digitalSTROM Programming Mode Functional State Machine

digitalSTROM

Version: v1.3-branch*

August 19, 2015

*Revision: 3c451f5c0c98db7edb9555940b5215106499d5d1

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Contents

1 Programming Mode

The Programming Mode enables the configuration of scene values using only pushbuttons (without a digitalSTROM Server). The pushbutton used to start the Programming Mode defines the scene being altered. The Programming Mode is active in only one zone for one group. The following two tables show how the Programming Mode can be activated.

1.1 Room-Button: CLICK_1P

Origin Room	Area	Action	Destination Room	Area
OFF	OFF		OFF	OFF
OFF	ON		OFF	ON
OFF	ON (PRIO)		OFF	ON (PRIO)
OFF	PRIO ON		OFF	PRIO ON
OFF	RUNNING->ON PRIO		OFF	RUNNING->ON PRIO
OFF	RUNNING->OFF		OFF	RUNNING->OFF
OFF	RUNNING->ON		OFF	RUNNING->ON
OFF	RUNNING->ON (PRIO)		OFF	RUNNING->ON (PRIO)
ON	OFF	PROG_ON	ROOM_PROG	ROOM_PROG
ON	ROOM_ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	ON (PRIO)	PROG_ON	ROOM_PROG	ROOM_PROG
ON	PRIO ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	RUNNING->ON PRIO	PROG_ON	ROOM_PROG	ROOM_PROG
ON	ROOM_ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	RUNNING->OFF	PROG_ON	ROOM_PROG	ROOM_PROG
ON	RUNNING->ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	RUNNING->ON (PRIO)	PROG_ON	ROOM_PROG	ROOM_PROG
RUNNING->OFF	OFF		RUNNING->OFF	OFF
RUNNING->OFF	PRIO ON		RUNNING->OFF	PRIO ON
RUNNING->ON	PRIO ON	PROG_ON	ROOM_PROG	ROOM_PROG
RUNNING->ON	ROOM_ON	PROG_ON	ROOM_PROG	ROOM_PROG

1.2 Area-Button: CLICK_1P

Origin Room	Area	Action	Destination Room	Area
OFF	OFF		OFF	OFF
OFF	ON	PROG_ON	AREA_PROG	AREA_PROG
OFF	ON (PRIO)	PROG_ON	AREA_PROG	AREA_PROG
OFF	PRIO ON	PROG_ON	AREA_PROG	AREA_PROG
OFF	RUNNING->ON PRIO	PROG_ON	AREA_PROG	AREA_PROG
OFF	RUNNING->OFF		OFF	RUNNING->OFF
OFF	RUNNING->ON	PROG_ON	AREA_PROG	AREA_PROG
OFF	RUNNING->ON (PRIO)	PROG_ON	AREA_PROG	AREA_PROG
ON	OFF		ON	OFF
ON	ROOM_ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	ON	PROG_ON	AREA_PROG	AREA_PROG
ON	ON (PRIO)	PROG_ON	AREA_PROG	AREA_PROG
ON	PRIO ON	PROG_ON	AREA_PROG	AREA_PROG
ON	RUNNING->ON PRIO	PROG_ON	AREA_PROG	AREA_PROG
ON	ROOM_ON	PROG_ON	ROOM_PROG	ROOM_PROG
ON	RUNNING->OFF		ON	RUNNING->OFF
ON	RUNNING->ON	PROG_ON	AREA_PROG	AREA_PROG
ON	RUNNING->ON (PRIO)	PROG_ON	AREA_PROG	AREA_PROG
RUNNING->OFF	OFF		RUNNING->OFF	OFF
RUNNING->OFF	PRIO ON	PROG_ON	AREA_PROG	AREA_PROG
RUNNING->ON	PRIO ON	PROG_ON	AREA_PROG	AREA_PROG
RUNNING->ON	ROOM_ON	PROG_ON	ROOM_PROG	ROOM_PROG

ROOM_PROG Start Programming Mode for a room scene

AREA_PROG Start Programming Mode for an area scene (including area membership)

ROOM_PROG Start Programming Mode for a room scene

After the Programming Mode activation the first digitalSTROM Device is selected and prepared for programming with a PROG_ON.

1.3 Programming Mode Operation

In Programming Mode the event handling differs between three categories of pushbuttons:

1. The pushbutton that initiated the Programming Mode (Initial Pushbutton)
2. Pushbuttons that are part of the zone and group that is in Programming Mode (Room Pushbuttons)
3. Other pushbuttons in the other zones of the apartment

1.3.1 Initial Pushbutton

CLICK_1P: SAVE_SCENE and PROG_OFF Room and exit Programming Mode

Any other events are handled according to 1.3.2 below.

1.3.2 Room Pushbuttons

CLICK_1X/TIP_1X: STOP_DEVICE if it is running and toggle currently selected digitalSTROM Device

CLICK_1X_UP/TIP_1X_UP: STOP_DEVICE if it is running and execute the MAX scene command

CLICK_1X_DOWN/TIP_1X_DOWN: STOP_DEVICE if it is running and execute the MIN scene command

CLICK_2X/TIP_2X/CLICK_2X_UP/TIP_2X_UP/CLICK_2X_DOWN/TIP_2X_DOWN: select the next digitalSTROM Device in the zone and PROG_ON Device

CLICK_3X/TIP_3X/CLICK_3X_UP/TIP_3X_UP/CLICK_3X_DOWN/TIP_3X_DOWN: PROG_OFF Room and exit Programming Mode

TIP_4X/TIP_4X_UP/TIP_4X_DOWN: ignore

CLICK_1P: ignore

1.3.3 Other Pushbuttons

CLICK_1P: move the digitalSTROM Device sending the event into the zone where the Programming Mode is active

Any other events are handled according to the functional state machine.