# Defibtech DDU-2000 Series Trainer

## User Manual

ELECTRONIC DISTRIBUTION

DAC-U2535EN-BD

## Notices

Defibtech, L.L.C. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Information in this document is subject to change without notice. Names and data used in the examples are fictitious unless otherwise noted.

## Limited Warranty

The Defibtech "Limited Warranty" is the sole and exclusive warranty for Defibtech defibrillators and associated accessories. For warranty purposes, the Trainer and all of its accessories are classified as AED accessories. Refer to the Original End User's Limited Warranty for AEDs available at www.defibtech.com for details.

## Copyright

# Contents

*This User Manual provides information and operational instructions specific to DDU-2000 Series Trainers.*

*For comprehensive information about DDU-2000 Series rescue AEDs, please refer to the DDU-2000 Series AED User Manual at www.defibtech.com.*

# 1 Introduction to the Defibtech DDU-2000 Series Trainer

The "***Trainer***" is a dedicated training system that is externally similar to a fully-functional Defibtech DDU-2000 Series Automated External Defibrillator (AED).*

The main unit has bright red overmolding to clearly distinguish it as a training device. The training pads and battery for use with the Trainer have red packaging and labels to distinguish them as being for training use only. ***The Trainer and training accessories cannot be used to defibrillate patients.***

A Remote Control is provided with the Trainer which allows the instructor to control training exercises and functions from a distance.

**WARNING** Do not store the Trainer or training accessories with a rescue AED or rescue accessories. The Trainer and training accessories cannot provide therapy.

# 2 Safety Information

This chapter includes a list of warning and caution messages that relate to the Trainer and its accessories. Many of these messages are repeated elsewhere in this User Manual and on the Trainer or accessories. The entire list is presented within this chapter for convenience.

**WARNING:** Conditions, hazards, or unsafe practices that may result in serious personal injury or death.

**CAUTION:** Conditions, hazards, or unsafe practices that may result in minor personal injury, damage to the Trainer, or loss of data.

* Essential performance.

## 2.1 Warnings

**WARNING**

All training instructors must read these instructions for use before using the Trainer.

**WARNING**

Do not use in the presence of flammable gases or anesthetics.

**WARNING**

Only use the provided AC Adapter to charge the Training Battery Pack. Using other AC adapters may cause unsafe conditions.

**WARNING**

Do not charge a battery pack which is damaged, discolored or has leakage. It may cause overheating, explosion or fire.

**WARNING**

Do not cover up the Trainer when it is in use.

**WARNING**

If the Trainer, Battery Pack, and/or AC Adapter becomes too hot to touch or otherwise appears faulty, immediately disconnect the power cord from the AC outlet, attach a "Do not use" or "To be repaired" label to the item(s) and contact your local distributor or Defibtech representative.

**WARNING**

Do not overcharge the Trainer Battery Pack.

**WARNING**

Do not store the Trainer or training accessories with a rescue AED or rescue accessories. The Trainer and training accessories cannot provide therapy.

**WARNING**

If the Training Battery Pack is inserted in a DDU-2000 series AED, the AED cannot be used to perform a rescue. Replacing the Training Battery Pack with a rescue battery pack will immediately allow the DDU-2000 Series AED to be used to perform a rescue.

**WARNING**

Do not store Training Pads and/or a Training Battery Pack with a rescue AED.

**WARNING**

Training Pads cannot be used to rescue a patient. If Training Pads are connected to a DDU-2000 Series AED, the AED will say "Check Pads," and the AED will report an error during the next automatic self-test.

**WARNING**

Do not apply the Training Pads to human skin. Use only with a manikin or similar materials.

**WARNING**

Do not sterilize the Trainer or its accessories.

## 2.2 Cautions

**CAUTION**

Only use a Defibtech-specified rechargeable battery pack for use with the Trainer. If an unspecified battery pack or a non-rechargeable battery is charged, it may cause overheating, explosion, fire or leakage.

