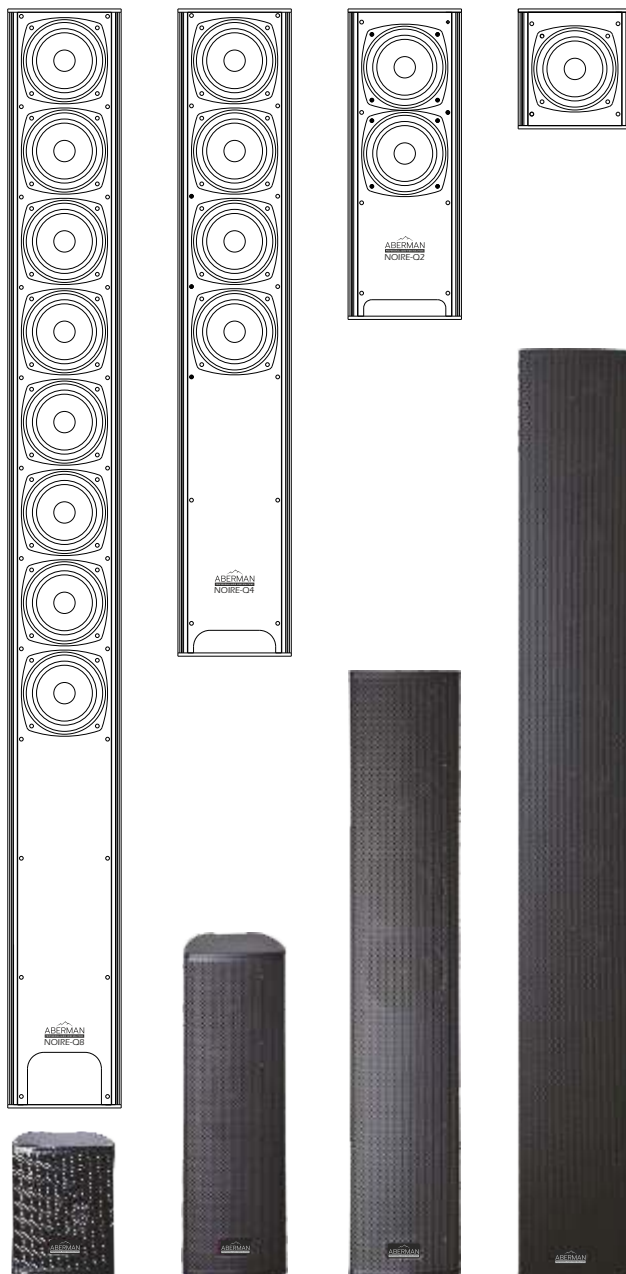
The largest of the NOIRE, the Q Series passive column speakers offers maximum quality and the highest sound sensitivity and coverage, being able to reach between 91dB to 100dB depending on the model, with 120° x 90° working angle.

The NOIRE column speakers could be used in multiple configurations. Thanks to link ports and optional mounting plates several speakers could be stacked one to another to achieve more power and sound pressure.

The Q series are powerful speakers made of high quality components only and providing a simple and powerful solution for virtually every audio need. Whether it's a small installation or even if you need real acoustic power, it's lightweight and excellent quality materials makes these speakers an ideal choice for your project.

ORDERING INFORMATION

Model No.	Product Description
NOIRE-Q1	1x4" Full Range Column Loudspeaker (Pair), Black
NOIRE-Q2	2x4" Full Range Column Loudspeaker, Black
NOIRE-Q4	4x4" Full Range Column Loudspeaker, Black
NOIRE-Q8	8x4" Full Range Column Loudspeaker, Black
NOIRE-Q1W	1x4" Full Range Column Loudspeaker (Pair), White
NOIRE-Q2W	4x4" Full Range Column Loudspeaker, White
NOIRE-Q4W	4x4" Full Range Column Loudspeaker, White
NOIRE-Q8W	8x4" Full Range Column Loudspeaker, White



SPECIFICATIONS

Model	Q1	Q2	Q4	Q8
Driver's Types	1x4"	2x4"	4x4"	8x4"
Sensitivity (1W/1m)	91dB	94dB	97dB	100dB
Max SPL	106dB	112dB	118dB	124dB
Coverage	120°x90°			
Frequency Response	100Hz-20kHz		90Hz-20kHz	
Impedance (Ω)	8	8	4	8
RMS Power	30W	60W	120W	240W
Input Connector	Spring Terminal x1		Neutrik Speakon x2 Euro Block 4-pin	
Available Colours	Black / White			
Mounting	Wall		Wall/Pendant	
Sizes (mm)				
Width	140			
Deep	175		160	
Height	146	380	790	1340
Net Weight (kg)	1.8	4.2	7.8	13.2



Additionally to passive **NOIRE D Series** speakers the active version is also present in the model range. The 2" active speaker column features a second channel power output, making it not only self-sufficient but also capable of driving another conventional speaker column of the same size, simplifying system configuration. Despite its compact size, the active module boasts impressive power output, ensuring a safe and efficient system configuration.

Regardless to its small sizes D Series speakers are providing high sound pressure levels along with a wide dynamic range and amazing quality of sound - same as other NOIRE series column speaker. The elegant design that combines sleekness and modern aesthetics is made by Audio Creation Xperts department of our European Engineering Team. The high quality speaker components especially focused on the music and voice reproduction for sound reinforcement tasks. The NOIRE Series column speaker series are one of the best choices you can make for your project.

The D Series is the smallest size version of NOIRE column speaker model range. It uses two inch low-mid drivers and providing maximum performance, power and sound quality.

The active family of D Series contains of two different models - D4 and D8. Each speaker model uses different quantity of 2" high efficient one way full range frequency drivers, one silk dome tweeter and compact 60W per channel amplifier module. This product range gives a perfect way to choose the best solution for different environments, setups and occasions. The wide range of mounting accessories helps not only to do mounting fast and easy, but reliably and flexible to match many of different challenges and scenarios.

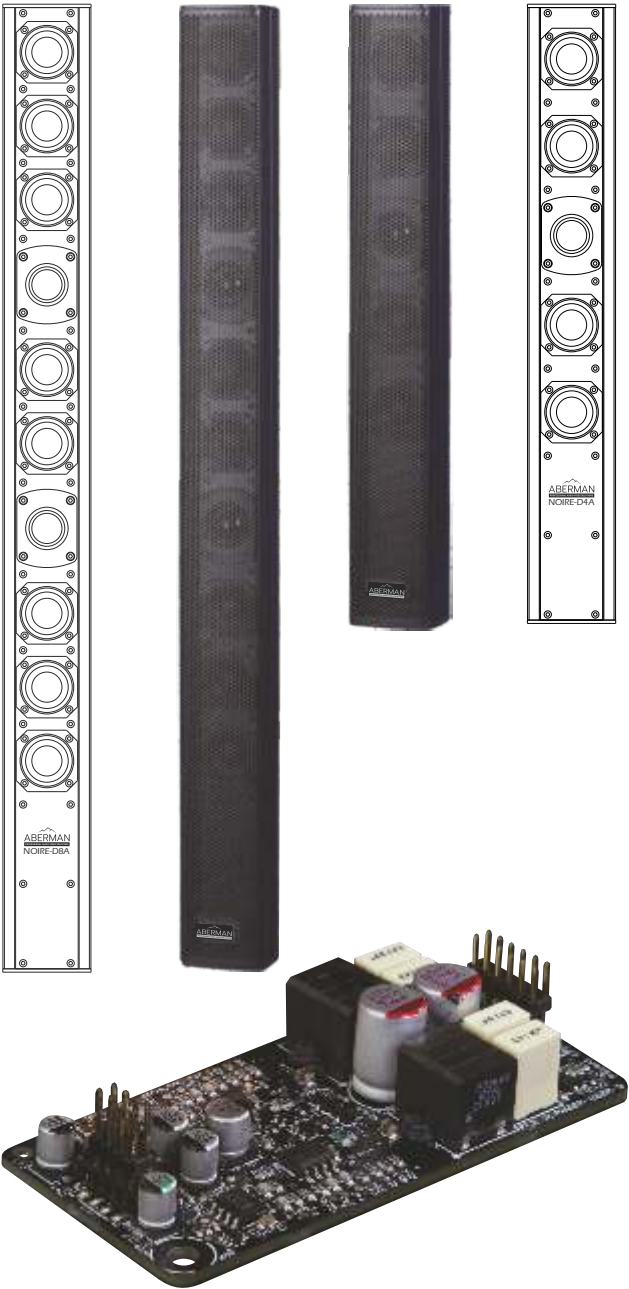
NOIRE D series offers maximum quality with high sound sensitivity and coverage, being able to reach between 89db to 95db depending on the model, with 90° x 30° working angle.

