



**BARNES**  
HEALTHCARE SERVICES

# TRILOGY NON-INVASIVE VENTILATION THERAPY



**Servicing Location:** \_\_\_\_\_

**Location Phone Number:** \_\_\_\_\_



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# INTRODUCTION

Non-Invasive Ventilation therapy has been prescribed by your doctor to assist with your breathing while you sleep and some during the day. Its purpose is to reduce the effort required for breathing by resting your breathing muscles and expanding your lungs. By wearing the device for a minimum of 6-8 hours each night, the prescribed settings aim to keep your airways open, remove waste gases (like carbon dioxide), and maintain your oxygen levels. As you continue with the therapy, you should gradually experience improvements such as increased energy, higher activity levels, fewer and less severe headaches upon waking, and feeling more alert.

The therapy specifically targets reducing the levels of carbon dioxide in your blood. Elevated carbon dioxide levels can make you feel sluggish or lethargic, and in severe cases, it can even impair your body's natural drive to breathe, which may lead to hospitalization.

Please note that the settings on your device are tailored to your height and gender and should only be adjusted by a doctor's order. The AVAPS-mode is designed to provide comfortable breathing support, with the ventilator continuously monitoring your breathing pattern and delivering the necessary pressures.

At Barnes Healthcare Services, our dedicated team is committed to helping you benefit from Non-Invasive Ventilation therapy by ensuring consistent and successful use of your device. Initially, a Respiratory Therapist will visit your home, followed by two more consecutive monthly visits, and subsequently every four months thereafter. If you require additional assistance, we can adjust the visit schedule to support your success with the therapy.

Thank you for choosing Barnes Healthcare Services as your provider. We look forward to assisting you throughout your therapy journey.

*Please note: The information included in this document is for informational purposes only and is not intended to substitute in any way for medical education, training, treatment, advice, or diagnosis by a healthcare professional. Barnes Healthcare Services makes no warranties related to the information in this document. A qualified healthcare professional should always be consulted before making any healthcare-related decisions.*

# TRILOGY 100 VIDEO LINKS



Part 1 - Introduction to Therapy



Part 2 - Machine Overview



Part 3 - Circuit Assembly



Part 4 - Mask Assembly and Care



Part 5 - Humidifier Setup



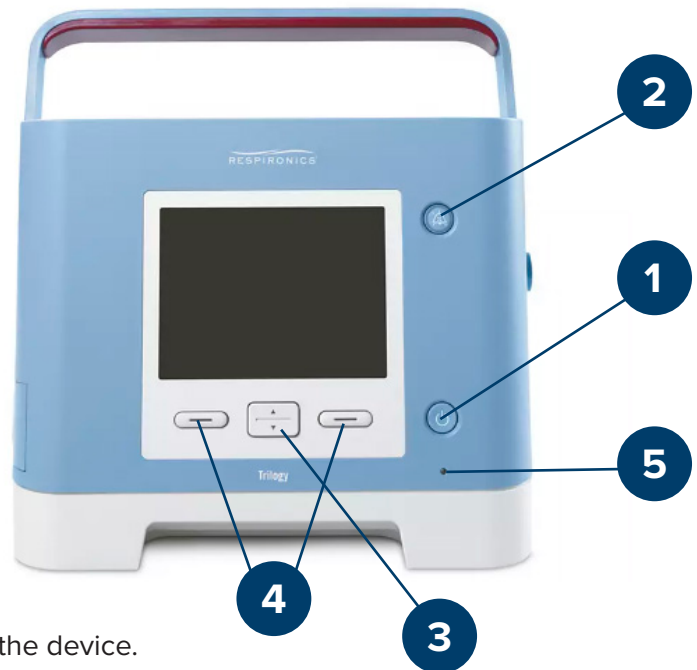
Part 6- Humidifier Circuit Assembly



*Typical setup of Trilogy Non-Invasive Ventilation without a heated humidifier.*



*Typical setup of Trilogy Non-invasive ventilation with a heated humidifier.*



## Front Panel Features:

The Front panel contains the control buttons, visual indicators, and display screen.

## Buttons

The following buttons are included on the front panel of the device.

### 1. Start/Stop Button

This button turns the airflow on or off, starting or stopping therapy.

