



Versus the Competition

We often hear that a cable is just a cable. Being audio professionals by trade we know that this is simply not true. Digiflex has long enjoyed a reputation of a quality cable that provides excellent value for the money - an enviable position. At first glance many cables will appear similar, however there are important distinctions in both materials and manufacturing processes that separate Digiflex from its competition. It's on focusing on these key points that we can see where the differences lie (or should we say *tell the truth*). Following is an overview of these points, addressed by Digiflex during raw material selection and manufacturing:

Connector Quality

A critical component of a cable is the connector. It is common to see generic connectors on cable that is claimed to be of very high quality. Usually if the cable is good there should be hi quality connectors to go with it. There are convincing imitations of the Neutrik connector being used. They may seem good at first sight but they are not the same. For its contacts, Neutrik uses a special alloy that keeps conductivity virtually as good as new even if there is extreme wear and a tarnished look. The self cleaning contacts ensure that dust or dirt don't get in the way of good electrical connection. In the case of the imitations the sound quality may quickly suffer because of the low quality alloys used. They tend oxidize easily and electrical resistance increases and becomes inconsistent in a short time. The same can also hold true for some other brand name connectors. Digiflex products use genuine Neutrik connectors. They are proven and are the undisputed industry standard. Don't settle for less!

Cable Memory

One of the most apparent indicators of cable quality is in what is called "memory". If you bend a cable and it tends to want to stay in the bent shape, it is said to be a cable with a lot of memory. That is not desirable and is a first indication of low quality. A good cable will tend to want return to its original shape quite easily after bending it.

Cable Stranding

Stranding is the number of strands which make up the conductors and shield of a cable. A cable made of a low count of big strands will tend to fail easier than a cable made of a large count of finer strands. Large strands usually tend to easily break and fall apart after moderate use. This is often not detected because it happens inside the cable. The shielding coverage then suffers and protection against noise and interference diminishes. If the center conductors break you will loose sound quality and the electrical benefits of modern audio circuits will not be taken fully advantage of. A rule of thumb is that it is better to have a large number of fine strands as they naturally tend to be more flexible and are less prone to failure.

Cable Shielding

This is the most important factor in reducing noise and interference in a cable. Shielding is measured in coverage percentage (the percentage of shielding material that actually covers the center conductors). Typically it should be 95% or more on cables used with microphone level signals. Less coverage can sometimes be acceptable on line level signals because the level of the signal will greatly outweigh the level of noise. There are three basic types of shielding:

- 1- *Braided*: A braided shield is one with its shield material woven around the center conductors (shield strands wrapped and intertwined in both a clockwise AND counter clockwise direction). A cable with a good braided shield is usually preferred as it offers the best protection against interference and noise and is usually the most rugged. A high quality braided cable will have a tight braid with coverage of 95% or more. A low quality cable will have a loose braid and you will see through it due to poor coverage.
- 2- *Spiral*: A spiral shield is a shield made with strands that are wrapped around the center conductors in a single direction (either clockwise OR counter clockwise). Generally a spiral shield is a second choice to the braided shield. However it is better to have a good spiral shield than a bad braided one (and there are a lot of badly braided cables out there!)
- 3- *Foil (or Tape)*: Finally there is the foil shield. The foil shield is typically made of a wrapping material (such as Mylar) that is plated with a thin coat of aluminium. This usually offers the best covering percentage (typically 100%) but because it is made of foil it can make crackling noises when handled (though this is very low level it can still happen). The aluminium plating is also prone to damage if the cable is severely nicked or pinched. So a foil shield is best suited for permanent installation applications such as in studios or equipment racks. It is also suitable in touring snake cables that are manufactured with a high quality rugged jacket such as the Digiflex multi channel cables.

The shielding *minimum* for a Digiflex N25-XX is **95%**. Anything less will be inadequate for rejection of interference and noise. We routinely see competitors with shielding coverage of around 80% or less. This is simply unacceptable for a mic level cable.