**CAUTION**

Do not disassemble or modify the Trainer and its accessories. Doing so may cause overheating, fire, electrical shock or injury.

**CAUTION**

The Trainer is made for indoor use and is not water/dust proof or resistant. Do not place the Trainer in locations that are extremely hot or cold, dusty or dirty, very humid or vibrating. If the Trainer is exposed to any of these conditions, it may cause fire or injury.

**CAUTION**

Do not drop the Trainer or apply a mechanical shock to it.

**CAUTION**

Do not store or use the Trainer outside of the specified conditions.

# 3 Trainer Components

## 3.1 Trainer Unit

***WARNING:*** *The Trainer and training accessories **cannot** be used to defibrillate patients.*

The components included with a new Trainer system are:

1. Trainer (DTR-2000).
2. Rechargeable Training Battery Pack (DTR-2005); provided with AC Adapter (DTR-2006).
3. Training Pads - 1 adult set (DTR-2001).
4. Remote Control (DTR-400; use is optional).

## 3.2 Training Battery Pack

The rechargeable Training Battery Pack should be charged using the supplied AC Adapter. Connect the AC Adapter to the Training Battery Pack by inserting the Adapter's connector into the port on the underside of the Battery Pack and then plug the Adapter into an AC power source. The battery will fully charge in 12-14 hours.

***Note:*** Avoid overcharging for longest battery life – when proper charging procedures are followed, the Training Battery Pack should have a life of approximately 200 charge/discharge cycles.

**WARNING**

Only use the provided AC Adapter to charge the Training Battery Pack. Using other AC adapters may cause unsafe conditions.

**WARNING**

If the Training Battery Pack is inserted in a DDU-2000 series AED, the AED cannot be used to perform a rescue. Replacing the Training Battery Pack with a rescue battery pack will immediately allow the DDU-2000 Series AED to be used to perform a rescue.

**WARNING**

Do not store the Training Battery Pack with a rescue AED.

### 3.3 Remote Control

The Remote Control requires two AAA batteries (included). Insert the batteries into the battery compartment in the back of the Remote Control. No other setup of the Remote Control is required.

### 3.4 Training Pads

One Training Pads set (pads pouch, pads, and connector cable) is included with the Trainer system. Additional training pads are available as complete pad sets and as an economical replacement pads multi-pack. The replacement pads attach (with hook and loop fasteners) to the reusable connector cable supplied with complete pad sets.

**WARNING**

Training Pads cannot be used to rescue a patient. If Training Pads are connected to a DDU-2000 Series AED, the AED will say "Check Pads," and the AED will report an error during the next automatic self-test.

**WARNING**

Do not store the Training Pads with a rescue AED.

**WARNING**

Do not apply the Training Pads to human skin. Use only with a manikin or similar materials.

## 4 Accessories

This chapter describes the accessories that can be used with the DDU-2000 Series Trainer. To obtain replacement component parts and accessories, contact your authorized distributor or Defibtech.

1. DTR-2001: Complete adult trainer pad set with connector cable
2. DTR-2051: 5-pack of adult replacement trainer pads
3. DTR-2002: Complete pediatric trainer pad set with connector cable
4. DTR-2052: 5-pack of pediatric replacement trainer pads
5. DTR-2005: Rechargeable training battery pack (charger not included)
6. DTR-2006: Trainer battery charger
7. DTR-400: Trainer remote control (includes two AAA batteries)
8. DAC-2105: Trainer soft carrying case

# 5 Training Scenarios

## 5.1 Available Scenarios

Six training scenarios (described below) are available for training exercises, and can be changed during training as desired.