### 2. Alarm Indicator and Audio Pause Button

This button serves two purposes: it temporarily silences the audible portion of an alarm, and it also acts as a visual alarm indicator. When silencing an alarm, if the cause of the alarm is not corrected, the alarm sounds again after one minute. Each time the button is pressed, the alarm silence period resets to one minute.

#### (a) Red Alarm LED

On the Alarm Indicator/ Audio Pause button, a red light flashes to indicate a high-priority alarm.

#### (b) Yellow Alarm LED

On the Alarm Indicator/Audio Pause button, a yellow light flashes to indicate a medium priority alarm. A solid yellow light indicates a low-priority alarm.

### 3. Up/Down Button

This button allows you to navigate the display menu and edit device settings.

### 4. Left and Right Buttons

These buttons allow you to select display options or perform certain actions specified on the screen.

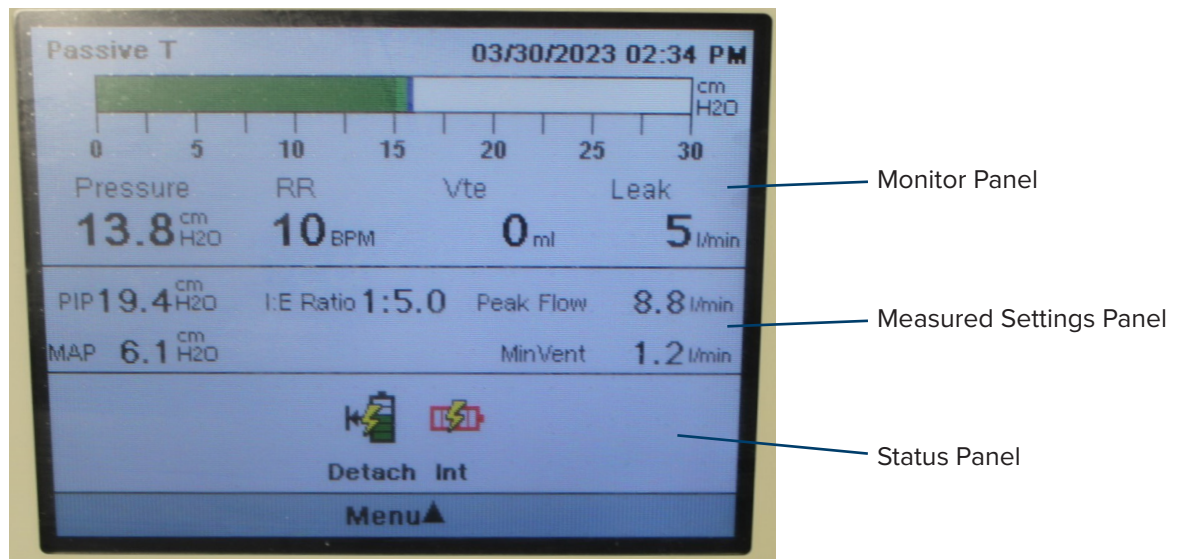
### 5. AC Power LED

In the lower right corner of the front panel, a green LED light indicates that AC power is applied to the device. This light remains on as long as adequate AC power is available.

### 6. Keypad Backlight LEDs

The Start/Stop, Up/Down, and Left/Right buttons all have a white LED that lights up if the keypad backlight is turned on in the device Options menu.





### Monitor Panel:

This panel lets you know which therapy mode is being used.

Pressure: amount of force it takes to deliver a breath to the lungs.  
Matches bar graph at top of screen.

RR: Number of breaths the patient is taking per minute

Vte: Tidal Volume is given in ml., volume of air exhaled with each breath

Leak: measures the air escaping from your mask

### Measured Settings Panel:

PIP: Peak Inspiratory Pressure - highest pressure delivered on patient's last breath

