



Yamaha Strings

ELECTRIC VIOLIN SILENT™ SERIES

SILENT *Violin*™

SILENT *Viola*™

SILENT *Cello*™

SILENT *Bass*™





New Dimensions of String Expression

Yamaha Electric and Silent string instruments are designed to provide enhanced practice and performance enjoyment. Our resolute quest for musical satisfaction has led to the creation of two revolutionary instruments: the Yamaha Electric Violin gives performers unprecedented on-stage freedom and captivates audiences with radical visual design, while the SILENT™ Series embodies an ideal blend of sound and playability that can put more joy into both practice and performance. Behind the startling visual designs of these instruments are details aimed at fulfilling the essential requirements for any high-quality musical instrument: outstanding playability and comfort as well as superior sound. Yamaha's unflagging pursuit of perfection brings groundbreaking string instrument potential to players at every level. We invite you to explore a new world of musical expression.



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SILENT™ SERIES

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Electric Violin



reddot award 2017
winner



Striking Presence for Live Performance

The innovative electric violin features an elegant, eye-catching design that can add strong visual impact to any performance. Of course that visual appeal is backed up by solid playability and sound that give the player unprecedented expressive freedom.

YEV104

[4-Strings model]

Colors : Natural (NT),Black (BL)

YEV105

[5-Strings model]

Colors : Natural (NT),Black (BL)



YEV104BL



YEV104NT



YEV105NT



YEV105BL

A design that radiates impressive presence on stage merges easy playability with visual beauty that will reach the entire audience. Both player and listener experience a new dimension of violin performance.

5-piece Body Optimizes Resonance

Carefully selected maple with mahogany and spruce in a 5-layer construction results in excellent response and natural overall sound.

* The black (BL) model has the same construction, but the layers cannot be seen.

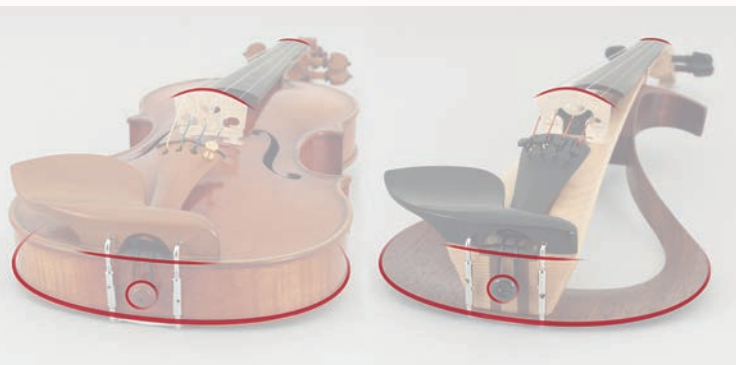


Bowing Nuances Faithfully Reproduced

The same type of high-output passive bridge pickup that is a highly regarded feature of the SV250 is used. While effectively picking up the sound of the entire instrument, it also captures the instrument's response and expressive bowing nuances employed by the player.

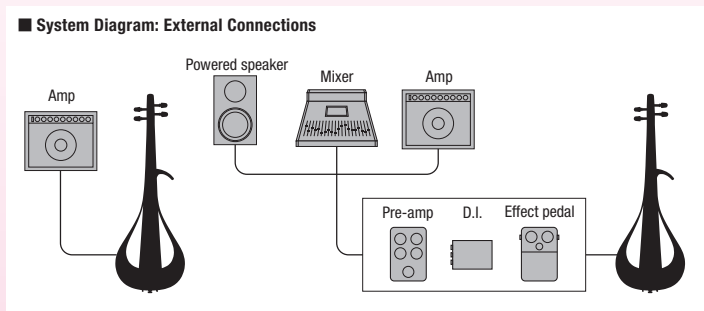
Walnut Frame Enhances Natural Tone

A 5-layer oil-finished walnut frame offers an ideal blend of flexibility and strength in a design that is not only striking, but also contributes to natural musical resonance.



An Easy Switch from Acoustic Violin

The natural touch points and curves allow the player to effortlessly move between the YE-V and a standard acoustic violin. The instrument's shape allows for most standard off-the-shelf Bridge-type shoulder rests, chin rests and tailpieces.



* The input impedance of the first device (preamp, direct box, etc.) the instrument connects to has a major influence on the sound quality produced by the speakers. In order to obtain the maximum performance from the instrument, we recommend connecting to a device with an input impedance of more than 1MΩ.

