

HealthGuard®-865

Self-Service Blood Pressure, Pulse, Percent Body Fat, and Weight Kiosk

OWNERS MANUAL



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INTENDED USE

The HealthGuard-865 kiosk is an automated non-invasive screening device intended for voluntary use by the general public. It provides self-service measurements of systolic and diastolic blood pressure, pulse, percent body fat, and weight. This sit down kiosk include a touch screen computer that guides the user on how to perform the measurements and controls all Kiosk functions. The HealthGuard-865 software allows the user the option of storing the measurements for future tracking purposes or e-mailing the results to the person's home.

The HealthGuard-865 is not for diagnostic use, and only furnishes data so the users can consult their personal physicians. The device is intended for users eighteen years and older.

SAFETY INFORMATION

To assure correct use of this product, basic safety measures should always be taken including the warning and cautions listed in this section.

| SAFETY SYMBOLS USED IN THIS OWNER'S MANUAL | |
|---|--|
|  WARNING | Indicates a potentially dangerous situation which, if not avoided, could result in severe injury or death. |
|  CAUTION | Indicates a potentially dangerous situation which, if not avoided, could result in minor injury to the user or patient or damage to the equipment or other property. |

DEVICE OPERATING CAUTIONS & WARNINGS



Contact your physician for detailed information and advice about your blood pressure. Self-diagnosis and treatment using measurement results may be dangerous. Follow the instructions of a licensed healthcare provider.



The HealthGuard-865 is not intended to be a diagnostic device and is for screening purposes only.



Read all of the information in the Owner's Manual before operating the device. This device is intended to measure blood pressure, weight, heart rate, and percent body fat for adults. Do not use on children or people who cannot express their intentions.



This device may cause discomfort or bruising on the upper arm. If this develops press the **STOP** button on the side of the measurement device or on the computer screen.



Operate the HealthGuard-865 only in the manner intended. Do not use this device for any other purpose.



Dispose of the device and accessories according to applicable local regulation.



Use only Futrex and HealthGuard authorized parts and accessories. Parts and accessories not approved for use with the device may damage the unit and void the warranty.

CARE AND MAINTENANCE



Do not subject the monitor to strong shocks, such as dropping the device on the floor.



No not expose the device or any of the components to water or submerge in water.



Store the device and components in a cool, clean, dry, and safe location.



Changes or modifications to the device not approved by the manufacturer will void the warranty. Do not attempt to repair the unit or components or disassemble the unit without expressed permission from Futrex and/or HealthGuard.

BEFORE TAKING A MEASUREMENT

To obtain the most reliable readings, follow these instructions:

1. Avoid eating, drinking alcohol, smoking, exercising and bathing for 30 minutes before taking a measurement. Rest for minutes before taking a measurement.
2. Stress raises blood pressure. Avoid taking measurements during times of stress.
3. Remove tight-fitting clothing from your left arm.
4. Remain still and do not talk during the testing.
5. Wait 2 to 3 minutes between measurements. The wait time allows arteries to return to the condition prior to taking the blood pressure measurement. You may need to increase the wait time depending on your individual physiological characteristics.
6. Ensure that your left palm is down and your arm is comfortably resting on the arm rest.
7. Keep a record of your blood pressure and heart rate readings for your physician. A single measurement does not provide an accurate indication of your true blood pressure. You need to take and record several readings over a period of time.

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1. Introduction

The HealthGuard-865 (HG-865) is a self-service kiosk that provides Blood Pressure, Pulse, Percent Body Fat and Weight. This document will provide information regarding set-up and interfacing to the HG-865.

1.1 Cleaning and Maintaining the HealthGuard-865

The HealthGuard-865 can be cleaned using soapy warm water. Alcohol swabs should be used to disinfect the cloth cuff and other surfaces that the arm may come into contact. The kiosk should be cleaned frequently to avoid dust build-up which could affect the performance of the device.

In the event that harmful materials are used for cleaning, damaged equipment will not be serviced without charges regardless of the warranty period.

