Step 1: Install the tablet into the protective case

1.1 Open the tablet from the Samsung Galaxy Tab A box.

Note: Please keep the original box, in case the tablet needs to be sent back for repair/replacement.

- 1.2 Open the red and black Shockproof Case (hereinafter, "case") from its packaging.
- 1.3 Install the tablet into the case by following the instructions contained within the case.

Step 2: Initialize setup of tablet operating system

- 2.1 Using the power charger provided with the tablet, begin charging the tablet.
- 2.2 Turn on the tablet by holding the power button for 3 seconds.
- 2.3 Set up the tablet operating system by going through the setup procedures listed on the tablet screen.

Notes:

It WILL be necessary to choose a wi-fi network that is connected to the internet for setup. This is so that all the necessary software and updates can be downloaded to the tablet.

It is NOT necessary to create a "Samsung" account and install their software (and in fact, we recommend you <u>not</u> do so).

It WILL be necessary to create or use an existing Google account (usually with a "gmail.com" email address). This is used to install the Google Play Store and the Google Apps (such as Google Chrome, which will be used for the Red Box System).

Please do NOT install extra apps from the Google Play Store or anywhere else. This may cause the system to run low on resources with respect to the Red Box System.

Step 3: Power on the Red Box and connect the tablet to the Red Box

3.1 Power on the Red Box by attaching the power cable to the power plug (indicated by the red arrow). After roughly 90 seconds, the green "Ready" light should begin to blink (indicated by the blue arrow). The blinking of the green light indicates that the Red Box is powered on and ready for the tablet to be connected to it.

If the green light does not blink after roughly 90 seconds, then unplug the power cord and plug it back in again.



3.2 Change the wireless connection of the tablet to connect to the Red Box. The SSID and corresponding password should be printed on a label attached to the bottom of the Red Box.

The wireless settings can be accessed in Android by pulling the menu from the very top of the screen, and pressing (and holding!) your finger on the wifi icon.

The wireless connection can be changed from within this menu.

Note: If the wifi icon is just tapped (instead of a hold/press), the wifi will be turned off. To turn the wifi on again, just tap the inactive wifi icon.

Also Note: It is okay to turn on the "Auto Reconnect" for the Red Box SSID, but it is NOT recommended to Auto Reconnect for any other SSID. This can cause problems.

See images below for example:



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<	Wi-Fi	Wi-Fi Direct Advanced	< RBS	
1	On	•	Password	
	Current network		Auto reconnect	
	Available networks		Advanced	
	🛜 RBS 🔫		Connect	
	+ Add network			
			1 2 3 4 5 6 7 8 9 0 Del	
			q ⁺ w [×] e ⁺ r [*] t ['] y ⁻ u [×] i ^{>} o [†] p [†] «	
			a's d'f g h í k l'Done	
			↑ 7 x c v b n m .! ? ↑	
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Step 4: Install the Red Board System software on the tablet

Once everything on the tablet has installed and updated (which may take quite a while to download and install), and the tablet is connected to the Red Box via the SSID, it is time to install a shortcut to the Red Board System software.

4.1 Begin by opening the Google group of icons by pressing the Google group (shown by the red arrow).



4.2 Open Google Chrome by pressing on the appropriate icon (shown by the red arrow).



4.3 Type the following address in the address bar at the top of Chrome "192.168.0.70:3001" <-- without the quotes, and press "Go" on the keyboard.



4.4 You should see something similar to the figure below... if not, then refresh the page.



4.5 Create a shortcut on the home screen by pressing the menu in the top right corner (shown by the red arrow), and then pressing "Add to Home Screen" on the dropdown menu (shown by the blue arrow).



4.6 Press "Add" on the next two dialog screens until a shortcut is added to the home screen of the tablet.

Note: You may have to swipe the home screen left to see the new icon. If you wish to move the new icon, press and hold your finger on the icon, then drag it left onto the "main" home screen.

Step 5: Open the application with the newly created shortcut

- 5.1 Press the "Home" button (in the middle of the row of buttons at the bottom of the screen) to go to the home screen.
- 5.2 Launch the Red Box application by simply pressing on the shortcut.

Step 6: Configure the tablet to "stay on" (i.e., NOT go to sleep) while power is supplied

- 6.1 Enable "Developer Options" on the tablet
- 6.1.1 Find the Settings icon by swiping up from the bottom of the screen when it is on the home screen. Tap the Settings icon.

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Finder search					
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800		•••	\triangleright		*
Samsung	Google	Microsoft Apps	Play Store	Camera	Gallery
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Clock	Contacts	Settings	Calendar	Calculator	Play Music
	8	>			
Samsung Notes	Spotify	Audible	Samsung Kids		
	- III		0	<	

6.1.2 Scroll down to the "About tablet" menu item and press it.



6.1.3 Press the "Software information" row.

54	12 S	21						
<	About tablet	Q						
	Galaxy Tab A							
	Edit							
	Model number SM-T							
	Serial number R52N60PBH3R							
	Status View the IP address, Wi Fi MAC address, and other information.							
	Legal information							
	Software information View the currently installed Android version, baseband version, kernel version, build namber, and more							
	Battery information View your tablet's battery status, remaining power, and other information.							
	Looking for something else?							
	Present C							

6.1.4 Press on "Build number" around 8-10 times until "Developer Options unlocked" (or something similar) shows at the bottom of the screen.

Software inf	ormation		
One UI versi	on		
Android ver	sion		
Kernel versi 4.4.111-1742033 #1 Tue May 12 1	on V L K7:55 KST 2020		
Build number	H T TSTOXXELATES	-	
SE for Andro Enforcing SEPT_ENATE10_0 Tue May 12 14:0	oid status 1.0014 1.39 2020		
Knox version Knox API Invel 38 TIMA 4.1.0	n		
Service prov SAOMC_SMITSTO R52960F8038 XAS//	rider SW ver. Lorm XAR,779,0008		
Security soft ADKD 43.1.1 field ADP 43.0 Reference SMR May 2020 R	tware version me 20300120 20191001 mmu 1		
Android sec	urity patch level		

6.2 On the Settings menu (Repeat steps 6.1.1 and 6.1.2 if necessary to get there), scroll to the bottom and press "Developer options". This menu item is right below "About tablet" of Step 6.1.2.

6.3 Toggle the "Stay awake" option so that it is ON. Now, the tablet will not go to sleep when it is being charged.

On	\mathbf{O}
Memory	
Approx. 1.3 GB of 2.0 GB memory used	
Take bug report	
Desktop backup password Besktop full backups aren't currently protected	
Stay awake	
Enable Bluetooth HCI snoop log Capture all Bluetooth HCI packets in a file (Toggle Bluetooth after changing this setting)	0
DEM unlocking Mow the boatloader to be unlocked	Ø
Running services.	
Picture color mode	0
WebView implementation	
Auto update system Apply updates when the tablet restarts.	
Demo mode	
Night mode	
Quick settings developer tiles	
Debugging	
USB debugging	0

7.1 Go to Settings Menu Screen by pressing the menu item "Settings" on the Dashboard



7.2 Press the down arrow on the "Other" menu item row.

RedBoard Interface			Settings			
Load						۲
Fans						•
Burner						•
Unload						•
Alarms						•
Timers						•
Limits						۲
Louver						•
Calibration	Offse	ts				۲
Grain Type	/ Dryi	ng №	lode			•
Other						• 🔶
Date/Time						•

7.3 Press the License Number input box indicated by the red arrow. Enter the serial number found on the bottom of the Red Box Controller itself.

