



**ASTON MICROPHONES**

Owners Handbook



# Thank you!

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On behalf of the whole team at Aston Microphones I'd like to thank you for investing in your Aston product.

Our microphones are designed and built in the UK to the most exacting standards. Every Aston product is individually tested at each key stage during manufacture to ensure reliable and consistent performance, and the most musical sound capture possible, so we're sure that your new baby will provide you with many years of perfect service.

Aston microphones are built using a tumbled stainless steel body so there is no paintwork to chip or scratch and legends are laser etched so will never wear off. Our packaging has been designed to save space, and focus on being as environmentally sustainable as possible, using 84% recycled materials and being 100% recyclable.

Your Aston microphone has been voiced and tuned following extensive blind listening tests by a panel of some of the biggest names in British music recording and production. Only when an overwhelming consensus put one particular combination of capsule and circuitry way out in front of both competing microphones and our other prototypes did we approve the designs.

We hope you enjoy what we've created, and thank you for supporting our brand

James Young

Aston Microphones

Hitchin, UK

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# Aston Owners Club

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Please register your product to extend your 2 year limited replacement warranty to 3 years, free of charge.

You'll be automatically given membership to our exclusive Aston Owners Club once you've registered here:

<https://www.astonmics.com/EN/my-aston>

# Aston Origin & Spirit

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Features:

- Wave-form mesh head - this unique design provides shock absorption to protect the capsule, with elastic mesh memory.
- Built-in pop filter using the latest stainless steel mesh-knit technology.
- Direct to stand microphone mounting option.
- 2mm, solid stainless steel, laser-cut and etched chassis.
- Capsule - The Aston Sound - developed by professional artists, engineers and producers.  
<https://www.astonmics.com/EN/Aston-Sound>
- Hi-Spec PCB and electronic components.
- Eco-friendly packaging. Well-designed, re-usable and recyclable packaging.

# Weights & Measures

	Aston Origin		Aston Spirit	
Product length	125mm	4.92in	175mm	6.89in
Product width	54mm	2.13in	54mm	2.13in
Product weight	450g	0.99lb	625g	1.38lb
100% recyclable and biodegradable card box (84% recycled fibre)	72g	0.16lb	72g	0.16lb
100% recyclable and biodegradable card sleeve	22g	0.05lb	22g	0.05lb
100% recyclable non cross-linked Ethafoam 150 PE25 insert	40g	0.09lb	37g	0.08lb



# Aston Origin

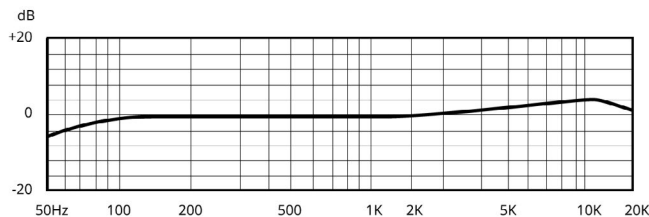
The Aston Origin is a high-performance cardioid pattern capacitor microphone utilising a one inch capsule with a gold evaporated Mylar diaphragm. It is versatile enough to use with most instruments, excelling on both acoustic guitar and vocals. Its hand-selected capsule is teamed with high-end transformer-less circuitry using only the highest quality selected components.

The Origin is designed to deliver a direct, smooth and intimate sound with the perfect balance of warmth and clarity for a natural-sounding and transparent recording.

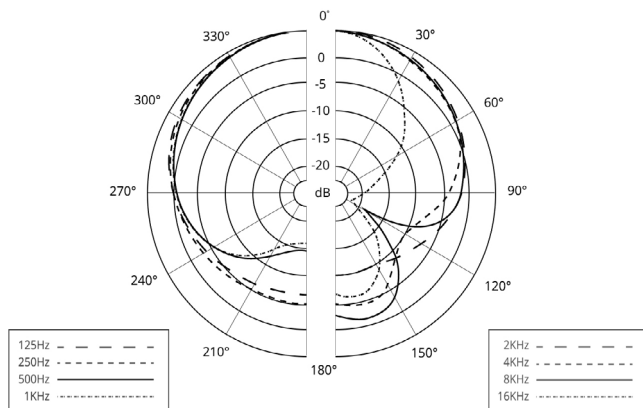
Origin specifications:

Transducer Type: Capacitor  
Acoustic Operating Principle: Pressure Gradient  
Directional Polar Pattern: Cardioid  
Frequency Response: 20Hz - 20kHz (+/- 3dB)  
Equivalent Noise Level: 18dB A-Weighted  
Sensitivity at 1 kHz into 1kohm: 23mV/Pa  
Maximum SPL for THD 0.5%: 127dB  
Pad Switch: -10dB/0 dB  
Low-Cut Filter: 80Hz  
48 Volt Phantom power (+/- 4 Volts) is required for operation

