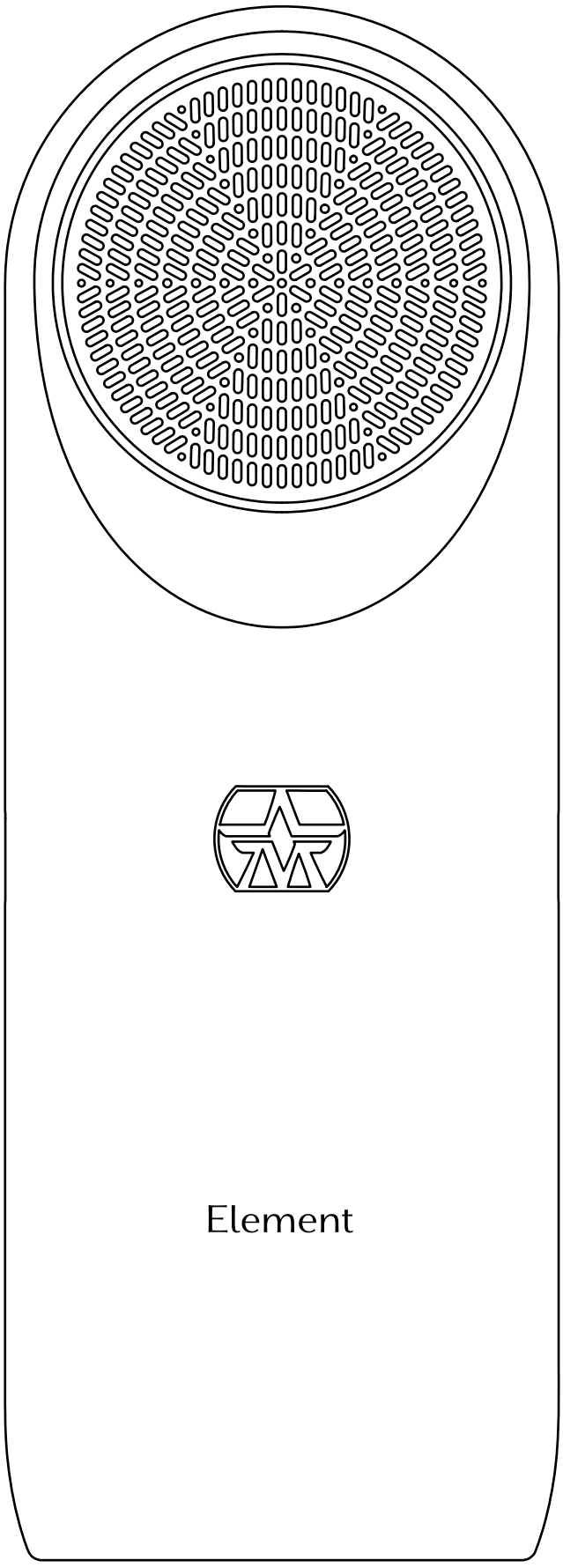
Studio Microphone



Aston Element

Aston Element is a large diaphragm active studio microphone developed, by public vote, to offer unprecedented performance. Its unique **Ridyon™** capsule takes the best features of dynamic, condenser and ribbon mic tech, without the drawbacks each of these traditional favourites often suffer from.

Element's backlit LED logo badge glows Aston purple when the active mic is receiving the 48v phantom power it requires (The LEDs are dual-purpose, also functioning as an intrinsic part of the audio signal path).

Anechoic tests by NTi Audio, the world's leading authority in scientific audio measurement, have rated the new mic at 3.8 dBA (A-weighted) making Element **the world's quietest studio microphone!** It also has the **widest frequency response of any electromagnetic** (ribbon or moving coil) **microphone ever made**.

Element is supplied with a proprietary magnetic Pop Filter which all-but eliminates unwanted plosives and 'esses'.
It automatically attaches in seconds, in exactly the correct position for use, and the magnets used to achieve this are shielded from the mic's capsule to ensure the audio remains completely free of artefacts. You can turn the pop shield upside down on the mic when recording instruments, so you don't have to keep putting it away between takes. Also included is a custom Shock Mount, designed specifically for Element, which clips quickly and easily to the mic.

Element is covered by a full 10 year warranty.

