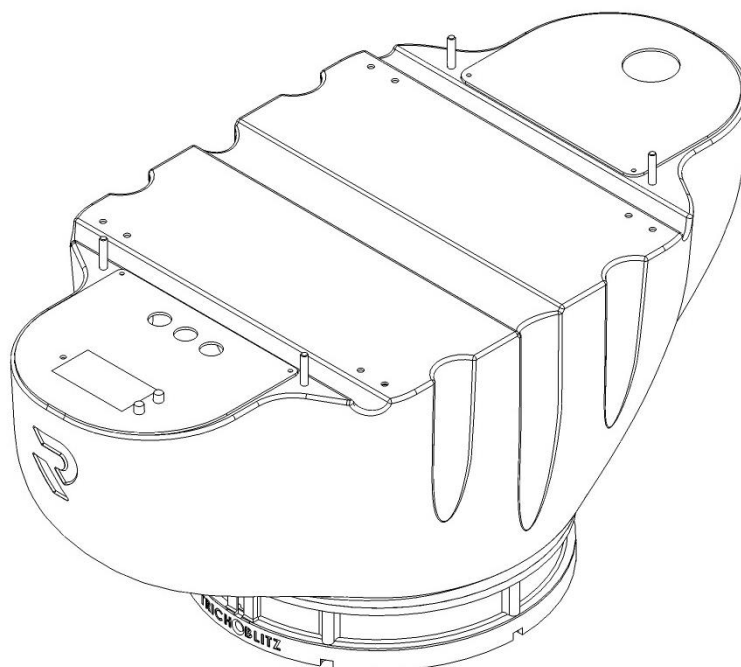


OPERATING MANUAL

TB800, TB1000

As of 2019



V3.0

Operating instruction

Seite

1. Display.....3

2. Description of the symbols in the document3

3. Pages4

4. Pages details5

4.1 Page 1: Actual values of the Drops5

4.2 Page 2: Test mode: „Test ON“5

4.3 Page 3: Duration of the PWM-signals [µs]5

4.4 Page 4: Duration start pulse [ms]: „DuraStp“5

4.5 Page 5: Distance between the start pulse [ms]: „DistStp“5

4.6 Page 6: Runtime cell wheel [ms]: „RuntCeW“5

4.7 Page 7: LED-function: „LedFnk>“5

4.8 Page 8: Actual value and switch point of the light barrier [%] : „LightBa>“5

4.9 Page 9: Rotationspeed cell wheel: „RoSpeed>“5

4.10 Page 10: Rotation speed cell wheel-offset: „RSpOfst>“6

4.11 Page 11: Enablesignal: „Enable>“6

4.12 Page 12: „StartBy>“6

4.13 Page 13: Evaluation startpuls „Strtpuls>“6

4.14 Page 14: „Rangerot“6

4.15 Page 20: Drops per day: “Drop_day”6

4.16 Page 21: Drops over all: “Drop_tot”6

4.17 Page 22: Operating hours per day: “OpHourDa”6

4.18 Page 23: Operating hours over all: “OpHourTo”6

4.19 Page 80: LED functions.....6

5. Pages errors7

5.1 Page 200: „Error light barrier“7

5.2 Page 201: Error „Start to early“7

6. Troubleshooting7

1. Display

Basically, the display is only used for diagnostic and documentation purposes. An operation of the throwing device without a display is possible at any time. **Please do not pull or stuck the cable on the display under tension,** this will inevitably lead to a crash of the display.

2. Description of the symbols in the document

- 2s➔ Press the Button for 2 seconds for to forward
- 2s➤ Press the Button for 2 seconds for to backward
- ↕ Button Up or Button Down

