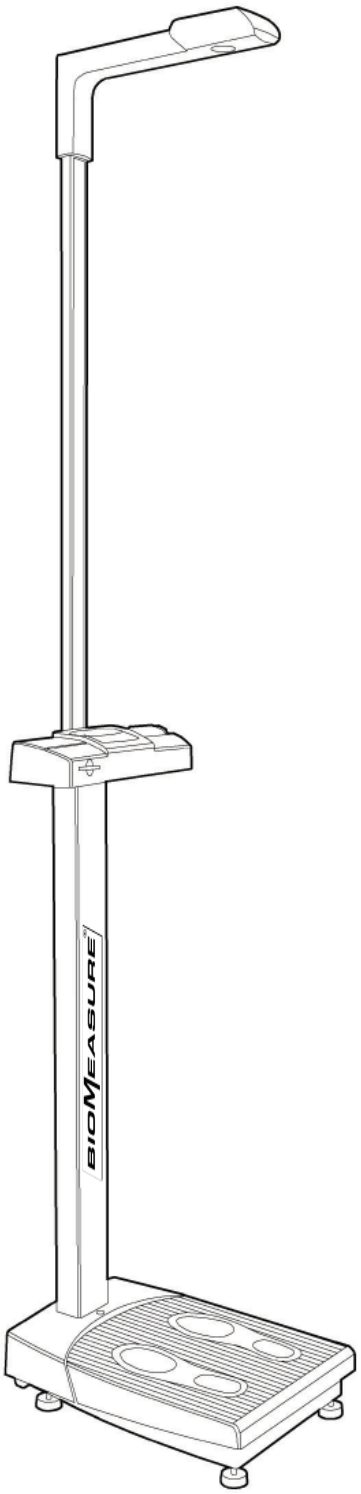
BIOMEASURE®

Youth Measuring System

MODEL III



User Manual

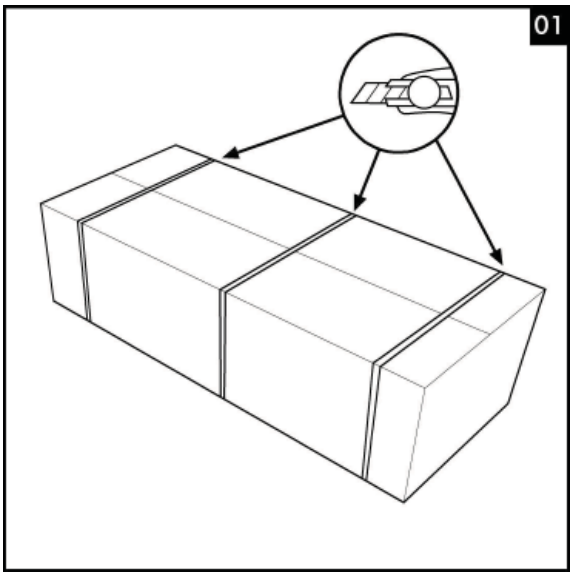
v .1008.1

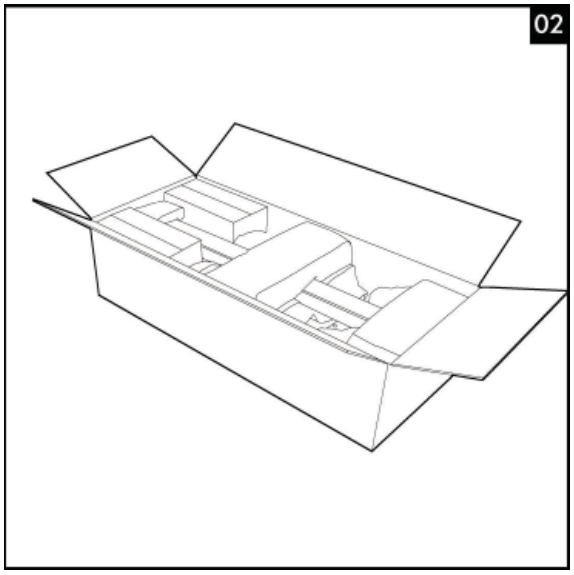
GLENVIEW HEALTH SYSTEMS

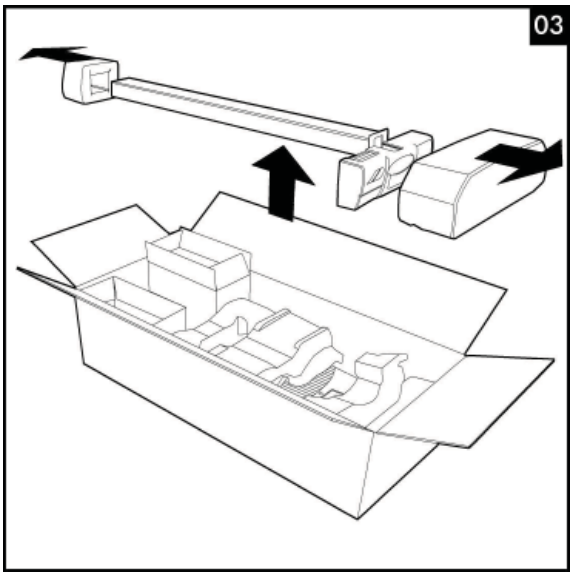
3050 NORTH LAKE TERRACE, GLENVIEW, IL 60026 - 1.800.724.4745 - www.biomeasure.net

