Foundation Series Webinar

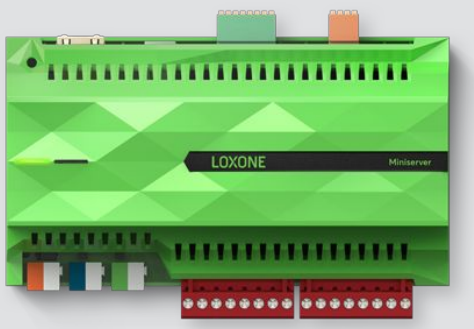
Heating

Create
Automation

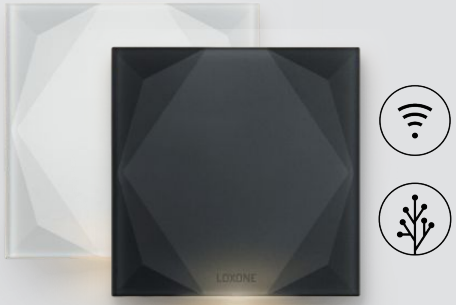
LOXONE

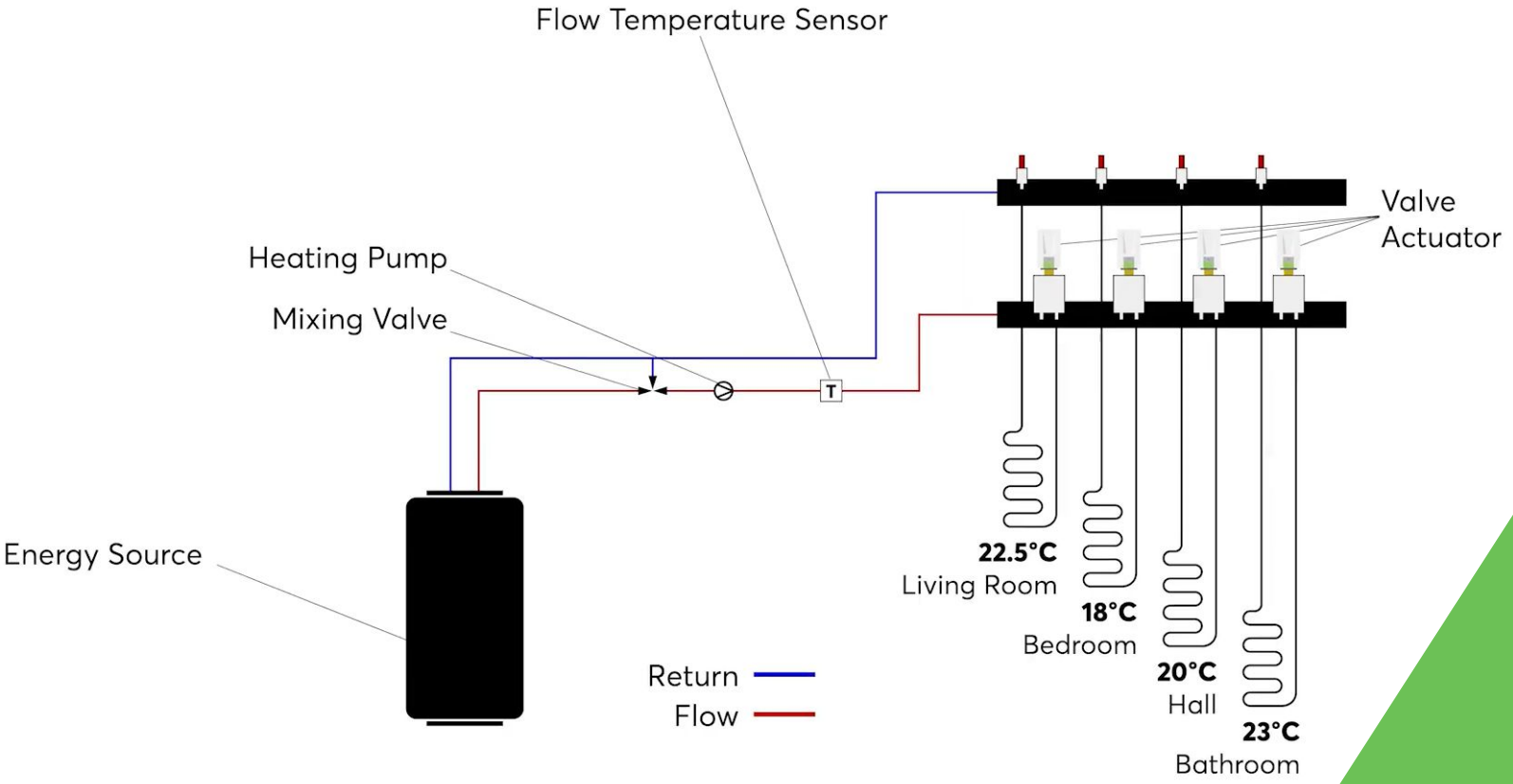
Agenda Points

- Function Blocks
  - Intelligent Room Controller
  - Climate Controller
  - Intelligent Temperature Controller
- Setting temperatures
- The effect of motion
- Parameters