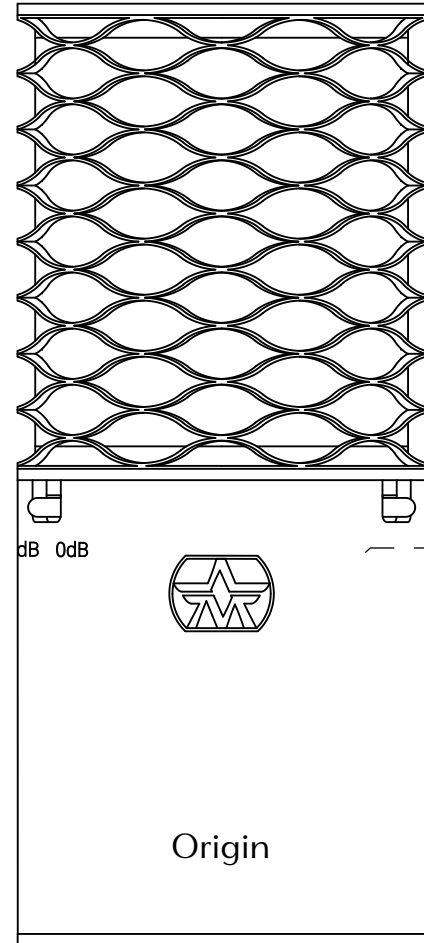
## Frequency Response



## Polar Pattern



# Cardioid Condenser



# Aston Spirit

The Aston Spirit is a high-performance, switchable pattern, microphone utilising a one inch, dual diaphragm, gold evaporated capsule. A switch on the mic body selects from Omni, Cardioid or figure-of-eight polar patterns. It is versatile enough to use with most instruments in addition to main and backing vocals. Its hand-selected capsule is teamed with high-end transformer balanced circuitry using only the highest quality electronic components. Its dual pad option allows it to accommodate very high SPLs while its low cut filter cuts the ultra-lows.

The Spirit is designed to deliver a beautifully open sound with sparkling harmonics. This microphone is capable of delivering a stunningly natural and transparent sound with just a subtle hint of flattery, capturing all the detail in the high range but without adding the harshness that some capacitor microphones are prone to.

Spirit specifications:

Transducer Type: Capacitor

Acoustic Operating Principle: Pressure Gradient

Frequency Response: 20Hz - 20kHz (+/-3dB)

Equivalent Noise Level: 14dB A-Weighted

Sensitivity at 1kHz into 1kohm: 23.7mV/Pa

Maximum SPL for THD 0.5%: 138dB

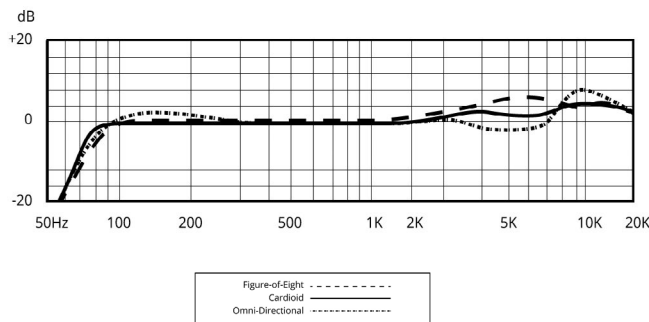
Polar pattern: Omni/Cardioid/Figure-of-Eight