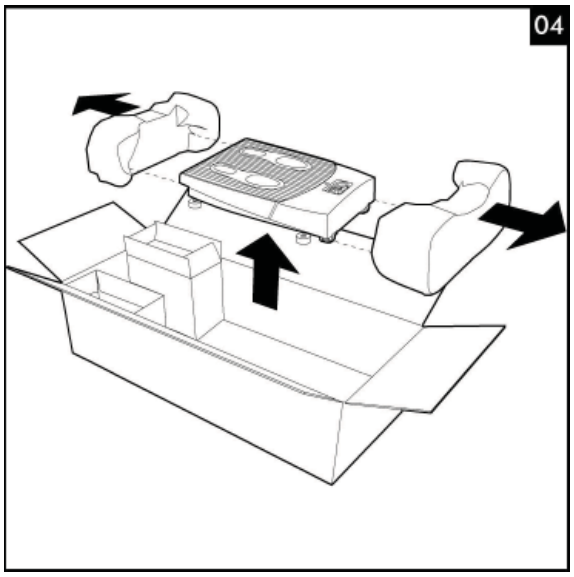
CONTENT

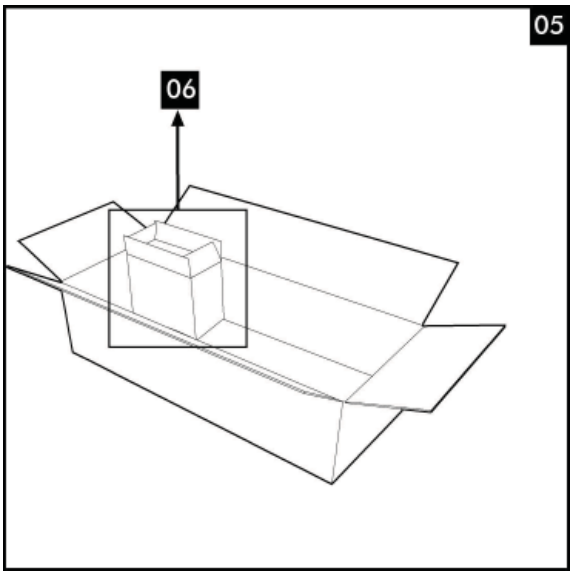
- **Unpacking**

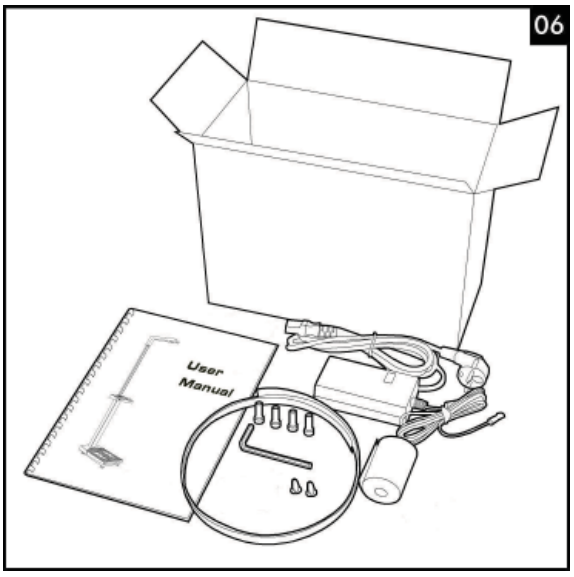












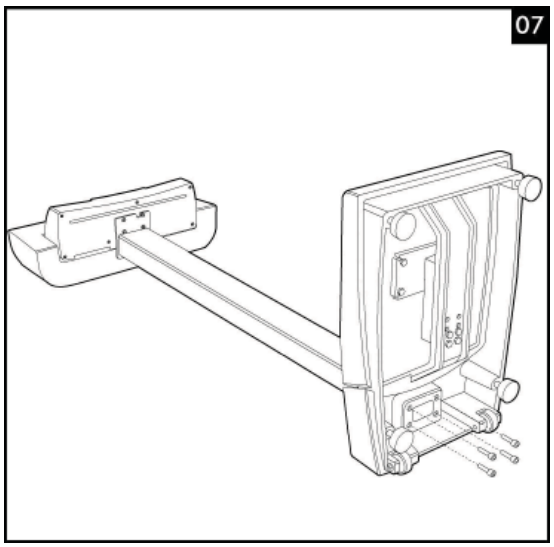
The attached box(06) contains:

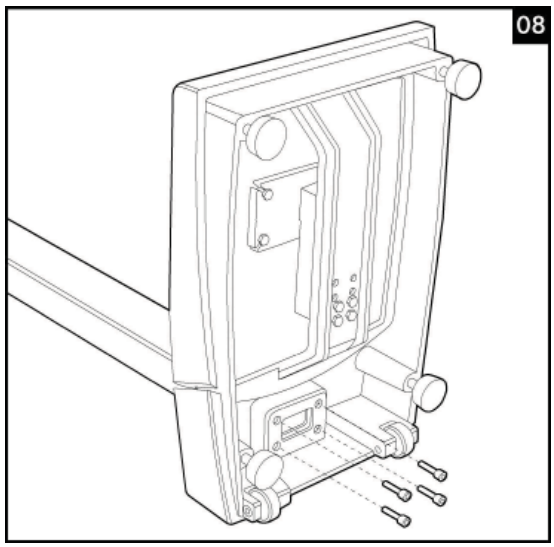
- BioMeasure Youth User Manual
- Power supply
- 4 Allens screws (6mm, larger)
- 1 Allen Key (6mm, larger)
- 2 Allens screws (5mm, smaller)
- 1 Allen Key (5mm, smaller)
- Roll of paper
- DB-9 male to DB-9 female serial cable.
- 1 Plastic strap (to fish the cable.)

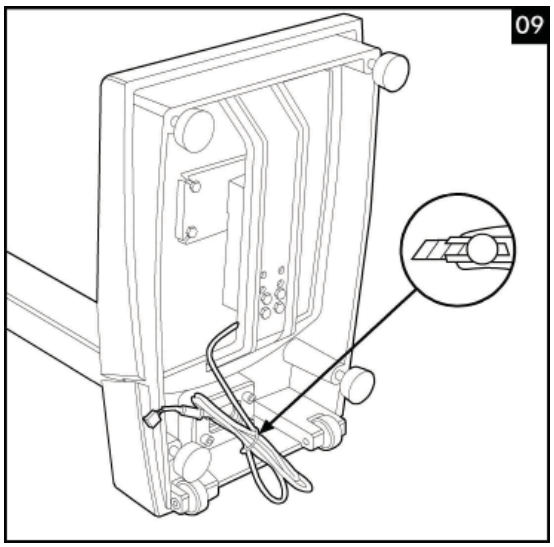
- **Column Assembly**

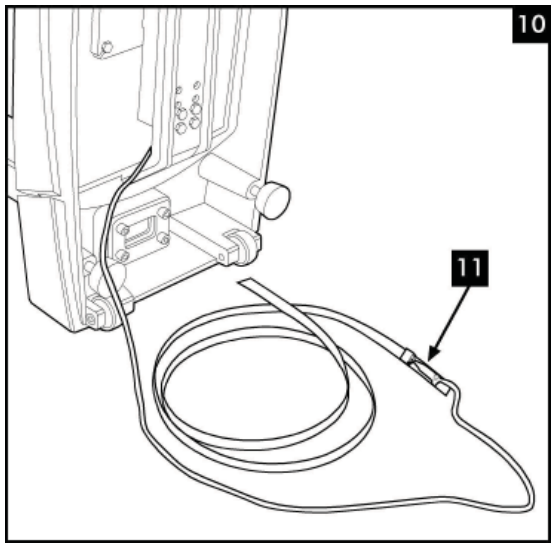
Carefully place the equipment on its back (07) and attach the column from underneath the scale's platform using the screws.

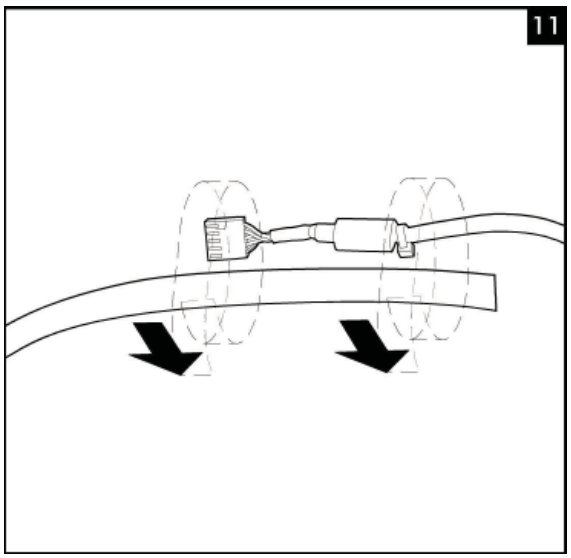
The weighing cell cable has to be passed through the pipe.

