

	Mobile-to-Mobile Mobile-to-PSTN PSTN-to-PSTN Testing procedures in Laboratory and Field environments	
	Number TextLink 9100 MT	Document verified by: George Skorkowski
Rev. Draft: 1.3	Document prepared by: Adrian Duarte	No of pages 7

1 Testing Overview

This document describes basic procedures for wireless and landline (PSTN) testing using TextLink 9100 MT:

TextLink 9100 MT can be used either in Laboratory or field testing. Field testing requires access to GSM and PSTN Networks. The following tests can be performed

- Mobile to Mobile in laboratory or field conditions
- Mobile to Landline (PSTN) in laboratory or field conditions
- Landline to Landline (PSTN) in laboratory or field conditions

All these tests are described in the following paragraphs.

2 Mobile-to-Mobile Communication

The Mobile-to-Mobile testing can be implemented with text communication performed by typing text on one of the TextLink 9100 MT's and receiving it on the other. The block diagram of connection is shown on Figure 1 (laboratory conditions) and Figure 2 (field conditions)

2.1 Requirements:

- 2 x TextLink 9100 MT
- 2 x Mobile phone handsets with hands-free adaptors
- 2 x 2.5 mm jack cable for connection to a mobile handset via Hands-Free Adaptor
- 2 x Optional RS-232 cable for connection to PC
- 2 x Optional RS-232 to USB converters
- 2 x Optional PC with downloaded TTY-Tools software

2.2 Testing Procedure

1. Set the volume on both mobile handsets to the mid-range
2. Select mobile mode (CTM) on both TextLink 9100MT's by using the following setting shortcut: **(Menu) (7) (2)**;
3. “<Mobile mode set>” will be displayed on the TextLink 9100MT screen.
4. On the first mobile handset dial a number of the second handset and press OK for dial. After that press any of the keys A through to Z on the TextLink 9100MT keyboard.
“< Connection established > <MOBILE>” will be displayed on the textphone screen.

5. Answer the call on the mobile using Answer button.
6. Press any of the keys A through to Z on the TextLink 9100MT
“< Connection established > <MOBILE>” will be displayed on the textphone screen
7. Type some characters on one of the TextLink 9100MT’s and check if they have been received by the other. If this communication is working OK reverse the order and use the other TextLink 9100MT to type text.

If formal tests are required then two PC’s need to be connected running DSPG tools with Gallaudet software.

Note: TextLink 9100 MT set-up described above is the same for Laboratory and field tests shown on Figure 1 and Figure 2 below