The NOIRE column speakers could be used in multiple configurations using optional accessories. Speakers of this size are ideal for a wide variety of applications, from conference rooms and lecture halls to shopping malls, clubs, and much more, ideal for indoor use.

The NOIRE speakers are simple and powerful solution for virtually every audio need. Whether it's a small installation or even if you need acoustic power the D series are an ideal choice for your project.

ORDERING INFORMATION

Model No.	Product Description
NOIRE-D4A	4x2" Active Two Way Column Loudspeaker, Black
NOIRE-D8A	8x2" Active Two Way Column Loudspeaker, Black
NOIRE-D4AW	4x2" Active Two Way Column Loudspeaker, White
NOIRE-D8AW	8x2" Active Two Way Column Loudspeaker, White



SPECIFICATIONS

Model	D4A	D8A
Middle Drivers' Types	4x2"	8x2"
Tweeter Types	1x1"	2x1"
Frequency Response	120Hz-20kHz	
Max SPL	107dB	113dB
Coverage	90° x 30°	
Internal Amplifier	2 x 60W	
Satellite Power	60W	
Power Supply	90-240V AC, 24V DC	
Input Connector	2x Neutrik Combo 1x DC Socket	
Output Connector	1x Neutrik SpeakON	
Available Colours	Black / White	
Mounting	Wall/Pendant	
Sizes (mm), Width x Deep	79 x 83	
Height	548	860
Net Weight (kg)	3.8	5.5



Same as for other models the **NOIRE T Series** by Aberman has the active versions. More over along with analog input speakers there are several active models with Dante Interface support. NOIRE-T Series featured a built-in active switching power supply module, providing up to 500W power, produced by the top quality and powerful performance Class D amplifier. Its ultra-compact design with high quality components ensures robust and efficient system operation. It also integrates a universal gain-regulated power supply with PFC function for safety and reliability. The models with Dante Interface allow to easily integrate the speakers into the Digital Dante Network and control all the system by the standard Dante Controller Software from Audinate.

Speakers design is made by Audio Creation Xperts department of our European Engineering Team. The high quality speaker components especially focused on the music and voice reproduction for sound reinforcement tasks.

The T Series is middle size version of NOIRE column speaker model range. It uses three inch low-mid drivers and providing maximum performance, power and sound quality. T Series contains of three different size models - T4, T8 and T12. Each speaker model uses different quantity of 3" high efficient one way full range frequency drivers and one aluminum ribbon tweeter. Each model could be equipped with Dante input Interface and available in Black or White finish.

ORDERING INFORMATION

Model No.	Product Description
NOIRE-T4A	4x3" Active Column Loudspeaker, Black
NOIRE-T8A	8x3" Active Column Loudspeaker, Black
NOIRE-T12A	12x3" Active Column Loudspeaker, Black
NOIRE-T4AW	4x3" Active Column Loudspeaker, White
NOIRE-T8AW	8x3" Active Column Loudspeaker, White
NOIRE-T12AW	12x3" Active Column Loudspeaker, White
NOIRE-T4DN	4x3" Active Dante Column Loudspeaker, Black
NOIRE-T8DN	8x3" Active Dante Column Loudspeaker, Black
NOIRE-T12DN	12x3" Active Dante Column Loudspeaker, Black
NOIRE-T4DNW	4x3" Active Dante Column Loudspeaker, White
NOIRE-T8DNW	8x3" Active Dante Column Loudspeaker, White
NOIRE-T12DNW	12x3" Active Dante Column Loudspeaker, White



SPECIFICATIONS

Model	T4A(DN)	T8A(DN)	T12A(DN)
Middle Drivers' Types	4x3"	8x3"	12x3"
Tweeter Types	1x3"		1x4"
Frequency Response		110Hz-20kHz	
Max SPL	114dB	119dB	122dB
Coverage		90° x 40°	
Internal Amplifier	250W		500W
Power Supply Type		Internal	
Power Supply		90-240V AC	
Input Connector (A)	1x XLR / 1x PowerCON (Analog)		
Input Connector (DN)	1x RJ45 / 1x PowerCON (Dante)		
Output Connector		1x XLR	
Available Colours		Black / White	
Mounting		Wall/Pendant	
Sizes (mm), Width x Deep		124 x 148	
Height	660	1072	1382
Net Weight (kg)	7.0	11.8	14.8



NOIRE Q Series are high power speakers with amazing clarity of the sound reproduction. The selected speakers has the active versions. Along with analog input speakers there are several active models with Dante Interface support. NOIRE-Q Series featured a built-in active switching power supply module, providing up to 500W power, produced by the top quality and powerful performance Class D amplifier. Its ultra-compact design with high quality components ensures robust and efficient system operation. It also integrates a universal gain-regulated power supply with PFC function for safety and reliability. The models with Dante Interface allow to easily integrate the speakers into the Digital Dante Network and control all the system by the standard Dante Controller Software from Audinate.

The active versions of NOIRE Q Series contains of two different Models - Q4 and Q8. Each model enforced with different quantity of 4" high efficient one way full range frequency drivers. Each model could be equipped with Dante input Interface and available in Black or White finish.

This product range gives a perfect way to choose the best solution for different environments, setups and occasions. The wide range of mounting accessories helps not only to do mounting fast and easy, but reliably and flexible to match many of different challenges and scenarios. The NOIRE column speakers could be used in multiple configurations. Thanks to link ports and optional mounting plates several speakers could be stacked one to another to achieve more power and sound pressure. The Q series are powerful speakers made of high quality components only and providing a simple and powerful solution for virtually every audio need. Whether it's a small installation or even if you need real acoustic power, it's lightweight and excellent quality materials makes these speakers an ideal choice for your project.

ORDERING INFORMATION

Model No.	Product Description
NOIRE-Q4A	4x4" Active Column Loudspeaker, Black
NOIRE-Q8A	8x4" Active Column Loudspeaker, Black
NOIRE-Q4AW	4x4" Active Column Loudspeaker, White
NOIRE-Q8AW	8x4" Active Column Loudspeaker, White
NOIRE-Q4DN	4x4" Active Dante Column Loudspeaker, Black
NOIRE-Q8DN	8x4" Active Dante Column Loudspeaker, Black
NOIRE-Q4DNW	4x4" Active Dante Column Loudspeaker, White
NOIRE-Q8DNW	8x4" Active Dante Column Loudspeaker, White

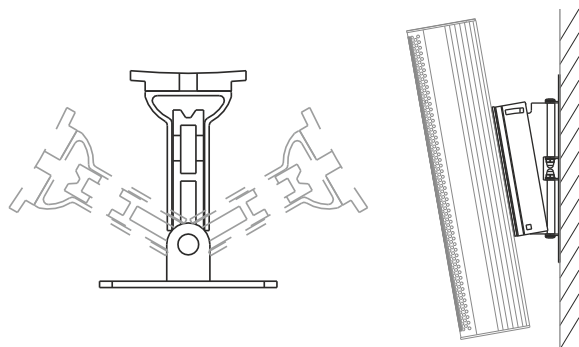


SPECIFICATIONS

Model	Q4A	Q8A	Q4DN	Q8DN
Driver's Types	4x4"	8x4"	4x4"	8x4"
Frequency Response	90Hz-20kHz			
Max SPL	118dB	124dB	118dB	124dB
Coverage	120°x90°			
Internal Amplifier	500W			
Power Supply Type	Internal			
Power Supply	90-240V AC			
Input Connector (A)	1x XLR / 1x PowerCON (Analog)			
Input Connector (DN)	1x RJ45 / 1x PowerCON (Dante)			
Output Connector	1x XLR			
Available Colours	Black / White			
Mounting	Wall/Pendant			
Sizes (mm)				
Width x Deep	140x160			
Height	790	1340	790	1340
Net Weight (kg)	8.8	8.9	14.0	14.2

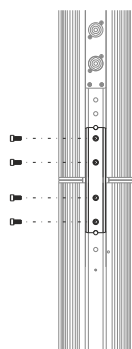


NOIRE Series speakers come with basic wall mounting bracket set. These brackets have to degrees of freedom and allow to aim speaker in the desired direction. Many optional accessories available to extend and enlarge the mount ways and possibilities. Column Speakers could be stacked together or mounted on the aSWP Sub-Woofers, floor stands, walls and etc. Special adapters available for standard 35 mm pole mounts including tripods. Check NOIRE speakers accessories by Aberman for other mounting options.



