CURCB

CURCB Module

USB to RCBus converter

CURCB is used to adapt an RCBus interface to USB.

In this way you can connect a tracker antenna like SATPRO to a PC, to give it commands or use the Mavlink protocol in streaming.

Normally it is necessary together with CTRCB and SATPRO when we use a Datalink from other brands that are not XLRS.

Conections:

It has two connectors, one for USB type “C” that connects to the PC and another RCBus that connects to the SATPRO.
Only with the CURCB module you can command the SATPRO but to use the Mavlink download protocol, the CTRCB module that complements it will be necessary.

RCBUS:

SATPRO native communications. Use a special 7m cable.

Speed: 1Mb. Synchronous binary packages.

IP8: 10

USB:

It is powered by USB.

Speed: 115200b fixed.

LEDs:

Power, turns on when you connect the USB.
TX and RX. They light up when there is data to or from the USB.

Boot:
Firmware updates.
Updated from DMD_Studio software.
Boot is accessed when the device is connected during the first seconds or when you enter DMD_Studio in Boot. More info here.

Functioning:

3 modes:

- Boot.
- commands.
- streaming.

Boot:
When it starts up, CURCB is in Boot mode for a few seconds waiting in case it connects with DMD_Studio to update the firmware. You can also enter Boot mode when in command mode, forcing it from DMD_Studio.

Commands:
Then enter command mode.
If you are connected to a PC with DMD_Studio, it will identify itself and allow text commands from the DMD_Studio console.
You can enter Boot mode from here by selecting it from DMD_Studio.
Commands can be sent to all devices connected to the RCBus such as SATPRO and CTRCB.

Streaming:

If it is connected to SATPRO and it is to CTRCB, when CTRCB

receives data through its TTL Serial interface (38400b), CURCB will automatically change from command mode to streaming and will remain that way, ready for streaming (Mavlink protocol) until it is disconnected. the USB.
Streaming mode is when you can connect mission planning software like Mission Planner or QGround Control.

As the process of entering this mode is automatic, to work normally simply connect the RCBus, then the USB and activate the mission planning software. You shouldn’t do anything else.
When data is transmitted from the autopilot and reaches the CTRCB module, this data will automatically reach the PC and the SATPRO so that it can orient itself automatically.
Please note that beforehand, SATPRO must be oriented to the North and then turned on.