

Print Advice

- If you like you can try to store the cheat sheet rolled up in an empty battery carrier
- Print the cheat sheet on a laser printer double sided in landscape. Size -> [x] double sided -> Use [x] mirrored on the short edge
- The height of the cut out should be 62mm
- Cut it out

**Lumintop GT70:**  
The top of the ramp brings you to half of TURBO. A double click brings you to TURBO with about 8 A.  
It is made to keep the GT70 longer in regulation with very little visual difference.

**Links**  
GT70 lamp on BLF: <http://budgetlightforum.com/node/61334>  
Produced by Lumintop: <http://lumintop.com> Videos: configuration <http://bit.ly/narsil-vid3> @8.5min  
A Lithium Ion Safety 101 on BLF: <http://bit.ly/liionsafety> more about UI <http://bit.ly/narsil-vid1>  
Narsil software in the GT thread on BLF: <http://bit.ly/narsilgt> <http://bit.ly/narsil-vid2>  
Narsil Thread with links to Narsil Manual (PDF) and Advanced Notes (PDF): <http://bit.ly/narsilthread>  
Narsil Cheat Sheet (PDF) to print by yourself: <http://bit.ly/narsil-cs> GT Support: <http://bit.ly/gtsupport>

**Navigation has "Lock in Mode". Explanation:** Navigation works only in Modes and Strobe, not in Ramping.  
After 1.2sec after setting the brightness you can not increase the brightness with a single click, because it turns it off.  
But you can first decrease the brightness by a click&hold and then increase by a single click. A click&hold in MODES or STROBES wrap from 1st mode to last.  
**Ramping Explained** A click&hold increases the brightness. If you miss your desired brightness / overshoot, a second click&hold reduces the brightness. So it toggles direction with each click&hold. (Timeout for this is 1.2sec)  
If your lamp is off, a click&hold starts first moonlight, pauses shortly and then ramps up.  
To indicate the maximum or minimum brightness level the lamp flickers when it reaches this limits.  
When you release the switch it tells what channel you use: 1 blink of the button = channel 1 , 2 blinks = channel 2.  
To turn the indicator light temporarily off, turn the light quickly off, while flashing the channel. Works at any level in ON. From OFF a slowish double press does the trick.  
**If You Want to** switch from a low brightness level to FULL and back again to the lower level:  
- 2x for FULL brightness, then 2x to go low again (Works only in Ramping with strobes = off) or  
- 2x for FULL brightness, then 1x for OFF and 1x for last memorized brightness. (Works only in Ramping, strobes = on)

Concept and Design by J. Hollmann

**Safety Measures in Narsil**  
The use of 4 matched batteries in the Lamp is recommended.  
Indication it is ready: 2x blinks after power is applied  
In case of a jammed button: Shut off after 20sec  
Electronic Lock Out in Ramping:  
Lock out turn ON or OFF 4x click (4x short blinks)  
  
Electronic Lock Out in Modes:  
Lock out turn ON or OFF 2x click + click&hold (4x short blinks)

**Overheat protection:** Output is lowered at 55°C  
**Low Voltage Protection (LVP)**  
Output decreasing from (fuel saver) 3.0V on.  
Main LED: 3x blinks as indication.  
Indicator LED: every 8 sec two blinks as indication.  
**Shut off at 2.8V**  
Main LED: 8x blinks as indication and shut off  
Indicator LED: every 8 sec two blinks (for 6 min)  
You should at least **remove the cells** or **do a mechanical lockout** to prevent any more drainage! Otherwise your batteries can be damaged.

**This lamp belongs to:**  
  
If found please:  
Tel.  
  
Email

The Lumintop GT70 is available with two different LED colors: Neutral white or clear white. That means the table with the MODES output in percent can be a bit off.

In the **GT70** the strobes are disabled by default.  
To enable please watch <http://bit.ly/narsil-vid3> from 8.5 min on. To get an idea how to do this. To enable strobes you must click 3 times instead of one in setting #4 (ramping) or setting #8 (modes).

The **GT70** uses an open firmware called NarsilM.  
The same firmware is used in other lights (BLF Q8 and BLF GT)  
So the videos for these lights are also helpfull for your lamp. The biggest difference is you must hold the button down for 16sec instead of 8sec to get in configurations menue.

## NarsilM Cheat Sheet

- It has on the left tables with the user interface operations for RAMPING and MODES. And how to get the temperature and firmware version
- on the right tables how to set up and the mode set table.
- The arrows indicate how sub-tables are connected.

## NarsilM v1.3 for Lumintop GT70

### Configuration

lock at <http://bit.ly/narsil-vid3> @8,5min before

- In the "Mine" column you can enter your settings

### User Interface

## PLEASE CUT HERE ✂

Overview Click Sequences NarsilM for version 1.3 (Cheat Sheet for Lumintop GT70 Rev. A.)