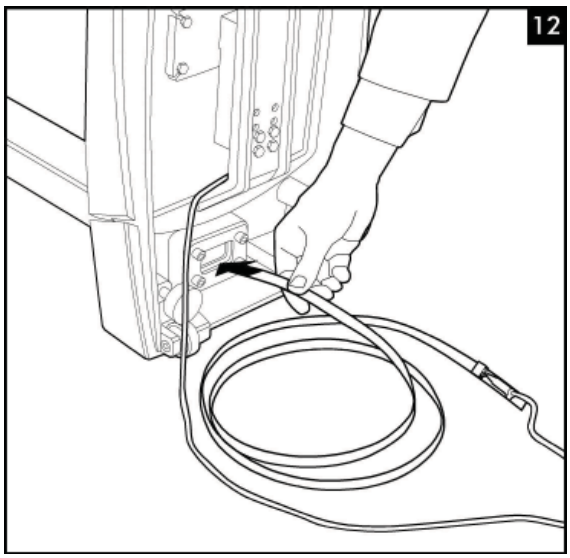


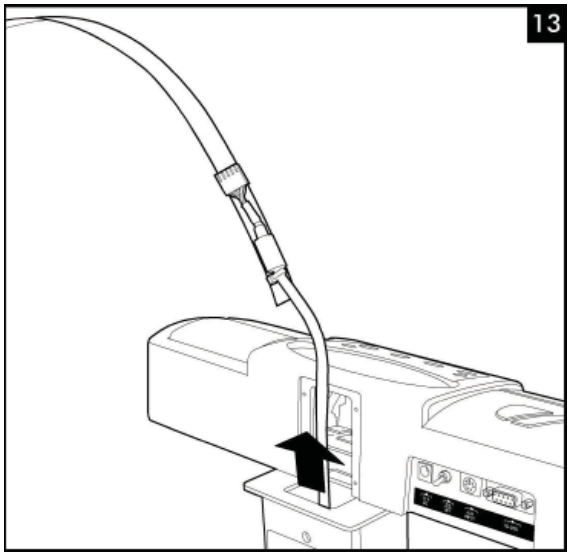


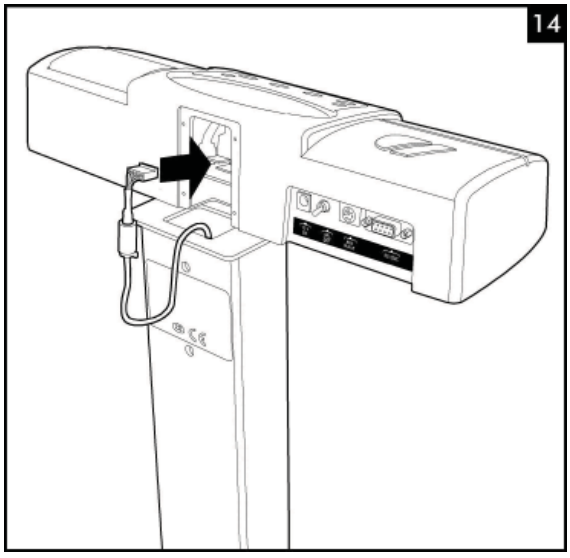




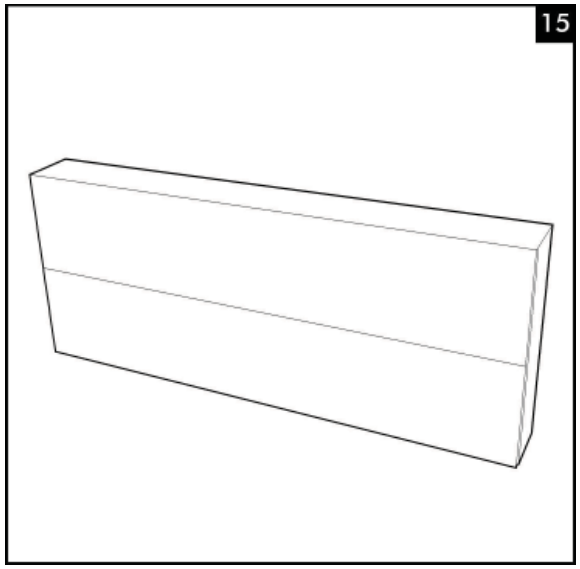


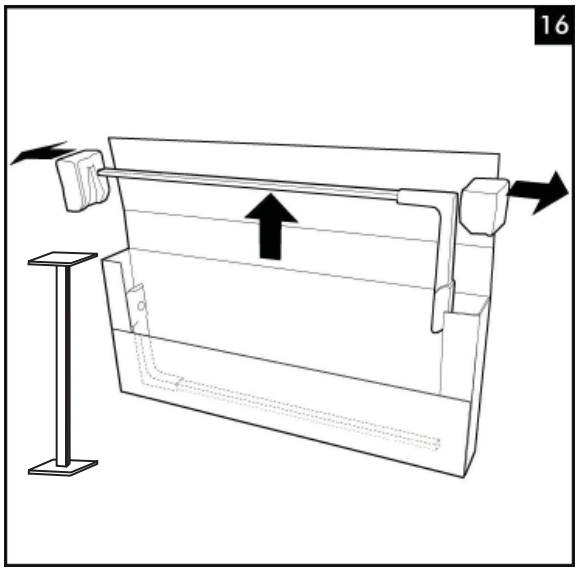


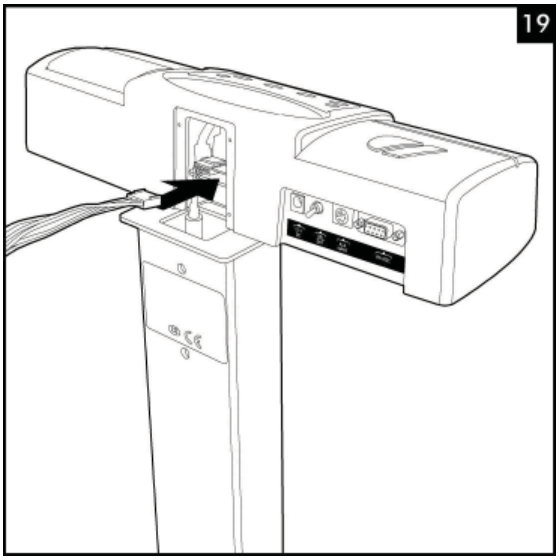


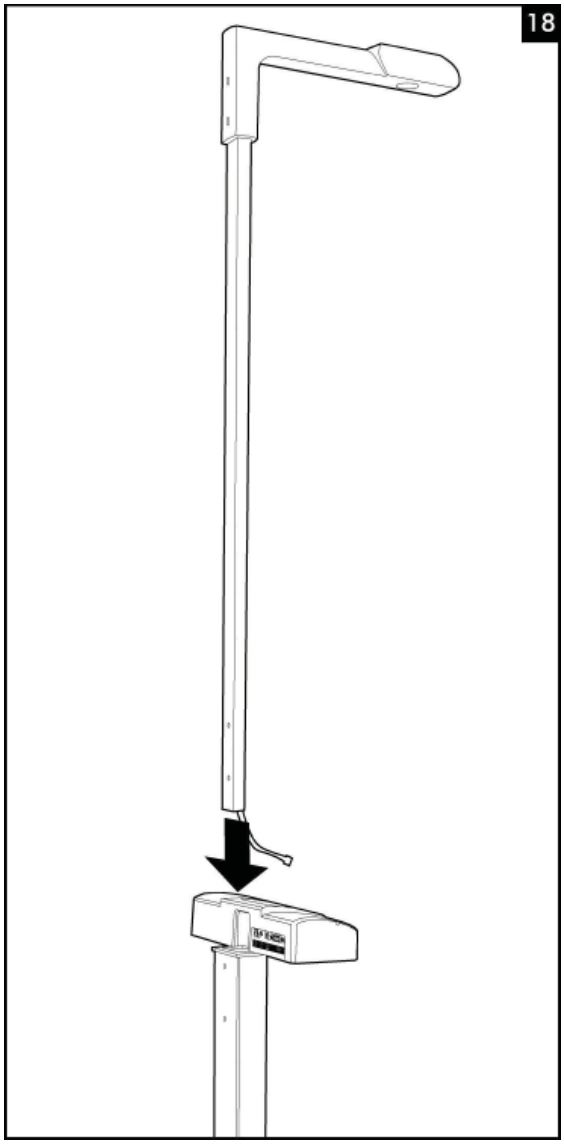


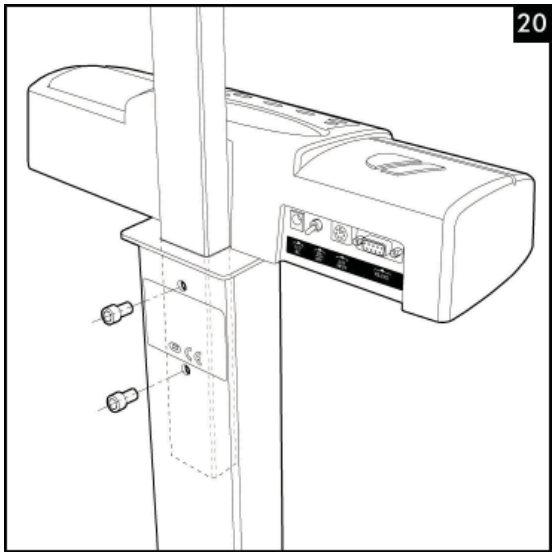
Remove the height measurement arm from the packing (15-16).







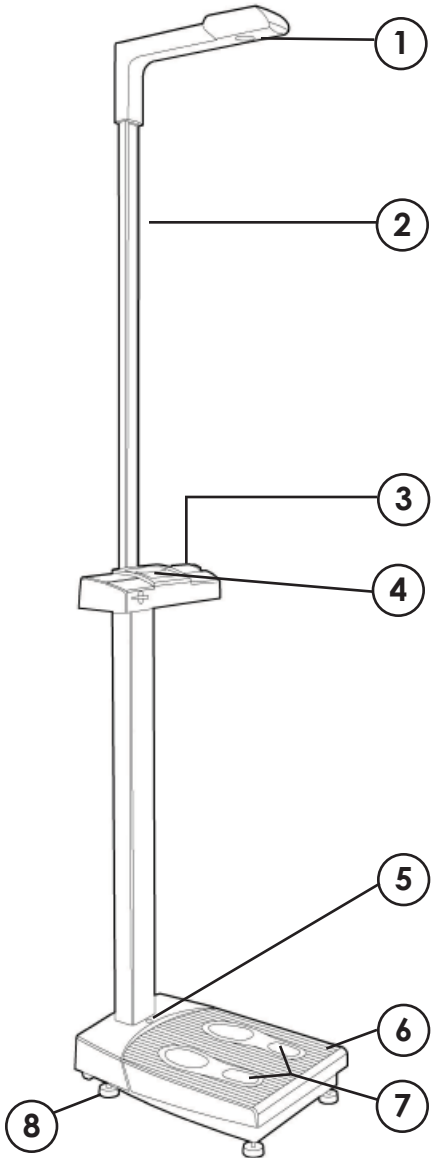




Connect the cable to the CPU board as shown.

Insert the height measurement arm. Make sure that the cable is properly attached.

Attach using the 2 Allen screws, so that the height measurement arm is firmly held parallel to the pipe.



