Tonearm series Sorane / Abis

SA-1.2 SA-1.2B SA-1.2BCS ZA-12 ZA-12B TA-1 TA-1L

As The Abis brand name was changed to Sorane in 2017 summer, the products are now called the Sorane tonearm series, with unchanged model number.

Somme SAN2



SA-1.2 SA-1.2B SA-1.2BCS

Fortunate encounter with IT Industry

Youtek feels, from the bottom of the heart, it was fortunate to have encountered Katsuaki Ishiyama-san, founder of IT Industry, almost 10 years ago. It is thankful to have him for developing Sorane (Meaning Space Sound in Japanese language, "宙音"). Formerly known as Abis, production started in late 2013, for Youtek worldwide sales. Abis was the initial brand name, the name changed to Sorane in spring 2017. These tonearms are export only: no sales are made in Japan. The goal was reasonable cost, with good quality.

All hand made and hand assembled by craftsmen

Since the organization of IT Industry in 1974, Katsuaki Ishiyama-san has amassed an extensive technical knowhow for the design and development of various tonearms, along with other analog equipment. IT Industry tonearms are manufactured and fitted together by hand, with the belief that fine-tuning is only available by craftsmen's precise and sensitive touch. Even with the use of modern CNC milling machines, to produce basic parts, their expertise is still hand assembly by craftsmen. During final assembly, parts must be precisely adjusted for ideal mechanical surface contact. Even with the very precise nature of CNC machining, final fitting requires precise grinding and honing, that removes only microns, but leads to much better performance.







Shared Features

a CNC, Machine-tooled and hand-assembled by skilled Japanese craftsmen. This highly skilled and delicate hand-assembly differentiates Sorane tonearms from mass-produced Japanese tonearms. With standard quality goals, high-volume production tonearms are manufactured by die-casting and semi-automatic assembly line processes, to keep production costs low.

b Concerning the reproduced sound from these models: The designer is confident you will get precise and clean sound, which can only be had from hand-made tonearms, but at a very reasonable price.

 ${\rm c}\,$ In particular, the SA-1.2 and ZA-12 will produce rich and tight bass, coming from the extremely rigid rectangular shaped armwand.

d Skilled hand assembly does not simply mean "combining the constituent parts by hand". Skilled hand assembly involves measurement, adjustment and hand-fitting to produce optimal interface between machined surfaces. Once completed, the fitment between every part is ideal, satisfying the necessary conditions for chatter-free reproduction of analog sound.

e Most importantly, the key to tonearm quality is highly sensitive and delicate motion, for which the bearings are the determining factor.

 $f\,$ Gimbal-bearing designs for excellent bass, dynamic sound and imaging, as well as unconditional azimuth stability (Which is the biggest problem for conventional uni-pivots bearing).

g For SA-1.2, SA-1.2B, SA-1.2BCS, (As attached photo) two sets of fine radial bearings are installed for both horizontal (set in the bearing stem column) and vertical (further small bearing at tonearm wand) suspension. This assures audiophiles of smooth tonearm function, greater longevity, better consistency, and enhanced ability to track warped vinyl.

(In SA-1.2BCS, negative-balance selection is to follow more precisely to warped vinyl)

(More versatile bearing of "Double Bearing Pivot suspension" is applied to ZA-12, as mentioned after.)

h For TA-1 and TA-1L, the same type radial bearing, used in the SA-1.2 for horizontal motion, is used, while a delicate pivot bearing is employed for vertical movement (this is still a bearing, but the bearing axis end is cone shaped, and requires careful assembly and adjustment). The right side cone in this photo is inserted into the miniature bearing inner race.

i For the SA1.2 and ZA-12, lead wires run through separate aluminum tubes inside the arm, maximizing stereo separation.

j For the ZA-12, the tonearm collet is removed. The effective length and geometry gives very low tracking error. The stylus tip of the cartridge is maintained as closely to the centerline of the tonearm as possible. The mass distribution is kept as close to neutral as possible.

 ${\bf k}$ Comes with phono cable (RCA output plug, or optionally as XLR), screws, washers, wrench and marking pin.

I Antiskating mechanism works favorably, in proportion to cartridge vertical stylus tracking force.

SA-1.2BCS

Based on the award winning SA1.2 tonearm, the SA1.2BCS adds additional features for the vinyl enthusiast.

Silver internal wiring for superior signal to noise ratio.

Silver headshell cartridge leads.

The SA1.2BCS offers the choice of either positive or negative balance (convertible center of gravity), via two alternate counterweight stems (the first tonearm ever produced with this feature in the world).

■ What is "positive balance"? The position of the counterweight shaft is below the centerline of the vertical bearing, moving the center of mass below the fulcrum point.

■ What is the outstanding feature of "positive balance"? Unconditional stability, with the tonearm always returning to the same resting location.

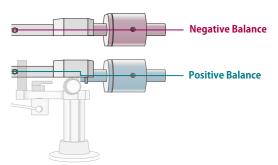
■ What is "negative balance"? The position of the counterweight shaft is slightly above the centerline of the vertical bearing, moving the center of mass above the fulcrum point.

■ What is the outstanding feature of "negative balance"? The tonearm automatically compensates for warps without the aid of extraneous devices, such as springs, servos, etc..



Cylinder type base / Option





The way to change Positive/Negative balance in SA-1.2BCS

As shown in these photos, SA-1.2 BCS is equipped with 2 counterweight shafts, one is "Positive" shaft (Installed, upon delivery of the product), while the other is "Negative", which are replaced interchangeably by your hands with attached Allen key.