Pad Switches: -20dB/-10dB/0dB

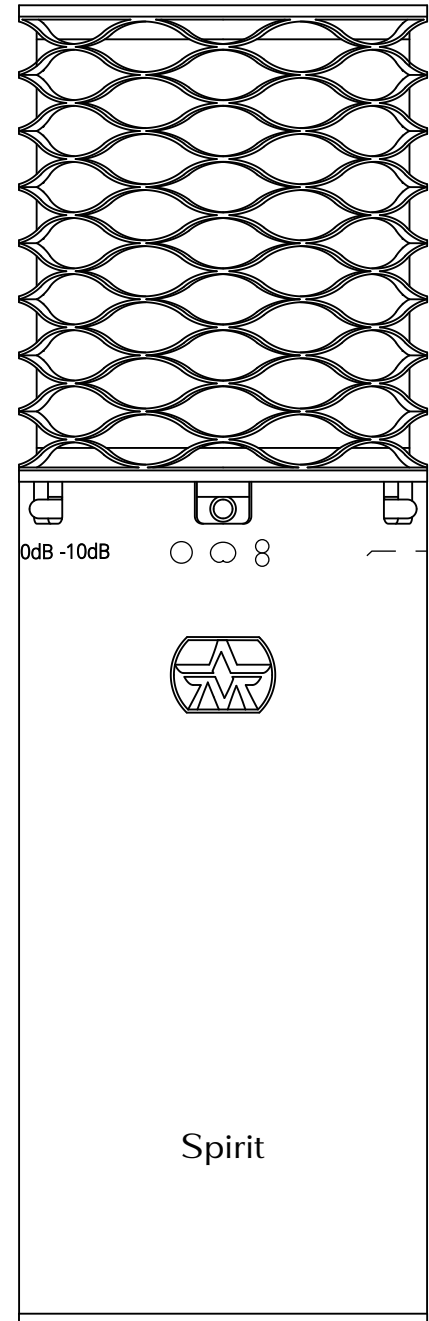
Low-Cut Filter: 80Hz

48 Volt Phantom power (+/- 4 Volts) is required for operation

## Frequency Response

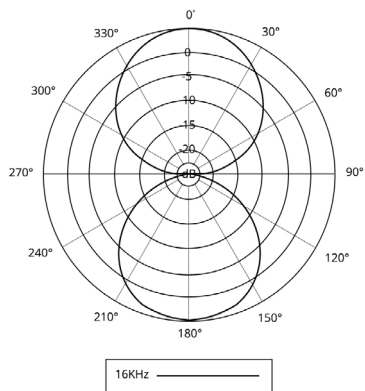


# Multi-Pattern Condenser

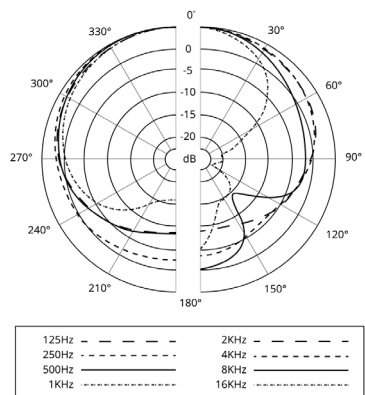


## Polar Patterns

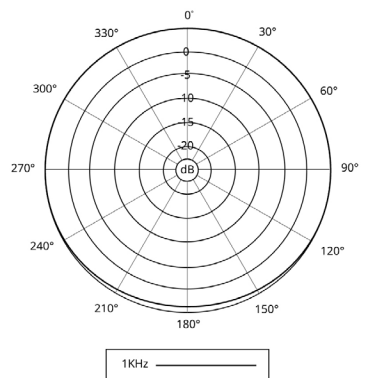
### Figure-of-Eight



### Cardioid



### Omni-Directional



# Aston Starlight & Starlight Stereo Pair

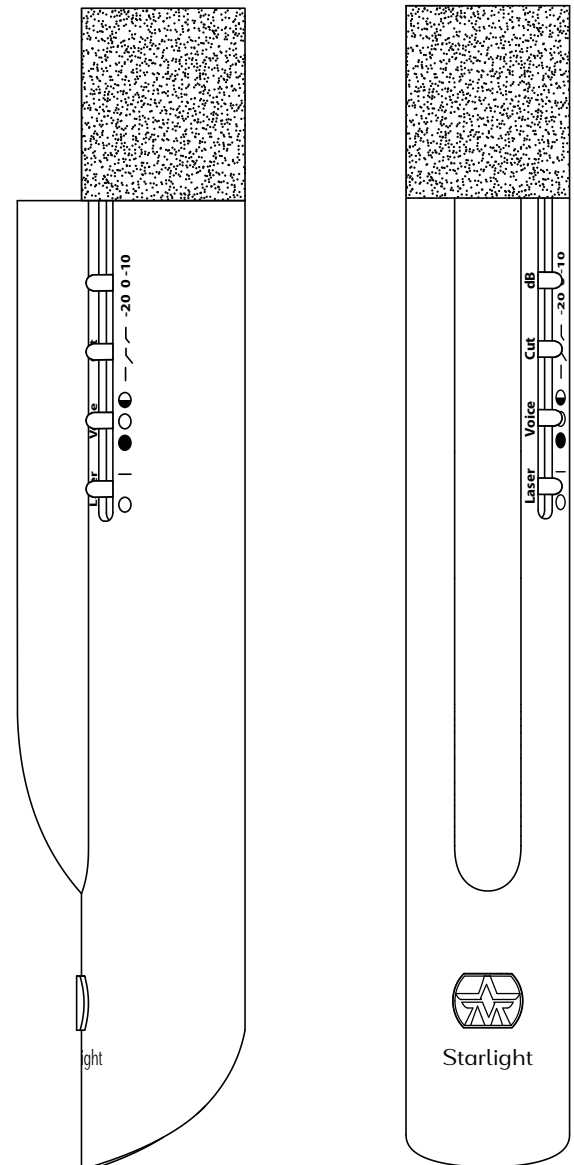
## Features:

- Laser-alignment sight for placement accuracy and recording recall
- Sintered metal head - unique & innovative design protects capsule and provides excellent acoustic properties
- Gold-sputtered 20mm capsule, chosen in blind tests by a panel of 50 top producers
- PCB - market-leading electronic design
- 1.5mm, solid stainless steel, laser-cut and etched chassis
- 3-position voicing switch: Vintage, Modern and Hybrid settings
- Pad switch: -20dB/ -10dB/ 0dB
- 3-position Low-Cut Filter
- Stereo pair comes with a mounting bar, 2 mic clips and 2 windscreens

## Weights & Measures

	Aston Starlight		Aston Starlight Stereo Pair	
Product length	181mm	7.13in	181mm	7.13in
Product width (with laser)	36mm	1.42in	36mm	1.42in
Product width (without laser)	26mm	1.02in	26mm	1.02in
Product weight	251g	0.55lb	502g	1.1lb
Accessory weight	52g	0.11lb	392g	0.86lb
100% recyclable and biodegradable card box (84% recycled fibre)	72g	0.16lb	164g	0.36lb
100% recyclable and biodegradable card sleeve	22g	0.05lb	55g	0.12lb
100% recyclable non cross-linked Ethafoam 150 PE25 insert	44g	0.10lb	130g	0.29lb

# Small Diaphragm Cardioid Condenser



# Aston Starlight

The Starlight is a small diaphragm, end fire condenser microphone featuring a sintered metal head which combines extreme durability with extraordinary audio transparency.