MAP: Mean airway pressure - average pressure in patient airway

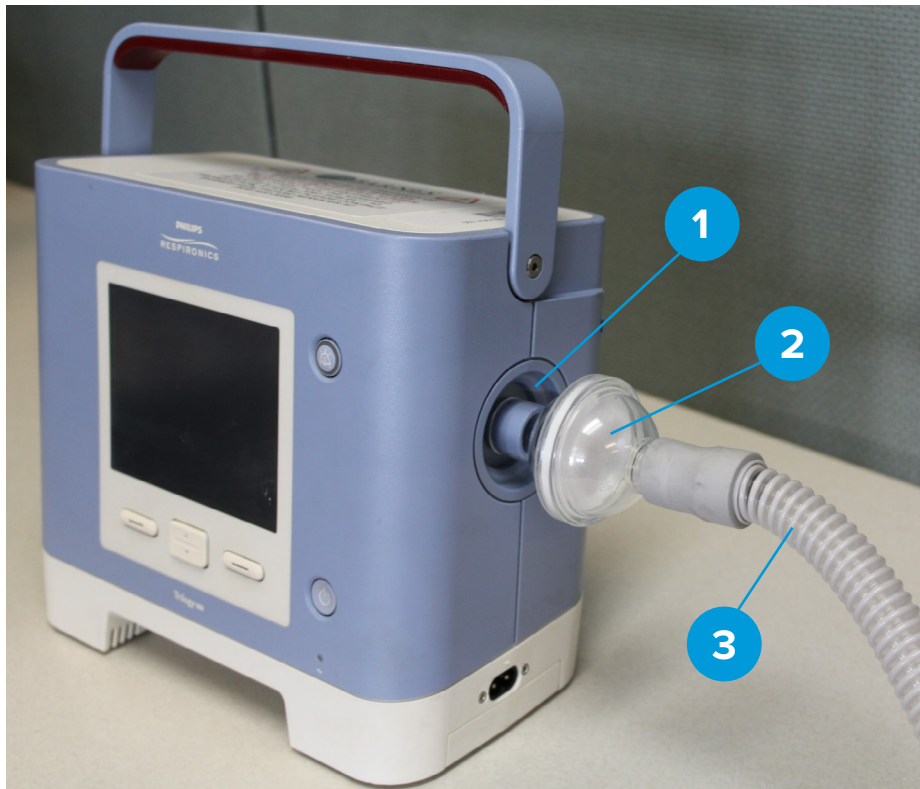
I:E Ratio: amount of time inhaling compared to the amount of time exhaling

Peak Flow: highest inspiratory flow delivered on patient's last breath

MinVent: amount of air delivered to patient over last minute.

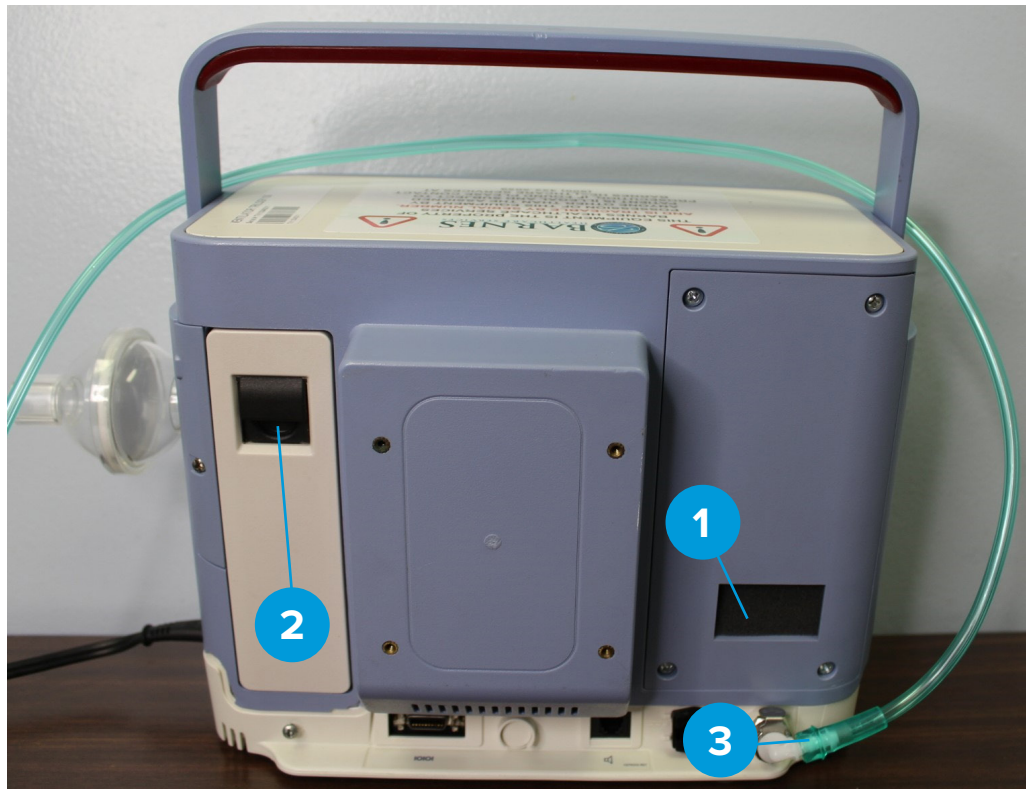
### Status Panel:

