



ASE UTRA

SOUND SUPPRESSORS

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AU jet-Z™ COMPACT suppressor



Description

The Ase Utra jet-Z™ COMPACT is a high-performance suppressor designed for centrefire rifles up to .300 Win Mag calibre.

Manufactured in Finland by Ase Utra OY, the jet-Z™ COMPACT suppressors incorporate Ase Utra's patented jet-Z™ baffle system. The suppressors are all-steel, all-welded units rated for hunting, sport shooting or professional use on bolt-action or semi-automatic weapons.

The jet-Z™ COMPACT and suppressor adds only 550 to 570 grams net weight and 150 mm net length to a typical rifle – and with a diameter of just 40 mm, the suppressor is slim enough to be used with low-mounted telescopic or iron sights.

The jet-Z™ COMPACT suppressors are available with a variety of internal threads to fit directly onto the rifle barrel. Standard threads include; M14x1, M17x1, M18x1, ½"x20 UNF, ½"x28 UNEF to fit most current centrefire rifles.

Performance

The jet-Z™ COMPACT suppressor reduces the weapon sound pressure level by 29 to 32 dB (depending on ammunition type), and significantly reduces recoil and muzzle flash. The result is a weapon firing full power ammunition, with a muzzle signature lower than that of an unsuppressed .22 rimfire rifle.

All standard rifles tested with the jet-Z™ COMPACT suppressors comply with the latest personal noise exposure limit set by European Directive 2003/10/EC (140 Pa or 137 dB(C)).

Specifications

Calibres	.243 Win ---- .300 Win Mag
Weight (Depending on calibre and thread type)	550-570 g
Diameter	40 mm
Overall length of suppressor body / Added length to weapon	180 / 150 mm
Net sound suppression (ref. U.S. MIL-STD-1474D)	29-32 dB (A)
Warranty	2 years

AU S series suppressors



Description

The Ase Ultra S series sound suppressors are available in various calibres, from .243 Win up to .338 Lapua Magnum. Manufactured in Finland by Ase Utra OY, the S series suppressors are manufactured out of 300 series stainless steel and are assembled by welding. The S series suppressors have a strong construction and are built to for a long service life.

The small S series S5 suppressor only adds 112 mm to the length of the weapon, the diameter being 45 mm.

The S series S6 suppressor is intended for larger hunting calibres such as .338 Win Mag and 9.3x62. The S series S6 suppressor adds 132 mm to the length of the weapon and the diameter is 45 mm.

In production is also the S series S7 model, for users seeking the maximum sound suppression levels. The S series S7 suppressor adds the length of the weapon by 156 mm and has the same diameter, 45 mm. The S7 model is especially intended for sniper type rifles.

The S series suppressors are available with a variety of internal threads to fit directly onto the rifle barrel. Standard threads include M14x1, M15x1, M17x1, M18x1, 1/2"x20 UNF to fit most current centrefire rifles.

Performance

The S series suppressors reduce the weapon sound pressure level by 22-35 dB (dependant on suppressor model and calibre).

The S series suppressors also reduce recoil and muzzle flash significantly. Rifles tested with the S series suppressors, comply with the latest personal exposure limit set by the European Directive 2003/10/EC (140 Pa or 137 dB (C)).

Specifications

Calibres	S5 .243 Win ---- .300 Win Mag S6 .338 Win Mag, 9.3x62, 9.3x66, .375 H&H S7 .308 Win ---- .338 Lapua Magnum
Weight	S5 580 g S6 650 g S7 780 g
Diameter	S5, S6 and S7 45 mm
Overall length of suppressor body / Added length to weapon	S5 122 mm / 112 mm S6 142 mm / 132 mm S7 166 mm / 156 mm
Net sound suppression (ref. US MIL-STD-1474D)	S5 24-27 dB (A) S6 22-25 dB (A) S7 32-35 dB (A)
Warranty	2 years

AU jet-Z™ CQB-QM suppressor



Description

The Ase Utra jet-Z™ CQB-QM suppressor is a lightweight, ultra-compact assault rifle suppressor designed for quick and easy fitting to standard 22 mm diameter A1 and A2 flash-hiders utilized in the M16 / M4 / HK416 family of weapons.

