Testing Your TDS

New Version

Original Version

This guide has been produced to help you determine whether your TDS is functioning correctly or not. Please work through this guide before contacting us to report any problems.

1 - Preliminary Tests

1.1 Start with the TDS unplugged from the power socket, switched off and with the telephone lead connected to the telephone provider socket.

1.2 Plug an ordinary telephone into the front panel of the TDS (use a 2:1 adapter for the original versions). For a TDS2, make sure that if the telephone line is plugged into channel 1 your telephone is also plugged into channel 1, then, repeat the test for line 2 and channel 2..

1.3 You should be able to make and receive calls as normal through the telephone.

1.3.1 I can't make or receive calls. Things to try:

Try a different telephone.
Try a different telephone line.
Unplug the TDS telephone cord from the service providers telephone socket. Plug the telephone in the socket directly. If this works OK, then either the TDS or telephone lead between TDS and telephone subscriber socket is faulty. Try replacing the lead. Newer models - see: www.dt4u.com/pdf/tdslinecord.pdf
Note: It may be worth a try insulating pin 6 on the telephone lead between telephone and TDS socket. This is the extreme right hand pin on the TDS telephone connection.

1.4 Connect the TDS to a power source and switch on. The Power light should illuminate. The Active light should flash, once if the switch is set to Auto, twice if set to Man. This test confirms the unit is powered up and the uP (microprcessor) is running. Note: Allow a few seconds for the circuits to discharge before retesting.

1.4.1 If the power light does not come on. Things to try:

Make sure the power socket is switched on and working - try plugging something else in and see if it works.
Take a look at the power fuse inside the TDS. This is towards the rear of the circuit board, close to the power connector. It has a value of 500mA and is an Antisurge type fuse. It may be labeled T100mA or T500mA. Note that fuses between 100mA and 500mA will work fine, though we recommend 500mA as this is best type to absorb any switch on surges (even if labeled as 100mA). DO NOT fit a fuse larger than 500mA.

This completes the preliminary tests.

2 Audio Tests - See section 8 for Original TDS Units

2.1 Check jumpers J1 to J10 and that they match the incoming audio signal level.

2.2 Play a CD over the sound system at normal volume. Check that LED 5 (just behind the audio input connector) flashes WEAKLY in time with the music. Repeat all these instructions for circuit 2 on a TDS2 (LED 6). Note that adjusting VR1 send level does NOT affect the brightness of the LED. Adjust jumpers J1 - J10 so that the LED flashes weakly in time with the loudest parts of the music. Note: If you set this level too high, the audio sent down the telephone line will sound unnatural and will 'duck' in time with the music - eg the loudness of the signal will vary. LED5 indicates compression level.

2.2.1 No Audio. Things to try:

If everything is turned on and a CD playing, but LED 5 is not flashing, then you have no audio reaching your TDS. Check all connections carefully and that everything is properly wired (audio applied across pins 2 and 3 of the XLR input socket) and that all the attenuator jumper levels are correct. Note that 100V line systems vary enormously and you may need to move the jumper from J5 to J6 to .... to get the right signal level.

2.2.2 Assorted Hums, Buzzes et al. Things to try:

If there is a hum / buzz on your sound system, this WILL appear on your TDS output. Eliminate all hums and buzzes before attaching anything new to your system. Keep all signal cables as short as possible and make sure under all circumstances that high power speaker or induction loop cables are kept at least 8" (250mm) away from microphone, line or dialup wiring including telephone line wiring. Otherwise, strange oscillations or radio frequency interferences can be introduced over your PA system. These can be notoriously difficult to track down and eliminate.

If you receive assorted hums and noises from your TDS1SR, then these are almost invariably line noise from the telephone network and could be a faulty telephone line. However it could be that the sound equipment at the distant end has hum problems.

2.3 Adjust VR1 so that the audio sent down the telephone line is not overloaded or distorted. Note: You can get a good idea of the correct volume by listening through the telephone plugged into the front of the TDS. Note: You will be able to hear dial tone at the same time.

2.4 TDS1SR Only. Move the Answer switch up. This locks the TDS in receive mode. Any audio received from the telephone line should be audible at the Audio Out socket. Moving the switch down achieves the same result but does not lock. During receive, the red Receive light illuminates.

3 Functionality

3.1 With a CD playing, move the TDS switch to Auto.

3.2 Call the TDS telephone number from another telephone, a mobile is ideal. The call should ring once or twice after which the TDS should answer the call. The Active light illuminates and you should be able to hear music through your telephone. Terminate the call. The TDS should clear down after a few seconds and the Active light extinguish. A second call should achieve the same result.

3.3 Move the TDS switch to the center position. Repeat 3.2. The TDS should do nothing and all calls will be unanswered (by the TDS). You can make and receive calls as normal over the telephone line (even if the telephone is plugged into the front of the TDS).

3.4 With the TDS switch in the centre Man position. Call out from the venue to some other telephone (your mobile is ideal) using the same telephone line as that to which the TDS is connected. You can use the front panel telephone socket on the TDS, or a completely different telephone socket provided it is on the SAME line. Answer the call on your mobile. Now, move the TDS switch down to the H/R position until the Active light illuminates. You should now hear music from the venue CD through your mobile. Replace the handset on the telephone you used to make the call (the TDS now controls the outgoing call). Adjust VR1 (Send Level) if necessary to get the best quality audio signal. The call will now be held by the TDS until a) You briefly press the H/R switch or b) 3 hours expire after which the internal timer disconnects the call (you can defeat this option by removing link J17 / J18).

4 Remote Controls

4.1 All front panel switches and indicators are available as inputs / outputs on the facilities sockets. Check the product handbook for wiring and connection diagrams or see www.dt4u.com/pdf/dialupfacilities.pdf There are no fuses or options on any of the facilities connections.

5 Faults

5.1 If you have worked through this guide and are still experiencing problems, please feel free to email us at sales@dt4u.com Make sure that you tell us what you have done, what happened and what went wrong. Armed with some good intelligence, we should be able to sort you out.

5.2 If you know or have a good idea what has happened eg a massive local lightning storm just before the TDS died does give some clue, please tell us. Up to the time of updating this guide (July15), we have never failed to repair ANY unit.

6 Warranty

6.1 Warranty is 12 months from date of despatch for new goods and 3 months for repairs.

7 Contact

7.1 In order to keep costs to a minimum, we do NOT have a telephone service. However we DO normally respond to emails within 1 business day. Contact via: sales@dt4u.com

8 Original Versions of TDS Products

8.1 Are still supported and continue to work well. Older versions of TDS work essentially the same way as newer models but have less electronics (no signal input amplifier or level compressor so no LED5), therefore matching audio levels between sound system and TDS is a little different.

8.2 Play a CD over the sound system at normal (not background) volume. Set the TDS to AUTOmatic and then call the telephone line using a mobile. The TDS should answer the call and connect to the sound system. Adjust the 100V line volume control www.dt4u.com/jpg/dialupinst.jpg until the sound heard through the mobile starts to distort or pop. Reduce the volume slightly until the sound is clear. This is the loudest possible signal that can be sent over the telephone system. Terminate the call from the mobile and the TDS should clear the call.