Shows what features are activated. Typically you will see icons that relate to the SD Card/ Detachable and Internal Battery ramp activation and Access to the ventilator menu.



## Side of Trilogy

1. Air Outlet Port
2. Bacteria Filter: *Replace with a new one once per month.*
3. Tubing: Clean once per week by soaking for 15-20 minutes in dishwashing liquid, rinse, and then hang to dry.



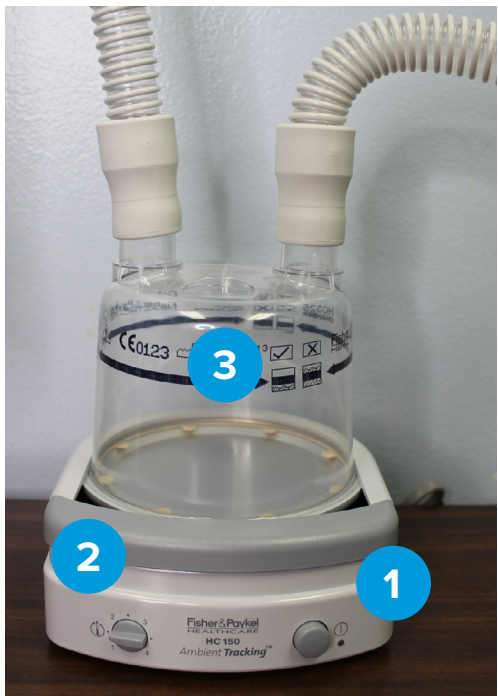
## Back of Trilogy

- 1. Air Inlet Port with Pollen (foam) Filter:** This needs to be rinsed at a minimum once per week, by running under water to eliminate dust. Be sure that it is dry before putting back in the ventilator. This can be replaced once a year.

Place the Ventilator on a hard, non-carpeted level surface, **NOT on the floor.**

Make sure the air inlet port in the back of the device is not blocked.

Air **MUST** be able to flow freely around the unit.
- 2. Detachable Battery:** This battery will last approximately 3 hours when fully charged. To make sure your battery stays charged and ready for power outages, keep your ventilator plugged in at all times. There is also an internal battery that will last approximately 3 hours also.
- 3. Oxygen Adapter:** If you have oxygen ordered for use with your ventilation therapy, this is where you would attach the tubing. (Cleaning: wipe off the adapter once per week with a damp cloth)



### Trilogy With Heated Humidifier

A humidifier is sometimes added to your therapy to help with dryness from the airflow of the ventilator. If you opt to use a heated humidifier, you will need to make sure you are cleaning the chamber and tubing at a minimum of weekly.