Laboratory tests

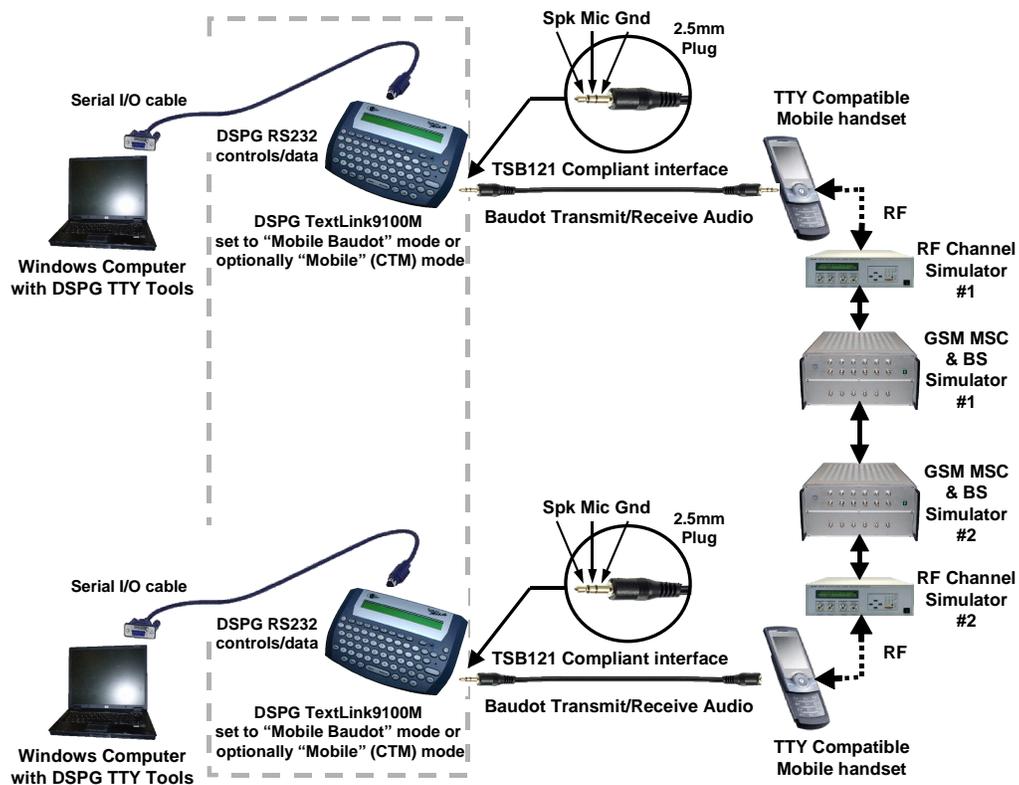


Figure 1: Mobile-to-Mobile Laboratory Test set-up using two TextLinks 9100 MT

Field Tests

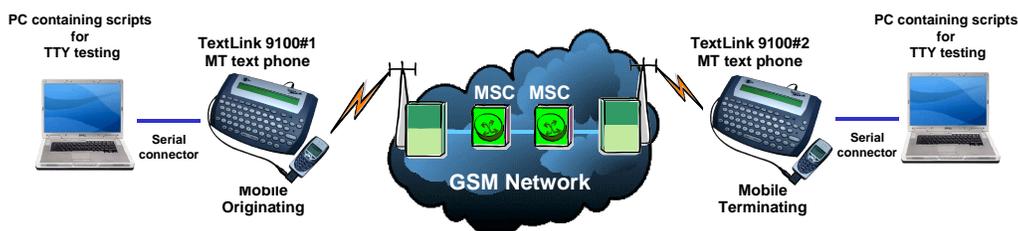


Figure 2: Mobile-to-Mobile Field Test set-up using two TextLink 9100 MT's

3 Mobile to Landline (PSTN) Communication

The Mobile-to-Landline (PSTN) testing can be implemented either directly with text communication performed by typing text on one of the TextLink 9100 MT's and receiving it on the other. The block diagram of connections is shown on Figure 3 (laboratory conditions) and Figure 4 (field conditions)

If formal tests are required then two PC's need to be connected running DSPG tools with Gallaudet software.

3.1 Requirements:

- 2 x TextLink 9100 Mobile MT
- 1 x Mobile phone handset with hands-free adaptor
- 1 x 2.5 mm jack cable for connection to a mobile handset via Hands-Free Adaptor
- 1 x RJ11 to RJ11 telephone cable
- 2 x RS-232 cable
- 2 x Optional RS-232 to USB converters
- 2 x PC with downloaded TTY- Tools software

3.2 Testing Procedure

1. Set the volume on the mobile handset to the mid-range
2. Run the TTY software test program and input all correct device information.
3. Select mobile mode for the TextLink 9100M on one side by using the following setting shortcut on the textphone: **(Menu) (7) (2)**;
“<Mobile mode set>” will be displayed on the textphone screen.
4. Select V18. or Baudot mode for the TextLink 9100M on the landline side by using the following setting shortcut on the textphone: **(Menu) (7) (1)**;
“<V.18 mode set>” will be displayed on the textphone screen or:
(Menu) (7) (4); “<Baudot mode set>” will be displayed on the textphone screen.
5. Dial a number on the mobile phone then press any of the keys A through to Z on the TextLink 9100M keyboard.
“< Connection established > <MOBILE>” will be displayed on the textphone screen.

6. Answer the call on your TextLink 9100M by pressing any of the keys A through to Z on the keyboard.
 7. Once the connection is established, wait for the **“Hello. GA”** message to appear on the display and then type some characters by hand and see if the other TextLink 9100M has received these characters.
- IF yes, then type some characters on the other side to verify that both sides send and receive the characters.
8. Start the TTY test by pressing the **'start call'** button on the screen. You will see the text displayed on the screen of the PC and on both the TL9100M screens.
 9. Once the test is finished press the **(Dial/End Call)** button on the textphone and press **“end call”** on the mobile.