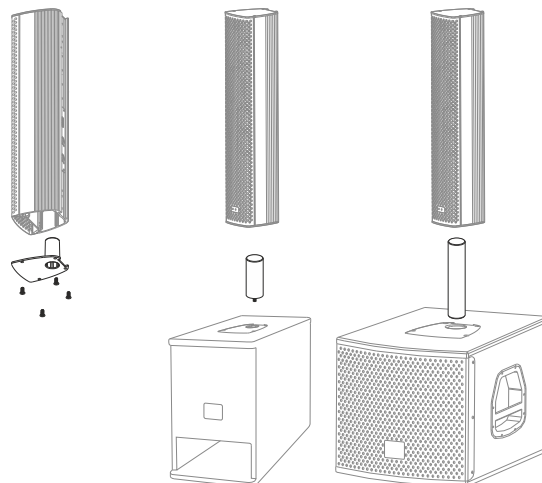
SPECIFICATIONS

Model	NOIRE-D-WB	NOIRE-TQ-WB
Compatible with	D Series	T & Q Series
Horizontal Aiming	Adjustable Up to 180°	
Vertical Tilt	Adjustable Down to 15°	
Available Colours	Black / White	
Mounting	Wall	
Sizes (HxWxD) (mm)	330 x 70 x 85	
Net Weight (kg)	1.2	



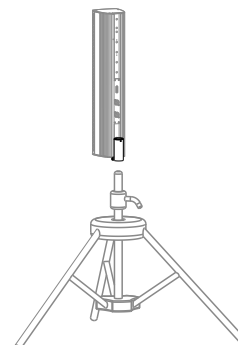
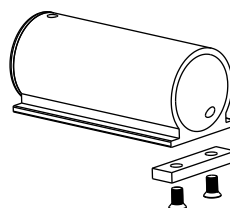
SPECIFICATIONS

Model	NOIRE-TQ-CB
Compatible with	T & Q Series
Material	Aluminum Alloy
Available Colours	Black
Mounting	Two or More Columns Connecting
Sizes (HxWxD) (mm)	175 x 45 x 7
Net Weight (kg)	0.15



SPECIFICATIONS

Model	NOIRE-T-SB75	NOIRE-T-SB150
Compatible with	T Series	
Sub-Woofer Model	aSWP8	aSWP12/15
Available Colours	Black	
Mounting Type	on Sub-Woofer	
Pole Size (DxH) (mm)	35 x 80	35 x 155
Plate Size (HxWxD) (mm)	148 x 123 x 80	
Net Weight (kg)	0.45	0.59



SPECIFICATIONS

Model	NOIRE-TQ-PB
Compatible with	T & Q Series
Material	Aluminum Alloy
Available Colours	Black
Mounting Type	on Tripod or 35mm Pole
Sizes (HxWxD) (mm)	90 x 45 x 45
Net Weight (kg)	0.25

ORDERING INFORMATION

Model No.	Product Description
NOIRE-D-WBB	Wall Mount Bracket for D Series, Black
NOIRE-D-WBW	Wall Mount Bracket for D Series, White
NOIRE-TQ-WBB	Wall Mount Bracket for T & Q Series, Black
NOIRE-TQ-WBW	Wall Mount Bracket for D Series, Black
NOIRE-TQ-CB	Connecting Bracket for T & Q Series, Black
NOIRE-T-SB75	aSWP8 Mount Bracket for T Series, Black
NOIRE-T-SB150	aSWP12/15 Mount Bracket for T Series, Black
NOIRE-TQ-PB	Pole Mount Bracket for T & Q Series, Black



aSWP

The **NOIRE Family** of column speakers are well known for its amazing clarity of the high and deep middle frequencies of the sound reproduction. But what if there is a need for deep and overtaking lows? To address the needs for rich, full low-frequency performance in various settings, ABERMAN has also developed a matching subwoofers, adding greater colours to your audio system's musical expression. There are several models available including the passive and active versions.

Starting from aSWP8 - 8" model with integrated Class H amplifier, producing powerful, deep bass with a flat frequency response of 38Hz-120Hz (± 10 dB). It also includes power output for two satellite channels, each delivering up to 160W@4Ohm. The active line of ABERMAN aSWP models also offers 12" and 15" sub-woofers featured a built-in Class D amplifier, this compact design boasts extremely high efficiency and very low distortion. Its active ultra-low power output can drive passive speaker columns, delivering a powerful 500W@4Ohm, further simplifying system configuration and ensuring efficient and smooth audio operation.

The aSWP12" and aSWP15" woofers greatly expand the low-frequency space of the sound column, making your sound reinforcement system more versatile. Additionally these models available in passive versions. It is not only suitable for speech reinforcement but also compatible with music reinforcement, enriching the functionality of the hall.

Active Sub-woofers are featuring integrated satellite channel power output to drive more full-range columns. This design not only simplifies system configuration but also significantly reduces costs, providing a superior solution for sound reinforcement systems in multi-purpose spaces.

All the models have enforced with bracket for using with NOIRE-Q series column speakers, or any other speaker system which use the standard 35 mm pole adapter.

ORDERING INFORMATION

Model No.	Product Description
aSWP8	1x8" Active Sub-Woofer 200W+2x160W, Black
aSWP12	1x12" Active Sub-Woofer 500W+1x500W, Black
aSWP15	1x15" Active Sub-Woofer 500W+1x500W, Black
aSWP12P	1x12" Passive Sub-Woofer 500W@4Ohm, Black
aSWP15P	1x15" Passive Sub-Woofer 700W@4Ohm, Black



SPECIFICATIONS

Model	aSWP8	aSWP12	aSWP15
Driver's Types	1x8"	1x12"	1x15"
Frequency Response	20-120Hz	45-250Hz	42-200Hz
Max SPL	115dB	122dB	125dB
Internal Amplifier	200W	2x500W	
Sattelite Frequency	110Hz-20kHz		
Sattelite Power	2x160W@4Ohm	1x500W@4Ohm	
Power Supply	115/230V AC	90-240V AC	
Input Connector	2x Phoenix 3-pin	1x XLR	
Remote Control	1x RJ45	-	
Output Connector	2x Euro Block	1x Neutrik SpeakON	
Available Colours	Black		
Sizes (mm)			
Width	250	480	660
Deep	419	525	690
Height	790	425	480
Net Weight (kg)	27.0	27.9	34.8



HBT1-4K-150AN is a signal transmission kit designed for HDMI 2.0 signals via HDBaseT Gen1, offering a bandwidth of up to 18 Gbps. The system supports resolutions up to 3840x2160@60 and 4096x2160@60, 4:4:4 color subsampling, and HDCP 2.2. It enables the transmission of video and audio signals, as well as bidirectional RS-232 and IR control signals, over distances of up to 150 meters using a single Cat5e/6 twisted-pair cable. Based on HDBaseT Gen1 technology these units utilize DSC compression for signal transmission, the ranges over a single Cat5e/6 cable are:

- 120 meters for UltraHD signals (up to 4K resolution)
- 150 meters for FullHD signals (up to 1080p resolution)

Transmitter and Receiver are compatible with HDBaseT modules of **MVS2 Modular Matrices**.

