

# Navigan terms and definitions. May 2018



These parameters are adjustable in LEDDU/ LEDRU products using Navigan software from [www.navigan.com](http://www.navigan.com)

Requires USB stick NWC 300U

Parameter	Description	Default Value
<b>NAVIGAN Front Page Parameters</b>		
	<b>Name used in Navigan</b>	<b>Description:</b>
		<b>Default. (options)</b>
1	"Occupancy Auto On Light Level"	DIM LEVEL: Automatic ON event will come ON at this level, triggered by motion sensor
		100% (0-100%)
2	"Occupancy Auto OFF Light Level"	DIM LEVEL: When the sensor detects vacancy and turns the lights off automatically, it will go to this level.
		0% (0-100%)
3	"Occupancy Auto On"	Enables or Disables AUTO-ON using signals from the occupancy sensor. Enabled= Occupancy Sensor mode Disabled= Vacancy Sensor mode
		Automatically sets based on what is linked with it. ONLY switch = disabled ONLY sensor = enabled switch AND sensor = disabled.  User can choose any setting.
4	"Minimum Voltage Output"	BOTTOM TRIM: Minimum 0-10V output voltage level when light is switched ON
		1.0V (0.0V to 10.0V)
5	"Maximum Voltage Output"	TOP TRIM: Maximum 0-10V output voltage level when light is switched ON Whatever you put in this box will become your new 100% for all other selections.
		10.0V (0.0V to 10.0V)
6	"Occupancy Auto Off Time"	TIMER: lights will go to "Occupancy Auto OFF" light level this many minutes after room is vacant. Do NOT set to less than 3 minutes.
		15 min (0-71582 minutes)
<b>"GO TO ADVANCED" BUTTON:</b>		
<b>Light Level Sensor Parameters: ONLY active when Light Level sensor is LINKED to LEDx</b>		
	<b>Name used in Navigan:</b>	<b>Description:</b>
		<b>Default (options)</b>
7	"Daylighting Mode"	Choose Between 2-level (2-level mode is only ON/OFF) or 5 point continuous daylight dimming
		5 Level (ON/OFF)
8	"Measured Light Level 1-5"	Used only in 5-level dimming, this will use information from a light level sensor to trigger a change to the lights.
		100, 200, 400, 600, 800 lux (range is 0-1024 lux)
9	"Output Light Level 1-5"	Used only in 5-level dimming, this will be the output when certain light levels are reached. 0- 100% are the options here. 100% is equal to "Maximum Voltage Output" above.
		100, 100%, 60%, 20%, 0% (anything between 0 and 100%)
10	"RAMP 1-2", "2-3", "3-4", "4-5"	Ramp speeds between light levels 1 and 2, 2 and 3, 3 and 4 , 4 and 5 this is how fast the lights will move from one setting to another when light sensor value changes.
		1% per second (can be any speed, 0 is instant on)
11	"Photo On Threshold"	Used only in 2-level mode, light is switched to "Maximum Voltage Output" if light level is below "Photo On Threshold"
		<200lux
12	"Photo Off Threshold"	Used only in 2-level mode, light is switched to "Minimum Voltage Output" if light level is above "Photo Off Threshold"
		>400lux
13	"LLS Adjustment Delay"	If you use a switch or sensor to change the light level this setting will delay the activation of the daylighting system by the value set in this timer.
		15 min
14	"Dim curve Adjustment via Rocker"	This is not recommended for use.
		ON (enabled) recommend OFF.

## “Rocker Parameters” When listed in % per second... 100% is equal to “Maximum Voltage Output above”

	Name used in Navigan:	Description:	Default (options)
15	“ON Transition Dim Speed”	Speed the light changes when a quick press ON is made on any linked switch	20% per second (0 is instant ON, 1-500% per second)
16	“OFF Transition Dim Speed”	Speed the light changes when a quick press OFF is made on any linked switch	20% per second (0 is instant OFF, 1-500% per second)
17	“Rocker dim UP speed”	Speed the light changes when press AND HOLD is done on any linked switch ON button	20% per second (0 is instant ON, 1-500% per second)
18	“Rocker dim DOWN speed”	Speed the light changes when press AND HOLD is done on any linked switch OFF button	20% per second (0 is instant OFF, 1-500% per second)
19	“Rocker Switch Auto OFF time”	You can use this as a twist timer. When the switch is pressed ON this timer can start, when the timer expires the light goes out. Disabled by default	0=disabled (0-71582 Minutes)
20	“Dimming via Rocker”	Allows you to make the switches on/off only or enable dimming features.	Enabled (Disabled)
21	“Occupancy Auto On Delay”	If the occupant uses a SWITCH to turn the lights OFF manually, the system will wait this timer to enable the sensor to automatic ON again. The sensor will be ignored during this timer.	15 min (1-71582 Minutes)