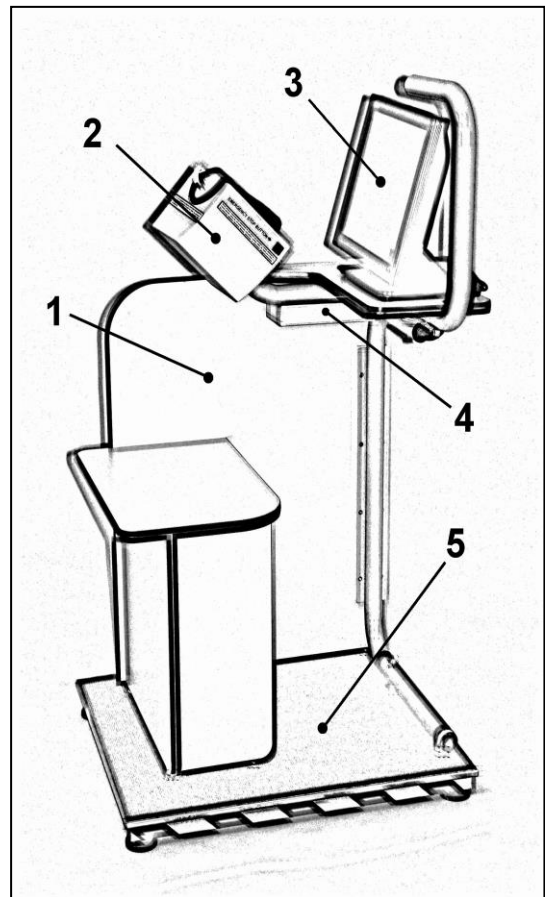
2. What We Supply

The HG-865 system consists of the following:

1. Booth
2. Cuff Mechanism
3. Touchscreen Computer
4. Command Module
5. Weight Scale

Details on the components will be found in Section 4, "System Overview."

In addition, the computer comes with complete software for operating the Kiosk. And finally, we provide comprehensive tech support..



3. What You Provide

You must provide an AC electrical wall outlet that has voltage anywhere from 100 to 250 volts with a line frequency between 50 and 60 Hz.

The HealthGuard-865 has the ability of sending information via the Internet, The kiosk is delivered with both WiFi as well as Ether Net capability. If you desire to use either of these capabilities, your need to supply the internet modem or the hard wire interface.

4. System Overview

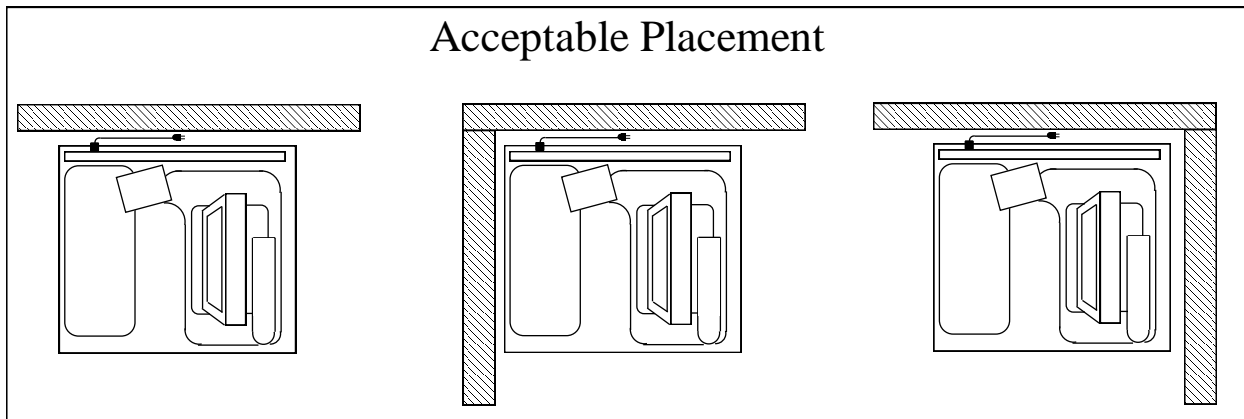
4.1. System Set-up – The HG-865 is shipped fully assembled on a pallet.