Thanks to PoC (Power over Cable) technology, the power supply needs to be connected to only one of the modules, while the other receives power via the twisted-pair cable.

The units feature compact metal housings and come with mounting brackets for installation on flat surfaces.



HBT1-4K-150HU - designed for HDMI 2.0 & USB signals extension over HDBaseT Gen1, offering video bandwidth of up to 18Gbps. It enables the transmission of UHD video and audio signals, USB data, and bidirectional IR control signals over distances of up to 150 meters using a single Category 5e/6 twisted-pair cable. The system supports resolutions up to 4K@60 4:4:4 and HDCP 2.2. A built-in EDID emulator in the transmitter allows switching between factory default settings and EDID data from the remote display connected to the receiver. In addition to video, the extender supports USB 1.1 signal transmission, providing KVM functionality. This makes the device an excellent solution for setting up remote operator workstations featuring an HDMI monitor, keyboard, mouse, and IR connectivity. Could be combined with **HBT1-4K-150DU** - for achieving HDMI to DisplayPort easy conversion.



HBT1-4K-150DU - model gives ability to extend the DisplayPort 1.2 signals over HDBaseT. When used with **HBT1-4K-150HU** allows to easily convert video to/from HDMI. Extender designed for DP signals via HDBaseT Gen1, offering a bandwidth of up to 21Gbps. It enables the transmission of video and audio signals, USB data, and bidirectional IR control signals over distances of up to 150 meters using a single Category 5e/6 twisted-pair cable. The system supports resolutions up to 4K@60 4:4:4. A built-in EDID emulator in the transmitter allows switching between factory default settings and EDID data from the remote display connected to the receiver. In addition to video, the extender supports USB 1.1 signal transmission, providing KVM functionality.



HBT1-4KWP-150C-TX is an HDMI 2.0 and USB-C to HDBaseT transmitter with a bandwidth of up to 18 Gbps. Designed as a wall plate, the unit features a built-in switcher with one HDMI input and one USB-C input. Source selection is controlled via a front-panel button, and automatic switching mode is supported.

The panel transmits video and audio signals, as well as bidirectional RS-232 and IR control signals, over distances of up to 150 meters using a single Category CAT5e/6 twisted-pair cable. It supports resolutions up to 4K2K at 60 Hz (4:4:4) and is HDCP 2.2 compliant. Panel supports PoC (Power over Cable) technology to receive power via the twisted-pair cable line.

Compatible with the **HBT1-4K-150AN** receiver and HDBaseT modules of **MVS2 Modular Matrices**.

SPECIFICATIONS

Model	4K-150AN	4K-150HU	4K-150DU
HDBaseT Specification	HDBaseT Gen1		
Compression Type	DSC		
Video Specification	HDMI 2.0b	DP 1.2a	
HDCP Specification	HDCP 1.4/2.2		
Resolution Support	4K@60		
Color Space	RGB/YUV		
Color Sub-Sampling	4:4:4, 4:2:2, 4:2:0		
Video Bandwidth	18Gbps	21Gbps	
HDR	HDR10, HDR10+, Dolby Vision, HLG		
TX Local Output	Passthrough	–	–
HDMI Audio	LPCM2/5.1/7.1, Dolby Digital, Dolby Digital+ Dolby True HD, Dolby Atmos, DTS 5.1 DTS-HD Master Audio, DTS:X		
USB Specification	–	USB 1.1	
TX USB Host	–	1x USB B	
RX USB Hub	–	2x USB A (KVM)	
Audio De-Embedding	RX	–	–
Analog Audio Type	Un-Balanced	–	–
IR Extension	Supported, Two-way		
RS232 Extension	Supported, Two-way		
Link Interface	RJ45, HDBaseT		
Link Indication	Link Status		
Signal Indication	Signal, HDCP		
Housing	Metal Enclosure		
Color	Black		
Installation Method	Desktop/Surface, Brackets Included		
Power Supply	24V, 1A DC, PoC Supported		
Power Consumption	9.5W	10W	13W
Operating Temp	0° C ~ 40° C		
Storage Temp	-20° C ~ 60° C		
Dimension (WxDxH)	140 x 65 x 18mm		
Net Weight	0.16 kg	0.25 kg	

ORDERING INFORMATION

Model No.	Product Description
HBT1-4K-150AN	HDMI over HDBaseT Extender Kit
HBT1-4KWP-150C-TX	HDMI/USB-C over HDBaseT Wallplate TX
HBT1-4K-150HU	HDMI & USB over HDBaseT Extender Kit
HBT1-4K-150DU	DP & USB over HDBaseT Extender Kit



MVS2-88DN

MVS2 is modular matrix family from Aberman which are real top level routing product for Ultra High Definition signals. There are several different chassises starting from 8x8 and up to 80x80 channels. Each unit supports the seamless switching with a maximum video bandwidth of 18 Gbps per channel and handles 4K signals with resolutions up to 3840x2160@60 4:4:4. The chassises accommodates 4-channel input and output modules featuring various video interfaces—such as HDMI, HDBaseT, DVI-U (DVI-D, VGA, YPbPr), and HD/3G/12G-SDI—as well as fiber-optic options for long-distance transmission and full EMI immunity. Each output interface includes an independent scaler, allowing for the adjustment of output signal parameters and resolution; this ensures rapid, seamless switching between inputs. A video wall function enables users to configure all or some of the outputs into a unified display area for a selected source. Additionally, any output can be switched to independent mode, effectively providing multiviewer functionality within the video wall setup. The front panel features an LCD display and controls for local operation, while remote control is supported via IP and RS-232 interfaces. The switcher includes a built-in web interface and an open API for command-based control (via TCP/IP or Telnet) and integration with third-party control systems. The chassises are equipped with dual power supplies to ensure redundancy and operational reliability. The form factor is designed for standard 19-inch rack mounting.



MVS2-1616DN



4x channels DVI-U Input & Output



4x channels HDMI 4K Input & Output



4x channels Fiber 4K Input & Output



4x channels 3G-SDI 4K Input & Output



4x channels 12G-SDI & HDMI 4K Input & Output



4x channels HDBaseT 100 meters 4K Input & Output



4x channels HDBaseT 150 meters 4K Input & Output



Optional Smart & Standard Control Modules

SPECIFICATIONS

Model	MVS2-xxDN			
Product Type	Modular Matrix Chassis			
Video Bandwidth	18Gbps per channel			
Video Specification	DVI 1.0, HDMI 2.0b*			
HDCP Specification	HDCP 1.4/2.2/2.3*			
Resolution Support	up to 4K@60			
Color Space	RGB/YUV			
Color Sub-Sampling	4:4:4, 4:2:2, 4:2:0			
Color Depth	8, 10, 12-bit			
HDR	HDR10, HDR10+, Dolby Vision, HLG			
Seamless Switching	Supported			
VideoWall Mode	Supported			
Display Bezel Compensation	Supported			
Multiview Mode	Fixed to Display			
EDID Management	Supported			
HDMI Audio	LPCM2/5.1/7.1, Dolby Digital, Dolby Digital+ Dolby True HD, Dolby Atmos, DTS 5.1 DTS-HD Master Audio, DTS:X			
Local Control	Front Panel			
Remote Control	IR, RS-232, TCP/IP and Web GUI			
Number of Presets	64			
GPIO, Smart Control	Optional			
Standard Control				
RS232 Input	1x Phoenix 3-pin			
RS232 Output	1x Phoenix 3-pin			
Ethernet	RJ45, 100Mbps			
Housing	Metal Enclosure			
Color	Black			
Installation Method	Rack Mount			
Power Supply Type	Internal, Dual, Redundant			
Power Input	2x IEC, ~ AC100-240Vm 50/60Hz			
Routing Matrix	8x8	16x16	36x36	80x80
Power Consumption (W)	190	320	840	1800
Operating Temp	0° C ~ 40° C			
Storage Temp	-20° C ~ 60° C			
Dimension (WxD)	483 x 378mm			
Dimension (H)	88	132	266	530
Net Weight	6 kg	8.6 kg	15,4 kg	25 kg