The addition of a laser not only makes precise alignment easy, it also helps achieve consistency when re-establishing the microphone position after de-rigging.

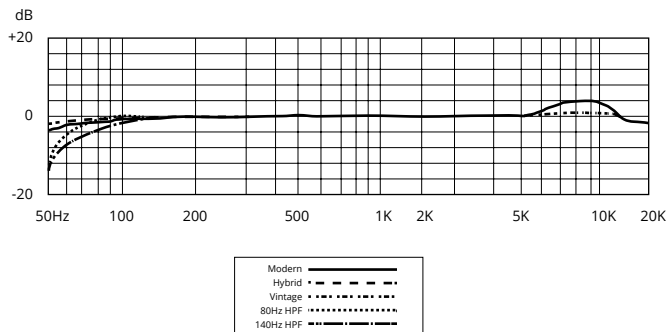
The 20mm gold sputtered capsule feeds into custom designed transformerless electronics, with low noise and ultra-low distortion as priorities. Using proprietary circuitry at the input stage of the mic amp rather than simple post-EQ, we have also given Starlight three different voices accessed via a switch on the microphone body.

Vintage voicing [●] introduces some subtle low end lift while gently rolling back the extreme highs for a classic warm, smooth sound. The 'middle' Modern setting [○] adds some airy high-end lift while the third Hybrid setting [◐] delivers a nominally flat response but with just a little low end lift. With its laser guide, sintered head and multiple voices, Starlight is the most comprehensive instrument mic package on the market today.

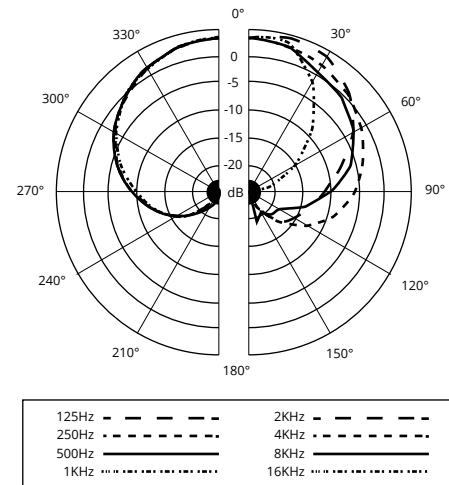
Starlight audio specifications:

Transducer Type: Capacitor  
 Acoustic Operating Principle: Pressure Gradient  
 Directional Polar Pattern: Cardioid  
 Frequency Response: 20Hz - 20kHz (+/- 10dB)  
 Equivalent Noise Level: 15dB A-Weighted  
 Sensitivity at 1kHz into 1kohm: 42.1mV/Pa  
 Maximum SPL for THD 0.5%: 130dB/ 140dB/ 150dB  
 Signal-to-Noise Ratio (rel. 94dB SPL): 79dB A-Weighted  
 Pad Switches: -20dB/-10dB/0dB  
 Low-Cut Filters: 80Hz, 140Hz  
 48 Volt Phantom power (+/- 4 Volts) is required for operation

## Frequency Response



## Polar Pattern



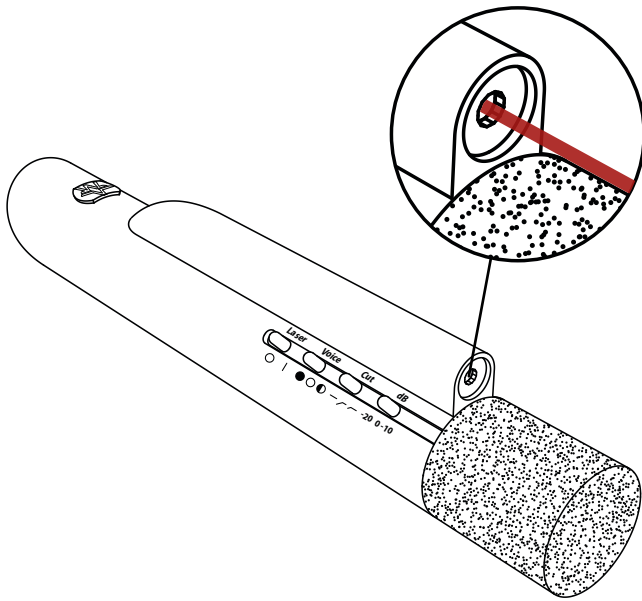
Starlight Laser

The Aston Starlight is equipped with a Class 2 Laser driven by 48V phantom power provided via the XLR cable from a mixing console/mic preamp. It does not require any batteries. The Starlight's laser is emitted through the laser aperture located on the top front of the microphone. Switch the Laser to the "I" position to turn it on and "O" position to turn it off. The Laser is not designed to be left on during use.

