

April 12, 2016

Tablet Compatibility for the STS-3U, STS-E, STS-PE, STS-2UE, and STS-P2UE

The following compatibility tablet applies to STS-3U, STS-E, STS-PE, STS-2UE, and STS-P2UE built after November 18, 2015. These units have a “>” prefix on the product label located on the bottom of the casing and shipping box. With the “>” prefix the product names become >STS-3U, >STS-E, >STS-PE, >STS-2UE, and >STS-P2UE. These units used an internal Type jumper to select tablet compatibility. The Type jumper is “open” as a manufacturing default.

The units built after November 18, 2015 use a MAC address range starting at 00:04:3B:04:BF:00. The first 3 octets are always 00:04:3B for a LAVA device.

Units built earlier than November 18, 2015 are not compatible with the Tab E or Tab 2. The internal Type jumper is not populated on the units. If the Type jumper was added to an early unit, it has a different behavior. The Mode button on these earlier units is also behaves different.

Model	Name	Android	Type Jumper	Cables	Notes
SM-T560NU	Tab E 9.7”	Lollipop	open	8 inch to 3.3 foot	
SM-T350	Tab A 8”	Lollipop	either	8 inch to 3.3 foot	2
SM-P550	Tab A 9.7”	Lollipop	either	8 inch to 1.6 foot	2, 4,5
SM-T810	Tab S2 9.7”	Lollipop	open	8 inch to 3.3 foot	3
SM-T710	Tab S2 8”	Lollipop	open	8 inch to 3.3 foot	3
SM-T530NU	Tab 4 10”	KitKat	added	8 inch to 3.3 foot	1
SM-T530NU	Tab 4 10”	Lollipop	added	8 inch to 3.3 foot	1
SM-T330	Tab 4 8”	KitKat	added	8 inch to 3.3 foot	
SM-T330	Tab 4 8”	Lollipop	added	8 inch to 3.3 foot	
SM-T900	Tab Pro 12.2”	KitKat	added	8 inch to 3.3 foot	6
SM-T520	Tab Pro 10”	KitKat	added	8 inch to 3.3 foot	6
SM-T800	Tab S 10.5”	KitKat	added	8 inch to 3.3 foot	6
SM-T700	Tab S 8.4”	KitKat	added	8 inch to 3.3 foot	6

Note	Information
1	A Tab 4 must be powered on with Charge-Only mode active. Once the tablet is running, then changing to SimulCharge is permitted.
2	The Tab A (all models) will stop battery charging on some occasions when entering SimulCharge mode. The battery icon shows charging. The battery level does not change. The battery charge current is reported as 0. The reported battery voltage does not change. The current physically drawn by the tablet is constant. Changing screen brightness will alter the current draw. Other aspects the tablet run normally. After several hours the tablet starts to charge again. Changing charge modes or cycling power generally results in recovery.
3	The Type jumper must not be installed for a S2 Tablet. With the jumper installed, the tablet appears to be charging, however the battery is receiving minimal charge current. Under some conditions the battery will slowly discharge. The manufacturing default is an “open” type jumper which allows for proper charging of this tablet.
4	The Tab A 9.7” tablet must not be used with the longer cables, as the USB connection and charging state are unstable.
5	The SM-T550 (no S Pen version) was only available for early testing. Early testing indicated the SM-T550 operated with the short cable, however a unit was never put through detailed testing. The tablet has the instability problems as the SM-P550 with long cables.
6	Not tested with Android Lollipop.
7	When the battery of a Samsung tablet is allowed to completely discharge, the unit may have to be placed in Charge-Only mode for several minutes before attempting to turn it back on. In this state, the tablet may not charge if in SimulCharge mode. Once the tablet is turned on, it can be placed back in SimulCharge mode.
8	Tablets have generally been tested on Samsung products available in Canada. The tablet firmware shipped to other parts of the world may have different behavior. The tablet behavior can be changed between releases within a given region. Once a tablet has been determined to work, it is best not to accept further updates to ensure USB operation remains the same if the Tablet is embedded in an enclosure. Samsung has no option to downgrade the system by the general public.
9	For each tablet model, Samsung has many variations such as those created for Telephony providers. These variations may not support the SimulCharge features and/or wired Ethernet. Many Telephony providers seem to have the wired Ethernet option physically removed .

Mode Button (units built after November 18, 2015)

Pressing the Charge Mode button for 5 seconds or more, places the tablet into Charge-Only Mode. The tablet remains in Charge-Only mode for 7 minutes before automatically changing back to SimulCharge mode, even if the Charge Mode button remains held.

The 7-minute Charge-Only window can be cancelled by double clicking the Charge Mode button. To click the button press for 1 second, release for 1 second and then repeat once more.

The power on default is always SimulCharge.

The green LED by the Mode Button indicates Charge-Only mode is active. On power up this LED flashes for about 2 seconds, then turns off. The pattern seen on this LED on startup is a distinctive flash-flash-pause, which occurs 4 times.

The internal Type jumper determines which tablets the unit is compatible with. With the Type jumper installed, the unit operates the same as the earlier units. With the Type jumper on, the green Charge-Only mode LED has a continuous on-off pattern during the first 2 seconds on power up. The Type jumper does not affect the Mode button behavior.

Mode Button (units built earlier than November 18, 2015)

When pressing the Mode Select button for at least $\frac{1}{4}$ second then releasing it, the Mode is toggled between SimulCharge Mode and Charge-Only Mode. If the button is pressed for more than 4 seconds, the button is ignored until released then pressed again.

The power on default is always SimulCharge.

The green LED by the Blue Button normally indicates Charge-Only mode is active. On power up this LED will flash for about 2 seconds, then turns off. The pattern seen on this LED is a continuous on-off pattern for the 2 second duration.

These early units have an optional behavior for the Mode button based on the Type jumper. This jumper is not present, however the pads for the jumper existed on the board. Installing the jumper changes the Mode button to be “level” sensitive. Holding the button in places the unit in Charge-Only mode, so long as the button remains pressed. With the button release, the unit is in SimulCharge mode.

The two behaviors of the Mode button used on the early units have been removed in the new units.