KÁCSA® AUDIÓ
SINCE·1995·ALAPÍTVA

Instruction for
HDMI Cable DIY Assembling

Version 3.12

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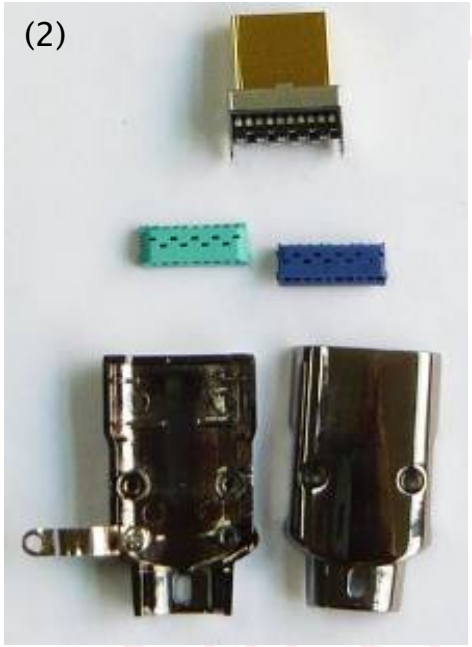
Preparation

(1) Specially designed and manufactured DIY DHMI 1.4 cable, 24 or 26 AWG
(2) DIY HDMI connectors with plastic holders and metal shells
(3) a hand tool, with a guiding jig
(4) a knife or any other stripping tool, a side cutter and a screw driver
(5) an optional portable tester or multi-meter

AWG	Maximum length for DVD-TV connection @1080p
26	20 meters
24	30 meters

The above maximum lengths apply for the most occasions of DVD to TV or projector real connection, but this is not always the case due to the poor interoperability between different brands of TV and DVD, a booster will be a solution in such a case.

(2)



(3)

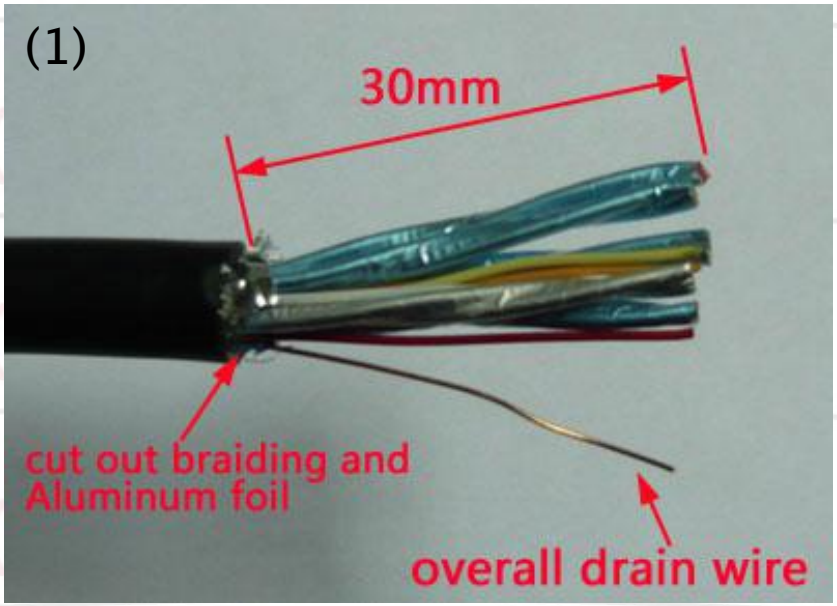
(4)