When selecting the location for the Kiosk, it is important to keep safety in mind. The Kiosk is designed to be placed with the “backboard” against a wall. The Kiosk may also be placed in a corner. Please do not position the Kiosk so that the back board is not against a wall. In addition, make sure the Kiosk is located on a stable, level surface. It should not wobble in any way. Use the Scale feet to level the scale. Then, check the leveling feet on the Kiosk. If they are not adjusted correctly, there could be movement between the Kiosk and the scale platform.

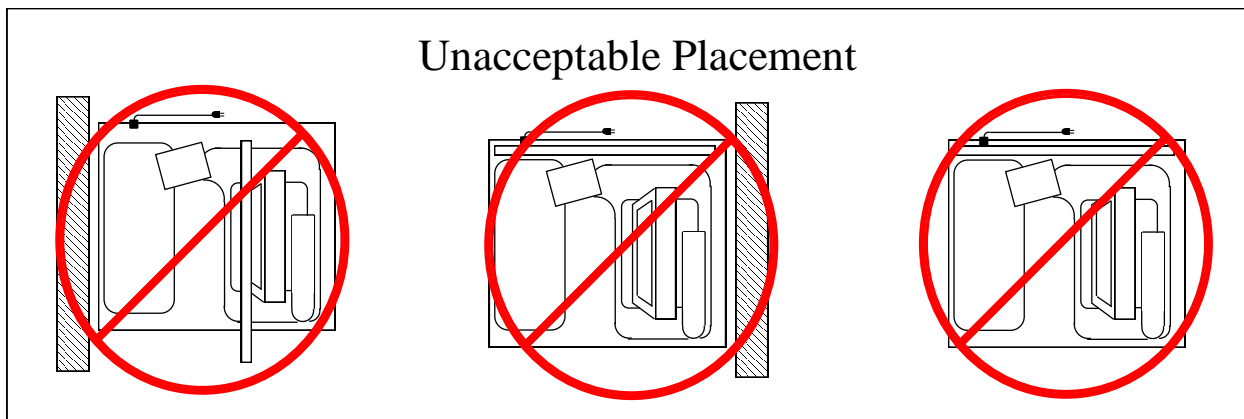
Important Note:

The weight readings will not be accurate if anything, besides the four scale feet, comes between the scale platform and the floor. Make sure nothing touches the floor except the feet.

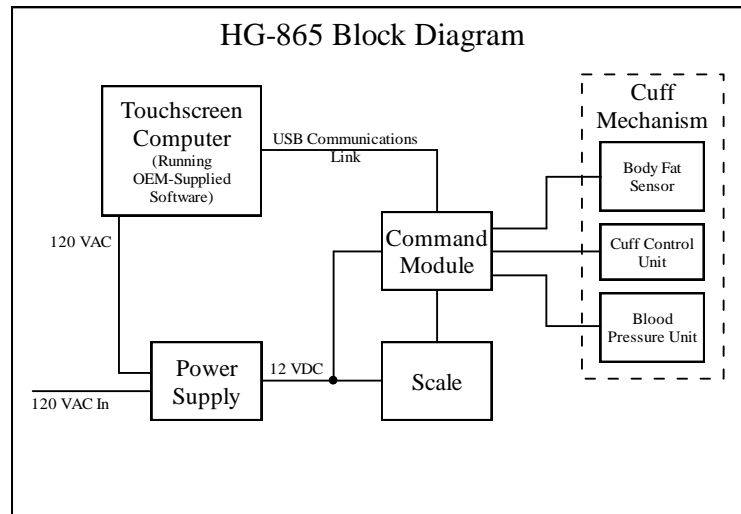
Finally, keep in mind that the Kiosk has an AC power cord that must be plugged into an outlet.



Note:  - represents a wall.



4.2.HG-865 Components



4.2.1. Command Module

The HG-865 is controlled by the microprocessor-based electronics located in the Command Module. The Command Module enclosure is located under the Touch Screen Computer and is powered by the 12V power supply located in the compartment under the seat. The Command Module communicates with the Cuff Mechanism, the Scale, and the Touch Screen Computer. Responding to instructions from the software running on the Touch Screen Computer, the Command Module orchestrates all the elements of obtaining the client's blood pressure, pulse rate, percent body fat, and weight.



Cuff Mechanism

In addition to the actual blood pressure cuff and its mechanical components, the Cuff Mechanism contains the Body Fat Sensor, Cuff Control circuitry and hardware, and the Blood Pressure Control system.

