MegaPulse P USB TestMinder

MULTI-PULSE TEST SOFTWARE

Instruction Manual



Dear Customer:

Congratulations! Compliance West USA is proud to present you with the MegaPulse P USB TestMinder Multi-Pulse Test Software. The installation and operating instructions are included in the Manual, so please retain this information for future use.

Thank you for your trust and confidence.

Rev. 1.3, April, 2013

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An Introduction to the MegaPulse P USBD TestMinder

The MegaPulse P USB TestMinder is an option that enables the control of your tester from a Windows-equipped computer. The TestMinder software allows to setup testing parameters as: "time between pulses", "polarity", "Voltage", "Pulse Cycles", etc. A record of every test can be saved in a computer file as ".txt" or ".csv" format. The ".csv" file can be read by Microsoft Excel.

Software Installation and Setup

- 1. Insert the CD "Compliance West USA TestMinder MegaPulse P USB" into the drive on your computer and follow the prompts. If the CD does not start automatically, browse to the CD and run the file "Setup.exe." The files will be installed to the location of your choice.
- 2. Connect the Megapulse to the computer using the Compliance West supplied USBD box. Do not connect the USB cable through a USB hub or a device on your computer like a USB port on your keyboard. A window will pop up on the screen: "Found New Hardware Wizard".
- 3. Click on "Cancel".



4. Ignore the following message "A problem occurred during hardware installation"



- 5. Browse to the CD and run the file "Install_Driver.exe." It will install the necessary drivers.
- 6. Installation is finished. Run "TestMinderUSBv1.2.exe", following the instructions in Section 2.

Test operation using MegaPulse P USB TestMinder

Manual Operation from the Computer

1. Click Start, Programs, TestMinder USB, TestMinderUSB on the Windows main screen to start the program. The following screen is displayed.

Trigger CHARGE	05000	
NOP PEN		
VOLTAGE	MegaPulse IMPULSE TESTER COMPLIANCE	VEST USA
VOLTAGE	MegaPulse IMPULSE TESTER COMPLIANCE M Messages: Enter the EUT serial number and/or other information in the fields below before pressing the TEST buttor:	IEST USA

2. The MegaPulse may be run in manual mode from the computer. To conduct a manual test, first setup a name for a file to record the test results: at the lower right of the screen: click the "Select file" button to show the "Open File" dialog box, then select a file name and suffix. ".txt" files can be opened by the windows text editor, ".csv" files can be imported into Microsoft Excel if desired. After the file is selected, the text box will show the file location.

est results will	De whiten to the file shown below	٧.
T:\MegaPulse	Test File:csv	
	(Calcol and Calc	

3. For reference, enter a Description and/or the EUT's Serial Number at the bottom center of the screen. The up and down arrows allow the user to increment or decrement a previously entered serial number without retyping.

In the rields below before pressing the 1251 button:				
MT-103 Amplifier 963852				
(any description)	(numbers only)			

4. Press the Option button to confirm or change the following settings.

🖻 For	m2 🗖 🛛 🖊
	Voltage set: 02000 Change
	Temporary Voltage: 02000 Change
	Stop Voltage: Enable Disable
	Front panel control: Enable Disable
	<u>OK</u> <u>C</u> ancel

Voltage Set: Press "Change" to set a charging voltage limit. The tester will stop charging at this value when "Stop Voltage" is enabled. This charge setting is permanently stored until changed. Every time this value is changed it is also copied to the "Temporary Voltage" setting.

Temporary Voltage: Press "Change" to set a temporary charging voltage limit. The tester will stop charging at this value when "Stop Voltage" is enabled. This setting overrides the "Voltage set" parameter. The temporary voltage setting will be lost when the tester is turned OFF and ON. After the tester is turned OFF and ON, <u>Temporary Voltage</u> will be equal to the "Voltage Set" value.

Front panel control: This option disables or enables the front panel buttons on the actual Megapulse tester.

5. Energy Measurement. If the Megapulse is equipped with Energy Measurement, the software will display the Energy in the main window.

Energy	000	

Click on the Check box to display the Energy and save it on the selected file.

Energy	383	Joules
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6. To conduct the test, select either positive or negative polarity by clicking on the "Polarity" button. As it is clicked, it alternates between Normal (positive) and Reverse (negative)

polarity. Polarity selection must be entered before clicking on the "Charge" button. After the charge button has been clicked, the "Polarity" button is disabled.

- 7. Press "Auto trigger" button to trigger automatically when the charging voltage limit is reached.
- 8. Press the Trigger button to discharge the voltage into the EUT.

Automatic Operation in Multi-Pulse Mode

1. Click Start, Programs, TestMinder USB, TestMinderUSB on the Windows main screen to start the program. The following screen is displayed.

