

### Have Your Cables Made With Virtually Any Mix Of Connectors And Cables Shown Here

#### Guitar & General Instrument Cables



Standard Slimline straight jack  
Available in mono only for guitar cables



SILENT straight jacks are NOT Slimline types. So no colour coding rings!

SILENT straight jack - Available in mono only  
Stops audible blurps when unplugging



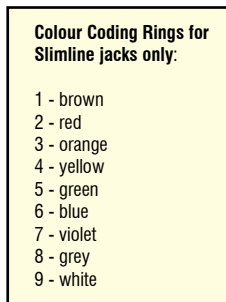
Colour Coding rings for Slimline jacks  
Available in all nine 'resistor' colour codes



Standard Slimline angled jack  
Available in mono only for guitar cables



SILENT Slimline angled jack  
Available in mono only  
Stops audible blurps when unplugging



Colour Coding Rings for Slimline jacks only:

- 1 - brown
- 2 - red
- 3 - orange
- 4 - yellow
- 5 - green
- 6 - blue
- 7 - violet
- 8 - grey
- 9 - white

**Unbalanced Instrument (Guitar Leads)** - Mono jacks are generally used for 'unbalanced' instrument guitar or general instrument cables.

The 'screened' or 'shielded' cable employed should have specially constructed cores to reduce capacitance, which is responsible for treble loss found with cheap cables (also some not so cheap too). Also, they ought to have a conductive plastic layer between the inner signal conductor and the screening to prevent 'crackling' noises when you move the cable about the stage. This is a common problem with low cost cables and even more of a nuisance when high gain amps are being used by the player.

Some manufacturers say their cables are made using OFC (Oxygen Free Copper). Well, there is absolutely NO sonic benefit to OFC. All it means is that the copper strands have increased resistance to tarnishing over years of life, thus making the cable much easier to solder in the future should a repair become necessary. **The cable used for these leads should be 'Inst' cable only.**

**Patch Cables (Leads)** - Patch leads are just very short guitar leads. They are constructed from exactly the same materials as normal guitar cables. In the case of ClearTone's YellowTAB Cables, they range 20cm, 30cm & 50cm lengths. The 20cm and 30cm patch cables do not have our famous YellowTAB™ ID marker because it will stop them from bending freely.

These cables should really be treated as **Microphone & Interconnect Signal Cables**, but have been included in this section because they go between effects pedals.

**Stereo Cables For Gibson ES355 Guitars** - We can make these too! A Stereo (TRS) angled jack to two mono jacks of your choice - no problem!

**Please... Do NOT use instrument cables for connecting passive speaker cabinets to amplifier speaker outputs! The high currents can melt the cable internally!**

#### Microphone & Interconnect Signal Cables



3 pole female locking XLR plug  
Fits all standard microphones



3 pole male XLR plug  
Fits all standard mixing desk Mic inputs



Standard Slimline straight jack  
Available in mono or stereo options



Colour Coding Rings for XLR plugs only:

- 1 - brown
- 2 - red
- 3 - orange
- 4 - yellow
- 5 - green
- 6 - blue
- 7 - violet
- 8 - grey
- 9 - white

**Unbalanced Microphone Cables** - A female XLR and mono jack are the normal connections for this type of cable. Unbalanced cables work in a similar way to instrument cables; the electrostatic screen effectively reduces noise picked up by the cable. However, no amount of screening can prevent electromagnetic noise being induced by the cable from nearby power or other cables and transformers. **The cable used for these leads should be balanced 'Mic' cable.**

**Balanced Microphone Cables** - Most microphone cables come with a female XLR connector at the microphone end and male three pin XLR connector at the mixer/amplifier end. There are two signals 180° out of phase and a ground screen connection. They work in a similar way to normal screened cables except with the added benefit of the 'balanced' signal hum rejection properties. This provides greater protection from unwanted noise entering the signal chain over unbalanced. Otherwise, the basic signal quality is just the same for both unbalanced and balanced. **The cable used for these leads should be balanced 'Mic' cable.**

**Balanced/Unbalanced Converters** - We are often asked to make short **Balanced to Unbalanced converter** leads. These allow a balanced XLRM/XLRF cable to plug into an unbalanced jack equipped mic input.