3. Pages

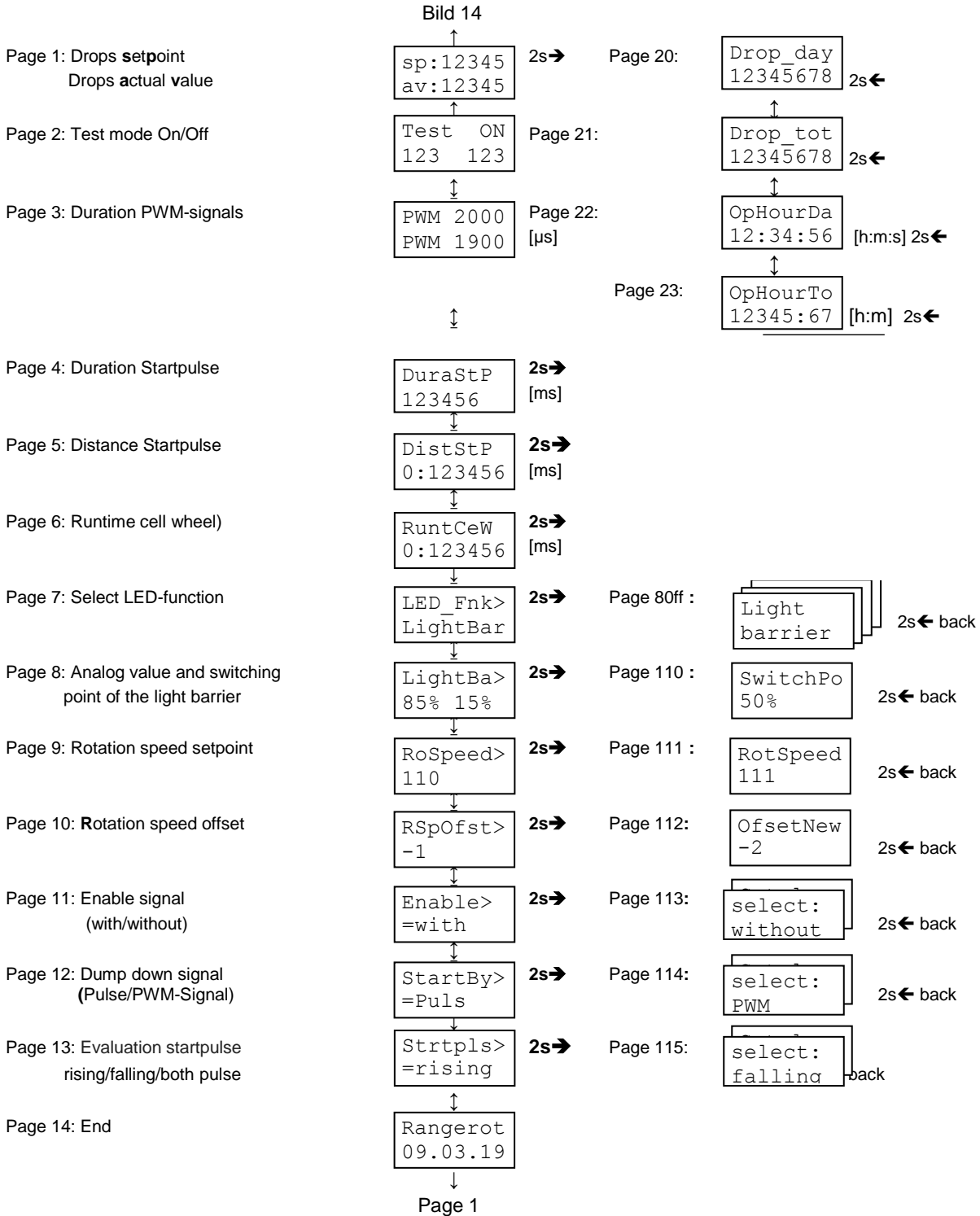


Bild 20: Drops per day
 Bild 21: Drops total
 Bild 22: Operating hours per day
 Bild 23: Operating hours total

Bild 80: Select LED-function
 Bild 110: Setting the Switching point of the light barrier
 Bild 111: Setting the rotation speed of the cell wheel
 Bild 112: Setting the rotation speed offset of the cell wheel
 Bild 113: Setting Enable with/without
 Bild 114: Setting Start by Pulse/PWM
 Bild 115: Setting rising/falling/both

4. Pages details

4.1 Page 1: Actual values of the Drops

Press the button Up and the button Down for 2 seconds, to delete the values

4.2 Page 2: Test mode: „Test ON“

To switch on or off test mode press the button Up for 2 seconds.

The test mode can only be switched on if the enabling signal from the radio control is off.

The two counters in the second line show you the setpoint and the actual value.

In test mode, the retentive counter and the operating hours are not incremented.

The counter will be deleted after the next reboot, or after the next switch on of the enabling signal.

If there is no drop falling for 6 times the test mode will be switched off automatically.

4.3 Page 3: Duration of the PWM-signals [μ s]

In the first line is shown the duration of the PWM signal for enable the Trichoblitz. It must have a minimum length of 1400 μ s (1,4ms)

If the cell wheel is started by PWM-signal, in the second line is shown the duration of the PWM signal for to start the cell wheel. The cell wheel will start, if the length of the puls is getting higher than 1600 μ s, (ore getting lower than 1400 μ s)

4.4 Page 4: Duration start pulse [ms]: „DuraStp“

If the cell wheel is started by pulse, the duration of the start pulse can be seen

The duration of the start pulse should have a length of about 100ms.

4.5 Page 5: Distance between the start pulse [ms]: „DistStp“

The distance between the last two start puls is shown

4.6 Page 6: Runtime cell wheel [ms]: „RuntCeW“

If there are balls in the container, the runtime of the cell wheel should be round about 200ms. If the value is outside of the range you can correct the speed of the cell wheel on page 9. **The speed is set on the optimum value from us, please contact us before you change the value.** If the speed of the cell wheel is too fast, it is possible that another ball is falling before the cell wheel is standing still.

If there are no balls in the container, the cell wheel stops automatically after 1000ms.

4.7 Page 7: LED-function: „LedFnk>“

The LED can be used for to visible the following functions.

