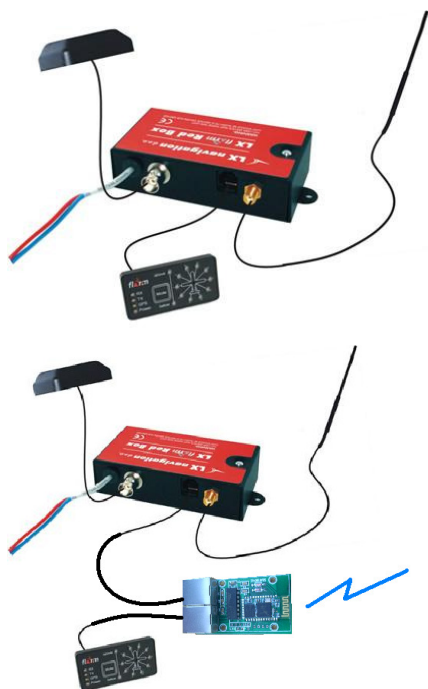# SoarTronic BT installation examples

RedBox FLARM with one ExternalDisplay

12 volts supply is provided to the RedBox using separate supply cables. External display is connected with IGC standard RJ12 cable.
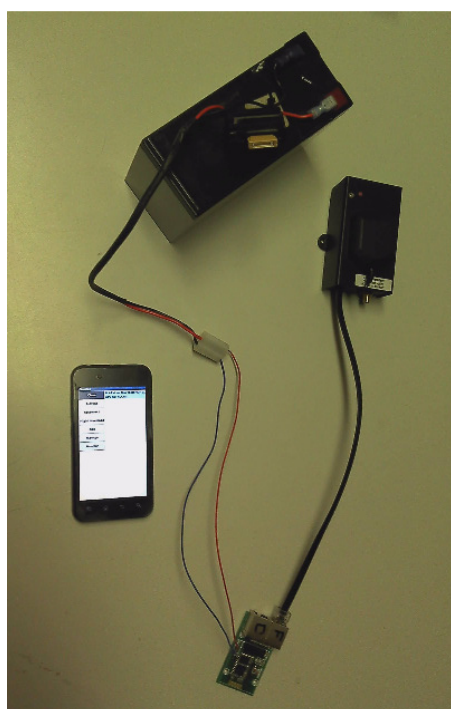
(RedBox can also be supplied with 12V over the RJ connector, like MiniBox).

You can add the SoarTronic Bluetooth module between RedBox and the external display. You will need another RJ12 cable, that is identical with the cable originally between the RedBox and ExternalDisplay.

SoarTronic BT cocule connectors can be used with both RJ12 (6 ires) and RJ45 (8 wires) connectors.

PLEASE NOTE, that the RedBox unit can provide 100mA current for external displays and BT modules. One external display draws about 45 mA, and SoarTronic BT module about 40mA max.. Do not connect more that 2 devices like this to prevent overloading.
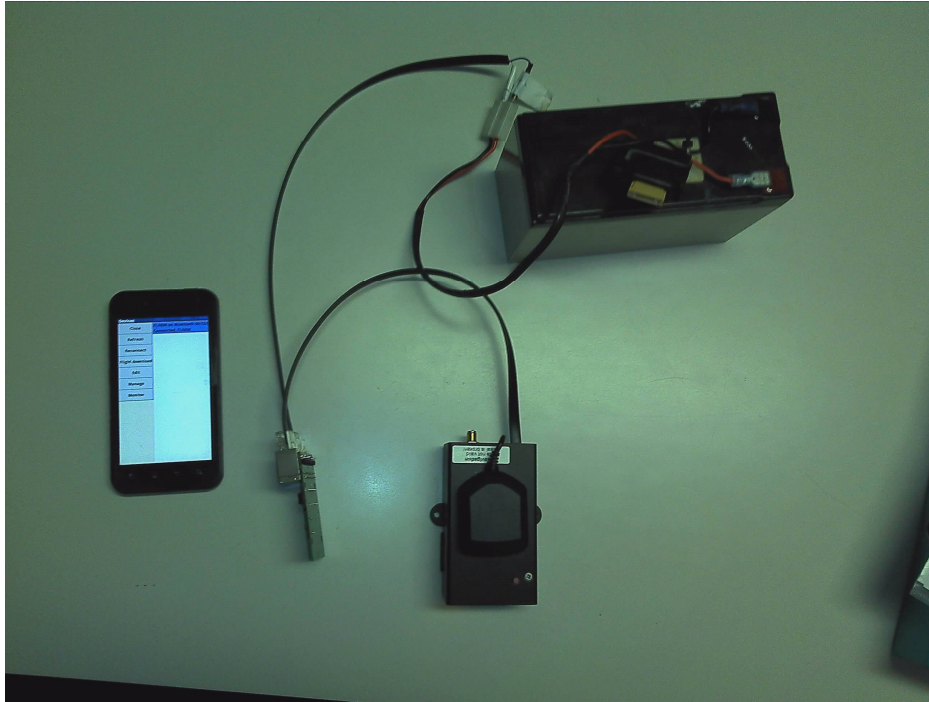
MiniBox FLARM with one ExternalDisplay
(Or original Swiss FLARM)

If you use MiniBox or original FLARM units, you have to feed operating power to your device using the same RJ connector as you use for data communication. To make installation easier, you can connect the 12V operating power to the SoarTronic Bt module. BT mnodule then connects the Vin and GND into IGC standard pins of the RJ connector. (this 12V is NOT used to power the BT module). Olease note, that the BT module does not have build in reverce current protection or fuse.
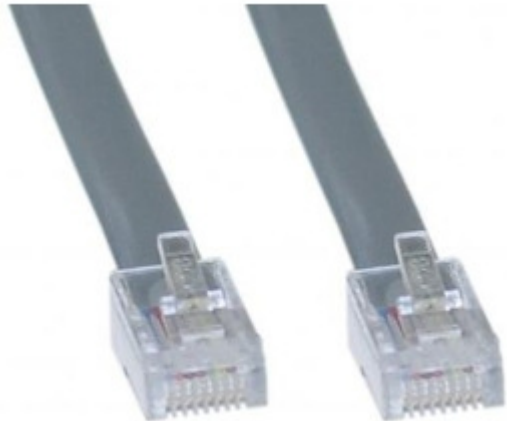
SoarTronic BT module is powered by the 3.3V provided by the MiniBod or original FLARM unit.

In this picture the second RJ connector, here marked with D (for Diplay) can be used to connect with an external display, for example. Please note, that SoarTronic BT module alone draws 40mA, and MiniBox can only provide about 100mA.

If your FLARM unit is already powered with a RJ cable, and you do not want to change the wiring, move the power cable from your FALRM unit to the Disp port of the SoarTronic BT1 module. Then add another IGC RJ cable to connect Flarm port of the SoarTronic BT module to the MiniBox or original FLARM

Please note, that if you have the original Swiss FLARM unit, only the wider, 8 wire RJ45 port transmits the FLARM trafic data on 19200 bauds communication speed.

SoarTronic BT1 module is build to operate with FALRM units, which are connected using IGC standard RJ12 or RJ45 connectors and standard external display cables. In this cable the connectors in both ends are 1:1 identical.

If you make such cable yourself using flat cable, in the streigh-tened cable the connector clips point opposite directions.

SoarTronic BT module ahs two RJ45 connectors for 8 wire cables. However you can connect 6 wire RJ12 cables used with LX RedBox and MiniBox units.

If you are unsure, you can e-mail us (soartronic@gmail.com) and ask instructions.

We hope that SoarTronic BT module is useful for you!

Best regards,

SoarTronic team