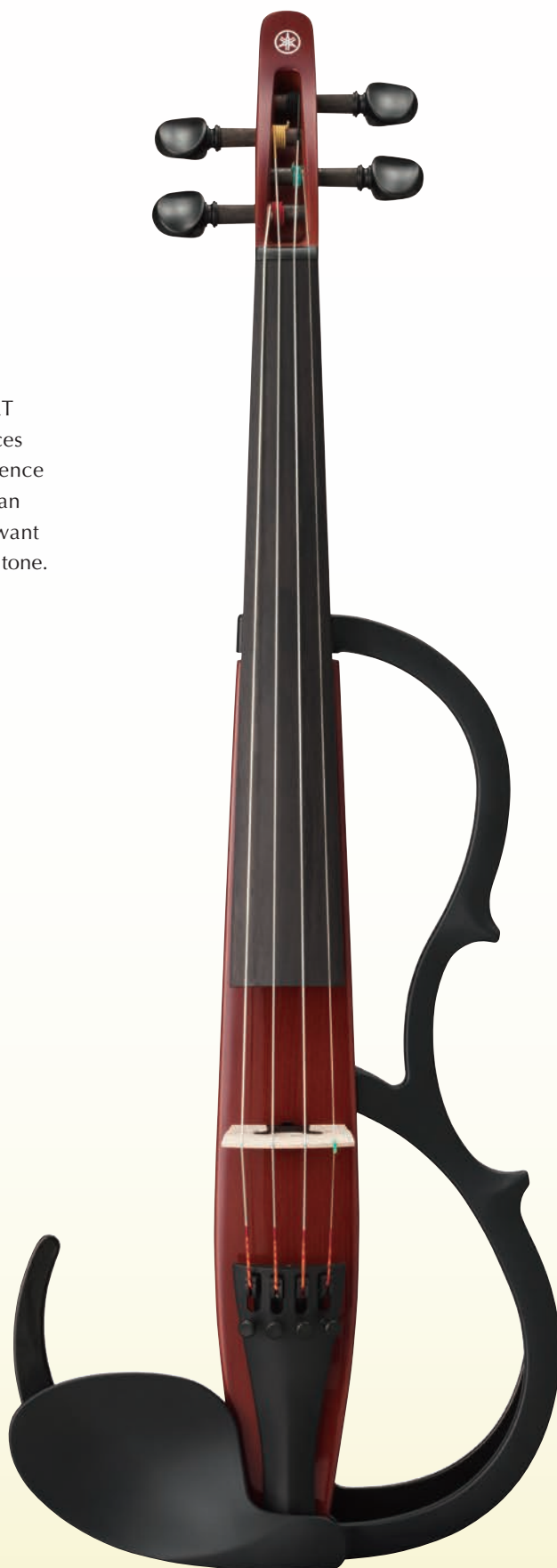
SILENT *Violin*™

Realistic Tone and Resonance for Practice

Even without a resonant body, the SRT POWERED system faithfully reproduces the body resonance, sound and ambience of an acoustic violin. The YSV104 is an excellent choice for all players who want to practice quietly with acoustic violin tone.

YSV104

Colors : Brown (BR), Black (BL), Red (RD)



RD
[Red]



BL
[Black]



BR
[Brown]

Every detail of the instrument is dedicated to realistic violin resonance that can lead the player to new heights of musical accomplishment.

Simulated Acoustic Violin Body Resonance

Although the YSV104 is a solid-body instrument that does not resonate like an acoustic violin, the SRT POWERED system faithfully reproduces the rich presence and tonal variety that are appealing characteristics of acoustic violin sound. Left and right channel volume, frequency response, and delay have been carefully optimized so that the performer can play while hearing realistic acoustic tone and resonance via the earphones.

* SRT: Studio Response Technology



Acoustic Form Makes Switching Instruments Easy

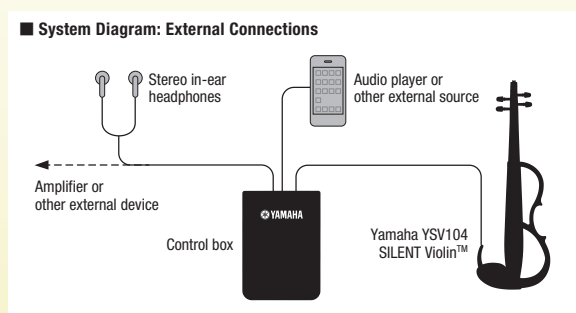
The layout of the bridge, tailpiece, neck, and other parts is the same as an acoustic violin, and the ability to use standard off-the-shelf Bridge-type shoulder rests facilitates a smooth, stress-free transition from acoustic violin to the SILENT Violin™ and back. Proper bow angle and finger placement give beginners a solid foundation to grow from.

Streamlined Control Box Supports Practice

Two reverb modes provide ambience optimized for practice and playing enjoyment. "ROOM" provides realistic room ambience that is ideally suited to practice, while "HALL" simulates the deep, rich reverb of a concert hall for pure playing enjoyment. An external audio source can be connected to the control box for play-along practice.



* The control box is for use with the YSV104 only. It cannot be used with other SILENT Violin™ models.



SILENT *Violin*™

Tone and Playability for any Genre and Stage

This refined performance model goes beyond practice and can hold its own on any stage. An original body structure contributes to sophisticated tone that is perfect for a wide range of musical genres.

