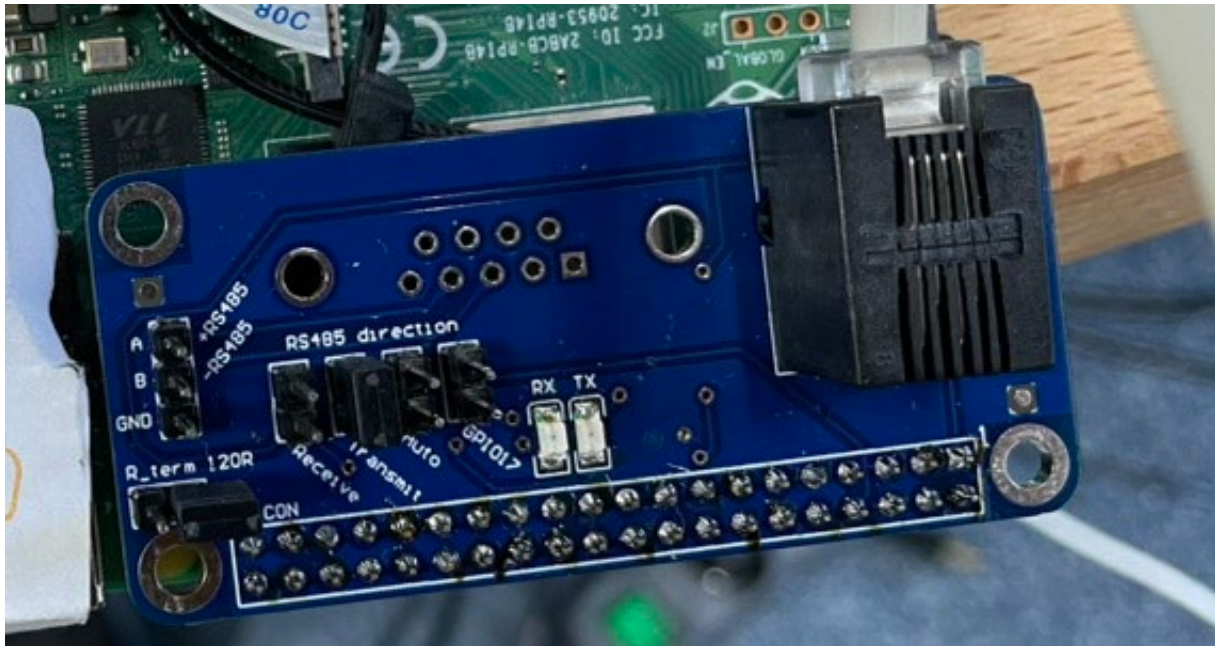# Raspi shield
For XY5/XY7 serial flipdot panel
MANUAL

<div style="border:1px solid black">

Attention: Please read the manual carefully.

In case of any doubts or questions pls contact

Marcin Krysinski at info@alfazeta.pl or +48 42 6891200,

Please note that Poland is GMT+1

</div>

Technical data

Supply voltage	5V from Raspi GPIO
Power consumption	
Control interface	TTL

General layout

Configuration jumpers
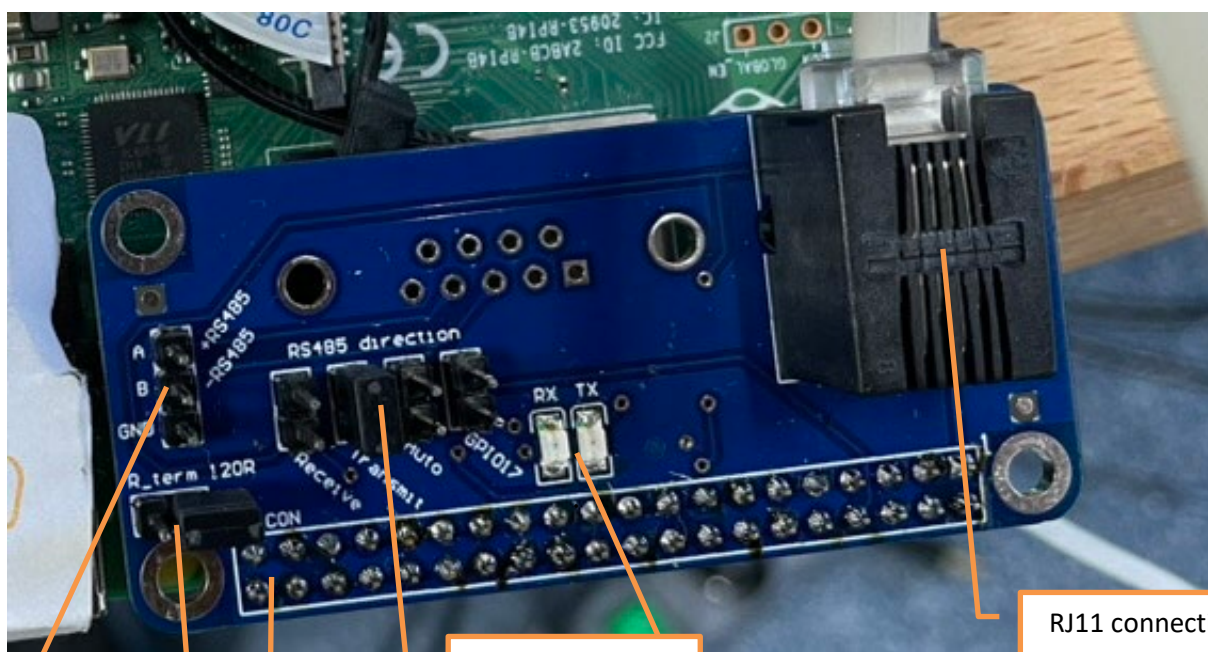
RJ11 connection (to panels)

RX/TX diodes

RS485 pin outputthe panels

GPIO connector (same as in

Termination resistor

General info

The hat has been designed to allow easy control of XY5/XY7 electromagnetic displays with RJ11 input. It is equipped with the same socket as the panels what allows easy connection.

It is tested with Raspi 4B and Raspi Zero but most probably will work also with other devices assuming GPIO layout is the same.

Installation is simple - plug it onto Raspi (square soldering pad on the connector is pin1 both on the hat and on raspi – should match). For Raspi 4 and Zero this should be plugged in such a way that it stays within a footprint of Raspi.

RX/TX diodes – are blinking when data are being sent / received and I believe will go on for a second when you power the device.

Settings

5 configuration jumpers:

Name	Factory shipped	Description
R_term_120	OFF	enables termination resistor of a serial line
Receive	OFF	enables transmission direction (receive data only, send data only, automatic detection, direction switched by GPIO17)
Transmit	ON	
Auto	OFF	
GPIO17	OFF	

Make sure you have your serial port ENABLED and console on serial DISABLED (this is described in the first link of Resources section.

Resources:

Using the serial port on Raspberry Pi OS Bookworm (abelectronics.co.uk)
RS485 Serial development board for the Raspberry Pi (abelectronics.co.uk)