Replacement Cable
Design for *Palm Radio* Paddle
MP Plug

K5PA
Cable Design
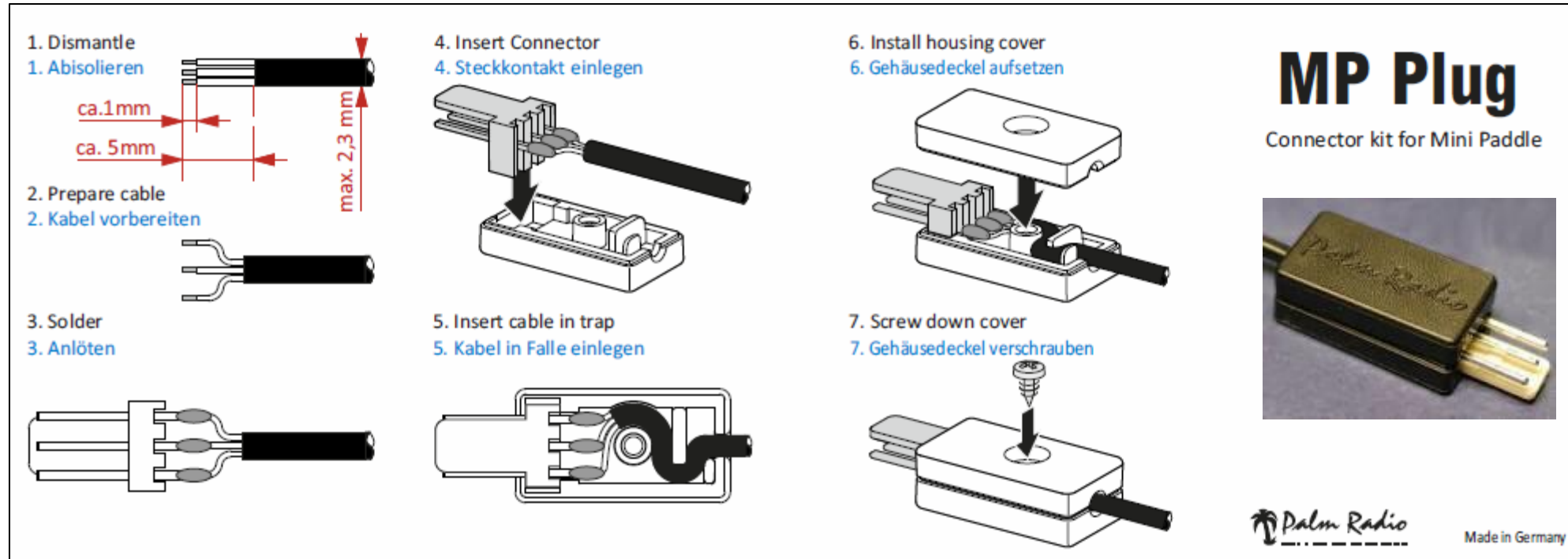
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https://www.k5pa.com
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Original
Connector

MP Plug Drawing From *Palm Radio* Website
Note: Palm Radio is Out-of-Business and Original Parts are Unavailable

1. Dismantle
1. Abisolieren

ca.1mm
ca. 5mm
max. 2,3 mm

2. Prepare cable
2. Kabel vorbereiten

3. Solder
3. Anlöten

4. Insert Connector
4. Steckkontakt einlegen

5. Insert cable in trap
5. Kabel in Falle einlegen

6. Install housing cover
6. Gehäusedeckel aufsetzen

7. Screw down cover
7. Gehäusedeckel verschrauben

MP Plug
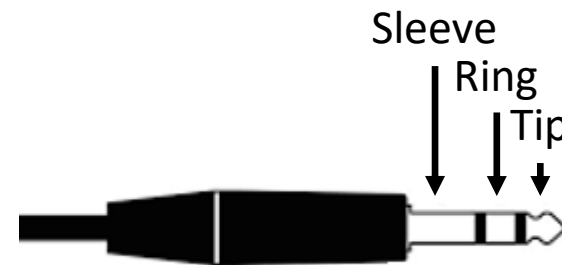Connector kit for Mini Paddle

Palm Radio

Made in Germany

(Credits: Palm Radio Original Drawing From Website)