SV250 [4-Strings model]

Color : Brown

SV255 [5-Strings model]

Color : Brown

Dedicated Control Box Expands Tonal Versatility

The dedicated control box puts control of volume and tone within easy reach. In addition to a line out jack that's suitable for sending the Silent Violin™ signal to an amplifier or effect unit, a XLR connector is provided for direct, high-quality connection to professional sound reinforcement and recording equipment.



* The control box is for use with the SV250 or SV255 only. It cannot be used with other SILENT Violin™ models.



SV250



"The Yamaha SV250/255 is the best 4-string or 5-string electric violin I've ever played or heard. Ultra light and ultra durable, with incredible flexibility, it achieves a beautiful "acoustic" sound while also enabling me to work with effects smoothly and effortlessly. It's even easier to play than an acoustic violin, allowing me to glide over passages that once seemed difficult."

Christian Howes

Original Body Structure for Beautiful Tone

A hollow chamber between the top and body, side slits, and other design details contribute to natural acoustic violin resonance while minimizing unamplified volume.

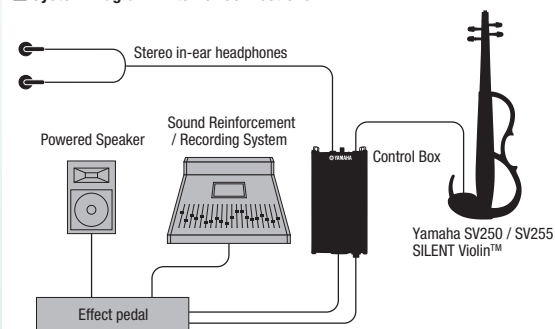


Two Pickup Types Complement Musical Expression

A pickup below the bridge picks up the overall resonance of the instrument's body for faithful reproduction of the subtlest playing techniques, while a second pickup built into the bridge accurately senses string vibration and bowing nuances. Balance between the two pickups can be adjusted as required.



System Diagram: External Connections



* Equipment printed in grey is optional

SILENT *Viola*™

A SILENT Viola™ for Practice and Performance

A dual-sensor stereo pickup system provides delicate reproduction of playing nuances from pianissimo to fortissimo. The SVV200 embodies fine acoustic viola playability in a quiet instrument that can be played anywhere. Critical sound and playability components are identical to their acoustic viola counterparts. The utmost care has been taken in every detail.



SVV200

Color : Brown

Built-in Controls Enhance Tone

In addition to a real wood frame that contributes to richly musical resonance, a built-in tone control system makes it possible to shape the upper harmonics for optimum tone and projection in just about any environment and performance situation.

Familiar Feel for Easy Instrument Changes

Tailpiece, chin rest, bridge, neck, and fingerboard are all the same as those on acoustic instruments, crafted from the same materials. Standard off-the-shelf Bridge-type shoulder rests can be used too, making it easy to switch between the SILENT Viola™ and a traditional acoustic instrument.



Performance-oriented Outputs

Line and headphone outputs designed with performance in mind are provided in convenient locations on the back of the instrument, where connectors and cables won't interfere with the performance. The built-in tone control system can be completely bypassed in situations where tonal adjustments will be made at a mixing console, for example.



Equalizer mode switch

Tone control system

SILENT *Cello*™



"When we started doing live shows, the first and only choice was the Yamaha SILENT Cello™. This is the best possible instrument to amplify and play in front of thousands of people, and still practice silently at night in our hotel room. It produces the most amazing, incredible sound and there are so many possibilities. There is no other choice."

2 CELLOS

Acoustic Cello Form and Tone Cast a Classical Aura

Deep musical tonality that responds to the most delicate bowing nuances works with three-stage reverb to deliver extraordinary expression. A sublime blend of playability and art make this an ideal instrument for classical performance.

SVC110



Standard Soft Case for SVC110

Innovative Design and Bright Sound for the Stage

Worm-gear tuning pegs that facilitate fine adjustments while performing, a compact design for easy portability, and other features make this model an excellent choice for the stage. Striking looks and sound enhance this fine instrument's audience appeal.

SVC210

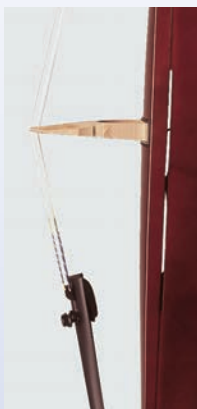


Standard Soft Case for SVC210

Emphasis on Tonal Clarity

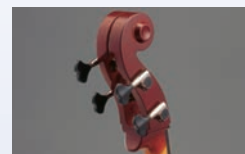
The pickups and circuitry that are responsible for sensing and amplifying string vibration have been purpose-built with emphasis on reproduction accuracy. A three-stage reverb function enhances the body resonance and sound hole simulation. It's easier to produce clear tone with a silent cello™ than an acoustic cello.

