

## TECHNICAL SUPPORT GUIDE

# HOW TO CONFIGURE FREY CHART PANEL WITH iPad

Frey Chart Remote app allows you to configure optotype chart panel anytime, anywhere in your consulting room.

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## BRIEF INTRODUCTION

This guide provides a **step by step** approach on how to connect and control the **Frey Chart Panel with Chart Remote Application** installed on your iPad.

This solution is available in the following Frey Chart Panels: **CP-400, CP-400P, CP-600P**.

**Frey Chart Remote Application** is available at the **AppleStore** for free. Just download and install it on your iPad. Currently, the app is available on iPad only.

A detailed procedure is described later in this guide, however, please feel free to contact our technical support via e-mail: **tech@frey.pl**



## WHAT DO YOU NEED TO BEGIN?

Before you set up the hardware, check that you have following:

### 6 REQUIRED FREY HARDWARE

Chart  
Panel  
Set

1. Chart panel monitor

2. Chart power cord

3. Remote control

4. Compatible compact Wireless  
USB adapter (can be purchased  
from Frey)

5. USB keyboard

6. iPad

+ wi-fi  
CONNECTION  
AVAILABLE



Pic.1. All you need to start.

## START

At the bottom edge of the panel you will find:

- power socket - connect the power cord.
- 2 USB ports:
  - ✓ connect keyboard to one of the USB ports.
  - ✓ connect a Wireless USB Adapter to the other USB port.

Insert the plug into the socket and turn on the Frey Chart Panel

When you see the **Frey logo on the display**, you are ready to proceed!

# FREY CHART PANEL NETWORK CONFIGURATION

You are now ready to configure hardware step by step. Next, locate the the remote control and keyboard. If the Frey Chart Panel has entered sleep mode, press any button on the remote control to continue.

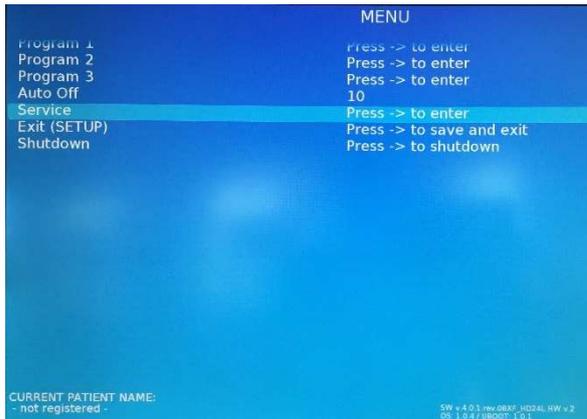
## I. SERVICE MENU - FIRST USE THE REMOTE CONTROL

Press **SETUP** button on the remote control.



Pic.2. [SETUP] button on remote control.

Frey Chart Panel screen will display MENU in blue



Pic.3. MENU screen.

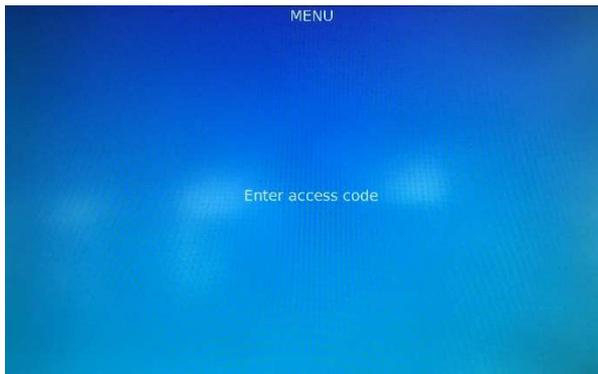
Using the **DOWN** arrow scroll down to **SERVICE**. Press **RIGHT** arrow to enter SERVICE mode.



Pic.4. [RIGHT] and [DOWN] arrow button on remote control.