**Unbalanced 'Line Level' Interconnect Signal Cables** - Mono and stereo (TRS) jacks, XLRs and RCA style phono plugs are often called for with general 'unbalanced' signal cables. These cables are usually called for as 'interconnects' between various pieces of electronic equipment and are usually referred to as 'line level' signals. **The cable used for these leads should be 'Inst' cable.**

**Balanced 'Line Level' Interconnect Signal Cables** - It is quite common to be asked for balanced cables with stereo (TRS) jacks at both ends. These can be made with straight or angles jack or a mix of jack and XLR connectors. **The cable used for these leads should be balanced 'Mic' cable.**

**Powered Speaker Connections** - Musicians are often confused over whether to select speaker or instrument cable for this job. So we have singled this application out to make it perfectly clear! These are really **Unbalanced 'Line Level' Signal Cables** which are recommended for unbalanced connections to a powered speaker, where the amplifier is inside the speaker box and is connected to it's own 230 volt mains supply. **The cable used for these leads should be 'Inst' cable.**

If you are driving a passive extension cabinet from the Powered Speaker, then: **The cable used for these leads should be 'Spkr' cable.**

**Powered 'Fold Back' Monitor Connections** - The advice is exactly the same for powered and unpowered stage 'fold back' monitor speakers too. Drive the powered monitor with an instrument cable from the mixer Monitor output. **The cable used for these leads should be 'Inst' cable.**

Connect the passive (unpowered) monitor to the powered monitor using a speaker cable. **The cable used for these leads should be 'Spkr' cable.**



Standard RCA Phono plug with strain relief bushing



3.5mm stereo 'Tiny' jack plug

Sometimes 3.5mm mini jacks are called for. We regret, we do not currently support this type of connector.

### Speaker Cables



2 Pole SPEAKON connector  
The increasingly 'standard' connector



Standard Slimline straight mono jack  
Often used on guitar amps and budget PAs



Standard Slimline angled mono jack  
Often used on guitar amps and budget PAs



3 pole male XLR plug  
Often used with older powered mixers and PAs



3 pole female XLR plug  
Sometimes used with older powered mixers and PAs



0.187" Fast-On terminals to connect a combo amp directly to a guitar speaker

**Passive Speaker Cables** - Here, we are talking about the cables that connect an amplifier output to a passive (unpowered) speaker cabinet.

Mono jacks, XLR and Speakon are the main connectors used to connect passive (unpowered) speaker cabinets to an amplifier. For this application, **special speaker wire MUST be used**. **Do NOT use instrument cables**, as the thin wires could become hot and burn out; plus there will be power loss along the cable.

New regulations require amplifiers to be made with SPEAKON connectors to connect passive speakers to them. These connectors are able to provide safe and high current performance. Jacks are not really designed for this application and can cause problems with higher powered equipment.

Much older equipment can be found which employ either male or female XLR connectors to hook up passive speakers too. Although, female XLRs are far less commonly used on the cable.

We are often asked for cables with only one connector at one end with prepared opposite cable ends for direct soldering to a speaker chassis... or with 0.187" fast-on terminals, which fit most modern standard speaker terminals as used by Celestion, Fane and Eminence, etc. **The cable used for all the above mentioned leads should be 'Spkr' cable.**

**Powered Speaker Connections** - For connections between a normal unpowered mixers (or similar) and a pair of powered (active) speakers (where the speakers have the amplifier built into the speaker box and are powered from the mains) - then please go to **Microphone & 'Interconnect' Signal Cables** on page one.

### The ClearTone YellowTAB™ Cable ID System



**Our Unique YellowTAB™ ID System** - All Cables over 0M3 (30cm) come with our unique YellowTAB™ ID system at one end of the cable - usually the instrument or microphone end.

This shows the cable length so that you do not have to uncoil all your cables to find the right length for the job in hand! Plus it contains our details so you can re-order easily in the future as your project expands.