The following scenarios are available:

1. VF (Ventricular Fibrillation) that converts to a non-shockable rhythm (normal sinus rhythm) after the 1st shock. This scenario is based on the American Heart Association training scenario and allows for a quick overview and demonstration of AED operation.
2. Non-shockable rhythm throughout.
3. Bad pads indication until the pads are disconnected and then re-connected (simulating replacement of the pads), followed by VF that converts after the 1st shock to a non-shockable rhythm (normal sinus rhythm).
4. VF that converts on the 2nd shock to a non-shockable rhythm (normal sinus rhythm).
5. Non-converting persistent VF.
6. Pads not applied to the manikin. This scenario is recommended as the Default Scenario when using the Remote Control. The Trainer will prompt the student to apply pads to the manikin, and the instructor can then manually select rhythm simulations (such as NSR and VF) or any one of the above training scenarios using the Remote Control.

***Note:*** The Trainer will announce "Training Mode" each time it is turned on to indicate that it cannot be used to defibrillate a patient.

***Note:*** When the Trainer is turned on, it will power up in the Default Scenario (see section 5.3 for instructions on setting the Default Scenario).

***Note:*** Training scenarios 1-5 assume that pads have already been applied to the manikin if pads are connected to the Trainer when the Trainer is turned on. For properly sequenced exercises using these training scenarios, the student should either apply the pads to the manikin before turning the Trainer on, or turn the Trainer on with pads disconnected, apply the pads to the manikin, and then connect the pads to the Trainer.

## 5.2 The Default Training Scenario

When a Trainer is first turned on, it operates in the "Default Training Scenario". The Default Training Scenario can be changed to any of the six available training scenarios.

***Note:*** New Trainers are factory programmed to initially start with the Default Training Scenario set to scenario #6.

## 5.3 Programming the Default Scenario

The Trainer can be re-programmed to start in any of the six available scenarios when powered on.

### *5.3.1 Programming the Default Scenario Without the Remote Control*

Use the following procedure to select a training scenario when a Remote Control is not available:

1. Start with the Trainer off.
2. Hold the Shock button down while turning the Trainer on.
3. The Trainer will announce "Training Mode n," where "n" is the number of the current Default Training Scenario.
4. Release the Shock button.
5. Push the Shock button repeatedly to advance through the available training scenarios until the desired scenario is reached (the Trainer will announce each scenario number in sequence).
   ***Note:*** It is OK to push the Shock button rapidly (without waiting for the numbers to be announced) in order to advance more quickly.
6. Turn the Trainer off. It will now operate in the chosen training scenario until the Default Scenario is reprogrammed.

### *5.3.2 Programming the Default Scenario With the Remote Control*

***Note:*** When performing training using the Remote Control, Defibtech recommends programming training scenario #6 (Pads not applied) as the Default Training Scenario. This will allow the instructor to manually select rhythm simulations or other training scenarios as desired using the Remote Control.

To program the Default Scenario using the Remote Control:

1. Start with the Trainer off.
2. Power on the Trainer.
3. Press and release the ***Shift*** Key on the Remote Control.
4. Press and release the ***Alt*** Key on the Remote Control.
5. Press the number key corresponding to the desired training scenario (#1 through #6).
6. The Trainer will announce "Training Mode 'n'" where 'n' corresponds to the numeric key that was pressed.

The Default Training Scenario has now been programmed and the Trainer will start using this training scenario every time the Trainer is turned on.

# 6 Display Modes

On power-up, the Trainer will default to operating in "**AED Video Mode**" which displays visual prompts throughout the rescue scenarios. The Trainer can be put into either "**AED ECG Mode,**" which provides a non-diagnostic display of the heart rhythm, or "**Manual Mode,**" which allows overriding of the automatic features of the Trainer.

***Note:*** Unlike a DDU-2000 Series rescue AED, the Trainer's video interface does not include a Battery Indicator icon. To recharge the Training Battery Pack, please refer to Section 3.2 ("Training Battery Pack") of this User Manual.

***Note:*** When the Trainer is set to "**AED Video Mode**" and adult training pads are connected to the unit, the visual scenarios displayed will depict an adult patient. When pediatric training pads (see Chapter 4, *"Accessories"*) are connected to the unit, the visual scenarios displayed will depict a pediatric patient.

For further information, please refer to the DDU-2000 Series AED User Manual, which can be viewed at www.defibtech.com.

