SL200D Intelligent Subscriber Line Tester
Getting Started Guide

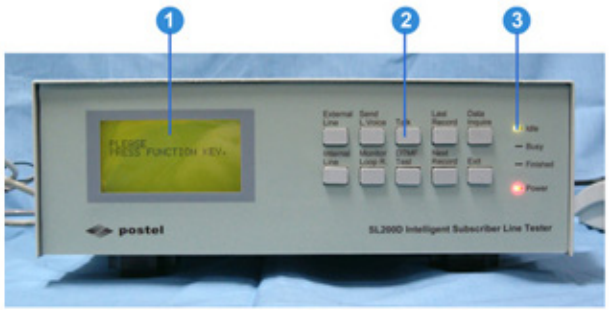
Contents

1. Items in the SL200D packaging

Items in the SL200D packaging:

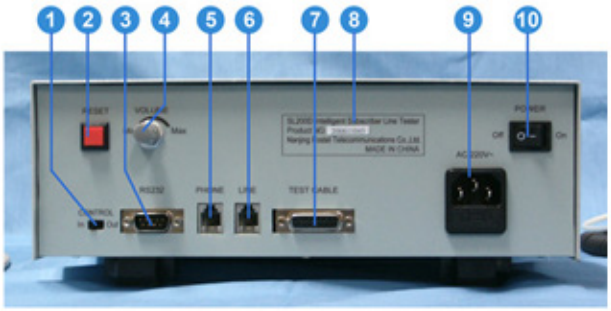
1. SL200D tester	1 pc.
2. Line control box	1 pc.
3. Test cord (about 15 meters long)	1 pc.
4. Power cord (250V)	1 pc.
5. Telephone cord with 2 RJ11 plugs	2 pcs.
6. Telephone connection box	2 pcs.
7. Connection cord with 2 clamps	2 pcs.
8. Screwdriver	2 pcs.
9. Fuse (0.5A)	2 pcs.
10. Operation manual	1 pc.
11. Certificate of approval	1 pc.

2. Panel and test cord descriptions



Front Panel

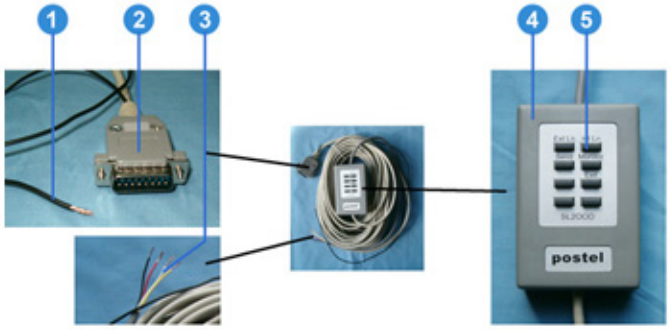
1 LCD Display
2 Function buttons (totally 10 buttons)
  External Line
  Internal Line
  Send L. Voice
  Monitor Loop R.
  Talk
  DTMF Test
  Last Record
  Next Record
  Data Inquire
3 LED indicators (totally 4 indicators)
  Idle
  Busy
  Finished
  Power



Back Panel

1 CONTROL switch - always be set at In side.
2 RESET button - be used to reset the tester.
3 RS232 port - not used here.
4 VOLUME adjusting knob - to adjust speaker volume.
5 PHONE plug - a phone should be connected here.
6 LINE plug - not used here.
7 TEST CABLE - a DB15 connector. The test cord should be plugged here.
8 PRODUCT LABLE - including product type, product serial number, etc.
9 POWER plug - A 220V AC power cord should be connected here.
10 POWER switch - turn on/off the power.

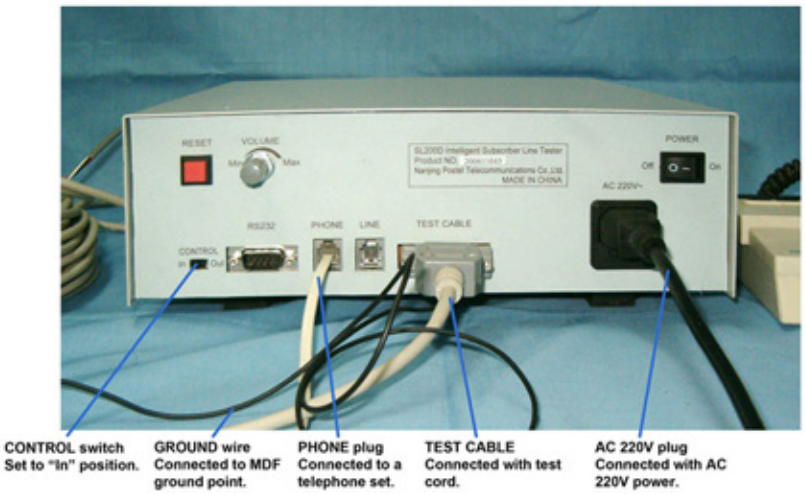
2. Panel and test cord descriptions (continued)