ORDERING INFORMATION

Model No.	Product Description
MVS2-88DN	UHD Modular Matrix Chassis 8x8, 2U
MVS2-1616DN	UHD Modular Matrix Chassis 16x16, 3U
MVS2-3636DN	UHD Modular Matrix Chassis 36x36, 6U
MVS2-8080DN	UHD Modular Matrix Chassis 80x80, 12U



MVS2-3636DN



VIP-2KH by ABERMAN is a family of cost effective Video-over-IP solution based on the H.265/H.264 compression technology. Both the Transmitter/Encoder and Receiver/Decoder have a standard copper RJ45 port. The encoder supports resolutions up to 1920x1200@60 4:4:4. Unit equipped with local HDMI passthrough output and analog audio input and output ports for embedding or de-embedding. The decoder's output scaler supports up to 2K60 formats, the analog stereo output supports for audio de-embedding. The system also supports USB for KVM usage, bidirectional RS-232, two-way IR, and POE. Guest control via RS-232, IR are supported. A built-in H.264 auxiliary stream supports multiple API commands for flexible configuration and can be used by third-party management applications for video preview. The system is based on Linux and provides flexible management methods in intelligent 100M/1G Ethernet networks.



VIP-4KH units are ultimate-performance Video-over-IP extender also based on the H.265/H.264 coding/compression technology. The universal transceiver could be configured as Transmitter/Encoder or Receiver/Decoder depending on the project needs. Unit featured with a standard copper RJ45 port and fiber SFP slot in a single housing. Using these slots the extension distance may reach dozen kilometers long, depending on the SFP module parameters and gives full immune to EMI interference. The transceiver supports resolutions up to 4K60 4:4:4, with audio embedding or de-embedding. The free window roaming function allows decoder to process up to 36 signals, enabling arbitrary windowing, overlaying, and splicing. Using a background image gives additional flexibility for visual content processing. The USB interface supports KVM control, bidirectional RS-232, bidirectional IR, and POE. Guest control via RS-232, IR, and CEC is supported. Two channels of relay ports and two channels of I/O ports for contact control are built in. Dante AV-A mode is supported with license activation. Built-in MJPEG Substream supports multiple API commands for flexible configuration and can be used by third-party management applications for video content preview.

The unit built on the SoC based Linux Core and provides flexible management methods of intelligent control over 1G Ethernet networks, giving ultimate powerful features to the whole system.



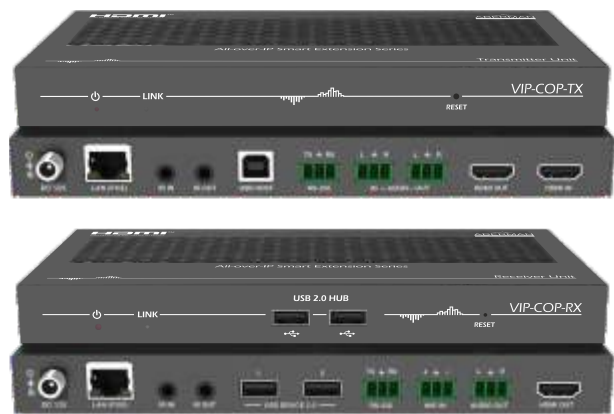
SPECIFICATIONS

Model	VIP-2KH	VIP-4KH
Compression	H.265/H.264	
HDMI Specification	HDMI 1.3	HDMI 2.0b
HDCP Specification	HDCP 1.4	HDCP 1.4/2.2
Resolution Support	1920x1200@60	4K@60
Color Space	RGB/YUV	
Color Sub-Sampling	4:4:4, 4:2:2	4:4:4, 4:2:2, 4:2:0
Preview Stream	Built-in H.264 on Encoder	
Matrix Routing	Supported	
VideoWall Mode	up to 9x9	
Display Bezel Compensation	Supported	
Multiview Mode	Fixed to Display	Free Windows
Encoder HDMI Output	Passthrough	
HDMI Audio	LPCM2/5.1/7.1	
Audio Sampling	32 / 44.1 / 48kHz	
USB Specification	USB 1.1 (KVM)	
KVM Matrix	Supported	
Analog Audio	Supported, One-way	
Analog Audio Type	Un-Balanced	Balanced
Audio Return Channel	-	
Free Audio Routing	Supported	
IR Extension	Supported, Two-way	-
RS232 Extension	Supported, Two-way	
Local Control	-	Front Panel
Remote Control	RS-232, TCP/IP and Web GUI	
Group Control	Optional Hardware Controller	
Link Interface	1 Gbit Ethernet	
Traffic Modes	Unicast, Multicast	
Ethernet Switch Type	Managed L2 Recommended	
Copper Port	1x RJ45	
PoE Specification	802.3at PD device	
Fiber Port	-	1x SFP
Housing	Metal Enclosure	
Color	Black	
Installation Method	Desktop, Rack 19", Optional Brackets	
Power Consumption	<0.4A, 12V DC	<1A, 12V DC
Operating Temp	0° C ~ 40° C	
Storage Temp	-20° C ~ 60° C	
Dimension (WxDxH)	204 x 95 x 21.5	204 x 131.5 x 30
Net Weight	0.47 kg	0.76 kg



ORDERING INFORMATION

Model No.	Product Description
VIP-2KH-TX	Video-over-IP 2K Encoder Unit, Copper Only
VIP-2KH-RX	Video-over-IP 2K Decoder Unit, Copper Only
VIP-2KH-CTRL	Video-over-IP System Controller (2KH only)
VIP-4KH-TRN	Video-over-IP Decoder Unit, Copper & Fiber
VIP-4KH-CTRL	Video-over-IP System Controller (4KH only)



VIP-COP by ABERMAN is a family of high-performance Video-over-IP extenders based on the Aspeed chipset and utilizing JPEG2000 technology. Both the Transmitter/Encoder and Receiver/Decoder have a standard copper RJ45 port. The encoder supports resolutions up to 4K60 4:4:4, with audio embedding or de-embedding. The decoder's output scaler supports up to 4K30 4:4:4, with audio de-embedding and microphone embedding, transmitted to the encoder's audio output (for point-to-point connections only). The device also supports USB 2.0/KVM/1G Ethernet, bidirectional RS-232, two-way IR, and POE. Guest control via RS-232, IR, and CEC are supported. A built-in H.264 auxiliary stream supports multiple API commands for flexible configuration and can be used by third-party management applications for video preview. The system is based on Linux and provides flexible management methods in intelligent 1G Ethernet networks.



VIP-OPT units are ultimate-performance Video-over-IP extenders also based on the Aspeed chipset and utilizing JPEG2000 technology. Both the Transmitter/Encoder and Receiver/Decoder featured a standard copper RJ45 port and fiber SFP slot in a single housing. Using these slots the extension distance may reach dozen kilometers long, depending on the SFP module parameters and gives full immune to EMI interference. The encoder supports resolutions up to 4K60 4:4:4, with audio embedding or de-embedding. The decoder supports up to 4K60 4:4:4, with audio de-embedding. The device supports ARC/eARC/S/PDIF/Analog audio return functions, as well as USB 2.0/KVM/Camera, 1G Ethernet, bidirectional RS-232, bidirectional IR, and POE. Guest control via RS-232, IR, and CEC is supported. Two channels of relay ports and two channels of I/O ports for contact control are built in. Dante AV-A mode is supported with license activation. Built-in MJPEG Substream supports multiple API commands for flexible configuration and can be used by third-party management applications for video content preview. The Linux-based system provides flexible management methods on intelligent 1G Ethernet networks.