A hollow chamber and side slits help to reproduce natural acoustic resonance while minimizing unamplified volume. (SVC110 and SVC210)



Intimate Playability

Although designed to be played-anywhere quietly, the neck, fingerboard, bridge, and other parts that affect playability are the same as equivalent acoustic instrument components, crafted from the same materials. Tuning pegs that are easy to adjust while playing (SVC210), and chest pads that provide maximum comfort for extended playing sessions (SVC110 and SVC210) further enhance overall playability.



Worm-gear tuning pegs make fine adjustment easy (SVC210)



Cushioned chest pad (SVC110 and SVC210)

Ensemble Capability

A LINE OUT jack can be connected to an external amplifier to allow ensemble playing with other instruments. There is also an AUX IN jack that can receive input from an external audio player for play-along practice with orchestral or piano recordings, for example.

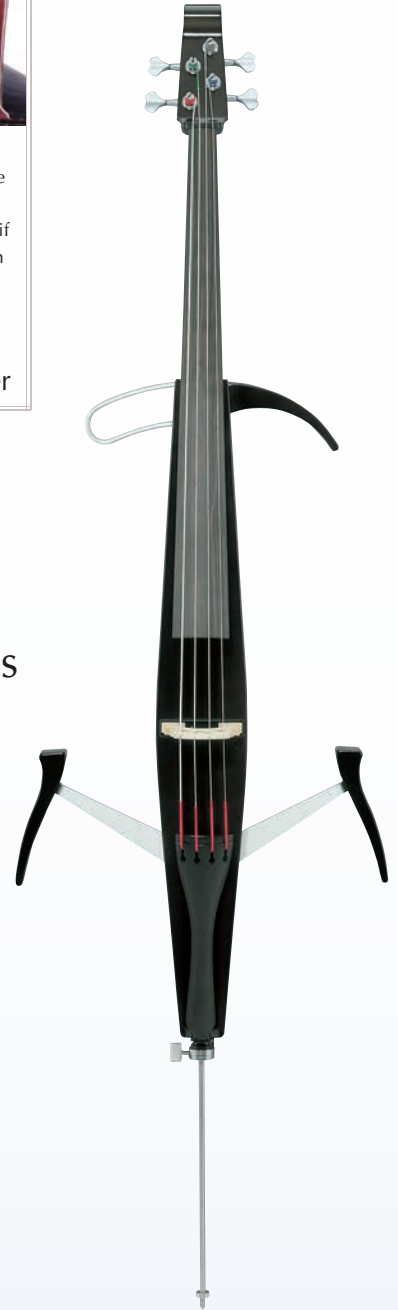


"I concertize all over the world on the Yamaha SILENT Cello™. It's playability is remarkable, the sound versatile and resonant, and for cellists on the go it features ultimate portability. No matter if you perform on it in a concert hall or practice on it by the beach, this cello is an outstanding musical companion."

Johannes Moser

Streamlined Design with All the Essentials

This go-anywhere, play-anywhere design is about as small and lightweight as it can be while still offering essential functionality for great sound and playability.



SVC50



Standard Soft Case for SVC50

Easy Transportation and Storage

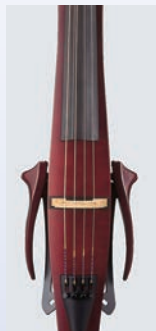
The SVC210 and SVC50 feature compact designs that facilitate transportation and storage. Knee rests can be retracted or removed completely and compactly stored in the instrument's soft case for stress-free transportation to any location.



Removable chest pad and knee rests (SVC50)

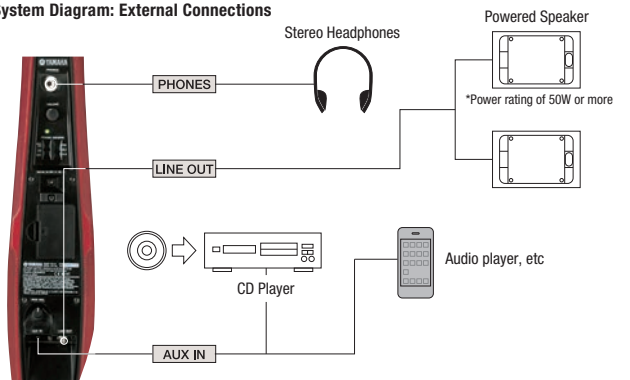


The SVC50's leg supports can be easily removed from the instrument body.



The SVC210 has folding legs and arm supports.