4.2.1.1. Body Fat Sensor

The photograph to the right shows a close-up of the Body Fat Sensor inside the Cuff Mechanism. The two IReds (Infrared Emitting Diodes) are on either side of the photo detector in the center. When the client's arm is inserted into the Cuff, the Body Fat Sensor must be in contact with bare skin for the body fat reading to be accurate. For more details, see Section 5.2, "Getting Accurate Body Fat Readings."



Also note that the Body Fat Sensor has an automatically regulated internal temperature control. This keeps the optics and electronic components in the sensor at a constant temperature, thereby increasing the stability of the Body Fat readings.

4.2.1.2. Cuff Control Unit

One of the patented features of the HG-865 is the locking Cuff Mechanism. To provide a snug fit on the client's arm, the cuff is spring-loaded and automatically retracts to its smallest size. As the client inserts his or her arm, the cuff expands to conform to the size of the client's arm. When the reading begins, the cuff automatically locks in this position, preventing the cuff circumference from expanding any further during the reading. It is this feature that allows HG-865 to provide accurate blood pressure results for such a wide range of arm sizes. Responding to signals from the Command Module, the Cuff Control unit locks and unlocks the cuff. The Cuff Control unit is contained within the Cuff Housing.

4.2.1.3. Blood Pressure Unit

Also inside the Cuff Housing, the Blood Pressure unit is comprised of the pump, valves, and circuitry that perform the blood pressure reading. This unit receives the signal from the Command Module and performs the blood pressure sequence. Upon completion of the reading, the Blood Pressure unit sends the results back to the Command Module.

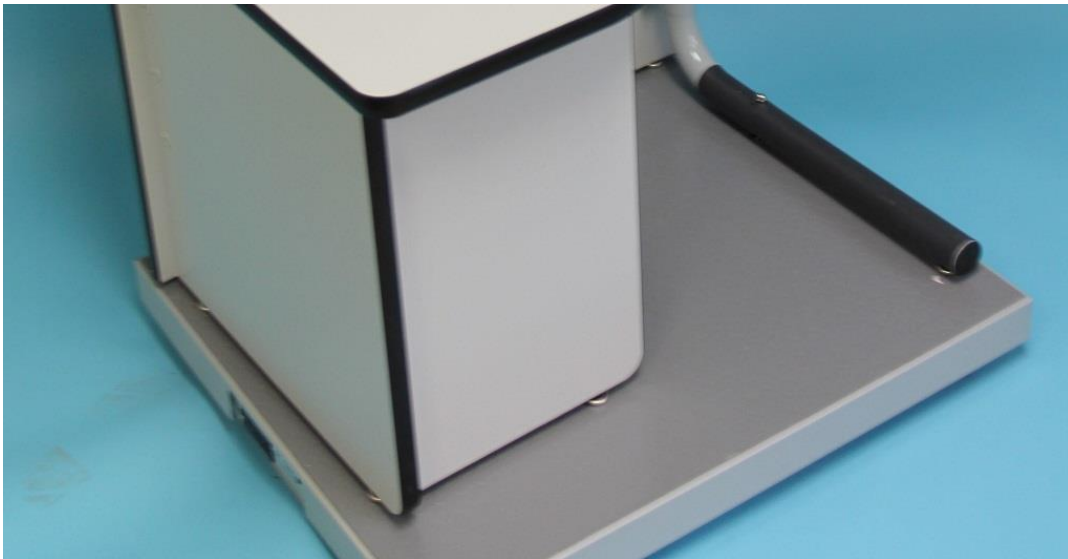
Power Supply

4.2.1.4. Power Supply Location

The Power Supply for the HG-865 is located in the cabinet under the seat.



Scale



The HG-865 uses a very accurate medical scale that is the floor of the kiosk.

The “brain” for the scale is mounted in the cabinet under the seat. The Command Module communicates with the scale via an RS-232 link, and the scale is powered by the 12 VDC output from the main Power Supply.