# 7 Remote Control Commands

The Remote Control can be used to change the behavior of the Trainer at any time while the Trainer is powered on. The following functions can be performed using the Remote Control keys:

- ***OFF*** - turns the Trainer off.
- ***PADS*** - simulates disconnected pads.
- ***NSR*** - simulates a Normal Sinus Rhythm (typically used once pads have been applied to the training dummy).
- ***VFIB*** - simulates Ventricular Fibrillation (typically used once pads have been applied to the training dummy).
- ***MOTION*** - simulates a cardiac rhythm corrupted with excessive motion artifacts (typically used once pads have been applied to the training dummy).
- ***1 - 6*** - instantly changes the Trainer to the corresponding training scenario. ***Note:*** Buttons 7 - 9 do not have any corresponding training scenarios.
- ***VOLUME UP*** - increases the volume of the Trainer's voice incrementally (up to a maximum limit).
- ***VOLUME DOWN*** - reduces the volume of the Trainer's voice incrementally (down to a minimum limit).
- ***PAUSE*** - alternately suspends and resumes Trainer operation. Once paused, the Trainer will only respond to the PAUSE key of the Remote Control.

# 8 Using the Remote Control with Multiple Trainers

The Remote Control can be used to individually control up to four Trainers at a time in a classroom setting.

To control each of the four Trainers individually, each Trainer must be assigned a unique letter "name." The Remote Control has four keys (A through D) which are used to program the AED Trainers with this name.

These keys may then be used as a prefix to any of the commands described in the previous section (e.g. pressing ***A***, then ***NSR*** causes AED 'A' to simulate a normal sinus rhythm, pressing ***D***, then ***PAUSE*** will cause AED 'D' to suspend operation).

***Note:*** To simultaneously control multiple Trainers after they have been assigned unique names, the instructor may use the Remote Control key sequence ***SHIFT-ALT-'Key'*** (where ***'Key'*** is the desired control command). All Trainers within range will respond to this sequence regardless of name assignment.

## 8.1 Assigning Unique Names to Trainers

To program up to four Trainers with unique names, use the following procedure:

1. Start with all of the Trainers off.
2. Power on the Trainer that is to be programmed.
3. Press and release the ***Shift*** Key on the Remote Control.
4. Press and release the ***Alt*** Key on the Remote Control.
5. Press one of the four alphabetically labeled keys on the Remote Control (***A*** to ***D***) to set the Trainers "name."

## 8.2 Removing Unique Names from Trainers

To remove the programmed name from a Trainer, use the following procedure:

1. Start with all of the Trainers off.
2. Power on the Trainer with the name assignment that is to be removed.
3. Press and release the ***Shift*** Key on the Remote Control.
4. Press and release the ***Alt*** Key on the Remote Control.
5. Press the ***Off*** Key on the Remote Control.

***Note:*** To avoid accidental naming or re-naming of Trainers in a setting where all Trainers may not be turned off, it is recommended that the above setup procedures be performed on each Trainer in a separate room.

# 9 Maintenance and Troubleshooting

## 9.1 Routine Maintenance

Although the Trainer is designed to be very low maintenance, simple maintenance tasks must be performed by the owner/operator on a regular basis to ensure the Trainer's dependability.

- Check Trainer and accessories for damage, dirt, and contamination. Clean or replace as necessary.
- Check that the Trainer Battery Pack is fully charged.
- Check that the remote control is fully-functional. Replace the 2 AAA batteries if necessary.

***Note:*** If the Trainer or any of its accessories have been dropped, mishandled, or abused, a thorough evaluation of operation should be performed.

