



# VieLight Neuro Gamma

The Neuro is the world's first trans cranial intranasal near infrared light (NIR) photobiomodulation device.

The Neuro is the world's first transcranial-intranasal near infrared light (NIR) photobiomodulation device. It is based on the science of [photobiomodulation](#), the utilization of low level photonic energy to stimulate mitochondrial function in neurons. It directs pulsed(10 Hz) NIR light energy to the [hubs](#) of the [default mode network](#) [ [video](#) ] (DMN) of the brain using optimally engineered light emitting diodes (LED). Research on DMN abnormalities and related neuro-pathologies are highly advanced, providing useful data for us to further develop the Neuro. This enables us to photobiomodulate the whole brain by targeting the DMN hubs. The efficiency of targeting the DMN enables us to utilize fewer diodes in 4 cluster heads in specific transcranial areas and 1 intranasal diode (5 areas in total) to deliver low level photons to the targeted network hubs.

Research studies in photobiomodulation show that damaged neurons regenerate when NIR light is present. The wavelength of 810 nm, pulsed at 10 Hz has been found to be the most effective wavelength for photonic penetration and neuronal healing. In human studies, pulsed NIR stimulation augments mental acuity, cognition, sustained attention, affective state and working memory.


Engineered for wearability, the VieLight Neuro comes equipped with a compact helmet(or headset), an advanced intranasal diode and a lightweight control unit(rechargeable through the mains).

The combination of easy-to-use design objectives along with powerful parameters makes the VieLight Neuro – a next generation near infrared device.

## A Brief Introduction to the Default Mode Network



 **V-Light**  
**Neuro Gamma**

 VieLight  
Neuro Gamma