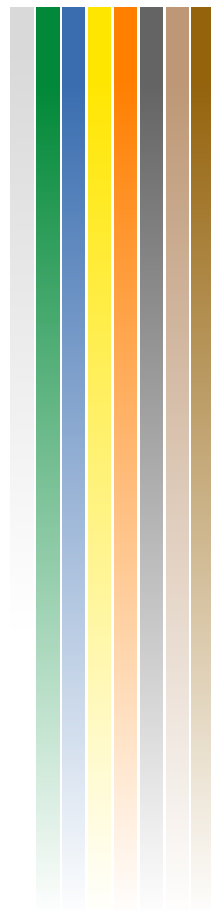


MOGAMI LAN CABLE 端末処理要領

MOGAMI LAN CABLE INSTALLATION INSTRUCTIONS

Part No. 3306



この加工手順は推奨コネクタ PANDUIT Part No. MP588-Cを使用して説明しますが、他社製の場合もほぼ同様です。

高周波特性の劣化を極力避けるため各ツイストペアの撚りをギリギリまで残して加工します。

Although this instruction is based on the Panduit Part No. MP588-C connector, the basic technique will work with most connectors.

Important-Read through all steps of the instructions thoroughly before you begin.



1.

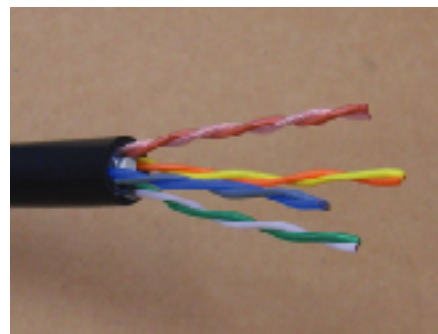
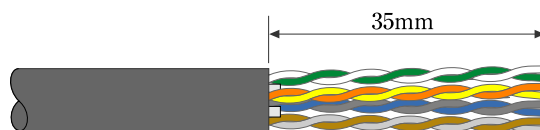
ケーブルのジャケットを約35mm剥く。

Remove approximately 35mm (1.38") of the cable jacket.

2.

ジャケットを剥いた部分まで中心のモノフィラメントと導体間に介在する中空チューブ4本をカットする。

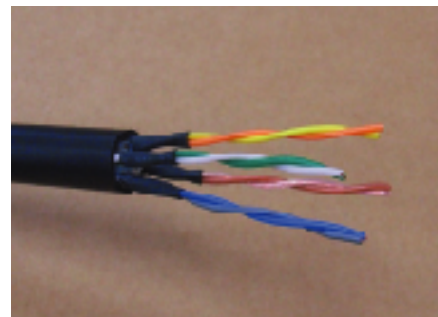
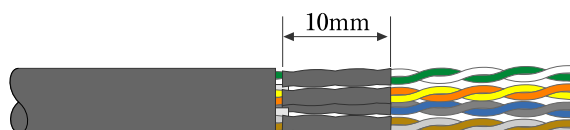
Cut out the center monofilament and four tubes between conductors up to the point where the cable jacket was removed. Be careful not to kink or untwist the conductor pairs or performance can suffer dramatically.



3.

ツイストペア根元部分の撚りを保てるよう4対それぞれを全長10mmの細い熱収縮チューブ(公称内径:1.5mm)で固めて保護する。その後、ステップ(5)で取り付ける中サイズの内部糊付熱収縮チューブ(全長:45mm, 公称内径:9.5mm)をジャケットに通しておく。

