

How Two - Wire a head unit in an MR2, wiring guide

Posted by SWAGGER - 2010/08/02 12:49

This How 2 is a guide for both fitting a stereo and or rewiring a new EU ISO harness into a Jap import, to allow future plug and play of different head units. All head units now come with (even from Honk Kong/e-bay etc) an ISO block, so it makes sense if the loom/harness in your car is ISO.

Tools needed:

Snips

Wire stripper

Soldering iron, solder and flux

Heat shrink

Heat gun or hair dryer

Time:

Depending on your competence, confidence and soldering skills, this really should be done in under an hour, not including stripping and re-fitting the dash.

This is a guide only, to help steer you in the right direction. I assume no responsibility for what you do with your car. That is your business.

Soldering:

1. With all connections, bare off approx 10mm of insulation, twist the copper multi core in to one tight core, do the same on the other wire to be connected.
2. Slide an inch of heat shrink on to one of the wires. Move it well down away from the area where you will be soldering so it does not shrink from the soldering heat.
3. Now twist the bare ends of the two wires to be connected together, good and tight.
4. Now GENTLY pull the wires back apart a tiny bit, to leave 2 or 3 mm in the middle for a bead of solder.
5. Solder as neatly as you can

Tip 1: Leave the iron on for 10-15mins before you start, the hotter the soldering iron the better!

Tip 2: Put the soldering iron on the copper wire to heat that up first, then, add the solder, lightly coated in flux.

6. When finished soldering, snip off the excess copper wire so you just have the two wires meeting with a neat, small bead of solder.

7. Now slide the heat shrink over the soldered joint and shrink tight with the heat gun.

Wiring in an Irish/UK MR2:

OEM is the MR2 standard.
Standard is the EU open standard.

<http://www.mr2.ie/images/fbfiles/images/ToyotaWires.gif>

Wiring in a Jap import MR2:

Speakers Wires:

Yellow / Black / Red / Aqua / Pink / White / Purple / Blue

Front Left Positive (FL+): Pink
Front Left Negative (FL-): Purple
Front Right Positive (FR+): Aqua
Front Right Negative (FR-): Blue
Rear Left Positive (RL+): Yellow
Rear Left Negative (RL-): Black
Rear Right Positive (RR+): White
Rear Right Negative (RR-): Red

Power wires:

Grey / Blue & Yellow / Brown

Switched Ignition +12v (IG 12V+): Grey
Constant 12V+ (BATT 12V+): Blue & Yellow Stripe
Earth or Ground (NEG 0V): Brown

Electric Antenna Power & Command Wires:

Blue & Pink Stripe / Red & Black Stripe

Switched Ignition 12V + Power (Live when key at position II): Blue & Pink Stripe
ATT Command wire (Live when head unit powers up): Red & Black Stripe

I had a little trouble with my electric aerial as there are two wires for the aerial (you can see above, black and red and the pink and blue. What I did was connect the two of them together and then connect them to the blue cable on the ISO harness that I fitted to it. This worked perfectly for me, aerial goes up and down as the radio is turned on and off.

Illumination / Dimmer:

Green

Most modern head units control their own lighting/display via their own internal power and circuitry, however, you may come across a head unit which when connected up as per above, still has no light up display, as in the buttons and backlight etc.

If this is the case, the stereo needs a live power source to your dash or driving lights. This means that when you turn on your car lights when it is getting dark, your stereo will illuminate in unison. Basically, all you are doing is wiring the green wire directly to either your driving (side) lights or dash. A handy source is the cigarette lighter light; it's close and easy to access.

Potential Issues:

Unless you disconnect the car battery before you start, it is possible that you may accidentally cross or ground certain wires, essentially creating a short circuit. This can and will blow fuses. The fuses blown depend on what lives you short.

So if after all of your time and effort, the stereo does not work, don't panic, it's most likely a blown fuse and easily sorted. Most of them are in the small fuse box right up high on the right hand side of the driver's foot well. You will need to kneel down with your face nearly on the floor and look up. Clip off the cover and on the front of the cover is a guide as to which fuses are which and what size they should be, in Amp's)

Blown Fuse Guide:

Check all of the below, but it is likely only one is blown.

If you shorted the constant battery 12V, you will have blown the "Dome" fuse.

If you shorted the switched ignition 12V, you will have blown either the "Rad & Cig" or the "ECU - IG" fuse. The Rad & Cig will be more likely.

The Dome fuse is the fuse for the overhead dome light and rad and cig is radio and cig lighter.

HINT: If the dash clock is not working, you blew the dome fuse.

Best of luck!

If you have any questions or need any help, drop me a PM and I will be happy to help.

If you found this How Two useful, please show your appreciation with a karma click!

Thanks,
SWAGGER

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Re:How Two - Wire a head unit in an MR2, wiring guide

Posted by slipsliderg - 2010/08/02 13:11

Nice write up Steve, KC awarded :yes:

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Re:How Two - Wire a head unit in an MR2, wiring guide

Posted by SWAGGER - 2010/08/02 13:16

Thank you sir!

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Re:How Two - Wire a head unit in an MR2, wiring guide

Posted by Cashy - 2010/08/28 18:43

Nice one KC click 4u !

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