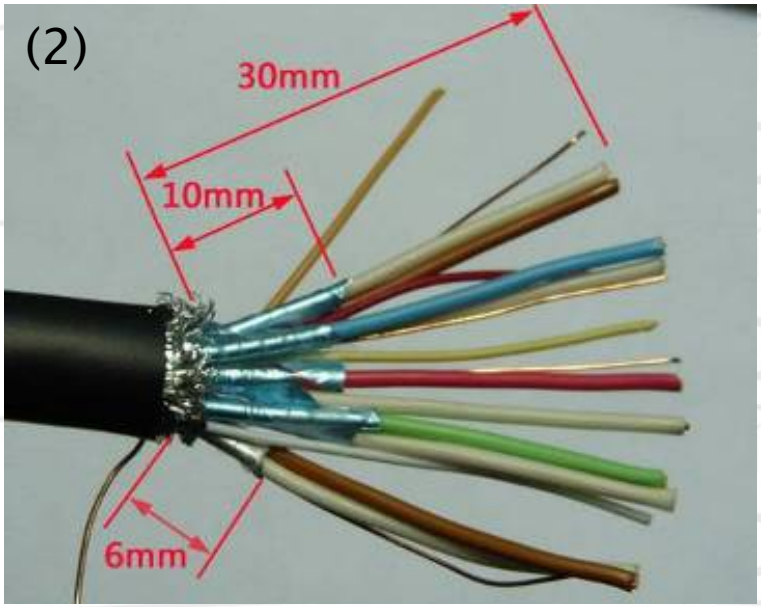
STEP 1: Strip Cable

(1) Strip cable jacket. Cut out braiding and Aluminum foil, only keep drain wire

(2) Strip the Aluminum foil of 5 Twisted Pairs (TP) per illustrated dimensions

Among 5 TPs, four with blue foil are for TMDS data, and one with silver foil is for Ethernet and Audio Return Channel (HEAC). It is important to keep the foil length of HEAC pair 6mm for easy installation in the following steps.





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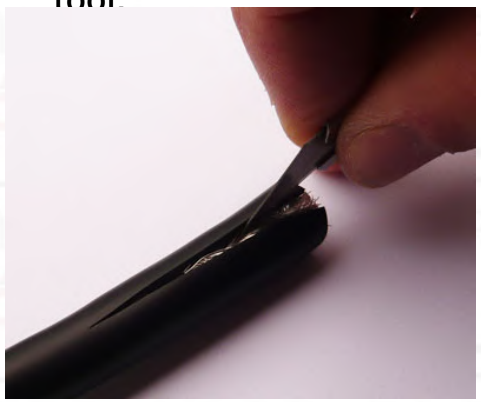
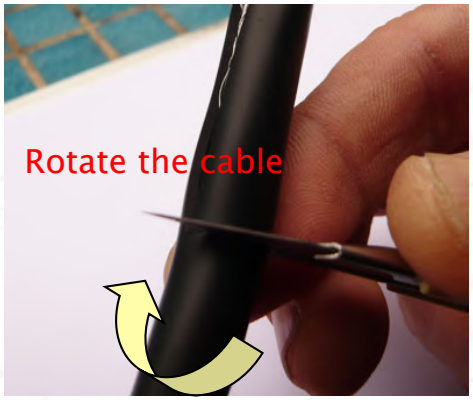
Tips for step 1:

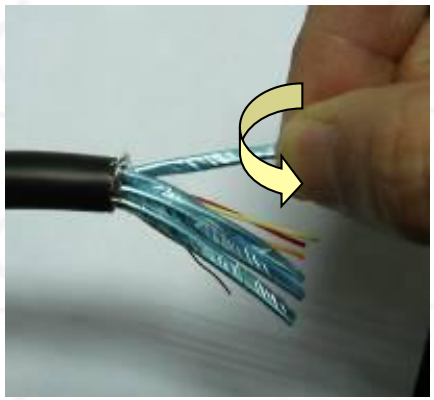
§ You can use a knife to strip the cable jacket, even if you don't have a professional stripping tool

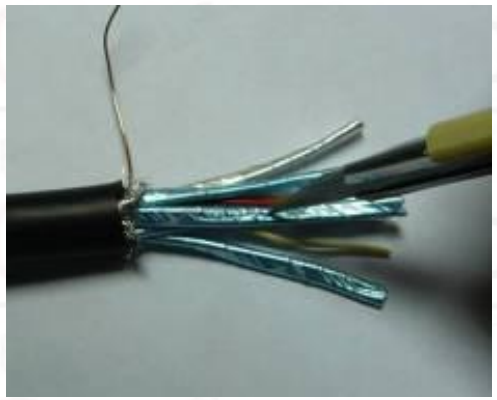




§ Use a side cutter to cut out the braiding and Aluminum foil, only keep the drain wire

§ For easy operation, untwist 5 Twisted Pairs first, and then strip the aluminum foil with a knife





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STEP 2: Insert Wires

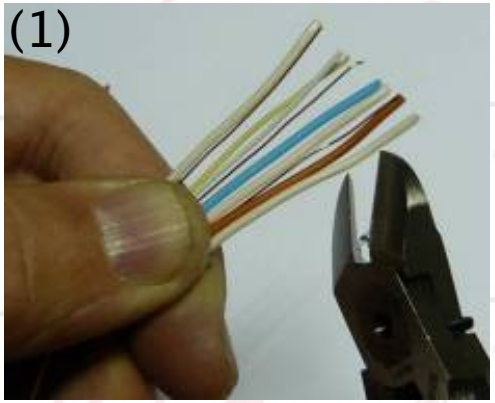
(1) Arrange the wires for 10-hole holder per the pin assignment in the next page.

