

**MINI Harmon Kardon “enabler” for use with aftermarket head units
Ian Cull. June 14, 2004.
<http://www.gbmini.net>**

The Harmon Kardon upgrade for the MINI includes an amplifier that communicates digitally with the factory head unit to set mode, volume, etc. If an aftermarket head unit is installed, the HK amp will not function.

The “HKenabler” circuit mimics the digital communications of the factory head unit, so an aftermarket head unit can be used with the HK amp. Specifically the circuit instructs the HK amp to run at high volume, with neutral balance and tone.

The aftermarket head unit volume, balance and tone controls can be used. However, since only one pair of left/right speaker level signals goes to the HK amp, fade is useful only to limit the maximum signal level to the HK amp (signals too high will distort because the HK amp inputs are overloaded).

The “HKenabler” circuit is connected as follows:

Red: +12V supply out from aftermarket head unit (the “amp switch” signal)

Black: 0V (chassis)

White: iBus signal (pin 9 of the stock head unit connector)

An optional switch can be connected to the “HKenabler” circuit to control the HK amp “mode”, and also to adjust the front/rear fade. The two brown wires connect to a momentary-close-when-pressed switch.

A quick press of the switch will cycle between “modes” of the HK amp:

MINI H/K

SPATIAL

ELECTRONIC

INSTRUMENTAL

FESTIVAL

A longer press of the switch (about 1s) will toggle the “driver mode” on/off – it will have an effect only for those modes for which it is applicable (MINI H/K, etc).

Press and keep the switch held for more than 2s to adjust the fade; the fade will cycle towards the front, then to the rear, then back to the front, continually while the switch is pressed. Release the switch when the desired fade is selected.

NOTE: Whenever the switch is given a quick press to change “mode”, the fade is reset to center and the “driver mode” is reset to off.