## 9.2 Cleaning

After each use, clean the Trainer of any dirt or contaminants on the case and connector socket. The following are important guidelines to be adhered to when cleaning the device:

- The battery pack should be installed when cleaning the Trainer.
- Do not immerse the Trainer in fluids or allow fluids to enter the Trainer.
- Do not spray cleaning solutions directly on the Trainer or its connectors.
- Do not use abrasive materials or strong solvents such as acetone or acetone based cleaning agents.
- To clean the Trainer's exterior, use a soft cloth dampened with one of the following recommended cleaning agents:
  - Soapy water
  - Ammonia based cleaners
  - Hydrogen peroxide
  - Isopropyl alcohol (70 percent solution)
  - 3 percent chlorine bleach/water mixture
- Ensure that the connector socket is completely dry before reinstalling the pads cable. After cleaning, allow the Trainer to completely dry.

Please note that none of the items included with the Trainer (including the Trainer unit itself) are sterile or require sterilization.

**WARNING** Do not sterilize the Trainer or its accessories.

## 9.3 Storage

Store the Trainer in environmental conditions within range of the specifications (refer to the "Environmental" section of the "Specifications" chapter of this manual for details).

## 9.4 Troubleshooting

The following table lists the symptoms, the possible causes, and the possible corrective actions for common problems. Refer to the DDU-2000 Series AED User Manual at www.defibtech.com for additional symptoms and detailed explanations on how to implement the corrective actions.

| ***Symptom*** | ***Possible Cause*** | ***Corrective Action*** |
|---|---|---|
| **Trainer will not turn on** | Training Battery Pack not inserted | Insert Training Battery Pack |
| | Training Battery Pack depleted or needs servicing | Recharge or replace Training Battery Pack or contact your local distributor or Defibtech representative |
| | Trainer malfunction | Contact your local distributor or Defibtech representative |
| **Trainer immediately turns off** | Low charge on Training Battery Pack | Recharge or replace Training Battery Pack |
| | Trainer malfunction | Contact your local distributor or Defibtech representative |
| **Display screen does not work** | Training Battery Pack not inserted or is improperly inserted | Confirm that the Training Battery Pack is fully inserted and firmly seated |
| | Training Battery Pack depleted | Recharge or replace Training Battery Pack |
| | Trainer malfunction | Contact your local distributor or Defibtech representative |
| **Training Battery Pack will not recharge** | No power being supplied from AC source | Plug AC Adapter into a AC power outlet that is confirmed to be live |
| | Loose connection between AC Adapter and Training Battery Pack | Confirm that the AC Adapter and Training Battery Pack are firmly connected |
| | Training Battery Pack has reached the end of its useful life | Replace Training Battery Pack with a new one |
| | Training Battery Pack and/or AC Adapter malfunction | Contact your local distributor or Defibtech representative |

***Note:*** Unlike a DDU-2000 Series rescue AED, the Trainer does not perform automatic self-tests to help ensure readiness. The Active Status Indicator (ASI) on the Trainer has limited functionality: it lights green when a sufficiently-charged Training Battery Pack is installed and the Trainer is powered up and is unlit when the Trainer is off or when power up is attempted on a Trainer in which the Training Battery Pack is completely depleted or not installed.

## 9.5 Repair

The Trainer contains no user serviceable parts. If the Trainer needs servicing, call your authorized distributor or Defibtech (refer to the "Contacts" chapter of this manual for contact information).

## 9.6 Recycling Information

At the end of useful life, recycle the Trainer and its accessories.

**Recycling Assistance**

For recycling assistance contact your local Defibtech distributor.
Recycle in accordance with local and national regulations.

**Preparation for Recycling**

Items should be clean and contaminant-free prior to being recycled.
When recycling a Trainer and its accessories follow local clinical procedures.

**Packaging for Recycling**

Packaging should be recycled in accordance with local and national requirements.

## 9.7 Notice to European Union Customers

The crossed-out wheeled bin symbol  on this product indicates that this equipment has been put on the market after 13 August 2005, and is included in the scope of the directive 2002/96/EEC on Waste Electrical and Electronic Equipment (WEEE) and of the national decree(s) which transpose provisions of such directive.

