

User Manual

Multivoie Pad

TABLE OF CONTENT

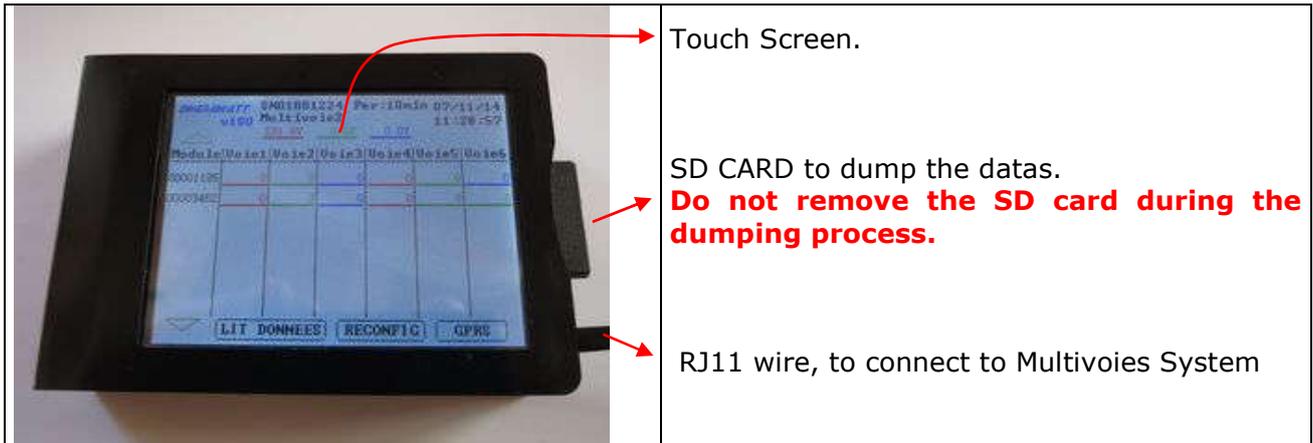
1	OVERVIEW :.....	3
2	Home screen :.....	4
3	ADVANCED VIEW OF A CHANNEL:.....	5
4	Waverforms	5
5	InitialiSe a Multivoies System:.....	6
6	CLOCK SETTINGS	6
7	SET THE TIME PERIOD OF RECORDING	7
8	DATA FILE DOWNLOAD.....	7
9	Configuration du module GPRS	8
	9.1 Main screen	8
	9.2 FTP Settings :.....	8
	9.3 Call Time settings.....	9
	9.4 GPRS clock settings.....	9

1 OVERVIEW :

Multivoie Pad is a device with a touch screen directly plugged to a Multivoies system. It allows to configure the system, dump the data, and view real time measures.

It provides a SD-card reader to dump the data in a tsv file, which can be read by any computer.

The Multivoie Pad is powered by the Multivoies System with an rj11 wire.



2 HOME SCREEN :

This is the screen displayed at the start. It shows automatically the serial number and the name of the concentrator, the voltage of the 3 phases, the clock, the time period of recording and the serial numbers of all the modules detected.

Show the serial number and the name of the concentrator, the voltage of the 3 phases and the recording period.
Touch this area to configure the time period of recording.(cf **Erreur! Source du renvoi introuvable.**)

List of module serial numbers with arrow navigation if more of 6 modules are plugged to the system.

Display the clock, touch to set up the system clock.

List of real-time powers for each channel of all modules.
Touch a frame to display the channel configuration screen.

Go to the dumping data screen.

The « reconfig » button allows you to initialize the configuration: all the channels get crossed out until the user set the phase of each channel.

GPRS module configuration

Module	Chan1	Chan2	Chan3	Chan4	Chan5	Chan6
00001127	0	608	0	611	0	1213
00005042	599	2	-2	0	2	1793

3 ADVANCED VIEW OF A CHANNEL:

597 Watts	15 VAR
234.9 Volts	15 VA
320 Wh	21474836.48
-13.8 VARh	F=50.0Hz PF: 1.00

NAME: Voie1

PHASE: 1 2 3 AUTO INV

CLR kWh CLR ALL kWh [Waveform Icon] OK

Browse between the modules

Browse between the channels

Shows the real time values.