Test Cord
(total length of the test cord is about 15 meters)

1 Ground wire - black. It should be connectted to MDF's ground point.
2 DB15 connector - one head of test cord.
3 Test plug wires - 4 wires with different colors.
  Red wire - connected to one of two external lines, i.e. subscriber lines.
  Yellow wire - connected to one of two external lines, i.e. subscriber lines
  Black wire - connected to one of two internal lines.
  White wire - connected to one of two internal lines.
4 Line control box
5 Function buttons (totally 8 buttons)
  Ext Ln - external line
  Int Ln - Internal line
  Send - send voice
  Monitor
  Exit - lower 4 buttons are the same

3. Installing the tester



Installing the tester

Connecting (soldering) 4 test wires to kinds of test plugs (Test plags are different for different MDFs.)

Field photos

4. Operations

The different functions are executed by pressing the respective function buttons on the front panel and the line control box.

The results are displayed on the LCD display. At the same time, some test results are played out by the speaker.

- **Turn on the power:** When turn on the power , Figure 4.1 and 4.2 is displayed on LCD display.
- **External Line** (it means the subscriber line outside the MDF) button: The data of DC voltage, AC voltage, resistance and capacitance for A-B, A-Ground, B-Ground (total 10 items) can be obtained in about 5 seconds and the fault types can be recognized automatically. The fault types are: normal, open circuit, short circuit, low insulation, wire ground,cross talk. The fault type is displayed in LCD and played out via speaker simultaneously. Figure 4.3 and 4.4.
- **Internal Line** (it means the subscriber line inside the MDF) button: The dial tone can be played out by the attached speaker and the operator can judge if the internal line is normal according to what the speaker is playing. Figure 4.5.
- **Send L. Voice** button: SL200D sends line checking voice to the subscriber line. And so the outside operator can recognize the line pair by connecting the phone to the line pair and listening to the phone. Figure 4.6.
- **Monitor Loop R.** button: Be capable of monitoring (testing) the loop resistance of lines continuously. The results are displayed in LCD and played out via the speaker continuously, respectively. Figure 4.7.
- **Talk** button: Be capable of supplying -48V supply and ringing. When off-hook, the operator can talk to the subscriber. Figure 4.8. and Figure 4.9.
- **DTMF Test** button: Ringing. When off-hook, talk to the subscriber and ask him/her to press the dial keys. The LCD displays the corresponding key number. Figure 4.8. and Figure 4.10.
- **Data Inquire** button: 50 record items of testing can be stored in scroll way for inquiry. Figure 4.11.
- **Last Record** button/**Next Record** button: To inquire the last record/next record. Figure 4.11. and Figure 4.12.
- **Exit** button: Exit to the initial state. Figure 4.2.

Figure 4.1

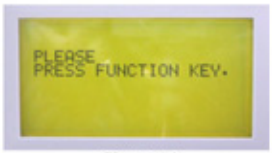


Figure 4.2

Figure 4.3

Figure 4.4

Figure 4.5

Figure 4.6

Figure 4.7

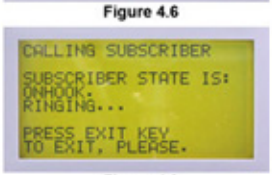


Figure 4.8

Figure 4.9

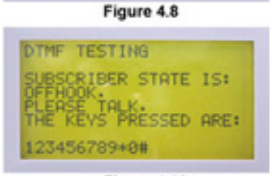


Figure 4.10

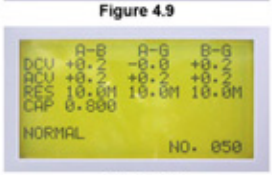


Figure 4.11

Figure 4.12

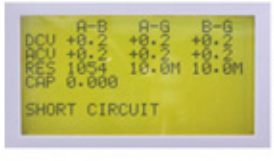
5. Line fault type explanation

Normal

The subscriber line pair is normal. It means that all the 10 data items of the line pair, including all of the terminal devices attached to this line pair, are correct. Generally, the terminal devices can work normally.

Open Circuit

The subscriber line pair is broken. It means that one or two lines of the line pair are broken. So the terminal device can not work at all.



Short Circuit

The two lines of the subscriber line pair touch each other. Generally, the A-B resistance is roughly from 0 to 2000 ohm. One of the cases is that the line pair is normal, but the phone is off-hook.

Wire Ground

One or two lines of the subscriber line pair fall to the ground. Generally, the resistance of A-Ground or B-Ground is roughly from 0 to 200k ohm. This case often happens in rainy days and some noise can be heard during talking.

Crosstalk

One of two lines of the subscriber line pair touch with another line pair. It is also called touching foreign voltages of excessive DC voltage in some different exchanges.

Low Insulation

The insulation resistance between A-B is not good enough to ensure the normal talking. The A-B resistance is generally from 2k to 200k ohm. This case often happens in rainy days and some noise can be heard during talking.

6. Miscellaneous pictures