

# OPERATING INSTRUCTIONS

## RAIN-TRAIN "Standard" RAIN-TRAIN "Plus"

### Manual Operation

#### Position of Switch "2"

The speed can be selected with "+" (plus) and "-" (minus). The trolley can be started with the buttons "←" (back) and "→" (forward). The button "stop" stops the trolley. The ends are recognized automatically. The nozzles are switched on with the buttons 1 to 5. The button "Beregnung EIN/AUS" will switch on the main valve in the water feed pipe.

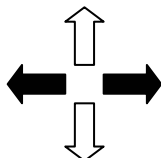
Attention: In case of longer operation without switched on main valve, or without water supply, the switched on valves at the trolley could get damages.

Button 1 = riding area inside "L" (second riding area)  
Button 2 = riding area inside "R" (second riding area)  
Button 3 = riding area outside "L" (first riding area)  
Button 5 = riding area outside "R" (first riding area)  
Button 4 = middle of hall "M"

### Set time

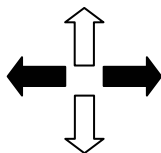
#### Position of Switch "6"

At first, press the Enter-button, then choose day, hour and minute with the arrow-buttons "L" and "R".



Below the respective eligible option, e.g. **Di:07:16:22**, appears a little bar. The bar can be moved with the buttons to the wished position.

The adjustment can be made with the buttons "Oben" and "Unten".



If the wished adjustment has been made, press again the Enter-button. Because of this everything is confirmed and arrow "→" and bar "\_" disappear.

### Set date

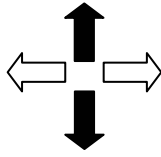
#### Position of Switch "7"

Corresponding to position of switch "6", instead of time appears the adjustable date.

## Set Timer

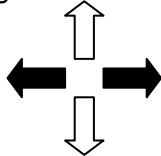
### Position of Switch "5"

Choose with the buttons "oben" and "unten" the corresponding timer, e.g. T4 (timer 4),



then press Enter. Now appears a little arrow, e.g. >T4:So:15:30:P1.

In addition to the little arrow, here is a bar, e.g. under So = Sunday. With the arrow-buttons "links" and "rechts"



the adjustable option is choosed, with the buttons "oben" and "unten" the details can be altered. End the complete series of events by pressing the Enter-button.

You can choose among eight timers at total.

The timer 1 to 7 are for the day "Montag bis Sonntag", the figure T5 stands for daily. If T6 is choosed, this program starts automatically at the choosed time. If the timer 1 to 7 is choosed, you can start e.g. 1 program per day or, too, 7 programs per day.

Information on display:

<b>T7:</b>	<b>So:</b>	<b>15:</b>	<b>30:</b>	<b>P1</b>
Timer-No.	weekday	hour	minute	no. of program

The timer will be deleted by pressing two times the Enter-button. It has to appear the program-no. P0.

## program-mode

### Position of Switch "4"

Herewith the programs (type of irrigation) are created. It appears in the display:

P1	G1
F1	S0

With the buttons "Programm - +" one of 20 possible irrigation programs is choosed. That means you can store fix up to 20 programs.

E.g. P3 is choosed, press the Enter-button,

two arrows appears >\_  
please press not the Enterbutton >\_

Next step is to choose the speed. "G1" means speed step 1, 10 speeds exist, e.g. "G10". The higher the speed, the minor the amount of water per cm<sup>2</sup>,

Choose with the buttons "- +" your speed, e.g. "G5". After this, please do not press Enter.

Next step is to adjust the number of trips with the buttons "Fahrten + -".

E.g. "F4" means four trips altogether. One distance is one trip.

The maximum adjustable number of trips is ten trips. Please do not press Enter.

Next step is to fix the sectors.

"S0" means S = sector, 0 = first sector; "S1" = second sector up to "S7" = eighth sector.

With the buttons "Düsen" the to be watered area per sector is adjusted.

Button 1 =	riding area inside "L"	(second riding area)
Button 2 =	riding area inside "R"	(second riding area)
Button 3 =	riding area outside "L"	(first riding area)
Button 5 =	riding area outside "R"	(first riding area)
Button 4 =	middle of hall "M"	

Each sector is shown in the display.

Is one of the eight sectors adjusted, the next sector is to be choosed with the button "arrow to right". This series of events has to be made for each to be watered sector. In the "not" to be watered sectors, "no" nozzles are switched on. If all sectors are adjusted, press the Enter-button and end this action.

If wished, the next program-no. can be choosed, e.g. "P4" and the next program can be written.

## **Automatic mechanism**

### **Position of Switch "1"**

The timer and other parameter can be started automatically on this position of switch. Other adjustments are not possible.

P.S.: The actual time is shown. As soon as the entered program is started (automatically), this program will be shown.

## **Program control (half automatic)**

### **Position of Switch "3"**

Choose program with the buttons "Programm - +" and start or break off with the button "Start Stop".

The choosed program which is in the memory store appears in the display (making out under position of switch "4" in program-mode).

If the trolley is, before its trip, not in its final position (station), it drives automatically to this position. The trip will begin out of this parking position.

## **Immediate stop of the system necessary**

E.g. if during a trip the irrigation has to be stopped immediatly.

1. set the switch on position "2" (manual), no matter where it stands.
2. additionally press the button Start-/Stop.

If the trolley should drive back again (without water), set the switch on manual (position "2") and move the trolley, like described there, with the buttons "vor-Stop-zurück".

## **Frost evacuation**

### **Position of Switch "0"**

In case of temperatures in the near of frost, this evacuation trip has absolutely to be made. The water supply must be closed and a possibility for a water evacuation must be open.

## **Fault announcement in the display**

### **1. Blocking Error**

This announcement says that the impulse machine at the trolley does not rotate itself.

Possible reasons:

- pollution of the impulse machine
- trolley blocks at a hindrance
- trolley is held on e.g. by the chain.
- driving gear is faulty

### **2. Connection fault**

E.g. cable break in the control cable, no voltage (220/230V) at the trolley, e.g. fuse.

## **Service**

### **Position of Switch "9"**

This position of switch is only for authorized persons. In this position the electronics does not recognize limit switches. Otherwise like the manual mode.

## **Initialization**

### **Position of Switch "8"**

In the display appears: "Initialisierung starten?" (Start initialization?)

The initialization is made by new systems at the first installation or after longer currentless time (loss of data). The trolley has to be approx. in the middle of the hall. If this is not the case, drive the trolley with position of switch "9" into the middle of the hall.

To initialize new, press the enter button, old initialization data is deleted automatically. The initialization is made automatically. During the trip appears regularly in the display "Initialisierung abbrechen" (stop initialization). It can be stopped at any time with the enter button. Do not press enter when the trip is over, otherwise the initialization will be started again.

Now can be started by means of the menu switch every other kind of operation.

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