*Guitar and Bass Magazine rated ClearTone™ cables with a perfect score in a recent review... 100%, a very rare event indeed!*

*That means there's really no excuse for buying those horrible imported cables that fall apart in no time at all... when you can get these for about the same money, custom made to your specs and delivered to your home within a day or so!*

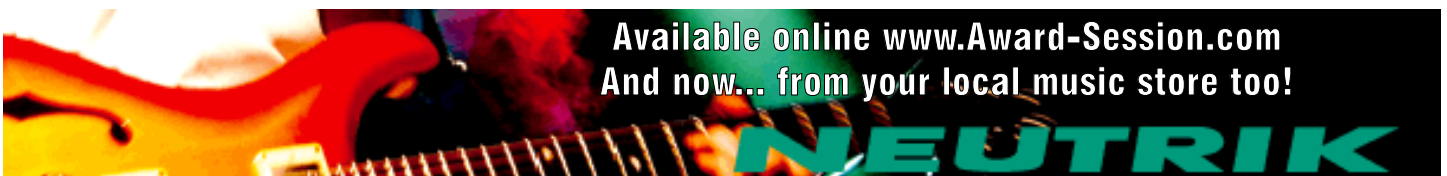
*Perfect cables are just a few clicks away from being yours - order online today!*

FINAL SCORE	
Build Quality .....	20/20
Playability .....	20/20
Sound .....	20/20
Value for money .....	20/20
Vibe .....	20/20
<b>TOTAL .....</b>	<b>100%</b>

Good for... connecting guitars and anything else you fancy to an amp  
Look elsewhere... if you want fancy coloured leads or cheap options that fall apart

The best cables on the planet... Wave goodbye to fall-apart construction and poor performance!

**ClearTone™**  
YellowTAB Custom Cables



Available online [www.Award-Session.com](http://www.Award-Session.com)  
And now... from your local music store too!

# NEUTRIK



**Instrument leads** look similar and it's easy to become confused as which are best. So here's some guidelines from an electronics engineers point of view, based on accepted technical facts, to help you understand cables.

**Let's get it straight.** Cables should do nothing to your tone, but should reject electro-static interference! There's no magical properties that'll make your playing sound like Satch. Fact!

**More fact!** There are plenty of cables that will fall apart and/or make your pickups sound like they're stuffed with cotton wool. They cost £4.99 or less on Ebay! But, you already suspected that... didn't you?

**What does 'low loss' mean?** - It is important to understand that all screened cables reduce the high frequencies that pass along them. The longer the cable, the more the loss. This is true of ANY make or type of screened cable. Always select 'low loss' cables for best performance when using guitars or other similar instruments.

A good guitar cable will have an inter-conductor capacitance of 130pf (pico farads) or less per metre. 6 metres is about the maximum length for a lead used with passive guitar pickups. With passive electro-acoustic guitar transducers you will need to keep guitar leads to an absolute minimum length, otherwise treble will become heavily lost! Always fit a pre-amp to your electro-acoustic if you can. If your guitar already has a pre-amp, then you can use leads as long as you like without any problems or loss of tone.

**What does 'noiseless' mean?** - Some low cost cables, when used with guitars, can cause a crackling sound when you move about.

Noiseless cables have a special conductive plastic layer inserted between the signal conductor and the screening braid which removes this source of unwanted noise.

**Can cables make my sound more 'juicy'?** - No, cables cannot do this! The signal passing along a cable cannot be improved, no matter what it's made from. Any such suggestion should be viewed as a dishonest claim.

**Should I buy leads with gold plated plugs?** - Don't waste your money if you are being asked to pay extra for gold plated connectors. The thin soft gold (5-10 microns) 'flash' plating looks cool, but scrapes off easily and the brass material underneath stops you from seeing that the gold has worn off! The brass eventually tarnishes and causes crackling when the plug moves or twists in the socket contacts.

It is true that gold is a very good conductor of electricity when mated with a gold plated socket.

### "A good cable does nothing to your tone"

But the sockets inside your guitar amplifier and guitar are not usually gold, so there can be virtually no benefit to gold plated plugs.

**Do thick cables sound better than thin ones?** - No. Thick cable is only important when large amounts of current is being passed along it. As in the case of mains and speaker cables. The thick conductors reduce the resistance in the copper wires, so that less power is lost over the run of cable. Also, low resistance cable stops the cable from getting as hot.

