

BMP2PC Manual

Table of Contents

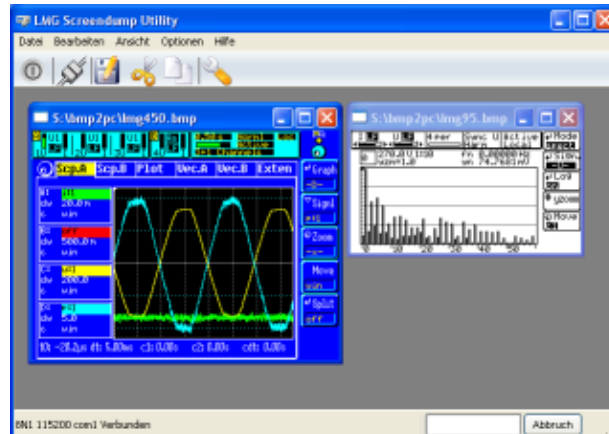
1 Introduction.....	1
2 Functionality.....	3
2.1 Operation.....	3
2.2 Connection to the power meter.....	3
2.2.1 What do I need?.....	3
2.2.2 power meter connection.....	4
2.2.3 special case LMG310.....	4
2.3 Make a LMG Screen Shoot.....	4
2.4 Working with a screen dump.....	5
2.4.1 Copy (cut) and Paste.....	5
2.4.2 Save the picture.....	5
2.4.3 Delete of unnecessaries pictures.....	5
2.5 FAQ side.....	5
2.5.1 I don't get a picture of my screen shoot.....	5
2.5.2 Using an USB adapter.....	6
2.5.3 How do I get the pictures into another application?.....	6
2.5.4 I want to make a report only with black/white pictures.....	6
2.5.5 I couldn't change the connection parameters.....	6
2.5.6 Do I get BMP2PC also for Linux?.....	6

1 Introduction

"BMP2PC" is a small tool, to make screen shoots of the LMG95/450/500 display and limited from the LMG310. With this tool, the user is able to make display shoots for the further documentation of his measurement on the PC. All picture will be in a Windows compatible format (BMP or JPG).

2 Functionality

"BMP2PC" is like a color printer, which is connected to your LMG. As soon as the user push the `print` button on his LMG, BMP2PC will receive the data and shows it on the PC display.



2.1 Operation

The operation is quite simple. Optional to menu points, there also a toolbar, for the most significant functions of BMB2PC. Only move the mouse pointer on the tool button (don't click on it), to read the help text.



Aborted BMP2PC



Changing button, turns the connection to the LMG on or off. The first symbol shows an active connection, the second a deactivated.



Push this button to save the current picture



Cuts the current picture



Makes a copy of the current picture



Program settings and connection parameters

Before the user can make any screen shoots, the LMG must be connected on the PC and the wright COM-port must be set.

2.2 Connection to the power meter

2.2.1 What do I need?

You only need a free/unused serial port on your PC or a commercial `USB to serial changer` and a power meter (LMG95/450/500) with a serial interface. Exception to the LMG95, every power meter from ZES ZIMMER got a serial interface allready by the basic version.

The connection is raised with an normal 1:1 cable (see also [special case LMG310](#)).

2.2.2 power meter connection

Connect the ComA socket of your LMG with the free serial port on your PC. Alternative, you can also use an 'USB to serial converter'. These converters are favorable to get by a computer accesories store or you can order it directly from ZES ZIMMER.

Start now "BMP2PC" an click on

Options→*Configuration*.

From the now shown list, choose now your serial port, to which your LMG is connected. In the configuration list, only the available and not in use serial ports of your PC will be shown. At least confirm your settings by pressing the OK button.

By using an USB adapter, you get a virtuel com port, which will be dynamic allocated from the operating system. For more details, please take a look on the [FAQ-site](#).

2.2.3 special case LMG310

Connect the AUX socket at the back side on the back side of the LMG310 with a free serial port of your PC. As opposed to to the other LMG`s, you have to use a **modem eliminator (null modem)** or a corresponding gender changer.

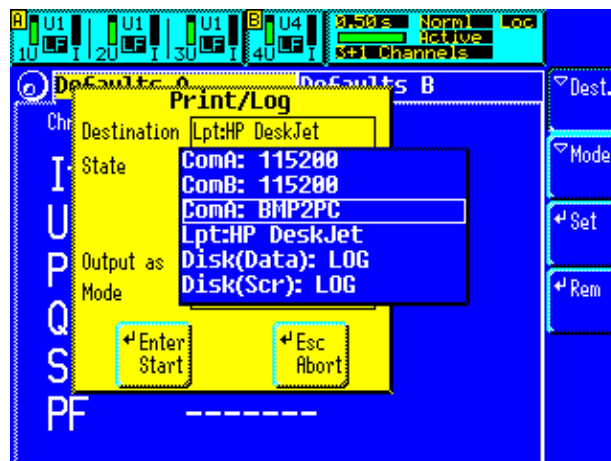
By choosing of the serial port, please activate also the option LMG310 on the right side of the port choice.