At the end of its lifetime, this product can only be disposed of in compliance with the provisions of the above-mentioned European directive (and as amended) as well as with the corresponding national regulations. Severe penalties are possible for unauthorized disposal.

Electrical and Electronic Equipment (EEE) may contain polluting components and hazardous substances, the accumulation of which could pose serious risk for the environment and human health. It is for this reason that local administrations provide regulations, which encourage reuse and recycling, and prohibit the disposal of WEEE as unsorted municipal waste and require the collection of such WEEE separately (at specifically authorized treatment facilities). Manufacturer and authorized distributors are required to supply information about a safe treatment and disposition of the specific product.

You may also return this equipment to your distributor when purchasing a new one. As for reuse and recycling, notwithstanding the limits imposed by the nature and the use of this product, the manufacturer will do its best to develop recovery processes. Please contact the local distributor for information.

# 10 Technical Specifications

## 10.1 General

| *Category* | *Specification* |
|---|---|
| **Size** | 7.3 x 9.5 x 2.3 inches (18.5 x 24 x 5.8 cm) |
| **Weight** | Less than 3 lbs (1.4 kg) (with battery) |
| **Power** | Battery Pack (rechargeable) |
| **Design standards** | Meets applicable requirements of<br>• IEC 60601-1<br>• UL 60601-1<br>• 2014/35/EU Low Voltage<br>• IEC 60601-1-2 |

## 10.2 Environmental

| *Category* | | *Specification* |
|---|---|---|
| **Operating / Maintenance** | Temperature | 0 – 50°C (32 – 122°F) |
| | Humidity | 5% – 95% (non-condensing) |
| | Air Pressure | 700 to 1060 hPa (21 to 31 inHg) |
| **Standby / Storage / Transport** | Temperature | 0 – 50°C (32 – 122°F) |
| | Humidity | 5% – 95% (non-condensing) |
| | Air Pressure | 500 to 1060 hPa (15 to 31 inHg) |
| **ESD and EMI (radiated and immunity)** | | Refer to Chapter 11 for details |
| **Radio Frequency Emissions Applicable Directive and Standards** | | ETSI EN 300 220-2 V2.1.2 (2007-06)<br>ERC RECOMMENDATION 70-03<br>ETSI EN 301 489-3 V1.4.1 (2002-08) |

## 10.3 Battery Pack

Use only Defibtech battery packs in the DDU-2000 Series Trainer.

| *Category* | *Specification* |
|---|---|
| **Model number** | DTR-2005 |
| **Main battery type** | 7.2V, 2000mAh, NiMH rechargeable battery |
| **Capacity** | 8 hours of continuous operation* |
| **Battery Life** | 2 years, or 200 charge/discharge cycles* |

*Typical, new battery, at 25°C

## 10.4 AC Adapter

Use only the AC Adapter supplied with the DDU-2000 Series Trainer.

| ***Category*** | ***Specification*** |
|---|---|
| **Model number** | DTR-2006 |
| **Line voltage** | 100 to 240 VAC |
| **Line frequency** | 50/60Hz |
| **Power input** | 0.3W |

# 11 Electromagnetic Conformity

## 11.1 Guidance and Manufacturer's Declaration

DDU-2000 Series Trainers are intended for use within the electromagnetic environment specified below. The customer or the user of the DDU-2000 Series Trainer should assure that it is used within the stated environmental specifications.

## 11.2 Electromagnetic Emissions

| ***Emissions test*** | ***Compliance*** | ***Electromagnetic environment – guidance*** |
|---|---|---|
| RF emissions<br>CISPR 11<br>FCC Part 15 | Group 1<br>Class B<br>Class B | The DDU-2000 Series Trainer 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. |
| Harmonic emissions IEC 61000-3-2 | Not applicable | Battery operated equipment |
| Voltage fluctuations/flicker emissions IEC 61000-3-3 | Not applicable | Battery operated equipment |