Display the channel name, touch to modify.

The current phase is in red.
Touch another number to apply a new phase.
With compatible modules, pressing the « auto » button allows you to automatically determine the correct phase (which is displayed in red).
WARNING: if the phase is not properly set, the measured powers and energies are totally wrong.

The « inv » frame allows you to invert the phase, if the current sensor has been connected the wrong way. (Active power set to negative).

Go back to the Home screen

Shows the waveforms.

“CLR ALL kWh” reset the energy accumulations for all the 6 channels of the module.

“CLR kWh” reset the energy accumulations for the current channel

4 WAVEFORMS

U(V) 0 I(A)

F=50.0Hz

P:197W Urms:229.2V Irms:0.86A

Prea:-11VAR Papp:-11VA PF:1.00

Voie 1 Module 00005037 OK

Voltage (in red) and current (in blue) curves are displayed in real-time, as well as current the values of the channel.

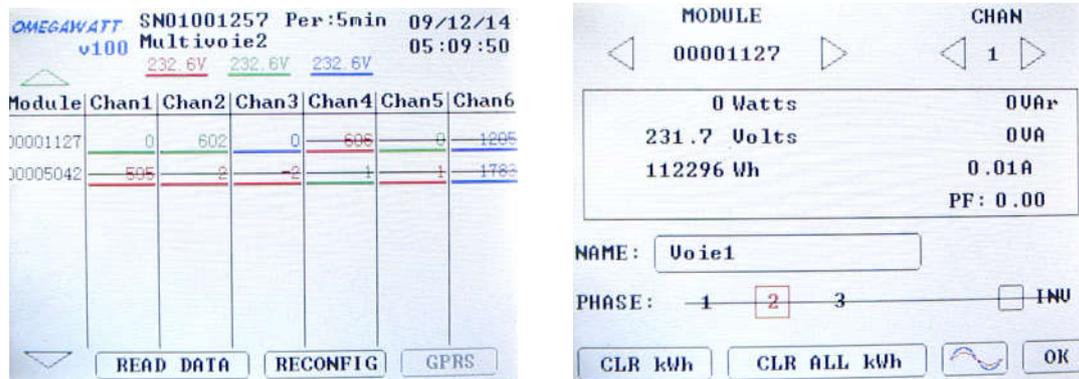
Touch the arrows to browse between the modules and the channels.

Ok go back to the advanced view of the current channel.

5 INITIALISE A MULTIVOIES SYSTEM:

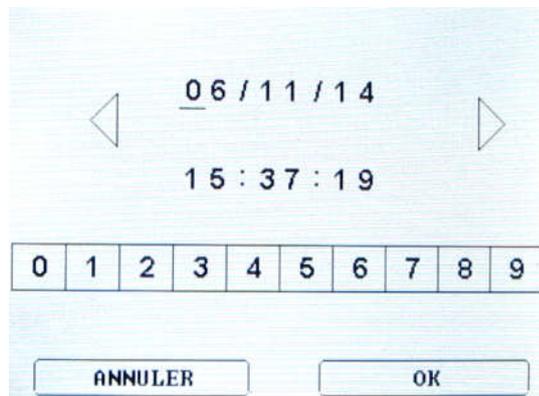
Once the connections are correctly set up, each channel phase must also be set.

The « reconfig » button allows you to initialize the configuration: all the channels get crossed out.



To set a channel, select it. The line concerning the phase is crossed out. After choosing a phase, the line is no longer crossed out.