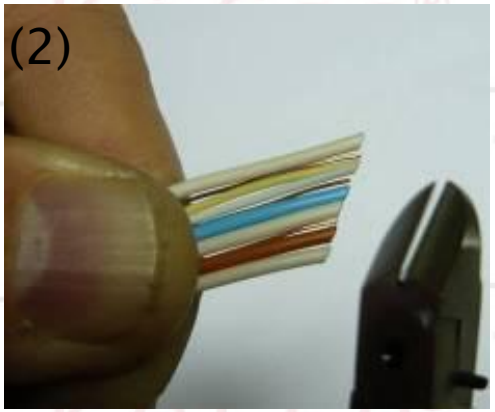
(2) Cut the wires at an angle for easy insertion

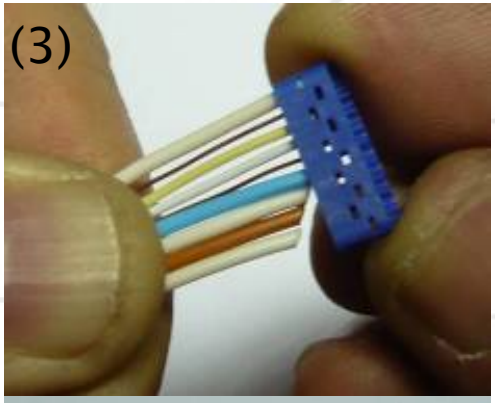
(3) Insert the wires into 10-hole holder in one step.
☒ You can divide 10 wires into two groups and insert them in two steps before you are skillful.

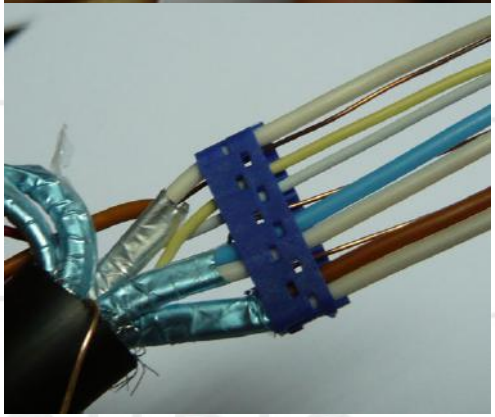
(4) Arrange the wires for 9-hole holder and insert the wires into the holder.

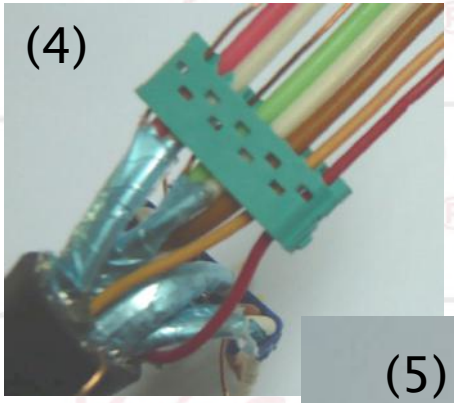
*(5) It is very **IMPORTANT** to keep two holders in alignment.*