## “Misc Parameters”

22	“Sensor Ramp Up Speed”	Speed the light changes when a SENSOR is triggering ON event.	20% per second (0 is instant ON, 1-500% per second)
23	“Sensor Ramp Down Speed”	Speed the light changes when a SENSOR is triggering OFF event.	20% per second (0 is instant OFF, 1-500% per second)
24	“Vacancy Grace Timer”	If you have a MANUAL on lighting set up, but the lights go off while someone is in the room, you will have this timer to wave your arm and the lights will automatically turn back on. Once this timer has expired you will need to manually turn lights back on with switch.	30 seconds (1092 minutes)
25	“Repeater Function”	Defines the repeater level of the device (OFF/1-hop/2-hop) <b>IMPORTANT! See Repeater Details on last page.</b>	OFF (disabled)
26	“Light Level After Power Loss”	This decides what the controller does after a power failure. Typically this is set to “Last State” so the lights return how they were when the power failed.	LAST STATE (ON, OFF, Last State)
27	“Repeat Linked Devices Only”	Disabled will repeat everything, enabled will repeat ONLY those devices that are linked to the controller you are choosing to act as the repeater. <b>IMPORTANT: See Repeater Details below on last page.</b>	Enabled (Disabled)
28	“Status Message Timer”	The controllers transmit their actual status after each change, OR every X minutes based on this timer. Not Needed for stand-alone systems, required for most software or cloud connected systems.	10 Minutes. (0= off, 1-71582 minutes)
29	“Driver ON Delay”	This is the Delay between turning the relay ON and stabilizing the 0-10V output.	50 milliseconds (0-2500 ms)
30	“Enable Debug Messages”	Enable or disable debug messages to be used by EnOcean Engineering or trained staff only.	Disabled (enabled)
31	“Enable Communication Link Checker”	With this feature ENABLED it will allow the controller to flash when any learned sensor has its button pressed. This is a very simple way to verify you’ve paired the sensors to the correct controllers. It can also be used to verify wireless signal between devices.	Enabled (disabled)

## USING REPEATERS, IMPORTANT DETAILS:

Q- Do I need to buy separate hardware to add a repeater?

- A- NO. LEDxU products can all be enabled as a repeater and still control the fixture or circuit they are paired with, it becomes a dual function device when set to repeat. There are no noticeable changes to the operation of a controller that has been enabled as a repeater.
- A- Only devices connected to power can operate as a repeater. (example, sensors and switches cannot be repeaters)

Q- When to use a repeater?

- A- If you have a space where some of the controllers don't always receive the first switch press, or they don't seem to DIM together you may benefit from adding a repeater.
- A- Inconsistent operation of various controllers in the same room. (some stay bright, some stay dim)
- A- You need to cover very long distances between controllers and sensors or switches.

Q- How do I choose which Controller to turn into a repeater?

- A- Toggle the lights on and off several times to determine which lights are operating consistently (every time) and which lights are not working as you expect. Select the consistently operating controller that is FURTHEST from the switch or sensor and select 1 hop repeater for this one.

Q- How do I turn it into a repeater?

- A- Select " 1 hop" from the "repeater function" box under "Go To Advanced" in Navigan software. You'll also need to decide WHAT to repeat, everything or only some things. See next ?

Q- Will it repeat everything EnOcean or just that one switch/sensor?

- A- You can select to repeat every EnOcean device within range or ONLY what the controller is linked with. In Navigan/Go To Advanced/"Repeat Linked Devices" option. Disabled will repeat everything, enabled will repeat ONLY those devices that are linked to the controller you are choosing to act as the repeater.
- B- More info: if you have a controller/repeater that is linked to 2 switches and one sensor and you ENABLE this option it will ONLY repeat the 2 switches and one sensor that is in memory. If you DISABLE this feature it will repeat ALL EnOcean signals within the space.

Q- Can I use more than 1 repeater?

- A- YES, in large spaces we sometimes see multiple 1 hop repeaters being used. And in some applications you'll need to use a combo of 1 hop and 2 hop repeaters.

Q- When do I use a 2 hop repeater?

- A- Please call the enocean support team before setting any repeaters to "2 Hop" this can sometimes cause network traffic to increase too much. It's best to discuss with support when this valuable tool can be safely used. [Support.na@enocean.com](mailto:Support.na@enocean.com) or 801-943-3215.