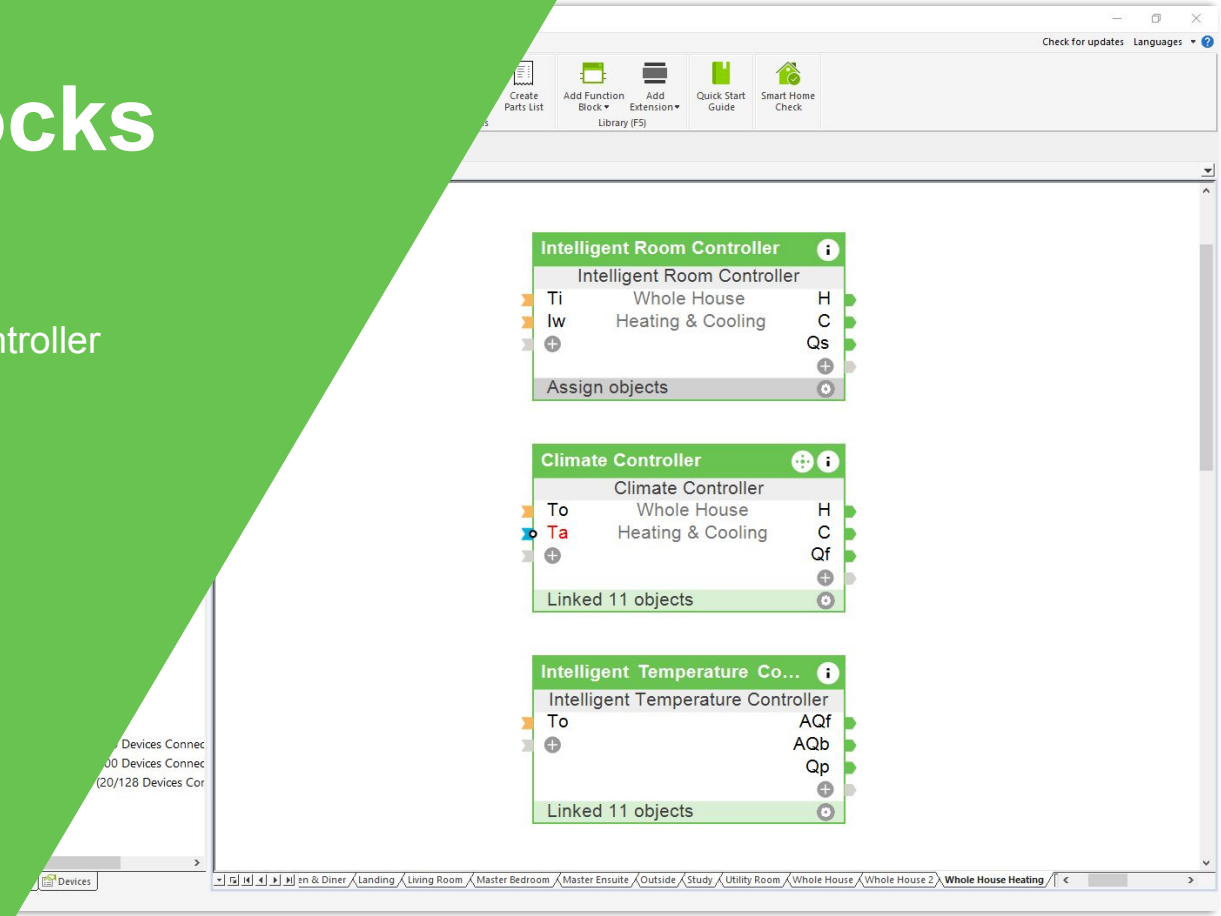
Loxone Heating Products




Flow Temperature Sensor
Heating Pump
Mixing Valve
Energy Source
T
Valve
Actuator
22.5°C
Living Room
18°C
Bedroom
20°C
Hall
23°C
Bathroom
Return
Flow

Heating Function Blocks

- Intelligent Room Controller
- Climate Controller
- Intelligent Temperature Controller



Stage 1

Intelligent Room Controller

This takes the room temperature and based on your setpoint, controls a valve actuator accordingly.

