## **Comunication KIT - Setup Quick Guide**

## 1. SETUP

### A) On the balance (follow exactly these steps):

- 1) Switch on the balance. When display shows zeroes, press and keep pressed MENU button <u>until sound stops</u>, then release the button. Press again MENU button until PC-PRTR message is shown, then confirm by pressing PRINT button. Press the MENU button until the "**PC Cont**" message is displayed. Press PRINT button to confirm this choice.
- 2) Now press again MENU button and the message "Baud rT" is displayed. Press now PRINT button to confirm. Now, using MENU or CAL buttons select the value of 9600. Confirm this value by pressing PRINT button. After this, press the ESC (on/off) button on the balance keyboard to return to weighing mode
- 3) Connect the USB plug of the converter to the USB port of your computer
- 4) Connect the serial cable to the serial port of the balance (in the rear side)
- 5) Connect the RS232-to-USB converter to the serial cable



### **B)** On the computer:

- 6) Switch-on the computer and insert the CD in your computer CD-ROM drive, browse it and go inside "CONVERTER DRIVERS" folder. To install drivers of the RS232-to-USB converter click *dpinst-amd64.exe* file if your computer OS is 64-bit or click *dpinst-x86.exe* if 32-bit. Wait for the installation of converter drivers is succesfully finished [Windows 10 may already contain drivers to work with converter, so drivers installation from the CD is not required].
- 7) Select the "i-WEIGHT SOFTWARE" folder of the CD and copy it into the Programs folder of your computer
- 8) Now start i-Weight from your computer folder, just click *i-Weight.exe* file
- 9) Software opens. On Software main window select "Comunication" menu, then "Balance Port" sub-menu (see image below) and select the right COM port number that your computer has associated to the serial-to-usb converter during installation of drivers.
- 10) Press WEIGHT button on software main window to verify the data is properly acquired by the software.

	Balance port	•	COM1		
	Port TLP50	+	COM6		
WE	IGHTS		COM4		
nu	m weight	u.meas.			

### 11) SETUP IS FINISHED

## **Comunication KIT - Quick Setup Guide**

# 2. SETUP TROUBLESHOOTING

 After setup is finished, if you press WEIGHT button and receive an error message window "Not valid data: check the serial port", the **probable cause** may be cables connection problem or wrong serial COM port number selected in the "Communication"/"Balance port" menu

### Solution:

- Verify that converter is inserted into the USB port of the computer, that serial cable is connected to the converter and that serial cable is connected to balance
- Verify that USB port of your computer is at least 2.0 and not 1.0 or 1.1 version
- Verify that the baud rate set on the balance is 9600
- Verify that the comunication mode set on the balance is "PC Cont" (PC continuous)
- Go into the "Communication" menu of i-Weight then go to "Balance port" sub-menu and select the right number of COM port corresponding in your computer to the installed serial-to-usb converter

To know which COM port number has been assigned to the serial-to-usb converter during installation, go to Windows "Control Panel", then "System and Security", then "System", then click on "Device Manager" (see image below).



Click on PORTS (COM and LPT) and you will have a list of all COM ports currently present on your computer. The serial-to-usb converter included with i-Weight takes the name of "USB

Porte (COM e LPT)	
	4)

Serial Port"(double check that the manufacturer is FTDI); in this way you come to know the number of the COM port. In the image below, for example, it is COM6.

Close this window and return to i-Weight. Go into "Comunication" menu, select "Balance port" sub-menu and select the right COM port number (in the case of this example it is COM6 port)

1	≥ i-V	Veight					_	-		-	- 0 <mark>- X</mark>	
	ile	Comm	nunication Mo	de	?							
1		B	alance port	×		COM1						
L.		P	ort TLP50	×	•	COM6	1					
L.	WE	IGHTS		_		COM4						
L.	nur	m	weight	u.n	neas.		T					1

## **Comunication KIT - Quick Setup Guide**

2) In the unlikely event that you still meet a problem of comunication between balance and computer, go to "Control Panel", then "System and Security", then "System", then click on "Device Manager" again.

### Solution:

Double Click on the "USB Serial port" (*see image 1*) device under "Ports (COM and LPT)"

Porte (COM e LPT)



The Properties window of the device opens, go to "Port Settings" Tab *as shown in the image 2* and check that these values are set as following:



Now click on "Advanced" button and the Advanced Settings windows will open, *see image 3*.

Set these values:

Receive (Bytes): 4096 Transmit (Bytes): 4096 Latency timer (msec): 1 Minimum Read Timeout (msec): 200 Minimum Write Timeout (msec): 1000

USB Serial Port (COM3) Properties	×
General Port Settings Driver Details Events	
Bits per second: 9600 V	
Data bits: 8 ~	
Parity: None ~	
Stop bits: 1	
Flow control: None ~	
Advanced Restore Defaults	
OK Cancel	





### Image 3

# 3. LIST OF SOFTWARE COMMANDS

This is a brief description of commands/functions of i-Weight 2.0 Software, please refer to the user manual for a detailed complete description of each command/function

COMMAND/FUNCTION	BRIEF DESCRIPTION
Header	Insert a customized header to be added to the data file.
Save / Save As	Saves data and statistics to Excel file (.xls/.xlsx) or text file (.txt)
Print	Performs direct data printing
Simple	Simple weighing mode.
Kinetics	Allows to perform a time kinetics, acquiring weight values from balance at fixed time intervals
Tare	Gives the net weight based on the calculation of a mean tare value or based on manually inserted tare value
Percentage	Allows to read the weight value as a percentage of a reference weight
Density	Allows to calculate the density of a solid or liquid sample
Count	Calculates pieces counting
Threshold	Allows to determinate if the weight loaded on the balance pan is above or below the two thresholds fixed by the user
Constant	Multiplies the weight value for a constant
Textile	Performs textile titration if the thread length is known
Volume	Calculates the volume value of the sample if its density is known.