System Diagram: External Connections



SILENT *Bass*™



Strong Tonal Presence for Classical Study or Performance

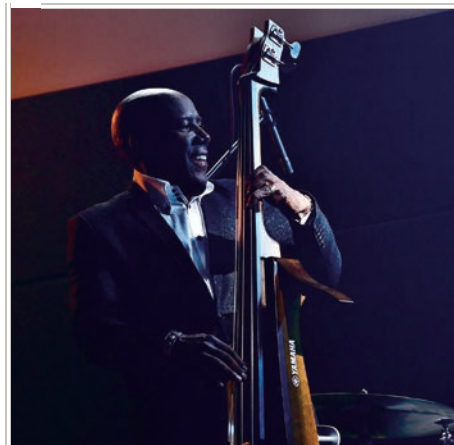
The SLB100 features realistic Double Bass tone and response in a quiet solid-body instrument. It maintains the playability of its acoustic counterparts for classical bowed and pizzicato styles.

SLB100



Optional Soft Case for SLB100

Stored in the dedicated soft case (sold separately), total volume is only about 40% of a standard contrabass.



"I have been with Yamaha for almost forty years and love all of their great products. I was very happy with the previous version of the Silent Bass; using it on many projects in studio and live, and didn't necessarily feel any need for improvement of this wonderful instrument. Nevertheless, Yamaha remains at the drawing board coming up with new ways to make it even better! This new generation SLB300 changes everything! It's truly love at first sight. Check it out!"

 Nathan East

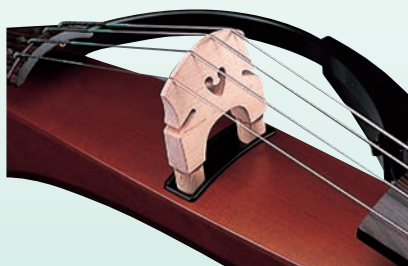


Stand BST1

[For SILENT Cello™ and SILENT Bass™]

Features for Refined Sound and Playing Feel

A height-adjustable bridge and separate pickups for the low and high frequencies enhance sound and response. Balance between the pickups can be adjusted as required for clear, heavy bowed bass or punchy pizzicato techniques.



An Ideal Ensemble Instrument

The LINE OUT jack can be connected to an external amplifier to allow ensemble playing with other instruments. There is also an AUX IN jack that can receive input from a CD player or other audio source for play-along practice.



Refined Bass for Any Stage

Developed in collaboration with leading jazz players from around the world, the SLB300 takes Silent Bass™ sound and playability to unprecedented levels, while Yamaha's SRT Powered System adds flexible, first-class sonic control. An antique style finish enhances the beauty and real-wood feel of the body, adding refined visual appeal to sound quality that is suitable for even the most distinguished venues.

SLB300



Standard Soft Case for SLB300/SLB300PRO

Stored in the dedicated soft case, total volume is only about 25% of a standard contrabass.



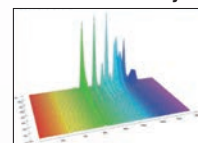
Body Designed for Pure Acoustic Tone [SLB300] [SLB300PRO]

A hollow chamber and side slits help to reproduce natural acoustic resonance while minimizing unamplified volume.

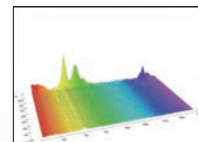


SRT Powered System adds realistic body resonance. (SLB300/SLB300PRO)

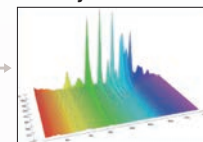
Response of an instrument with no resonant body



Acoustic instrument resonance



Response with acoustic instrument body resonance added by SRT



The Yamaha SRT (Studio Response Technology) Powered System is a digital technology that employs in-depth analysis of the acoustic properties of actual musical instruments to add natural-sounding body resonance in real time to instruments such as the Silent Bass™ that do not have a physical resonant body.

* This system adds simulated body resonance to the analog signal output from the instrument's pickup so that the performer's own playing technique and nuances are delivered without compromise. No sampling or sample playback is involved.

* These graphs are provided to illustrate the effect of the SRT Powered System, and do not represent the system's actual frequency response.

Body Designed for Pure Acoustic Tone

A hollow chamber and side slits help to reproduce natural acoustic resonance while minimizing unamplified volume.

Three Microphone Types, EQ, and Blend Control Deliver Ideal Sound (SLB300/SLB300PRO)

Acoustic body resonance as picked up by three well-known and prized studio microphones is realistically simulated. (*SRT Powered system) The microphones can be selected via the MIC TYPE selector, and the sound adjusted via the BLEND and BASS/TREBLE controls to ideally match a wide range of musical genres, ensembles, performance locations, and more.



Traditional Acoustic Bass Form Where It Matters

A compact, simplified shape does away with nonessential mass and volume. An acoustic bass shaped frame and a center of gravity designed to minimize rotation further enhance playability, while the bridge, fingerboard, neck and other critical parts are in positions that require no change in hold or playing technique from traditional acoustic basses.

SLB300/SLB300PRO also uses standard contrabass strings, so the user can choose the strings that he or she prefers.