1 ULTRASONIC HEIGHT SENSOR

2 HEIGHT SENSOR ARM

3 PRINTED TICKET SLOT

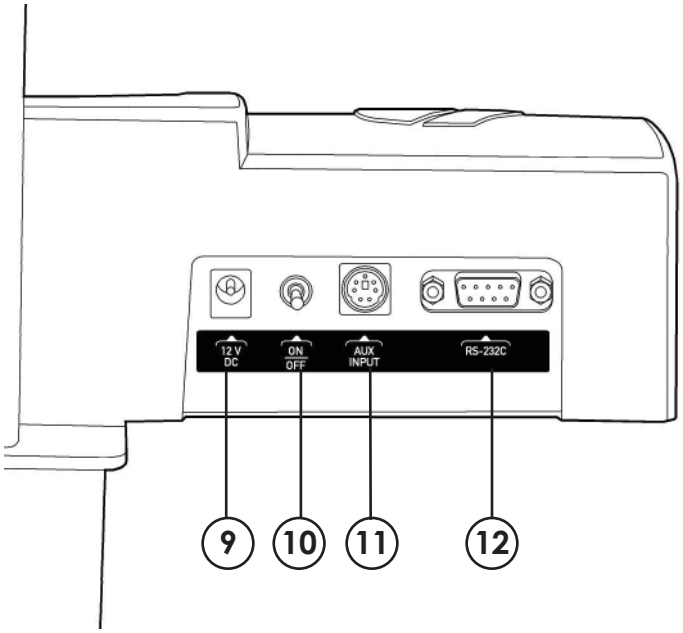
4 LCD DISPLAY

5 LEVEL

6 PLATFORM

7 FOOT PADS

8 ADJUSTABLE FEET (Use them to level the BioMeasure, once it is in the desired location)

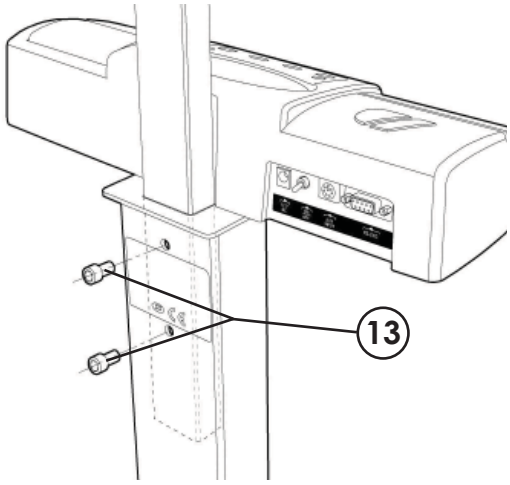


9 POWER SUPPLY JACK

10 ON/OFF SWITCH

11 AUXILIARY JACK

12 SERIAL PORT (RS-232 INTERFACE)



13 HEIGHT SENSOR ANCHOR BOLTS

Maintaining accuracy and consistency during operation requires:

1. The BioMeasure must be placed in a location away from intense vibrations and sources of extreme hot or cold temperatures.