6 CLOCK SETTINGS



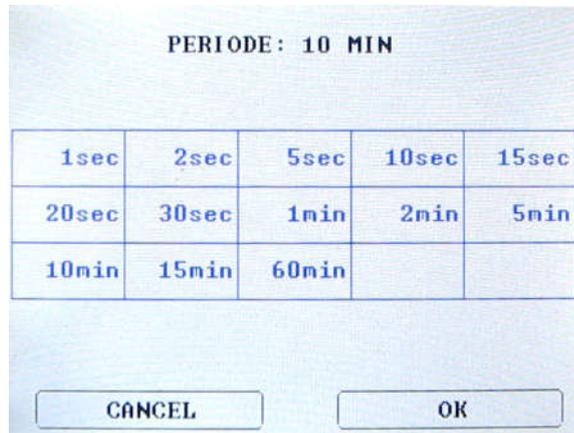
Choose the new date and time using the numeric keys. The cursor moves forward every time you enter a new number. The left and right keys allow you to move back and forth.

Press OK to confirm the new time.

7 SET THE TIME PERIOD OF RECORDING

In order to set the recording period of the Multivoies system, you need to press the concentrator information's displayed on top of the screen.

Simply select the new period in the frame and press ok.



Note: With Multivoie system, data are continuously recorded. A period change creates a new line in the data file with the time the change occurred.

8 DATA FILE DOWNLOAD

In order to dump the data, you must insert an SD card in the device. Touch the "Read data" button to access the data-dump screen.

Touching "Read Data" will begin the dumping sequence. Do not remove the SD card during the dumping process.

Once the dumping is over, the "CLR DATA" button become available. It allows you to reset the Multivoies system's memory.

	<p>Number of records.</p> <p>Free memory. When reaching 100%, the oldest data will be overwritten by new ones.</p> <p>File name on SD-Card. Touch to modify. (with default name "SN concentrator" _xxx.tsv)</p> <p>Shows the progress of the dumping process</p> <p>Touch to initialize the system memory, enabled after the end of the dump.</p>
--	---

9 CONFIGURATION DU MODULE GPRS

Note: Before using GPRS module, you must create the correct folder on the ftp server:

"FTP folder set in GPRS module\"Concentrator SN\" \
(example : \0002\01001224\)

The GPRS module list must be up to date (button UPD. LIST)

9.1 Main screen

	<p>The first line shows you if the list of modules stored on the GPRS matches the ones of the Multivoies system. Here, the list is not up to date. You must press "UPD. LIST" to update it. This is very important, as data will not be transmitted if the list is incorrect.</p> <p>Shows the call time, touch to set.</p> <p>Shows the GPRS clock. Touch to access the GPRS clock screen.</p> <p>Date of the last record sent to the ftp server.</p> <p>APN is related to the mobile network operator in use and thus to the SIM card.</p> <p>To force an upload.</p> <p>To configure ftp settings.</p> <p>CSQ show the mobile connection level.</p>
--	--

9.2 FTP Settings :

	<p>Ftp server name or IP address.</p> <p>User name.</p> <p>Password.</p> <p>Folder on FTP root (must be crated before on the server, along with a subfolder with the serial number of the concentrator.)</p> <p>Touch to apply the new settings. These settings will be displayed in green if the settings were correctly set.</p>
--	--

9.3 Call Time settings

	<p>Set the hour with the help of the numeric pad.</p> <p>Upload frequency :</p> <ul style="list-style-type: none"> -Once by day. -Twice a day: the second call occurs 12h after the first call. -Every hour: the call occurs on the minute set.
--	--

9.4 GPRS clock settings

	<p>Multivoie system clock.</p> <p>The arrow sends the GPRS clock to the Multivoies System.</p> <p>Gprs Clock</p>
--	--

10 FIRMWARE UPDATE

To update the screen, put the file UPDATE.hex into the root directory of the *SD Card*.

Then insert the SD card into the screen **unplugged**. Plug the display, the screen remains white for around 20s, then restart and shows the home screen.

The file UPDATE.hex is automatically deleted after the successful update.