WBTC User manual

What is the hardware ?

Power Supply		Flux Capacitor
DE0-Nano-SOC : FPGA/HPS		
IO ports		Time Circuit Display

Figure : All of the WBTC hardware
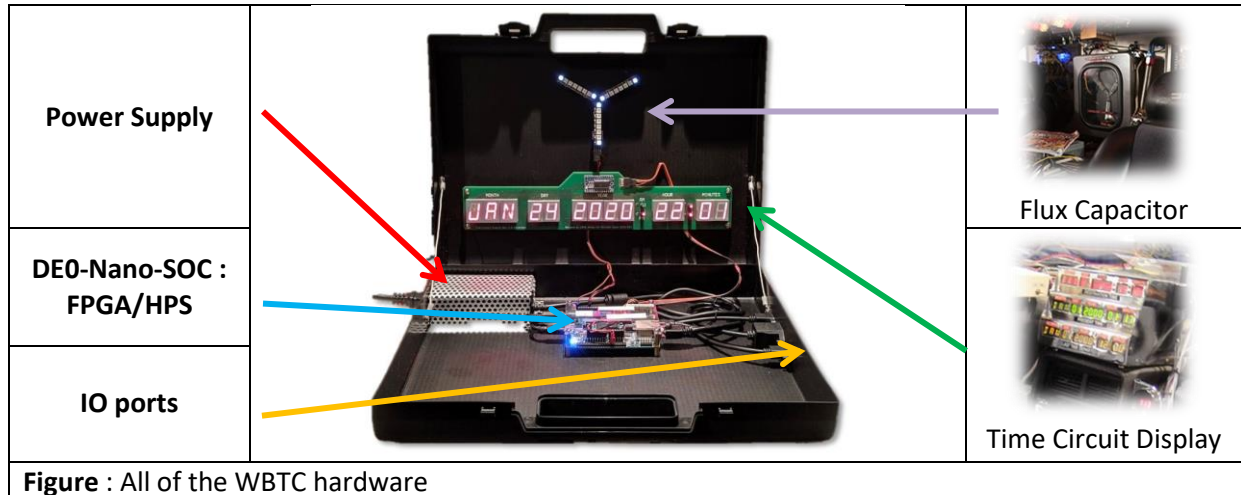
How to use the dashboard to control the WBTC

Please ask the **demonstrator** to connect to the dashboard of the WBTC with a demonstration computer.

Switch the **time circuit display** *ON* or *OFF* using the Power slider. Adjust the **brightness** by using the slider.	
Configure the **Time and Date** of the system manually : -Enter your *date and time* and press **Apply**	
Switch the **Flux capacitor** *ON* or *OFF* using the Power slider. Adjust the **brightness** by using the slider. Change the animation using the **Animation** selector	

Figure : How to use the dashboard to control the WBTC

Configuring with the serial console

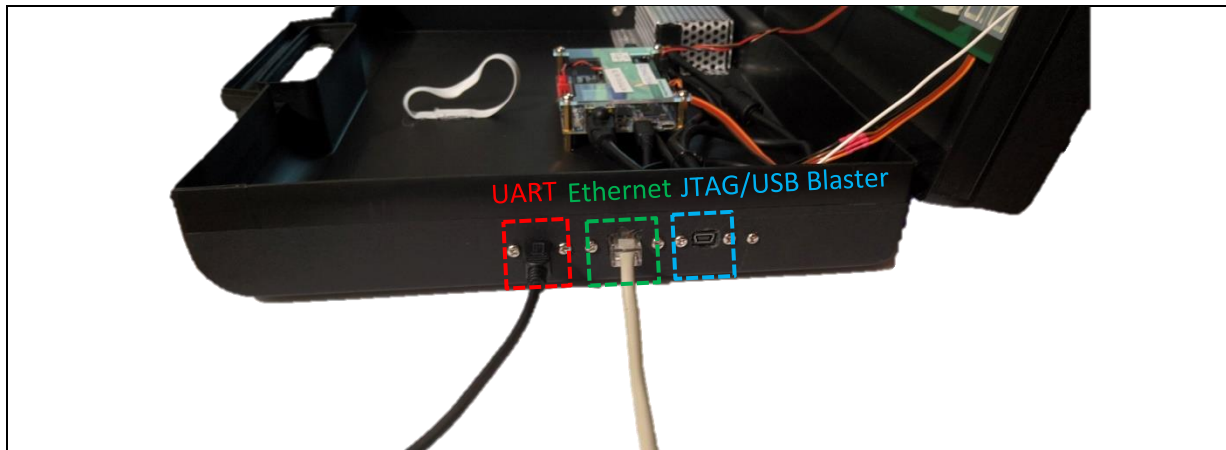Please ask the demonstrator to connect and open the serial monitor before using the commands.

Figure : Connectors for the network and UART console

You can change the system parameters using the following commands.

Element	Action	Commands
Time Circuit Display	Power [on/off] the TCD	**timecircuitctl set power on** **timecircuitctl set power off**
	Change the TCD brightness (i.e. 50%)	**timecircuitctl set brightness 50**
Flux Capacitor	Power [on/off] the FC	**fluxcapacitorctl set power on** **fluxcapacitorctl set power off**
	Change the animation 0=Back to the future 1=Rainbow Frenzy 2=Rainbow ZigZag	**fluxcapacitorctl set animation 0** **fluxcapacitorctl set animation 1** **fluxcapacitorctl set animation 2**
	Change the FC brightness (i.e. 50%)	**fluxcapacitorctl set brightness 50**
Time and Date	List timezones	**sudo timedatectl list-timezones**
	Change timezone (i.e. Europe/Paris)	**sudo timedatectl set-timezone Europe/Paris**
	Change date/time (i.e. 1st of December 2020 at 20h56)	**sudo date --set="2020-12-01 20:56"**
	Check the status of NTP	**timedatectl show**
IP address	Check the current ip and mac address	**ip a**