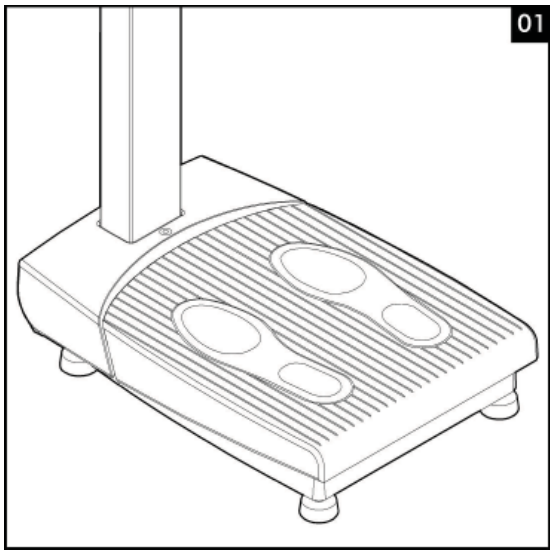
2. The ultrasonic sensor in the head of the BioMeasure is extremely sensitive to external interference like that produced by fluorescent lights. Keep the BioMeasure at least 3 feet from fluorescent lights.

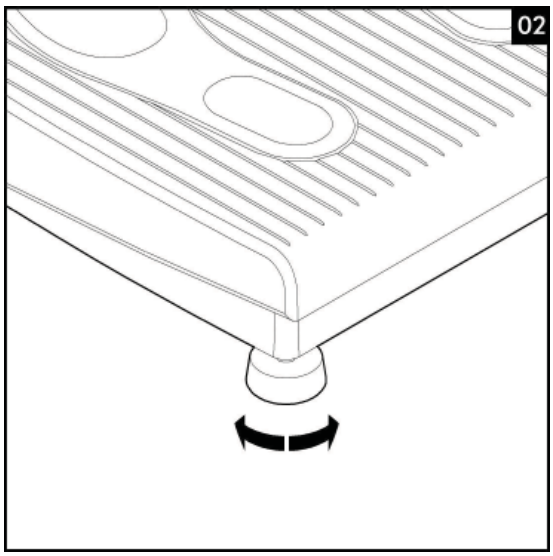
3. The power cord can now be inserted into a properly grounded outlet. Next, turn the BioMeasure on using the power switch located on the BioMeasure behind the display.

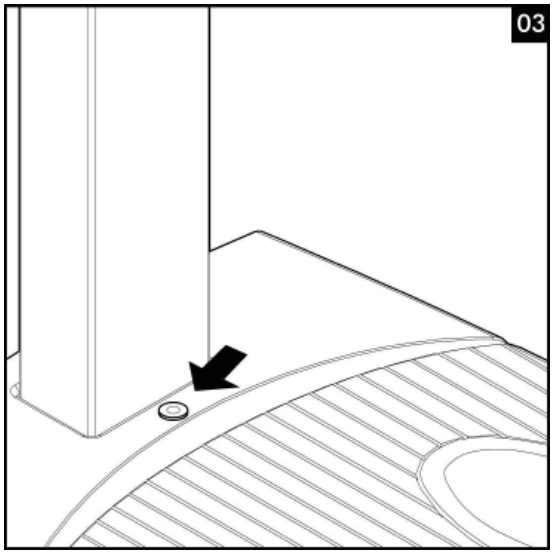
Leveling the BioMeasure Youth Machine

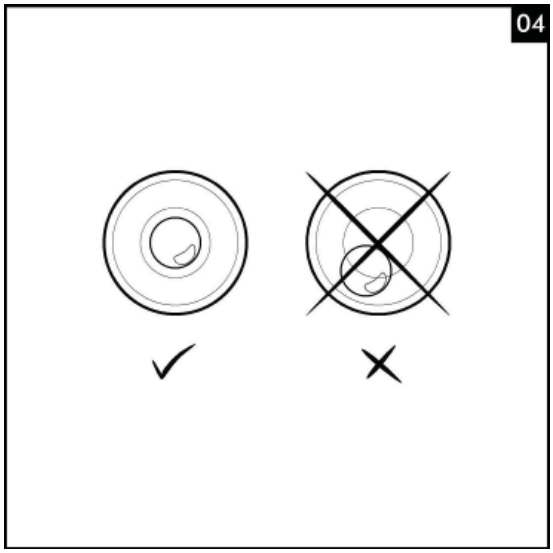
Adjust the four footpads to level the BioMeasure. Use the built in level to make sure the BioMeasure is sitting properly. Make sure the bubble moves to the center of the glass by adjusting the four feet.

When the user steps on the platform, the BioMeasure should remain stable. It should not shift or move. *Even slight movement can affect the accuracy and functionality of the unit.*









WARNING! Do not use fingernails, pencils, or any type of foreign objects to press the keys on the keypad. The keypad is designed to use with your finger tips. A keypad may be excluded from warranty repair service, when there is physical damage due to improper use.

- **Keys**

Provides access to the programming menu.
Select options while in programming menu.

Prints out the ticket with the results. (Only when in “manual mode”).

Down arrow key: lowers the value or the menu option.

OK key: confirms the options.
Hold key: activates/ de-activates the Hold function.

Activates/ de-activates the tare function.

Female key: indicates female gender.
Up arrow key: raises the value, or the menu option.

- **Indications**

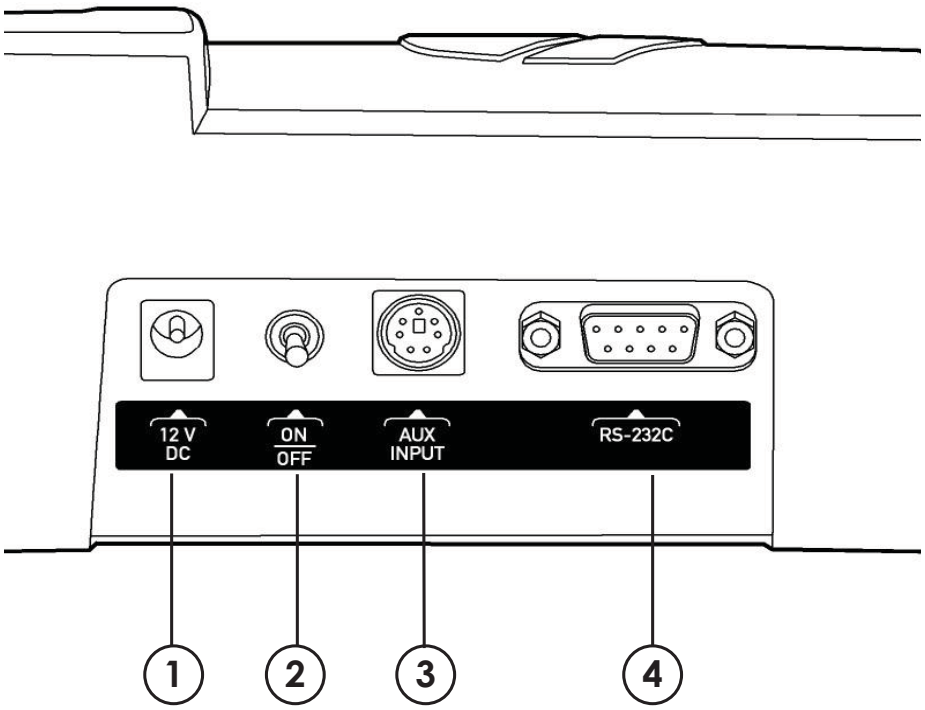
Tare function.

