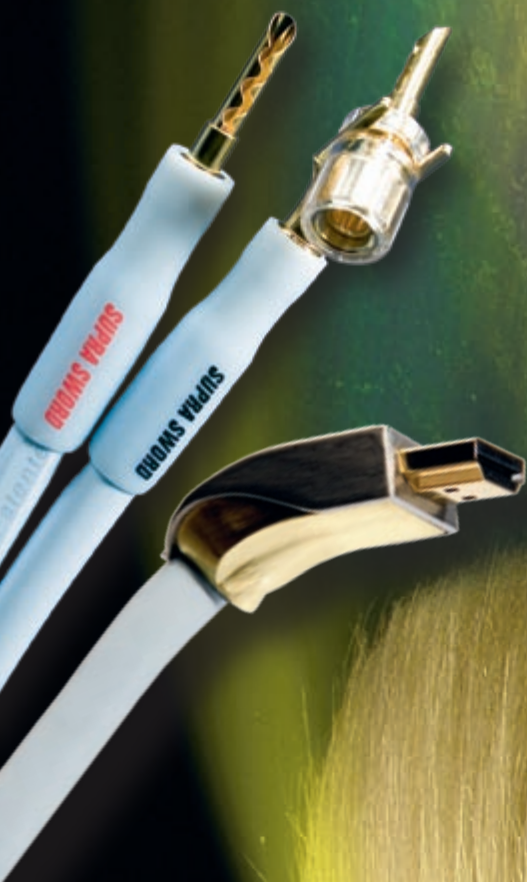


2009

SUPRA[®] *Cables*
MADE IN SWEDEN

NO NONSENSE



English Edition



JENVING has been producing high quality cables for over 30 years.

In competition with mostly more expensive products SUPRA has won an impressive number of awards around the world.

The Hi-Fi press often speaks about SUPRA products in terms of

NO NONSENSE

value-for-money High End products. The company philosophy is to make “no nonsense design”

products with the highest possible quality in cables, connectors and material. In combination with creative and patented inventions SUPRA is always a step ahead.

Before our first product, SUPRA Classic 2.5 Speaker Cable (over 30 years ago), there were no speaker cables, but just cables.

Our latest products “SWORD” speaker- and interconnect cable surprise Hi-Fi friends all over the world with their performance.

If you are looking for super designed, mysterious cables, well...

we don't have them! But If you are looking for real Hi-Fi,

High End cables, then SUPRA is definitely your choice.



NEW
SUPRA
HDMI!

Big Small connectors news!

Newly designed SUPRA HDMI connectors, new design for RCA and new SUPRA GS, Ground Separators. Read more about them on the next page.

SUPRA DisplayPort Cable

DisplayPort is a new VESA standard for connecting computer to any kind of Display. Many big companies have joined the DisplayPort standard such as AMD, Intel, Nvidia, HP, Lenovo, Dell, Philips, Samsung and Texas Instruments, to mention a few.

As a replacement for VGA and DVI it has many advantages. It carries signals for sound (up to 8 channels), USB and high-resolution display formats. All in one tiny cable. All in the digital domain.

It excels the HDMI standard, with bit rate up to 10.8Gb/sec. The connector resembles the HDMI, but it is slightly bigger and is fitted with latches to ensure safe connections.

SUPRA DisplayPort cables will be launched in the spring of 2009.



Big Small Connectors News!



Sometimes a small change in a product design will make a big difference. The space behind Flatscreen TV's and home cinema receivers is often very limited. So we created a new series of bent connectors, RCA and HDMI, which also can be placed in close proximity as shown in the picture. They are very space efficient.

SUPRA Bent RCA

This connector is easy to assemble. No screws. The bent design is not only space saving but minimizes the strain on the chassis connectors, which often are soldered directly on the PCB, which can be fragile.

The construction is Patent Pending.

The bent RCA will be offered as an option with the higher priced interconnects when ordering.

SUPRA Ground Separator

SUPRA GS, Ground Separator. This little thing solves issues with hum in sound and "sparks" in pictures owing to ground loops and polarisation conflicts.

As shown in the picture, it comes in 3 versions:

Bent and straight with PAL connectors, and straight with F-connectors.



How you get a bent and too big connector through a small conduit pipe

This HDMI interconnect series will be launched in the beginning of 2009.

-

ATC Approved
HDMI V1.3c

[illegible]

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CABLES / CONNECTORS

SUPRA LoRad

LoRad stands for Low Radiation. SUPRA LoRad is the one and only audio classified shielded mains cable that is safety approved in compliance with HD 21.5 S3.

The shield protects from the electric field, and a twisting of the conductors with a short pitch extinguishes the magnetic field. This results in cleaner sound, correct transients and a better stereo definition with 3-dimensional characteristics. Simply closer to the truth.

Patented by Tommy Jenving

SUPRA OctoPower

– always power at full speed

Problems with connector corrosion in your car or boat? SUPRA's power cables are tinplated to be immune to environmental degeneration from salt water or humidity under the hood.



Tips and Tricks:

A simple way to check the cable radiation is to use an AC field sensor.

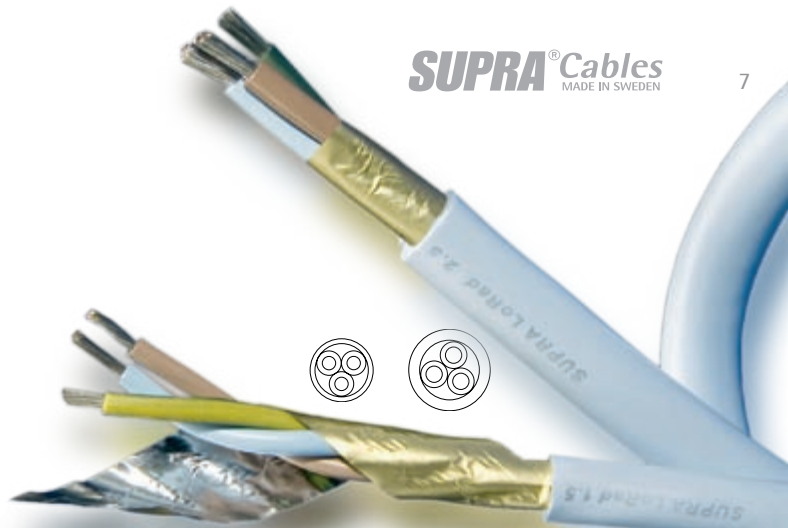
Hold the AC sensor against a cable and if it lights up it means the cable is radiating noise fields. Of course, the cable must be connected to the wall socket that is switched on.



Check SUPRA LoRad in the same way and you will find that it does not indicate any noise radiation.



AC sensors are available from SUPRA dealers or electrical stores.



SUPRA LoRad Patented Shielded Mains Flex

LoRad stands for Low Radiation of electric and magnetic alternating fields. Protects your equipment from radiated mains noise, as well as from RF pick-up.

The screen protects from the electric field and a short pitch twisting protects from and cancels the magnetic fields.

This will typically result in a cleaner sound and more accurate transients, which in turn give you a tighter bass, better 3-Dimension presence and stereo definition. Closer to the truth.

Besides this, the human health aspect should be considered. It is scientifically proven that magnetic alternating fields affect the human cell growth.

The secret of LoRad is the yellow/green earth conductor. Normally all shielded cables have 4 conductors, blue, brown, yellow/green and one uninsulated wire in contact with the shield. So far, it has not been possible to pass the safety test for flex use with this naked drain wire as it cuts and damages the cable inside when the cable is repeatedly moved and bent.

As usual, SUPRA did something unexpected. The yellow/green earth conductor was instead insulated with semi-conductive plastic. No drain wire needed anymore and the cable passed the flex test. The cable is electrically shielded as the foil is in connection with the semi-conductive plastic on the earth conductor. SUPRA LoRad is connected as any unshielded mains cable, the shielding is automatically connected.

LoRad must be connected to an earthed socket in order to get the shielding function.

SUPRA LoRad is the sole audio grade mains cable in the world with full European safety approval. Certified in compliance with HD21.5 S3.

SUPRA's screening concept is patented worldwide by Tommy Jenving.

Applications:

- Hi-Fi and studio system
- Medical equipment
- Measurement- and laboratory equipment
- For people sensitive to electric/magnetic radiation
- In any application where electric/magnetic interference is critical

Some customers :

The Swedish National Laboratory of Forensic Science SKL
Air Force (JAS project)
Hospitals



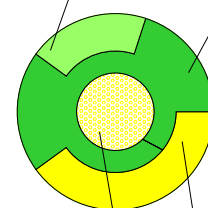
Safety approved in compliance with HD 21.5 S3

LoRad Shielded Mains Flex 110-240V

LoRad earth conductor 40% yellow and 60% green circumference surface

Light green insulation. 20% of c.s.

Dark green semi-conductive plastic 20%+20% = 40% of c.s.



Yellow insulation. 40% of c.s.

Conductor. 1.5 mm or 2.5 mm

000412 Tommy Jenving

Item	Mechanical Specifications												Electrical Spec.		
	Colour	Cross Sec. Area (mm ² /AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation	Shield Coverage	Jacket	Ext. Size (mm)	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	Voltage Nom. (V)	Current Nom. (A)
LoRad 3G1,5	Ice Blue	1.5 / 15	3	90	0,15	Tinned	2 Layer	Aluminium/PET	Heat Et Ageing	Ø8,5	103	100m/328ft	10,8	250	10
LoRad 3G2,5		2.5 / 13		320	0.10	OFC	PVC	Foil, 100%	Resitant PVC	Ø11	170	50m/164ft	6.8		16

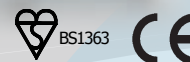
LoRad Shielded Mains Blocks in Aluminium

The mains blocks are fully shielded from radiated electric fields by means of their aluminium chassis. The conductive chassis drains the interference down to ground. It has to be connected to an earthed socket with an earthed mains cable, in order to work properly.

For a useful degree of shielding and immunity, the mains block should be combined and employed with SUPRA LoRad shielded mains cables.

*Unique Stand-by Surge Protection,
designed by SUPRA
Not connected in the circuit until
a surge occurs*

LoRad Shielded Mains Blocks



3-way Surge Protection

The SP-models, i.e. MD06-EU/SP and MD06-US/SP, are equipped with SUPRA's surge protection device which protects all three ways: Live to Earth, Neutral to Earth and Live to Neutral.

Many other surge protectors are only Live to Neutral, and do not protect against field surges by proximate lightning. Lightning is always referred to earth.

SUPRA NIF Transient Filter

All models are equipped with SUPRA NIF (Non-Intrusive Filtering), a mild transient filter which will not influence the transient properties of the equipment. SUPRA NIF is developed by Ben Duncan Research in England.

MD06-US

NEMA-15 sockets.
American standard.
Input connector: IEC-320
15 Amp Fuse
NIF transient filter.

MD06-EU

6 EU sockets, Schuko.
Inlet connector: IEC-320
10 Amp Fuse
NIF transient filter.

MD06-B5

6 UK 13A sockets, British Standard BS1363/A
Inlet connector: IEC-320
NIF transient filter.

MD06-US/SP

Same as MD06-US, but in addition equipped with the 3-way surge protection.

MD06-EU/SP

Same as MD06-EU Mark II but in addition equipped with the 3-way surge protection.

MD06-B5/SP

Same as MD06-B5, but in addition equipped with the 3-way surge protection.

Item	Mechanical Specifications													Elec. Spec		
	Qty/ Pack	Filter Type	Surge Protection	Connectors, High Voltage		Radio	Network	Tel/Fax	Pin	Chassi	Fuse	External Size	Colour	Voltage	Current	
				Input	Output				Material			LxBxH (cm)		Nom. (V)	Nom. (A)	
MD06-BS/SP	1 pc	NIF Transient Filter	3-way	MCH-10	-> 6 x	BS1363/A	TV	Sat	24K Gold Plated Brass	Earthed, Aluminium	-	47x9,5x5,5	Silver	240	13	
MD06-EU			-	MCH-10	-> 6 x	Schuko, EU/Fr					10 A	38x9,5x5,5			10	
MD06-EU/SP			3-way	MCH-10	-> 6 x	Schuko, EU/Fr						42x9,5x5,5				
MD06-US			-	MCH-10	-> 6 x	Nema-15						32x8,5x5			110	15
MD06-US/SP				MCH-10	-> 6 x	Nema-15						36x8,5x5				
MD08-EU/SP			3-way	MCH-16	-> 8 x	Schuko, EU/Fr					X	X			X	X



Surge Protection for:

Satellite Receiver/CATV

Radio Aerial

TV Aerial

Network/Broadband

Telephone/Fax/Modem

Not Enough of Sockets?

MD08-EU/SP

- A complete solution

Your Home Cinema and Hi-Fi may comprise a lot of equipments and they all need to be connected to mains sockets.

8 EU sockets, Schuko

Input connector: IEC-320 16 A

(IEC-320 is an international standard for mains connectors.)

- NIF transient filter
- 3-way surge protection



Input connector: IEC-320 16 A, SWF-16



Safety approved in compliance with HD 21.5 S3

SUPRA LoRad is the sole audio grade mains cable in the world with full European safety approval.



SUPRA GS

Ground Separators

Ground Isolator for aerial cables to TV, CATV and Radio. Eliminates Audio and Video interference noise, created by earth loops and stray leakage potentials in the cable shield.

GSS TV EU

Straight shape ground separator for TV/CATV with the European PAL system.

Gold-plated female PAL to male PAL connectors.

GSB TV EU

Bent shape ground separator for TV/CATV with the European PAL system.

Bent shape for easier connection directly into the TV.

Gold-plated female PAL to male PAL connectors.

GSS AERIAL F-CON

Straight shape ground separator for TV/CATV (outside EU).

Gold plated female to female F-connectors.

Supplied with two gold-plated cord connectors.



Item	Mechanical Specifications									
	Version	Application Examples	Connector <<< Direction >>> Connector			Construction	Frequency Range		Attenuation	Colour
			From		To		From	To	Freq. Range	
GSS TV EU	Straight	Aerial,	Aerial Female	<->	Aerial Male	Inductive transmission	100MHz	1,4GHz	Max 5dB	Ice Blue
GSB TV EU	Bent	(Not for use between satellite dish and receiver)	Aerial Female	<->	Aerial Male					
GSS Aerial F-Con	Straight		F-Connector Female	<->	F-Connector Female					

LoRad

Screened Cord Sets

LoRad CS-EU (10A)

EU-version, with Schuko plugs, is the most common standard throughout Europe. Exceptions are Denmark, Italy, Ireland and Britain.

LoRad 1.5 CS-EU

Screened cord set with LoRad 3x1.5 mm² cable and SWF10 connector (IEC-320) and SW-EU plug. Current rating 10A.

LoRad 2.5 CS-EU

A similar cord set but with LoRad 3x2.5 mm² cable. Current rating 10A.

LoRad CS-BS

British standard, BS1363A. This BS-approved cord set is available only in CSA 3x1.5 mm². British (UK) safety standard does not approve factory produced cord sets of CSA 2.5 mm².

LoRad 1.5 CS-BS

Shielded mains cord set with LoRad 3x1.5, SWF10 connector (IEC-320) and MC-BS plug.

LoRad CS-US

US-version, NEMA-15, is the American standard and also common throughout Asia. The plug is approved Hospital Grade.

LoRad 1.5 CS-US

Screened cord set with LoRad 3x1.5, SWF10 connector (IEC-320) and SW-US plug. Current rating 15A.

LoRad 2.5 CS-US

Screened cord set with LoRad 3x2.5, SWF10 connector (IEC-320) and SW-US plug. Current rating 15A.

LoRad CS-EU (16A)

LoRad 2.5 CS-EU-16

Screened cord set with LoRad 3x2.5, SWF16 connector (IEC-320) and SW-EU-16 plug. Current rating 16A.



LoRad CS-EU



LoRad CS-BS



LoRad CS-US



LoRad CS-EU-16



Item	Mechanical Specifications								Elec. Spec		Standard Lengths						
	Application	Standard	Conn. < Direction >		Conn.	Screen	Conductor	Cable	Colour	Voltage	Current	(1 m = 3.28 ft)					
			Wall Socket		Equipment	Connection	Connection	Clamping		Nom. (V)	Nom (A)	1m	1,5m	2m	4m	W/O*	
LoRad 1.5 CS-EU	Earthed 250V	Eu/Fr	SW-EU	->	SWF-10	Automatic	Screw	Screw	Ice Blue	250	10	x	x	x	x	x	
LoRad 1.5 CS-BS		British	MC-BS	->	SWF-10	Screen					13	x	x	x	x	x	
LoRad 1.5 CS-US	Earthed 110V	Nema	SW-US	->	SWF-10	Connection.				110	15	x	x	x	x	x	
LoRad 2.5 CS-EU	Earthed 250V	Eu/Fr	SW-EU	->	SWF-10	The Earth				250	10	x	x	x	x	x	
LoRad 2.5 CS-US	Earthed 110V	Nema	SW-US	->	SWF-10	Insulation is				110	15	x	x	x	x	x	
LoRad 2.5 CS-EU-16	Earthed 250V	Eu/Fr	SW-EU	->	SWF-16	Semi-Cond.				250	16	x	x	x	x	x	

* W/O Cable = Customized lengths available.

SW-EU



SW-EU Male Plug

16A Schuko, European Standard.
Gold plated pins.
Accepts a cable diameter up to 11 mm.
Mates also the French standard.

SWF-10



SWF-10 Female Connector

10A. IEC-320.
Gold plated terminations.
Accepts a cable diameter up to 11 mm.
Fits MCH10.

SWF-16



SWF-16 Female Connector

16A. IEC-320.
Gold plated terminations.
Accepts a cable diameter up to 11 mm.

MCH10



MCH10 Male Chassis Connector

10A. IEC-320.
Gold plated pins.
Fits SWF10.

SW-US NEMA



SW-US Male Plug

15A. Hospital Grade.
Nema 15 American standard.
Gold plated pins.
Accepts a cable diameter up to 11 mm.