- light barrier
- enable signal from the radio control
- startpulse
- error
- motor is running

To select the LED function, press the button Up for 2 seconds. Now you can select with the buttons Up and Down the function you wish. For to go back, press the button Down for 2 seconds. The default setting is “light barrier”.

4.8 Page 8: Actual value and switch point of the light barrier [%] : „LightBa>“

To detect the dropped balls, in the chute a light barrier is housed

The first value is the actual value of the light barrier. Normally the actual value should be between 60% and 100%.

If the actual value is underneath, the photocell is dirty and can be cleaned by blowing out.

The second value is the switching point for stopping the cell wheel, after the drop has fallen. It should be set to 10%.

To change the switching point, press the button Up for 2 seconds. Now you can select with the buttons Up or Down the switching point you wish. For to go back, press the button Down for 2 seconds

4.9 Page 9: Rotationspeed cell wheel: „RoSpeed>“

The rotationspeed is set on the optimum value from us, please contact us before you change the value. If it is necessary anyway, the runtime of the cell wheel (page 6) should be about 200ms, until a ball is falling.

To change the setpoint, press the button Up for 2 seconds. Now you can select with the buttons Up or Down the setpoint you wish. For to go back, press the button Down for 2 seconds

4.10 Page 10: Rotation speed cell wheel-offset: „RSpOfst>“

If the cell wheel to a standstill phases easily turn, this can be compensated by the offset.

To change the setpoint, press the button Up for 2 seconds. Now you can select with the buttons Up or Down the setpoint you wish. For to go back, press the button Down for 2 seconds

4.11 Page 11: Enablesignal: „Enable>“

If Enable Signal is necessary or not, you can select the adjustment.

If there is selected “Enable **with**”, the startpulse will be only considered when the Enable-signal is already true. If there is selected “Enable **without**”, each startpulse will be considered.

To change the adjustment, press the button Up for 2 seconds. Now you can select with the buttons Up or Down between “Enable with” / “Enable without”. For to go back, press the button Down for 2 seconds.

Attention, after changing the setting a restart has to be done.

4.12 Page 12: „StartBy>“

Here you can select if the startsignal is a puls or a PWM-signal.

To change the adjustment, press the button Up for 2 seconds. Now you can select with the buttons Up or Down between start by puls or start by PWM-signal. For to go back, press the button Down for 2 seconds.

4.13 Page 13: Evaluation startpuls „Strtpuls>“

You can select between:

- rising flank of the startpulse
- falling flank of the startpulse
- rising and falling flank of the startpulse

To select the function you wish, press the button Up for 2 seconds. Now you can select with the buttons Up and Down the function you wish. For to go back, press the button Down for 2 seconds. The default setting is “rising flank of the startpulse”

4.14 Page 14: „Rangerot”

Here you can see the software version

4.15 Page 20: Drops per day: “Drop_day”

To delete the value press the button Up and Down for 2 seconds at the same time

4.16 Page 21: Drops over all: “Drop_tot”

To delete the value press the button Up and Down for 2 seconds at the same time

4.17 Page 22: Operating hours per day: “OpHourDa”

To delete the value press the button Up and Down for 2 seconds at the same time

4.18 Page 23: Operating hours over all: “OpHourTo”

To delete the value press the button Up and Down for 2 seconds at the same time

4.19 Page 80: LED functions

Have a look at chapter “page 7”

5. Pages errors

5.1 Page 200: „Error light barrier“

Error
lightbar

If the light barrier is occupied for more than 5 seconds, the error message is activated. This message can be triggered by a dirty light barrier or by a ball blocking the discharge chute.

The error message has no effect. To quit the message press the button Up or down.

5.2 Page 201: Error „Start to early“

Start
to early

Is there is a start signal during the cell wheel is running, the error message is activated.

The error message has no effect. To quit the message press the button Up or Down.

6. Troubleshooting

problem / errormessage	Possible Cause	Solution/remedy
Display errormessage: „Error lightbar“	The light barrier is dirty	Clean the lightbarrier . In picture „LightBa>“ you can see the quality of the lightbarrier The value should be between 80-100%
Display errormessage: „Start to early“	The distance between the startpulse is to small	Decrease the airspeed.
Two drops are falling	The cell wheel is to fast	Go to the picture „RoSpeed>“,and decrease the speed of the cell wheel
More than two drops are falling	The light barrier is dirty	Clean the lightbarrier . In picture „LightBa>“ you can see the quality of the lightbarrier The value should be between 80-100%
The startpulse has no result	The Trichoblitz is getting no startpulse	Check the connecting cable. In picture „DuraStp“you can see the Duration of the startpulse
	The Enable signal is missing	-Check the connecting cable. -activate the signal or go to the picture „Enable>“, and select “without”
	The Trichoblitz is getting a wrong Startpulse	Check the setting in the picture „StartBy>“
The cell wheel is trying to move, but there is no drop falling	The cell wheel is blocked	Check the cell wheel
The display remains dark	The connecting cable is connected wrong, or the voltage was higher than 5V	Send the Trichoblitz to the service