	RAMPING		MODES	
	Clicks	Action	Clicks	Action
from OFF	- 1x	last level ON	1x	first mode (from the mode set) a)
	- click&hold	moon + ramps up	- click&hold	last mode (from the mode set) = full
	- 2x	TURBO = max level b)		
	- 3x	battery check		
	- 4x	lock out on/off (4x short blinks)		
from ON	- 5x	momentary (for off: Power Reset)		
			1x + click&hold	temporarily locator LED off/on c)
			- 1x + click&hold (for 2.5 sec)	battery check
			- 2x + click&hold	lock out on/off (4x short blinks)
			- click&hold (over 1.2 sec)	strobe #1

  

	RAMPING		MODES	
	Clicks	Action	Clicks	Action
from OFF	- 1x	switches lamp OFF	1x	next mode or after 1.2sec OFF
	- click&hold	ramps up, if max level = ramps down d)	- click&hold	previous mode
	- 2x	TURBO = max level b)		
	- 3x	battery check		
	- 4x	lock out on/off (4x short blinks)		
from ON	- 5x	momentary (for off: Power Reset)		
			- 2x + click&hold	lock out on/off (4x short blinks)
			- click&hold (over 1.2 sec)	strobe #1

- a) depends on option "Mode Memory". If set = 2, it starts with the last memorized mode. Default is 1 = off  
b) This max level is not memorized. So you can 2x for full and to go back to the previous brightness, please use: Switch OFF and ON  
c) Every consequent click&hold within 1.2 sec reverses the ramping direction.  
d) When enabled in Advanced Settings

**Blink Out Temperature**  
"from battery" check via 2x  
45°C would be 4 blinks, pause, then 5 blinks  
like in battery check

**Blink Out Firmware Number**  
from "Blink Out Temperature" via 2x  
version 1.2 would be 1 blink, pause, then 2 blinks  
like in battery check  
To RESET to factory settings: click&hold for at least 1.2 seconds. Success indicator: 4x short blinks

Strobe Modes / Blinky Modes		
to get strobe:	Strobe #	Modename
from Ramping: go to full, then 2x Clicks	1	18 Hz strobe
	2	police strobe
from Modes: longhold	3	bike strobe e)
	4	2 sec beacon
then navigation works as in Modes	5	10 sec beacon
to end: a click for off		

- e) Continuous light with a brighter stutter so car drivers notice you better at night.

Configuration Settings MODES

Setting #	Function	Clicks	Default Value	Mine
1	Ramping Mode	1=disable, 2=enable	2	
2	Choose Mode Set	1-12 (1-7 is # of modes) see Mode Sets	4	
3	Moon Mode	1=disable, 2=enable	2	
4	Mode ordering	1= sets lo→hi, 2=sets hi→lo	1	
5	Mode Memory	1=disable, 2=enable	1	
6	Set Moonlight Level	1-7 (PWM value)	3	
7	Thermal / timed Stepdown	1=disable, 2=Temperature f), 3=timed Timed: 1=60sec, 2=90sec, 3=2 min, 4=3 min, 5=5 min, 6=7 min	2	
8	Blinky mode	1=disable, 2=one strobe, 3=all strobes/beacons	1	
bypass the 3.5 sec wait: doing a click&hold to skip to the next setting. to end: hold, until exit is indicated with 4x short blinks				

Mode Sets			
Mode Set Order	Mode Count	Mode Percentages GT70	Notes
1	1	full only	(full is always max FET)
2	2	5 - full	
3	3	5 - 30 - full	
4	4	0.5 - 5 - 40 - full	
5	5	0.7 - 5 - 20 - 40 - full	
6	6	0.5 - 5 - 15 - 25 - 50 - full	
7	7	0.3 - 1.3 - 4 - 10 - 20 - 60 - full	
8	8	0.3 - 1 - 2.6 - 5 - 11 - 25 - 70 - full	
9	4	0.5 - 2.2 - 9 - 22	
10	5	0.5 - 2.2 - 9 - 22 - 54	
11	6	0.5 - 2.2 - 9 - 22 - 54 - full	
12	8	5 - 10 - 18 - 30 - 45 - 55 - 71 - 89	
to end: not needed, it continues to Configuration Setting number three (#3)			

from "Chose Mode Set"

Configuration Settings RAMPING

Setting #	Function	Clicks	Default	Mine
1	Ramping Mode	1=disable, 2= enable	2	
2	Set Moonlight Level	1-7 (PWM value)	3	
3	Thermal / timed Stepdown	1=disable, 2= Temperature f), 3= timed Timed: 1=60sec, 2=90sec, 3=2min, 4=3min, 5=5min, 6=7min	2	
4	Blinky mode	1=disable, 2= one strobe, 3=all strobes/beacons	1	
bypass the 3.5 sec wait: doing a click&hold to skip to the next setting. to end: hold, until exit is indicated with 4x short blinks				

