

# NEIRY

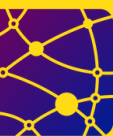
## VR-BCI DEVICE

**For Education and Lab Use**

Authorised Exclusive  
Distributor in India:



**Neiry — a VR-BCI  
product which provides neuroscience  
labs a more **portable and convenient**  
BCI system with EEG data, comes  
together with a data reader and SDK.**

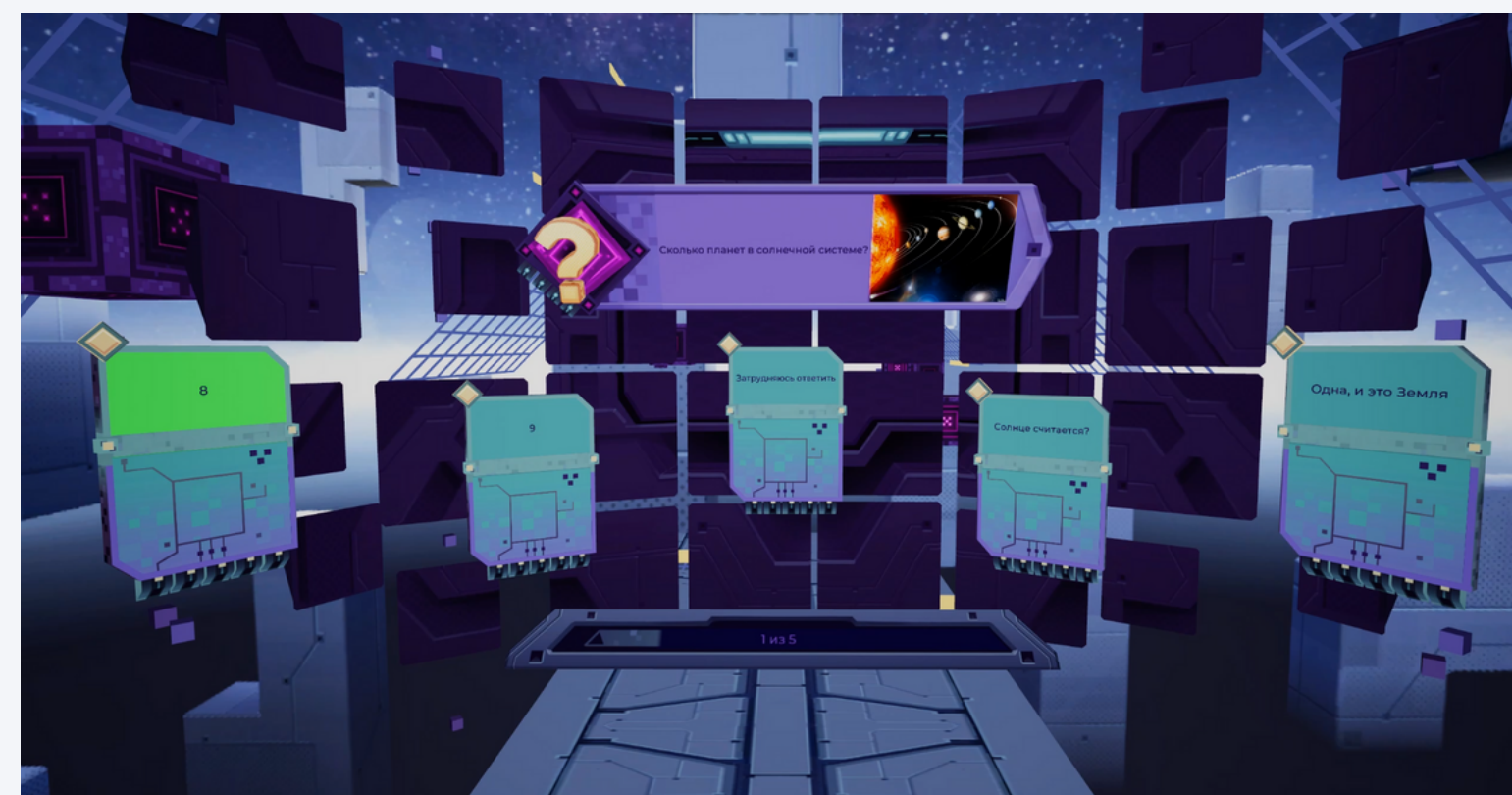


# A Combination of **HARDWARE**, **SOFTWARE** and complete **EEG system**

VR-BCI device



Attractive and engaging  
content



# Why

# NEIRY?

## **CONVENIENT, WIRELESS AND PORTABLE**

There are only two steps to use our device - just put it on your head and push the "start" button.

## **DRY ELECTRODES**

User's head stays dry throughout the whole experience.

## **COMES WITH RAW DATA, READER & SDK**

The collected raw EEG data can be analysed using our reader, or any other readers you preferred. The data is convertible into other formats. Our SDK allows you to design your own experiment using the device.

## **ENGAGING SYSTEM**

VR content helps to catch user's attention, while BCI allows users to interact with the content using their brain.



# TECHNICAL DESCRIPTION

## FOR VR HELMET

- Display - 4K (3840 x 2160)
- CPU - Qualcomm Snapdragon 835
- Weight - 268g
- Refresh rate - 90Hz
- Storage - 32G
- Bluetooth - 4.2



# TECHNICAL DESCRIPTION

## FOR EEG DEVICE

- Number of EEG channels: 9 (7 EEG + 1 Ground + 1 Referent)
- Number of data channels: 7
- Connection to computers: wireless 2.4 GHz (Bluetooth)
- Working frequency band of the amplifier: 0-80 Hz
- Sampling frequency for each channel: 250 Hz
- RMS value of the noise brought to the input: not more than 1.5  $\mu\text{V}$
- Range of amplitudes of the measured signals: +/- 0.8 V
- Bit ADC: 24
- Resistance to electrostatic discharges: 8 kV



# WHAT COMES IN THE BUNDLE?

VR-BCI DEVICE



VR-CONTENT, RAW EEG  
DATA, EEG READER AND  
SDK



TRANSPORTING CASE  
WITH DISINFECTING UV  
LIGHTS

(FOR PURCHASE OF MORE THAN 6 DEVICES)



# A GLANCE OF OUR SDK

## DOCUMENTATION

You can download it through the link:

<https://neiry-bci.com/sdk>



Figure 1 - Neiry E3 BCI HMD

### 1 Introduction

This quick-start guide will offer a sample project provided with SDK. It is a simple P300 project that employs the Unreal Engine 4 and focuses on Neiry E3 BCI HMD. We also provide concise documentation on how to create and set up a new

### 3 Exploring Example Project

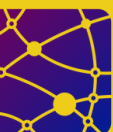
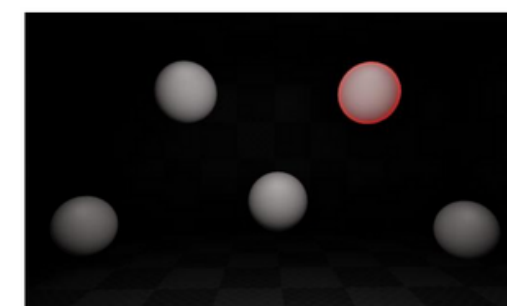
Now that we have set up our development environment, we can start to explore Example Project provided with SDK.

Project source: `{SDK-ROOT}/Examples/ExampleProject`

Android app: `{SDK-ROOT}/Apps/Android/ExampleProject-arm64.apk`

#### 3.1 About the Project

The project has stimuli formed as spheres with flashing activation. Its flow is split in two phases: the first is aimed to train a P300 classification model and the second allows predicting what the user will pick.





# Contact

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