Starlight laser specifications:

Wavelength: 650nm  
 Divergence (Spot Size or Beam Diameter): 10x10mm @ 5m  
 Maximum Average Power: 0.9mW





### CAUTION

Though the laser is of a very low power, the following precautions should be observed. Never aim a laser into the eyes or stare directly into the beam and only activate the laser while setting up the microphone position. Check that nobody is in the path of the laser before switching it on. When working outdoors, ensure that the laser is never aimed into the flightpath of aircraft or into the audience. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



# Aston Stealth

## Features:

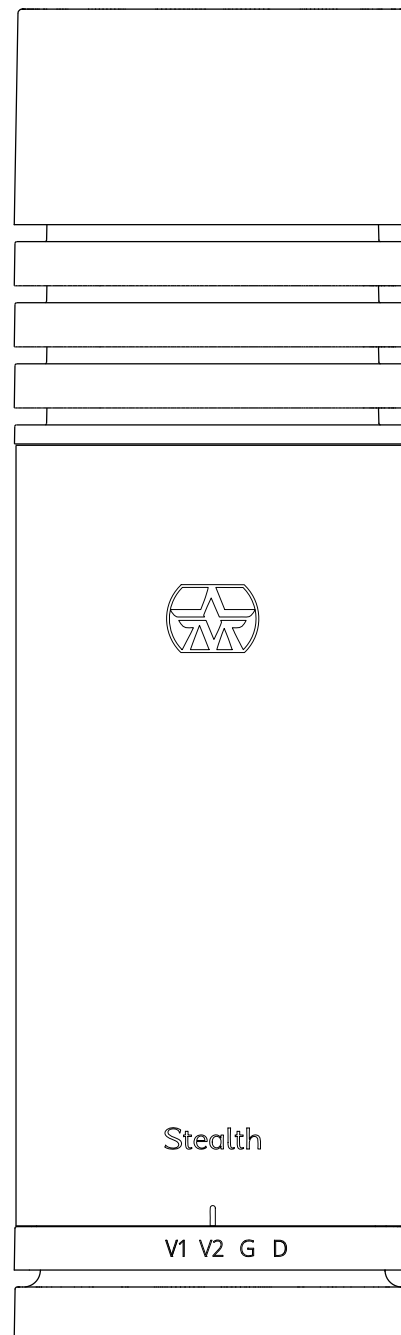
- Broadcast quality cardioid microphone for studio and stage
- 4 settings – 4 different voices – 4 discrete signal paths
- Works with and without 48V phantom power
- Autodetect function senses 48V and activates built in preamp
- Class A Mic Pre built in – no external gain lifting device required
- Unique Sorbothane internal shock mount
- Excellent off axis (side) rejection
- Built-in purple LED phantom power indicator – switchable for Stealth mode
- Aston's legendary build quality
- Sound developed by 92 top engineers, producers and artists and the Aston 33 panel
- Supplied with quick release stand mount

## Weights & Measures

	Aston Stealth	
Product length	196mm	7.72in
Product width	58mm	2.28in
Product weight	692g	1.52lb
Clip - US/European thread adaptor	48g	0.10lb
100% recyclable and biodegradable card box (84% recycled fibre)	144g	0.28lb
100% recyclable and biodegradable card insert	154g	0.30lb
100% recyclable and biodegradable card sleeve	22g	0.05lb



# Studio & Live Microphone



# Aston Stealth

The Aston Stealth is a large chassis, broadcast quality, end fire dynamic mic with four switchable voice settings, each tailored to deliver unparalleled performance across a broad range of applications: The settings are:

**V1 (Vocal 1):** This was voted top in blind testing for a range of male vocal takes, regardless of the pitch of the singer.

**V2 (Vocal 2):** This setting came top for a range of female vocal takes. As with V1 this was more to do with timbre than pitch. In both cases these results are subjective and we recommend trusting your ears to find the best settings for your needs.

**G (Guitar):** At home on anything from Spanish guitar through to raucous guitar cabs!

**D (Dark):** A vintage sound, reminiscent of classic ribbon mics.

Stealth works with or without 48V phantom power. In passive mode (unpowered) the active circuit is completely bypassed and Stealth operates with the simplest possible signal chain to give a beautifully clean sound.

When in active mode Stealth features a high quality built-in Class A Mic Pre Amp, dispensing with the need for an expensive external gain lifting device.

A unique built-in Autodetect function senses the presence of 48V phantom power and will automatically switch the mic to active mode.

Phantom power mode is indicated by purple LED floodlights. These can be switched off when the mic is to be heard but not seen, for example in broadcast and video environments.

Stealth includes a proprietary internal shock mount design with the capsule suspended in mid-air, completely isolated from the mic chassis, and supported at 3 points by Sorboathane polymer hemispheres.