MC-BS



MC-BS Male Connector with Fuse

13A, British standard BS1363A.
Gold plated pins.
Accepts a cable diameter up to 11 mm



SUPRA LoRad SW, a Series of Patented Mains Plugs

SW is a series of mains plugs for 110-240V, safety approved Hospital Grade and Audio Grade. Accepts big cable diameters. Easy to assemble, no loose screws, nothing to slip onto the cable before termination. Available for American, British and European standards.

Design and patent: Tommy Jenving.

LoRad

*Earthed, Rewireable
Mains Connectors
Audio Grade
Hospital Grade
Patented*

Item	Mechanical Specifications											Elec. Spec	
	Qty/ Pack	Male/ Female	Connector	Standard	Pin Material	Conductor Connection	Cable Clamping	Max Cable Dia. (mm)	Cable Inlet	Mounting Hole (mm)	Colour	Voltage Nom. (V)	Current Nom. (A)
SW-EU	1 pc	Male	3-pole Wall Socket	EU Et French	24K Gold Plated Brass	Screw	Screw	Ø11	Straight	-	Anthracite	250	16
SW-US				Nema			Clamp		-	Ice Blue	110	15	
MC-BS		Female	3-pole Equipment Conn.	British			Screw		Angled	Anthracite	250	13	
SWF-10				Inter- national					10				
SWF-16				IEC-320		Screw		16					
MCH-10		Male	3-pole chassis Conn.			Soldering	-	-	-	26.5 x 20	Ice Blue		10

OctoPower

Power Supply Cables - for car and boat

SUPRA Octopower

SUPRA's power supply cables for car audio and marine are tin plated to withstand outdoor use in cars and boats and to prevent poor connections and power loss caused by corrosion.

SUPRA Octopower is immune to a salty coastal or marine climate.

Octopower 8

Tin plated

8 mm²



Octopower 16

Tin plated

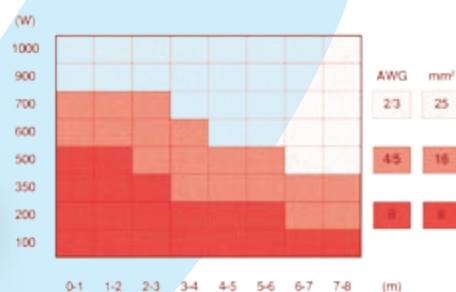
16 mm²



Octopower 25

Tin plated

25 mm²



Cable Choice Chart

Item	Mechanical Specifications										Elec. Spec
	Colour	Cross Sec. Area (mm²/AWG)	No. Wires	Wire Dia. (mm)	Wire Material	Insulation	Temp. Range (°C)	External Size Dia. (mm)	Weight (g/m)	Length/Bobbin (m / ft)	
Octopower 8	Silver	8 / 8	252	0.19	Tin Plated OFC	Oil Resistant PVC	-35 To +75	Ø 7.0	92	100 / 328	2.4
Octopower 8	Blue										
Octopower 16	Silver	16 / 5	476					Ø 8.5	172	50 / 164	1.3
Octopower 16	Blue										
Octopower 25	Silver	25 / 3	735					Ø 10.0	244		0.8
Octopower 25	Blue										

POWER

CABLES / MAINS BLOCK / CONNECTORS

SPEAKER

CABLES / CONNECTORS

INTERCONNECT

CABLES / INTERCONNECTS / CONNECTORS

HDMI & DVI

CABLES / INTERCONNECTS / CONNECTORS

INSTALLATION

CABLES / CONNECTORS

SUPRA **Sword** – High End

Would it not be nice to have the very best sound medium between amplifier and loudspeakers, performing with total transparency? SUPRA Sword is a successful attempt to create a cable of that quality. Not the most inexpensive, but the best.

There is also a Sword Interconnect: RCA or XLR.

Patented design.

SUPRA **Ply** – Focusing Dynamics/Transients

The flat sandwich design contributes to enhanced dynamics in the music. Positive side effects: reduced interference and interaction distortion. Tin plated.

SUPRA **Rondo** – High Flex, Twisted, Round

A recognized way to extinguish interference in a cable is by twisting the conductors. The usual side effect is torsion tension in the conductors, and the cable will suffer from bending fatigue. SUPRA Rondo is produced in big specially made twisting machines that eliminates this problem and make a very efficient short pitch twisting possible. Tin plated.

SUPRA **Classic** – 99.999% Pure Copper

All SUPRA products are built with the highest possible quality in material and components. Already more than 30 years ago Supra first loudspeaker cable changed people's attitude to what cable should be used for connecting the loudspeakers. That was SUPRA 2.5, which later became SUPRA Classic 2.5, and is still going strong. Tin plated.

Tin Plating

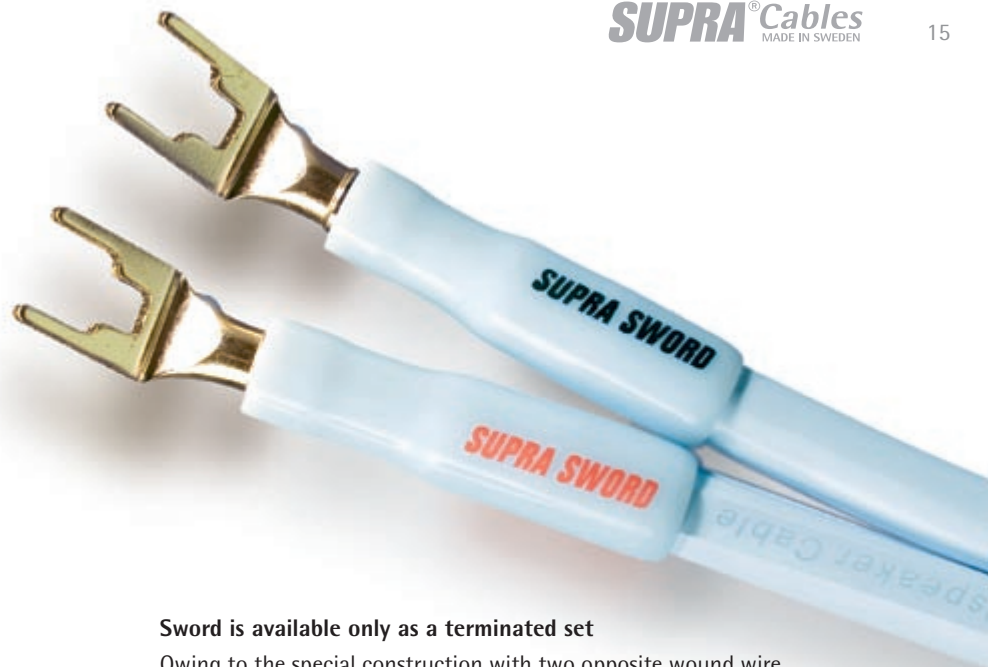
A SUPRA concept for cleaner sound.

The tin is of higher resistance than copper and also protects copper from bad sounding corrosion. It also minimises the current jumps from wire to wire over corroded copper surfaces while more of the signal passes through the pure copper *inside* the wires. The tin layer also minimises the skin-effect, by acting as a semi-Litz.

SPEAKER

S U P R A / S w o r d





Sword 3m (10 ft) pair

SUPRA's flagship. Sword is a patented cable. The secret is the bifilar-wound litz conductors, each comprising 24 individually insulated wires. The bifilar winding is built with 12 of these wires helically wound in one direction and 12 in the opposite direction. This divides the magnetic field into opposing directions resulting in self-cancellation. Because Sword's conductors comprise a number of insulated wires, dynamic skin-effect is also cancelled. Therefore Sword behaves as a non-inductive and phase stable cable.

What does it sound like?

SUPRA Sword passes the most complex music transients without any deformations. Signal delay is suddenly the same at all musical frequencies. Therefore it vanishes, giving a clear 3-dimensional presence, a sure sign of the highest fidelity.

Patent holder: Johnny Svärd

SUPRA Sword is also available as Interconnect cable with RCA or XLR connectors. See page 27 for more info.

Sword is available only as a terminated set

Owing to the special construction with two opposite wound wire groups which cancel each other's fields, the termination quality is very critical.

The termination is done with strong, gas-tight crimping, so the joined metals are fused into one unit. This is more pure and secure than any soldering.

Sword is available in standard lengths of 2m, 3m, 4m pairs, delivered in a Mahogany wood case.

Termination: Spade/Banana/BFA combination connector. Customized lengths available on order.

Sword

Loudspeaker Cable



Sword Jumper, 28 cm pair

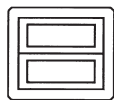
Fixed Spade termination, not the CombiCon, i.e. not replaceable with Banana connectors. This is a bridge connection for loudspeakers with double inputs (Bi-amp). Tom Frantzen of the German magazine STEREO created the idea of this product.



The usual strap connections between the loudspeaker terminals are good examples of how a jumper should NOT be designed. They make the most high inductance connection by means of the wide distance between the conductors. In order to overcome this weak link the SUPRA Sword Jumper was developed.

Item	Mechanical Specifications											Elec. Spec		Standard Lengths						
	Colour	Cross Sec. Area (mm²/AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation	Jacket	External Size (mm)	Attached Connectors			Cable Conn.	Solder Tin (For Disenaming)	R (Ω/km)	L (μH/m)	(1m = 3.28ft)			
Sword Pair	Ice Blue	3 / 12	2	12+12	0.4	Enameled OFC Wire	PE	Heat Et Ageing Resistant PVC	9.3x18.4	Banana	Spade	BFA	Crimp	Almit SR-34 Super Sn 96.5%, Ag 3%, Cu 0.5% Lead Free	5,2	0.25	2m	3m	4m	W/O*
Sword Single			x							x	x	x								
Sword Jumper			-							x	-	-								
Additional Length			-							-	-	-								

* W/O Cable = Customized lengths available.



A Square Thinking Good Dynamics

SUPRA PLY - 'A Logical and Progressive Design'

Audio cables' performance is initially determined by their loop resistance (R) & inductance (L) & shunt capacitance (C). For most speakers R & L must be low, but capacitance value, C doesn't matter as speakers already act as large cap loads. But simply using larger wire makes R low, at the expense of an increasing ratio to L with musically unacceptable effects. Ways to make inductance L low also with low resistance, include tapes, either stacked or arranged in ribbons. But these types are impractical to fit to nearly every speaker connector without discontinuities, & are stressed often unsightly when bends are required in real installs & also aren't suited to mobile uses. Litzing with multiple, insulated conductors is more practical, but quality Litzes are expensive and termination not easy. Other types are gross, like industrial pipes, unsuited to many domestic spaces.

Simplistic fat conductors' rising impedance (due to L) of +6dB/octave is further raised by internal eddy currents causing 'Skin effect', like 'the square root of inductance', adding. +3dB/oct, to the L-reactance slope. For typical cable runs, net inductivity is such that performance in heavy plain conductors is measurably affected with steady signals just above 1kHz.

Cables with copper or silver stranded conductors suffer from complex oxidation. The semi conductive 'diodes' between the strands aren't seen by steady tests, but look like a high capacitance to music signals. This causes energy storage/release cycles, that regular tests miss, yet which is audible with music. This problem is also describable as the electron flow being 'trapped' inside strands & twisting away from the direct route.

SUPRA PLY is a large section, low resistance cable, overcoming skin effect & transient distortion, using pure tin plating. Tin melds to copper without any diodic barrier, & also protects the copper from common corrosions - ideal for outdoors & 12 volt. Most audiograde cables' conductors are damaged by contamination, by plastic out-gassing, from the impure atmosphere, & liquid spills. Some are protected but only by a thin coating that'll one day crack with use and age. Neatly, oxidation forming on PLY is sonically benign.

Other Advantages

When installing, PLY's rectangular conductor is readily circularised for insertion into receptacles of most regular connectors. Square outer profiling suits most housings too - unlike ribbons, tapes & litzes. PLY is readily coiled, more like thinner, basic cables - making it friendly in temporary setups.

Demoing the Difference

Unlike some audio products, benefits of SUPRA PLY are readily shown by repeatable measurements. Fig.1 using a swept sine wave shows progressively increasing losses >1kHz for all cables, caused by L & skin effect, ranging to 10dB at 20kHz - ultrasonic sounds do matter [3] ! Ply's low-loss behaviour for hf audio (incl. bass transients), is evident. Figs. 2, 3 are time domain 'scope pics, showing typical dynamic/damping differences with a square wave. After transients, SUPRA's Ply restrains the peaking & accelerates the signal's return to 0 volts at the speaker end. Peaking in wide spaced cable shows limp damping & hf loss, because it has high L & low C, the opposite of what's required to drive most speakers.



Ply CombiCon



Ply CombiCon

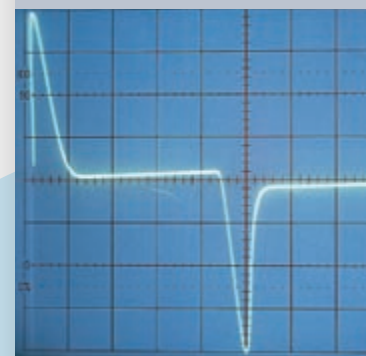


Fig. 1: Losses for wide spaced cable

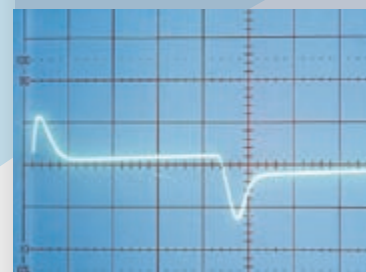


Fig. 2: Oscilloscope graph of losses for Ply 2.0

Item	Mechanical Specifications								Elec. Spec		Standard Lengths			
	Colour	Cross Sec. Area (mm²/AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation & Jacket	External Size (mm)	Weight (g/m)	R (Ω/km)	L (μH/m)	Blister Pack 5m 10m	Bobbin (m / ft)	
Ply 2.0	Ice Blue	2.0 / 14	2	120	0.15	Tinned	Heat & Ageing Resistant PVC	5.8x5.8	74	8.1	0.30	x x	100 / 328	
Ply 3.4		3.4 / 12		192		OFC		7.2x7.2	97	5.1	0.20	x x		

Item	Mechanical Specifications						Standard Lengths				
	Cross Sec. Area (mm²/AWG)	Qty/ Pack	Connector			Cable Connection	Colour	(1m = 3.28ft)			
			Banana	Fork	BFA			2m	3m	4m	W/O*
Ply 2.0 CombiCon	2.0 / 14	1 pair	x	x	x	Nut	Ice Blue	x	x	x	x
Ply 3.4 CombiCon	3.4 / 12		x	x	x	Fixing		x	x	x	x

* W/O Cable = Customized lengths available.

Ply Loudspeaker Cables

Ply 2.0 
Ply 3.4 

Less Radiation

The radiation from unshielded loudspeaker cables is often stronger than that from ordinary mains cables. SUPRA screened loudspeaker cables radiate less interference to low level circuits, inputs and interconnects.

The shielding is also highly effective in rejecting high frequency interference, by minimising aerial pick-up.

The minimising of interference fields is recommended in all fixed installations, with computers playing an increasing part in everyday life. Sensitive networks of low level information control all kinds of operations.

Meanwhile, multi-room installations often require audio, video, data and loudspeaker lines to run through ceilings and walls in very close proximity.

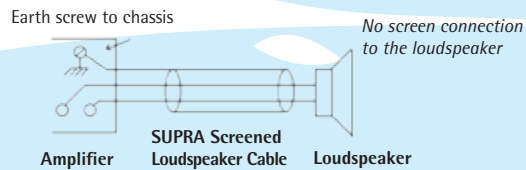
The biological effects of electric and magnetic fields should also be considered.

The Screened PLY

The screened SUPRA PLY 3.4/S combines low inductance and tin plating with the shielding concept, making it a top high-end loudspeaker cable.

See below for connection of screened cables!

Connection of Screened Loudspeaker Cables:



PLY 3.4/S

2x3.4 mm². Tin plated, sandwich design.

Application examples: High power systems, or longer lengths in low to medium power systems or where RF levels warrant it or where runs must be next to mains or lower level signal cables.

LINC

SUPRA LINC is designed with an Alu/PET shield which reduces effects from stray electric fields, and a short pitch twisting which minimises the magnetic field as well as giving the cable low inductance.

LINC stands for Low Interaction Concept.

LINC 2.5

2x2.5 mm². Tin plated.

Application examples: Medium power systems or shorter lengths in high power systems.

LINC 4.0

2x4.0 mm². Tin plated.

Application examples: Fixed installations, high power systems or longer lengths in low/medium power systems.

Ply / Linc Shielded Loudspeaker Cables

Item	Mechanical Specifications											Elec. Spec		Standard Lengths	
	Colour	Cross Sec. Area (mm²/AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation & Jacket	Shield Material	Shield Coverage	External Size (mm)	Weight (g/m)	R (Ω/km)	L (μH/m)	Blister Pack 5m	Bobbin (m / ft)
Ply 3.4/S	Ice Blue	3.4 / 12	2	192	0.15	Tin	Heat & Ageing	Braid 120x0.15	> 95%	7.3x7.3	156	5.1	0.20	x	100 / 28
Linc 2.5		2.5 / 13	+	320	0.10	Plated	Resistant	Aluminium/ PET Foil	100%	Ø8.1	94	6.8	0.42		
Linc 4.0		4.0 / 11	Drain Wire	511	0.10	OFC	PVC			Ø8.7	135	4.9	0.44		

Item	Mechanical Specifications							Standard Lengths				
	Cross Sec. Area (mm²/AWG)	Qty/ Pack	Connector			Cable	Colour	(1m = 3.28ft)				
			Banana	Fork	BFA	Connection		2 m	3m	4m	W/O*	
Ply 3.4/S Combicon	3.4 / 12	1	x	x	x	Nut Fixing	Ice Blue	x	x	x	x	

* W/O Cable = Customized lengths available.

