VIP®-400
Pupillometer
Quick Start Guide

Power Up

Charging the VIP-400 Pupillometer

1. Connect the VIP-400 Power Adapter to the VIP-400 Charging Station and plug into a power outlet. The indicator light at the base of the Charging Station will display a white color to indicate power has been established to the Charging Station.

2. Place the VIP-400 into the Charging Station. The Charging Station indicator light will turn **blue**, and the LCD screen will display within the battery icon, indicating the VIP-400 is charging. The indicator light will turn **green** when fully charged.

NOTE: Prior to first-time use, ensure the VIP-400 is fully charged and Date/Time are set accurately (refer to Setting Date and Time section).

3. **The VIP-400 Pupillometer goes to sleep in the Charging Station to efficiently charge:**

   • The VIP-400 will initially turn ON (or remain on) upon being placed in the Charging Station.

   • After 2 minutes in the Charging Station, the VIP-400 will go to sleep to efficiently charge. The screen will go dark. If any button is pressed or the screen is touched within this 2-minute window, the time period before the VIP-400 goes to sleep is extended by an additional 2 minutes.

   • To use the VIP-400 after it has gone to sleep in the Charging Station, simply remove from the Charging Station, and it will wake up automatically.

4. **If the VIP-400 Pupillometer is not in the Charging Station, to conserve battery life it will:**

   • Go into sleep mode after 4 minutes. To turn ON, touch the screen or push any button.

   • Power down after an additional 6 minutes.

Turning On the VIP-400 Pupillometer

5. If the VIP-400 is out of the Charging Station and has powered down, press (do not hold) the **On/Off** button on the side of the device.

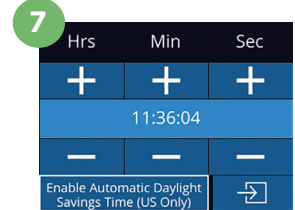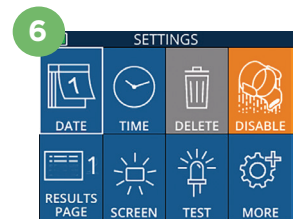**NEUR** **PTICS**®

Setting Date and Time

6. To modify the date and time, from the Home Screen, select the **Settings** icon ⚙ and then select **Date** or **Time**. Follow the prompts to input the current date and time using 24-hour time configuration and select ⏎ .

7. Customers in the United States have the option to enable **Automatic Daylight Savings Time (DST)** in the **Time** settings. Automatic DST is disabled by default. Automatic adjustments occur based only on US DST regulations and are not updated according to geographic location.

Date and Time Maintenance:

- Regular quarterly maintenance is necessary to ensure date and time are correct. The set date and time will affect the timestamp listed for subsequent patient pupil measurements. Changing the date and time will not alter the timestamps on previous measurements.

- Immediately adjust the time after any time change if Automatic DST is disabled.

Returning to the Home Screen

8. Press the **OD** or **OS** buttons (green circles) to return to the Home Screen.

Measuring Pupils Using the VIP-400 Pupillometer

Attaching the Eye Cup to the Pupillometer

9-10. Two components are required to initiate a pupil measurement:
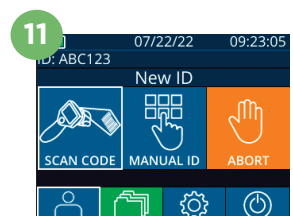
- VIP-400 Pupillometer (Ex. 9)
- Eye Cup (Ex. 10)

The VIP-400 should not be used without the eye cup positioned correctly (Ex. 10) It is very important that the eye cup be correctly fitted. A snug fit helps reduce the possibility of stray light entering the eye while the scan is taking place. The eye cup has a tab in the rim which fits into the indentation in the lens shield of the Pupillometer.

Position the tab in the eye cup rim into the indentation in the lens shield of the Pupillometer and press into place. The tabs on either side of the lens shield should also snap into the holes on either side of the eye cup.
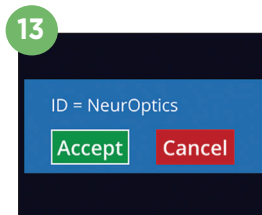
Enter a New Patient ID

11. There are two options for associating the Patient ID to the Pupillometer:
1) Scanning the patient's wristband barcode using the VIP-400 Incorporated Barcode Scanner; or
2) Manually entering the Patient ID with entering alpha or numeric characters.

Scan Barcode Using Incorporated Barcode Scanner

12. From the Home Screen, select [icon], then **Scan Code**. The VIP-400 will emit a white light from the top of the device. Center the light over the barcode until you hear an audible beep.