Stealth comes supplied with a specially designed adjustable quick-release stand mount.

## Stealth specifications:

Transducer Type: Moving coil

Directional Polar Pattern: Cardioid

Frequency Response: 20Hz - 20kHz

Equivalent Noise Level: 10dB

Sensitivity (passive mode) at 1 kHz into 1 kOhm: ave. 1mV/Pa\*

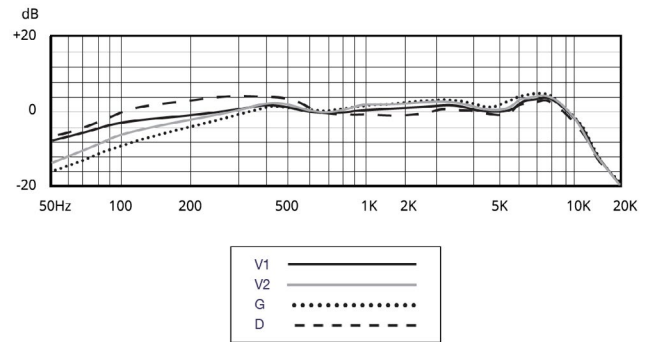
Sensitivity (active mode) at 1 kHz into 1 kOhm: ave. 150mV/Pa\*

Maximum SPL for THD 0.5%: 140dB

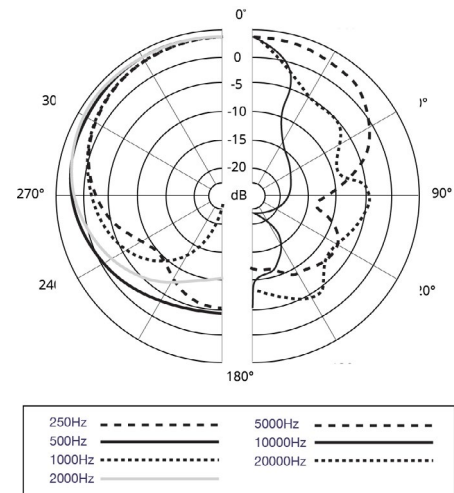
\* Varies across the 4 voices

# Studio & Live Microphone

## Frequency Response



## Polar Pattern



### Proposition 65 information for California residents:

WARNING: This product contains chemicals known to the State of California to cause cancer and cause birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

