



T10-R – Device Manual

Warning: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

I. Device Setup

■ Powering on T10-R Device – Power Supply

WARNING: NEVER HOT PLUG/UNPLUG DEVICE FROM POWER CABLE

1. Set power supply to 18V
2. Power off power supply
3. Connect T10-R device to power supply using 5P connector cable with alligator clips
4. Power on power supply at 18V
5. Device should boot. Check Android status bar (found at top of LCD screen) to confirm device is charging and receiving power.

■ Connecting T10-R Device – via USB to PC

1. Power on T10-R device by power supply with 18V and ensure it is fully charged (depending on duration of the test)
2. Power off power supply, and disconnect 5P connector cable to power supply
3. Connect T10-R device 5P cable to the 5P USB adapter cable (pink), and connect to PC

Note: Device will not charge when connected to PC

I. Operating Device

■ Device Power Modes

1. T10-R will boot up when connected to power supply, and can be powered at 12-18V
2. Device can be Powered Off/placed into Shipmode (complete power off) by:
 - Pressing the center Power button for three seconds > enter Passcode: 102938 > Select Power Off/Shipmode
3. T10-R is an Android device, and user can access Android settings menu by:
Selecting Settings icon on Android home screen > enter Passcode: 102938

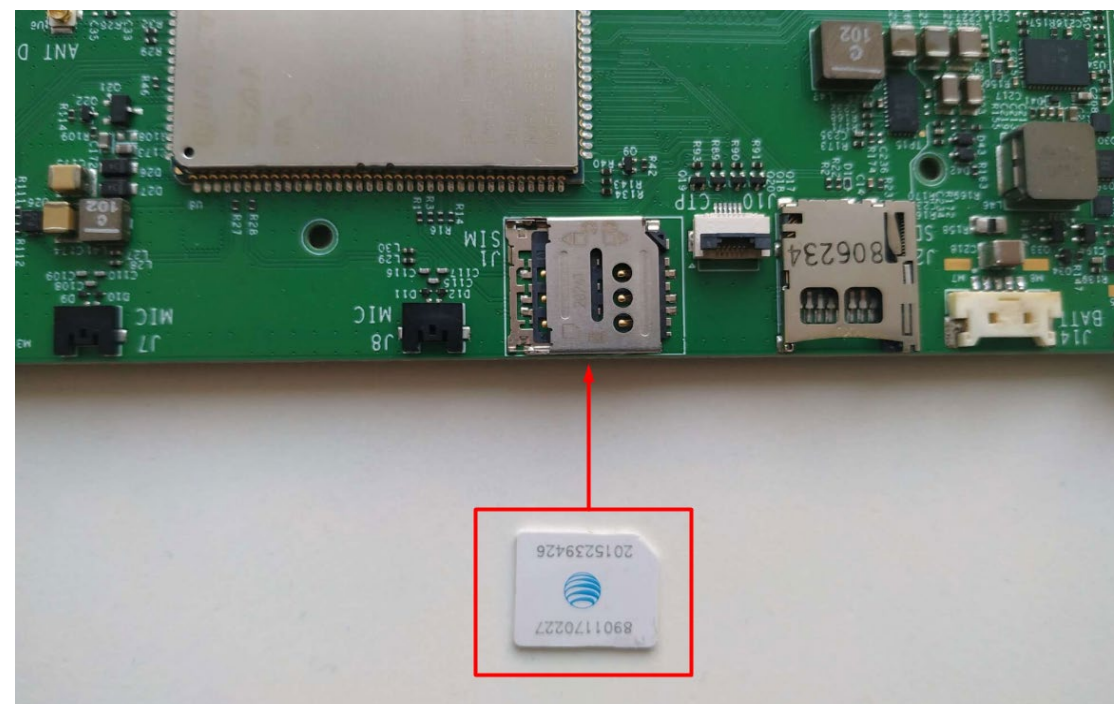
■ Device Default Settings

1. When powered on, device will automatically boot and automatically provisions to known networks
2. Device will connect to LTE networks by default, but has 3G fall back in case LTE is not available
3.