Positive Negative



ZA-12 ZA12-B

Double Bearing Pivot suspension

The key to tonearm quality is the sensitivity and stability in retrieving delicate signals, for which the bearings are the determining factor. The ZA12 employs specially designed "Double Bearing Pivot suspension" for vertical suspension, (which supersedes even two sets of fine radial bearings, installed SA-1.2B).

Schematic in this photo is exaggerated Illustration to show you inner structure of Double Bearing Pivot, extracting inside parts to outside, on purpose.

Thanks to this ultra-fine precise suspension, you would enjoy extensive reproduction sound to limit-less high frequency, even from very base low sound.

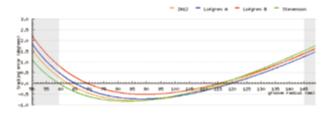
Counter weight shaft damping

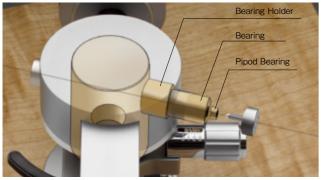
To damp whole movement of tonearm-wand, counter weight shaft composes of 2 pipes, brass-pipe inside and Delrin (Dupont-Plastic) pipe out side, which is connected to ZA-12 main body via outer rubber ring, through rubber adhesive.

The rectangular arm-wand is machined from a solid aluminum block having an advantage in rich and tight bass reproduction. As bass sound is mainly recorded in the horizontal plane of the groove, the low resonance frequency of the ZA12 will give excellent low bass reproduction.

Tonearm wires run through separate aluminum tubes inside the arm so that stereo separation is maximized.

The geometry of the ZA12 is chosen to give excellent sound for all types of music, for old classical recordings, and new audiophile recordings. The curve fits nicely between the Stevenson geometry (good for classical) and Lofgren (good for modern audiophile recordings).









TA-1 TA-1L



TA-1 and TA-1L Tonearm

The major key to tonearm quality is the sensitivity and stability in retrieving delicate signals, for which the bearings are the determining factor. The TA-I employs a miniature radial bearing for horizontal movement and a miniature pivot bearing for vertical movement. Very high performance is achieved at a reasonable price.

The body is constructed from a machine-tooled solid aluminum block.

The hand-assembled arm wand satisfies every vital condition necessary for vibration-free and noise-free reproduction..

Reproduced sound is precise and clean, thanks to hand assembly by highly skilled craftsmen.

Comes with detachable headshell, phono cable (RCA output plug, or optionally as XLR), screws, washers, wrench and marking pin.



Cylinder type base / Option



SME-Sorane Sliding Base

SA-1.2 SA-1.2B SA-1.2BCS

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Specifications	Total Length	310mm	
	Spindle center to arm pivot distance	223mm	
	Stylus to pivot distance	239mm	
	Overhang	16mm	
	Offset Angle	22.25°	
	Cartridge weight	15-45 grams, including headshell	
	Anti-skating Device	0-3 grams	
	Net weight	750g (with headshell: 767g)	
		TA 1	TA 11
		TA-1	TA-1L
	Total Length	288mm	380mm
	Spindle to pivot distance	216mm	310mm
	Stylus to pivot distance	232mm	322mm
	Stylus to pivot distance Overhang	232mm 16mm	
	, ,		322mm
	Overhang	16mm	322mm 12mm
	Overhang Cartridge weight range	16mm 15-29 grams with headshell	322mm 12mm 15-24 grams with headshell

ZA-12 ZA-12B

Whole length	410mm	inner groove	60.325mm
pivot to spindle	310mm	outer groove	146.05mm
effective length	322mm	inner null point	63.531mm
overhang	12mm	outer null point	119.375mm
offset angle	16.5°	maximum error	1.4°
linear offset	91.453mm	maximum distortion	0.481%
		average rms distortion	0.312%
		Max. Cartridge weight	40g



recommendation,for the least amount of money, it has few competitors."

https://www.stereophile.com/content/listening-135-abis-sa-12#2U7VgPU6Cxpbd85z.99

"the TA-1L is a well-made and distinctly Art Dudley Stereophile #145 USA recommendable product: a distinctively welldetailed transcription-length tonearm for a fair

price.

https://www.stereophile.com/content/listening-145-page-2#cDsfQjPjpaYfAoYP.99

Well, first and foremost is a clean and quiet Dave Thomas Stereotimes USA backdrop that seemed to push

more of the musical performance to the forefront.

https://www.stereophile.com/content/recommended-components-2018-edition-turntablestonearms-cartridges-etc

"I'd put the combination of Abis SA-1.2 and	Art Dudley,	Stereophile	USA
Denon DL-103 up against all but their priciest	Herb Rechart	Recommended	
competitors."		Components /	
		Class-B	

https://www.stereophile.com/content/recommended-components-2018-edition-turntables-tonearms-cartridges-etc

Distributor & Dealer

Review	Reviewers	Magazine	country	
"The Abis tonearm allowed the Miyajima [Premium BE Mono II] to shine as a detail-retrieval champ of the first order,"		Stereophile Recommended Components / Class-B	USA	
https://www.stereophile.com/content/recommended-components-2018-edition-turntables- tonearms-cartridges-etc				
	Thomas Schmidth	LP magazines	Germany	
"The result is an arm that's an absolute dlight in form,function and perceives sound quality"	Adam Smith	Hifi News	UK	
"No other arm I can think of, even others with SME headshell mounts, offers quite so much flexibility."	Geoff Husband	TNT France	France	
http://www.tnt-audio.com/sorgenti/abis_sa12_e.ht	ml			



