

How to connect an electromagnetic lock to the BioSmart Zflex Relay Module

1. Remove the PV-WTC cover.
2. Connect a lock and Zflex to the PV-WTC terminal in accordance with the wiring diagram (Attention: on the PV-WTC terminals released before April 2020 RS485 + and RS485- outputs are mixed up).
3. The electromagnetic lock should be connected jointly with the BioSmart Zflex relay module in accordance with figure 1. Use cables 3 and 4 to connect it.

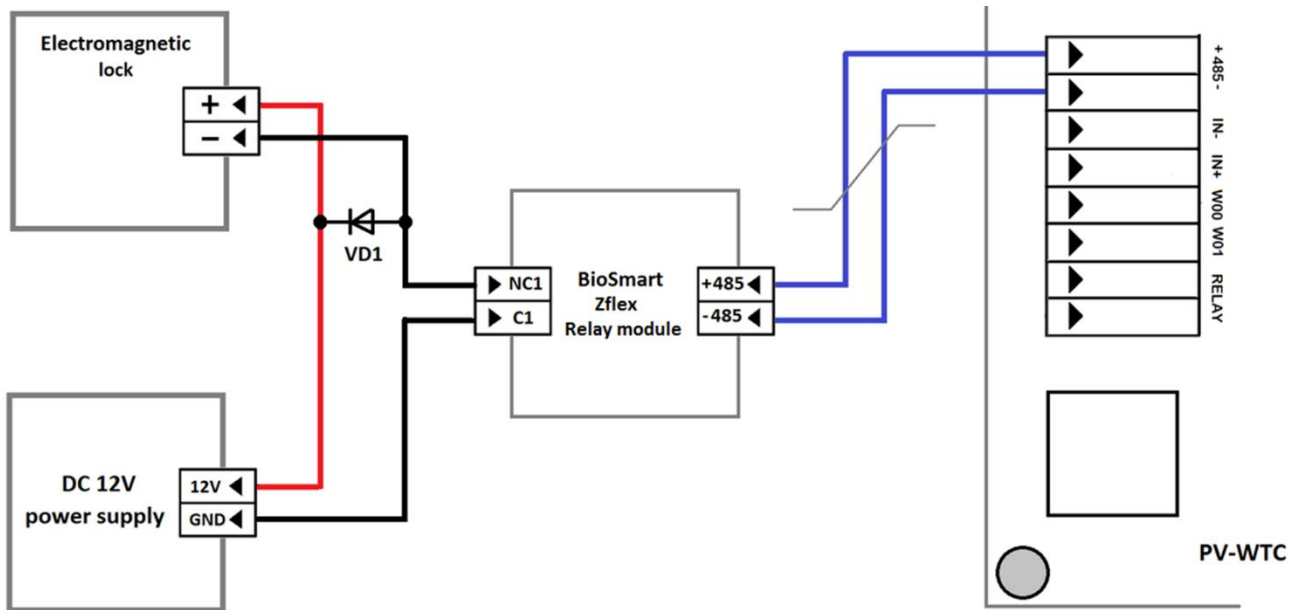
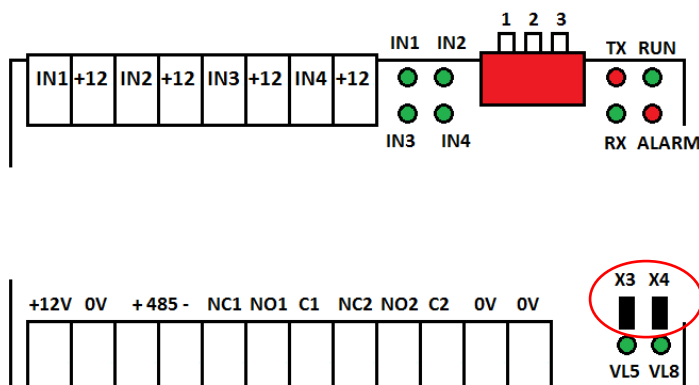


Figure 1. Connecting an electromagnetic lock

4. In order to protect relays from reverse current, that occurs in the circuit when the lock is triggered, it is required to install a shunt diode, according to the circuit shown in Figure 1. Use 1N4007 (1A, 100V) diode or similar. Install a diode as close to lock as possible.
5. Use separate power supplies for lock and device.
6. X3 and X4 Zflex jumpers on must be removed.



7. Connect the PV-WTC terminal to an Ethernet network.

8. Access the web interface of the terminal from a browser:

IP address (the default one is 172.25.110.71 or use previously configured):
port 8082.