II. Testing - AT Commands

■ Disassembling Device

1. Be sure device is disconnected from power supply
2. Power off and place in ship mode (to power off hold the center button 3 sec > enter passcode 102938 > select shipmode)
3. Undo the screws on the back cover of the battery case to remove cover piece.
4. Disconnect the battery cable at the connectors (be very careful and only pull on the connectors to avoid damage to any wires)
5. Loosen the screws on the back housing piece of the device, followed by the front screws
6. Open the device VERY CAREFULLY to avoid any damage to cables/connections
7. Locate the SIM card on the board and replace
 - a) If able to replace without removing any connections, proceed carefully
 - b) If unable to easily replace SIM card, disconnect necessary cable connections – VERY carefully and record exact point to reconnect
8. Reconnect all cable connections. Assemble housing back together, fasten the back screws. Connect the battery cables, replace battery cover, and secure screws.



II. Testing - AT Commands

■ Recognizing Device on PC

1. Power on device and then connect to PC using 5P/USB adapter cable
2. Select the SETTINGS icon on the Android home screen
3. Enter passcode: 11 powered
4. Scroll down to About Tablet > tap 12 times to access **Developer Options**
5. Scroll down to Networking and **Enable Debugging**, update **USB Configuration**, from Charging to **MTP**
6. Check PC and device should appear as a recognized device
7. Unzip SC20 zip file
8. Copy file path for adb_fastboot folder (e.g. C:\Users\User\Desktop\SC20\adb_fastboot)
9. Open Command Prompt (cmd.exe) on your PC
10. Type **cd** and paste folder path you previously copied (e.g. cd C:\Users\Pixel\Desktop\SC20\adb_fastboot)
11. Type **adb shell** and press Enter (if everything successful **msm8909_Viper_T10-R:/ #** should appear)
12. Type **su** and press Enter
13. Type **setprop persist.sys.usb.config diag,serial_smd,rmnet_qti_bam,adb**
14. Reconnect USB (After that device should be recognized as PID 9091)
15. Go to Device Manager on your PC
16. Look for Android devices under Other devices section
17. Right click on each one of them and select Update driver
18. Select Browse my computer for drivers and locate rivers which were included in SC20 zip file
(folder Quectel_SC20_signed_usb_driver_10051.7_20180211)
19. Repeat step 17 and 18 for each device which is under Other devices section and marked as Android
20. If everything went successful PID 9091 will appear under Modems section
21. Right click on that Modem to select Properties, where you will be able to check what port, it is connected to.
22. Open hyperterminal/teraterm and connect to port mentioned in step 21
23. Upon successful result you will be able to enter AT commands.

III. RSE Spot Check

■ Disassembling Device

1. Be sure device is disconnected from power supply/PC
2. Power off device and place in ship mode (to power off hold the center button 3 sec > enter passcode 102938 > select shipmode)
3. Undo the screws on the back cover of the battery case to remove cover piece.
4. Disconnect the battery cable at the connectors (be very careful and only pull on the connectors to avoid damage to any wires)
5. Loosen the screws on the back housing piece of the device, followed by the front screws
6. Open the device VERY CAREFULLY to avoid any damage to cables/connections
7. Locate the thick white LVDS FPC cable (which connects the LCD). This will need to be disconnected from the connector that is found on the front housing piece. **PLEASE BE EXTREMELY CAREFUL WHEN DISCONNECTING FPCs for LCD.**



Figure 3-7: LVDS FPC

III. RSE Spot Check... Continued

■ Disassembling Device

- a) If able to disconnect without removing any cable connections, proceed carefully
 - b) If unable to easily access, disconnect necessary cable connections – VERY carefully and record exact point to reconnect
8. Disconnect LVDS strip, by removing tape that may be placed over the connector (save for re-installation), then flipping up the connector's tab/clip piece, then pull the FPC out of the connector and let it hang loose in the housing.
 9. Also disconnect the skinny white FPC (for the cap touch) that is connected onto the PCB. Disconnect carefully following the same instructions listed in step # 8.
 10. Keep test SIM card installed in device.
 11. Reconnect all cable connections. Assemble housing back together, fasten the back screws into the housing. Connect the battery cables, replace battery cover, and secure screws.



Figure 3-8: LVDS to LCD



Figure 3-9: Touch cap FPC to PCB