HOLD/B Hold / Blocked function.

→0← Zero weight on platform function.

MIN Minimum weighing function.

Note: Use only non-abrasive cleaners to clean the BioMeasure.



1 POWER SUPPLY JACK

2 ON/OFF SWITCH

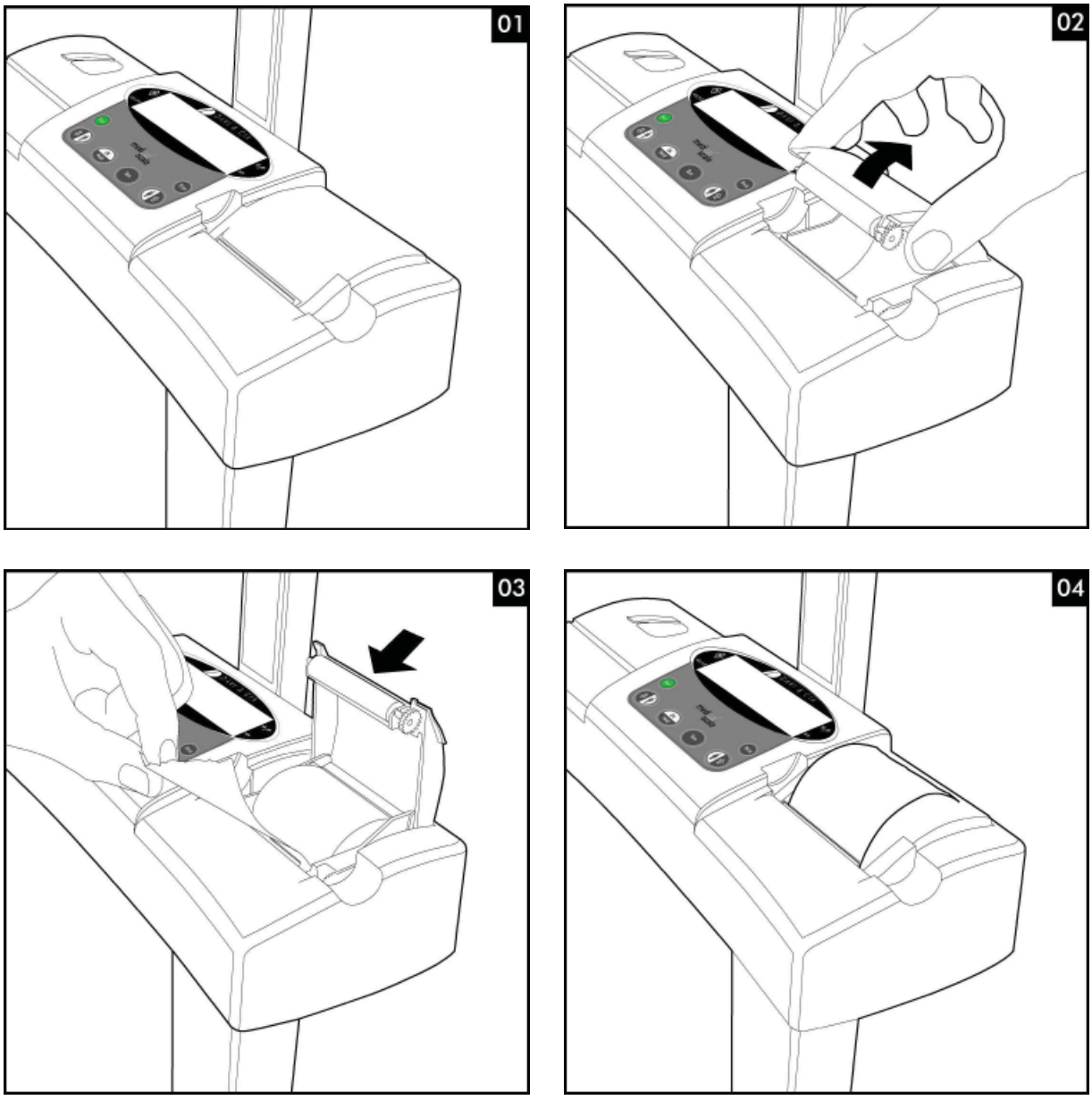
3 AUXILIARY JACK

4 SERIAL PORT (RS-232 INTERFACE)

Powering the BioMeasure on:

1. Do not step on the platform while powering on. A weight of 0.0 lbs will appear on the LCD screen when the BioMeasure is ready.

When the BioMeasure runs out of paper, change the paper roll by lifting the printer cover located on the top right side of the BioMeasure. This can be done without turning the BioMeasure off. The scale will continue to work without paper, only displaying the weight and height.



TARE function

Proceed as follows:

- Stand on the BioMeasure without the additional weight. Press <TARE> and hold the key down for two seconds.
  The screen will read 0.0 until the weight is steady. The Tare sign is activated.

- Now put the additional weight on the platform. The BioMeasure shows only the value of the additional weight. You can perform as many measurements as necessary. Once the load has been removed from the platform, the display will read "_ _ _ _".

- Press the <TARE> key again to de-activate the TARE function and the indicator will disappear.

HOLD function

The BioMeasure will hold the weight on the display after the person has stepped off the platform.
This allows you to attend the individual before making notes.

Press the <HOLD> key and hold it down for two seconds.

Proceed as follows:

Press the <HOLD> key and hold it for two seconds while the person is on the BioMeasure
View the weight on the display. The Hold sign appears and the value remains on the display.
The HOLD function can be de-activated by pressing the <HOLD> key for two seconds. The indicator will disappear when successfully de-activated.

Body Mass Index (BMI)

The Body Mass Index is a ratio of weight to the height that provides us with a reference value regarding our weight.

The BioMeasure calculates the person's BMI:

The scale automatically calculates the person's BMI and shows it on the display without the need for to press any key.

IMPORTANT: BMI is a valid reference for adults only.

- **Access the Menu**

To access the set-up menu of the BioMeasure, follow the procedure below:

1. Switch OFF the BioMeasure
2. Press and hold the 

key and the 

key as you power the BioMeasure ON.

The following option screen will appear:

```
>> 1. ADJUST <<
   2. TEST
```

- **Use of key**

Using the  key and the  key, select the menu option and confirm by pressing <OK>


Down arrow key: Scrolls down through the menu.