With the LMG310 its only possible to save the grafical mode (f.e. the spektrumview). Therefor, choose for the printer, in the **logging** menu of the LMG310, `BMP2PC (aux)`. Subsequently you copy the signalviews of the grafic menus by pressing **Print** to the program 'BMP2PC'. Copying of other menus apart from the grafic views are not possible.

2.3 Make a LMG Screen Shoot

The following discription only true for LMG95/450/500. If you want to use a LMG310, please read the note [Special case LMG310](#).

Connect your LMG to your PC (see [Connection to the power meter](#)). To make a screen shoot, access the wished menu, which you want to copy, and press the button Print/Log on your LMG. For the destination, you have choose **ComA:BMP2PC**.



The LMG95 only got a Black/white display, but the settings and dialogs are the same as shown on the picture above.

The active serial port and also his status (connected/not connected) is shown in the status display.

If the LMG is correct appointed, you can make the screen shots by pushing the **Enter** button. Possibly, you get the advice, that the LMG is still conected with the interface. In case you got no aktive interface

connection, or your LMG is in remote (REM) status. You can ignore this advice, and push the button `Enter` on the LMG again.

If everything is OK, you will see a image from the screen shooted LMG menu on your PC. If not, please read the hints on the [FAQ side](#).

In the status line (bar graph), you'll get the information about status quo of the copy cycle.

You can always cancel the copy cycle, by clicking on the close symbol or the cancel button of the picture in the status line.

2.4 Working with a screen dump

"BMP2PC" is only for saving the displays on your PC . It is not possible to work out the picture. For a work out, you need another program. To get the picture into another programm, you got two possibilities:

1. Copy (cut) and Paste
2. Save the picture in BMP or JPG

2.4.1 Copy (cut) and Paste

Klick on the wanted picture and choose Edit->copy or use the short cut Strg-C. Change into the other application (f.e. Winword) and use the short cut Strg-V or choose Edit->paste.

You can also use the button 'copy' or cut at the toolbar, to copy the picture into the clipboard. Be carefull, if you don't use the picture in another application, you will delete the picture by using the cut option!

2.4.2 Save the picture

Every picture that "BMP2PC" receives, get the title 'unnamed' with a number. That also shiws you, that the picture has not been saved. To save picture into a file, please select the picture and choose File->Save As ... or push the floppy disk symbol at the tool bar. It's possible, to save the picture in BMP or JPG format. Thereby it's enough to give the picture a name, it is not necessary, to give it also the extension.

After saving, the picture will get the saved name. With this, your able to see, which pictures already saved and which not.

2.4.3 Delete of unnecessaries pictures

Needles pictures can be deleted by using the cut symbol at the tool bar or close the picture (x) and press "No" by the following saving option. If you close the porgram, the saving option apears by every picture, which is not saved.

2.5 FAQ side

2.5.1 I don't get a picture of my screen shoot

First of all, please check, that you'r using the wright cable (exception of the LMG310, you always need a normal serial 1:1 cable).

Is the cable correct plugged on the LMG ComA (LMG310 Aux-socket) at a free serial port of your PC?

Is the choosen com port equivalent to the selected port in "BMP2PC" (Options->settings)? (please also take look at: [Using an USB adapter](#))

Usual, the baudrate for BMP2PC is set to 115200 baud. Please take a look at the LMG, if this settings are OK, by pressing Print/log and followed Set. If it's not 115200 baud, please set it to 115200.

2.5.2 Using an USB adapter

If you don't have any com ports or no free com ports on your PC, you can use an USB adapter. By using an USB adapter, the PC provides you a virtual com port. This depends at which USB port the adapter is connected or how many ports already allocated. Be careful, BMP2PC supports only com1...com9.

To identify, which virtual com port the USB adapter got, you have to start BMP2PC, without the adapter. Open the settings menu and take a look at the com ports, which were found. Close BMP2PC and connect the adapter. Please wait a few seconds, till the adapter is installed from windows. Then start again BMP2PC, open the settings menu and look at the com ports. You will find the old ones and also a new one, which is the virtual com port of the adapter.

2.5.3 How do I get the pictures into another application?

You can get the picture by cut and paste into another application, or save it on your harddisk and reload it into your application.

2.5.4 I want to make a report only with black/white pictures

You got two ways to get the color pictures into black/white. First, load the saved pictures into a paint program (e.g. Paintshop) and save it with 256 greyscales. The other way is to change the display of the LMG450 from color into black/white. To do this, push the misc button of the LMG followed by the color button. After changing into black/white, all BMP2PC pictures also will be black/white.

2.5.5 I couldn't change the connection parameters

Probably, you still got a remote connection to the PC. Also when no data will be sent anymore, this could be possible. Check if the LMG is in remote mode. In the upper right side of the display, it's shown if it's in remote or local state. If it's in remote, you must go into the interface menu and press the button goto local, or press the disconnect button in BMP2PC.

2.5.6 Do I get BMP2PC also for Linux?

Of course! If you don't get it on the homepage <http://www.zes.com>, call us or send an email to: jbuermann@zes.com