

# Tyro Libra/Aquila 2,4,of 6-fold dual remote control

Manual 868 MHz

## Libra handheld “transmitter” and Aquila “receiver”

Number of functions: 2, 4, 6 or 8, ON/OFF.

### Button functions

To activate the Libra transmitter: press and hold the “I” button for two seconds.

To deactivate the Libra transmitter: press and hold the “O” button for a second.

### Mounting

To optimize the range of the Libra transmitter, it is recommended to place the antenna of the Libra receiver as high as possible and free from any metal objects. After connecting and mounting it is recommended to test the device before connecting the main powersource.

## Please note: All systems are already programmed by the manufacturer.

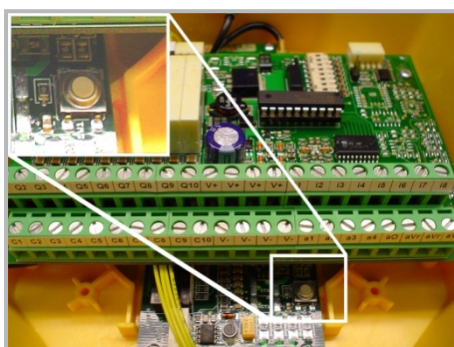
### Programming a new or extra Libra transmitter into the Aquila receiver

If you wish to program an new or extra Libra “transmitter” into the Auriga “receiver”, please follow the steps below:

Step	Description
1.	Connect the powersource to the V+ screw terminal, and the ground cable to V- on all PLC's
2.	Turn the Libra “transmitter” off.
3.	Turn off the power on the Aquila “receiver”
4.	Push the white button on the lower print of the Aquila “receiver” (pic.1)
5.	<b>Keep it pressed in !</b>
6.	Turn on the power of the Aquila “receiver”
7.	Turn on the Libra “transmitter” by pressing the green button (pic.2).
8.	Release the white button on the Aquila “receiver” as soon as the message <b>OUT OF RANGE</b> appears in the display.

**Only if the text NEW ADDRESS appears in the display, the system is ready for use !**

(Pic.1)



(Pic.2)



All deliveries will be subject to our general sales conditions, available on demand or through our website. Our products are certified for many applications. When mounting, always take into account the applicable machine directives.

# Tyro Libra/Aquila 2,4,of 6-fold dual remote control

Technical specifications 868MHz:

<b>Aquila receiver</b>	
Operation voltage	10-38Vdc
Max. output amps	3A (at 24 Vdc)
IP classification	IP-66
PLC	3, 5 or 10 Relays
Weight	856 gram
Dimensions	160x150x60 mm



<b>Libra transmitter</b>	
Max. charging voltage	26Vdc
Min. charging voltage	12Vdc
Battery standby time	± 200 hours
Battery usage time	± 32 hours, ± 7 hours with backlight turned on
Normal charging time	± 5 hours
IP classification	IP65
Range	Up to 350 meters
Weight	192 gram
Dimensions	150x71x31 mm
Frequency	868 Mhz



**For proper usage of the Libra transmitter it has to be charged every day!**

## How to turn on the backlight:

Turn the Libra transmitter off.

If you hold the green button for 5 seconds, the backlight will be activated.

If you hold the green button again for 5 seconds, the backlight will be deactivated.

## Standard options:

Libra transmitter and Aquila receiver.

Rechargeable battery.

Button backlight.

Receiver antenna 868MHz.

Carkit 12V/24V or 230 V adapter.

Auto sleep after 5 minutes.

## Extra options:

Keypad on the Aquila receiver.

Coax extension cable and torque piece, available lengths: 1 meter, 2 meters or 5 meters.

Protective case for the Libra transmitter.

PLC with analog functions.

Double function buttons (only available on the 4 and 6 fold remote controls).

Display on the Libra transmitter and the Aquila receiver

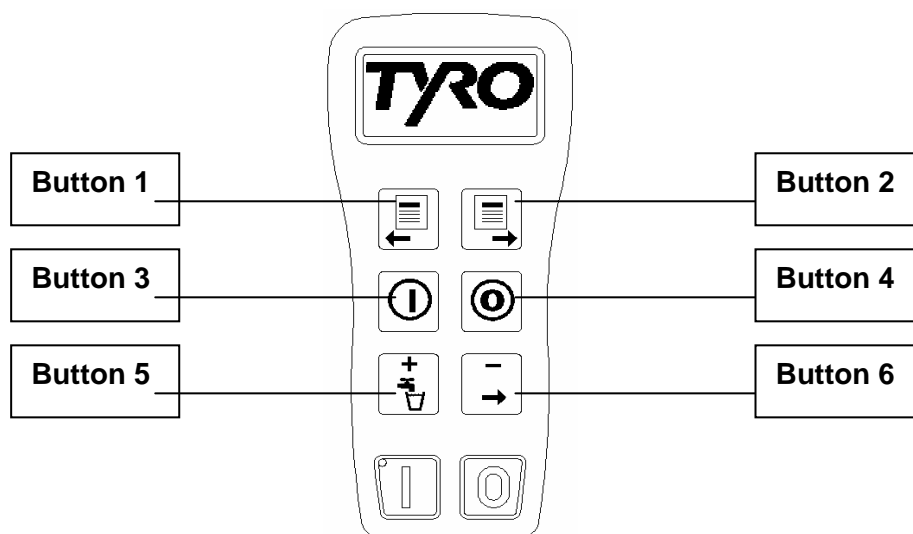
Multiple functions at the same time.