Pin Definitions for the TRS 1/8" (3.5 mm) Plug

NOTE! This is on the Bottom Side of Plug When Installed on Key

Ring
Sleeve
Tip

Tip
Sleeve
Ring

Left Paddle
Common
Right Paddle

Tip
Sleeve
Ring
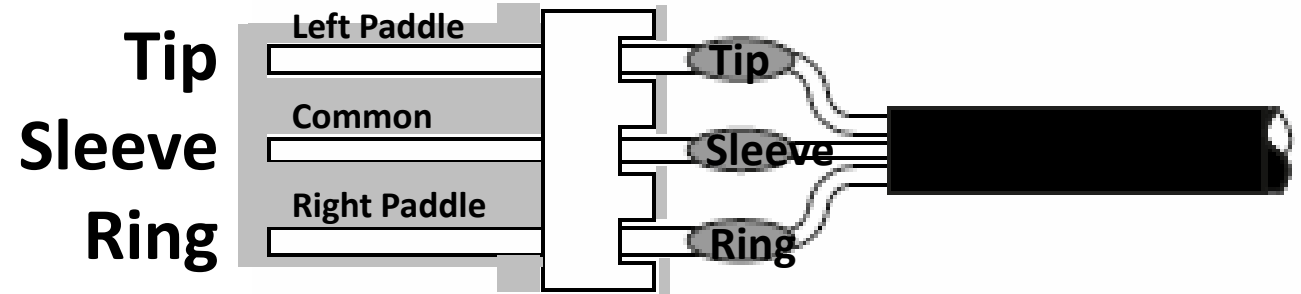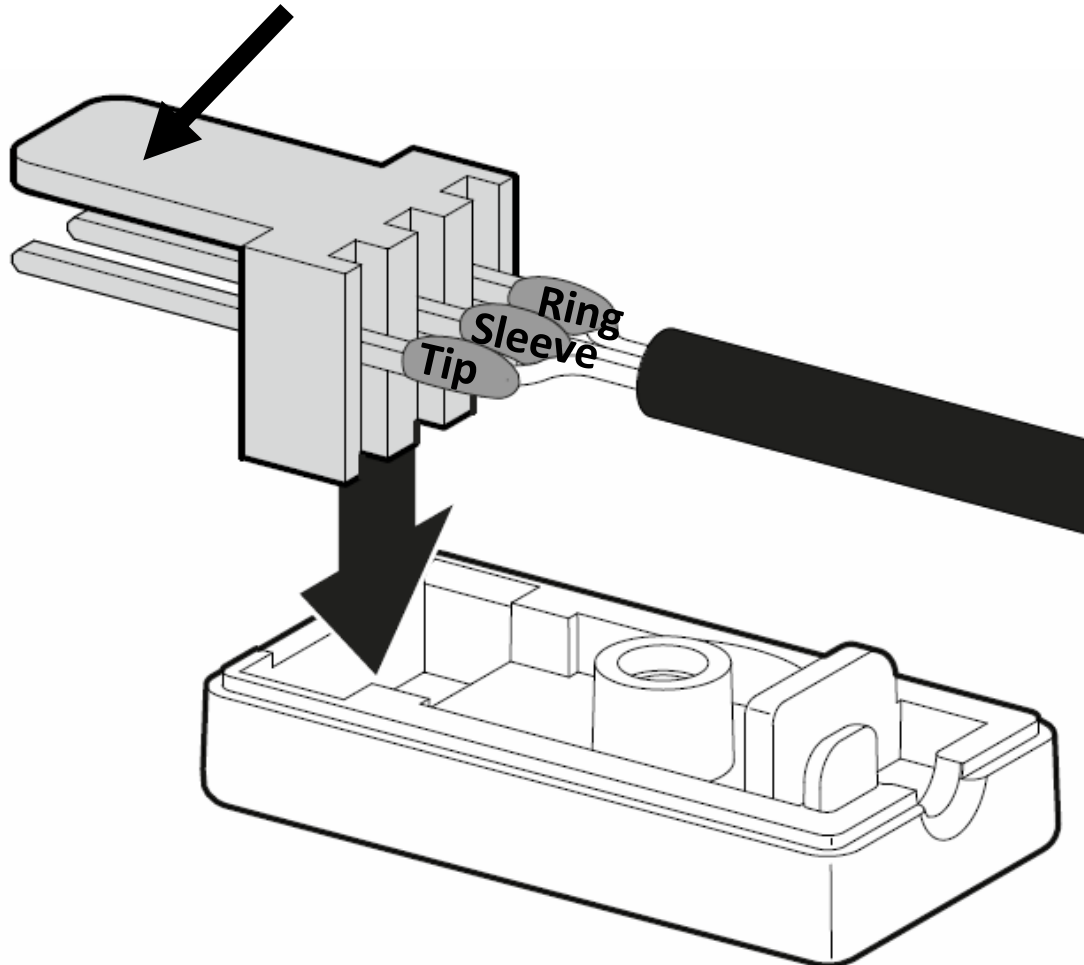
NOTE! This Top View Showing Pins As They Would Insert Into Paddle Connector

