FAQ's

Telephone Hybrids (Both HY-02 Series and DHY-02 Series)

Question : What are the remote connection details for these units ?
Answer : The connector is a 5 pin IP40 plug, Sonifex part number 45-505 available from stock. Every new unit is shipped with the mating connector - make sure that you did not throw it away with the packaging.

Pin 1 = lamp 1
Pin 2 = switch 1
Pin 3 = common
Pin 4 = lamp 2
Pin 5 = switch 2

Question : What type of remote lamp should be used ?
Answer : The remote lamp type should be 18V at 40mA.

Question : For the HY-02 series, I want the remote lamp to be ON to indicate line diverted, but not dim when the line is not diverted, or
Question : For the HY-02 series, I want to use a LED for the remote lamp. How do I do it ?
Answer : Remove R12 from the circuit on the HY02-4 PCB. It should work ok then.

Question : What are the connections for the telephone wire ?
Answer : The telephone line is connected via the white and red wires on the connector. So you know which pin is which, the latch is adjacent to Pin 6.

White wire, pin 2, BT line A
Green wire, pin 3
Blue wire, pin 4
Red wire, pin 5, BT line B

Note : Pins 1 and 6 are not used.

Question : The handset connected to the unit doesn't ring. What's wrong ?
Answer : If the handset connected to the unit does not ring, check to see if only the A+B is connected, if so all four wires need to be connected (Steve, this doesn't make any sense to me - needs rewording - what are A+B ? All four wires of what ?

Question : What is the power consumption of the telephone hybrids ?
Answer : For models HY-02, HY-02s and RD-02r less than 6 watts.
For models HY-02d and HY-02t less than 12 watts.
For models DHY-02s and DHY-02sr less than 9 watts.
For models DHY-02t and DHY-02tr less than 18 watts.
The RD-02 draws power from the hybrid that it is connected to.

Question : The telephone hybrid unit keeps "dropping the line". How can I stop this happening ?
Answer : Firstly, try disabling the k-break function of the hybrids -
For theDHY-02 series, remove JP2 (a small jumper) on the main circuit board.
For the HY-02 series, disconnect the link wire between terminals T2 and T3.
Refer to the product manuals for information on where these jumpers and terminals are. If you still have a problem once the k-break is disconnected, please contact Sonifex technical support, technical.support@sonifex.co.uk

Question : How do I re-tune the dial tone connect in a DHY-02?

Answer : Find out if the exchange has a single or dual dial tone.
You will need a volt meter or an oscilloscope to do this procedure relatively quickly.

1) Remove the lid of the DHY-02 and power the unit up.
2) Locate RV1 & RV2 on the left hand side of the PCB about half way towards the back of the unit, with front panel towards you.
3) If the exchange has a single dial tone fit JP8 found next to RV1. If not go to next instruction.
4) Turn adjusters on RV1 & RV2 fully anti-clockwise, they may click when fully adjusted otherwise 10 turns should be enough.
5) Connect volt meter / scope between pin 8 Q33 (NE567N) found next to RV1, pin 8 is left hand side of the chip furthest from the front panel, with front panel towards you, and 0 volts, pin 3 (red wire) of PL5 10 way connector or pin 3 of PL5 (blue wire to OUTPUT XLR). Press Line Connect button. You may get some kind of error tone / message from the exchange after a while just hang up and reconnect and continue procedure.
6) The volt meter / scope should now show approx. 5 volts. Turn RV1 until reading drops to 0 volts. If the exchange has a single dial tone then unit should drop the line after a few seconds and procedure is complete.
7) Connect volt meter / scope between pin 8 Q34 (NE567N) found next to RV2 and 0 volts. The volt meter / scope should now show approx. 5 volts. Turn RV2 until reading drops to 0 volts the DHY-02 will drop out after a few seconds as both detecting circuits are detecting the same tone. Turn RV2 1 turn and press the Line Connect button if the DHY drops the line after a few seconds turn RV2 1 turn and repeat until the DHY doesn't drop the line.
8) Now with the Line Connect button on turn RV 2 until the reading on the volt meter / scope drops to 0 volts, this should now be detecting the second dial tone and drop the line after a few seconds and the procedure is complete for setting the unit to detect dual dial tones.

If no voltmeter or oscilloscope is available fit JP8 to set DHY for single tone even if exchange is dual tone. Then follow the procedure but instead or taking readings from the volt meter / scope you will need to turn RV1 and RV2 1 turn at a time starting with RV1 waiting a few seconds each time until unit drops out. Remove JP 8 if exchange is dual tone and repeat for RV2
NOTE: the first time the DHY drops out is because it detecting the same tone as RV1 continue until unit stops dropping the line and carry on until unit drops out for the second time.

Question : The telephone hybrids don't automatically disconnect on dial-tone. Why not ?
Answer : For the HY-02 series, this is correct. There is no dial tone disconnection unless the HY-DTD dial tone detect option has been added. For the HY-02 series with the HY-DTD option added, the unit is probably connected to a PABX, or a non British Telecom network (i.e. not used in the UK) and so, the dial tone detect circuit needs changing. Contact Sonifex technical support, technical.support@sonifex.co.uk for further information. For the DHY-02 series the unit is probably connected to a PABX, or a non British Telecom network (i.e. not used in the UK) and so, the dial tone detect circuit needs changing. Contact Sonifex technical support, technical.support@sonifex.co.uk for further information.