**Teach you to choose a public broadcast transmission cable**

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In the construction process of broadcasting systems, people tend to focus on the relevant equipment packages, ignoring the choice of broadcast transmission cables. In fact, for a broadcast system project, in order to obtain a satisfactory acoustic effect, in addition to high-quality broadcast equipment (power amplifiers, speakers, etc.), the quality of the broadcast transmission cable also affects the sound to some extent. the quality of.

At present, in the construction process of broadcasting system engineering, people often use the "speaker line" mode used by the home audio system to select the transmission cable of the broadcasting system. In fact, there are certain misunderstandings in it.

The "speaker line" used in the home audio system is a combination of the transparent plastic and the copper wire dyed in gold and silver. It is called the "gold and silver line" in the market. The specification of "gold and silver wire" is determined according to the number of copper wire wrapped inside, and it is not standardized how much it is classified.

"Speaker cable" is mainly used in home audio systems. In general, the length is only 3-5 meters. Therefore, when selecting the option, you should try to select "rough" and "material" a little "speaker cable" to improve the signal. Transmission rate and reduced transmission loss.

If the "speaker line" is used in the public address system, because the laying line is long, the engineering cost determines that it is impossible to use the advanced "speaker line", and only the low-level "speaker line" can be used. This type of "speaker line" is relatively inferior in quality. Most of the small factories (workshops) use relatively backward production processes, and users cannot assess and accept them with reference to national standards.

Low-grade "speaker cables" are generally parallel lines, that is, transparent plastic wrapped in two copper wires arranged in parallel. The principle of electromagnetics tells us that there is a parasitic capacitance between the lines between any two parallel lines, and the existence of parasitic capacitance between the lines will cause the high-frequency components in the transmission signal to be bypassed. The longer the line, the greater the influence of the parasitic capacitance between the lines. . Therefore, it is not suitable to use parallel lines for transmitting broadcast signals over long distances, otherwise it is easy to cause unclear and boring phenomena.

Scientists have found that the twisted pair method can effectively overcome the influence of parasitic capacitance between lines, so the twisted pair method is widely used in computer network lines and advanced audio wires. With the popularity of twisted pair cable manufacturing processes, more and more transmission cables are twisted pair. Therefore, the public broadcasting system should also use a twisted pair broadcast cable to transmit broadcast signals over long distances.

The outer layer of the twisted-pair broadcast cable is wrapped with a plastic jacket to further protect the internal twisted pair cable, which can avoid the wire trough, the bridge frame cut, and the short-circuit inner core wire in the construction project. This is the twisted pair. Jacket broadcast cable. Therefore, we recommend that public address systems use twisted-pair jacketed broadcast cables.

In addition, based on the twisted pair sheathed broadcast cable, there is also a twisted pair sheathed transmission cable with a shield. For large public address systems, we recommend using a twisted pair sheathed transmission cable with a shield. Due to the shielding effect of the shielding net, the cable can effectively prevent the radiation influence of the broadcast cable on the other cables laid in the same pipe (same trunk), and can further strengthen the tensile resistance of the cable, especially suitable for the weak electric shaft inside the high-rise building. Laying and outdoor long distance laying.

In the public address system, in addition to the twisted pair cable, the broadcast transmission cable also has certain requirements on its wire diameter. In theory, the thicker the wire diameter, the smaller the transmission loss of the line, but the problem that comes with it is that the construction cost has gone up and the construction difficulty has increased. Weighing the pros and cons, considering the performance price ratio, the broadcast transmission cable can be selected by reference to the attached table.