- f) To set Temp.: Wait with click till lamp gets hot. If clicked before 5sec = No new temp. is set  
Default is 55°C. See more in the main manual

### Advanced Configuration Settings

Setting #	Function	Clicks	Default	Mine
1	Locator LED feature	1=disable, 2=enable	2	
2	Battery level Indicator LED Only	1=disable, 2=enable	1	
3	Indicator LED Enable	1=disable, 2=enable	2	
bypass the 3.5 sec wait: doing a click&hold to skip to the next setting. to end: hold, until exit is indicated with 4x short blinks				

### A few Notes:

1x is a single click, 2x is a double click, 3x is a triple click.  
click&hold = You press the button and hold it down a bit longer. When you have to hold it down much longer it is mentioned.

If you have a problem at OFF, lamp seems not respond to click:  
Timing of click for off, hold the switch just a tad too long and the Lamp will not register it as shut down command but treat it as a very short ramp command. Your light is not broken. Please try a very fast and short click.

Quick introduction for newbies or relatives:  
- Don't hold the button down for longer than 16 seconds! The lamp will enter configuration and starts wild blinking. Don't push a button or you change things. In case handle it to a pro or search for reset in the cheat sheet.  
- Don't look in the working end!  
- One click on, one click off.  
- Push the button and keep it holding for ramping. Rember to release within 16 seconds.

JasonWW has a few Videos about the NarsilM user interface: <http://bit.ly/narsil-vid1>

Reset to factory in RAMPING:  
The Lamp can be OFF or ON:  
3x, 2x, 2x, press&hold (for 1.2sec) till 4 blinks

Reset to factory in MODES:  
Only from OFF:  
1x, click&hold (for 2.5 sec), 2x, 2x, press&hold (for 1.2sec) till 4 blinks

Strobe Modes: (changed from NarsilM v1.0)  
Hint: In the GT70 the strobes are off by default. To activate see backside.  
The normal way to use strobes (RAMPING: 2x, 2x, Y clicks [Y=1...4]) is time sensitive because of the lock in modes. Some people are not quick enough for the Y clicks, because the Ys have to be done right after the second double click.  
If navigation is hard, try:

RAMPING from OFF/ON: Double click, double click. Now you are in the 1th strobe = 18Hz Strobe.  
or  
MODES from OFF/ON: Longhold (over 1,2sec). Now you are in the 1th strobe = 18Hz Strobe.

Now you can go back via click&hold. You can go back endlessly. If you go backwards you have time to do this.

MODES The mode sets in the table are exclusive moonlight. If you choose mode set #6 (which has 6 values in the table) and enable moonlight you will end up with 7 brightness levels.

Switch from MODES to RAMPING  
(while holding, the lamp goes into strobes, that's normal)  
hold for 3.2sec, after two short blinks and one blink, do a doubleclick (2x).  
The lamp continues to blink out configuration for RAMPING.

Switch from RAMPING to MODES  
(you hold for a long time, if you ramp down it's easier on the eyes)  
hold for 16sec, after two short blinks and one blink, do a single click (1x).  
The lamp continues to blink out configuration for MODES.

Basically it is holding the button till it blinks 2x and 1x and then a double click shuts RAMPING on or a single click shuts it off.

Now you can wait till the lamp is gone through the rest of the config menu. The lamp will blink four times short when finished.

If strobes are completely disabled in the settings:  
A 2x click from 2x turbo should restore the previous level you were at.  
GT70: The strobes are disabled by default. To activate see backside.

There is a bit of confusion when you read in the forum about Narsil and its version numbers, because they are not straight and there was a name change to NarsilM.

### Narsil / NarsilM Timeline

2016-07 Narsil v1.12  
2016-09 Narsil v1.1 (because only two digits blink out)  
2016-09 Narsil v1.2  
2016-10 fork to Narsil Triple  
2017-04 Narsil v1.3  
2017-05 NarsilM v1.0  
(Narsil Multi, combines Narsil 1.3 and Narsil Triple)  
It is used in the BLF Q8 and the Q8 uses only two channels.  
2017-08 NarsilM v1.1 for the BLF GT prototype (with Buck driver support merging) also another config: GTBug  
2017-10 NarsilM v1.2 config: 2C1S  
2018-05 NarsilM v1.3 for Haikelite MT09R (Texas\_Ace)  
2018-07 NarsilM v1.3 for Lumintop GTmini (Texas\_Ace)  
2018-08 NarsilM v1.3 for Lumintop GT70 (Texas\_Ace)