Sleeve
Ring
Tip

Tip-Rig-Sleeve (TRS)

Tip = **Left** Paddle wire

Ring = **Right** Paddle Wire

Sleeve = **Common** Return Wire

1/8" (3.5 mm) TRS plug common audio cable cut-in-half

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Typical Part Selection 0.1 inch (2.54 mm) pin spacing

Note

3-pins can be selected by cutting off unwanted pins using sharp wire cutters at the breakaway plastic indentions.

I like gold plating for long lasting contact quality. Other models can be selected on Amazon or Mouser websites.

Solder to short terminals, long terminal plug into paddle.

Construction Notes

Steps to Build Cable Assembly

- Cut your cable with the 1/8" (3.5 mm) TRS plug to desired length and strip wires.
- <u>Prior to any soldering</u>, prioritize having heat shrink in place prior to soldering! Easy to forget.
  - Slip larger (1/4") heat shrink tubing over cable and pull away from soldering end.
  - Pre-tin each wire for solder.
  - Pre-tin each connector pin.
  - Add (1/16") diameter heat shrink tubing over each wire prior to soldering.
    - Keep away from heat so it does not shrink during your soldering.
      - Some skill required.
      - You can use needle nose to absorb heat away from heat shrink tube during soldering.
  - Once wire all wires soldered to pins, heat shrink all tubing then pull larger tubing over all 3 pins and shrink
- Add dot of paint or label to define up orientation for 3-pin connector

Tools & Materials

- Low wattage soldering iron with fine tip.
- 1/8" (3.5 mm) TRS plug common audio extension cable cut to desired length. Example used at this link:
  - https://www.amazon.com/gp/product/B01D5H8JW0/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- Straight, 3-pin header, 0.1 inch spacing (see prior page)
- Small (1/16") diameter heat shrink tubing. Example it of various diameters at this link:
  - https://www.amazon.com/gp/product/B00A3HSTE4/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&th=1
- Larger (1/4") heat shrink tubing.
- Dot of paint or label to define up orientation for 3-pin connector.

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Completed Project

dot of paint

My Notes

- 1/8" (3.5 mm) TRS plug common audio extension cable cut to desired length
- Flip the connector over to swap the dot and dash paddle assignments!
- Add dot of paint or label to define up orientation for 3-pin connector