

Connection instructions

Updated 11/26/2020

Radio module C18, 2-3180

C18 is used for remote opening of e.g. gates or doors.



Introduction

C18 Radio Module is an add-on module with integrated radio receiver for VAKA systems. The communication between transmitter and receiver is encrypted with, "jumping keys", to prevent eavesdropping.

VAKA's radio system communicates at a frequency of 868 MHz and Axema's radio keys have unique IDs that enable tracking in the system's event log. The RN18-4 radio key has four different buttons, all of which can have different functions, such as remote door opening or remote control of relays in the C17 module. The radio key RN18-1 has one button that corresponds to the A button on RN18-4. It is possible to mount several C18 modules in the same system, but, then it is recommended that different buttons on the radio key are programmed for each C18 module.

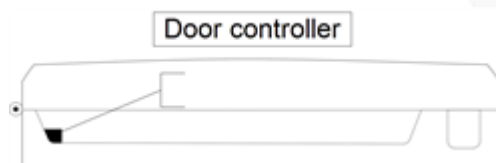
C18 is delivered with a small quartz wave antenna that must be positioned vertically for best coverage. Optimal mounting of the antenna requires an intervention in the door controller enclosure. If longer reading distances are required, for example for gate and gate control, there is an external antenna (MMCX connector) with 3 m of cast cable (Article number, 2-5010). If only very short reading distances are required, no antenna needs to be used.

Mounting

- When broadcasting through exterior wall or concrete wall, for example for garage ports control, an external antenna is recommended.
- When broadcasting through inner walls, for example a plaster wall between front door and office, the quartz antenna is recommended.
- When broadcasting in an office environment the quartz antenna is recommended. Depending on the desired range, the C18's integrated antenna may be sufficient.
- Metal cabinets and the like, shield radio waves and can completely eliminate reception. Place the antenna as far away from metal objects as possible.

Quartz antenna in an indoor environment

- Cut off a small part of the right corner in the cover of the door controller, see picture.



- When the module is mounted, it must be mounted in the right module slot and the antenna drawn through the cut hole and positioned vertically.



External antenna

The C18 is equipped with an MMCX connector for connecting an external antenna. The cable for Axema's antenna for extra range (2-5010) can be routed as shown.



1. Power off the controller.
2. Connect any antenna to the module.
3. Mount the module in a suitable slot in the door controller.
4. Power up the controller.

Installation and configuration

This manual only covers the installation and connection of the unit.

For information of how to configure the unit, see the manual for VAKA commissioning (<https://info.axema.se?commissioning>).

For configuration of motor lock settings, see section [Access control -> Motor lock](#) in the commissioning manual. (<https://info.axema.se?commissioning>)

For configuration of the C12, see section [Volume settings](#) in the commissioning manual. (<https://info.axema.se?commissioning>)