Note: TextLink 9100 MT set-up described above is the same for Laboratory and field tests shown on Figure 3 and Figure 4 below

Laboratory Tests

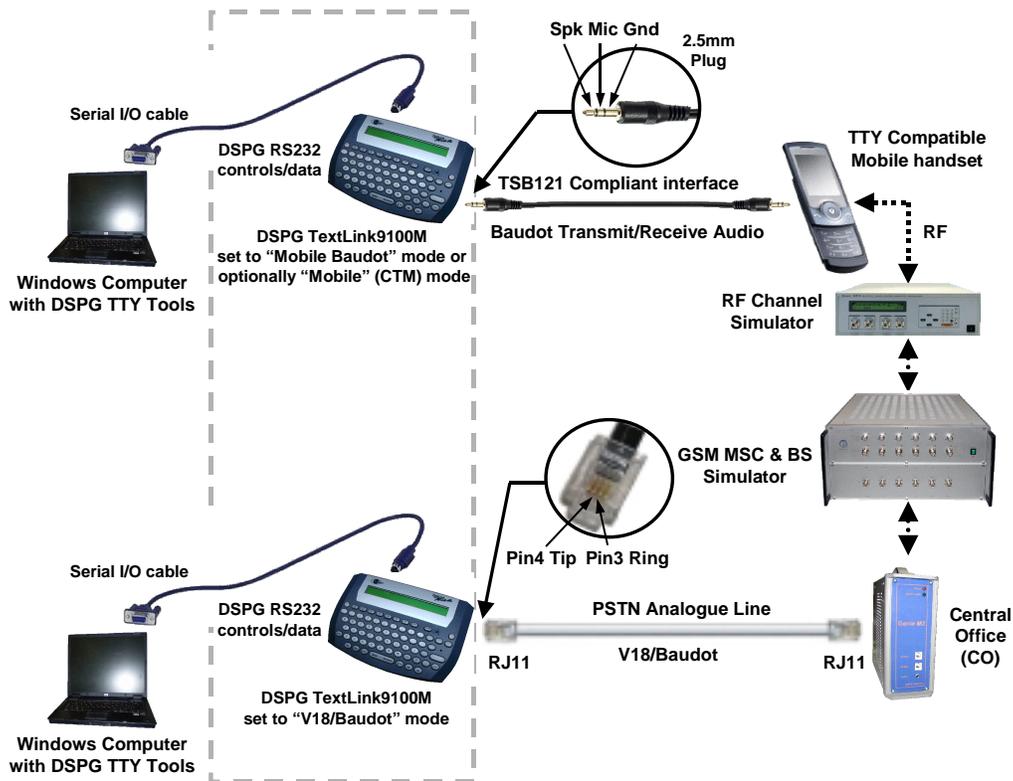


Figure 3: Mobile-to-PSTN Laboratory Test set-up using two TextLinks 9100 MT

Field Tests

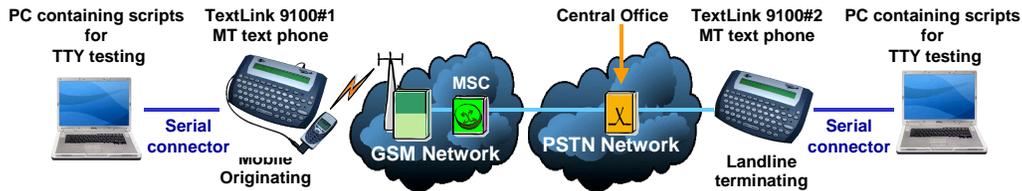


Figure 4: Mobile-to-PSTN Field Test set-up using two TextLink 9100 MT's

4 Landline (PSTN) to Landline (PSTN) Communication

1. Select V18 mode for the for both TextLink 9100M by using the following setting shortcut on the textphone: **(Menu) (7) (1)**;
“<V.18 mode set>” will be displayed on the textphone screen.
2. In the laboratory environment using DSPG’s network emulator or other commercially available PBX, dial any number on the TextLink 9100M keyboard then press any of the keys A through to Z on the keyboard.
“< Connection established > <V.18>” will be displayed on the textphone screen.
3. In the field conditions dial the real PSTN number on the TextLink 9100M keyboard then press any of the keys A through to Z on the keyboard. Then follow the same procedure as above
4. Answer the call on the other TextLink 9100M by pressing any of the keys A through to Z on the keyboard.
5. Once the connection is established, “< Connection established > <V.18>” will be displayed on the textphone screen. Then type some characters by hand and see if the other TextLink 9100MT has received these characters.