The Rondo Family

SUPRA Concentric Cables are highly flexible and of short pitch twisting for low inductance and low radiation as well as a high tolerance to frequent bendings and vibrations before bending fatigue.

This short pitch twisting requires special machines, and is a slower and more expensive production which you do not often find in other than the SUPRA portfolio.



Rondo 2x2.5

2x2.5 mm². Tin plated

Application examples:
Hi-Fi or stage use in medium or shorter lengths in high power systems.

Rondo 4x2.5

4x2.5 mm². Tin plated

Application examples:
Bi-wiring, pair channel cable for medium power systems or single channel connected for high power systems.
For Hi-Fi or stage use.

Rondo 4x4.0

4x4.0 mm². Tin plated

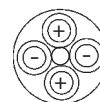
Application examples:
Bi-wiring, pair channel cable or single channel connected for high power systems.
For Hi-Fi or stage use.

Rondo

Tips and Tricks:

How to connect SUPRA Rondo 4x2.5 and Rondo 4x4.0 for lowest inductance

Connecting Rondo as shown in the figure below will make a lower inductance of 0.25 and 0.35 µH/m, respectively, which in turn makes them top class high-end loudspeaker cables.



Item	Mechanical Specifications									Elec. Spec		Standard Lengths		
	Colour	Cross Sec. Area (mm²/AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation Et Jacket	External Size (mm)	Weight (g/m)	R (Ω/km)	L (μH/m)	Blister Pack 5m 10m	Bobbin (m / ft)	
Rondo 2x2.5	Anthracite	2.5 / 13	2	320	0.10	Tin Plated OFC	Heat Et Ageing Resistant PVC	Ø 7.7	110	6.8	00.40	x x	100 / 328	
Rondo 2x2.5	Ice Blue								x x					
Rondo 4x2.5	Anthracite		4					511	Ø 9.7		170	0.35	x	75 / 246
Rondo 4x2.5	Ice Blue											x		
Rondo 4x4.0	Anthracite	4.0 / 11				Ø 11.0	236		4.3	0.40	x	50 / 164		
Rondo 4x4.0	Ice Blue													

Connect the loudspeaker cables for signal direction = direction of the legend (text) printed on the cable. Explanation on page 50.

The Classic Series

The SUPRA Classic Series comprises highly flexible cables containing tin plated multi-stranded OFC copper of purity degree 5N, which means >99.999% pure, i.e. purer than five nines. The insulation is a special ion stable PVC which minimises corrosion of the sonically benign tin surface. The tin contributes to a better sound quality by minimising the skin-effect and making less current jumps between the wire surfaces.

This series covers all Hi-Fi applications from low power speakers, such as rear speakers of home theatre systems, to high power systems with long cable lengths.



Mini 1.6

2x1.6 mm²

An economy version of Classic 1.6 of fewer wires.

Application examples: Low power such as rear speakers of home theatres.

Available only in white.



Classic 2.5

2x2.5 mm²

Application examples: Medium power systems, or shorter lengths in high power systems. Available in both Ice Blue and Anthracite Grey.



Classic 4.0

2x4.0 mm²

Application examples: High power systems, or longer lengths in low/medium power systems.

Classic 1.6

2x1.6 mm²

Application examples: Tweeters in bi-wiring, low power systems or shorter lengths of medium power systems.

Classic 1.6/H

Halogen free

2x1.6 mm²

Same as Classic 1.6 but with fire retardant ECCOH-insulation.

This makes it slightly stiffer but with a lower surface friction, which is good for installation.

Classic 2.5/H Halogen Free

2x2.5 mm²

Similar to Classic 2.5 but using fire retardant PE insulation.

This makes it slightly stiffer but with a lower surface friction, which is good for installation.

Classic 6.0

2x6.0 mm²

Application example: High power, longer lengths

Classic Loudspeaker Cables

More about flame retardant material on page 49!

Tips and Tricks:

For bi-wiring, Nylon Braid and Heat Shrink are available in kit-form. See page 45.

Item	Mechanical Specifications									Elec. Spec		Standard Lengths			
	Colour	Cross Sec. Area (mm²/AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation	External Size (mm)	Weight (g/m)	R (Ω/km)	L (μH/m)	Blister Pack			Bobbin (m / ft)
Cl. Mini 1.6	White	1.6 / 15	2	90	0.15	Tin Plated OFC	Heat & Ageing Resistant PVC	3.1x6.2	44	10.8	0.40			x	300 / 984
Classic 1.6	Ice Blue			204	Halogen Free/Flame ret.		10.5					x	x		
Classic 1.6/H															
Classic 2.5	Anthracite	2.5 / 13		320	0.10		Heat & Ageing Resistant PVC	3.6x7.3	65	6.8	0.45	x	x	x	200 / 656
Classic 2.5															
Classic 2.5/H	Ice Blue	4.0 / 11		511	Heat & Ageing Resistant PVC		4.8x9.6	108	4.3	0.55	x	x		100 / 328	
Classic 4.0		6.0 / 9		756			5.5x11.2	154	2.9	0.59	x	x			
Classic 6.0															

Connect the loudspeaker cables for signal direction = direction of the legend (text) printed on the cable. Explanation on page 50.

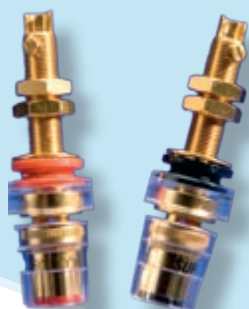
Boxcon

24K gold plated speaker cabinet connector.

For cables up to 10 mm² or Banana/Fork. For cabinet wall thickness up to 29 mm. Red and Black.

1 pair/pack

Also available in bulk of 50 pairs

**Fork**

24K gold plated spade.

The width of the fork grip is 5.5 mm. The cable can be connected either on axis or on a 90° angle.

Fits up to 10 mm² cables.

Adapter screw for 4 mm.

Banana plug is included.

SUPRA Fork is the most copied of our products worldwide.

2 pairs/pack

Also available in bulk of 200 pcs

**Fork-XL**

A larger variation of SUPRA Fork.

The size of the Fork-XL is 6.5 mm.

The adapter screws for Banana

plugs are not included

in this product.

2 pairs/pack

Also available in bulk of 200 pcs

**Banana**

24K gold plated.

4 mm Banana plug for up to

10 mm² cables. Can be connected

either on axis or at a 90° angle.

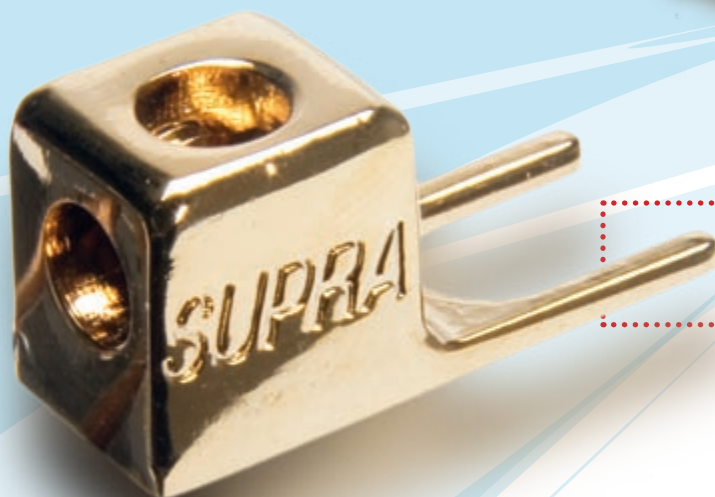
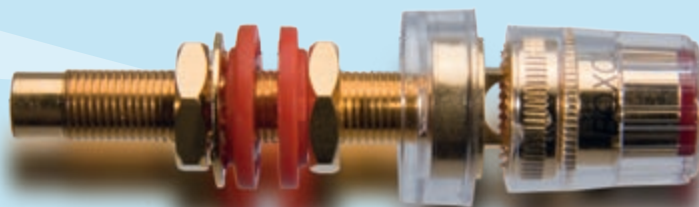
Red and Black housings.

2 pairs/pack

Also available in bulk of 50 pairs



Loudspeaker Connectors



SUPRA Fork is one of our most copied products worldwide.

Item	Mechanical Specifications										
	Qty/ Pack	Connector	Mounting	Male/ Female	Material	Connector Fixing	Cable Connection	Max Cable Area (mm²/AWG)	Mounting Hole	External Size WxHxL (mm)	Colour Identification
Boxcon	1 pair	Banana/Fork/Cable Direct	Chassis	Female	24K	Screw/Clamp	Screw/Sold.	10 / 7	M8	Ø19x35-64	Red/Black
Fork	4 pcs	Fork, 5.5 mm	Cord	Male	Gold Plated	-	Screw		-	8x20x21	-
Fork XL		Fork, 6.5 mm								10x12.5x26	
Banana	2 pairs	Banana/BFA Plug			Cu	Expansion Pin				10x18x42	Red/Black

CombiCon Banana

24K gold plated loudspeaker connector for cables up to 6mm². The Banana pin fits also BFA plugs or connectors. The cable can be attached straight on axis or at a 90 degree angle. A Banana pin can be attached to the connector body.

2 pairs/pack

Bulk pack:

50 pairs of Banana pin and
50 pairs connector body.



CombiCon Spade

24K gold plated loudspeaker connector for cables up to 6 mm². The cable can be attached straight on axis or at a 90 degree angle. Another spade can be attached to the connector body.

2 pairs/pack

Bulk pack:

50 pairs of Spade and
50 pairs connector body.



CombiCon Kit

A set of 2 pairs of connector body,
4 pcs of Spade and
4 pcs of Banana/BFA.

CombiCon Assortment

An assortment set of 50 pairs of
connector body, 50 pcs of Banana/
BFA and 50 pcs of Spade.
For dealers and installers.

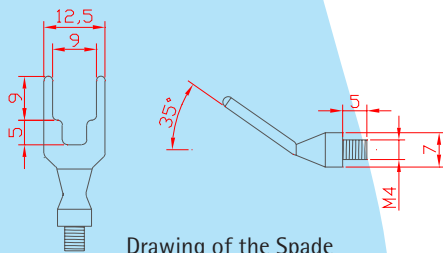


CombiCon

This combination connector comprises two parts: a termination part of cable to be screwed onto a connector body. The connector part is of two types; Spade and Banana pin, which in turn also fit BFA plugs.

The Connector Body

The connector body can be attached to the cable either on axis or at 90 degree angle. See the R.H. picture above. Also a spade terminated cable can be attached to the connector body. Printing in red and black, respectively, for polarity identification.



Drawing of the Spade



Loudspeaker Connectors

CombiCon



The Termination Parts

The Banana pin also fits BFA connectors.

The Spade is angled for easier mounting in tight spaces. It has a two step, wide opening, see drawing to the left.

Item	Mechanical Specifications									
	Qty/ Pack	Connector			Material	Connector Fixing	Cable Connection	Max Cable Area (mm²/AWG)	External Size DxL (mm)	Colour Identification
CombiCon Banana	2 pairs	x		x	24K	Exp. Pin	Nut Fixing	6 / 9	Ø13x20.5	Red/ Black
CombiCon Spade			x		Gold	-				
CombiCon Kit	2+2 pairs	x	x	x	Plated	Spring/ Pin/-				
CombiCon Assortment	50 pcs each	x	x	x	Cu					

INTERCONNECT

POWER

CABLES / MAINS BLOCK / CONNECTORS

SPEAKER

CABLES / CONNECTORS

INTERCONNECT

CABLES / INTERCONNECTS / CONNECTORS

HDMI & DVI

CABLES / INTERCONNECTS / CONNECTORS

INSTALLATION

CABLES / CONNECTORS

It takes interconnect cables to connect up a Hi-Fi system or home cinema.

It seems easy, and used to be, but in 2009 there is a lot to pay attention to.

Some connector standards are geographically limited, as for example the Scart connector is used only in Europe. In the video field there are a great variety of connector types and signal systems.

SUPRA offers a very wide assortment.

Hundreds of different connectors and combinations to cover the requirements of our worldwide markets.

Silver Plating

Only when the frequencies are very high, as in digital signals, does it seem wise to go the opposite way, i.e. to silver plate for a lower surface resistance. At such high frequencies it is hard to keep the signal inside the wire, so instead we design for an easier surface current flow.

Digital Interlinks

Important properties of digital cables are a high propagation velocity factor and a correct and stable characteristic impedance (Z).

Analogue Interconnects

Low capacitance (C) is important.

Analogue Cable

Hi-Fi



EFF-I

Analogue Interconnect Hi-Fi

Our multi test winner!

A reinforcement of even the finest details is the goal of all cable design. A traditional cable can, however, not achieve that quality, due to the construction. A good interconnect must have low capacitance and low skin-effect.

The skin-effect has a dynamic and noticeable influence because an audio signal is nothing but variations of frequencies and sound levels. If we were to transfer only one stable frequency the skin-effect would not be any problem. The frequencies push the signal differently far out from the centre of the conductor. High frequencies travel on the surface whereas low frequencies travel inside the conductor.

Thus, the higher the frequency, the higher the resistance.

In order to minimize the skin-effect the EFF-I is designed in accordance with Equalized Frequency Flow (EFF) Technique. It is based on tube shaped conductors with a wall thickness of 0.20mm, which is well below the smallest skin depth within the Audio range. This allows the same resistance for all frequencies. The result is a transparent and exact reinforcement with clear room definition.

EFF-I One of SUPRA's most awarded products, not without good reason...

EFF-I

Analogue Interconnect Hi-Fi

Analogue connection, for instance from CD or pre-amp to amplifier.

Suitable connectors:

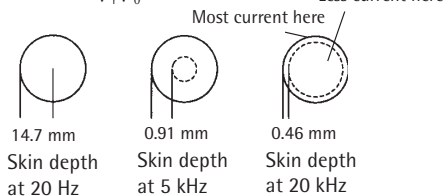
SUPRA PPSL, PPX and Swift XLR.

Design

0.5 mm²/conductor. Tube shaped and flexible conductors wound on a core of PE. Two conductors with individual screening for balanced or semi-balanced connection.

Effective skin depth

$$\delta = 1/\sqrt{\pi \mu_r \mu_0 \sigma f}$$



Item	Mechanical Specifications													Electrical Spec.		
	Colour	No. Cond.	Application Examples	Cross Sec. Area (mm²/AWG)	No. Wires	Wire Dia. (mm)	Wire Material	Conductor Insulation	Screen	Jacket	External Size (mm)	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	C (pF/m)	Velo. Factor
Biline	Ice Blue	2	Stereo Sub., MP3	0.20 / 24	1	0.4	Sn Plated	PE Foam	Braid & Alu/PET	Heat &	Ø7.0	53	100 / 328	87.5	45	0.78c
Dual			Hi-Fi	0.24 / 23	19	0.127	OFC	PE	Alu/PET Foil	PVC	2 x Ø5.5	70		72	52	0.66c
DAC		1	Analogue/Digital	0.54 / 20	19	0.19	OFC	PE Foam	Cond. Nylon,100%	Ageing Resistant	Ø6.1	43	50 / 164	45	110	0.78c
Eff-i			Hi-Fi, High End	0.46 / 21	12	0.22	Ag pl. OFC	PE	Aluminium/ PET-Foil		Ø7.2	68		38	75	0.66c
SubLink			Mono Sub Woofer	0.24 / 23	19	0.127	Sn pl. OFC				Ø6.0	48		100 / 328	72	52

Analogue Cable

Subwoofer/MP3/Hi-Fi

DAC

Hi-Fi

A 'fast' interconnect of extremely low capacitance. In accordance with our design concepts, the inductance is to be low for a loudspeaker cable whereas for an interconnect the capacitance is to be low. SUPRA DAC is insulated with a special PE which exhibits only 45 pF/m capacitance. It is screened with our very efficient and strong semi-conductive nylon ribbon.

The velocity factor of SUPRA DAC is as high as 78% of the speed of light, owing to the low dielectricity of the insulation. With PTFE/Teflon it would have been only 71%.

The velocity factor can be calculated with the simplified formula: $v = \sqrt{1/K}$ where K is dielectricity factor of the insulation. More clean transients and thus improved space dimension comes with the high velocity.



SubLink

Mono Subwoofer/ Analog Hi-Fi

A two-core screened interconnect for semi-balanced connection. Low capacitance and efficient noise rejection maintain signal integrity in the long run interconnects, which are often required for subwoofer links. It can be connected balanced or semi-balanced.

Suitable connectors:

SUPRA RCA-6 and Swift XLR.



BiLine

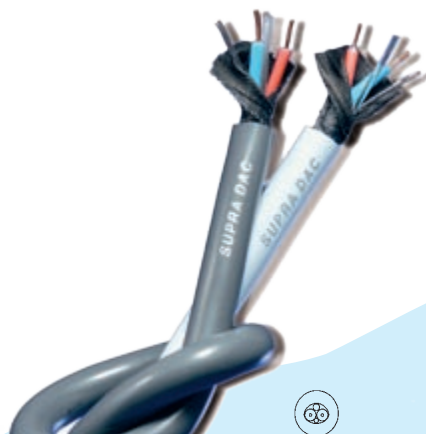
Stereo Subwoofer/MP3

A concentric twin-coax interconnect cable. Each pair is screened and jacketed to make complete cables. Application examples: Y-Links from AV amps with 1 output to subwoofer with 2 inputs or corresponding with mini plug 3.5mm SUPRA MP-8 from computer or MP3 to amp.

For balanced or semi-balanced connection.

Suitable connectors:

SUPRA RCA-6, MP-8 and PPX.



DAC

Hi-Fi

Round 2-core interconnect with a common semi-conductive Nylon screen.

A fast interconnect of neutral character. Low capacitance.

Application example:

Analogue interconnect between CD/pre-amp and power amplifier.

Suitable connectors:

SUPRA PPX, PPSL, RCA-6 and Swift XLR.



Dual

Hi-Fi

A dual-in-line interconnect cable for semi-balanced connection and with screens of aluminum foil. Low capacitance.

