

AJAX-MBTCP

Modbus TCP gateway for AJAX alarm systems

Connect your AJAX Hub and read alarm status from your Modbus TCP client.



01 Connect the gateway

With power off, mount on a DIN rail (2 modules). Connect 12-30 VDC to the bottom terminal, respecting polarity. Connect Ethernet to the same LAN as the AJAX Hub and Modbus TCP client, then power on.

02 Set a fixed gateway IP address

Open <http://192.168.1.51> from a PC on the same subnet (192.168.1.x). Set a free fixed IP on the Hub LAN and save the settings. Restore your PC network settings if changed, then reconnect at the new gateway IP.

03 Send AJAX SIA events to the gateway

In the AJAX app, open Space Settings / Security Companies / Monitoring Station. Configure SIA events to the gateway IP, port 2410. Set an Object number of 3 letters and save. This replaces any existing SIA destination, so a separate SIA monitoring service cannot run alongside the gateway.

04 Configure areas and optional arm/disarm control

On the gateway web page, match Partition Mode and the number of areas to the AJAX Group configuration, then save. For arm/disarm control, enter the 8-character Hub ID from Hub status on Ajax Config and save. In AJAX Security Companies, invite by email: info@elausys.be. Control commands require internet access. The invitation is optional for status monitoring.

05 Connect your Modbus TCP client

Set the server to the gateway IP, TCP port 502 and Unit ID 1. Read coils with FC01 and write command coils with FC05. Poll at intervals below 60 seconds. The gateway supports up to 2 simultaneous clients. Addresses below are zero-based offsets. If your client numbers coils from 1, add 1 to the decimal offset. Status coils are read-only.

06 Verify feedback and control

Check Network and Connected LEDs are on. Arm/disarm area 1 in AJAX and read Armed at 0x000E (14) and Disarmed at 0x000B (11) with FC01. If control is enabled, use FC05 to write ON to 0x0000 (0) to arm area 1 or 0x0001 (1) to disarm. Confirm in AJAX. Command coils reset to OFF.

No connection or no updates?

Check supply, LAN and SIA IP/port. Modbus: check port 502, Unit ID 1 and coil offsets. No detector updates: normally reported only when armed or in Night Mode. Always Active also triggers alarms while disarmed. Control: check invitation and internet.