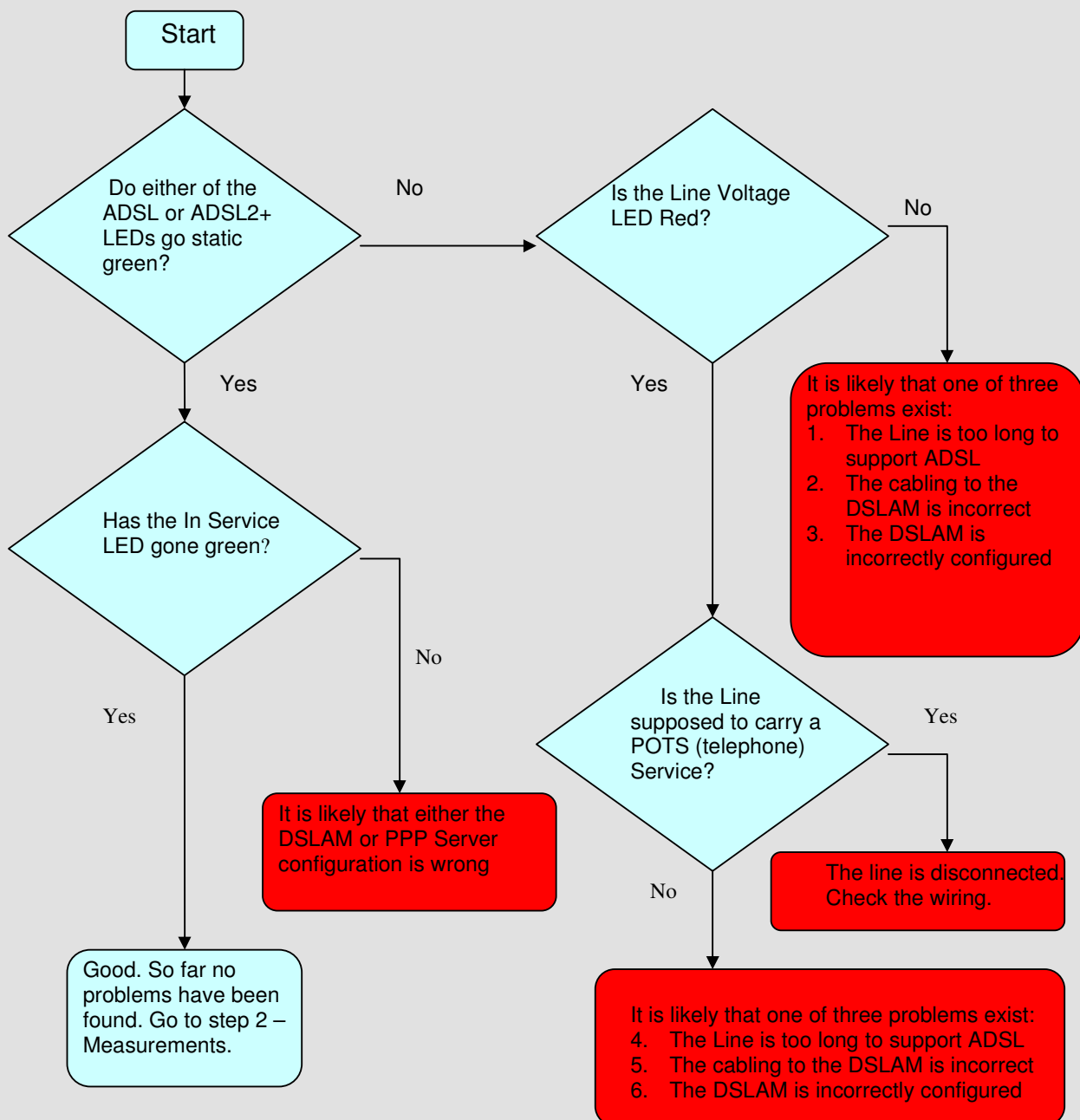




QuickTest 100 Application Note

How to Diagnose line faults using the QuickTest 100 Front Panel LEDs

Using the QuickTest 100 Front Panel LEDs it is simple to diagnose many line faults. Following the flow chart below will assist in identifying the corrective action to be taken.



Step 2 - checking the measurement LEDs

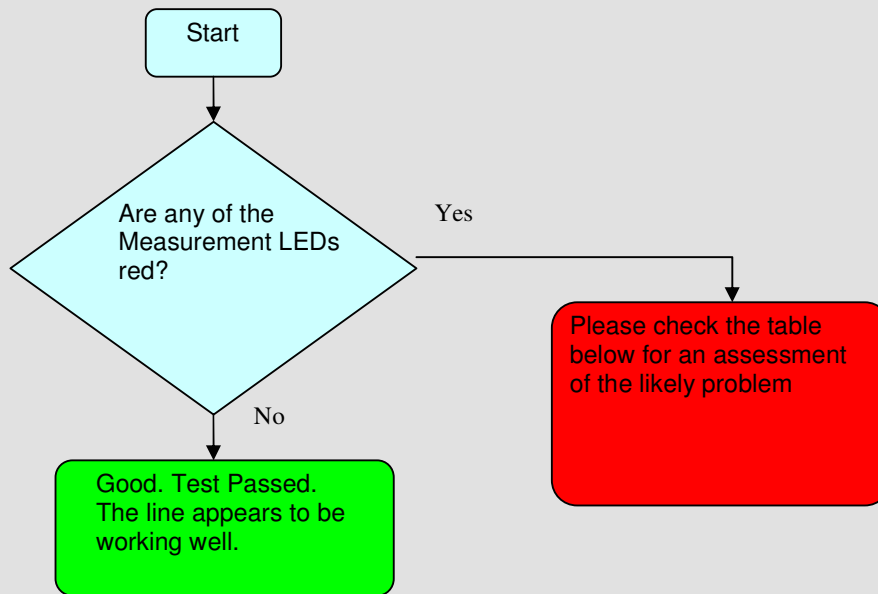


Table 1: Using the Measurement LEDs to troubleshoot a problem on the DSL line.

Line Rate LED	N. Margin LED	L.Attn LED	Diagnosis
GREEN	GREEN	RED	Although the target Line Rate is being achieved, there is excessive Line Attenuation. This is likely to be because you are a long distance from the exchange or there is some poor wiring.
GREEN	RED	GREEN	The desired noise margin is not being achieved. This may result in intermittent line drops and loss of data. It is likely that the DSLAM Noise Margin settings need to be corrected.
GREEN	RED	RED	Although the target Line Rate is being achieved, the desired Noise Margin is not being achieved and there is excessive Line Attenuation. This is likely to be because you are a long distance from the exchange or there is some poor wiring.
RED	GREEN	GREEN	The target Line Rate is not being achieved but the Noise Margin and Line Attenuation are good. This is likely to be a configuration problem with the DSLAM
RED	GREEN	RED	There is excessive Line Attenuation. This is likely to be because you are a long distance from the exchange or there is some poor wiring.
RED	RED	GREEN	The target Line Rate is not being achieved. Since the Noise Margin is also below the expected value but the amount of Line attenuation is OK this is likely to be a poorly configured DSLAM port.
RED	RED	RED	With all measurements LEDs RED it is likely that you are a long distance from the exchange or there is some poor wiring.



Pass / Fail Threshold Configuration

It is important to configure the ADSL Pass /Fails thresholds with the correct values for the service you are testing. The graph below will help you to select suitable values for your service.