Latch function (bi-stable output contact).

Standby time (10/15 minutes) or no standby time

# Tyro Libra/Aquila 2,4,of 6-fold dual remote control

## Installation guide 868MHz



### Aquila connections PLC,s:

V+ 12 /24 Vdc  
V- 0 Vdc

Every single PLC should be connected to V+ and V-.

All circuitboards communicate through data bus. (yellow wires + white connectors)

C1 / C10 on PLC1 and C1 / C3 on PLC2 , etc, are connected to V+.

### Outputs:

PLC 1	Menu	Function	Button
Q1 contact relay 1	Bediening	START	3
Q2 contact relay 2	Bediening	STOP	4
Q3 contact relay 3	Tekst...	Tekst...	3
Q4 contact relay 4	Tekst...	Tekst...	3
Q5 contact relay 5	Tekst...	Tekst...	3
Q6 contact relay 6	Tekst...	Tekst...	5
Q7 contact relay 7	Tekst...	Tekst...	6
Q8 contact relay 8	Tekst...	Tekst...	5
Q9 contact relay 9	Tekst...	Tekst...	6
Q10 contact relay 10	Tekst...	Tekst...	3

### INPUTS:

PLC 1	ANALOGGE INGANG:
PLC 1	PLC 1
I1 Tekst...	A1 Tekst...
I2 Tekst...	
I3 Tekst...	
I4 Tekst...	
I5 Tekst...	
I6 Tekst..	

# Tyro Libra/Aquila 2,4,of 6-fold dual remote control

## I/O board Aquila receiver wiring diagram

### Relays outputs

Depending on the type of the transmitter it is possible there are more or less relays on the PLC.

The Relays contacts on the PLC are of the type normally open (NO) and are localized between Q and C of the terminal strip.

The contact between Q1 and C1 belongs to Relays 1, Q2 and C2 belongs to Relays 2 and so on.

To see how the Relays switches, only the powersource wire (V+) and the ground wire(V-) have to be connected.

By pushing a random button you can see which relay is switching because of the orange LED.

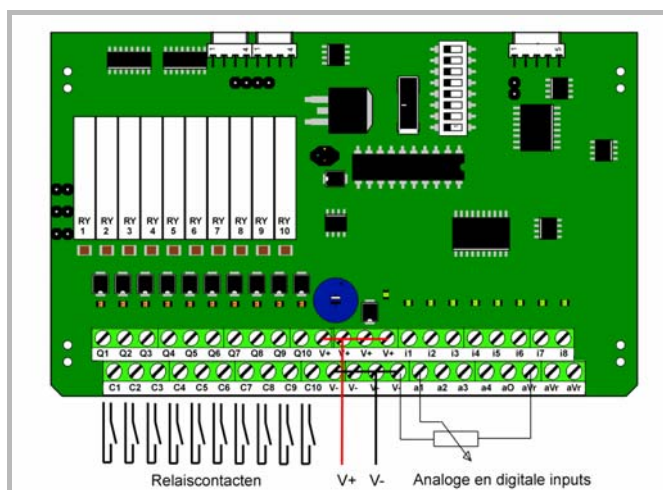
### Powersource

The positive voltage must be connected to V + and the negative voltage (ground) on V-.

The 4 connections V+ are internally connected with each other, this also applies to the 4 connections V-.

## I/O board Aquila receiver wiring diagram

**Please note: All systems are already programmed by the manufacturer.**



(Pic.3)

### Digital inputs

Only if your remote control is programmed for this, it's possible to connect signals to i1 up to i8 for feedback to the Auriga receiver such like an end stop switch.

### Analog inputs

Only if your remote control is programmed for this, it's possible to apply analog voltage levels on a1 up to a4 for feedback to the Auriga receiver such like potentiometer for leveling.

This analog voltage level may vary between 0 and 10V.

It can use the reference voltage of 10V present on the aVr connections (20mA max).

The 3 aVr connections are connected with each other.

### Analog output

Only if your remote control is programmed for this and is proportional, it is possible to get an analog output voltage on connection aO. This analog voltage may vary between 0 and 10V and is adjustable in 8 steps.