

CAT-6 MODULAR PLUG ASSEMBLY GUIDE

Cat.6 Assembly Guide

1. Cat.6 patchcord includes :

- 1.1 Modular Plug.
- 1.2 Loading Bar.
- 1.3 Cat.6 Cable with "Cross".

2. Terminology

- 2.1 "Plug"- the Cat.6 modular Plug (long body).
- 2.2 "Loading Bar"- the Cat.6 loading bar is to fix the wire position and improve assembly stability.
- 2.3 "Cable"- the Cat.6 cable.
- 2.4 "Wire"- the twisted pairs inside the cable.
- 2.5 "Cross"- the PE Cross inside the cable.

Modular Plug & Loading Bar



Cat.6 Cable with "Cross"



1. Cable Cutting

- 1.1 10cm more length is needed when cutting the cable. The 10cm is for plug assembly and rework once.

- 1.2 After arrangement, the cable radius must be larger than 17.5cm to avoid the damage of the wires inside the cable.

- 1.3 Cable tie- tied the cable for one rotation only.

Radius >17.5CM



Tied the cable for one rotation only



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2. Cable Jacket Removal

2.1 Use machine or hand tool to remove cable jacket. The wires inside the cable can not be damaged. The wire length outside the cable is 22mm after jacket removal.

2.2 All the actions have to be very careful not to damage the wires.

Jacket removal



3. Cross Removal

3.1 Open the 4 twisted pairs before Cross removal. The wires can not be bended for more than 90 degree.

3.2 Use sharp pocket knife to removal the Cross. Cut the one side of Cross first(50%), then cut the other side of Cross(100%). The length of Cross removal is the same as Jacket removal (22mm).

Cross Removal



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4. Untwist the Wire

- 4.1 For SUNF PU UTP CAT.6, Green/Blue pairs untwist twice (rotate 360 degree). Orange/Brown pairs untwist once (rotate 180 degree).
- 4.2 The wires can not be bended for more than 90 degree.

Untwist the wire



5. Wire pre-cutting

- 5.1 Arrange the wires and cut 2mm wires away.
- 5.2 Rotate the scissors with some angle to cut the wire with a oblique angle. It will be easier to insert the wire into loading bar.

Wire pre-cutting



Inserting Wire into Loading

6. Inserting Wire into Loading Bar

- 6.1 For right-handed person- Use left hand to hold the cable & fix loading bar. Use right thumb & forefinger to insert the wire.
- 6.2 Insert the 12/45/78 first, then 3/6.
- 6.3 The wires can not bended for more than 90 degree.
- 6.4 This is the most important step for patchcord assembly. The dedicated operators are preferred in order to achieve stable yields.



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Adjust the Loading Bar position

7. Adjust Loading Bar position

7.1 Use pliers to fix the wires and move the Loading Bar to Cross position.

7.2 The wires can not be bended for more than 90 degree during this step.

7.3 To avoid the damage of loading bar, do not push the loading bar too much.



Wire Cutting

8. Wire Cutting

8.1 Cut the wire at the very edge of Loading Bar. Be careful not to damage the Loading Bar.

8.2 Use a sharp pliers to cut the wires. Make sure there is no wire residue to avoid the short between wires.



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Inserting the Loading Bar into Plug

9. Inserting the Loading Bar into Plug

9.1 Insert the loading bar into plug. Make sure to push the loading bar till the end of plug.

9.2 Push the cable jacket and try to minimize the distance between the cable jacket & loading bar. This step is important to minimize the performance loss at SR molding step.

9.3 Make sure the wires are at right position before crimping step.



10. Molding (If Applicable)

