

The wires are twisted around each other to reduce cross talk or electromagnetic between pairs of wires. In this way they cancel each other's disturbance. Twisted wire are also called UTP wire or unshielded twisted pair wire because the plastic covering on it is unable to stop the disturbances caused by external electromagnetic field.

Since some telephone sets or desktop location require multiple connection twisted pair is sometime installed in two or more pairs all within a single cable for some business locations, twisted pair is enclosed in a shield that functions as a ground. This type of twisted pair is called shielded twisted pair (STP). This is different from ordinary twisted pair wire which is unshielded twisted pair or UTP. Twisted pair is now frequently installed with two pairs with extra pairs making it possible to add another line. It also comes with each pair uniquely colour-coded when it is packaged in multiple pairs.

• Advantage of twisted pair wire :-

i) Where is cheap and easier to use

ii) STP wires are less disturbed by external interferences

iii) These wires are less likely to cause interferences themselves.

iv) STP wires carry data at a very fast speed.

• Disadvantage

i) These wires support baseband transmission. that means at a time only one channel can be viewed.

ii) unshielded twisted pair wires may be disturbed by external interferences giving low quality of transmission.

iii) These wires are not suitable for connecting to terminal point.