Up arrow key: Scrolls up through the menu.

Confirms options.

- **Summary of Options**

1. ADJUST	1. WEIGHT	Weight settings	
	2. HEIGHT	Height settings	
	3. EXIT	Exit settings	
2. TEST	1. WEIGHT	Weight test	
	2. HEIGHT	Height test	
	3. DISPLAY	Display Test	
	4. KEYBOARD	Keyboard test	
	5. ADC	ADC test	
	6. RS232	RS232 Serial port test	
	7. CARD	Smart card test	
	8. PRINTER	Printer test	
	9. EXIT	Exit TEST menu	
3. PROGRAM	1. HEIGHT	Adjust height	
	2. BMI	On/Off	
	3. LANGUAGE	Language settings	
	4. S/N	Serial Number	
	5. CLOCK	Clock settings	
	6. UNITS	Select units (metric or standard)	
	7. DATE MODE	Date format	
	8. PRINTOUT	Printout mode	
	9. TICKET	Program top lines of ticket	
	10. COINS	Program coins	
	11. EXIT	Exit PROGRAM menu	
4. IN_MS			
5. SELEC. EVF			
6. EVF			
7. EXIT	Exit MAIN menu.		

- **Access the test menu**

1. Hold <TARE> and <OK> down simultaneously, while you power up the BioMeasure. This will allow you to enter the main menu.

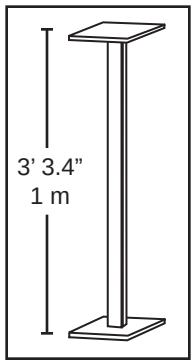
   The first screen will read:

use this key to scroll down through the menu.

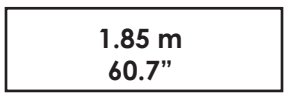
- **Height Test**

use this key to scroll down through the menu.

To access the height test, select **>>HEIGHT<<** option. The following screen will appear:



Select **>> FACTORY<<**. The following screen will appear:



The BioMeasure is now continuously measuring height. Place the included **Certified Height Meter Gage** on the platform. And check that the measurement given by the BioMeasure is **3'3.4"** (Use the second value, the first value is metric.)

Press <OK> to exit. It will return to the previous menu. Scroll down and select **>> 9. EXIT<<**

Scroll down in the main menu, then select **>>7. EXIT<<**

IMPORTANT: If the value displayed is incorrect, refer to Programming section to calibrate the Height measurements. (Pg. 15)

- **Printer Test**

Access the main menu. (See top of this page.)

Use this key to scroll down. Select option number eight **>>8. PRINTER<<**

The BioMeasure will print a series of alphanumeric characters and symbols.

After printing it will return to the previous menu. Scroll down and select **>> 9. EXIT<<**

Scroll down in the main menu, then select **>>7. EXIT<<**

- **Access the Menu**

1. Hold <TARE> and <OK> down simultaneously, while you power up the BioMeasure. This will allow you to enter the main menu.

   Scroll down and select option number 3.

>>3.PROGRAM<< 4. EXIT

use this key to scroll down through the menu.

- **BMI**

This option turns the BMI function on and off.

>> 1. BMI << 2. UNITS

use this key to scroll down through the menu.

Select the BMI option and the following screen will appear:

>> 1. BMI ON << 2. BMI OFF

Confirm by pressing <OK>

Scroll down and select **>> 11. EXIT<<**

Scroll down in the main menu, then select **>>7. EXIT<<**

- **Clock**

This option allows you to program the **date and time.**

Access the main Menu. (See top of this page). Select option **>>3. PROGRAM<<**

Select the >>CLOCK<< option from the next menu. The following screen will appear:

DD/MM/YY 0

Enter the date digit by digit using the arrow keys and confirm by pressing <OK>

After you enter the date, the following screen will appear for you to enter the time:

HH:MM 0

It will return to the previous menu. Scroll down and select **>> 11. EXIT<<**

Scroll down in the main menu, then select **>>7. EXIT<<**

- **Programming HEIGHT (Calibration)**

1. Hold <TARE> and <OK> down simultaneously, while you power up the BioMeasure. This will allow you to enter the main menu, which permits you to calibrate the height in 1cm increments.

   The first screen will read:

   >>1. ADJUST <<
   2. TEST

   use this key to scroll down through the menu.

   3. PROGRAM
   4. EXIT

2. Adjust the height (1cm increments) Begin by selecting **>>3. PROGRAM<<**

3. Press <OK> to select **>>1. HEIGHT<<** (option number one).

4. Adjust the height (in centimeters only) using <up arrow> and <down arrow> keys on the keypad.

   PROGRAM HEIGHT
   ↓>- 0cm +<↑

   use these keys to scroll up and down.

   a.) Press <OK> to make the change to the selected value.

   IMPORTANT: if you do not press <OK> the device will not store this value. The number will remain at the previous level.

   The following screen will appear:

   >>1. HEIGHT<<
   2. BMI

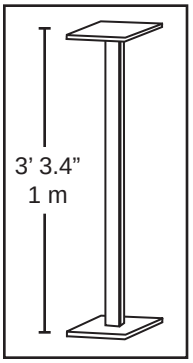
   

   use this key to scroll down through the menu.

5. Scroll to **>>11. EXIT<<** on the screen using the <up arrow> and <down arrow> keys on the keypad and press <OK>.

6. Scroll to **>>7. EXIT<<** on the screen using the <up arrow> and <down arrow> keys on the keypad and press <OK>.

   The device will automatically reboot. **Test height (Pg. 13)** with the **Certified Height Meter Gage** included, and repeat this process, if needed, until the height is measured accurately.



- Model: BioMeasure Youth Measuring System
- Display : Alphanumeric LCD
  2 X 16 characters
- Overall Weight: 75 lbs. Approx.
- Maximum outer dimensions: 224(H) X 34.5(W) X 49.5(D) cm
- Measuring ranges
  - Weight: 5.5 lbs. (2.5 kg) min. to 550 lbs (226.79kg) max.
  - Height: 100 to 200 cm in 1cm divisions
- Measuring methods
  - Weight: Load cell
  - Height: Ultrasound
- Accuracy of the measurements
  - Weight: +/- 100 g
  - Height: +/- 1cm
- Power supply: 120 ~ + 10% - 15% max/100 VA
- When in operation
  - Temperature: +50°F to +104°F (+10°C to + 40°C)
  - Humidity: 30% to 75%
- Printer: Thermal head
  8 dots/mm
  384 dots/line
- Paper width: 60mm (60X50mm)

Interface BMI4KIDZ-12™ with your PC, using a USB port instead of a DB-9 serial port

When measuring children using the bmi4kidz-k12™ software, remove the roll of paper to disable the printer and cover the LCD display with tape. This will prevent the children from seing the measurements results.

The BioMeasure Youth Measurement System connects to a computer using an RS232 Serial cable.

