

Wiring and Form Tapping out

By G8MNY

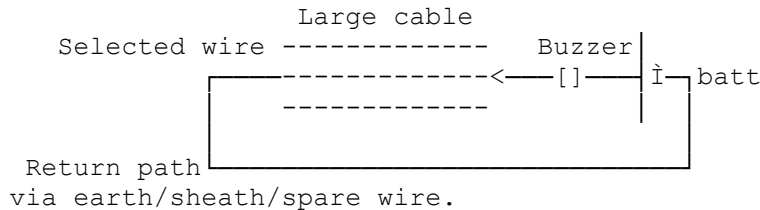
(New Aug 07)

(8 Bit ASCII Graphics use code page 437 or 850)

Here is some basic methods of tapping out/fault finding wires in large multicore cables or forms (car looms?).

DC BUZZER

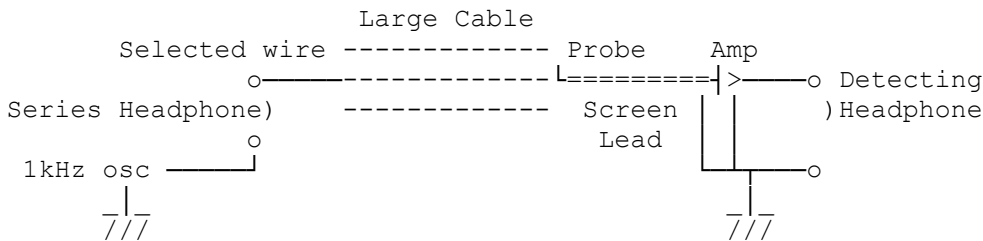
If full DC access is easily available then a simple DC buzzer test will do OK.



For in between connectors a Pin can be inserted into single wires to make connection to confirm the identity or prove the fault, but doing so will damage the insulation!

UNBALANCED AC TESTING

When no access to the wire is possible then AC testing can be done with a large AF signal & sensitive AF Amp & headphones as the phone engineers use..

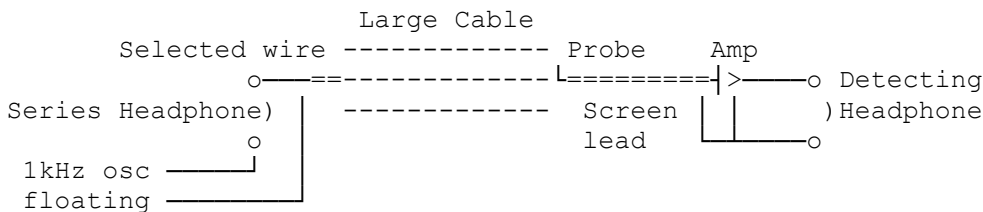


Here the cable is not in audio pairs, the return path is via earth. The probe is just an unshielded wire/rod connected to a short screened lead to the Amp. The Amp is very high gain (10,000x e.g. a 741) & tailored for 1kHz.

The osc can be a steady tone or a pulsed tone, 3V AC is a good level to use.

When you hear the loudest tone in the detecting headphone from the cable, earth that lead, & if the tone then goes, the send headphone gets louder, if not it is just a loud crosstalk keep searching.

BALANCED TESTING



Here the cable is in audio pairs. When you hear the loudest tone in the detecting headphone from the cable, short that pair of wires together, & if the tone then goes, the send headphone gets louder, if not it is just a loud crosstalk pair (fault?) keep searching.

Why don't you write an interesting bul?

73 De John, G8MNY @ GB7CIP