New

The ultimate SILENT Bass™

Building on the high level of quality achieved in the SLB300, this model offers tone that is remarkably close to acoustic bass plus even further refined playability. With appearance,

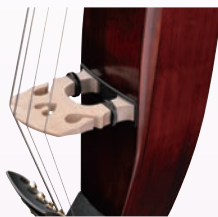
SLB300PRO

Bridge

In addition to featuring A.R.E treatment*, the thickness of the maple bridge has been carefully optimized for this instrument.

Aluminum adjusters specially selected for the SLB300PRO also provide a notable upgrade that contributes to improved response and clear tone.

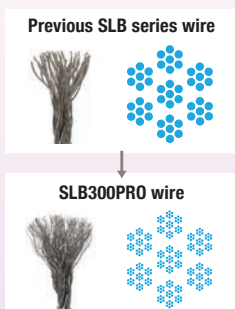
* A.R.E stands for Acoustic Resonance Enhancement, an innovative process that matures the wood in a short period of time to achieve tone and resonance that would normally only be found in an older instrument that has been played for many years.



Dedicated SLB300PRO tailwire

Tail wire that previously consisted of 49 x 0.22-millimeter strands has been upgraded to a more flexible wire consisting of 343 x 0.06-millimeter strands.

A flexible tail wire developed specially for the SLB300PRO contributes to soft body resonance and response that are similar to those of acoustic instruments.



Upgraded fingerboard and neck materials

With an ebony fingerboard, which is a rare feature on an upright bass, and a beautiful curly maple neck, this instrument offers outstanding response as well as natural tone playability



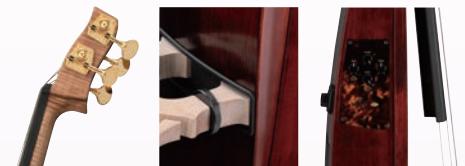
Tuning machine

The tuning machine head handles are machined out of heavy duty stock and feature an original shape for smooth, easy operation.

Overall durability and operability have been significantly improved.



A refined exterior for high-end jazz scene



- The neck is made of beautiful tiger-stripe curly maple with an extremely thin finish that feels like a well-played instrument.

- The body features an antique-like finish that simulates the color and tactile wood grain of a vintage acoustic bass.

- Special-order gold-plated machine heads and a simulated tortoise shell control panel provide elegant accents to refined overall appearance.

* The wood grain will be different in each individual instrument.



"Yamaha has always been synonymous with highest quality and consistency. Having played my beloved instruments for all these years, I know first hand how they never rest on their laurels, always seeking to improve, with great success. Their support throughout the world and their unsurpassed craftsmanship has made them an important part of my everyday life as a musician."

Chris Minh Doky

Accessories

- Your sound, wherever you are.
THR5A



THR5A packs in everything you need for an off-stage amp. Real tube amp tone and dynamics, great sound at low volume, genuine hi-fi quality stereo playback and full recording capabilities. Get ready to spend a lot more time playing the violin.

- Wireless freedom. Cable simplicity.
Relay G10



The Line 6 Relay® G10 is incredibly easy to use—it works just like a cable. You get incredible sound quality, rock-solid performance, and the freedom of digital wireless—all from the world's easiest, most compact instrument wireless system.

For SILENT Bass™ SLB100

- Soft Case
BSC1 (Compatible for SLB100)



For SILENT Cello™ and SILENT Bass™

- Stand BST1
(Compatible for SVC110, SVC210, SVC50, SLB100, SLB300, SLB300PRO)

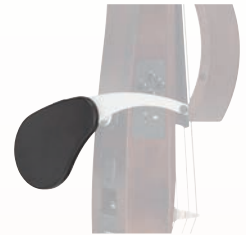


For SILENT Bass™

- Extension Frame
BEF2
(Compatible for SLB300, SLB300PRO)
- Knee Support
BKS1
(Compatible for SLB100)



- Knee Support
BKS2
(Compatible for SLB300, SLB300PRO)



AC Power Adapter

- PA-130B or an equivalent recommended by Yamaha
(Compatible for SV250, SV255, SVC110, SVC210, SVC50, SLB100)



Carbon Bows

Violin Bows



YBN100 Series

Yamaha crafts five carbon bows that offer wood-like appearance plus a selection of weights and balance to satisfy individual player performances.

		Overall Weight		
		59.0g (Light)	60.5g (Medium)	62.0g (Heavy)
↑ Closer to frog Balance ↓ Closer to tip	230mm		YBN100-M1	
	245mm	YBN100-L2	YBN100-M2	YBN100-H2
	260mm		YBN100-M3	

* Weight and balance values listed above may have an error of +0.3g/-0.3g, +5mm/-5mm.



CBB101 This model offers outstanding playing feel with appealing economy. Flex is identical to a wood bow, and control is easy for beginners as well as advanced players. The CBB101 is an excellent second-bow choice for professionals too.