Manufactured in Finland by Ase Utra OY, the jet-Z™ CQB-QM suppressor incorporates Ase Utra's patented jet-Z™ baffle system.

The jet-Z™ CQB-QM is an all-steel, all-welded unit rated for professional use on semiautomatic and select fire weapons. The patented Quick-Mount enables secure attachment to MIL-SPEC A1 and A2 flash-hiders, with absolutely no modification to the standard weapon.

Performance

The jet-Z™ CQB-QM suppressor reduces sound pressure level by 30-32 dB (A). In addition to the reduction in sound signature, the suppressor also reduces recoil and an added benefit is the elimination of visible muzzle flash, especially for military users.

M16 rifles and M4 carbines tested with the jet-Z™ CQB-QM suppressor comply with the new personal noise exposure limit set by European Directive 2003/10/EC (140 Pa or 137 dB(C)).

Specifications

Calibre	.223 Rem / 5.56x45 mm NATO
Weight	670 g
Diameter	40 mm
Overall length of suppressor body / Added length to weapon	170 mm / 125 mm
Net sound Suppression (ref. US MIL-STD-1474D)	32 dB(A)
Warranty (semi-automatic and burst fire)	2 years

AU jet-Z™ CQB suppressor



Description

The Ase Utra jet-Z™ CQB suppressor is a lightweight, ultra-compact suppressor for assault rifles. Manufactured in Finland by Ase Utra OY, the jet-Z™ CQB suppressor incorporates Ase Utra's patented jet-Z™ baffle system.

The jet-Z™ CQB is an all-steel, all-welded unit. The jet-Z™ CQB adds only 550 grams net weight and 120 mm net length to a typical rifle – and with a diameter of just 40 mm, the suppressor is slim enough to be used with low-mounted telescopic or iron sights.

The jet-Z™ CQB is available with a variety of internal threads to fit directly onto the rifle barrel. Standard threads include; M14x1, M17x1, M18x1 ½"x20 UNF, ½"x28 UNEF to fit most current centrefire rifles.

Performance

The jet-Z™ CQB suppressor reduces sound pressure level by 30-32 dB (A). In addition to the reduction in sound signature, the suppressor also reduces recoil and an added benefit is the elimination of visible muzzle flash. Rifles tested with the jet-Z™ CQB suppressor comply with the new personal noise exposure limit set by European Directive 2003/10/EC (140 Pa or 137 dB(C)).

Specifications

Calibre	.223 Rem / 5.56x45mm NATO
Weight	c. 550 g
Diameter	40 mm
Overall length of suppressor body / Added length to weapon	150 mm / 120 mm
Net sound suppression (ref. U.S. MIL-STD-1474D)	30-32 db (A)
Warranty	2 years



Ase Utra OY is one of the largest manufacturers of sound suppressors in the world. Total suppressor manufacturing exceeds over 10,000 each year.

Since 1994 Ase Utra has developed and manufactured sound suppressors for the needs of

- Hunters and sport shooters
- Military and law enforcement users.





The Ase Ultra sound suppressors have proven to be extremely durable and reliable products in demanding conditions. In addition to sport shooters and hunters, Ase Ultra sound suppressors are in use with law enforcement and military units in several countries.

The patented products are the result of continuous research and development. Quality, in both operation and products, is the foundation of the company!

AU S series SMG suppressors



Description

The Ase Ultra S series SMG sound suppressors are available for carbines and submachine guns in 9x19 mm Para calibre. Manufactured in Finland by Ase Utra OY, the S series SMG suppressors are manufactured out of 300 series stainless steel and assembled by welding. The S series SMG suppressors have a strong construction and are built to for a long service life.

The small S series S4 SMG suppressor only adds 80 mm to the length of the weapon *, the diameter being 45 mm. The S4 SMG suppressor is intended for users seeking a small hearing safe suppressor.