High impedance signals, like guitars and general musical instruments, do not require low resistance wire. Standard 6mm diameter cables is perfectly adequate for **all** normal instruments.

**Will 'oxygen free' (OFC) cable improve my tone?** - No. OFC means that the copper conductors inside will not tarnish (oxidise) over many years and as such, will make it easier to solder in the future if a repair becomes necessary. Nothing to do with sonic ability.

**Are 'moulded' jack plugs better?** - In some respects, but cables usually break just outside the plug where the cable gets bent a lot. So, if this happens, you can't open the plug to repair it and you'll have to throw it away.

**Coiled leads look really cool!** - Yes they do. But they are generally made from cheap cable that has a very high capacitance and, as explained earlier, this will severely attenuate the high frequency signals passing along it. Coiled leads are also extremely long and this will add further to the high frequency attenuation along it's whole length. Coiled leads are a very bad idea, to be frank.

**Are jack plugs with 'grips' on the sleeve better?** - That's a subjective point. But our view is no. Grips may reduce contact resistance slightly... but then resistance is not an issue with high impedance signals like guitars or similar. It is also claimed that they make a more positive connection,

but if the jack plug is more difficult to remove from the socket, then more strain will be placed on the cable when pulled out accidentally during a slip. Not really that much of a benefit in our opinion.

**Do I need special speaker cables?** - Yes, using instrument cables for connecting speakers is not recommended. Very high currents pass along speaker cables, so you need much thicker wire to handle it. Guitar lead conductors are very thin and such use could result in heat damage to your cables. Power reaching the speakers may be reduced as well. Don't be tight... buy what's right!

**What causes a hum on my pedal-board wiring?** - Never mount AC adapters or other power supplies directly onto your pedal board. If the pedal connecting cables run close to them, then the transformers inside the AC adapters will transmit hum into the signal cables. The screening in guitar/signal cables (or inside guitars too, for that matter) CANNOT stop this kind of electromagnetic radiation. Try and keep your AC adapters at least 1 metre away from all audio cables!

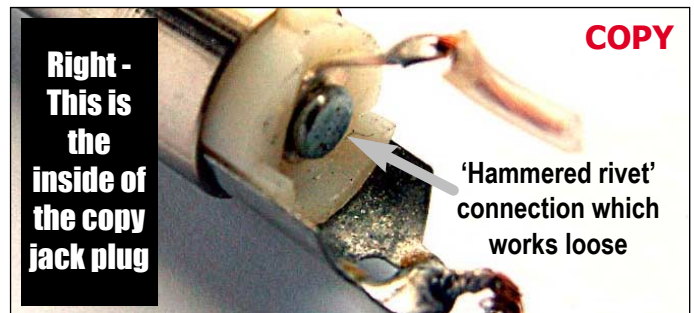
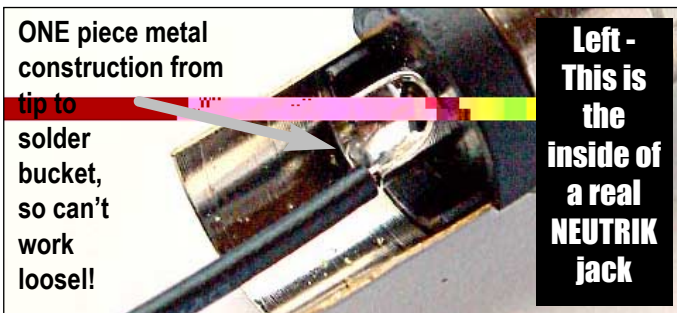
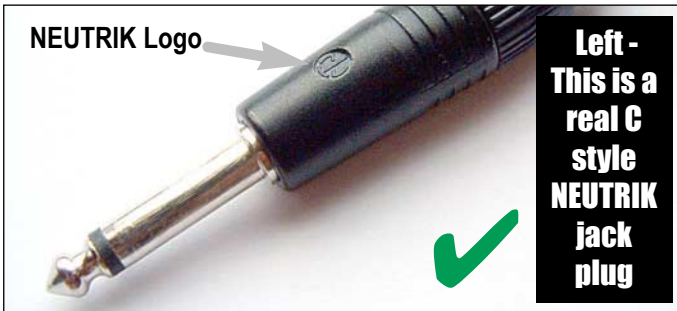
Using AC adapters that are too low in current rating can also cause hum in your signal - See our 'How to select power supplies' (90KB PDF) on the *Manuals* page of our website.