CBB107ZB Artist Signature Series

One of the world's most respected and preeminent violin professors and soloists, Zakhar Bron is the mentor of such great violinists as Vadim Repin, Maxim Vengerov, Daishin Kashimoto, and Tamaki Kawakubo. Bron is very particular when it comes to bow performance and his collaboration with Yamaha manufacturing expertise has resulted in the Zakhar Bron signature bow.



Zakhar Bron

Viola Bow



The benefits of this bow are in its ample resilience and controllability. In addition to being a practical, economical choice for beginning to advanced players, the CBB202 features abalone ornamentation for elegant visual appeal.

CBB202



Cello Bow



Combining fine playing characteristics and economy, this cello bow offers the power that players need for dynamic performance. The CBB301 is great for beginners and professionals alike.

CBB301



Bows Specifications

Model		Stick		Grip		Winding	Button		Frog	
		Material	Color	Material	Color		Metal Band	Core	Material	Eye
Violin Bows	YBN100 Series	CFRP ※1, GFRP ※2	Wood	Goat Leather	Black	Gold-filled Brass	Nickel Brass	Snakewood/Abalone Inlay	Snakewood	Abalone/Nickel Brass Ring
	CBB101	CFRP ※1, GFRP ※2	Black	Goat Leather	Black	Silver Plate	Nickel	Ebony	Ebony	Pearl/Nickel Ring
	CBB107ZB	CFRP ※1, GFRP ※2	Black	Goat Leather	Black	Gold Brass/Décor	Gold Brass	Ebony/Abalone Inlay	Ebony	Abalone/Gold Ring
Viola Bow	CBB202	CFRP ※1, GFRP ※2	Black	Goat Leather	Black	Silver Plate/Décor	Nickel	Ebony	Ebony	Pearl/Nickel Ring
Cello Bow	CBB301	CFRP ※1, GFRP ※2	Black	Goat Leather	Black	Silver Plate/Décor	Nickel	Ebony	Ebony	Pearl/Nickel Ring

※1 CFRP:Carbon Fiber Reinforced Plastic ※2 GFRP:Glass Fiber Reinforced Plastic

* Specifications and design subject to change without notice.

Specifications

	Electric Violin		SILENT Violin™			SILENT Viola™
	YEV104	YEV105	SV250	SV255	YSV104	SVV200
Body Color	Natural (NT) Black (BL)		Brown (BR)		Brown (BR) Black (BL) Red (RD)	Brown (BR)
Size	4/4		4/4		4/4	16" (406mm)
Neck	Maple		Maple		Maple	Maple
Body	Spruce/Mahogany/Maple		Spruce/Maple		Spruce	Spruce
Frame	Walnut		Plastic		Plastic	Plywood
Finger Board	Composite		Ebony		Composite	Ebony
Tuning Pegs	Ebony		Ebony		Ebony	Ebony
Strings	D'addario Zyex, Helicore (C string)		D'addario Zyex, Helicore (C string)		D'Addario Zyex	Thomastik Dominant
Bridge	Maple with built-in Piezo-electric Pickup		Maple (Aubert)		Maple (with built-in pickup)	Maple (Aubert)
Tailpiece	Synthetic Resin (Yamaha original)		Wittner Ultra		Synthetic Resin (Yamaha original)	Ebony
Fine Tuner	4 (each string)	5 (each string)	4 (each string)	5 (each string)	4 (each string)	1 (A-string)
Chin Rest	Composite		Plastic		Plastic	Ebony
Pickup	Maple with built-in Piezo-electric Pickup		2 Piezo Pickups (body and bridge)		Piezo Pickup (Bridge)	2 Piezo Pickups
Electric Controls	Volume control, Selector Switch <small>(Volume Control activation switch)</small>		Pick up Blend		Volume	Volume, EQ Mode Switch, EQ Control
Control Box	—		Line Out Volume, Treble, Bass, Headphone Volume, Grand Lift Switch, Valanced Out, PAD Switch		Volume, Sound type switch (Room/Hall)	—
In/Out Jacks	Passive output		Phones Out, Line Out, Balanced Out		Instrument jack (Input/Output), AUX IN jack (Input), PHONES jack (Output) <small>*all mini jack type</small>	Phones Out, Line Out
Power Supply	—		AA size 1.5V battery 2pcs. or AC adapter (optional)		AA size 1.5V battery 2pcs (optional)	9V battery 1pc.
Battery Life*	Manganese	—	approx. 15~45 hrs		—	approx. 12 hrs
	Nickel metal hydride	—	—		maximum 24 hrs	—
	Alkaline	—	approx. 50~120 hrs.		maximum 29 hrs	approx. 24 hrs
Dimensions (L×W×H)	592×204×111mm	607×204×120mm	(instrument) 591×206×117mm (control box) 147×72×49mm	(instrument) 600×206×122mm (control box) 147×72×49mm	(instrument) 583×206×111mm (control box) 98×70×20mm	677×246×129mm
Weight	approx.560g	approx.590g	500g (control box) 260g	540g (control box) 260g	490g (control box) 70g	740g
Control box	—	—	○	○	○	—
Earphone	—	—	○	○	○	○
Soft case	—	—	—	—	—	—
Bow	—	—	—	—	—	—
Shoulder pad	—	—	—	—	—	—
Standard Accessories	—		Connection Cable, Cable bands		Connection Cable ×2	—