SPECIFICATIONS

Model	VIP-COP	VIP-OPT
Compression	JPEG2000 by Aspeed	
HDMI Specification	HDMI 2.0a	HDMI 2.0b
HDCP Specification	HDCP 1.4/2.2	
Encoder Input	up to 4K60 4:4:4	
Decoder Output	4K30 4:4:4	4K60 4:4:4
HDR	HDR10, HLG passthrough	
Preview Stream	Built-in H.264 on Encoder	
Matrix Routing	Supported	
VideoWall Mode	up to 9x9	
Display Bezel Compensation	Supported	
Multiview Mode	Fixed to Display	
Encoder HDMI Output	Passthrough	
HDMI Audio	LPCM2/5.1/7.1, Dolby Digital, Dolby Digital+ Dolby True HD, Dolby Atmos, DTS 5.1 DTS-HD Master Audio, DTS:X	
USB Specification	USB 1.1/2.0	
KVM Matrix	Supported	
Analog Audio	Supported, Two-way	
Digital Audio	-	SPDIF, Reverse
Audio Return Channel	-	ARC, eARC
Free Audio Routing	Supported	
IR Extension	Supported, Two-way	
RS232 Extension	Supported, Two-way	
GPIO Ports	-	Supported
Relay Ports	-	Supported
Local	-	Front Panel
Remote	IR, RS-232, TCP/IP and Web GUI	
Group Control	Optional Hardware Controller	
Link Interface	1 Gbit Ethernet	
Traffic Modes	Unicast, Multicast	
Ethernet Switch Type	Managed L2 Recommended	
Copper Port	1x RJ45	
PoE Specification	802.3at PD device	
Fiber Port	-	1x SFP
Dante AV-A™	-	Optional
Housing	Metal Enclosure	
Color	Black	
Installation Method	Desktop, Rack 19", Optional Brackets	
Power Consumption	<1A, 12V DC	
Operating Temp	0° C ~ 40° C	
Storage Temp	-20° C ~ 60° C	
Dimension (WxDxH)	204 x 100 x 21.5	204 x 136 x 25.5
Net Weight	0.5 kg	0.6 kg



ORDERING INFORMATION

Model No.	Product Description
VIP-COP-TX	Video-over-IP Encoder Unit, Copper Only
VIP-COP-RX	Video-over-IP Decoder Unit, Copper Only
VIP-OPT-TX	Video-over-IP Encoder Unit, Copper & Fiber
VIP-OPT-RX	Video-over-IP Decoder Unit, Copper & Fiber
VIP-CTRL	Video-over-IP System Controller (COP & OPT)



aCAMBAR Series by ABERMAN are All-in-One UltraHD USB Cameras with built-in beamforming microphone and fullrange speaker. Designed for small and medium-sized conference rooms this solution significantly reducing wiring and saving space and time. Many smart features and AI algorithms, such as automatic framing, speaker tracking, and smart gallery, provide more intelligent and user-friendly experience.

Video output interfaces complies to HDMI 1.4b specification. The internal scaler allows to output 2160p resolution at 30fps and multiple lower resolutions from 1080p. The high quality UHD CMOS sensor with a 55dB SNR effectively reduces image noise in low-light conditions. The 2D & 3D noise reduction significantly lowers image noise, ensuring clear images in low-light situations. Camera featured with 120° wide-angle lens, 5x digital zoom, and ePTZ support with pan/tilt +/-15°, the optical lens are designed for conference use, ensuring clear coverage of all the participants. The wide horizontal field of view, can cover the demands of extra-large conferencing room and other scenarios need larger optical zoom.

Thanks to built-in advanced AI capability and algorithms, cameras can support precise speaker tracking. Cameras provide a budget-friendly solution for live streaming, conferencing and education, using the high-quality UHD CMOS sensors insures the ultimate picture quality.

Built-in AI algorithms for face and human shape recognition automatically adjust the lens to frame participants as they move. The sound source positioning algorithm locks onto the speaker, focusing on them without manual intervention. This allows remote attendees to clearly see everyone, making the communication in meetings more vivid and natural.

The enhanced functionality of audio processing gives more power for distance voice pickup. The built-in beamforming microphone array uses a specially designed the low-distortion lateral beamforming algorithms to directly target the speaker, ensuring balanced audio pickup with the range of up to 6 meters. The overall distance can be extended by connecting the external microphones, check optional features list.

Thanks to built-in speaker the aCAMBAR cameras are able to provide the complete sound reinforcement. The full-range high-fidelity speaker is professionally tuned to effectively reduce sound interference, outputting rich bass, full midrange, and clear treble, with natural and authentic human voices along with clear and natural sounds.

There are several additional options available to expand the possibilities and ensuring that these cameras will be able to satisfy customer needs and give a real all-in-solution:

- built-in port with PoE for cascading external microphones
- wired & wireless BYOM support option over LAN or WiFi
- HDMI input port for external video source device

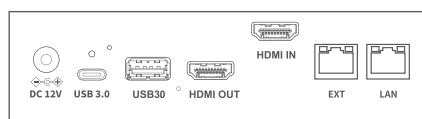
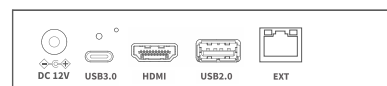
ORDERING INFORMATION

Model No.	Product Description
aCAMBAR	All-in-One UltraHD ePTZ Camera
aCAMBAR-C	All-in-One UltraHD ePTZ, Cascading Mic, Camera
aCAMBAR-B	All-in-One UltraHD ePTZ, BYOD Support, Camera
aCAMBAR-H	All-in-One UltraHD ePTZ, HDMI Input, Camera

SPECIFICATIONS

Model	aCAMPBAR / -C	aCAMPBAR-B/-W
PTZ Type	MPTZ & EPTZ	
Horizontal / Pitch	+/-15°	
Digital FOV	121°	120°
Horizontal FOV	110°	110°
Vertical FOV	75°	75°
Video Formats	4K @ 30 / 1080p 60/50	
HDMI	720p60 / 50, 480p60	
Sensor	1/2.5, 8.51Mpx	1/1.8, 20Mpx
Scanning Mode	Progressive	
Digital Zoom	5x	
Minimum Illumination	0.5Lux @ (F1.8, AGC ON)	
White Balance	Auto, Indoor, Outdoor, Push, Manual, VAR	
Backlight	Compensation Supported	
Noise Reduction	2D&3D Digital Noise Reduction	
SNR	≥ 55dB	
Audio	AI-Powered AEC/ANC/AGC	
Speaker	Built-in 8W, Full Frequency	
SPL	96dB @ 0.5m	
Microphone	Built-in Beamforming Array 2/4	
Pickup Distance	6 meters	
External Mics	Supported, Cascading PoE port (optional)	
USB Video Protocol	UVC 1.1~1.5	
Color System/Codec	YUY2 / H.264 / MJPEG / NV12	
USB Audio	Support 1.0 UAC	
Operating System	MS Windows 7(UVC1.1)/8/10/11, Mac OS X	
UVC PTZ Control	Supported (ePTZ)	
I/O Interfaces		
USB Service	1x USB2.0, Type-A	1x USB3.0, Type-A
USB Video	1x USB3.0, Type-C	
HDMI Output	1x HDMI	
HDMI Input	1x HDMI (optional)	
Wired Network		
Mic Cascading	1x RJ45, PoE Support (optional)	
Wireless Network		
WiFi	1x Built-in (optional)	
Collaborate	up to 5 wireless screens (optional)	
Bluetooth	5.0	
Remote Control	Supported	
Installation Method	Desktop, Bracket Supplied	
Power Interface	JEITA type, DC IN 12V, 2A	
Operating Temp	0° C ~ 40° C	
Storage Temp	-40° C ~ 60° C	
Dimension (WxDxH)	600 x 140 x 115	
Net Weight	2.5kg	

REAR PANEL





aCAMP-F Series by ABERMAN are FullHD Professional PTZ Cameras with optional NDI support. Thanks to built-in advanced AI capability and algorithms, cameras can support precise speaker tracking, with the built-in dual mics array or an external microphone. Cameras provide a budget-friendly solution for live streaming, conferencing and education, using the high-quality 1/2.8 inches FHD CMOS sensor with 2.07 million pixels insures the ultimate picture quality.