Se TestMinder MP Remote Control Software	
Ado Tigger HARGE HAR	Stop
Messages: Program: Multi-Pulse Test: Enter the EUT serial number and/or other information in the Eidek balow before neesing the TEST button. Test results will be written to the fill	shown below:
Options Setup Intercess door bottle pressing the FLOT button. Exit Start (any description) (numbers only)	

- 2. The MegaPulse is run in multi-pulse mode only from the computer. To conduct an automatic test, first enter a test result file in the window at the lower right hand part of the screen. First, set up a name for a file to record the test results: at the lower right of the screen: click the "Select file" button to show the "Open File" dialog box, then select a file name and suffix. ".txt" files can be opened by the windows text editor, ".csv" files can be imported into Microsoft Excel if desired. After the file is selected, the text box will show the file location.
- 3. For reference, enter a Description and/or the EUT's Serial Number at the bottom center of the screen. The up and down arrows allow the user to increment or decrement a previously entered serial number without retyping.

MT-103 Amplifier	963852
(any description)	(numbers only)

4. To set the number of pulses and a repetition rate for the multi-pulse test, first click the check box in the "Multi-Pulse Test" field. Two buttons will become available; "Setup" and "Start". Click on the "Setup" button.

Multi-Pulse Test:		
	Setup	
	Start	

5. The setup screen is displayed. This screen allows the user to define up to three test sequences within the following parameters:

<u>Pulses:</u> 0 - 1000 pulses <u>Polarity:</u> Positive, Negative or Toggle <u>Test voltage:</u> 0 - 30,000V "Depending on the Megapulse model" <u>Time between pulses:</u> 1- 999 seconds <u>Repeat sequences:</u> 0- 99 times <u>Time between sequences:</u> 0-999 seconds.

NOTE: It is possible to set the time between pulses faster than the charge time of the MegaPulse. Care must be taken to allow enough charging time or the multi-test will be conducted at a lower voltage and stopped. Also if the time between pulses is set too high, there will be dead time after every pulse because the unit will charge and trigger to fast, since it is set automatically to "Auto Trigger" mode when performing multi-pulse tests. To optimize testing, we suggest running manual tests to become familiar with charging times and then optimize the multi-pulse test times. In addition, it is recommended to practice the multi-pulse options with tests at low voltage until operation is familiar.

🖻 Multi-Pulse test setup
multi Pulse
Test Sequence:
1 🗹 Perform 1 pulse(s) of Positive 💌 polarity, Test Voltage 500 every 10 seconds
2 V Perform 1 pulse(s) of Negative v polarity, Test Voltage 1000 every 10 seconds
3 🔽 Perform 1 pulse(s) of Toggle 💌 polarity, Test Voltage 1500 every 10 seconds
Repeat the selected sequences 5 times.
10 Time in seconds between sequences

6. After Multi-Pulse Test Parameters are correctly entered, click the "OK" button to return to the TestMinder Main Screen.

7. To conduct a Multi-Pulse test, click on the "Start" button in the Multi-Pulse Test field. The test starts immediately (see next figure), and status is shown on the Main Screen. Note that the charge process can be stopped and pause the multipulse at any time by pressing the Safety "STOP" button, the multipulse can be stopped by pressing on the bottom left yellow button "Stop Multipulse Test", but if the unit was charging the unit will deliver that pulse, and then stop, "Do not use this button for emergency stop". When a multi-pulse test is paused with interlock the Trigger and Charge buttons start blinking until the "GO" button is pressed to clear the emergency state and continue testing. Care must be taken at this point because the tester might still have charge. Make sure to safely discharge the tester before starting a new sequence to avoid any risk.

TestMinder MP Remote Control	Software 4990 ✓ Energy 264 Joules MegaPulse MPULSE TESTER COMPLIANCE V	MULTI-PULSE TEST IN PROGRESS: Pdises 20 Time 0:33:00 MEST USA
Program: Options Exit Exit	Enter the EUT's serial numbers and/or other information in the fields below before pressing the TEST button: MT-Amplifier 963852 (any description) (numbers only)	Test results will be written to the file shown below: T:\MegaPulse Test File.csv Select file

Multi-pulse test window

Technical Assistance

Technical Assistance from Compliance West USA is available:

Phone: (800) 748-6224 **Hours:** 8:00 AM - 4:00 PM Pacific Time. Also available on our web site at: **www.compwest.com**

Contact:

Compliance West USA 650 Gateway Center Way, Suite D San Diego, CA., 92102 United States of America.

Phone: (619) 878-9696 **FAX:** (619) 794-0404

AC Setup

WARNING

To prevent damage of the PC you must connect the AC power to a separate line, otherwise the PC can suffer damage due to the High Voltage Output of the Mega Pulse Tester.



Correct Connection

Incorrect Connection