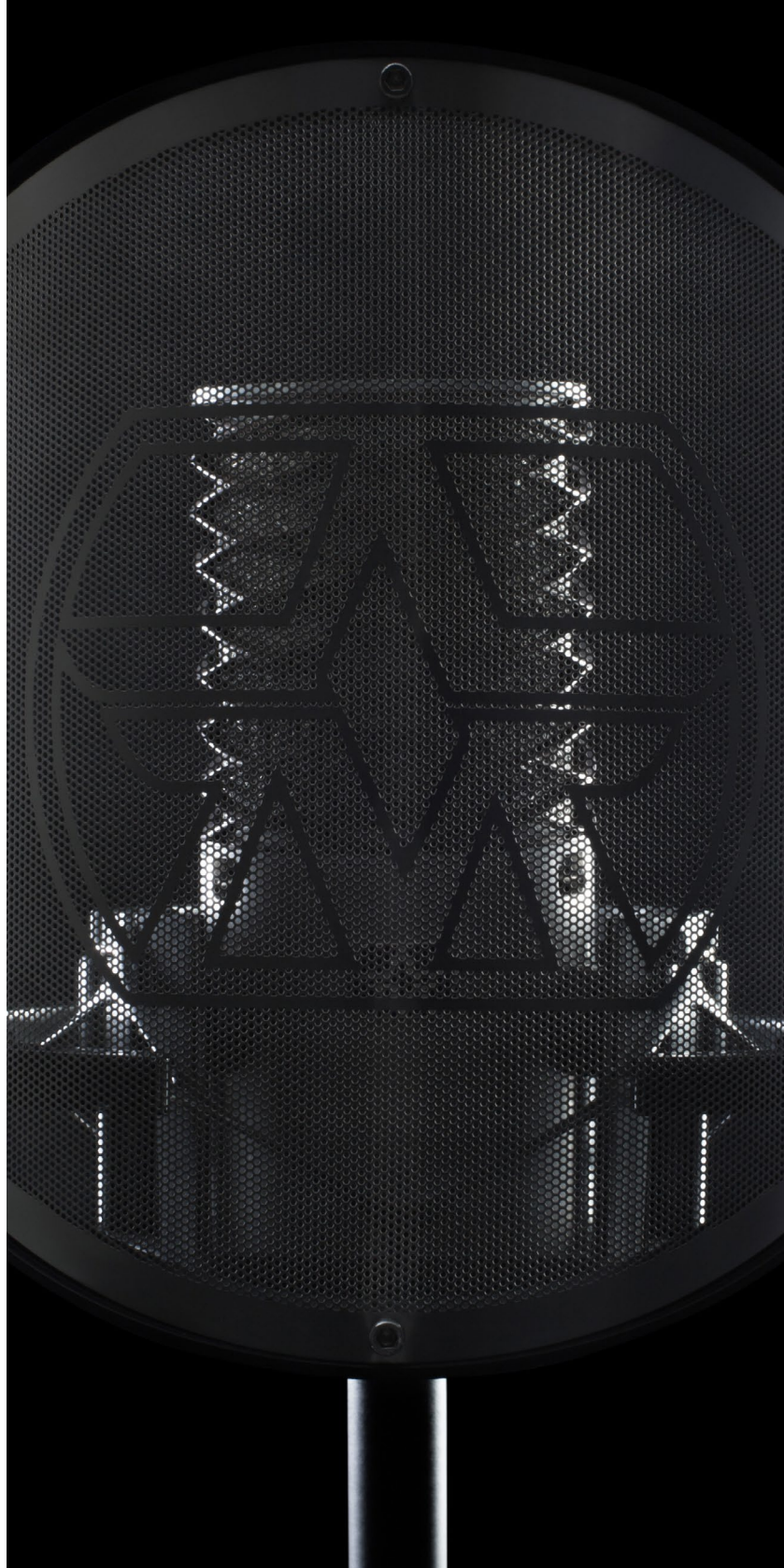
# Aston Accessories

## Features:

- Aston SwiftShield (Universal Shock Mount and Pop Filter Set), Aston Shield GN (Pop Filter and Gooseneck) and Aston Swift (Universal Shock Mount)
- Universal mic mount - fits mics 40 to 60 mm diameter (full list of compatible mics on [www.astonmics.com](http://www.astonmics.com))
- Ultimate mechanical isolation with Aston's 'ShockStar' technology
- Super-hardwearing Aluminium and glass-fill nylon construction
- Ultra-swift proprietary mounting system
- Solid stainless steel pop shield with 'Hextech' filter holes
- Deluxe gooseneck mounts to any stand

## Weights & Measures

	SwiftShield		Shield GN		Swift	
Product length (assembled)	175mm	6.89in	135mm	5.31in	170mm	6.69in
Product width (assembled)	145mm	5.71in	60mm	2.36in	145mm	5.71in
Product height (assembled)	160mm	6.30in	530mm	20.87in	60mm	2.36in
Product weight	190g	0.42lb	270g	0.6lb	140g	0.31lb
Shield surface area	158 x 135mm	6.22 x 5.31in	158 x 135mm	6.22 x 5.31in	n/a	n/a
Gooseneck length	n/a	n/a	392mm	15.43in	n/a	n/a
100% recyclable blister pack	90g	0.2lb	90g	0.2lb	90g	0.2lb



# Aston SwiftShield, Shield GN & Swift

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Aston SwiftShield combines the Aston Swift shock mount and the Aston Shield pop filter into one bundle, to give you the perfect set up for your studio vocal mic.

The Aston Swift shock mount takes microphone mounting to the next level of ease. With 2 quick release spring clips designed to fit a wide range of mics, from 40-60 mm diameter, mounting your microphone takes seconds.

We have reconceived the shock system, and as with all our products worked from the ground up on an entirely new design idea. The 'ShockStar' suspension eliminates the need for fiddly rubber bands, but offers a high level of elasticity for maximum isolation. As with all Aston products, the use of novel materials and our unique, architectural, approach to design is setting new standards for the industry.

The pop filter itself features a unique, solid stainless steel shield, with precisely acid etched hexagonal filter holes, to give crystal clear vocals, with perfect acoustic performance for plosive (pop) control. It also presents a large surface area and curves around the mic, so vocalist movement is never an issue. Together with your mic, the Aston SwiftShield set will give you everything you need for vocal mic applications, and really make your set up stand out from the crowd.

The Aston Shield GN pop filter has been engineered to give you a perfect fit on any mic stand in seconds and has one of the best quality goose-necks you'll ever see... no more limp or hanging pop shields, no more fiddly thumb screws... The Aston Shield GN has a big, sturdy, crocodile clip to mount quickly and easily onto mic stands of any shape or size, and has an exceptionally well-engineered goose-neck support with matte-black rubberised finish, which stays exactly where you put it. You'll LOVE using this product.



# Aston Halo & Halo Shadow

## Features:

- Hi Tech construction with patented PET felt
- Radically improves isolation
- Double curved form improves isolation top and bottom as well as at the sides
- Much bigger surface area and depth of acoustic material
- Better diffusion, for both direct source and primary reflections to the rear of the filter
- Lightweight
- Proprietary 'easy-mount' hardware also accommodates your microphone mounting hardware

## Weights & Measures

	Aston Halo		Aston Halo Shadow	
Product depth	302mm	11.89in	302mm	11.89in
Product width	530mm	20.87in	530mm	20.87in
Product weight	1.85kg	4.08lb	1.85kg	4.08lb
100% recyclable and biodegradable card box (84% recycled fibre)	2.25kg	4.96lb	2.25g	4.96lb
100% recyclable and biodegradable covering box	0.8kg	1.77lb	0.8kg	1.77lb



# Aston Halo & Halo Shadow

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The Aston Halo/ Halo Shadow microphone screen is designed to address the shortcomings of other 'reflection filter' style products combining low weight with minimal audio colouration.