Application examples:

Analogue interconnect between cd/fpre-amp and power amplifier. For balanced or semi-balanced connection.

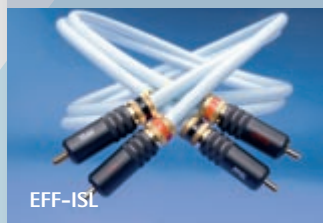
Suitable connectors:

SUPRA RCA-6 and Swift XLR.

Item	Mechanical Specifications													Electrical Spec.		
	Colour	No. Cond.	Application Examples	Cross Sec. Area (mm²/AWG)	No. Wires	Wire Dia. (mm)	Wire Material	Conductor Insulation	Screen	Jacket	External Size (mm)	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	C (pF/m)	Velo. Factor
Biline	Ice Blue	2	Stereo Sub., MP3	0.20 / 24	1	0.4	Sn Plated	PE Foam	Braid & Alu/PET	Heat	Ø7.0	53	100 / 328	87.5	45	0.78c
Dual			Hi-Fi	0.24 / 23	19	0.127	OFC	PE	Alu/PET Foil	Et	2 x Ø5.5	70		72	52	0.66c
DAC		1	Analogue/Digital	0.54 / 20	19	0.19	OFC	PE Foam	Cond. Nylon, 100%	PVC	Ø6.1	43	50 / 164	45	110	0.78c
Eff-i			Hi-Fi, High End	0.46 / 21	12	0.22	Ag pl. OFC	PE	Aluminium/ PET-Foil	Ageing Resistant	Ø7.2	68		38	75	0.66c
SubLink			Mono Sub Woofer	0.24 / 23	19	0.127	Sn pl. OFC				Ø6.0	48		100 / 328	72	52

EFF-ISL

Analogue interconnect.
Designed for minimized skin-effect.
Best applied between CD/pre-amp and power amp.
Enhances transients and timing for true sound performance.
Supplied with SUPRA PPSL RCA connectors with squeeze locking.



EFF-ISL

EFF-IX

Analogue interconnect.
Designed for minimized skin-effect.
Best applied between CD/pre-amp and power amp.
Enhances transients and timing for true sound performance.
Supplied with SUPRA PPX RCA connectors.



EFF-IX

EFF-XLR

Analogue interconnect.
EFF-interconnect for balanced professional connection.
Designed for minimized skin-effect.
Best applied between CD/pre-amp and power amp.
A balanced connection picks up less interference and is therefore recommended for long cable runs.
Provided with SUPRA SWIFT XLR connectors.



EFF-IXLR

DAC-SL

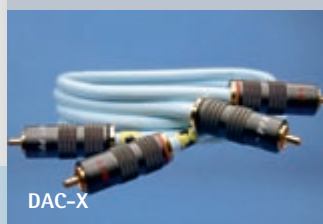
Analogue Interconnect.
A 'fast' interconnect of neutral character. Low capacitance. Best applied between CD/pre-amp and power amp.
The 'fast' cable keeps transients pure and thus helps 3-D definition in the music.
Provided with SUPRA PPSL RCA connectors with squeeze locking.



DAC-SL

DAC-X

Analogue Interconnect.
A 'fast' interconnect of neutral character. Low capacitance. Best applied between CD/pre-amp and power amp.
The 'fast' cable keeps transients pure and thus helps 3-D definition in the music.
Provided with SUPRA PPX RCA connectors.



DAC-X

DAC-XLR

Analogue Interconnect. Balanced.
A 'fast' interconnect of neutral character. Low capacitance. Best applied between CD/pre-amp and power amp.
The 'fast' cable keeps transients pure and thus helps 3-D definition in the music.
A balanced connection picks up less interference and is therefore recommended for long cable runs.
Provided with SUPRA SWIFT XLR connectors.



DAC-XLR

Dual-RCA

Analogue Interconnect.
A value for money test winner.
Low capacitance. Best applied between CD/pre-amp and power amp. With metal connectors for best screening.
Provided with SUPRA RCA-6 connectors.



Dual-RCA



Analogue Cables

High-End/Hi-Fi

All SUPRA Connectors have shielded metal housings, and the cables are designed with SUPRA's efficient screening. This guarantees interference free cable runs.

The cables are designed for low capacitance and high velocity.

The result is better definition and dynamics.

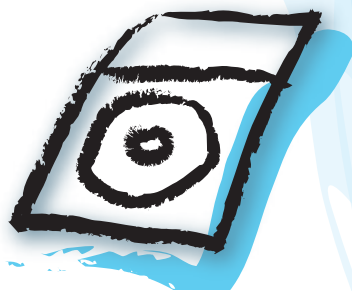
Item	Mechanical Specifications											Stand. Lengths		
	Qty/ Pack	Application Examples	Connector From	<<< Direction >>>	Connector To	Cable	Screen Connection	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28Ft)		
												1m	2m	W/O *
DAC-SL	1 pair	Analogue Hi-Fi, Cinema or High End	PPSL RCA	<->	PPSL RCA	DAC	Semi- Balanced	Almit SR34	Squeeze	Squeeze	Ice Blue / Anthracite	x	x	x
DAC-X			PPX RCA	<->	PPX RCA		Balanced	Super	Expansion	Screw		x	x	x
DAC-XLR			SWIFT XLR 3F LIGHT AU	->	SWIFT XLR 3M LIGHT AU			Sn 96.5%,	Bayonet			x	x	x
Dual-RCA		Analogue Hi-Fi, Cinema or High End	RCA-6	<->	RCA-6	Dual	Semi- Balanced	Ag 3%, Cu 0.5% Lead Free	Expansion	Crimp	Ice Blue	x	x	x
EFF-ISL			PPSL RCA	<->	PPSL RCA				Squeeze	Squeeze		x	x	x
EFF-IX			PPX RCA	<->	PPX RCA		EFF-I		Expansion			x	x	x
EFF-IXLR		SWIFT XLR 3F LIGHT AU	->	SWIFT XLR 3M LIGHT AU	Balanced			Bayonet	Screw		x	x	x	

* W/O Cable = Customized lengths available.



Analogue Cables

SACD / SubWoofer / MP3



6RCA - 6RCA

SACD Cable

For 5.1 Analogue sound from the SACD to the surround system. When there is a better DA converter in the SACD you would prefer the analogue option.

Provided with SUPRA RCA-3 connectors.

SubLink-RCA

Mono Sub-Woofer Cable

For connection between receiver and active sub-woofer (mono). Low capacitance and high interference immunity make longer cable runs possible, which most often is the case for sub-woofer connection.

Provided with SUPRA RCA-6 connectors.

Y-Link

Stereo Sub-Woofer Cable

For connection between receiver and active sub-woofer (stereo). Y-Link is a Y connected semi-balanced cable, from one to two RCAs. Low capacitance and high interference immunity make longer cable runs possible, which most often is the case for sub-woofer connection.

Provided with SUPRA PPX and RCA-6 connectors

BiLine-Mp

MP3/Ipod/Computer Cable

When you want the best from your Ipod / MP3 / computer to your Hi-Fi equipment. The cable is fully screened and immune to external interference from, for instance, the computer.

Provided with SUPRA MP-8 and RCA-6 connectors.



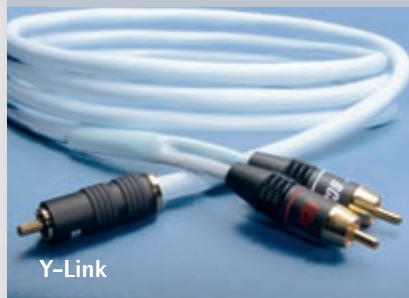
SUPER AUDIO CD



6 RCA - 6 RCA



SubLink-RCA



Y-Link



BiLine MP

Item	Mechanical Specifications									Standard Lengths								
	Application Examples	Connect. <<< Direction >>> From	Connect. To	Cable	Screen Connection	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)								W/O *
6 RCA - 6 RCA	SACD/AV	6 x RCA-3	<->	6 x RCA-3	AV-6.4	Almit	Exp.	Clamp	Ice Blue	1m	2m	4m	6m	8m	10m	12m	15m	x
BiLine MP-RCA	Computer/MP3/iPod	MP-8 3.(5m)m Stereo	<->	2 x RCA-6	BiLine	SR34	- / Exp.	Clamp		x	x	x	x	x				x
SubLink-RCA	Active Mono Sub.	RCA-6	<->	RCA-6	SubLink	Super	Exp.	Crimp		x	x	x	x	x	x	x	x	x
Y-Link	Active Stereo Sub.	PPX RCA	<->	2 x RCA-6	BiLine			Screw/Crimp		x	x	x	x	x	x	x	x	x

* W/O Cable = Customized lengths available.

S U P R A / S w o r d

High End
Product



Hi-Fi CHOICE AWARD 2007
"Best Interconnect over £100"
Bronze Medal



SUPRA SWORD-ISL RCA SUPRA SWORD-IXLR

The success with the Sword loudspeaker cable woke-up the thoughts about an interconnect cable constructed in compliance with the same patented design.

The cable works as a perfect signal carrier without the side effects of the traditionally designed cables. It is hard to beat the Sword series, regardless of price.

Available semi-balanced (RCA) and balanced (XLR). Limited edition.

About the design

The sketch below explains the principle design with the 12 insulated conductors. 6 conductors are wound clockwise, 6 are wound counter clockwise. In the same way as a short pitch twisted cable extinguishes interference the Sword concept eliminates electrical defects and allow the same velocity over the whole frequency range.

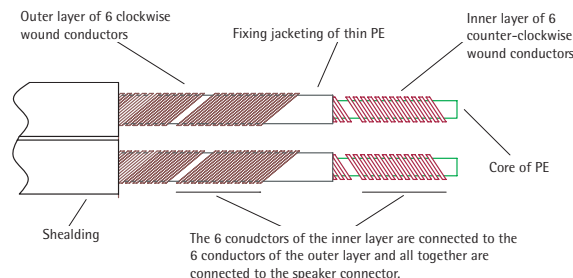
Patented design by Johnny Svärd

Analogue Cables

High End

For you who want the best possible!

SUPRA Sword is also available as loudspeaker cable with Spade and Banana connectors. See page 13 for more info.



Item	Mechanical Specifications										Electrical Specifications			
	Colour	Cross Sec. Area (mm²/AWG)	No. Cond.	No. Wires	Wire Dia. (mm)	Wire Material	Insulation	Shield Coverage	Jacket	Ext. Size (mm)	R (Ω/km)	C (nF/m)	Phase Dislocation 0.5-100 kHz	Phase Deviation
Sword-I	Ice Blue Metallic	1.5 / 15	2	6 + 6	0.4	Enameled OFC	PE	Alu/PET Foil, 100%	PVC Crystal	8	33	0,14	0.96 Degrees	0

Item	Mechanical Specifications										Standard Lengths			
	Qty/ Pack	Application Examples	Connector <<< Direction >>> From		Connector To	Cable	Screen	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)		
			RCA-BSL	->	RCA-BSL		Semi-bal.	Almit SR34	Squeeze		Ice Blue	x	x	x
Sword-ISL	1 pair	Analogue, High End	SWIFT XLR 3F LIGHT AU	->	SWIFT XLR 3M LIGHT AU	Sword-I	Balanced	Super	Bayonet	Screw	Metallic	x	x	x
Sword-IXLR														

* W/O Cable = Customized lengths available.

DAC

Digital 110 Ohm

Our 'fastest' cable. Designed for digital Audio with XLR-interface, AES/EBU 110 Ohm. Suitable connectors: SUPRA Swift XLR.

AnCo

Video/Digital cable 75 Ohm

AnCo is developed for use with aerials, video or component video. For component video you have to run 3 cables in parallel. Fits SUPRA RCA-6, BNC-6 and the new antennae connector Acon.

Trico

Video/Digital cable 75 Ohm

Double screening, 'fast' and low insertion loss: 0.6 dB/100m. Our best video/digital cable. True 75 Ohm. Application example: composite video, such as DVD to TV/projector or digital Audio (s/pdif) from DVD to AV amplifier. Suitable connectors: SUPRA PPX, MP-8 or BNC-8

Digital Cables

Coaxial 75 Ohm /
AES EBU 110 Ohm



DAC

DAC Digital/Analogue Interconnect Cable, AES/EBU Harmonised, 110 Ohm

A 'fast' interconnect of extremely low capacitance. In accordance with our design concepts, the inductance is to be low for a loudspeaker cable whereas for an interconnect the capacitance is to be low. SUPRA DAC is insulated with a special PE which exhibits only 45 pF/m. It is screened with our very efficient and strong also semi-conductive nylon ribbon. SUPRA DAC is also co-designed for digital audio and is harmonised with the AES/EBU standard. (Square wave of 60 MHz, impedance 110 Ohms, balanced.)

The very high frequency properties of SUPRA DAC are outstandingly good, owing to its high velocity factor.

The velocity factor of SUPRA DAC is as high as 78% of the speed of light, owing to the low dielectricity of the insulation. With PTFE/Teflon it would have been only 71%.

The velocity factor can be calculated with the simplified formula $v = \frac{1}{\sqrt{K}}$ where K is the dielectricity of the insulation material.

More clean transients and thus improved space dimension comes with the high velocity.

Anco

Anco Aerial/Component Cable, 75 Ohm, Co-axial

Designed for 75 OHM applications. Solid centre core for high quality video properties. Silver plated screen and centre core for enhanced high frequency transfer. PE insulation for low capacitance and high velocity factor. Upgraded with double screening in 2008.

Trico

Trico Digital/Video Composite Cable 75 Ohm, Co-axial

SUPRA Trico is double shielded interconnect cable of very low capacitance, insulated with PE foam which produces only 58 pF/m and makes the cable's propagation velocity as high as 78% of the speed of light. The centre conductors are made of silver plated OFC copper. The silver plating of the conductor and screen enhances the cohesive properties of the cable, for signals at high frequencies.

Trico is double-shielded with a braided inner screen of silver plated oxygen-free copper and an outer of bare OFC-braid. The screens provide efficient noise protection. The high technology design of Trico produces an extremely low attenuation: -0.6dB/100m at 1MHz and -7.1dB/100m at 100MHz.

True 75 Ohm: The characteristic impedance is very stable: +/- 1.5 Ohms from 1MHz up to 100MHz.

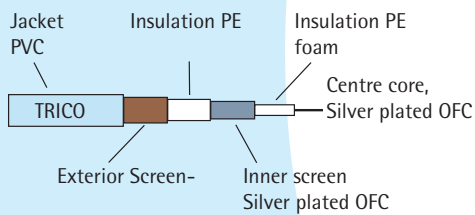
Item	Mechanical Specifications														Electrical Spec.		
	Colour	Application Examples	Cross Sec. Area (mm²/AWG)	No. Wires	Wire Dia. (mm)	Wire Material	Conductor Insulation	Inner Shield Coverage	In. Shield Insulation	Outer Shield Coverage	Jacket	Dia. (mm)	Weight (g/m)	Length/Bobbin (m / ft)	C (pF/m)	Imp. Z (Ω)	Velo. Factor
DAC	Ice B./Anthr.	Analogue/Digital	0.54 / 20	19	0.19	OFC	PE Foam	Cond. Nylon, 100%	-	-	Heat & Ageing	Ø6.1	43	50 / 164	45	110	0.78c
AnCo	Ice Blue	Video/Aerial	0.28 / 23	1	0.6	Silver	PE	Aluminium Foil	-	Braid Sn OFC, >95%	Resistant	Ø6.2	52	150 / 492	72	75	0.72c
Trico		Video/Digital	0.71 / 19	7	0.36	Plated OFC	PE Foam	Braid Ag OFC, >95%	PE	Braid OFC, >90%	PVC	Ø8.2	105	50 / 164	58	75	0.78c

Digital Formats

For digital applications it is always important to chose a cable with the right characteristic impedance.

The characteristic impedance of source, cable and receiver must match (be the same) in order to avoid signal loss by reflections.

- S/PDIF stands for Sony Philips Digital Interface.
- AES/EBU stands for Audio Engineering Society and European Broadcasting Union.



● Coaxial Digital 75 Ohm

S/PDIF – the most common consumer electronic format

75 Ohm S/PDIF is an interface for BNC- or RCA-connectors. The most common in Hi-Fi applications.

Trico-RCA

- Application example: DVD to AVR amplifier.

Trico-BNC

- Application example: CD transport to DAC.

Trico-MP/RCA

- Application example: Computer till audio amplifier

These 75 Ohm digital interconnects are designed to carry the full digital spectrum, and can be applied in all 75 Ohm applications. Semi-balanced for best interference immunity.

● AES EBU 110 Ohm – professional standard

110 Ohm AES/EBU is a blanced interface with XLR connectors. The most common in professional use.

DAC-XLR AES/EBU

- Applikation example: CD to DAC

Digital-Cables

S/PDIF Coaxial
AES/EBU



Trico-RCA

Trico-RCA/Trico-BNC

Trico-RCA/Trico-MP

DAC-XLR

75 Ohm S/PDIF

110 Ohm AES/EBU

Item	Mechanical Specifications									Standard Lengths								
	Application Examples	Connector From	Direction	Connector To	Cable	Screen Connection	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)							
Anco-RCA Coax	Digital 75 Ohm	RCA-6	<->	RCA-6	Anco	Unbalanced	Almit SR34	Expansion	Clamp	Ice Blue	1m	2m	4m	6m	8m	10m	12m	15m
DAC-XLR AES/EBU	Dig. AES/EBU 110Ω	Swift XLR 3F light Au	->	Swift XLR 3M light Au	DAC	Balanced	Super Sn 96.5%, Ag 3%, Cu 0.5% Lead Free	Bayonet	Screw	Ice B./Anthr.	x	x	x	x	x	x	x	x
Trico-BNC	Coaxial Digital 75 Ohm	BNC	<->	BNC	Trico	Semi-Balanced		Bayonet	Crimp	Ice Blue	x	x	x	x	x	x	x	x
Trico-RCA		PPX RCA	<->	PPX RCA				Expansion	Screw		x	x	x	x	x	x	x	x
Trico MP-RCA		MP-8 Mono 3.(5m)m	<->	PPX RCA				- / Exp.	Crimp/		x	x	x	x	x	x	x	x
Trico RCA-BNC		PPX RCA	<->	PPX RCA				Exp./Bayonet	Screw		x	x	x	x	x	x	x	x

* W/O Cable = Customized lengths available.