Room Ventilation Controller (MVHR/Fans/Internorm)

Local ventilation devices can support heating and cooling depending on outside, room and target temperatures.

Stage 2

Climate Controller

Based on the demands of multiple Intelligent Room Controllers, the Climate Controller determines the appropriate overall requirement. For example, whether heating, cooling or nothing is required to reach the desired temperatures.

Stage 3

Intelligent Temperature Controller

From the demands of multiple Intelligent Room Controllers, the Intelligent Temperature Controller determines the optimal flow temperature or provides the setpoint for a thermal store.

Stage 4

Mixing Valve Controller

Using the information from the Intelligent Temperature Controller the Mixing Valve Controller can operate a valve to achieve the desired flow temperature.

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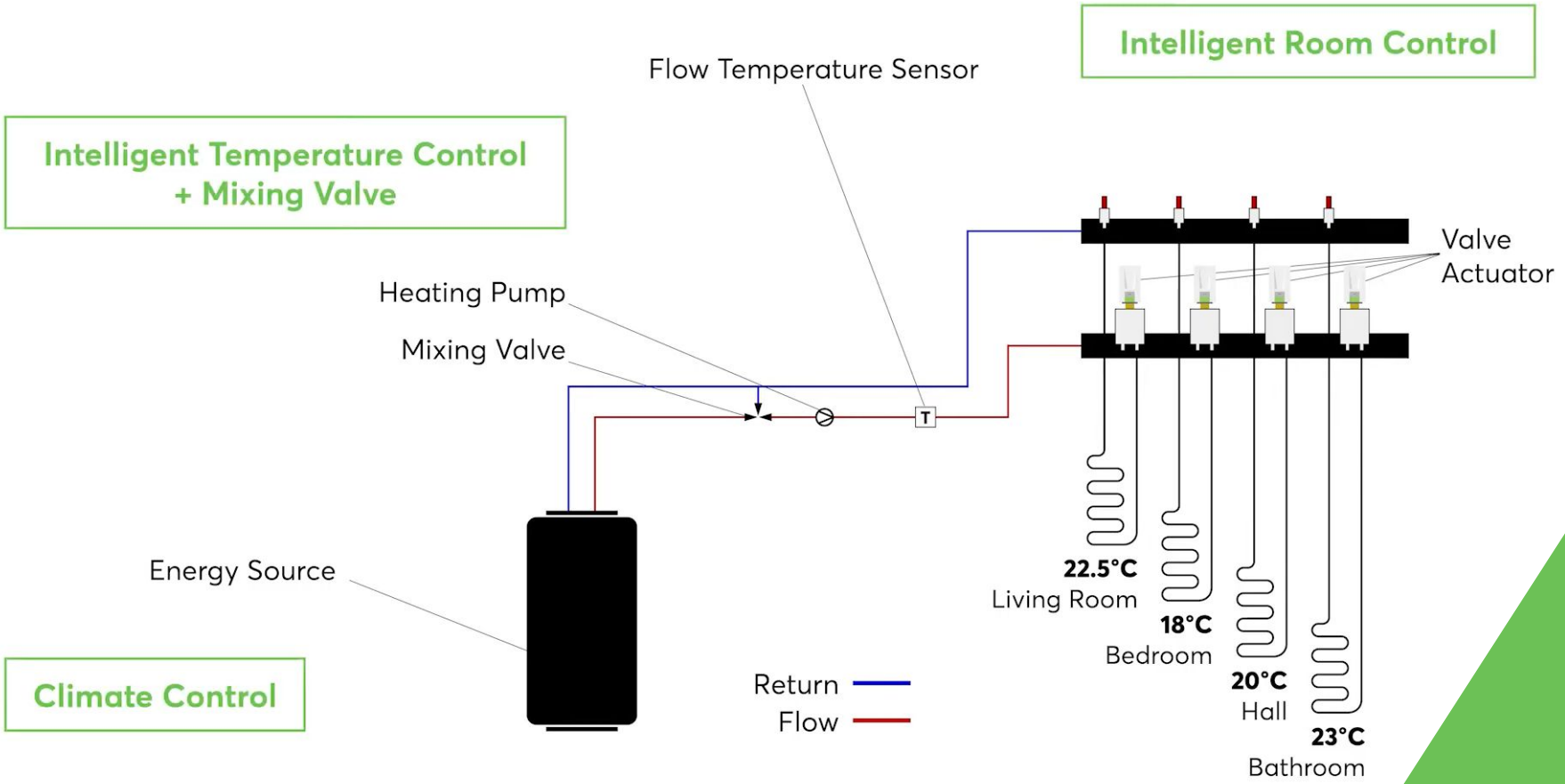
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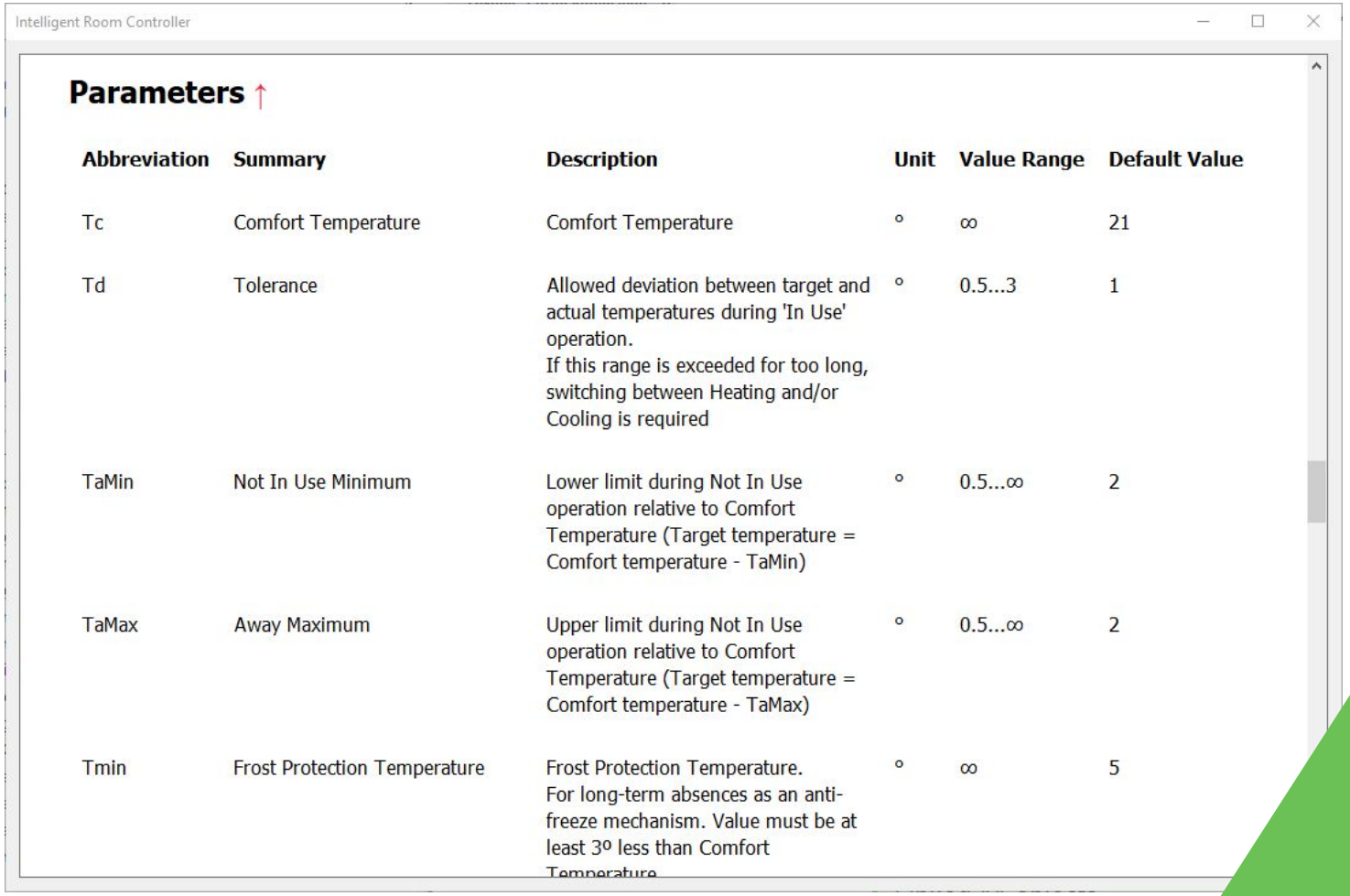
Setting Temperatures