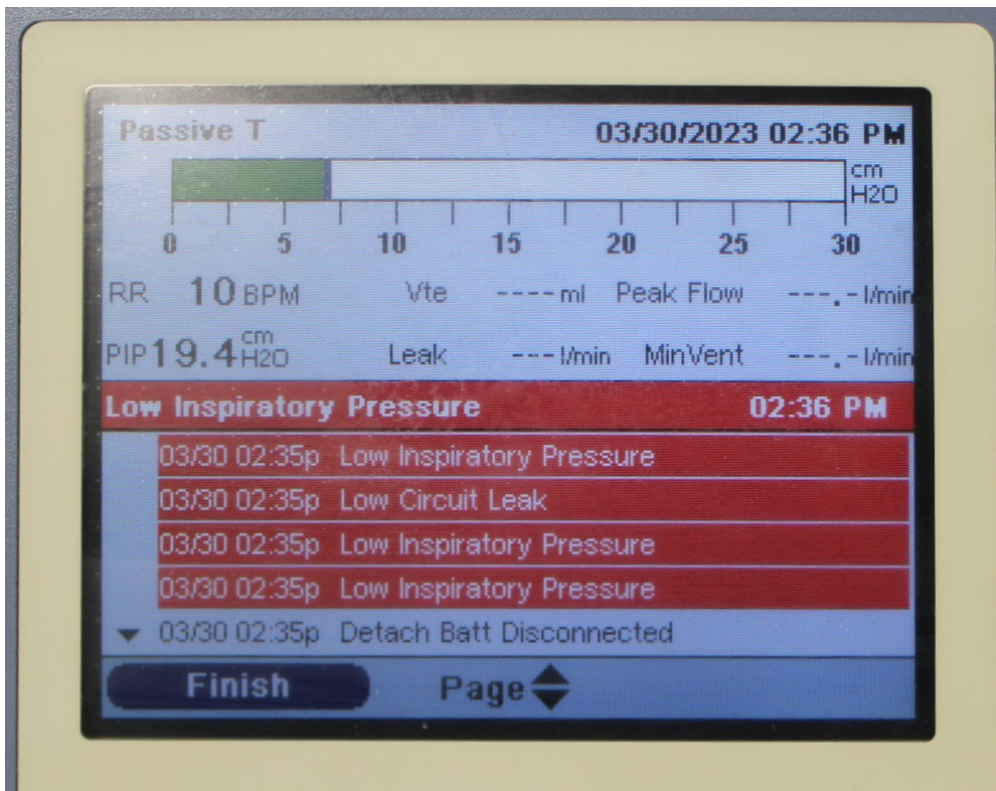
1. Heater unit: the green light indicates the unit is on
2. The dial is used to provide more heat to the water producing more humidity in the air being delivered to you. If you are experiencing dryness in your mouth or nose, then you should gradually increase the heat over several nights. Should you start having water in the tubing or splashing up into the mask, turn the dial down to reduce the amount of humidity. You can also use the humidifier without heat. This will provide a small amount of humidification to your airways.
3. Cleaning: Daily - empty the water chamber. Weekly - Soak the chamber in warm water with dishwashing liquid for 15-20 minutes, rinse well and let dry. The chamber itself can be replaced every six months.
4. Be sure to turn the heated humidifier off when ventilator is not in use.





### Parts of the Full-Face Mask

1. **Headgear:** This should last 6 months or more. This can be hand washed in warm soapy water and rinsed off as needed.
2. **Cushion:** This needs to be wiped off with a damp cloth daily. This can be replaced every 2 months, typically when it doesn't hold a seal any longer.
3. **Frame:** This holds the cushion and headgear in place. It can be replaced with the whole kit (headgear/ cushion) once every six months.



## Alarms

If you have alarms on the Trilogy unit, the alarm situation will be displayed on the bottom half of the screen. This lets you know what variations in normal functions the ventilator detect happening.

Typically if you see Low Pressure or Circuit Disconnect, you have a leak in the tubing, mask, O<sub>2</sub> adapter, or something has disconnected from the circuit.

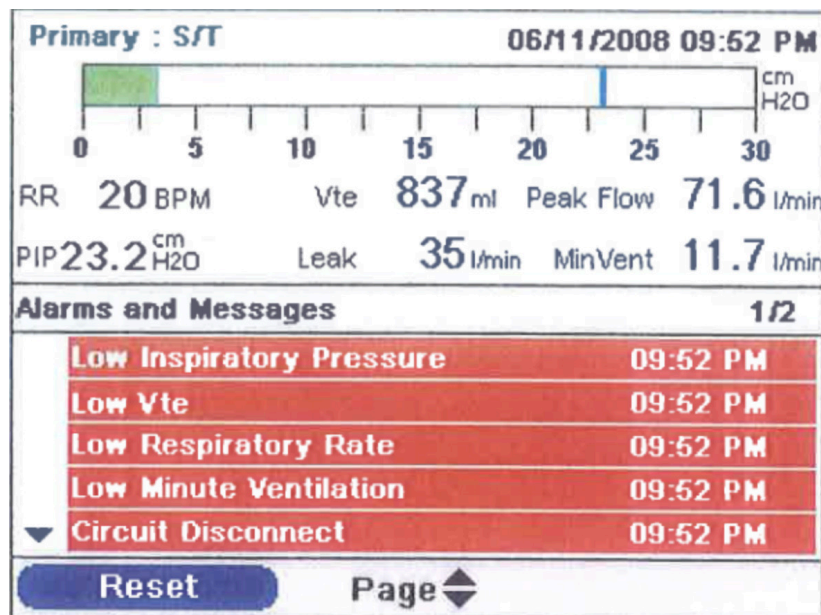
The easy fix is to find the leak and fix it. Often it is as simple as unhooking the mask kit and fitting it on again.