X-ZAC Toslink*

An exact mechanical fit is important in order to avoid divergence losses. Therefore X-ZAC is provided with a high precision metal connector.

The fibre optic is principally the same as ZAC, but the X-ZAC is machine polished in further 3 stages.

Available in 1m (3ft).

ZAC Toslink*

Our most popular Toslink.

Fibre optic, fitted with Toslink at both ends.

ZAC Toslink is available in 1m (3ft), 2m (6ft), 4m (13ft), 8m (26ft), 15m (49 ft).

ZAC MinTos

Mini plug to TosLink

The same concept but fitted with Mini Toslink at one end and a Toslink at the other. Often used between Mini discs and CD players. Available in 1m (3ft), 2m (6ft), 4m (13ft).

ZAC Mini

Mini plug to mini plug

The same fiber optic but fitted with Mini plug 3.5mm at both ends. Often used between MP3 player and computer/amplifier. Available in 1m (3ft).



X-ZAC Toslink

ZAC Toslink

ZAC MinTos

ZAC Mini

Optical Cables

S/PDIF

ZAC Fibre Optic Interconnect

ZAC stands for Zero Attenuation Concept.

The innovative curving of the fibre core tip to get a zero divergence loss enables plastic fibre optic to be used, and achieve the same transmission quality as that of a glass fibre core in combination with the strength and flexibility of the plastic core.

Properties and advantages of the fibre optic cable are:

- Low weight
- Wide band width
- Interference immune
- No radiation
- Independent of voltage

*Toslink

TosLink is short for Toshiba Link. Optical variant of S/PDIF where light is used for signal transfer.

Item	Mechanical Specifications									Standard Lengths									
	Application Examples	Connector < Direction > Connector			Cable	Fibre	Lens Polish	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)								
		From		To							1m	2m	4m	6m	8m	10m	15m		
X-ZAC TosLink	Optic Digital	Toslink, Metal	<->	TosLink, Metal	ZAC	Plastic	6-step	Bayonet	Molded /	Ice Blue	x								
ZAC TosLink		Toslink	<->	TosLink			3-step	Bayonet / -	Bending Protection		x	x	x	x	x			x	x
ZAC MinTos		Mini Plug 3.5mm	<->	TosLink							x	x	x						
ZAC Mini		Mini Plug 3.5mm	<->	Mini Plug 3.5mm							x								

AV-2

2-Core Coax

Application examples:
S-video.

Suitable connectors are SUPRA SVHS-7 and/or SUPRA Scart plugs.

S-video = Y/C

AV-3

3-Core Coax

Application examples:
Component video, A/V.

Suitable connectors are SUPRA Scart, RCA-3, BNC-3 and VGA plugs.

Component video = Y/Cb/Cr

AV-3

4-Core Coax

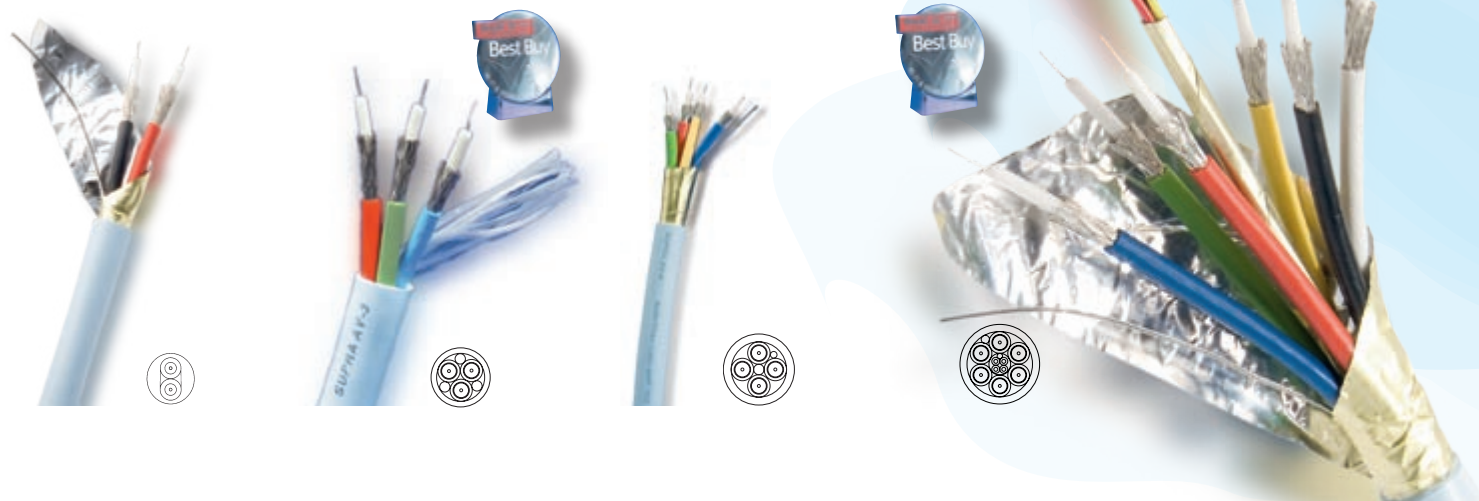
Application examples:
RGB, Component video, A/V.

Suitable connectors are SUPRA Scart, RCA-3, BNC-3 and VGA plugs.

AV-6.4

AV-6 comprises 6 coax, surrounded by a common overall foil screen, which further minimises RF break-through. The centre core is a screened 2-pair audio cable.

Application examples:
RGB/S-video/Composite Video/Component Video. Suitable connectors are SUPRA Scart, VGA, SVHS-7, BNC-3 and RCA-3.



AV Series Audio/Video Multi Core Coax 75 Ohm

The SUPRA AV cables are multi-core coax of individual 75 Ohm rated coax cores.

Each core has a braided screen of tin-plated OFC.

The SUPRA AV series is of very low capacitance owing to the PE foam insulation.

The construction is especially developed for Home Theatre use, and suits several applications with SUPRA VGA-11, Scart, RCA, S-VHS and BNC connectors.

The timing error is less than 2.2 ns, which enables accurate RGB transmission.

The AV-6.4 comprises a screened 2-pair audio cable as a centre core.

Applications:

- Home Theatre
- Video walls
- High resolution video projection
- Computer graphics workstations
- Studio tie lines

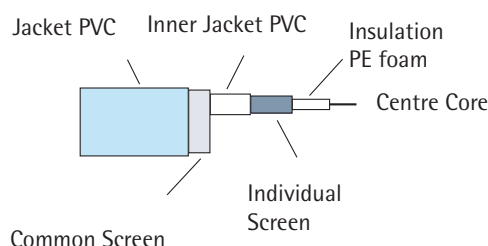
SUPRA AV-6.4 is an upgraded version of the 'Best Buy' awarded AV-6*.

It remains the same 6-core coax cable, unchanged except for the added 2-pair centre core for audio.

AV Multi Cable

Coaxial 75 Ohm

Construction of the AV Series



Item	Mechanical Specifications														Electrical Specifications			
	Colour	Application Examples	No. Coax	Cross Sec. Area (mm²/AWG)	No. Wires	Wire Material	Wire Insulation	Inner Shield Coverage	Coax Insulation	Outer Shield Coverage	Jacket	Ext. Size (mm)	Weight (g/m)	Length/Bobbin (m/ft)	R (Ω/km)	C (pF/m)	Imp. Z (Ω)	Velo. Factor
AV-2	Ice Blue	S-video or AV	2	0,20 / 24	1	Tin Plated OFC	PE-Foam	Braid 120x0.10 OFC Sn >95%	Heat Et Ageing Resistant PVC	Al/Pet, 100% Foil, 100%	Heat Et Ageing Resistant PVC	Ø7.0	53	100 / 328	87,8	45	75	0.78c
AV-3		Component / AV	3									Ø8.0	68					
AV-4		RGB or AV	4									Ø9.5	105					
AV-6.4			6 (+4)									Ø11.0	147					

Damping: 1MHz/1.4 dB, (5m)Hz/3.1dB, (10m)Hz/4.4dB, 50MHz/9.8dB

Composite*

Comprehensive video signal



Video Cables

Trico & Anco, Composite Video

Available in different combinations with Scart-RCA- and BNC connectors.

Trico and AnCo are used for these cables. Shown as R.H. pictures.

Application examples:

Video/TV Game to TV/Projektor.

Aerial Cable

Anco

Anco is a silver plated cable for high quality antennae/aerial signals.

Available only with European PAL connectors. Male to female or female to male.

Suitable connectors is Acon M and Acon F.

The PAL system (Phase Alternating Line) is employed in most of Europe.

In USA the NTSC system (National Television System Committee) is used.

Application example:

Antennae/aerial to TV/Digital receiver.

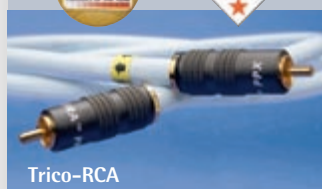
The Secret

Trico and Anco are True 75 Ohm

Trico and Anco has a property that is the secret behind the sharp and clean picture: True 75 Ohm for low reflection loss, especially at longer runs. Trico and AnCo have double screening for less interference.

All connectors are screened.

- * Composite Video means that colour (chroma) and light intensity (luminance) are mixed in the same conductor. Due to this mix, the colour performance can not be as good as with other separating formats.



Trico-RCA



AnCo-RCA



Trico-BNC



AnCo-BNC



Trico RCA-BNC



AnCo RCA-BNC



Scart-1RCA



Scart-1BNC



AnCo-TV

Item	Mechanical Specifications										Standard Lengths							
	Connection Configuration	Application Examples	Conn. < Direction > Conn.		Cable	Screen Connection	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)							
			From	To							1m	2m	4m	6m	8m	12m	15m	W/O*
1 RCA -> Scart	Video 75 Ω/ CVBS/ Composite Video	DVD/VHS,	RCA-6	->	Scart	Unbalanced	Almit SR34 Super Lead Free Sn 96.5%, Ag 3%, Cu 0.5%	Exp./Friction Gr.	Screw/Squeeze	Ice Blue	x	x	x		x		x	x
Scart -> 1 RCA		Computer TV,	Scart	->	RCA-6	Unbalanced		Friction Gr./Exp.	Squeeze/Screw		x	x	x		x		x	x
Anco-BNC Coax		TV or	BNC-6	<->	BNC-6			Bayonet	Crimp		x	x	x		x	x	x	x
Anco-RCA Coax		Projector	RCA-6	<->	RCA-6			Expansion	Screw/Squeeze		x	x	x		x	x	x	x
Anco RCA-BNC Coax	Aerial 75	TV/Radio	RCA-6	<->	BNC-6		Unbalanced	Exp./Bayonet	Screw/Crimp		x	x	x		x	x	x	x
Anco-TV F-M			ACON-F	<->	ACON-M	Expansion		Screw/ Clamp	x		x	x		x	x	x	x	
Anco-TV M-M			ACON-M	<->	ACON-M	Bayonet		Crimp	x		x	x		x		x		
Trico-BNC			Video 75 Ω/ CVBS/ Composite Video	DVD/VHS,	BNC-8	<->		BNC-8	Semi-Balanced		Expansion	Screw	x	x	x		x	
Trico-RCA	Computer,	PPX RCA	<->	PPX RCA	Trico	Exp./Bayonet	Screw/Clamp	x			x	x		x		x		
Trico RCA-BNC	TV, TV	PPX RCA	<->	BNC-8		Exp./Bayonet	Screw/Clamp	x			x	x		x		x		

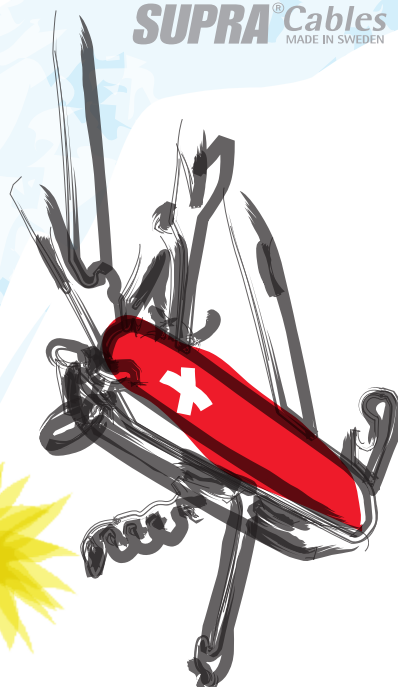
* W/O Cable = Customized lengths available.

SUPRA 'SwissArmy' Cables

Different video standards, signals and interfaces makes it difficult to know which cable will be the right.

Sometimes it takes a somewhat odd cable to solve a connection problem. The following pages show a selection of different audio/video cables.

Should you not find what you are looking for, call the distributor or local dealer. We can customize for all connector combinations and lengths at a reasonable cost.



S-Video Cable

AV-2

The S-Video cables are available in different combinations with Scart/S-video/RCA connectors.

All connectors are shielded

Application example:

DVD/SVHS to TV/Projector.

S-Video*

Separated Video Signal

S-Video Multi Cable

AV-4 & AV-6.4

The S-Video cables are also available in combination with audio or composite video, in several variations with Scart/S-video/RCA connectors.

All connectors are shielded.

Application example:

DVD/VHS to TV/Projector.

The S-Video Format

S-Video is a better transfer system than composite, but needs two conductors with correct phase properties for synchronising the luminance and chroma.

In order to achieve this, the True 75 Ohm impedance is an important parameter of the cable.

* S-Video means a signal that is separated Y/C. Y (grY) is grey scale (luminance) and C stands for Colour.

S-Video gives better colour quality and sharpness than composite video. Supports 480i and 576i formats.



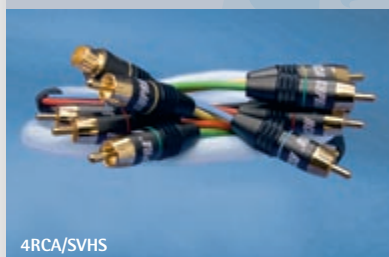
Scart-SVHS



SVHS-SVHS



Scart-SVHS/2RCA



4 RCA/SVHS



Item	Mechanical Specifications										Standard Lengths											
	Connection Configuration	Applica.- Examples	Connector < Direction >		Connector	Cable	Screen- Connection	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)										
			From		To							1m	2m	4m	6m	8m	10m	12m	15m	W/O		
Svideo-Svideo	Svideo or Y/C	DVD,	SVHS-7	<->	SVHS-7	AV-2	Separate	Almit SR34	-	Crimp	Ice Blue	x	x	x	x	x	x	x	x	x		
Scart -> Svideo		Comput., TV,	Scart	->	SVHS-7		Screened	Super	Spring Plate/-	Clamp/Crimp		x	x	x					x	x		
Svideo -> Scart			SVHS-7	->	Scart		Conductors	Lead Free	-/Spring Plate	Crimp/Clamp		x	x	x					x	x		
1 RCA/Svideo	Svideo Et Video	TV or Projector	SVHS-7/RCA-3	<->	SVHS-7/RCA-3	AV-3	+	Sn 96.5%,	-/Expansion	Crimp		x	x	x		x				x	x	
2 RCA/Svideo	Svideo Et AV		SVHS-7/RCA-3	<->	SVHS-7/RCA-3	AV-4	Common	Ag 3%,				x	x	x		x				x	x	
4 RCA/Svideo	Comp.Video/Svideo		RCA-3/SVHS-7	<->	RCA-3/SVHS-7	AV-6.4	Screen	Cu 0.5%				x	x	x		x	x	x	x	x	x	x

* W/O Cable = Customized lengths available.

Component Cables

AV-3

The component cables are available in different combinations with RCA, BNC, Scart, VGA, and DVI connectors. All connectors are screened.

Application example:

DVD to TV/Projector.

Component*

Separated Analogue Video Signal

* Analogue Component means that colour chroma) and light intensity (luminance) is separated into three information parts, namely Y, R-Y and B-Y:

- Y signal contains luminance- and synchronising information.
- R – Y signal is red minus luminance
- B – Y signal is blue minus luminance

Note: Component Video is not compatible with RGB.

The component connectors are usually marked YPbPr. Sometimes they are wrongly marked Y/Cb/Cr (digital component), YUV or RGB.

Component Video is a high quality transfer technique, and can handle resolutions up to 1080p.

VGA-3RCA

3RCA-3RCA

DVI-3BNC

3RCA-3BNC

VGA-3BNC

Scart-3RCA

3BNC-3BNC

DVI-3RCA

Scart-3BNC

Item	Mechanical Specifications									Standard Lengths									
	Connector Configuration	Application Examples	Conn. <Direct.> Conn.		Cable	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)									
			From	To						1m	2m	4m	6m	8m	10m	12m	15m	W/O*	
3 BNC - 3 BNC	Y/Pb/Pr	DVD/SAT To TV or Projector	BNC-3	<->	BNC-3	Almit SR34 Super Lead Free Sn 96.5%, Ag 3%, Cu 0.5%	Bayonet	Crimp	Ice Blue	x	x	x		x			x	x	
3 RCA - 3 BNC	Component/AV		RCA-3	<->	BNC-3		Expansion/Bayonet	Clamp/Crimp		x	x	x	x	x				x	x
3 RCA - 3 RCA			RCA-3	<->	RCA-3		Expansion	Clamp		x	x	x	x	x	x	x	x	x	x
DVI - 3 BNC	Y/Pb/Pr Component		DVI-I	<->	BNC-3		Screw/Bayonet	Clamp/Crimp		x	x	x		x				x	x
DVI - 3 RCA			DVI-I	<->	RCA-3		Screw/Expansion	Clamp		x	x	x		x				x	x
Scart - 3 BNC Comp.			Scart	<->	BNC-3		Spring Plate/Bayonet	Clamp/Crimp		x	x	x		x				x	x
Scart - 3 RCA Comp.			Scart	<->	RCA-3		Spring Plate/Expansion	Clamp		x	x	x		x				x	x
VGA - 3 BNC			VGA-11	<->	BNC-3		Screw/Bayonet			x	x	x		x				x	x
VGA - 3 RCA			VGA-11	<->	RCA-3		Screw/Expansion			x	x	x		x	x	x	x	x	x

* W/O Cable = Customized lengths available.