Aim white light at barcode

13. The Patient ID will now appear on the VIP-400 touchscreen. Confirm the patient information is correct and select **Accept**.
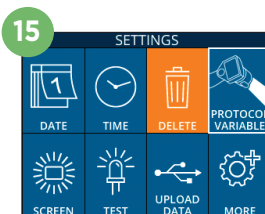
Manual Entry of the Patient ID

14. From the Home Screen, select [icon], then **Manual ID**. Using the touchscreen or keypad, enter the alpha or numeric Patient ID and select [icon]. Confirm the patient information on the screen is correct and select **Accept**.
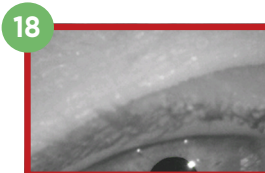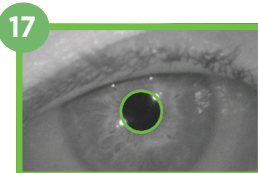

Set Measurement Protocol

15. From the Home Screen, select the Settings icon [icon] and then the top right icon [icon] to toggle between Protocol **Light Off** and Protocol **Variable.** Then press **OD** or **OS** to return to the Home Screen.

16. Position the VIP-400 at a right angle to the patient's axis of vision, minimizing any tilting of the device.
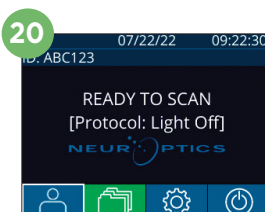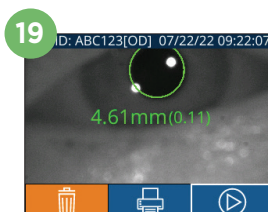

17-18. Press and hold either the **OD** or **OS** button until the pupil is centered on the touchscreen and the display shows a green circle around the pupil. A green frame around the screen indicates the pupil is properly targeted (Ex. 17), while a red frame indicates the pupil needs to be re-centered on the screen before the measurement is initiated (Ex. 18). Once the green frame appears, release the button, holding the VIP-400 in place for approximately three seconds until the results screen is displayed.

19. From the Results screen, select the **Video** icon [icon] to view the playback of the reading.
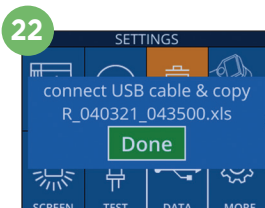
Browse Records

20. From the Home Screen screen, select the **Records** Icon [icon]. Browse records by patient ID using the **UP** [icon] or **DOWN** keys. To search for a specific ID, select [icon], then type in the patient ID and select [icon].

Download Data

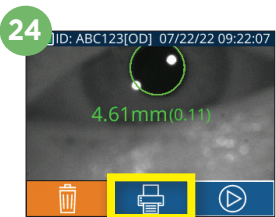**21-22.** From the Home Screen screen, select the **Settings** Icon [icon], then select **Upload Data**. Connect the USB cable from the pupillometer to the computer (Ex 21). The memory card of the pupillometer will show as "Neuroptics" on the computer. Open the folder and copy the file. Press "Done" on the pupillometer screen (Ex 22) once the files has been copied, as the file will then be erased.

Print Data

23-24. Attach the power supply to the printer (Ex. 23). Turn the printer on and a green light will illuminate. From a measurement results screen (either last measurement taken or "Browse Records" to find a different measurement), select the Print icon 🖶 on the bottom of the screen (Ex. 24).

Power Off

To turn the VIP-400 Pupillometer OFF, either:

- Navigate to the Home Screen and select the **Power** icon ⏻ , then confirm **Yes** to power OFF.
- Press and hold the **On/Off** button ⏻ on the side of the VIP-400.

The VIP-400 may occasionally require a System Reboot. To reboot, simply press and hold the **On/Off** button ⏻ on the side of the VIP-400 until it powers OFF.

Cleaning and Maintenance

Isopropyl alcohol (IPA)-based cleaning solutions, in formula concentrations up to 70% IPA, are recommended for use in cleaning the VIP-400 Pupillometer and VIP-400 Charging Station. Please refer to the Cleaning and Maintenance Instructions included in the **Instructions For Use**, which can be found at **https://neuroptics.com/resource-center-applied-research/**

Ordering Information

VIP-400-SYS	VIP®-400 Pupillometer System
NEUR-2059-01	Eye Cup
CBL-0006-00	Data Download Cable
NEUR-PRTS445	Wireless Printer Kit

For additional information regarding our product, please refer to the **Instructions For Use**, which can be found at **https://neuroptics.com/resource-center-applied-research/**