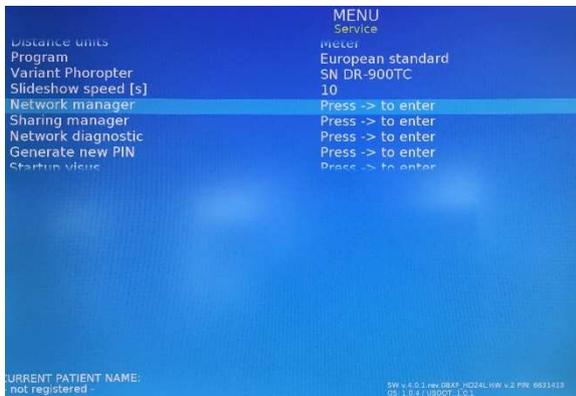
Command: **ENTER ACCEPT CODE** will be displayed on the screen.

Use the remote control to enter code: **AAAA**



Pic.5. MENU. Place your code here.

Then, using the remote control (**DOWN arrow**), scroll down to **NETWORK MANAGER**.



Pic.6. MENU. Network Manager navigation.

### **WARNING**

To properly configure network connection, it is necessary to have adequate knowledge on networking. Therefore, network configuration should be carried out by trained IT staff.

## **FREY CHART PANEL NETWORK CONFIGURATION**

### **II. NETWORK MANAGER – USE THE KEYBOARD NOW**

You are now in Network Configuration screen. Note the way this section navigates:

**Navigate** between the setup fields using **[TAB]** key.  
Mark/unmark/ **accept** a tic box using **space bar**.  
**Exit** network configuration using **[ESC]** key on **remote control**

**1** Type: 'Managed' (mandatory)

**2** ESSID: ESSID is the name given to the wi-fi network available in your location – type the name of your wi-fi.

**3** Channel: Auto.

**4** Security: choose actual network security method of your wi-fi network. Frey recommend using **WPA2-PSK**, as it will provide the highest level of encryption for the wi-fi connection).

**5** Security key: password of your wi-fi network.

**6** Configuration: 'Auto (DHCP)' (recommended).

**7** Accept to save.

**MANUAL**

Choose 'Manual' to enter network configuration data manually..

Use USB keyboard to fill the form. Use ESC key on the remote to abort.

Pic.7. Network configuration manager screen.

Press the [Accept] button, and the following command should appear on the panel screen:  
**Network reload in progress.**

Please wait and the system will divert you to the SETUP MENU .



**IP & PIN NUMBER**

In SETUP MENU you will find the IP number of the Frey Chart Panel in the **right bottom corner** of the SETUP SCREEN:

**YOUR IP & PIN NUMBER**

SW v.4.0.1.rev.08NR\_24 HW v.2 IP: wlan0-192.168.1.7/24 PIN: 6631413  
OS: 1.0.4 / UBOOT: 1.0.0B

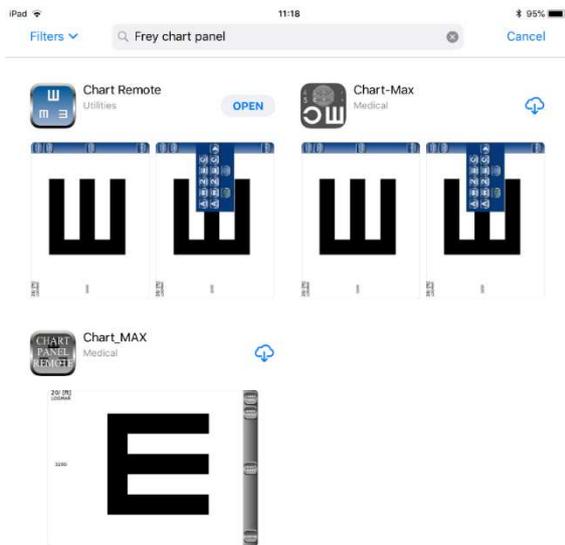
Pic.8. Network manager screen displaying IP number and PIN number.

