



OPERATIONAL INSTRUCTION CRS 100

This device is a HF radio receiver for Loop Antennas with frequency conversion for ASK modulations (Amplitude Shift Key) followed by digital decoder with microcontroller. This chain is able to reconstruct the signal sent from the transmitter Crs015. A second microcontroller will then handle all the information received according to definite rules sent by the PC through the device Crs120. The communication between the two devices (CRS 100 & CRS 120) is in RS 485 full duplex thanks to a data transmission cable. This cable also provides to give all the power supply needed to work correctly. The device, from now on called Reader CRS 100, can be connected to the CRS 120 with a distance of 800 meters without any signal repeater.

Different peripherals such as : RTC (Real Time Clock), Eeprom, local tension regulator and signalling led complete the device.

FIELDS OF USE

Together with the CRS 015 and the CRS 120 each time it is necessary to identify object and things in movement when they pass over a pre determined detection point . It can have application both in motorsports and industrial fields.

INSTALLATION:

1. ensure that the system is turned off (Crs120 switch PWR set to OFF),
2. connect the Crs100 to the data transmission cable through the circular connector IP65,
3. turn the system on (Crs120 switch PWR set to ON),
4. ensure that the green light PWR ON of the Crs100 is on,
5. bring a transponder near the Crs100 and ensure that the red light FRAME OK is on,
6. connect the detection loop to Crs100,
7. ensure that no red light of the Crs100 is turned on
8. ensure that a transponder located at a suitable height on the detection loop, turns on the red light FRAME OK and, when expected, do the procedure for setting and calibrating the system.
9. screw drive well the circular connectors and seal it with auto agglomerate tape first, then with adhesive tape,
10. join well the detection loop and then join well the detection loop seal it with auto agglomerate tape first, then with adhesive tape,

NOTES: the detection loop is sensitive to interference that can sometimes be generated by power cables: a proper installation plans to stay at least 3mt from these cables. It is also advisable to avoid placing the detection loop near or above a metal or carbon. Avoid passing power cables close to the data transmission cable.