Important Notes:

- 1) The scale’s “brain” (under the Kiosk seat) and the scale proper (the “floor” of the Kiosk) are a matched set. It is *essential* that when the Kiosk is assembled, the Scale serial number matches the Booth serial number.
- 2) When power is applied to the HG-865, the scale zeros itself. Therefore, it is essential that the kiosk be completely unoccupied when you plug the AC cord into the wall. Please leave the Kiosk undisturbed for at least 30 seconds after applying power.

4.2.2. The Touch Screen Computer

The HG-865 comes standard with an “all-in-one” touch screen computer. Here are the specifications for this computer, but keep in mind that from time to time, Futrex may upgrade the computer specs.

| | |
|---------------------------|--|
| OS | Microsoft Windows 10 |
| CPU | Intel i3 or Similar |
| RAM | 1 GB |
| HDD | Nominally 80GB (with 74 GB available) |
| Display | 15" XGA TFT LCD |
| Resolution | 1024 x 768 |
| I/O Ports | 2 x USB Ports (at least one available) 1 x Ethernet port (RJ-45) 1 x RS232 Serial port (9-pin D-sub) 1 x Parallel Port (25-pin D-sub) 1 x VGA Port (15-pin D-sub) 1 x PS/2 Keyboard Port 1 x PS/2 Mouse Port |
| Installed Software | HyperTerminal (terminal Emulation, for troubleshooting) HG-865 Software |

Note: Other options may be made available upon request.

5. System Operation

This section provides an overview of HG-865 System Operations. If you are developing your own software, you will need to be familiar with the information in this section. Details on the system communications are provided in the separate document, “HG-865 Host Protocol”.

5.1. Powering Up the System

There are two steps to powering up the HG-865. This is true whether you are powering the system, or there has been a power failure – it is important that these two steps be followed.

5.1.1. Step 1: Connect the AC cord to the wall plug.

The HG-865 does not have a power switch, so it is powered as soon as the AC cord is plugged into the wall outlet. Before doing so, please decide upon the Kiosk’s location, and place it in that spot. Make sure the Kiosk is stable on the floor. Ensure that the Kiosk is unoccupied, with no one (or any extraneous objects) sitting or stored on it. Do not lean on the kiosk, or even touch it, when you plug it in. The reason for this drill is that upon power-up, the scale zeros itself out. In order to obtain accurate weight readings, the scale must remain undisturbed for the first 30 seconds after power-up.

Step 2: Wait for the computer to power on automatically -- the computer should, however if it does not the power button is located in the front of the computer and can be accessed as seen below:



5.2. Getting Accurate Body Fat Readings

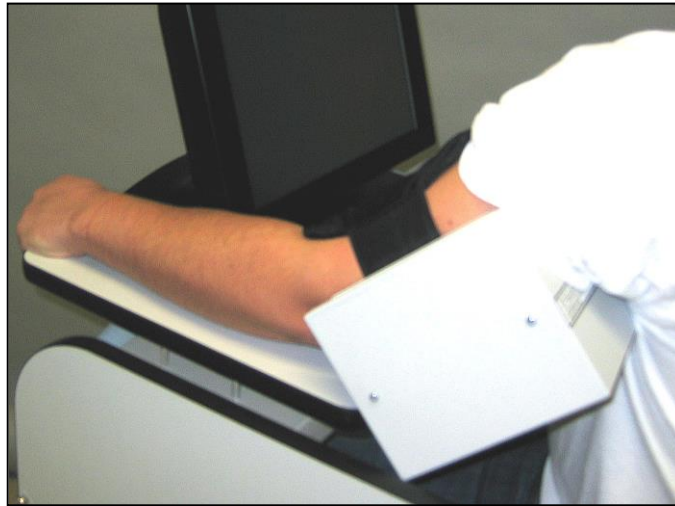
Percent body fat is measured by using low-level light just outside the visible portion of the spectrum. This Near Infrared (NIR) light is the same as the light transmitted by the TV remote control when you change channels. It is not visible to the eye, and is totally harmless.

The NIR light shines in a specific location on the back of the upper arm. Research has proven that the local percent of body fat at this location is related to the person's overall percent body fat.

Here are some factors that will affect the accuracy of the Percent Body Fat readings (continued on next page).

5.2.1. Shirt sleeve must be rolled up

The NIR light emitted by the body fat sensor must enter directly into the client's arm. For that reason, their shirtsleeve must be rolled up completely, without covering the body fat sensor.