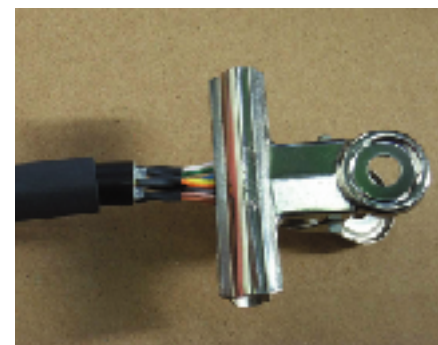
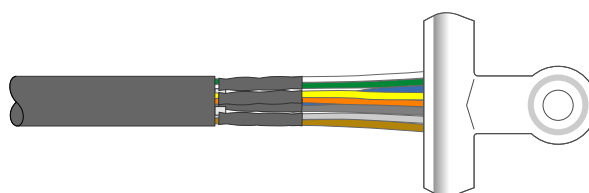
Important : Maintain the original pitch of each twisted pair as much as possible all the way up to the connector to minimize any deterioration of high frequency characteristics for the cable assembly. The first 10mm (0.39") of each of the four twisted pairs must be protected by 10mm long heat shrink tubes (nominal diameter: 1.5mm / 0.059") so that original pitch of each twisted pair is maintained. Carefully slide the tubes over each pair up to the overall cable jacket, and apply heat. Slide a medium size inside adhesive heat shrink tube (length: 45mm / 1.77", nominal diameter: 9.5mm / 3/8") past the conductors and over the cable outer jacket. This will be used later in step 5 so do not apply heat to it yet.



4.

収縮チューブから外に出たツイストペア部分の撚りをほぐす。次にストレート結線の場合、白・緑・青・黄・橙・灰・透明・茶の順に並行に並べる。そして列が崩れないように先端をクリップで押さえておく。

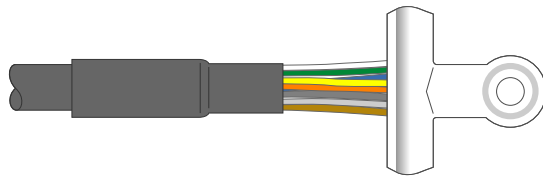
Untwist the pairs beyond their individual shrink wraps on the connector side and straighten the individual conductors. Line up the conductors in order: White-Green-Blue-Yellow-Orange-Grey-Clear-Brown for a straight connection. (In case of cross connection, refer to cross connection instructions.) Then, clip the tip of the flat eight conductors together as shown so that the prepared color order won't accidentally move.



5.

ステップ(3)で先に通しておいた内部糊付熱収縮チューブをドライヤーの熱で収縮させて、ケーブルジャケットと内部導体コア(4対のペア導体)を固定する。ジャケットの端から先に熱収縮固定した細い熱収縮チューブを覆いその先端から5mm位先まで被せて熱収縮させて固定する。この時、コア側に熱を掛けすぎてあまりに小さくなるまで収縮させると丸みを帯びてコネクタ内部に挿入出来なくなるのでほどほどのところで止めておく。

Stabilize the end of the cable jacket and inside core conductors (four twisted pairs) with the adhesive heat shrink tube pre installed in step 3. Align this adhesive heat shrink tube about 5 mm (0.20") past the end of the heat shrinks now covering the individual pairs. Then apply heat to shrink and affix it firmly. Caution - Do not shrink too much on the conductor side during this process. Otherwise, the conductor pairs will be rounded, and it becomes hard to insert them into the RJ-45 connector. The goal is for all 4 pairs to be aligned in a flat row.



6.

並行に並べた導体部分先端をPanduit社の先端揃え治具(WPT-8 Wire Prep Tool)に挿入し、先に並べた色順番で平らに固定し、治具からはみ出る部分1mm位を残して切り落とす。並行に並んだ導体部分が11mmあればRJ-45コネクタに圧接した時にプラグ接点部分に完全に届く長さを確保出来る。

Insert the flattened conductors individually into the Panduit WPT-8 Wire Prep Tool in the proper White-Green-Blue-Yellow-Orange-Grey-Clear-Brown sequence as described in step 4. Pull the conductors through until the tip of the shrink tube is at the conductor retention slot. Then, trim all 8 conductors flush using a wire cutting tool, leaving 1mm (0.039") beyond the end of the conductor retention slot. Check before you cut-11mm (0.433") long flat conductors assure enough length to properly terminate to the RJ-45 connector.



7.

後で取り付ける編組スリーブ(SFチューブ)を固定するための大き目の内部糊付熱収縮チューブ二つ(全長:30mm,公称内径:12.7mm)をジャケットに通しておく。

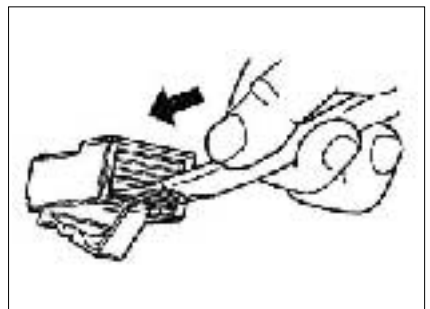
Slide two larger adhesive heat shrink tubes (length: 30mm / 1.18", nominal diameter: 12.7mm / 1/2") over the cable jacket so that braided sleeving can be attached during the final step. Do not apply heat to them yet!