Component Cables, High End

Anco

SUPRA component cables are available in different combinations with RCA and BNC. Anco is for high quality demand and/or long cable runs. The signal is separated into three individual coaxial cables of very low loss. (0.6/100m)
All connectors are shielded.

Application example:
DVD to TV/Projector.

Component

Separated Analogue Video Signal

Component Video Multi Cable

AV-4 & AV-6.4

SUPRA Component video cables are also available in combination with audio, composite or S-Video. There are many variations, with Scart/S-Video/RCA-connectors. All connectors are shielded.

Application example:
DVD/SVHS to TV/Projector.



Anco-RCA Component



Anco-BNC Component



Anco-RCA/BNC Component



4 RCA/SVHS

Note: Component video is not compatible with RGB.

Item	Mechanical Specifications									Standard Lengths									
	Connector Configuration	Application Examples	Connector < Direction > Connector		Cable	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)									
Anco-BNC Component	Y/Pb/Pr	DVD/SAT	3xBNC-6	<=>	3xBNC-6	Anco	Almit SR34	Bayonet	Crimp	Ice Blue	1m	2m	4m	8m	10m	12m	15m	W/O*	
Anco-RCA Component	Component/	TV or	3xRCA-6	<=>	3xRCA-6		Super, Ag 3%,	Expansion	Screw		x	x	x	x			x	x	x
Anco RCA-BNC Comp.	AV	Projector	3xRCA-6	<=>	3xBNC-6		Sn 96.5%,	Exp./Bayonet	Skuv/Crimp		x	x	x	x			x	x	x
4 RCA/Svideo	Comp./Vid./Svideo		RCA-3/SVHS-7	<=>	RCA-3/SVHS-7		Cu 0.5%	-/Expansion	Crimp		x	x	x	x	x	x	x	x	x

* W/O Cable = Customized lengths available.

Scart Cable AV-series, High End

These are "specialized Scart Cables" using the high quality AV-series multi coax of true 75 Ohms and low losses, for best performance.

Available in many combinations with Scart, RCA, BNC and S-video. Check for type of signal and possible directionality, in the table.

- All video cores are of 75 Ohm coax type, individually screened.
- Audio cores are separately screened to avoid cross-talk interference.
- All conductors are insulated with PE, which makes low capacitance.
- A common aluminum shield protects from electro magnetic interference.

Scart Cable Full Scart

Owing to the larger size of the AV-cores the full Scart can not be made with this cable, but a smart compromise has been developed. We have focussed on the most important parts and given them a larger area whereas other have to be smaller, which made SUPRA Full Scart better than most other full Scarts.

SCART

Video Cables



A selection of SUPRA Scart Cables.

Should you not find what you are looking for, call the SUPRA distributor or local dealer.

We can customize for all connector combinations and lengths at a reasonable cost.



All soldering staff are holders of soldering certificate. All of our interlinks are soldered with lead-free silver tin, for performance and ecology.



Item	Mechanical Specifications										Standard Lengths										
	Connector Configuration	Applications Examples	Connector < Direction > Conn.		Cable	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)											
			From		To					1m	2m	4m	8m	10m	12m	15m	W/O*				
FS Full Scart	Full Scart	DVD/VHS/TV/SAT	Scart	<->	Scart	FS	Almit SR34 Super Lead Free Sn 96.5%, Ag 3%, Cu 0.5%	Spring Plate	Clamp	Ice Blue	x	x	x	FS also 0,6m and 1.5m							
2 RCA -> Scart Audio	Audio	TV/Amplifier	RCA-3	->	Scart	AV-2		Expansion	Crimp/ Clamp		x	x	x	x				x	x		
3 RCA -> Scart A/V	Audio & Video	TV/Amp./DVD	RCA-3	->	Scart	AV-3		/			x	x	x	x					x	x	
4 RCA -> Scart RGB	RGB & C-Sync	DVD/TV	RCA-3	->	Scart	AV-4		Spring Plate			x	x	x	x					x	x	
4 BNC -> Scart RGB			BNC-3	->	Scart			Bayonet/Spring Pl.			x	x	x	x					x	x	
Scart -> 2 RCA Audio	Audio	TV/Amplifier	Scart	->	RCA-3	AV-2		Spring Plate			Crimp/ Clamp	x	x	x	x				x	x	
Scart -> 3 RCA AV	Audio & video	TV/Amp./DVD	Scart	->	RCA-3			/				x	x	x	x					x	x
Scart - 3 RCA Comp.	Component or Y/Pb/Pr	DVD/Projector	Scart	<->	RCA-3	AV-3		Expansion				x	x	x	x					x	x
Scart - 3 BNC Comp.			Scart	<->	BNC-3			Spring Pl./Bayonet				x	x	x	x						x
Scart -> 4 RCA RGB	RGB & C-Sync	DVD/SAT/Projector	Scart	->	RCA-3	AV-4		Spring Pl./Expansion				x	x	x	x					x	x
Scart -> 4 BNC RGB			Scart	->	BNC-3			Spring Pl./Bayonet			x	x	x	x						x	x
Scart - 6 RCA AV	AV, In/Out	DVD/Amp./TV	Scart	<->	RCA-3	AV-6.4		Spring Pl./Expansion			Crimp/Clamp	x	x	x	x				x	x	
Scart - Scart AV-6.4	RGB & Svideo & AV	DVD/TV/High End	Scart	<->	Scart			Spring Plate	Clamp			x	x	x	x	x	x	x	x	x	
Scart -> Svideo/ 2 RCA	Svideo & Audio	DVD/Amp./TV	Scart	->	SVHS-7/RCA-3			Spring Pl./Expansion	Clamp/Crimp			x	x	x	x					x	x
Svideo/ 2 RCA -> Scart			SVHS-7/RCA-3	->	Scart			Expansion/Spring Pl.	Crimp/Clamp			x	x	x	x					x	x

* W/O Cable = Customized lengths available.

VGA-4 RCA

VGA-5 RCA

VGA-4 BNC

VGA-5 BNC

SCART-VGA

VGA-VGA

VGA-3 RCA female

VGA Cables

AV series, High-End

These cables are specialised VGA cables of the high quality AV series, multi coax of true 75 Ohm and low loss for best performance. Available in many combinations with VGA, RCA, BNC, scart and DVI.

Check for type of signal and possible directionality, in the table.

- All video cores are 75 Ohm coax, individually screened
- The audio cores are separately screened to minimize cross interference.
- All cores are insulated with PE for low capacitance.
- A common aluminium screen protects from electro-magnetic interference.

VGA Video Cables

A selection of SUPRA VGA cables.

Should you not find what you are looking for, call the SUPRA distributor or local dealer.

We can customize for all connector combinations and lengths at a reasonable cost.

Item	Mechanical Specifications									Standard Lengths									
	Connector Configuration	Application Examples	Conn. < Direction > Conn.		Cable	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)									
			From	To						1m	2m	4m	6m	8m	10m	12m	15m	W/O*	
VGA - 3 RCA	Component	DVD/Projector	VGA-11	<-> RCA-3	AV-3	Almit SR34 Super Lead Free Sn 96.5%, Ag 3%, Cu 0.5%	Screw	Clamp	Ice Blue	x	x	x		x			x	x	
VGA - 4 RCA	RGB & C-Sync/VH-Sync	Comput./DVD	VGA-11	<-> RCA-3	AV-4		/ Expansion	/ Crimp		x	x	x		x				x	x
VGA - 5 RCA	RGB & V-Sync & H-Sync	Projector	VGA-11	<-> RCA-3	AV-6.4		Screw	Clamp		x	x	x		x				x	x
VGA - 3 BNC	Component	DVD/Projector	VGA-11	<-> BNC-3	AV-3		/ Bayonet	/ Crimp		x	x	x		x				x	x
VGA - 4 BNC	RGB & C-Sync/VH-Sync	Comput./DVD	VGA-11	<-> BNC-3	AV-4	Sn 96.5%, Ag 3%, Cu 0.5%	/ Bayonet	/ Crimp	Ice Blue	x	x	x		x			x	x	
VGA - 5 BNC	RGB & V-Sync & H-Sync	Projector	VGA-11	<-> BNC-3	AV-6.4					Screw	Clamp	x	x	x		x			
VGA - VGA		Comput./DVD	VGA-11	<-> VGA-11	AV-6.4		Spring PL/Screw	Clamp		x	x	x		x		x		x	x
DVI - VGA	RGB C/H/V-Sync	DVD/Comput./	DVI-I	<-> VGA-11						Screw/-	Clamp/Crimp	x	x	x		x			
Scart -> VGA	RGB & C-Sync	Proj./Monitor	Scart	-> VGA-11	AV-4					x	x	x		x			x	x	
VGA - 3 RCA(F)	Component	Adanter	VGA-11	<-> RCA-3 Female	AV-3					(25cm)									

* W/O Cable = Customized lengths available.



DVI-I

Component / RGB

DVI-3RCA & DVI-3BNC Cable

DVI for component video is used for DVD players with three RCA or three BNC output to projector/plasma with DVI-I input. Available in different standard lengths up to 15m. Fully shielded and rewireable connectors enables installation in conduits >20mm dia. Re-soldering necessary.

DVI-4RCA & DVI-4BNC Cable

For transfer of analogue RGB with composite synchronising from DVD or H/V synchronising from computer. Suitable for DVI-I/4RCA or 4BNC output to projector/plasma with DVI-I/4RCA or 4BNC input. Available in different standard lengths up to 15m. Fully shielded and rewireable connectors enables installation in conduits >20mm dia. Re-soldering necessary.

DVI-5RCA & DVI-5BNC Cable

For transfer of analogue RGB with separate H- and V synchronising from computer. Suitable for computer with DVI-I output to projector with 5RCA or 5BNC inputs. Available in different standard lengths up to 15m. Fully shielded and rewireable connectors enables installation in conduits >20mm dia. Re-soldering necessary.

VGA-DVI Cable

For transfer of analogue RGB, suitable between DVD and monitor/projector with DVI-I input. Available in different standard lengths up to 15m. Fully shielded and rewireable connectors enables installation in conduits >20mm dia. Re-soldering necessary.

Scart-DVI cable

For transfer of analogue RGB, suitable between DVD and monitor/projector with DVI-I input. Available in different standard lengths up to 15m. Fully shielded and rewireable connectors enables installation in conduits >20mm dia. Re-soldering necessary.

DVI-3RCA

DVI-3BNC

DVI-4RCA

DVI-4BNC

DVI-5RCA

DVI-5BNC

VGA-DVI

Scart-DVI

Item	Mechanical Specifications								Standard Lengths						
	Configuration	Application Examples	Conn. <Direct> From	Conn. To	Cable	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)					
										1m	2m	4m	8m	15m	W/O*
DVI <-> 3 RCA	Component, Y/Pb/Pr	DVD/Projector/TV	DVI-I	<-> RCA-3	AV-3	Almit SR34	Screw/Expansion	Clamp	Ice Blue	x	x	x	x	x	x
DVI <-> 3 BNC			DVI-I	<-> BNC-3		Super	Screw/Bayonet	Clamp/Crimp		x	x	x	x	x	x
DVI <-> 4 RCA	RGB + C-Sync	Comput./DVD/TV/Projector	DVI-I	<-> RCA-3	AV-4	Sn 96.5%, Ag 3%, Cu 0.5%	Screw/Expansion	Clamp		x	x	x	x	x	x
DVI <-> 4 BNC			DVI-I	<-> BNC-3			Screw/Bayonet	Clamp/Crimp		x	x	x	x	x	x
DVI <-> 5 RCA	RGB, H/V-Sync	Comput./Projector/Monitor	DVI-I	<-> RCA-3	AV-6.4		Screw/Expansion	Clamp		x	x	x	x	x	x
DVI <-> 5 BNC			DVI-I	<-> BNC-3			Screw/Bayonet	Clamp/Crimp		x	x	x	x	x	x
DVI <-> VGA	RGB C/H/V-Sync	DVD/Comput./Projector/TV	DVI-I	<-> VGA-11		Lead Free	Screw	Clamp		x	x	x	x	x	x
Scart -> DVI	RGB & C-Sync		Scart	-> DVI-I	AV-4		Spring Plate/Screw			x	x	x	x	x	x

* W/O Cable = Customized lengths available.

4 RCA - 4 RCA

5 RCA - 5 RCA

6 RCA - 6 RCA

1 RCA - SVHS

2 RCA - SVHS

4 RCA - SVHS

5 BNC - 5 RCA

5 BNC - 5 BNC

RCA/BNC Multi Cables AV-Series

These cables are made with the high quality AV-series, multi coax cables of True 75 Ohm.

- All video cores are of 75 Ohm coax type, individually screened.
- Audio cores are separately screened to avoid cross-talk interference.
- All conductors are insulated with PE, which offers low capacitance.
- A common aluminum shield protects from electromagnetic interference.

A comprehensive assortment of different cables.

- Component video (Y/Pb/Pr)
- S-video (Y/C)
- RGB
- Audio/Video
- Composite video (CVBS)

RCA/BNC AV Multi Cables

Item	Mechanical Specifications										Standard Lengths							
	Connector Configuration	Application Examples	Connector < Direction >		Connector	Cable	Solder Tin	Connector Fixing	Cable Clamping	Colour	(1m = 3.28ft)							
			From		To						1m	2m	4m	8m	10m	12m	15m	W/O*
4 RCA - 4 RCA	RGB/Audio/Video	DVD/SAT, Comput., Amp. To TV, Projector or monitor	RCA-3	<->	RCA-3	AV-4	Almit SR34 Super Lead Free Sn 96.5%, Ag 3%, Cu 0.5%	Expansion	Clamp	Ice Blue	x	x	x	x			x	x
5 RCA - 5 RCA			RCA-3	<->	RCA-3	AV-6.4					x	x	x	x			x	x
6 RCA - 6 RCA	Audio/Video		RCA-3	<->	RCA-3	AV-4		Bayonet	Crimp		x	x	x	x			x	x
4 BNC - 4 BNC	RGB/Audio/Video		BNC-3	<->	BNC-3	AV-4					x	x	x	x			x	x
5 BNC - 5 BNC			BNC-3	<->	BNC-3	AV-6.4		x	x		x	x			x	x		
5 RCA - 5 BNC			RCA-3	<->	BNC-3	AV-6.4		Exp./Bayonet	Clamp/Crimp		x	x	x	x			x	x
1 RCA/Svideo	Svideo Et Video		SVHS-7/RCA-3	<->	SVHS-7/RCA-3	AV-3		Expansion	Clamp		x	x	x	x			x	x
2 RCA/Svideo	Svideo & Audio/Video		SVHS-7/RCA-3	<->	SVHS-7/RCA-3	AV-4				x	x	x	x			x	x	
4 RCA/Svideo	Comp. Video/Svideo		RCA-3/SVHS-7	<->	RCA-3/SVHS-7	AV-6.4				x	x	x	x	x	x	x	x	x

* W/O Cable = Customized lengths available.

BNC-3

24K gold plated BNC plug for crimping. Crimping tool: see below. Fits 3mm cable dia, e.g. the SUPRA AV-cables.

BNC-6 (Not in picture)

24K gold plated BNC plug for crimping, similar to BNC-3 but fits 6mm cable dia. e.g. SUPRA Anco.

BNC-8

BNC plug for soldering. 24K gold plating with Teflon insulation. Fits cable diameters of 7.0-8.5mm e.g. SUPRA Trico.

2 pcs/pack

Bulk pack: 50 pcs

SCART

24K gold plated Scart connector with shielding housing of metal. Angled in a way that allows positioning of connectors in close proximity to each other. Fits cable dia of 8-12mm. Can be mounted in close proximity.

1 pc/pack

Bulk pack: 50 pcs

SVHS-7

24K gold plated S-Video connectors with shielding metal housing and Teflon insulation. Fits cable diameters up to 7 mm.

2 pcs/pack

Bulk pack: 50 pcs

MP-8 Mini Jack Plug Stereo

24K gold plated mini plug 3.5 mm. For large diameter cables up to 8 mm. Designed to fit also counter-sunk chassis connectors.

2 pcs/pack

Bulk pack: 50 pcs

MP-8 Mini Jack Plug Mono

Similar to above, but mono. Often used with Trico for digital audio from computer.

2 pcs/pack

Bulk pack: 50 pcs

VGA-11

DB-15 connector with 24K gold-plated pins. For cable dia up to 11 mm. Fits all AV-cables.

1 pc/pack

Bulk pack: 50 pcs

Acon-F and Acon-M

Antennae/Aerial connectors 75 Ohms. Gold plated with shielding metal housing. Fits the SUPRA Anco cable.