Designed, engineered and tested in the UK, the Halo combines modern advances in material technology and production, cutting edge patented manufacturing processes and rigorous acoustic testing to bring you the ultimate in portable acoustic devices. Using patented PET Felt and beautifully engineered hardware components, your Aston Halo has been created to the most exacting standards. PET felt is one of the most lightweight and efficient, technical acoustic products available on the global market today. An additional side benefit is that PET acoustic felt is made from 70% recycled PET plastic bottle material and so is also very environmentally friendly.

The Halo is actually made from two PET felt shells, with 100mm of loose PET acoustic material sandwiched internally. These rigid shells provide the structure as well as the absorbing surface, removing the need for any internal support, making Halo incredibly light and strong. Halo's hardware allows easy, fast and stable mounting. Every Aston Halo is individually tested during manufacture to ensure reliable and consistent performance and the most musical sound capture possible.

The Halo offers radically improved performance while maintaining the green credentials of our manufacturing process (as with our mic packaging which is 100% recyclable and 84% recycled material). It also contributes both sonically and visually to the creative environment, helping the artist to get the best from every take. In our opinion, the Halo offers the very best possible solution for portable room acoustics available today.

## How to setup and use my Aston Halo

The Halo can greatly improve the quality of recordings made in untreated or partially treated rooms. To get more information about how to setup and use the Aston Halo reflection filter please visit:

<https://www.astonmics.com/EN/product/Halo/Halo#tab4>

# Using Your Aston Microphone

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If you are an experienced audio practitioner, then you'll need little instruction in using Aston microphones - just apply standard 48 Volt Phantom power to our capacitor models and you're in business. For the Spirit and Origin models, the Aston badge denotes the front of the microphone when using cardioid pattern for main vocals, guitars and so on. When using the Spirit in figure-of-eight mode, the logo denotes the 'positive' side of the microphone. The Starlight is end-fire, meaning that it needs to be aimed directly at the sound source where the laser helps with exact placement.

You can find detailed information on using your Aston product, and hints & tips on setting up for best results, here:

<https://www.astonmics.com/EN/product/Mics/Origin#tab4>

<https://www.astonmics.com/EN/product/Mics/Spirit#tab4>

<https://www.astonmics.com/EN/product/Mics/Starlight#tab4>

# Microphone Terminology & General Care

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## Microphone Terminology

**Pad:** The pad switch on a microphone reduces its output level, which is often necessary when working close to very loud sound sources such as kick drums, guitar amplifiers or brass instruments. At very high sound levels the electrical signal generated by the microphone can cause distortion both in the microphone circuitry itself and in the pre-amp to which it is connected. If your pre-amp meters indicate a safe level but you are still hearing distortion, then try the 10dB pad position. Mics that have a 20dB pad setting can deal with even higher sound levels, but unless you are in the habit of recording tank battles at close quarters, you'll probably find that the 10dB pad does the trick. Do not use the pad when working with quiet or moderate level sounds as under those circumstances it may lead to slightly more background noise (circuit hiss).

**Low-cut Filter:** The low cut filter reduces the level of signals at the bottom of the audio spectrum and in most cases will have little or no effect on the tonality of vocal recordings. Its purpose is to reduce the level of those very low frequencies

that you don't need to capture, and unless you are recording bass instruments or kick drums, you can usually leave the filter engaged. Where the mic has two filter settings, try both and use the highest one if you can't hear any tonal changes in what you are recording. When recording vocals a low-cut filter will reduce rumble from traffic noise or from vibrations passing up the mic stand from the floor and will also compensate for the bass lift that occurs naturally when a cardioid pattern mic is used close to the mouth. It can also help reduce the effect of 'popping' when enunciating M, P and B sounds, though a separate pop screen is to be recommended where the singer works close to the microphone.

### General Care

While Aston microphones are amongst the most durable capacitor microphones on the market, they should still be handled with care. If cleaning is required, use only a damp cloth or pre-moistened screen wipe pads and avoid harsh or solvent based cleaners. Also never spray any type of contact cleaner or polish near the capsule or basket area.

The high impedances inside capacitor microphones make them susceptible to moisture or condensation, so if you hear any strange crackling sounds, leave the mic to dry out in a warm room. This is particularly important when moving a microphone from a cold vehicle to a warm studio where a vocalist's damp breath can otherwise cause problems. Once dried out the performance should return to normal.

Obviously dropping microphones is to be avoided but one advantage of the Origin and Spirit basket design is that the outer Wavespring is designed to deform if subjected to a knock or impact, thus absorbing much of the energy. This can easily be pushed back into place making dented baskets a thing of the past. When not in use, it is good practice to store microphones in their boxes or to cover them with a plastic bag to avoid the ingress of dust.

When using a typical boom stand, make sure that the boom is aligned with one of the three legs as this provides the most stable configuration and reduces the risk of toppling.







ASTON MICROPHONES



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