The S series S6 SMG suppressor is intended for users who are seeking for a higher suppression level. The S series S6 suppressor adds 125 mm to the length of the weapon * and the diameter is 45 mm.

The S series SMG suppressors are available with a selection of internal threads and quick mounts to fit on a variety of carbines and submachine guns.

* Figures for suppressors with an HK MP5 mount (S4 SMG-MP5 and S6 SMG-MP5)

Performance

The S series SMG suppressors reduce the sound pressure level of the weapon by 18-28 dB (dependant on suppressor model and calibre). The S series SMG suppressors also reduce recoil and muzzle flash significantly.

Submachine guns tested with the S series SMG suppressors, comply with the latest personal exposure limit set by the European Directive 2003/10/EC (140 Pa or 137 dB (C)).

Specifications

Calibres		9x19 mm Para
Weight	S4	530 g
	S6	680 g
Diameter		45 mm
Overall length, closed /	S4	125 mm / 80 mm
Added length to weapon (w/ HK MP5 mount)	S6	165 mm / 125 mm
Net sound suppression (ref. US MIL-STD-1474D)	S4	18-20 dB (A)
	S6	25-28 dB (A)
Warranty		2 years

Ase Utra rimfire suppressor



Description

The Ase Utra rimfire suppressor features excellent sound suppression and is intended for both pistol and rifle use. The suppressor is manufactured from steel components and intended for a long service life. The finish on the suppressor is manganese phosphate. The suppressor allows the use of iron sights or low mounted optical sights. The standard thread for the suppressor is 1/2" x 20 UNF. The suppressor can be taken apart for cleaning and maintenance.

Performance

The suppressor reduces the sound pressure level by c. 28-32 dB on a rifle and c. 35-40 dB on a pistol. It should also be noted that the first shot with the Ase Utra suppressor is as quiet as the following ones, so there is no significant "first round pop". The reduced sound pressure level removes the shooters risk of receiving hearing damage and also reduces the environmental noise significantly. The Ase Utra rimfire suppressors comply with the latest personal exposure limit set by the European Directive 2003/10/EC (140 Pa or 137 dB (C)).

Specifications

Calibres	.22LR, .22 WMR and .17 HMR
Weight	280 g
Diameter	28 mm
Overall length / added length	165 mm / 150 mm
Net sound suppression (ref. US MIL-STD-1474D)	rifle 28-32 dB (A) pistol 35-40 dB (A)
Warranty	2 years

Why choose an Ase Ultra sound suppressor?

Benefits

- Lowers the sound pressure level below the hearing damage threshold for impulse noise
- Reduces the environmental noise
- Significantly reduces recoil
- Hides the visible muzzle flash
- Can be installed on weapons with iron sights
- Does not negatively affect accuracy, but more often improves it
- Is a front mounting suppressor by design and does not prevent the free floating of the barrel and does not prevent barrel cooling, compared to telescopic designs.

Technology

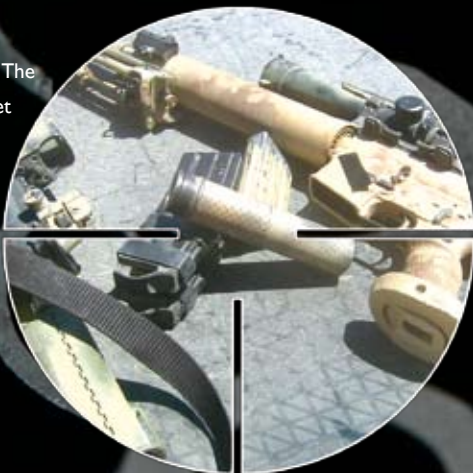
The Ase Ultra suppressors utilize advanced technology and quality materials. The suppressors are manufactured out of precision castings and machined using modern CNC-techniques. The Ase Ultra suppressor designs are the result of innovative work and thorough research.