**Just a point to think about...** some cable makers spend a lot of time making their cables 'look' sexy and like they're doing more than they really are. Try not to be drawn in by this. A cool looking lead can often be poor in quality and performance... or both even.

Look at this way... marketing hype and glossy adverts are designed to help you part with your hard earned cash!



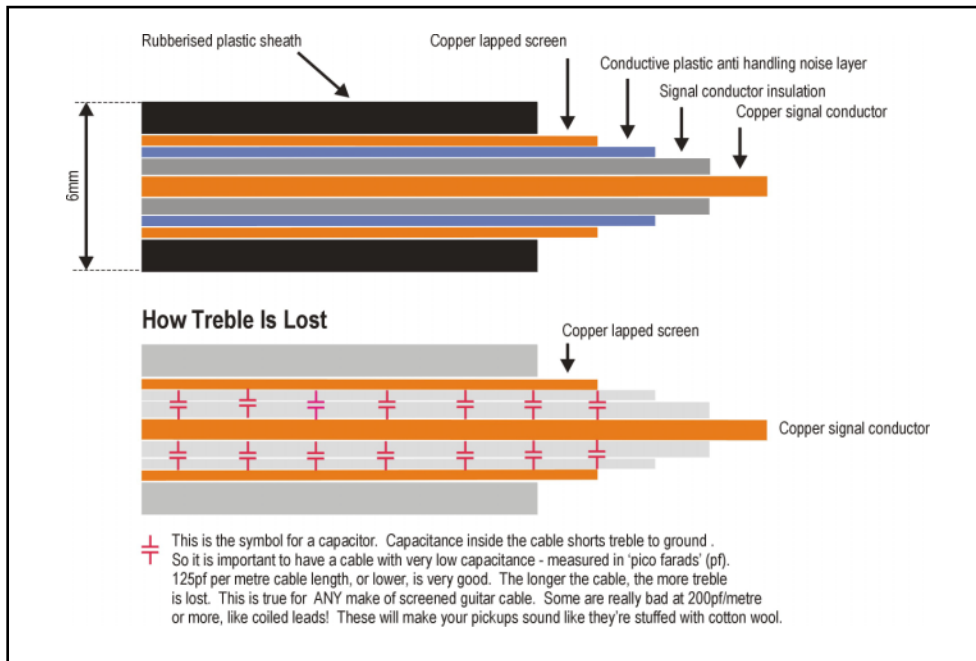
Be sure the only turkey you buy... will be the one you eat at Christmas?



The real cost of a cheap cable is the amount you paid for it PLUS the cost of a decent cable later!

Why not just buy a good lead from the outset?

### Anatomy Of A Good Guitar Cable



#### Award-Session Friends:

Eric Clapton (August album), Roy Buchanan, James Burton, Dave Stewart (Eurythmics), Jan Ackermann (Focus), Mick Ralphs (Bad Co.), Stevie Winwood, Late Rory Gallagher, Tony Hicks (Hollies), Mike Rutherford, The Hellecasters (Jerry Donahue, Will Ray), John Jorgensen (Hellecasters/Elton John), Brooks & Dunn (Tony King, Troy Klontz, Dwayne Rowe & Barry Ledderer), Los Lobos, Bruce Welch (Shadows), Mick Jagger & Ronnie Wood (Stones), Gordon Giltrap, Steve Diggle (Stranglers), Mike Berry, Martin Barre (Jethro Tull), Geoff Whitehorn (Who?), Late Alan Murphy, Clem Clempson, Big Jim Sullivan, Paul Hardcastle (Ninnineteen), Glen Burtnik (Styx), Bill Dickens, Ronnie Montrose, Doc Powell (Luther Vandross), Micky Gee (Shakey Stevens), Abbey Road Studios, Marcus Studios... and more.

You can learn the history of Session amps and Award-Session preamps from the PDF downloads at: [www.award-session.com](http://www.award-session.com)