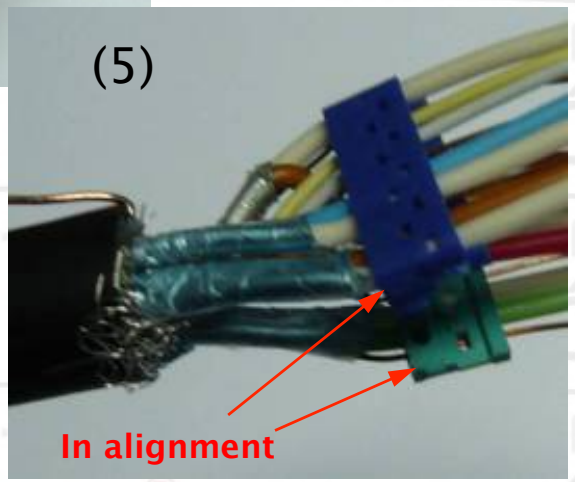












Pin Assignment

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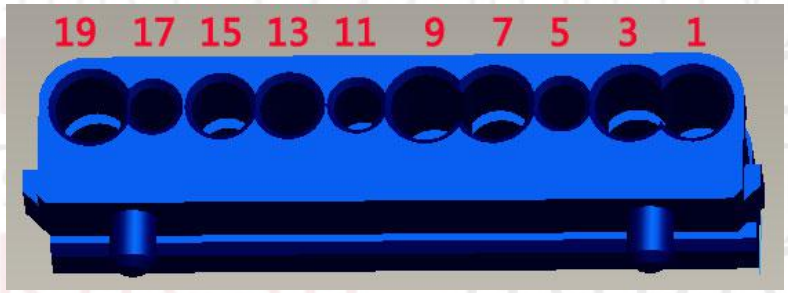
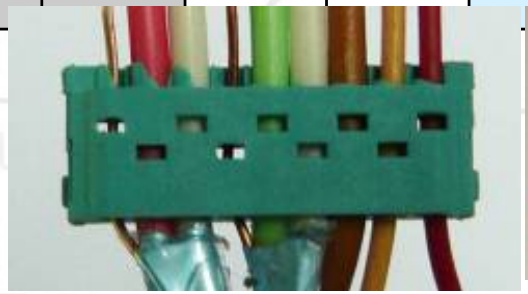
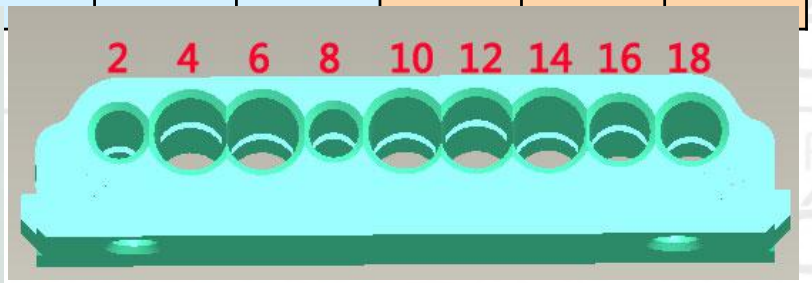
Any mis-wiring, even an intercrossing of Twisted Pairs, will lead to transmission failure. So it is **EXTREMELY VITAL** to make sure the wire assignment correct without any error !!!



Pin#	19	17	15	13	11	9	7	5	3	1
wires	Twisted Pair with silver foil		yellow	White	Twisted Pair with blue wire			Twisted Pair With brown wire		
	White	Drain			Drain	Blue	White	Drain	Brown	White





Pin#	2	4	6	8	10	12	14	16	18
wires	Twisted Pair with red wire			Twisted Pair with green wire			Yellow	Orange	Red
	Drain	Red	white	Drain	Green	White			

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STEP 3: Compress

(1) Install a connector into the guiding jig (the black piece)

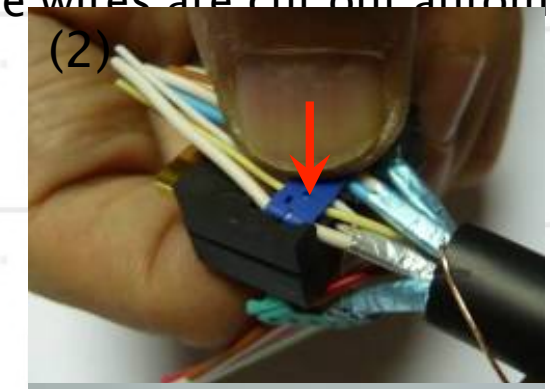
(2) Install and press the holders into the guiding jig.

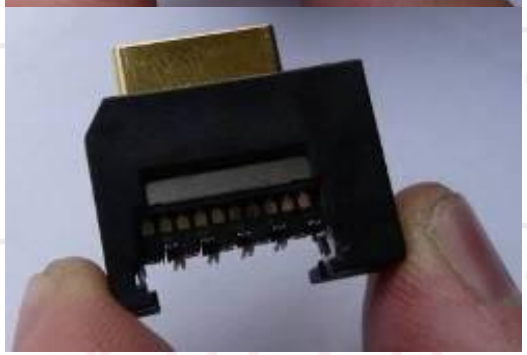
- The 10-hole blue holder is for 10-pin side of HDMI connector and the 9-hole green holder for 9-pin side.
- Press two holders with thumb until they lock with the connector

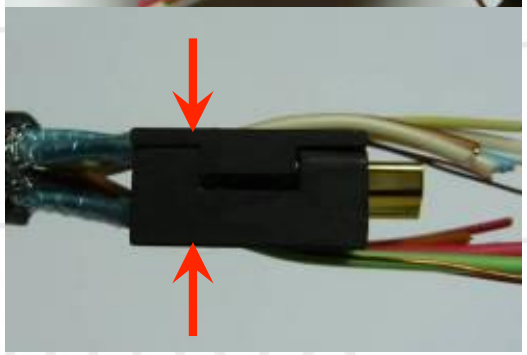
(3) Insert the assembly into the hand tool