Project Element

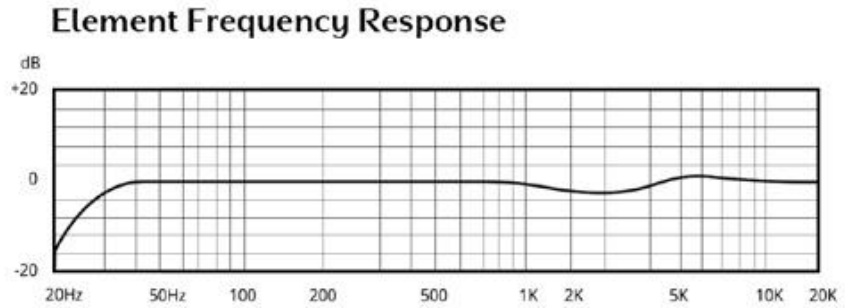
In a world-first, Aston Element was developed in conjunction with the musicians and producers who would ultimately be using it. More than 4000 people signed-up to participate in a series of blind listening tests, the results of which guided the Aston engineers in modifying the prototypes, until Element was outperforming not only direct rival mics but some far costlier options too.

Element specifications:

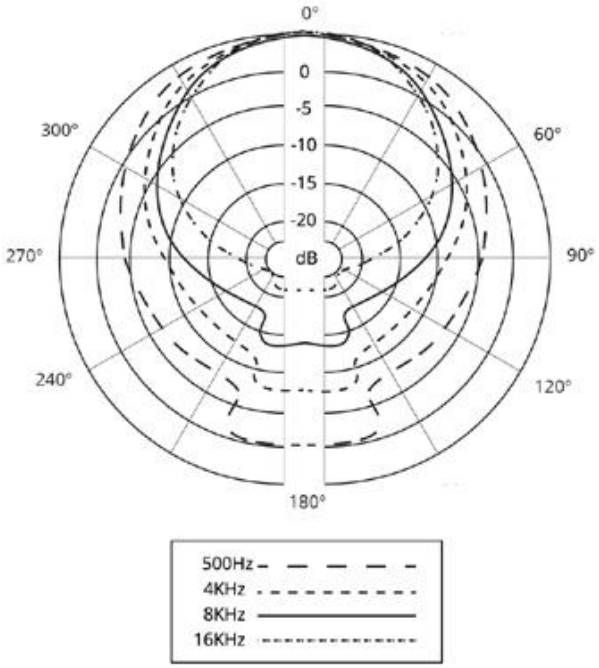
Transducer Type: Moving coil
Directional Polar Pattern: Cardioid
Frequency Response: 20Hz - 20kHz
Equivalent Noise Level: 3.8 dBA (A-weighted)
Sensitivity (passive mode) at 1 kHz into 1 kOhm: ave. 12mV/Pa
Maximum SPL for THD 0.5%: 132dB

Studio Microphone

Frequency Response



Polar Pattern



IMPORTANT SAFETY WARNING – NEODYMIUM MAGNETS

The Element Pop Shield attaches to the Element microphone using strong Neodymium magnets, safely secured by a custom designed housing in both the Pop Shield and the mic itself. The magnets cannot be exposed under normal use. **However please note the following important safety precautions:**

1. Heart pacemakers

Neodymium magnets can have a dangerous effect on medical implants such as pacemakers. Please ensure the Pop Shield is never in close proximity to any such device.

2. Children

All Neodymium magnets should be kept away from children at all times as swallowing or direct contact carry significant health hazards.

Should your Element Pop Shield become damaged, please contact Aston Microphones Ltd on 0845 500 2500 or email *support@astonmics.com*

Element Accessories

The Element bundle comes supplied with an ingenious magnetic pop shield and a proprietary design clip-on shock mount developed specifically for Element.

Aston Element Pop Filter

The proprietary magnetic Pop Filter attaches to Element in a split second to eliminate unwanted plosives and ‘esses’.
It automatically attaches in exactly the correct position for use, and the magnets used to achieve this are shielded from the mic’s capsule to ensure the audio remains completely free of artefacts. You can turn the pop shield upside down on the mic when recording instruments, so you don’t have to keep putting it away between takes.

Aston Element Shock Mount

The specifically designed ergonomic Shock Mount clips quickly and easily to your Element, and is extremely effective at stopping unwanted vibrations reaching the mic.

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**)
- 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% recycleable blister pack	90g	0.2lb	90g	0.2lb	90g	0.2lb

Aston SwiftShield, Shield GN & Swift

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 MICROPHONES

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

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

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

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 circuity 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.

Spirit
Origin

ASTON MICROPHONES

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