IF yes, then type some characters on the other side to verify that both sides send and receive the characters.

6. Start the TTY test by pressing the '**start call**' button on the screen. You will see the text displayed on the screen of the PC and on both the TL9100M screens.
7. Once the test is finished press the **(Dial/End Call)** button on the textphone and press “**end call**” on the mobile.

Note: TextLink 9100 MT set-up described above is the same for Laboratory and field tests shown on Figure 5 and Figure 6 below

Laboratory Tests

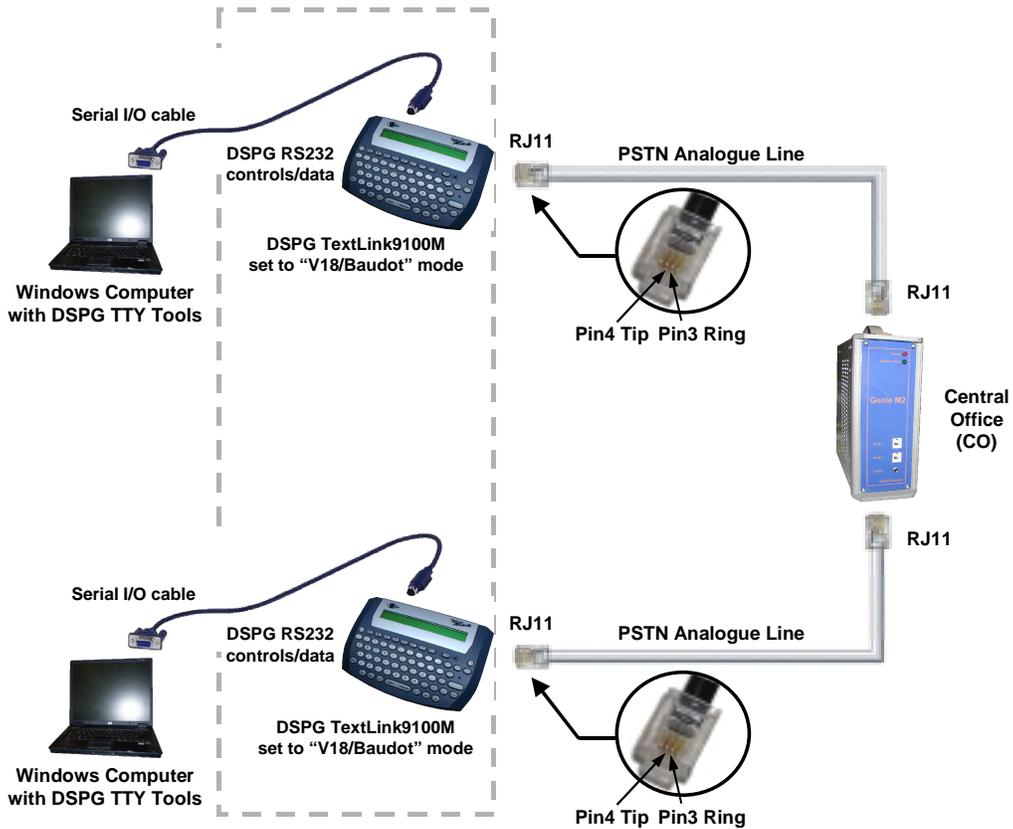


Figure 5: Landline (PSTN)-to-Landline (PSTN) Laboratory Test set-up using two TextLink 9100 MT's

Field Tests



Figure 6: Landline (PSTN)-to-Landline (PSTN) Field Test set-up using two TextLink 9100 MT's

END OF DOCUMENT