1 set Male & Female/pack

Bulk pack: 50 pcs each



Line Connectors



	ACON M/F	BNC-3	BNC-6	BNC-8	DB25M/F	DVI-I	DVI-D	MP-8 Mono	MP-8 Stereo	PPB RCA	PPSL RCA	PPX RCA	RCA-3	RCA-6	RCA-6SC	Scart	SVHS-7	Swift XLR 3M/5F	VGA-11
AnCo	x	x						x					x	x	x	x			
AV-2		x											x			x	x		
AV-3		x			x								x			x	x		x
AV-4		x			x								x			x	x		x
AV-6.4		x		x	x								x			x	x		x
Biline								x		x	x	x				x			
DAC									x	x	x		x	x				x	
Dual									x	x	x		x	x				x	
EFF-I									x	x	x							x	
HF100						x													
MB-01										x	x		x	x				x	
MBS									x	x	x		x	x				x	
SubLink									x	x	x		x	x				x	
Trico			x				x		x	x	x				x				

Item	Mechanical Specifications												
	Qty/ pack	Connector	Male/ Female	Pin Material	Insulation	Housing	Connector Fixing	Cable Clamping	Max Cable Dia. (mm)	Ext. Size WxHxL (mm)	Colour Ident.		
Acon M/F set	2 st	Aerial	Ma./Fe.	Gold Plated Cu	PTFE (Teflon)	Shielded	Spring Plate	Clamp	Ø6.2	Ø13x36	-		
BNC-3		BNC	Male				Bayonet	Crimp	Ø3.2	Ø15x25			
BNC-6									Ø6.2	Ø15x25			
BNC-8									Ø8.0	Ø13x52		Blue	
DB25-F	1 Pc	DB25/ D-sub 25	Female	Male	Noryl	Shielded Front Mounted	Screw	Screw/ Clamp	Ø11.0	55x17x51	White		
DB25-M	2 st	Jack Plug 3.5mm	Male			Shielded	-	Clamp	Ø8.5	Ø13x52			
MP-8 Mono									Ø8.5	Ø13x52			
MP-8 Stereo	1 Pc	Scart				Shielded Fr. Mount.			Ø11.0	48x20x60		-	
Scart	2 st	S-video				PTFE (Teflon)			Shielded	Ø7.0		Ø13x42	Yellow
SVHS-7	1 Pc	DB15 (HD)				Shielded Fr. Mount.			Screw	Ø11.0		31x44x15	-
VGA-11													

Patented
XLR connector with 24K gold plated
pins. Fully shielded for noise rejection.
Easy assembly.
No loseable screws. Nothing to slip on
the cable before soldering.

Set of male/female per pack
Bulk pack: 10 pcs male or female
(no set)



Gold plated XLR pins
(SUPRA Swift)

24K gold plated RCA (Phono) plug with Teflon insulation and metal housing. Fits 3 mm cable diameter, e.g. the SUPRA AV-6 core. Provided with different Colour rings.

1 pair/pack
Bulk pack: 50 pairs

The same plugs as above RCA-3 in set of 3 pcs with Red, Green and Blue marking rings.

3 pcs/pack
Bulk pack: 50 pcs/colour

24K gold plated RCA plug with squeeze clamping, only for cable diameters of 5-6 mm.

1 pair/pack
Bulk pack: 50 pairs

24K gold plated RCA plugs, only
for cable diameters of 8mm.
Bent design.
Shielding metal housing.
Can be mounted in close
proximity.

1 pair/pack
Bulk pack: 50 pairs

RCA plug in 24K gold plating with squeeze clamping of both front part and cable aperture. Shielding housing, front mounted. Teflon insulation. Lathe turned in one piece. Max cable dia 7.7 mm.

1 pair/pack
Bulk pack: 50 pairs

Similar design as the above,
without squeeze clampings.
Max cable dia 8.5 mm.

1 pair/pack
Bulk pack: 50 pairs



Enables installation in conduits.
Fully shielded by the Aluminium housing.

A combined digital and analogue connector. We will be using it mainly for analogue applications with our cables AV-3, AV-4 and AV-6.4, for Component or RGB transfer.

A purely digital version that preferably is being used with our DVI/HDMI Cable HF10

1 pc/pack
Bulk pack: 50 pcs



NEW!
SUPRA
PPRB

Line Connectors

Item	Mechanical Specifications										
	Qty/ Pack	Connector	Stift Material	Insulation	Housing	Connector Fixing	Cable Clamping	Max Cable Dia. (mm)	Ext. Size ØxL (mm)	Colour Ident.	
PPSL	1 Pair	RCA Male Straight	24K Gold Plated Cu	PTFE (Teflon)	Shielded	Chuck	Chuck	Ø7.7	Ø13x53	Red/White	
PPX					Front Mounted	Expansion	Screw	Ø8.5	Ø13x43	Red/White	
RCA-3 A/V					3 Pcs		Shielded	Crimp	Ø3.2	Ø12x50	Red/White
RCA-3 RGB	Red/Green/Blue										
RCA-6	1 Pair	RCA Male, Bent		Noryl	Shielded	Quick Lock	Ø6.5	13,5x46	White		
PPRB							Quick Lock		Ø8.5	Red/White	
Swift XLR Au Set	1 set Ma/Fe	XLR Female/Male				Front Mounted	Quick Lock	Screw	Ø7.4	Ø19x83 / Ø19x77	Red/Black
DVI-I	1 Pc	DVI-I 24+5 Male		SPS	Aluminium, Screened	Screw	Clamp	Ø11	48x39x15	Anthracite	
DVI-D		DVI-D 18+1 Male									

HDMI



DVI



CONFIRMATION OF HDMI™ ATC TESTING	
This Tested Product identified below has successfully completed testing at the HDMI Authorized Test Center with respect to the Test Specification listed below.	
PARTICIPANT	TESTED PRODUCT
Contact: Tommy Jenving	Category (i.e. Source, Sink, Repeater, Cable): cable
Company: Jenving Technology AB	Parent Model Name(s): SUPRA HP100
Address: Bastbacka 112-113	Parent Model Number(s):
Ljungskile Sweden S-45991	Derivative Model Name(s) and Number(s) (as supplied by Participant, not tested):
Phone: 46-522-698990	
Email: supra@jenving.se	
TEST CONFIRMATION	
Date of Issue: December 4, 2008	Test Specification: 1.3c
Test Center: Sunnyvale, CA	Confirmed by: Dat Tran
Notes: 1. This confirmation is subject to the terms and conditions of the Authorized Test Center Agreement, and does not guarantee the quality or functionality of any product, compliance with any specification, or interoperability with other HDMI products. Participant is solely responsible for the quality, functionality, interoperability and specification conformance of Participant's products. 2. This confirmation is based upon the information Participant has supplied and Participant's representation that the products listed under "Derivative Model Name(s)" have the same hardware and software as the Tested Product and would successfully pass all the HDMI ATC tests.	
 Certificate #SV1000	

POWER

CABLES / MAINSBLOCK / CONNECORS

SPEAKER

CABLES / CONNECTORS

INTERCONNECT

CABLES / INTERCONNECTS / CONNECTORS

HDMI & DVI

CABLES / INTERCONNECTS / CONNECTORS

INSTALLATION

CABLES / CONNECTORS



10,200,000,000 bits/sec

Full HD Digital Video and Audio in one tiny cable...

How is that possible?

With the HDMI V1.3 standard, specifying full HD with billions of colours and full 24bit 192kHz 5:1 audio, you will need about 10.2 Gb/s streaming capacity. A lot of bits!

As you can imagine, no ordinary cable will do the job.

SUPRA HF100 is tested and approved in compliance with the latest test provisions v.1.3c by HDMI's Accredited Testing Center in the USA. A secure quality guarantee of our HDMI cables.



**ATC Approved
HDMI v1.3c**

The bandwidth in the HF100 (used in all of our HDMI/DVI cables) is 600MHz, almost twice the spec of HDMI V1.3 (340MHz). There are some interesting cables out there claiming to do the job but only a few are actually approved for it. SUPRA Hdmi is a safe choice.

Colour Flicker and Colour Cast?

SUPRA's HDMI cable can transfer the finest details from your DVD to TV. If you use a cable of poor quality, it causes colour flicker and colour cast and sometimes no picture at all. Something to consider.

HDMI™
HIGH DEFINITION MULTIMEDIA INTERFACE

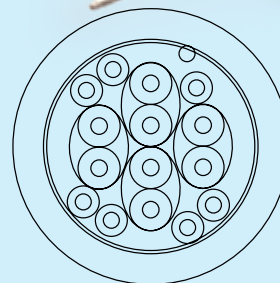
HDMI stands for 'High Definition Multimedia Interface'

JENNING Technology is an HDMI licensed cable manufacturer.

You will see all licensed manufacturers listed on www.hdmi.org

SUPRA HF100

SUPRA HF100 is designed for longer cable runs and higher resolution for hardware with HDMI V1.3 and DVI interface. The cores in SUPRA HF100 are insulated with Gas Blown Polypropylene, which offers low capacitance and high velocity factor. The digital pair is impedance stable over the entire frequency range, up to 600 MHz, (Compare HDMI V1.3, 340Mhz). SUPRA HF100 is double screened.



HF100
digital



New! SUPRA HDMI Metangle Bent Type

SUPRA DVI

Want to hide the cables in the wall?

SUPRA's rewirable HDMI och DVI connectors enable installation in conduit >20mm dia.

Item	Mechanical Specifications														Electr. Specifications			
	Colour	Applikation.- Examples	Cable	Data Link (TMDS)	Cross Area (mm²/AWG)	Wire Material	Ledar- Insulation	Inner Screen Coverage	Comm. Conductors	Outer Screen täckningsgrad	Jacket	Ext. Size (mm)	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	C (pF/m)	Imp. Z (Ω)	Velo. Factor
HF100	Ice Blue	HDMI/ DVI 1080p	Single Link	4x Screened TP, CAT7	0,26 / 23	Solid OFC	PE Foam	Alu. Foil ft Braid 100%	7x0.22 PE	Alu/PET Foil 100%	H.A.R. PVC	Ø9.5	106	75 / 264 300 / 984	75	48	100	0.78c

SUPRA HDMI/DVI cables are made with SUPRA HF100 which is an impedance stable cable, suitable for longer installation runs. The cable supports resolution for HDTV 1080p up to 15m. HF100 is also certified for the HDMI standard V1.3.

SUPRA HDMI

SUPRA HDMI-HDMI is a high quality 'single link' HDMI cable, designed for digital video and audio in longer runs. The cable is terminated with over moulded HDMI-Connector at both ends or as an HDMI to DVI-D cable. It is a 'single link' cable. The gold plating on the pins is 0.8 micro metre thick for long life reliable connection. Both DVI and HDMI are suitable for Video transfer. DVI is only for Video signal whereas HDMI transfers both Audio and Video.

SUPRA DVI

DVI stands for 'Digital Visual Interface'.

SUPRA DVI-DVI is designed for video transfer up to 20 m. Maximum resolution WUXGA 1920x1200. The cable is provided with SUPRA's quality connectors DVI-D. The connector is fully shielded by means of its aluminium housing. It is rewirable for after-termination at installation in conduits. The gold plating of the pins is 0.8 micro metre thick, for long life, reliable connection.

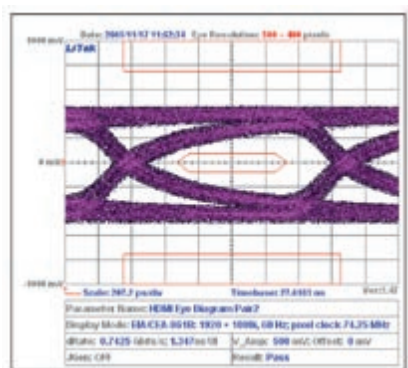
HDMI/DVI Cables



SUPRA HDMI The First Over 12 Metre

When our HDMI cable of 10 m was approved by HDMI's accredited testing centre (ATC), we were only one of two companies in the world with official certificate for this length.

Later, for 12m approved HDMI cable, we were the first in the world (as far as we know). We can give you a better chance to arrange your home cinema layout free from being limited by short cables.





DVI-D Connector



DVI-HDMI Adapter



HDMI-DVI Adapter

Rewireable SUPRA DVI Connectors

Makes installation in conduits possible.
Fully screened with metal housing.

A combined digital and analogue connector
We are using it mainly for analogue applications with our cables SUPRA AV-3, AV-4 and AV-6.4 for Component or RGB transfer.

DVI-D 18+1 Connector

A purely digital version that is preferably used with our DVI/HDMI Cable HF100.

Adapters

All connection surfaces are 24K gold plated. We do not recommend adapters for cables longer than 8m. For these applications we suggest our HDMI-DVI cable.

Adapter for DVI to HDMI
DVI female to HDMI male.

Adapter for HDMI to DVI
HDMI female to DVI male.



Bent SUPRA HDMI Connector

Angled HDMI for less strain by heavy cables and easier fitting for wall TV/DVD/Receiver etc. The housing is detachable from the soldered cable. The connector body is pre-moulded to protect the termination and make installation possible in conduits. (>20mm). The housing is in metal for optimal shielding.

Should you prefer to put a straight housing on after installation, it is available, too.

NEW!

Item	Mechanical Specifications									
	Qty/ pack	Connector < Signalriktning > From	Connector To	Pin Material	Connectorhus	Connector Fixing	Cable Clamping	Max Cable Dia. (mm)	Ext. Size LxBxH (mm)	Colour
DVI-I Plug	1 Pc	DVI-I 24+5 Male		24K	Aluminium, Screened	Screw	Clamp	Ø11	48x39x15	Anthracite
DVI-D Plug		DVI-D 18+1 Male		Gold	PVC, Screened	Screw/- -/Screw	-	-	51x40x13	Grey
DVI-HDMI Adapter		DVI-D 24+1 Female	-> HDMI Male	Plated						
HDMI-DVI Adapter		HDMI Female	-> DVI-I 24+1 Male	OFC					41x40x15	

Cable accessories



Item	Pict. Ref.	Qty/ Pack	Application Examples	Colour	Fit Dia. (mm)	Inner Size (mm)	Ext. Size (mm)	Temp. Range (°C)
Bending Protection 7	K	100 st	Bending Protection Scart/AV-2	Black	Ø5-Ø7.0	Ø7.2	Ø8.5	-30 to +130
Rubber Sleeve 5	J	100 st	Bending Protection		Ø5.0-Ø8.0	Ø5.0	Ø6.8	
Rubber Sleeve 7.5	I		AV Series or		Ø7.5-Ø13	Ø7.5	Ø9.2x30	
Rubber Sleeve 10	H	100 st	Fixing Nylon Braid		Ø10-Ø16	Ø10	Ø12x35	-30 to +70
Termination Trousers	G		Y-Joint Protection for BiLine	White	Ø7.5-Ø9.0	Ø8.5	Ø9.5	
Termination Trousers set	F	2 st	Fixing of		Ø5-Ø10	Ø10 (Ø5)	Ø13.5	-55 to +135
Heat Shrink Hose 10	E	75 m	Nylon Braid	Black	Ø6.4-Ø12.5	Ø12.7 (Ø6.4)	Ø14	
Heat Shrink Hose 12	D		Fixing of		Ø9.5-Ø19.0	Ø19.1 (Ø9.5)	Ø20.5	
Heat Shrink Hose 19	C	100 m	Fit Line Cable	White	Ø5-Ø8	Ø8	Ø9	-70 to +125
Nylon Braid 8	B	5 m	Bunching of Bi-Wired Speaker Cable	Black	Ø7-Ø15	Ø10	Ø11	
Nylon Braid 10	A		Fit Line Cable		Ø5-Ø8	Ø8	Ø9	
Nylon Braid 15	C+F	10 m	Bunching of Bi-Wired Speaker Cable	Black	Ø7-Ø15	Ø10	Ø11	
Nylon Braid 8 kit	B+E	10 m	Fit Line Cable		Ø5-Ø8	Ø8	Ø9	
Nylon Braid 10 kit	A+D		Bunching of Bi-Wired Speaker Cable	Black	Ø7-Ø15	Ø10	Ø11	
Nylon Braid 15 kit	A+D	10 m	Fit Line Cable		Ø5-Ø8	Ø8	Ø9	
Nylon Braid 8 kit	B+E		Bunching of Bi-Wired Speaker Cable		Ø7-Ø15	Ø10	Ø11	

POWER

CABLES / MAINS BLOCK / CONNECTORS

SPEAKER

CABLES / CONNECTORS

INTERCONNECT

CABLES / INTERCONNECTS / CONNECTORS

HDMI & DVI

CABLES / INTERCONNECTS / CONNECTORS

INSTALLATION

CABLES / CONNECTORS

MB Multi Series

– for Fixed Installations

The conductors are of the same design as of the MBS microphone cable but the jacketing is thinner and the shielding is of polyester based aluminium to better suit installation applications.

MBS Microphone Cable

– for Stage and Studio

A non-compromise design, both mechanically and electrically. Negligible microphony, high noise rejection, low capacitance, high flexibility, high bending strength. The best mic and instrument cable.

Fire Retardant

– Halogen Free Cable

Perfect for installation in official premises.

Most of our cables can be made in Fire Retardant Halogen Free material. The Page shows only those cables in our ordinary production.

INSTALLATION



MB-01 Installation Mic/Line Cable Balanced

1-pair, screened.

Application example: Fixed installation, balanced connection.



MB-02 Installation Mic/Line Cable Balanced

2-pair cable, similar to MB-01, with individual pair screening and pair jacketing.

Application example: Fixed installation, balanced connection.



MB-04 Installation Mic/Line Cable Balanced

4-pair cable, similar to MB-02 with individual pair screening and pair jacketing.

Application example: Fixed installation, balanced connection.



MB-08 Installation Mic/Line Cable Balanced

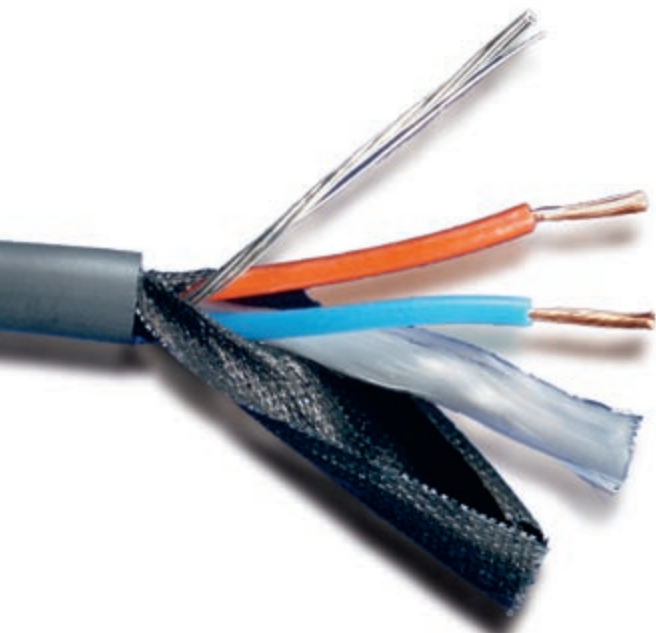
8-pair cable, similar to MB-04 with individual pair screening and pair jacketing.