Video output interfaces complies to HDMI 1.3 and SMPTE424M for 3G-SDI specifications. The internal scaler allows to output 1080p resolution at 60fps and multiple lower resolutions from 720p. Enforced with high quality optical zoom and wide horizontal field of view, can cover the demands of extra-large conferencing room and other scenarios need larger optical zoom. The new generation of intelligent image processing algorithms provide best results for white balance and automatic exposure functions. This feature significantly improves the quality of image output performance. Recommended for using in education recording and broadcasting, distance education, video conferencing, live broadcasting and other scenarios. Enforced with advanced focusing algorithm, the lens can focus quickly, accurately and stable. All the output interfaces give low latency and allows to simultaneously provide high-quality picture at 1080p resolution. Adopting upgraded version of AI technology, pedestrian recognition technology, can accurately determine the location of each person based on information such as pedestrian wearing, body shape, hairstyle, and face recognition, realize automatic identification of target human form and tracking, and automatic frame selection.

The streaming output support for RTSP, RTMP, Onvif, Multicast, SRT, GB/T28181 and other protocols. Camera supports Full NDI protocol, can output nearly lossless NDI encoded video through the network, and backward compatibility with NDI@HX2 protocol, which requires lower network bandwidth and can transmit H.265/H.264 encoded videos with high image quality and low latency. NDI support is an optional function (25 minutes demo mode is provided). The NDI support license could be activated at factory or purchased separately.

ORDERING INFORMATION

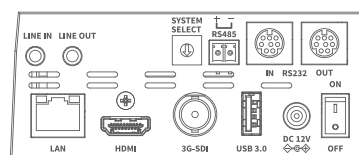
Model No.	Product Description
aCAMP-F12	12x Optical Zoom FullHD PTZ Camera
aCAMP-F12N	12x Optical Zoom FullHD PTZ Camera with NDI
aCAMP-F20	20x Optical Zoom FullHD PTZ Camera
aCAMP-F20N	20x Optical Zoom FullHD PTZ Camera with NDI
aCAMP-F30	30x Optical Zoom FullHD PTZ Camera
aCAMP-F30N	30x Optical Zoom FullHD PTZ Camera with NDI



SPECIFICATIONS

Model	F12	F20	F30
Optical Zoom	12x	20x	30x
Lens (mm)	f3.5~42.3	f4.42~88.5 F1.8~F2.8	f4.42~132.6
Horizontal FOV	72.5°-6.9°	60.7°-3.36°	60.7°-2.28°
Vertical FOV	44.8°-3.9°	34.1°-1.89°	34.1°-1.28°
Video Formats	1080p60 / 59.94 / 50 / 30 / 29.97 / 25		
HDMI/SDI	1080i60 / 59.94 / 50, 720p60 / 59.94 / 50		
Sensor	1/2.8 inches, CMOS, Effective Pixels: 2.07Mpx		
Scanning Mode	Progressive		
Digital Zoom	16x		
Minimum Illumination	0.5Lux @ (F1.8, AGC ON)		
Shutter	1/30s ~ 1/10000s		
White Balance	Auto, Indoor, Outdoor, Push, Manual, VAR		
Backlight	Compensation Supported		
Noise Reduction	2D&3D Digital Noise Reduction		
SNR	≥ 55dB		
Pan Angle	±170°		
Tilt Angle	-30° ~ +90°		
Pan Speed	1.7° ~ 100° /s		
Tilt Speed	1.7° ~ 699° /s		
Image Flip	Supported		
Image Freeze	Supported		
Preset Position	255		
Preset Accuracy	0.1°		
Microphone Array	Built-in Dual Microphones, 100Hz -16KHz		
Analog Audio	Support 3.5mm Line-In		
Input/Output	Support 3.5mm Line-Out		
Digital Audio Output	Support HDMI, USB, LAN, 3G-SDI etc		
Audio Interface	1 x Line In, 3.5mm Jack		
	1 x Line Out, 3.5mm Jack		
Control Interface	VISCA/Pelco-D/Pelco-P 1 x RS485, 1x RS232 VISCA only: 1x RS232 OUT: up to 30m		
Power Interface	JEITA type, DC IN 12V, PoE+ 802.3at, 15W		
LAN Video Codec	H.264 / MJPEG		
Video Stream	First Stream, Second Stream		
First Stream Res	1920x1080, 1280x720, 1024x576 etc.		
Second Stream Res	1280x720, 1024x576, 720x576 etc.		
Video Bit Rate	32kbps~20480kbps		
Bit Rate Control	VBR, CBR		
Frame Rate	1fps ~ 60fps		
Audio Compression	AAC		
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps		
USB Video Protocol	UVC 1.1~1.5		
Color System/Codec	up to 1080p60 YUY2 / H.264 / MJPEG		
USB Audio	32K Sampling Rate, Support UAC2.0		
Operating System	MS Windows 7(UVC1.1)/8/10/11, Mac OS X		
UVC PTZ Control	Supported		
Operating Temp	0° C ~ 40° C		
Storage Temp	-40° C ~ 60° C		
Dimension	142mm (W)×169mm (D)×175mm (H)		
Net Weight	1.5kg		

REAR PANEL





aCAMP-U Series by ABERMAN are UltraHD Professional PTZ Cameras. Thanks to built-in advanced AI capability and algorithms, cameras can support precise speaker tracking. Cameras provide a budget-friendly solution for live streaming, conferencing and education, using the high-quality UHD CMOS sensors insures the ultimate picture quality.

Video output interfaces complies to HDMI 2.0 and SMPTE424M for 3G-SDI specifications. The internal scaler allows to output 2160p resolution at 60fps and multiple lower resolutions from 1080p. Enforced with high quality optical zoom and wide horizontal field of view, can cover the demands of extra-large conferencing room and other scenarios need larger optical zoom. A brand-new CMOS image sensor with a 55dB SNR effectively reduces image noise in low-light conditions. The 3D noise reduction significantly lowers image noise, ensuring clear images in low-light situations.

Enforced with advanced focusing algorithm, the lens can focus quickly, accurately and stable. All the output interfaces give low latency and allows to simultaneously provide high-quality picture at 1080p resolution. Using own proprietary ReID technology, the device identifies the speaking person overview, including his figure, appearance, and outfit. As the speaker moves within the room, the camera automatically tracks them, ensuring the target remains centered. Even if there are interferences or the speaker exits the frame, the camera swiftly recaptures and tracks them upon reentry.

aCAMP-U30 allows to send the precise camera tracking information (PTZ/focus/aperture) to 3D production software, seamlessly blending real-life footage with 3D virtual backgrounds and characters to create a realistic virtual studio, offering a more immersive and interactive visual experience.

The streaming output support for Dante AV-H, NDI®|HX2, HX3, SRT, TCP/IP, HTTP, RTSP, RTMP(s), Onvif, DHCP, GB/T 28181, Multicast, Free-D, etc. and other protocols. By default NDI supported in demo mode only (25 minutes).