5.2.2. Elbow must be touching the arm rest

By having the client's elbow resting on the arm rest, the body fat sensor is automatically located at the correct spot on the client's triceps. In addition, the client's arm should be relaxed, with the palm of the hand facing down.

5.2.3. Skin must be in firm contact with the body fat sensor

Once the arm has been properly inserted into the cuff, the client's triceps must be in firm contact with the body fat sensor. A good way to tell if this is the case is to look at the client's triceps after the measurement is complete. There should be a faint impression of the rectangular face of the body fat sensor visible on the client's skin.

5.3. Getting Accurate Blood Pressure Readings

The HG-865 uses the oscillometric method of blood pressure measurement. In this approach the sensor built into the HG-865 detects the blood's motion through the brachial artery, and then converts the blood motion into a digital signal. This approach eliminates the need for a stethoscope, simplifying the use of the system. In addition, the self-adjusting nature of our patented blood pressure cuff leads to more accurate readings because the cuff is sized to the client's arm.

The same factors that ensure good body fat readings also apply to blood pressure readings.

5.3.1. Shirtsleeve must be rolled up

While a good blood pressure reading can be obtained even through light clothing, the best results will come from a bare arm. This is especially important if the client also wants an accurate percent body fat reading.

5.3.2. Please relax and no talking or movement

Once the client's arm is comfortably placed in the cuff, he or she should relax and remain quiet. Motion of any kind may lead to a failed reading. Even talking can affect the blood pressure measurement.

6. **Software Requirements**

Please review the included "HealthGuard Software Manual" for a comprehensive and complete guide to completing measurements on the kiosks and using the administrator functions of the kiosk.

7 Specifications

| | |
|---|--|
| Blood Pressure and Pulse Accuracy | Pressure: ± 3 mmHg or 2% of readings above 200 mmHg Pulse: $\pm 5\%$ of reading |
| Body Composition Accuracy | Comparable to Hydrostatic Weighing, universally considered the “Gold Standard” in Body Composition Analysis. |
| Measurement Ranges | Blood Pressure: 0 to 280 mmHg Heart Rate: 40 to 180 beats/min Percent Body Fat: 2.5% to 45% Weight: 40 to 440 lbs (200 kg) |
| Arm Size Range | 9” to 13” in circumference |
| Age Ranges | 18 and up for Blood Pressure 18 and up for Percent Body Fat |
| Blood Pressure Measurement Method | Oscillometric |
| Overpressure Limit | 300 mmHg |
| Body Composition Measurement Method | Near Infrared Interactance |
| Evaluation Time | Typically less than one minute |
| Storage Temperature / Humidity Range: | Temperature: -4° F to 131° F (-20° C to 55° C) Humidity: 865% to 90% RH (non condensing) |
| Operating Temperature / Humidity / Barometric Pressure Range | Temperature: 50° F to 104° F (10° C to 40° C) Humidity: 865% - 90% RH (non condensing) Barometric Pressure: 105kPa to 80 kPa (790 – 600 mmHg) |
| Kiosk Cabinet Dimensions | Height: 49 inches Width: 29 ½ inches Depth: 23 ½ inches Weight: approx. 100 lbs. |
| Weight Scale Dimensions | Height: 3 ½ inches Width: 23 ½ inches Depth: 26 ½ inches Weight: approx. 50 lbs. |

8 Service Requirements

For service within the warranty period or following; please contact Futrex Support and Service at 301-733-9368 or via e-mail Service@Futrex.com. Futrex is the only authorized service representative for HealthGuard products.

DO NOT attempt to repair equipment without Futrex's expressed approval. This is will result in a void of warranty.

Failure to follow the cleaning and maintaining requirements outlines in SECTION 5 may result in failure of the equipment and possible health hazards. If there are any problems with the equipment, please take the following steps.

1. Gather the instrument model, serial number, date of purchase, and a description of the problem.
2. Call Futrex Service at 301-733-9368 or e-mail Service@Futrex.com.
3. If necessary, Futrex will issue a Return Materials Authorization (RMA) number which you will need to include with your instrument if it requires to be sent back for service. More information will be provided to you about this process during your call to Futrex Service.