Due to the above, Ase Ultra suppressors are:

- **Very compact in size and have an excellent size to performance ratio**
- **Light weight**
- **Durable**

Product development

Our research and development is continuous. The newest Ase Ultra suppressor family on the market are the S series suppressors. There are several models available in the S series to suit a wide selection of calibres. The S series suppressors are manufactured out of 300 series stainless steel.



GENERAL INFORMATION ON FIREARM SOUND SUPPRESSION MEASUREMENT

The measuring unit of sound suppressor suppression ability is decibel, dB(1/10th Bell), named after the inventor of the telephone, Alexander Graham Bell). It is a measuring unit which is used to measure sound or sound pressure level(SPL) .

According to the definition $SPL=20 \lg(p/p_0)$, p being the measured pressure and p_0 being the pressure level of the human hearing range threshold, $20\mu Pa$. From this definition we can deduce that the hearing threshold is 0 db. Normal conversation is 56 dB, a lawnmower 85 dB, a jet plane 135 dB. Firearm discharge sound is peak impulse noise where the highest peak is usually measured.

The threshold for hearing damage for peak impulse noise is c. 140 dB. In front of a artillery piece the SPL is over 185 dB which can lead into death when the lung cells are ruptured, not to mention hearing damage. The SPL for an 5.56 mm calibre M4 carbine is approximately 165 dB, when measured 1 meter left of the muzzle.

When measuring SPL, several filters are used to remove for example the parts deemed unnecessary. The most common filters are the A-filter which strives to describe the characteristics of human hearing and where the low (under 20Hz), inaudible to human hearing sounds are suppressed and the C-filter, where the filtering of the lower sounds is lesser. There is not a very large variable between A or C-filters when measuring gunshot noise.

The major problem in measuring sound suppressor suppression abilities is that the whole range of measuring instruments have to be suitable, must to have fast enough risetime, according to the American MIL-STD-1474D it has to be under $20\mu s$, to be able to react to a suppressed firearm shot, which has been established to be shorter in duration compared to an unsuppressed shot.

The measurements themselves are taken with the microphone 1 meter side from the muzzle of the weapon and at a height of 1.6 meters, directed 90 degrees upward to the trajectory of the bullet.

Without the suppressor, a sufficient statistical certainty is usually accomplished with five shots, with the suppressor attached an average of ten shots and additionally taking notice what is the SPL of the first shot, if there is any First Round Pop (FRP). This FRP is the result of the expanding gases and the oxygen inside of the suppressor converging.

It is typical for SPL measurements that the environment characteristics have an effect in the results so the measurements should be taken in an open land area without reflecting surfaces.

The best comparable results are achieved when the measurements of different suppressors are made at the same event or at least according to the standard procedure; if a manufacturer does not specify their measurement types or their instruments, one should be cautious about the results.



Technical data on Ase Utra sound suppressors

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Suppressor	Overall length of suppressor body	Ø Diameter	Added length to weapon	Weight	Net sound suppression dB (A) U.S. MIL-STD 1474	Measured calibre
AU rimfire suppressor	165 mm	28 mm	150 mm	280 g	Rifle: 28-30 Pistol: 35-40	.22 LR (sub sonic)
jet-Z™ CQB	150 mm	40 mm	120 mm	550 g	30-32	5.56x45 mm NATO
jet-Z™ CQB-QM	c. 170 mm	40 mm	c. 125 mm	660 g	30-32	5.56x45 mm NATO
jet-Z™ COMPACT	180 mm	40 mm	150 mm	550-570 g	28-32	.308 Win
S series S4 SMG	125 mm	45 mm	80 mm	530 g	18-20	9x19 mm Para
S series S5	122 mm	45 mm	112 mm	580 g	24-27	.308 Win
S series S6 SMG	165 mm	45 mm	120 mm	680 g	25-28	9x19 mm Para
S series S7	166 mm	45 mm	156 mm	780 g	30-35	.308 Win
S series S7	166 mm	45 mm	156 mm	780 g	32+	.338 Lapua Magnum