



SWB-R / SWB-C : Instructions for use

The SWB modules are able to create a wireless network, which allows LAE controllers fitted with TTL or RS485 serial port to be linked to the TAB (version 4.2 or following) supervisory software.

This network must consist of an individual SWB-C module, which is to be connected to the PC where the supervisory software is installed, plus one or more SWB-R modules connected to the controllers.

SWB-C

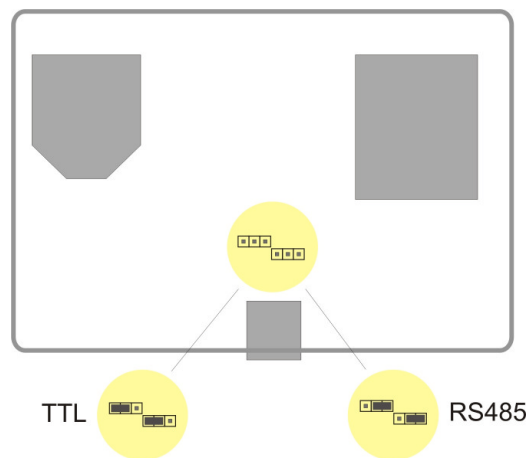
This module is the network coordinator. It's fitted with RS232 interface and must be linked to a PC COM port via the cable supplied. In the event that the PC is not fitted with RS232 ports, you may use a USB-RS232 converter that is available on the marketplace.

On the side of the module, where the RS232 connector is located, there are also three LED's; the first on the left (ON) must blink to show that the coordinator is switched on and has started the network. The other two LED's show the incoming and outgoing transmission data.

SWB-R

These modules, via the cable supplied, may be connected to controllers fitted with TTL or RS485 port. The connection type must be selected via built-in jumpers (the factory setting is for TTL port). To change connection type, remove the lid by unscrewing the 4 screws and move the jumpers as per the drawing here below.

SWB-R:
Serial port selection



On these modules too there are 3 LED's. The first on the left (ON) must blink to show that the module is switched on and joined the network. The other two LED's show incoming and outgoing transmission data.

Please keep into account that for the TTL port a SWB-R module must be connected to every single controller, whereas in the case of an RS485 port you may connect up to 63 controllers via a single SWB-R.

NETWORK INSTALLATION

Network installation with SWB modules is simple and quick, however you should please keep into account that:

- The SWB-C module (coordinator) must be started as first
- The SWB modules may create a *mesh* type network; this means that every single SWB-R (router) will hook the network via one of the adjacent modules and it will communicate with the SWB-C (coordinator) exploiting the modules located halfway (see scheme below). If the distance between two adjacent modules is wider than the maximum range of 30-40m, it's then possible to interpose a stand alone SWB-R module as a simple repeater.
- In order to protect the network from intrusions by non authorised systems, every module allows other modules to remain hooked to the network for a minute approx. after it has been switched on.

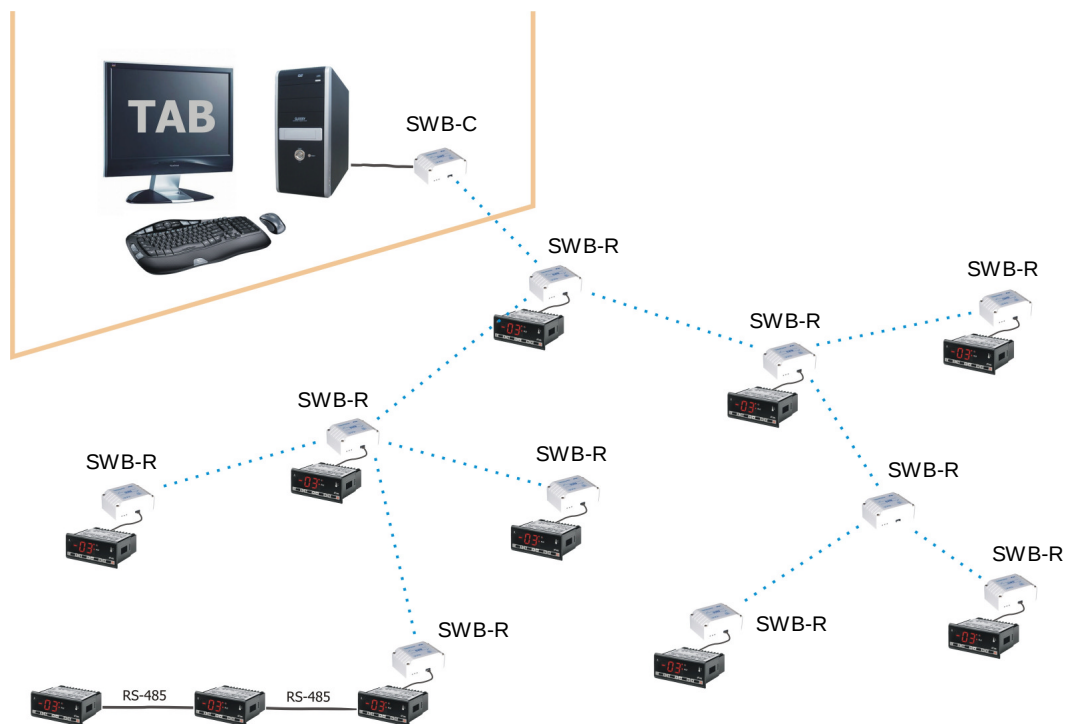
Caution!: To install a new network, the SWB-R modules must be in the same state as they were factory set, i.e. they must not have been associated to any network previously. To resolve situations other than this, use the “SWB Network Manager” software and refer to its specific instructions for use.

Therefore please proceed as follows:

- 1- Place the SWB-C module and all the SWB-R modules in a place where they would operate, and install them in such a way as to ensure that they are as much in line of sight of each other as possible. Above all please try and make sure that there are as less metallic obstacles as possible. Connect the SWB-C to the PC and the SWB-R's to the relevant controllers.
- 2- Turn on the SWB-C module. The coordinator chooses a free radio channel in which it will start its own network. When the first LED on the left starts to blink this means that the SWB-C is ready and this will allow the other SWB-R modules to be added to the network for a time equal to 1 minute.
- 3- If it's possible to turn on all SWB-R's at the same time, the network will create automatically. Please make sure that all modules have got the LED “ON” blinking. Otherwise, starting from the SWB-C, turn on the closest SWB-R within 1 minute, then check that the LED “ON” starts to blink and so on till the furthest one.

Now, the network is started and all controllers may be reached by the supervisory system.

Every single SWB-R will be identified in the network through its serial number, reported on the label.



TECHNICAL DATA

- Radio frequency band: ISM 2.4GHz
- Radio range: up to 40m indoor with presence of obstacles
- Serial port SWB-C: RS232 on DB-9 connector
 SWB-R: TTL/RS485 selectable, on Ampmodu II 4-way connector
- Max. Number of peripherals on the port RS485: 63
- LED indicators: power supply / in the network, serial transmission, serial receiving
- Power supply: 230Vac/3W
- Dimensions: 110x75x53 mm