8.

RJ-45 コネクタのラッチを下に見て左から1-8の順番に合わせて導体を挿入する。この時、やや下側に押し付ける方向に挿入しプラグ接点の下まで完全に届くまで差し込む。

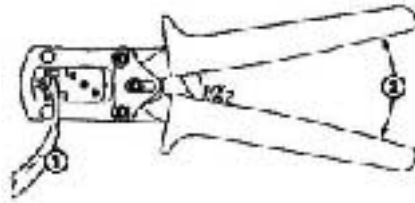
Place all conductors in the connector guide grooves, number 1-8 left to right with latch down as shown. Apply slight downward pressure as you insert the conductors until they are fully extended and under the plug contacts.



9.

コネクタに挿入したケーブルが動かないように手で固定しながらPanduit社MPT5-8圧接工具にコネクタ部分を所定の位置まで差込、圧接固定する。

Place the plug in the die until it clicks, holding the cable and connector with your fingers. Maintain pressure by pushing cable into plug. Complete termination by closing the die set fully and releasing.



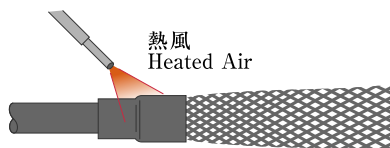
10.

編組スリーブの片側を接続したコネクタ側から被せ先に入れた熱収縮チューブの内側に挿入しチューブの真中まで入れる。その後、熱収縮チューブの真中まで挿入された状態のまま指先感触で探りながらコネクタ側にゆっくり引っ張り、先に熱収縮固定されているチューブ端に編組スリーブ端があたるあたりで固定して、熱収縮チューブをドライヤの熱でしっかり固定する。

推奨編組スリーブサイズ:SFチューブ(全長:180mm,折径:22mm,最小:12mm,最大:33mm)

Place one side of the braided sleeving over the cable from the connector side. Insert it inside of one of the two large heat shrink tubes up to the middle of the heat shrink tube. Then, slowly pull the braided sleeving together with the heat shrink tube, keeping the end of braided sleeving in the middle of the large adhesive tube, toward the connector. Stop pulling when you feel the end of the braided sleeving is almost to the edge of the inside shrink tube. Fix inside adhesive heat shrink tube firmly with the heat gun so that cable jacket and braided sleeving are held together firmly.

Recommended braided sleeving size: Length: 180mm (7"), Width in flat: 22mm (0.87") Width minimum: 12mm (0.47") Width maximum: 33mm (1.30")



11.

最後に編組スリーブの反対側を折り返して袋状にしてケーブル側に戻し、同じ様に先に入れた熱収縮チューブの残りのひとつの内側に挿入する。同じ様に熱収縮チューブの真中まで挿入してから指先感触で探りながらコネクタ側にゆっくり引っ張り、先に固定した熱収縮チューブの端に編組スリーブ端があたるあたりで固定して、その上からドライヤ熱で収縮させしっかり固定して作業は終わる。

Finally, pull the loose end of the braided sleeving back over the cable, then insert it inside of the remaining large heat shrink tube. Align it to the middle of the tube as in step 10. Then, slowly slide the braided sleeving together with heat shrink tube, keeping end of braided sleeving in the middle of heat shrink tube, toward the connector. As before, stop pulling when you feel the end of braided sleeving is about to the edge of shrink wrap applied in step 10. Fix the adhesive tube firmly with the heat gun so that cable jacket and braided sleeving are firmly attached.



完成 You are done!

補足 Supplement

推奨ドライヤー:局所的に熱収縮させたいので熱風開口部が細いタイプ
開口部が広いと編組スリーブと一緒に溶けてしまい易い。

Recommended heat gun - Make sure to use a small diameter tip to make it easy to shrink the tube without melting the braided protective sleeving.