## IMPORTANT NOTE

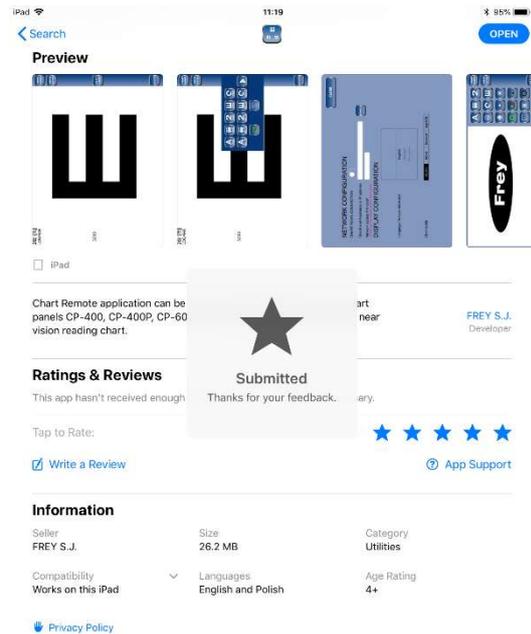
After first setup you need to wait up to 5 minutes until the IP is assigned by the router. At next startup the device should connect to the network immediately.

## SEARCH AND DOWNLOAD CHART REMOTE APP

Search , download and install free FREY CHART REMOTE application from Apple **AppStore**.



Pic.9. Application screen.



## HINT

You can search it by name 'Chart Remote' or by key words: 'Frey', 'chart panel' or 'visual acuity chart'.

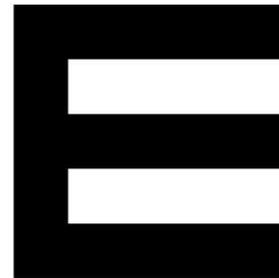
## APPLICATION CONFIGURATION

Once the **Frey Chart Remote Application** is installed, you can now connect to your Frey Chart Panel. **To connect** the Frey Chart Panel with the iPad, follow the next steps:

1. Run the application.
2. Press **[CONFIG]** button in the sidebar to progress to the **NETWORK CONFIGURATION** menu.

20/[ft]  
LOGMAR

3200



Pic.9. Application screen. **[CONFIG]** button.

3. Turn **ON** the **CHART PANEL CONNECTION** switch - swipe to the right, and will indicate green.
4. Fill in Frey Chart Panel **IP address** field (please refer to Pic. 8, page 7).
5. Enter network access **PIN code**.

Pic.10. Network configuration screen.

6. Press any button on the remote control to exit.
7. Both devices should be synced. Press **[CLOSE]** button.
8. New screen will display previous screen. If not **Remote Control view**, press **[REMOTE CONTROL]** button on the iPad screen.

## APPLICATION CONFIGURATION

### HINT

Both **IP number** and **PIN number** can be found in Service Menu (AAAA) screen of the Frey Chart Panel (please refer to Pic. 3 in this guide).

In the application window you will see the same image as displayed on the Frey Chart Panel. This means that connection is operating correctly, and will display:

'*Connected with chart panel*' message.



Pic.11. PANEL Software screen. Connected with iPad.

You are now ready to operate Frey Chart Panel with the **FREY CHART REMOTE** application.

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## TROUBLESHOOTING

The application window displays the Frey logo while your Frey Chart Panel displays different data. This means the connection was not established successfully. Check the message displayed under the application window:

### *'No connection' with chart panel*

Double check described previous configuration steps, both at the Frey Chart Panel and iPad application side. Follow the steps described in CHART PANEL NETWORK CONFIGURATION section, and verify if the panel IP and network PIN in the application are correct.

### *'Connecting to chart panel'*

Please wait up to five minutes for synchronization. If the connection is not established, proceed as in case of *'No connection'* message.

If the application displays message *'Connected with chart panel'*, but is displaying a black screen, then there are two possibilities:

1. Check the display of your Frey Chart Panel. If both devices are connected but the panel is in sleep mode for example, application window will display a black screen.
2. If the Frey Chart Panel displays anything, and the iPad app displays a black screen, tap the application window. You should see the replicated screen as displayed on the Frey Chart Panel.

### HINT

Tapping the application window toggles between test displaying and test description, which is presented together with a black screen in the application.

For technical support  
contact us via  
e-mail: [tech@frey.pl](mailto:tech@frey.pl)