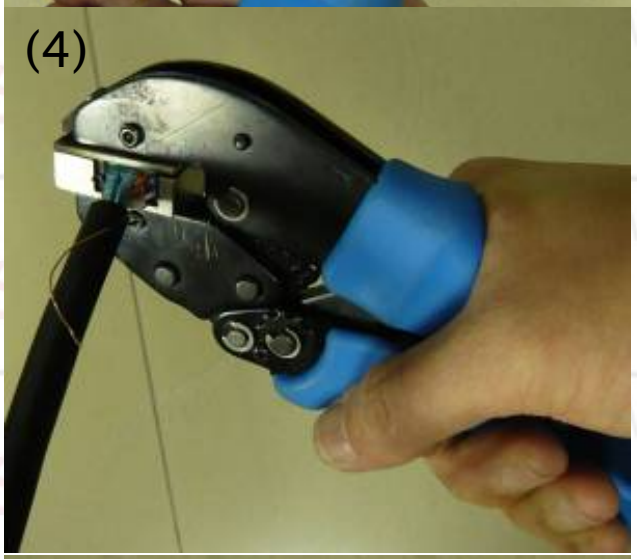
(4) Compress the tool

(5) Finished! Excessive wires are cut out automatically.









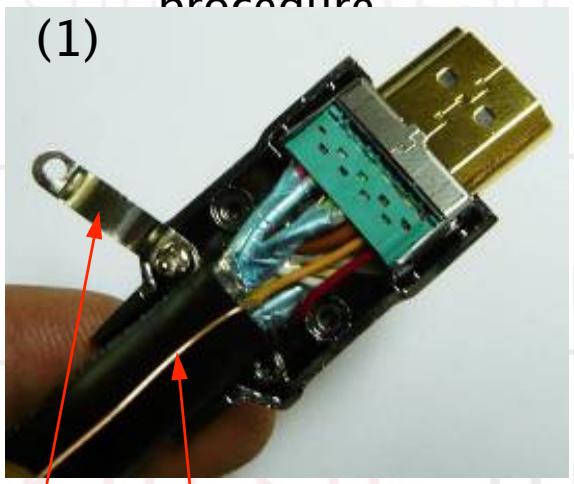
STEP 4: Install Shell

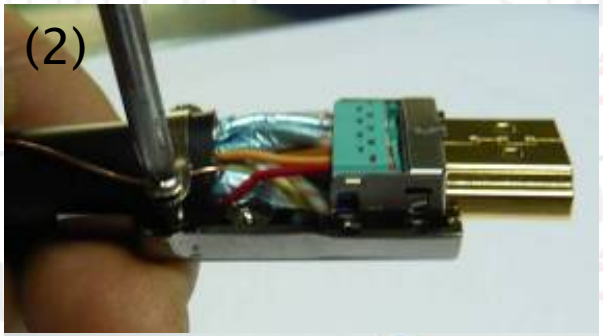
(1) Put the connector into the bottom half of the die-cast metal shell.

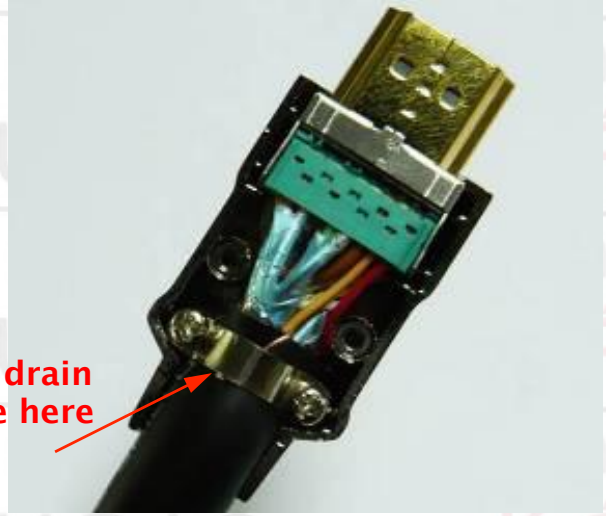
It is a good method to test the cable before shell installation.

(2) Install the metal belt to fasten the cable onto the metal shell. Make sure the drain wire be under the metal belt for grounding.

(3) Install the upper half and two screws to finish the whole procedure.







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STEP 5: Test

§ After two connectors are assembled on both ends of the cable, test the finished cable assembly on a DVD-TV system.

or

§ Test it with a portable HDMI cable continuity tester.

☒ This is a very simple device only for open-circuit test and **the mis-wiring and short-circuit is beyond this tester**. Eyeballing check is much more helpful for mis-wiring troubleshooting. Anyway it is helpful for an installation beginner.

Optional tester