Specifications

	SILENT Cello™			SILENT Bass™			
	SVC110	SVC210	SVC50	SLB100	SLB300	SLB300PRO	
Size	4/4	4/4	4/4	String Length 1,054mm (41-1/2")	String Length 1,040mm (41")	String Length 1,040mm (41")	
Neck	Maple	Maple	Maple	Maple	Maple	Curly Maple	
Body	Spruce/Maple	Spruce/Maple	Alder	Spruce/Mahogany	Spruce/Mahogany	Spruce/Mahogany	
Frame	Plywood	—	—	Beech (Detachable)	Beech (Detachable)	Beech (Detachable)	
Knee Supports	—	Beech (Folding Type)	Beech (Detachable)	(optional : BKS1)	(optional : BKS2)	(optional : BKS2)	
Finger Board	Ebony	Ebony	Ebony	Rosewood	Rosewood	Ebony	
Tuning Pegs	Ebony	Worm Gear Type	Worm Gear Type	Custom Worm Gear Type	Custom Worm Gear Type	Custom Worm Gear Type (Thick Type)	
Strings	Hericore (D'addario)	Hericore(D'addario)	Prelude(D'addario)	Helicore Hybrid Light (D'addario)	Helicore Hybrid Light (D'addario)	Helicore Hybrid Light (D'addario)	
Bridge	Maple (Aubert)	Maple (Aubert)	Maple (PANPI)	Maple (Height Adjustable)	Maple (Height Adjustable)	Maple with A.R.E (Height Adjustable)	
Tailpiece	Wittner Ultra	Wittner Ultra	Ebony	Ebony	Ebony (Reverse type)	Ebony (Reverse type)	
Fine Tuner	4 (each string)	4 (each string)	—	—	—	—	
Pickup	Piezo Pickup	Piezo Pickup	Piezo Pickup	2 Piezo Pickups	Piezo Pickup	Piezo Pickup	
Electric Controls	Volume, Aux-In Volume, Reverb Switch (RM/HL1/HL2)	Volume, Aux-In Volume, Reverb Switch (RM/HL1/HL2)	Volume, Aux-In Volume, Reverb Switch (RM/HL1/HL2)	Volume, Tone control, Aux-In Volume	<ul style="list-style-type: none"> • Volume control knob • Treble control knob • Bass control knob / Bypass button • Blend control knob / Microphone type switch button 	<ul style="list-style-type: none"> • Volume control knob • Treble control knob • Bass control knob/Bypass button • Blend control knob/ Microphone type switch button 	
In/Out Jacks	Phones Out, Line Out, Aux-In	Phones Out, Line Out, Aux-In	Phones Out, Line Out, Aux-In	Phones / Line Out, Aux In	Line Out	Line Out	
Power Supply	AA size 1.5V battery 2pcs. or AC adapter(optional)	AA size 1.5V battery 2pcs. or AC adapter (optional)	AA size 1.5V battery 2pcs. or AC adapter (optional)	9V battery 1pc.or AC adapter (optional)	AA battery(alkali or nickel hydrogen) 2pcs.	AA battery(alkali or nickel hydrogen) 2pcs.	
Battery Life*	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Manganese</div> <div style="width: 35%;">approx. 3~10 hrs.</div> <div style="width: 30%;">approx. 2.5~15 hrs.</div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Alkaline</div> <div style="width: 35%;">approx. 9~25 hrs.</div> <div style="width: 30%;">approx. 10~35 hrs.</div> </div>
Dimensions (L×W×H)	1,266× 430× 243mm (without chest support)	1,251× 438× 243mm (setup for playing with the chest support attached)	1,235× 432× 240mm (with the knee support attached,and the end pin fully retracted)	1,753×525×435mm (with the frame attached and the end pin fully contracted)	1,692× 456× 330mm (with the frame attached and the end pin fully contracted)	1,692× 456× 330mm (with the frame attached and the end pin fully contracted)	
Weight	3.7kg	3.9kg	3.5kg	10kg	6.8kg	7.0kg	
Headphone	○	○	○	—	—	—	
Soft case	○	○	○	—	○	○	
Bow	—	—	—	—	—	—	
Chest support	○	○	○	—	—	—	
Standard Accessories	Audio Cable	Audio Cable	Audio Cable	Mute, Allen Wrench	Mute, Allen Wrench	Mute, Allen Wrench	

* The battery life will vary depending on the quality of the batteries, or the use of reverb, headphones, etc.
* All specifications subject to change without notice.