Cable Filler

Filler material should conform to the cable materials, not the other way around. Filler material's role is to fill empty space and, in shielded cable, it must be soft and shouldn't interfere in any way. Digiflex shield properties remain constant over time due to proper design and the use of **cotton filler**. Our competitors often use jute or other synthetic fillers. These are much stiffer than cotton and, combined with a delicately applied spiral shield, as is commonly seen with our competitor; these fillers will push away the shield and leave many areas unshielded. They will continue to push away more and more of the spiral shield as the cable is used; this will dramatically reduce the shielding coverage and audio performance.

Cable Rip Cord

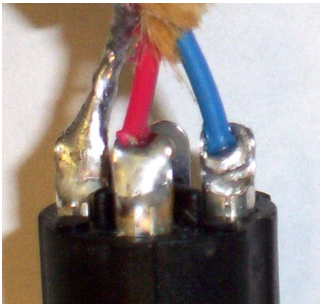
A rip cord is a thin strand of solid string that lies between the shield and the overall jacket. Aside from being there to help split the jacket when producing assemblies, one of its roles is to protect the core of the cable from being damaged by physical tension. Since everything inside a cable is twisted in a spiral pattern, if excessive pull is exerted on a cable, the insides can shift and the cable can become permanently damaged and can eventually be rendered unusable. Because the rip cord is placed in a straight line from one end to the other, it bears the tension and keeps everything inside intact. Digiflex Tourflex cables always have a rip cord. Our competition often omits this key component.

Cable Consistency

If you grip the cable and make it slide in your hand you will notice that the Digiflex cable is even and smooth. Often our competitors' cables are bumpy and irregular. This is because of the fillers that don't give like cotton. It can also be an indication of lower quality manufacturing of the overall jacket. Sometimes you can actually see that the competition's jacket is not truly round! The Digiflex quality standards ensure a consistent, round cable. This is important for wrapping and longevity.

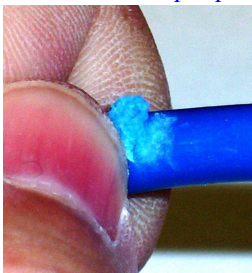
Workmanship and Other Quality Aspects

The actual method of soldering is extremely important. The product will only perform properly if this key step is performed properly. Though understated, solder quality is so important that it can actually have an effect on sound quality and durability. A properly soldered cable will have a nice shiny finish to it and will be smooth. A dull colour solder joint can be an indication of low quality soldering and can result in intermittent functionality and/or loss of sound quality. It is very important to have a good quality solder joint as irregularities can actually act as an antenna under certain conditions and increase noise and interference. For comparison, please read the following excerpt. This details an inspection of a sampling of our competitors' products:



"I opened the connectors on the samples and I very surprised at what I saw. While soldering, some of the insulator's plastic melted and got mixed in with the lead. A third of the conductors have solder so dry that it looks like there's inadequate contact. The solder colour is dull and looks like what could well be cold solders on most joints. One might say it just looks dull, but in the electrical realm this is a big deal. Having worked in electronics manufacturing for over 10 years, I can tell

you that this type of soldering is exactly what we were trained not to do. One of the samples shows corroded and brittle copper (worsened by bad soldering). It looks like it could be second quality (B stock?); and it's oxidized. With time the individual copper strands will break, fall apart and the sound properties will change. Depending on how rough the client



is with the cable, this could mean replacement within a relatively short time. One other sample had such a bad jacket that I was able to tare out chunks with a finger nail without too much effort. I wouldn't want to see the results of that cable getting pinched while pulling on it. In short, after careful evaluation, I have to say that these samples are simply inadequate for even the seasoned musician or sound enthusiast. They fail on every basic quality criteria."

The Digiflex team takes great pride in its workmanship; and it is praised by the top names in the industry. You can depend on our guarantee of consistent, continual quality and value. These are things you will never have to hear us apologize for.

Conclusion

These aspects all add up. And in the end, even though at first glance the competition may seem to offer an "equivalent" or even a viable alternative, there is always a substantial difference, visible or not, that makes a Digiflex product a true bargain and a sure investment.