Application example: Fixed installation, balanced connection.

Mic / Line Installation

MB Series Colour Codes								
Par	1	2	3	4	5	6	7	8
Yarn-Colour	Black	Beige	Red	Orange	Yellow	Green	Blue	White
Screen	Aluminium foil with drain wire for easy screen connection							

Item	Mechanical Specifications																	Elec. Spec.	
	No. Pairs	Application Examples	Cross Area (mm²/AWG)	No. Of Wires	Wire Dia. (mm)	Wire Material	Insulation	No. Of Conductors	Tensile Reinforcement	Screen	Pair Jacket	Jacket	Temp.-omr. (°C)	Ext. Size (mm)	Weight (g/m)	Length/ Bobbin	Colour	R (Ω/km)	C (pF/m)
MB-01	1	Analogue	0.24 / 23	19 Pcs / Conductors	0,127	Tin Plated OFC	PE	2 + biConductors	-	Aluminium/ PET	PE	Heat Et Ageing Resistant PVC	-20 to + 90	Ø4.8	32	300	Anthracite	72	52
MB-02	2	Audio							Polyester/ Silk Yarn					Ø7.0	42	200			
MB-04	4	Mic/Line												Ø8.0	72	100			
MB-08	8	Installation												Ø10.8	130				



MBS / SWIFT XLR



MBS Microphone Cable, Balanced

A non-compromise design, both mechanically and electrically. Negligible microphony, high noise rejection, low capacitance, high flexibility, high bending strength. The best microphone and instrument cable.

Application examples:
Microphone, guitar.

Tips and Tricks:

You can easily test the microphony by plugging the cable into the mixer with the other end of the cable left open, without anything connected. Turn up the volume and listen to how sensitive the cable is when you touch it, tap it and move it, or slap it against a hard floor, as occurs with mic and guitar cables.

MBS Microphone Cable is based on SUPRA's unique Nylon-screen concept.

The advantages of SUPRA Nylon-screened cables over ordinary braided cables are:

• Tensile Strength

The tensile strength is 500N/50mm.

• Bending Fatigue

In accordance with a military flex test, a cable must pass 30,000 bending cycles without damage. After 90,000 bending cycles the test of the Nylon screened SUPRA MBS was concluded without any damage to the cable.

• Environmental Immunity

Air humidity does not influence the cable's electrical properties.

• Microphony

The softness of the Nylon screen in combination with other design parameters makes for a quiet cable, free from microphonics.



Swift 3F XLR Light and Swift 3M XLR Light

3-pole Female and Male.

Patented by Tommy Jenving.

Also available with gold plated pins, in set, on page 41.

Swift XLR Connectors

The patented SUPRA Swift has several advantages over other XLR connectors:

- Totally shielded.
- No loseable screws. Only one retained screw.
- Nothing to slip onto to the cable before soldering.
- Strain relief: The screw serves also as a clamp and since it is placed at a considerable distance from the aperture there will be no bending forces on the cable at the clamping point.

Item	Mechanical Specifications															Electr. Spec.		
	No. Pairs	Application Examples	Cross Area (mm²/AWG)	No. Of Conductors	No. Of Wires	Wire Dia. (mm)	Insulation	Screen	Tensile Reinforcement	Jacket	Ext. Size (mm)	Temp. Range (°C)	Colour	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	C (pF/m)	Velo. Factor
MBS	1	Mic./line	0.24 / 23	2 +	19	0,127	PE	Semi-Cond.	Polyester Yarn	H.A.R	Ø5.5	-20 to +90	Anthracite	34	150 / 492	72	52	0.66c
MBC		Flex./Install.		biConductors		Sn OFC		Nylon		PVC								

Item	Mechanical Specifications													
	Qty/ pack	Connector	Pin Material	Insulation	Housing	Wire Connection	Connector Fixing	Cable Clamping	Max Cable Dia. (mm)	Ext. Size WxHxL (mm)	Mounting Hole (mm)	Colour Ident.		
XLR-C3F	1 Pc	XLR Chassis Female	Silver- Plated Cu	Noryl	Shielded	Solder	Quick Lock	-	-	27x37x31	Ø23.5	-		
XLR-C3M		XLR Chassis Male								22x37x21	Ø19.0			
Swift XLR 3M Light		XLR Male								Ø19x70	-			
Swift XLR 3F Light		XLR Female	Gold Plated Cu		Shielded Front Mounted			Screw	Ø7.7	Ø19x75	-			
Swift XLR 3M Light Au		XLR Male								Ø19x70	-			
Swift XLR 3F Light Au		XLR Female								Ø19x75	-			

Sometimes you need a fire retardant and Halogen free cable for installation in official premises.

The products below comply with the E30 standard. Insulated with ECCOH 5995 material.

ECCOH means:

- Halogen Free
- Low Smoke
- Low emission of poisonous gas in a fire

HF 100/H

Fire retardant, halogen free HF100, other properties remain same as the original HF100 .



DVI-DVI HF 100/H

A Cable made with HF100/H and with DVI connectors in aluminium, fully shielded. The connectors are detachable, for installation in conduits.



Classic 1.6/H Halogen Free

2x1.6 mm²
Similar to Classic 1.6 but with fire retardant ECCOH-insulation. It is somewhat stiffer and has a lower surface friction which make it easier to install in conduits.



Classic 2.5/H Halogen Free

2x2.5 mm²
Similar to Classic 2.5 but with fire retardant ECCOH-insulation. It is somewhat stiffer and has a lower surface friction which make it easier to install in conduits.

**Fire
Retardant
Halogen Free**

Item	Mechanical Specifications										Electr. Spec.	
	Colour	Cross Area (mm ² /AWG)	No. Of Conductors	No. Of Wires	Wire Dia. (mm)	Wire Material	Insulation	Ext. Size (mm)	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	L (μH/m)
Classic 1.6/H	Ice Blue	1.6 / 15	2	204	0.10	Tin Plated OFC	Halogen Free Et Flame Retardant E30	3.1x6.2	44	300 / 984	10.5	0.40
Classic 2.5/H		2.5 / 13		320				3.6x7.3	65	200 / 656	6.8	0.45

Item	Mechanical Specifications														Electr. Specifications			
	Colour	Application Examples	Cable	Data Link (TMD5)	Cross Area (mm²/AWG)	Wire Material	Wire Insulation	Inner Screen Coverage	Comm. Conductors	Outer Screen Coverage	Jacket	Ext. Size (mm)	Weight (g/m)	Length/Bobbin (m / ft)	R (Ω/km)	C (pF/m)	Imp. Z (Ω)	Velo. Factor
HF100/H	Ice Blue	HDMI/ DVI 1080p	Single Link	4x Screened TP, CAT7	0,26 / 23	Solid OFC	PE Foam	Alu. Foil 8-Braid 100%	7x0.22 PE	Alu/PET Foil 100%	H-Free Flame	Ø9.5	106	75 / 264 300 / 984	75	48	100	0.78c

Attenuation: 1MHz/1.9 dB, 10MHz/5.4dB, 100MHz/17.4dB, 600MHz/44.6dB

Item	Mechanical Specifications									
	Connection Configuration	Application Examples	Conn. < Direction > Conn.		Max Resolution	Cable	Connector Fixing	Cable Clamping	Colour	
DVI – DVI/H	Single-link	Multimedia	DVI-D 18+1	<>	DVI-D 18+1	1920x1200	HF100/H	Screw	Clamp	Ice Blue

* W/O Cable = Customized lengths available.

Connector pin out information

S-video (Y/C)			
Pin	Function	Pin	Function
1	Ground Luminance (Y)	3	Luminance (Y)
2	Ground Chrominance (C)	4	Chrominance (C)

DB-15 HD (VGA)			
Pin	Function	Pin	Function
1	Red +	9	
2	Green +	10	Sync Ground
3	Blue +	11	
4		12	
5		13	H-Sync/C-Sync
6	Red Ground	14	V-Sync
7	Green Ground	15	
8	Blue Ground	Chassi	Screen

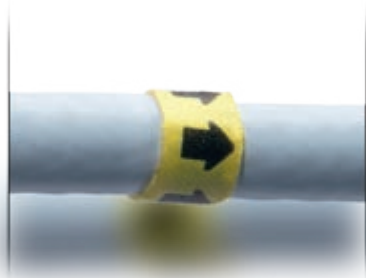
DB-25 (D-sub)			
Pin	Function	Pin	Function
1	Left Front +	14	Left Front -
2	Center +	15	Center -
3	Right Front +	16	Right Front -
4	Sub Woofer +	17	Sub Woofer -
5	Left Rear +	18	Left Rear -
6	Right Rear +	19	Right Rear -
Ground chassis - Ground chassis			

Sart			
Pin	Function	Pin	Function
1	Audio Out Right	12	Data 1
2	Audio IN Right	13	Red Ground
3	Audio Out Left	14	Data Ground
4	Audio Ground	15	Red RGB, C vid Y/C
5	Blue Ground	16	RGB Status
6	Audio IN Left	17	Video Ground (CVBS)
7	Blue RGB	18	RGB Status Ground
8	CVBS Status	19	Video (CVBS) Out, Y when Y/C
9	Green Ground	20	Video (CVBS) IN, Y when Y/C
10	Data 2	21	Ground (Screen)
11	Green RGB		

XLR			
Pin	Function	Pin	Function
1	Ground/Screen	3	Signal Ground (cold)
2	Signal (hot)		

DVI-I 24+5			
Pin	Signal	Pin	Signal
1	D2-	16	Hot Plug Detect
2	D2	17	D0-
3	Screen	18	D0
4	D4-	19	Screen
5	D4	20	D5-
6	DDC SCL	21	D5
7	DDC SDA	22	Screen
8	V-Sync	23	CLK
9	D1-	24	CLK-
10	D1	C1	Red
11	Shield	C2	Green
12	D3-	C3	Blue
13	D3	C4	H-Sync
14	+5V	C5	Ground
15	Ground	Chassi	Screen/Ground

DVI-D 18+1			
Pin	Signal	Pin	Signal
1	D2-	16	Hot Plug Detect
2	D2	17	D0-
3	Screen	18	D0
4		19	Screen
5		20	
6	DDC SCL	21	
7	DDC SDA	22	Screen
8		23	CLK
9	D1-	24	CLK-
10	D1		
11	Screen		
12			
13			
14	+5V		
15	Ground	Chassi	Screen/Ground



Directionality Assurance

All SUPRA cables are constructed with attention to consistent and equal 'direction' in all the conductors. Simplistic electronics theory says there is no 'directionality' in conductors, but assumes conductors are perfectly isomorphic. It also ignores the inherently directional nature of signal and energy flow. Yet electricity could not be sold without 'energy flow directionality'.

In reality, practical conductors are drawn many times - not cast. This creates highly elongated crystal structures. This in turn creates a physical (mechanical) directional feature or 'axial polarity'. Annealing and also 'burning-in' processes can reduce the 'strength' of the 'drawing imprint', but only to a degree.

All conductors in SUPRA cables are consistently arranged to point 'forwards', in the direction (left to right) implied by the legend (text) printed on the cable jacket. Directional consistency is ensured in two ways. First, direction of the conductors to be used in each cable is known from the spooled direction of the conductors received from the copper wire factory. That is a reliable method because an efficient manufacturing process is consistent and omits random re-spooling steps.

Forward Thinking Technology

Second, the 'directionality' of conductors is now able to be measured, and SUPRA cables are the first in the world to benefit from a spectral technique developed by audio consultant Ben Duncan in conjunction with Jenving Technology AB. This employs some special test conditions which better approximate audio equipment's real-world usage than standard, pure signal sources. Test results show typical increases in harmonic (noise) levels 0.5dB when cables are connected so the conductors' drawn direction opposes the signal flow direction. In real use the noise difference, which is some dB below the main signal, could be much greater. From this, a reduction in such noise

Soldering

For those who prefer to make their own cable sets and for carrying out servicing, we have gathered the following configuration tables. Please be aware of the importance of the soldering quality. All SUPRA pre-made cables are soldered with lead-free silver-tin with copper solder and non-corrosive flux, available as *Multicore TSC-96*, which we recommend.

The galvanic potential of silver is closer to copper than is lead to copper and thus the galvanic potential will be minimised.

Poor solderings is mostly due to either too high or too low a temperature.

Flux is needed to get through the oxide and avoid a dry joint, without overheating.

A dry joint might work very well for a period of time but as the oxide grows between the tin and the object, there will eventually be a poor connection. In the worst case, the conductors will loosen and create a short circuit.

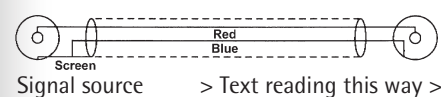
All SUPRA connectors are insulated with Teflon to withstand the correct soldering temperatures (300° - 400°C).

For these reasons we always recommend leaving the soldering of interlinks to a professional workshop.

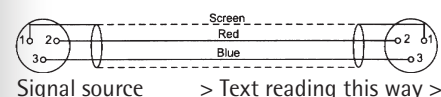
All of our soldering team are holders of soldering certification to Military Quality Standards.

Balanced and Semi-Balanced Cables

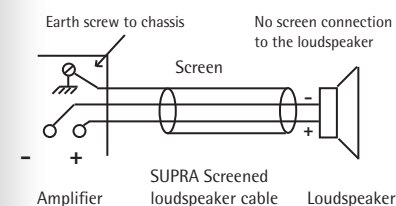
Semi-balanced connection with RCA



Balanced connection with XLR



Connection of screened loudspeaker cables



The screen is to be connected to the amplifier chassis or any other ground point of the amplifier. No connection at the loudspeaker end.

Conductor Dimensions in AWG to Metric

AWG (No.)	Dia. (mm)	Area (mm ²)	AWG (No.)	Dia. (mm)	Area (mm ²)	AWG (No.)	Dia. (mm)	Area (mm ²)
6/0	14,73	170,3	10	2,59	5,27	25	0,455	0,163
5/0	13,12	135,1	11	2,3	4,15	26	0,405	0,128
4/0	11,68	107,2	12	2,05	3,31	27	0,361	0,102
3/0	10,4	85	13	1,83	2,63	28	0,321	0,0804
2/0	9,27	67,5	14	1,63	2,08	29	0,286	0,0646
0	8,25	53,4	15	1,45	1,65	30	0,255	0,0503
1	7,35	42,4	16	1,29	1,31	31	0,227	0,04
2	6,54	33,6	17	1,15	1,04	32	0,202	0,032
3	5,83	26,7	18	1,024	0,823	33	0,18	0,252
4	5,19	21,2	19	0,912	0,653	34	0,16	0,02
5	4,62	16,8	20	0,812	0,519	35	0,143	0,0161
6	4,11	13,3	21	0,723	0,412	36	0,127	0,0123
7	3,67	10,6	22	0,644	0,325	37	0,113	0,01
8	3,26	8,35	23	0,573	0,259	38	0,101	0,00795
9	2,91	6,62	24	0,511	0,205	39	0,0897	0,00632

Anglo/American vs. Metric

1 foot = 0.3048 m 1 m = 3.281 feet
 1 yard = 0.9144 m 1 m = 1.094 yards
 1 pound = 0.4536 kg 1 kg = 2.205 pounds
 $F^{\circ} = (C^{\circ} \times 9/5) + 32$ $C^{\circ} = (F^{\circ} - 32) \times 5/9$

Formulas

Characteristic Impedance (Simplified Formula)

$Z = \sqrt{L/C}$ where L = inductance and C = capacitance

Velocity Factor (Simplified Formula)

$v = \sqrt{1/K}$ where K = dielectricity of the insulation

Effective Skin Depth

$\delta = 1 / \sqrt{\pi \mu_r \mu_0 \sigma f}$ where σ = conductivity = 1/resistivity
 f = frequency
 μ_r = permeability of the conductor
 μ_0 = permeability of air

Conductor Resistance

$R = L \times \rho / A$ where L = length in m
 ρ = resistivity
 A = cross section area in mm²

Material Constants

Material	Dielectricity (K)	Permeability (μ_r)	Resistivity ($\Omega \times \text{mm}^2/\text{m}$)
PVC	4-5	-	-
PE Flame Ret.	2.3	-	-
PE	2.3	-	-
PTFE/Teflon	2.0	-	-
PE Foam	1.64	-	-
Tin (Sn)	-	$\mu_r > 1$ approx. equal to 1	0.115
Gold (Au)	-		0.022
Copper (Cu)	-		0.017
Silver (Ag)	-		0.016
Air/Vacuum	-	$1.26 \times 10^{-6} (\mu_r)$	-



*The Arken Award 2008 for
 "Lifetime Achievement"
 presented to **Tommy Jenving**
 for his service and contribution
 to the Swedish Hi-Fi industry
 over the last thirty years.*

*September, 2008
 Gothenburg, SWEDEN*

SUPRA[®] Cables
MADE IN SWEDEN
by Jenving Technology AB

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Telefax: +46 (0)522-69 89 99
E-mail: supra@jenving.se

www.jenving.se

And last something special...

A Toyota SUPRA (as fast in its own field as many of our best cables).
An Ice Blue beauty of 480 hp.
The car will be on tour on shows all over the world. Remember to look for it. Beautiful, smooth and fast.
Have a look inside for surprises.
Needless to say that this is SUPRA Cables official 'Mobile Showroom'.