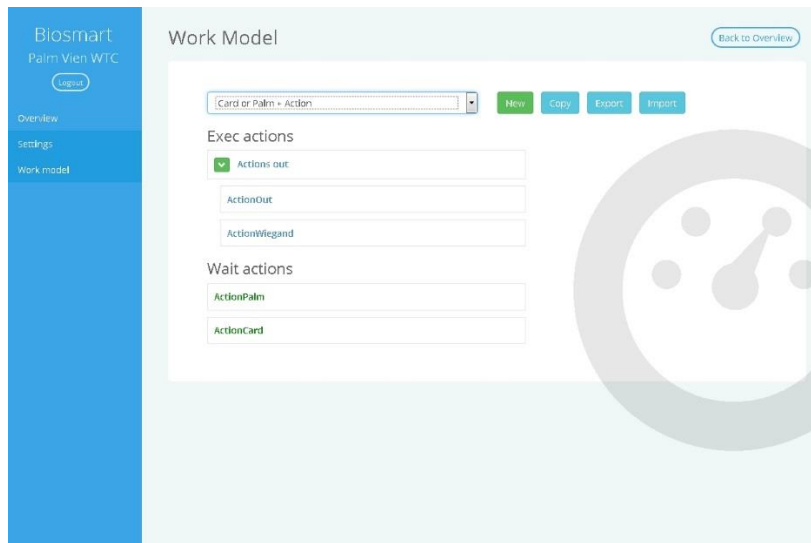
Example: <http://172.29.21.190:8082>

Login: root

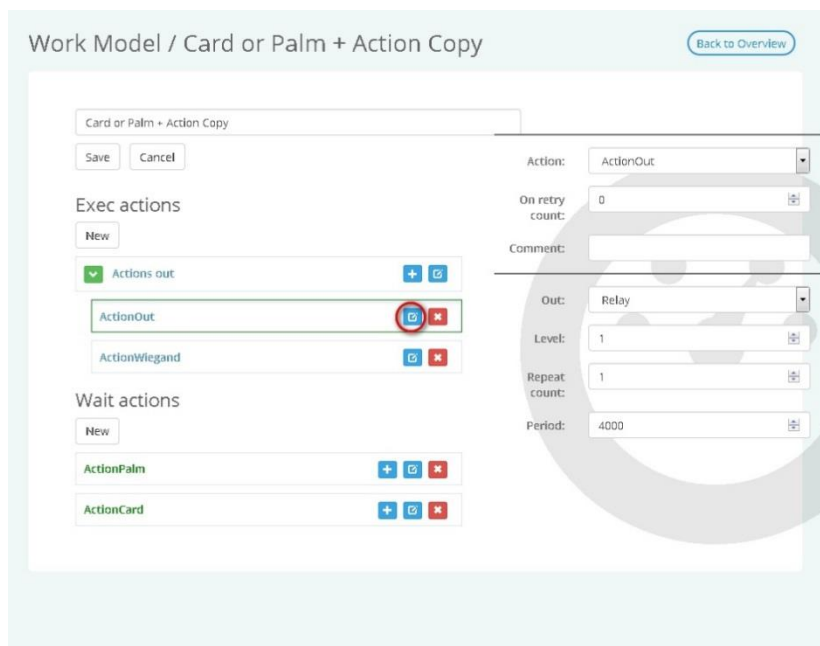
Password: bioroot

9. Go to the Work Model section of the web interface.

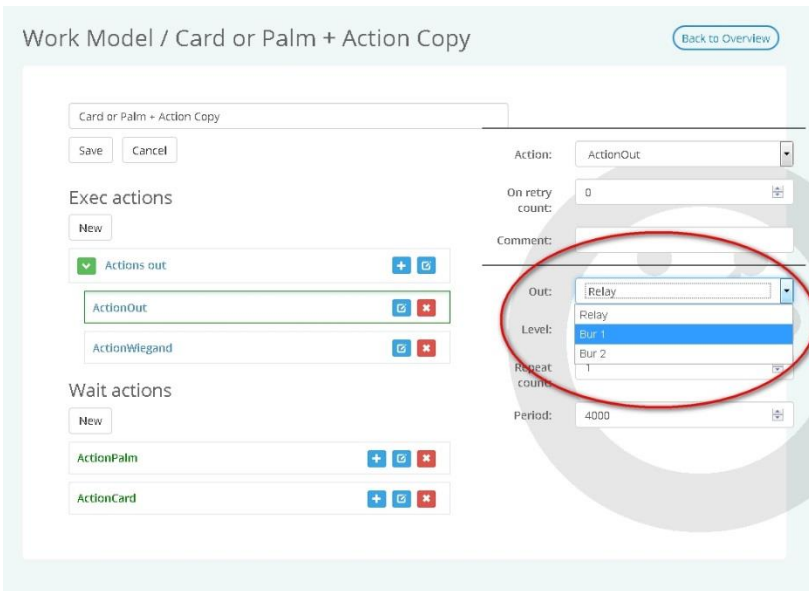
10. From the list of work models, select Cards or Palm+Action. Click Copy.



