Troubleshooting the LDX10/TDX20/M7225 when not connecting to computer.



The LDX10, TDX20 and M7225 mobile computers, can all be configured to communicate with a computer using its USB connection in one of two ways:

- Serial over USB
- WMDC (Windows Mobile Device Connectivity)

First, let's determine the device's current communications method. Exit out of DCSuite on the device by tapping on Settings and then Exit. Double tap on the 'My Device' icon on the desktop and navigate to the 'Windows\Startup' folder. If "DCSuite" is the only shortcut listed in that folder, continue following the steps below. If the only shortcut listed is "SuiteCommunications", jump to the section titled "SuiteCommunications is listed in the Startup folder" on page 3.

DCSuite is the only shortcut listed in the Startup folder:

This will indicate the device is using WMDC as its communications method. On the computer, press the Windows key and type in "Device Manager" and select the app once its displayed. In Device Manager, check and see if the device is listed as a 'Microsoft USB Sync' device under a section labeled "Mobile devices".

Mobile devices
Microsoft USB Sync

1.) My device is displayed as above, but the DC app does not show it as being connected:

With this being the case, then there would be some Windows services needing their properties modified. Press the Windows key, type in 'Services' and select the app when its displayed. Look for the following two services:

	-			
🥋 Windows Mobile-2003-based device connectivity	Provides connectivity for Windows	Running	Automatic (Delayed St	Local Syste
🎑 Windows Mobile-based device connectivity	Provides remote command and co	Running	Automatic (Delayed St	Local Syste

For each of these two services, set their Log On properties as displayed below:



Once that is set on both services, <u>stop</u> the Mobile-2003 service if it is running. Then stop and start the Windows-mobile-based device connectivity service. Once that service is running, Start the Mobile-2003 service. Disconnect the device from the computer. Run the DC App being used on the computer and select the Sync tab at the top. At the bottom, set the USB Port mode as seen here and then connect the device to the computer. It should be shown as connected.



1.a) Device is still being seen as disconnected in the DC App but WMDC shows it as connected.

If this is the case, then manually converting the device to use serial USB as its communications method will be needed. Ensure that you have v3.60 or higher version of the DC App installed. Then open Windows file explorer on the computer and go into the "C:\Program Files (x86)\AML" folder, then the DC Console or DC Sync folder, whichever is installed. In that folder, we want to right mouse on the "SuiteCommunication.CAB" file and select Copy. Then click on 'This PC' in File Explorer and the device should be displayed on the right-side section of the view panel. Go into the \Temp folder and paste the SuiteCommunication.CAB file there. Then, back on the device itself, tap on Settings in DC Suite and select Exit. Double tap in the 'My Device' icon, go into the Temp folder and double tap on the cab file. Select Ok at the top right when prompted to install it. Once that's installed, it will remove the CAB file from the \temp folder. Go ahead and paste another copy of it back in that folder in case its needed in the future. When finished, disconnect the USB cable from the device and press and hold the power button for 10 full seconds. Then release and press once to boot it back up. In the DC App on the computer select the Sync tab and change its USB mode to be serial as seen here:



Then connect the USB cable to the device and the DC App should then show it as connected. Restart the app if it does not.

1.b) Device is still being shown as disconnected:

Press the Windows key, type in WMDC and select 'Windows Mobile Device Center' when the app appears. If this also does not show the device as being connected, then reloading the device's firmware may be needed in order to get the device communicating. Instructions and firmware files can be found on the following page:

https://www.amltd.com/Tools-Utilities/

2.) My device is displayed as an unknown device:

With this being the case, the needed WMDC services have not been installed on the computer. Ensure that the current logged on user has administrator access on the computer and the device is connected. Then press the Windows key and type in 'Check for Updates'. Once that's finished scanning, select 'View optional updates' and install the USB sync driver as seen below:

Windows Update



Once installed, proceed back to step 1.

Check for updates

✓ Driver updates

If you have a specific problem, one of these drivers might help. Otherwise, automatic updates will keep your drivers up to date.

Microsoft Corporation - Other hardware - Microsoft USB Sync

SuiteCommunications is listed in the Startup folder:

This indicates the device is configured to use Serial over USB for its communications method. DC Console or DC Sync v3.60 or higher is needed in order to communicate with the device. Our current released version can be downloaded using the following link:

https://www.amltd.com/Software/DC-Software/

On the computer, press the Windows key and type in 'Device Manager', select the app once its displayed. In device manager, see if the device is listed under a section labeled 'Ports (COM & LPT)' and assigned a comm port number as seen below:

✓ I Ports (COM & LPT) AML Serial USB (COM9)

If that is not seen, but instead there is an unknown device displayed, select it. Then press the right mouse button and select "uninstall". Then, having V3.60 or higher version of the DC App installed, disconnect the device and run the DC App. Select the Sync tab and set the USB port mode as seen here:



Reconnect the device and verify it is now listed under "Ports" and assigned a comm port number. Close and reopen the DC App on the computer if the device is not showing as connected.

If after following the above connection troubleshooting steps and the device is being seen in device manager as "unknown", then disconnect the USB cable from the device and carefully depress the reset button using the tip of a paper clip.



Then, momentarily connect and disconnect the USB cable from the device. Once its booted back up, reconnect the USB cable and check Device Manager. A different USB cable and/or a different USB port should also be tried if needed. If the device is still seen as "unknown", then using an externally powered USB hub may be needed in order to connect the device to the computer and have it detected correctly.