9 Electrical Safety

Prior to the operation of the HealthGuard-865, make sure to check the following items:

- Is the power supply the appropriate voltage for your setting? (100 to 240 VAC)
- Are the power connections properly made to the equipment?
- Is the outlet and HealthGuard-865 grounded properly?

The answer to all of these questions should be YES. Once you have checked for electrical safety, you may power on the instrument as instructed in the "Getting Started" section below.



Electrical Safety is important to maintaining the instrument and preventing fires. Use caution at all times you are using AC power. **DO NOT** overload power strips, as this is a common cause of electrical fires.

10 Electromagnetic Testing and Safety

The HealthGuard-865 has been manufactured in compliance with current EMI/EMC requirements; however the use of this system in the presence of an electromagnetic field can cause temporary degradation of the HealthGuard-865. If this occurs, Futrex suggests a review of the environment in which the system is being used to identify possible sources of radiated emissions. These emissions can be from other electrical devices used within the same room or an adjacent room. Communication devices such as cellular phones can cause these emissions. The existence of TV, radio, or microwave transmission equipment located nearby can cause these emissions. If EMI/EMC causes disturbances, it may be necessary to relocate your system.

| Guidance and Manufacturer's Declaration – Electromagnetic Emissions | | |
|---|-------------------|--|
| The HealthGuard-865 is intended for use in the electromagnetic environment specified below. The customer or user of the HealthGuard-865 should assure that it is used in such an environment. | | |
| Emissions Test | Compliance | Electromagnetic Environment – Guidance |
| RF Emissions CISPR 11 | Group 1 | The HealthGuard-865 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. |
| RF Emissions CISPR 11 | Class B | The HealthGuard-865 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes. |
| Harmonic Emissions IEC 61000-3-2 | Not Applicable | |
| Voltage Fluctuations / Flicker Emissions IEC 61000-3-3 | Not Applicable | |

Guidance and Manufacturer’s Declaration – Electromagnetic Immunity


The HealthGuard-865 is intended for use in the electromagnetic environment specified below. The customer or the user of the HealthGuard-865 should assure that it is used in such an environment.

| Immunity Test | IEC 60601 Test Level | Compliance Level | Electromagnetic Environment – Guidance |
|--|---|------------------------------|---|
| Electrostatic Discharge (ESD) IEC 61000-4-2 | ± 6 kV Contact ± 8 kV Air | ± 6 kV Contact ± 8 kV Air | Floors should be wood, concrete or ceramic tile. If the floors are covered with synthetic material, the relative humidity should be at least 30%. |
| Electrical Fast Transient / Burst IEC 61000-4-4 | ± 2 kV for power supply lines ± 1 kV for input/output lines | Not Applicable | The HealthGuard-865 does not use AC Power / Power Supply Lines during operation |
| Surge IEC 61000-4-5 | ± 1 kV line(s) to line(s) ± 2 kV line(s) to earth | Not Applicable | The HealthGuard-865 does not use AC Power / Power Supply Lines during operation. |
| Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11 | <5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 s | Not Applicable | The HealthGuard-865 does not use AC Power / Power Supply Lines during operation. |
| Power Frequency (50/60 Hz) Magnetic Field IEC 61000-4-8 | 3A/m | 3A/m | The HealthGuard-865 was tested and performs normally within the specification limits. |

NOTE U_T is the a.c. mains voltage prior to application of the test level.

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The HealthGuard-865 is intended for use in the electromagnetic environment specified below. The customer or the user of the HealthGuard-865 should assure that it is used in such an environment.

| Immunity Test | IEC 60601 Test Level | Compliance Level | Electromagnetic Environment – Guidance |
|--|---|----------------------------|---|
| <p>Conducted RF IEC 61000-4-6</p> <p>Radiated RF IEC 61000-4-3</p> | <p>3 Vrms 8650 kHz to 80 MHz</p> <p>3 V/m 80 MHz to 2.5 GHz</p> | <p>3 Vrms</p> <p>3 V/m</p> | <p>Portable and mobile RF communications equipment should be used no closer to any part of the HealthGuard-865, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended Separation Distance:</p> $d = 1.2\sqrt{P}$ <p>$d = 1.2\sqrt{P}$ 80 MHz to 800 MHz</p> $d = 2.3\sqrt{P}$ 800 MHz to 2.5 GHz <p>Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters.</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey^a should be less than the compliance level in each frequency range.^b</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p>  |

NOTE 1 At 80 MHz to 800 MHz, the higher frequency range applies

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the HealthGuard-865 is used exceeds the applicable RF compliance level above, the HealthGuard-865 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the HealthGuard-865.