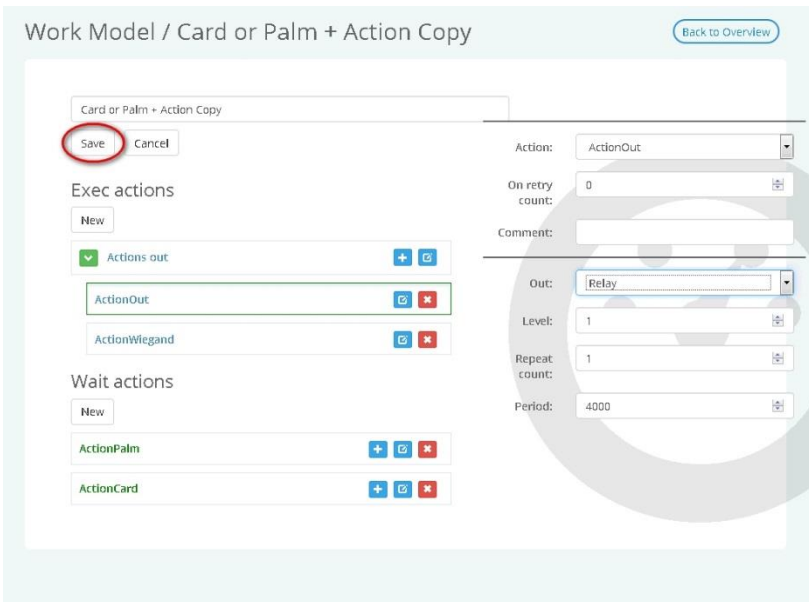
11. In the window that opens, select Action Out and click the Edit button.



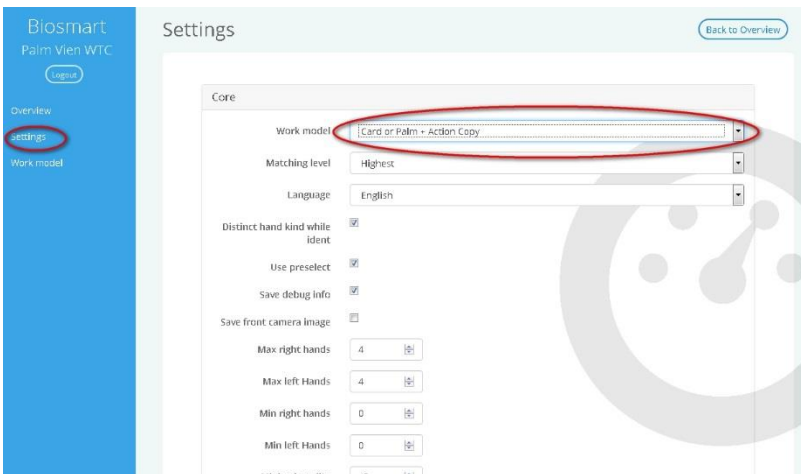
12. Specify which Zflex relay (Bur1 or Bur2) the terminal will operate.



13. Click Save.



14. Go to Settings section. Choose Card or Palm + Action Copy, which is the created Work Model.



15. Click Save.

The screenshot shows the 'Biosmart Palm Vien WTC' settings interface. On the left is a blue sidebar with 'Logout', 'Overview', 'Settings', and 'Work model' links. The main content area is divided into sections: 'Studio connection' with fields for 'warning timeout (sec)' (1800) and 'block timeout (min)' (0), and a checked 'Run SNMP agent' checkbox. Below is the 'PV WTC 2' section with a 'Hello Message' field, checked 'Choose hand at enroll' and 'Antifraud' checkboxes, an 'Antifraud block timeout' field (1), and an unchecked 'Tamper signalling on start' checkbox. The 'NTP' section has an unchecked 'NTP enabled' checkbox and an empty 'NTP server' field. At the bottom, a row of buttons includes 'Save' (circled in red), 'Cancel', 'Reset work model', 'Reinit DB', and 'Download log files'.

Now the lock should be connected to Zflex Relay Module!