## 11.3 Electromagnetic Immunity

| ***Immunity test*** | ***IEC 60601 test level*** | ***Compliance level*** | ***Electromagnetic environment – guidance*** |
|---|---|---|---|
| Electrostatic discharge (ESD)<br>IEC 61000-4-2 | ±8 kV contact<br>±15 kV air | ±8 kV contact<br>±15 kV air | There are no special requirements with respect to electrostatic discharge. |
| Electrical fast transient/burst<br>IEC 61000-4-4 | ±2 kV for power line supply lines<br>±1 kV for input/ output lines | Not applicable | Battery operated equipment |
| Surge<br>IEC 61000-4-5 | ±1 kV line(s) to line(s)<br>±2 kV line(s) to earth | Not applicable | Battery operated equipment |
| Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11 | Not applicable | Not applicable | Battery operated equipment |

| ***Immunity test*** | ***IEC 60601 test level*** | ***Compliance level*** | ***Electromagnetic environment – guidance*** | |
|---|---|---|---|---|
| Power frequency (50/60 Hz) magnetic field IEC 61000-4-8 | 30 A/m | 30 A/m | Power frequency magnetic fields should not be greater than levels characteristic of a typical location in a commercial or hospital environment. | |
| Radiated RF<br>IEC 61000-4-3 | 20 V/m<br>80 MHz to 2.7 GHz<br>80% 5Hz AM Modulation | 20 V/m | Portable and mobile RF communications equipment should be used no closer to any part of the DDU-2000 Series Trainer, including cables, than necessary. The recommended separation distance calculated from the equation applicable to the frequency of the transmitter is shown in the following table. | |
| | | |  | Interference may occur in the vicinity of equipment marked with this symbol. |

***Note 1***: At 80 MHz and 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.

The ISM (industrial, scientific and medical) bands between 150 kHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz.

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 DDU-2000 Series Trainer is used exceeds the applicable RF compliance level above, the DDU-2000 Series Trainer should be observed to verify normal operation. If abnormal performance is observed additional measures may be necessary, such as reorienting or relocating the DDU-2000 Series Trainer.

## 11.4 Regulatory Compliance

Changes or modifications of this product, not expressly approved by Defibtech, may void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules and Industry Canada Radio Standard RSS-210. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# 12 Glossary of Symbols

| *Symbol* | *Meaning* |
|---|---|
|  | SHOCK Button – Delivers defibrillation shock to the patient when the device is ready to shock.<br>***NOTE: The Trainer and training accessories cannot be used to defibrillate patients.*** |
|  | ON/OFF Button<br>• Turns the device ON when it is OFF.<br>• Turns the device OFF when it is ON. |
|  | Caution, consult accompanying documents. |
|  | Refer to instruction manual / booklet. |
|  | Do not expose to high heat or open flame. Do not incinerate. |
|  | Do not damage or crush. |
|  | Follow proper disposal procedures. |
|  | Operational temperature limitation. |
|  | Manufacturer. |
|  | Date of manufacture. |
|  | Manufacturer and date of manufacture. |

| ***Symbol*** | ***Meaning*** |
|---|---|
| CE | Meets the requirements of the European Directives. |
|  | Do not reuse. |
| REF | Catalogue number. |
|  | Keep dry. |
|  | Handle with care. |
|  | Transportation and storage requirements.<br>See environmental requirements on packaging. |
| LATEX | Does not contain latex. |
| LOT | Lot number. |
| IPX0 | No special protection. Refer to IEC 60529 for further information. |
| SN | Serial number. |
| 7.2V, 2000 mAh NiMH | Nickel metal hydride battery. |
| NON-STERILE | Product is not sterile. |

# 13 Contacts

### Manufacturer

Defibtech, L.L.C.
741 Boston Post Road, Suite 201
Guilford, CT 06437 USA

Tel.: 1-(866) 333-4241 (Toll-free within North America)
1-(203) 453-4507
Fax: 1-(203) 453-6657

Email:
sales@defibtech.com (Sales)
reporting@defibtech.com (Medical Device Reporting)
service@defibtech.com (Service and Repair)

CE