Optional features:

- Gravity Sensor - adding support for image auto-flip
- Dante AV-H - adding support for Dante Digital Network
- NDI® - adding full support NDI protocol features

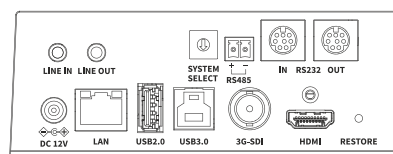
ORDERING INFORMATION

Model No.	Product Description
aCAMP-U12	12x Optical Zoom UltraHD PTZ Camera
aCAMP-U12N	12x Optical Zoom UltraHD PTZ Camera with NDI
aCAMP-U20	20x Optical Zoom UltraHD PTZ Camera
aCAMP-U20N	20x Optical Zoom UltraHD PTZ Camera with NDI
aCAMP-U30	30x Optical Zoom UltraHD PTZ Camera
aCAMP-U30N	30x Optical Zoom UltraHD PTZ Camera with NDI

SPECIFICATIONS

Model	U12	U20	U30
Optical Zoom	12x	20x	30x
Lens (mm)	f4.4~52.8	f6.25~125	f7.1~210
	F1.8~F2.6	F1.58~F3.95	F1.61~F5.19
Horizontal FOV	71°~8.2°	60°~3.5°	59.2°~2.5°
Vertical FOV	42.7°~4.5°	35.7°~2.0°	34.6°~1.4°
Video Formats	1080p & 4K @ 60/59.94/50/30/29.97/25		
HDMI/SDI	1080i60 / 59.94 / 50, 720p60 / 59.94 / 50		
Sensor	1/2.5, 8.51Mpx	1/1.8, 8.42Mpx	
Scanning Mode	Progressive		
Digital Zoom	16x		
Minimum Illumination	0.5Lux @ (F1.8, AGC ON)		
Shutter	1/30s ~ 1/10000s		
White Balance	Auto, Indoor, Outdoor, Push, Manual, VAR		
Backlight	Compensation Supported		
Noise Reduction	2D&3D Digital Noise Reduction		
SNR	≥ 55dB		
Pan Angle	±170°		
Tilt Angle	-30° ~ +90°		
Pan Speed	1.7° ~ 100°/s		
Tilt Speed	1.7° ~ 69.9°/s		
Image Flip	Supported		
Image Freeze	Supported		
Preset Position	255		
Preset Accuracy	0.1°		
Audio			
Analog Audio	Support 3.5mm Line-In		
Input/Output	Support 3.5mm Line-Out		
Digital Audio Output	Support HDMI, USB, LAN, 3G-SDI etc		
Audio Interface	1 x Line In, 3.5mm Jack		
	1 x Line Out, 3.5mm Jack		
Control Interface	VISCA/Pelco-D/Pelco-P 1 x RS485, 1 x RS232 VISCA only: 1x RS232 OUT: up to 30m		
Power Interface	JEITA type, DC IN 12V, PoE+ 802.3at, 15W		
LAN Video Codec	H.265 / H.264 / MJPEG		
Video Stream	First Stream, Second Stream		
First Stream Res	3840x2160, 1920x1080, 1280x720 etc.		
Second Stream Res	720x480 etc.		
Video Bit Rate	32kbps~51200kbps		
Bit Rate Control	VBR, CBR		
Frame Rate	50Hz: 1fps ~ 50fps, 60Hz: 1fps ~ 60fps		
Audio Compression	AAC, G711A		
Audio Bit Rate	96Kbps, 128Kbps		
USB Video Protocol	UVC 1.1~1.5		
Color System/Codec	up to 2160p30 YUY2 / H.264 / MJPEG		
USB Audio	32K Sampling Rate, Support UAC2.0		
Operating System	MS Windows 7(UVC1.1)/8/10/11, Mac OS X		
UVC PTZ Control	Supported		
Operating Temp	0° C ~ 40° C		
Storage Temp	-40° C ~ 60° C		
Dimension (WxDxH)	142 x 169 x 175		170 x 196 x 228
Net Weight	1.5kg		2.0kg

REAR PANEL





aCShare Series by Aberman are BYOD/BYOM wireless presentation system. aCShare and aCShare-MAX are specially designed to feed content to large displays with UHD 4K resolution. System support cross platform connection for wired and wireless sources to display them in different ways.

The **aCShare** unit has built-in Android 10.0 system with 1GB of RAM and 8GB of flash storage. In comparison to the Linux system, its external USB interface not only supports pairing with the transmitter and system upgrades, but also allows users to use USB drives and mouse for a convenient operation on the Android system. This product is equipped with dual 5G network, ensuring surfing the internet while casting the screen. At most, eight devices can be connected to cast 4K high definition screen in the small to medium-sized meeting room. It also support practical functions such as one-to-multiple cast, touchback control and NFC. It supports interactive applications where there are personalized templates to set up.

The main video output of **aCShare-MAX** support resolutions up to 4K30 while the second one is up to 1080p60. The HDMI input port support up to 4K30 signal resolution. Up to 16 devices could be connected to the unit wirelessly within the 1.2Gbps bandwidth channel, delivering the video content and receiving the internet access through the WiFi 6 network. Depending on signal resolution up to 9 sources could transmit their content simultaneously. These sources could be shown in different layouts and user has a lot of choices for splitting display content in varies creative ways. The system based on Android 11.0 system which providing many features and offers stable performance for content presentation tasks. The software casting methods based on the tranScreen developed algorithms. Goes beyond the traditional presentations where only wired cable connection were allowed the aCShare family open a new vision of connect audio and video equipment in conference and meeting rooms, auditoriums and classrooms - to create an easy, fast and efficient way to interact between the colleagues and partners.

The unit housed in the compact aluminum case robust enough to provide protection and cooling for the internal components. It is equipped with 4 external antennas and could be used on a desktop or wall mounted. Thanks to its stylish design unit will be a nice element part of the modern office or meeting room.

ORDERING INFORMATION

Model No.	Product Description
aCShare	UltraHD BYOD Receiver Main Unit
aCShare-MAX	UltraHD BYOM Receiver Main Unit
aCShare-BC	BYOD Button USB Type-C 2K Transmitter Unit
aCShare-BC-4K	BYOD Button USB Type-C 4K Transmitter Unit
aCShare-BH	BYOD Button HDMI 2K Transmitter Unit
aCShare-BH-4K	BYOD Button HDMI 4K Transmitter Unit
aCShare-BU	BYOD Button USB A Transmitter Unit
aCShare-Holder	BYOD 2x Button Desktop Holder
aCShare-RC	Wireless Remote Control

SPECIFICATIONS

Model	aCShare	aCShare-MAX
CPU	H313	RK3568@1.8GHz
GPU	-	Mali-G52 2EE
RAM	DDR 1GB	DDR 2GB
Internal Storage	EMMC 8GB	EMMC 16GB
OS Running	Android 10.0	Android 11.0
File Systems	FAT16/FAT32/NTFS	
Video Files	AVI/TS/VOB/MKV/MOV/ISO WMV/ASF/FLV/DAT/MPG/MPEG	
Image Files	HD JPEG/BMP/GIF/PNG/TIFF	
Audio Files	MP3/WMA/AAC/WAV/OGG/DDP/HD FLAC/APE	
Decoding	H.265 HEVC/MVC 4096x2304@60fps HH.264 AVC/MVC 4096x2304@60fps VP9 up to 4096x2304@60fps VP8 version2 up to 1920x1088@60fps VC1 MPEG-4/2/1 up to 1920x1088@60fps	
WiFi Standards	WiFi5	WiFi6
Hotspot Rate	867 Mbs	1201 Mbps
Hotspot Load	Up to 8 devices	Up to 16 devices
WiFi	5G/2.4GHz Dual	
Bluetooth	Bluetooth V5.0	
Casting		
Hardware/Software	MS-Win, Mac/Android, iOS, Linux, Chrome	
Protocols	tranScreen private, AirPlay, DLNA, Miracast	
Transmission Delay	<150ms @10 meters /1080P	
Distance	30 meters @1080P	
USB 2.0	1x USB2.0 Type A	2x USB2.0 Type A
USB 3.0	-	2x USB3.0 Type A
USB	-	1x USB2.0 Type-C
HDMI Input	-	1x HDMI 4K@60
Audio Input	1x Analog Stereo, mJack 3,5 mm, stereo	
HDMI Main Out	1x HDMI 4K	
HDMI Second Out	-	1x HDMI 1080p
Analog Audio	1x Analog Stereo, mJack 3,5 mm, stereo	
RS232	-	1x RJ11 Connector
LAN	1x RJ45, 100Mbps	1x RJ45, 1Gbps
Indication	Power, Hot Spot, Casting	
Power Consumption	5W	12.5W
Power Supply	DC 5V	~AC 110-240V
Mechanical		
Housing	Aluminum Alloy Enclosure	
Color	Light Grey	
Dimensions (LxWxH)	120 x 70 x 31mm	206 x 125 x 35mm
Weight	1.5 kg	
Operating Temp	0°C ~ 50°C	
Storage Temp	-20°C ~ 60°C	
Relative Humidity	10%~90% RH (non-condensinal)	