The tubing or bacteria filter may have a hole, crack, or tear that is causing a leak. If so, this should be replaced.

The O<sub>2</sub> tubing is not connected to the O<sub>2</sub> adapter.

Alarm Silence Button: This will silence the alarm for one minute until you find the problem. The red light will remain blinking until the alarm is corrected.

Reset Button: The alarm notification will remain on the screen after the problem has been corrected. Once the alarm has been corrected, press the reset button to clear the alarm messages.



### Other alarms you may experience:

Low Battery/ Battery Depleted: Check to make sure the green light on the front is on. If it is not, check the power cable's connection to the machine and ensure that it is plugged into a working (un-switched) outlet. This will start charging the internal and external batteries as indicated by the yellow lightning bolts over the icons.

Vent Inoperable or Ventilator Service Required: If you see this alarm, you will need to call Barnes Healthcare Services to have your vent exchanged.

## Ventilator Alarms

**High priority Alarms:** 3 beeps followed by 2 beeps – the audio pause button will be flashing red. This alarm indicates a critical issue with breathing or operation of the ventilator.

**ALWAYS LOOK AT THE PATIENT FIRST** before attending to the equipment to ensure he/she is being properly ventilated.

The display portion of the screen will show you the alarm situation.

When the alarm situation has been taken care of, press the reset button under the display.

**Medium Priority Alarms:** 3 beeps – the audio pause button will be flashing yellow. *These types of alarms require prompt attention.*

The alarm situation will be on the display screen, and when the situation has been taken care of, you press the reset button to clear the alarm.

**Low Priority Alarms:** 2 beeps and the audio pause is a solid yellow light. *These types of alarms convey the information you should be aware of.*

**Informational Messages and confirmation alerts:** 1 single beep.

The message will be on the display screen that a condition has occurred that requires attention such as AC Power is disconnected or the detachable battery is not charging.



## Alarm Summary:

### Loss of Power

**High Priority**

Press Start/ Stop button and then press Right button to silence the alarm. If using AC power, try plugging the device into an alternate AC power source. If loss of power continues and the detachable battery is depleted, contact Barnes Healthcare for service.

### Ventilator Inoperative

**High Priority**

Press Start/ Stop button. If the display is operational, Power Off confirmation screen appears. Select Right button to shut off the device and silence alarm. Remove the patient from the vent and contact Barnes Healthcare for service.

### Check Circuit

**High Priority**

Make sure there is no kinked or pinched tubing. Make sure the tubing is properly attached. Make sure all tubing and mask are clean and free of condensation.

### High Expiratory Pressure

**High Priority**

Make sure the tubing is not kinked or pinched. Check the patient's breath rate.

### Low Expiratory Pressure

**High Priority**

Make sure the tubing is not kinked or pinched.

### Circuit Disconnect

**High Priority**

Check breathing circuit and reconnect if it has become disconnected or fix the leak.

### High Inspiratory Pressure

**High / Medium Priority**

Make sure the tubing is not kinked or pinched.

### Low Inspiratory Pressure

**High Priority**

Check patient circuit for leaks or disconnects.





## **YEARLY SUPPLIES**

2 MASKS WITH HEADGEAR

4 CUSHIONS/PILLOWS

12 BACTERIA FILTERS

2 TUBING

1 FOAM FILTER

## **SUGGESTED CHANGE SCHEDULE**

CHANGE BACTERIA FILTER ONCE A MONTH

CHANGE CUSHION/PILLOWS ONCE EVERY 2 MONTHS

CHANGE MASK WITH HEADGEAR ONCE EVERY 6 MONTHS

CHANGE TUBING ONCE EVERY 6 MONTHS

CHANGE FOAM FILTER ONCE A YEAR

**\*\*If you need more than the allotment allowed,  
contact your Resiratory Therapist**



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