The effect of motion


Intelligent Room Controller
Parameters ↑
Abbreviation
Summary
Description
Unit
Value Range
Default Value
Tc
Comfort Temperature
Comfort Temperature
°
∞
21
Td
Tolerance
Allowed deviation between target and actual temperatures during 'In Use' operation.
If this range is exceeded for too long, switching between Heating and/or Cooling is required
°
0.5...3
1
TaMin
Not In Use Minimum
Lower limit during Not In Use operation relative to Comfort Temperature (Target temperature = Comfort temperature - TaMin)
°
0.5...∞
2
TaMax
Away Maximum
Upper limit during Not In Use operation relative to Comfort Temperature (Target temperature = Comfort temperature - TaMax)
°
0.5...∞
2
Tmin
Frost Protection Temperature
Frost Protection Temperature.
For long-term absences as an anti-freeze mechanism. Value must be at least 3º less than Comfort Temperature
°
∞
5

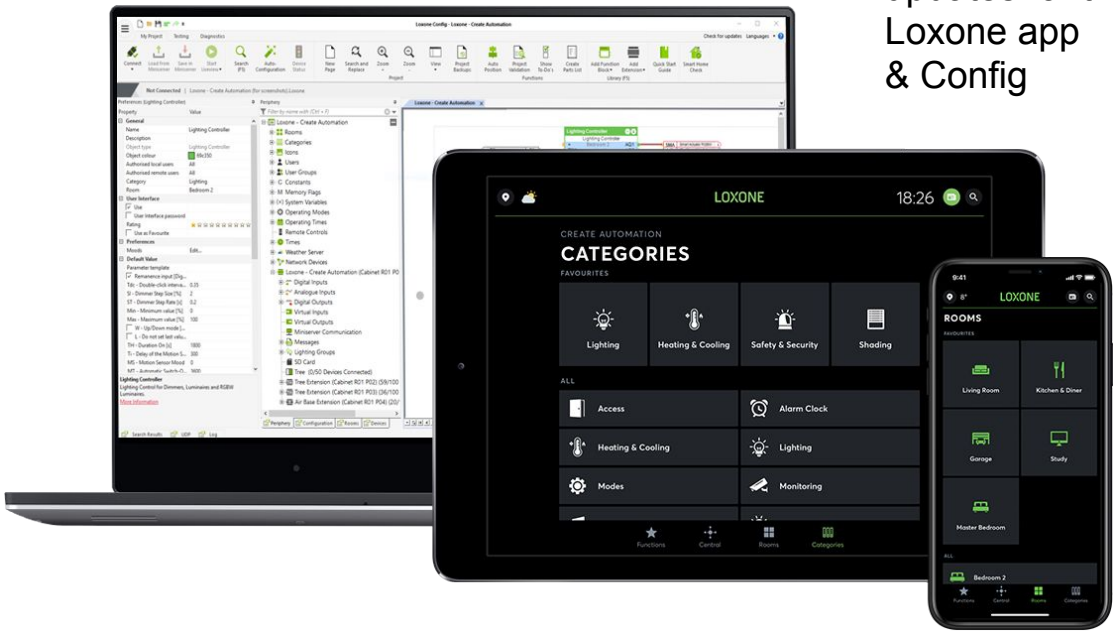
Parameters ↑

Abbreviation	Summary	Description	Unit	Value Range	Default Value
Mode	Mode	Analogue Mode Selection. Generally, Heating/Cooling only mode is started if the sum of the valve openings of the Room Controllers is more than the Switch-On Threshold. 0 = Automatic change depending on the requirements of the Intelligent Room Controllers. 1 = Heating only if there is sufficient demand. 2 = Cooling only if there is sufficient demand.	-	0...2	0
Tmin	Minimum Runtime	Minimum Runtime The minimum runtime must be met before switching to standby (All inputs OFF) or the opposite mode. Minimum openings of the room controllers are ensured.	min	∞	0
Str	Start Threshold	Switch-On threshold for Heating or Cooling demand required to start operation, measured in % of all	%	0...100	30

Parameters ↑

Abbreviation	Summary	Description	Value Range	Default Value
Min	Minimum	Minimum target flow temperature To calculate the flow temperature, the outdoor temperature is required at input To or via system variable.	∞	5
Max	Maximum	Maximum target flow temperature To calculate the flow temperature, the outdoor temperature is required at input To or via system variable.	∞	40
B	Buffer Target Temperature Offset	Buffer temperature increase during Heating (AQb = AQf + B) or buffer temperature reduction during Cooling (AQb = AQf - B)	∞	5
S	Slope	Parameter - Slope of the heating curve (0.05 to 2.5)	∞	0,5
N	Offset	Parameter - Offset of the heating e.g. cooling curve (when heating the flow temperature is increased by this value, when cooling decreased)	∞	0

Powerful Software



Ongoing free updates for the Loxone app & Config

Welcome Package

For the perfect start!

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Business Development

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