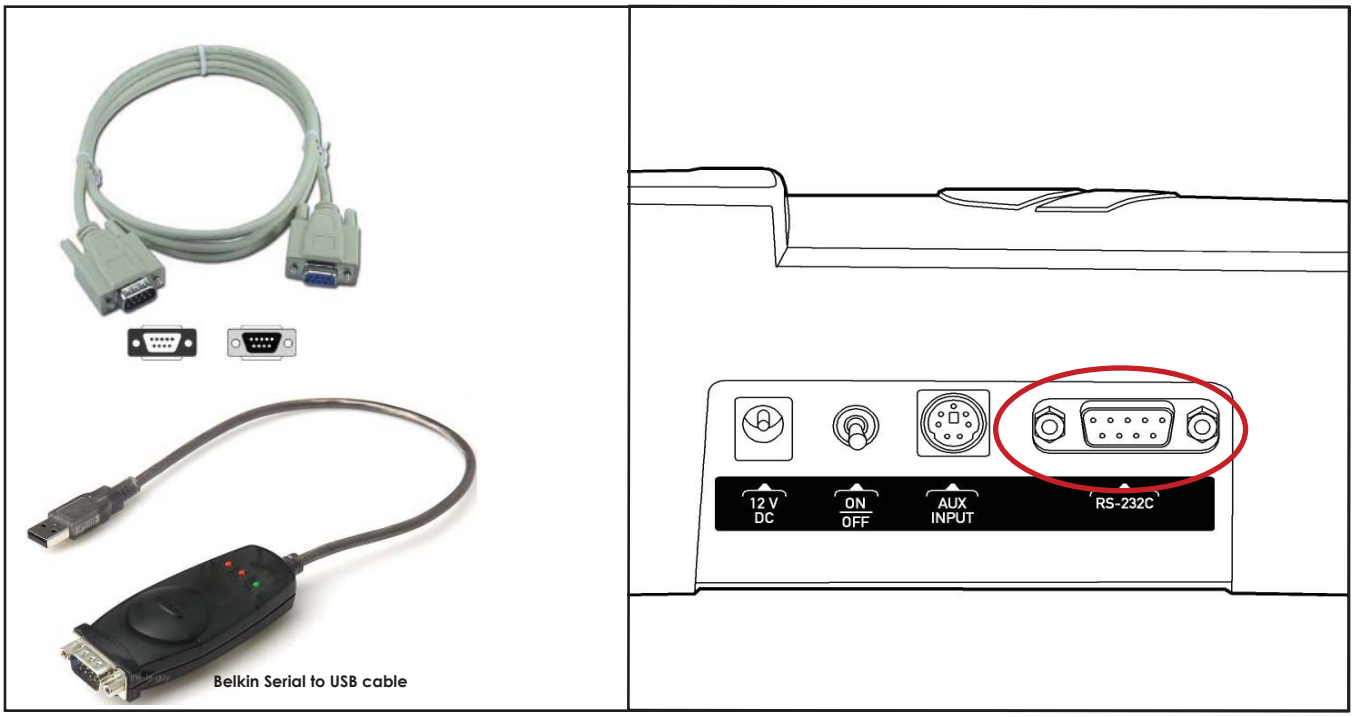
When the computer has a Serial port, the cable connects directly and the bmi4kidz-k12™ software will automatically use this port – usually COM 1.

However, most newer computers do NOT have a serial port and therefore an adapter is required to convert from Serial to USB. Although there are many Serial-to-USB adapters available, the one that has been tested and which is recommended is the **Belkin F5U409** adapter, which is available from Staples.

Important Notice: Use a **Belkin Serial to USB cable**. This will save time later, as it works better than other cables/ converters in this particular application.

To install the drivers (software) for the Belkin Adapter, the following process is recommended:

1. Do NOT plug in the adapter until after step 2
2. Install the software using the CD supplied with the adapter
3. After the installation has finished, plug the USB adapter into any available USB slot
4. There should be a short pause while the port is being configured.

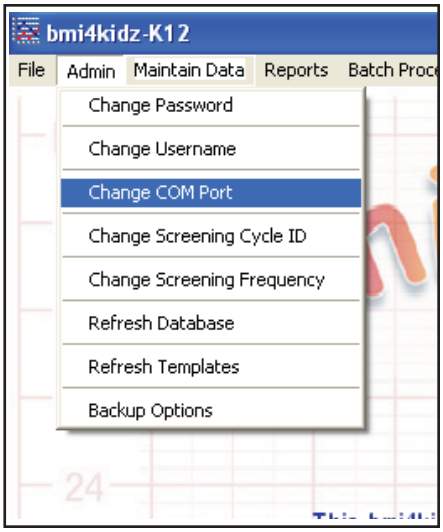


Belkin Serial to USB cable

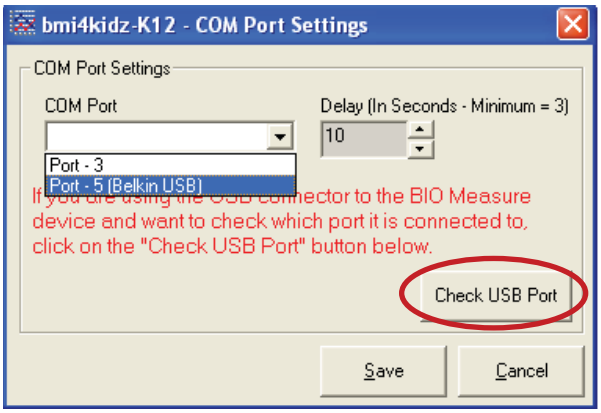
The next step is to determine which COM port has been assigned to the USB adapter.

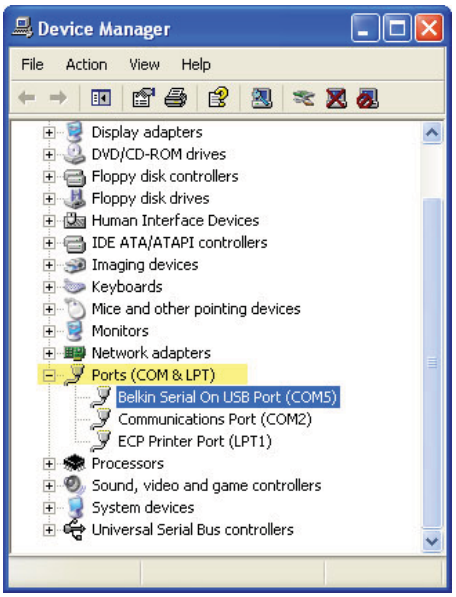
You do this by looking at the port in the "DEVICE MANAGER". You can access the device manager in bmi4kidz-k12™ following this procedure:

1. Open bmi4kidz-k12™ software Application
2. Select "admin" located on the top.
3. Drop to "Change COM port".
4. Choose "Check USB port".



This will allow you to examine the ports configured.





Once you know which port number has been assigned to the new USB adapter, you can confirm that bmi4kidz-k12™ is also assigned to the correct port by using "Change the COM PORT" and the drop arrow feature in the box on the left labelled "COM PORT". Once they are confirmed to be the same, try a measurement. ***IF bmi4kidz-k12™ DOES NOT SYNC UP THE APPLICATION WILL AUTOMATICALLY RE-CONFIGURE TO PORT 1.*** This is how it has been designed. If you use the Belkin product, this should not be an issue.