^b Over the frequency range of 8650kHz to 80MHz, field strengths should be less than 3 V/m.

Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the HealthGuard-865

The HealthGuard-865 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the HealthGuard-865 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the HealthGuard-865 as recommended below, according to the maximum output power of the communications equipment.

| Rated Maximum Output Power of Transmitter W | Separation Distance According to Frequency of Transmitter m | | |
|--|--|--|--|
| | 8650 kHz to 80 MHz $d = 1.2\sqrt{P}$ | 80 MHz to 800 MHz $d = 1.2\sqrt{P}$ | 800 MHz to 2.5GHz $d = 2.3\sqrt{P}$ |
| 0.01 | 0.12 | 0.12 | 0.23 |
| 0.1 | 0.38 | 0.38 | 0.73 |
| 1 | 1.2 | 1.2 | 2.3 |
| 10 | 3.8 | 3.8 | 7.3 |
| 100 | 12 | 12 | 23 |

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

11 Electrostatic Discharge

Electrostatic Discharge (ESD), commonly referred to as static shock, is a common naturally occurring phenomenon. ESD is most common in conditions with low humidity, which can be caused by heating or air conditioning. In low humidity conditions, electrical charges naturally build up on individuals and can create static shocks. An ESD condition occurs when a person with an electrical energy build-up comes in contact with objects such as metal doorknobs, file cabinets, other people, or electronic equipment. The static shock is a discharge of the electrical energy build-up from a charged person to a lesser or non-charged individual or object.

ESD can also build up from actions such as wearing socks on carpet. The HealthGuard-865 takes weight measurements and some clients may prefer to remove their shoes. It is important to note that the level of electrical energy discharged from a user of the HealthGuard-865 to the instrument can be significant enough to cause damage to the equipment. The following precautions can help to reduce ESD:

- Anti-Static Spray on Carpets & Linoleum
- Anti-Static Mats

12 Troubleshooting

| Problem | Probable Cause(s) | Corrective Measures |
|---|---|--|
| Display Shows HG-865 NOT CONNECTED | a) Bad Connection between the HG-865 and the communications port b) No Power to the HG-865 c) HG-865 is not warmed up | a) Ensure that the Communications Cable is connected to both the PC and the HG-865 b) Ensure that the power supply is plugged into a working outlet, and that it is connected to the HG-865 cuff. c) The HG-865 takes 1-2 minutes to warm up (sometimes a bit longer). Wait for a minute or two, and then try again. |
| Poor Repeatability on Blood Pressure Measurements | Subject moved during the evaluation. | Repeat the evaluation, and be sure to remain still and quiet during the evaluation. |
| Unusually high blood pressure readings | Subject has not relaxed enough to be at normal resting blood pressure. | Have the subject sit quietly for 2-3 minutes, and then repeat the test. |
| Error measuring Body Fat. Display is --- | Sleeve was in the way of the body fat sensor. | Ensure that the subject has his or her sleeve rolled up. The skin must be bare for reading. |
| Poor Repeatability on Body Fat Measurements | a) Subject moved during the evaluation b) Sleeve was in the way of the body fat sensor. | a) Repeat the evaluation, and be sure to remain still and quiet during the evaluation. b) Ensure that the subject has his or her sleeve rolled up. The skin must be bare for a body fat reading. |
| Error taking Weight Measurement when stepping on scale | Bad connection between the scale and the HG-865 Moving your body when standing on scale | Ensure that the Serial Cable is connected to both the scale and the HG-865 Stand still, no talking |
| HG-865 becomes unresponsive after using emergency stop button | HG-865 lost communication with PC | Wait 1 – 5 minutes to allow the instrument to regain communications with the PC as the system resets. |

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