June 2017

Hybrid Capture® System Microplate Heater 1 User Manual

CE

IVD

REF

6000-1110U (120 V)
6000-1240U (230 V)

QIAGEN
19300 Germantown Road
Germantown, MD 20874
USA

EC REP

QIAGEN GmbH
QIAGEN Strasse 1
40724 Hilden
GERMANY

1100210EN Rev. 05

Sample to Insight

QIAGEN

Contents

1 Introduction

The Hybrid Capture® System (HCS) Microplate Heater 1 has been designed specifically for use with the *digene*® HC2 DNA tests.

Read this user manual before operating the HCS Microplate Heater 1.

1.1 General information

1.1.1 Technical assistance

At QIAGEN we pride ourselves on the quality and availability of our technical support. IF you have any questions or experience any difficulties regarding the instrument or QIAGEN products in general, do not hesitate to contact us.

QIAGEN customers are a valuable source of information regarding our products. We encourage you to contact us if you have any suggestions or feedback concerning our products.

For technical assistance and more information, please see our Technical Support Center at www.qiagen.com/TechSupportCenter or contact QIAGEN Technical Services or a local distributor.

1.1.2 Policy statement

It is the policy of QIAGEN to improve products as new techniques and components become available. QIAGEN reserves the right to change specifications at any time. In an effort to produce useful and appropriate documentation, we appreciate your comments on this user manual. Please contact QIAGEN Technical Services.

1.1.3 Version management

This document is *Hybrid Capture System Microplate Heater 1 User Manual*. See the user manual's front cover for revision information.

1.2 Intended use

The Hybrid Capture System Microplate Heater 1 is intended for use only in conjunction with *digene* Hybrid Capture 2 (HC2) DNA tests as described in the respective *digene* HC2 DNA test instructions for use.

2 Safety Information

This manual contains information about warnings and cautions that must be followed by the user to ensure safe operation of the HCS Microplate Heater 1 and to maintain the instrument in a safe condition.

WARNING

The term **WARNING** is used to inform you about situations that could result in personal injury to you or other persons.
Details about these circumstances are provided to avoid personal injury to you or other persons.

CAUTION

The term **CAUTION** is used to inform you about situations that could result in damage to the instrument or other equipment.
Details about these circumstances are provided to avoid damage to the instrument or other equipment.

Before using the instrument, it is essential to read this manual carefully and to pay particular attention to any details it contains concerning hazards that may arise from the use of the instrument.

The details given in this manual are intended to supplement, not supersede, the normal safety requirements prevailing in the user's country.

2.1 Proper use

WARNING/ CAUTION **Risk of personal injury and material damage**

Improper use of the HCS Microplate Heater 1 may cause personal injuries to the user or damage to the instrument.
The HCS Microplate Heater 1 must only be operated by qualified personnel who have been appropriately trained.

2.2 Electrical safety

Only operate the HCS Microplate Heater 1 with the power cord provided with the instrument. For satisfactory and safe operation of the HCS Microplate Heater 1, it is essential that the line power cord is connected to true electrical earth (ground).

WARNING **Electrical hazard**

The HCS Microplate Heater 1 must be grounded for protection against electrical shock.
Do not use an adapter to a 2-terminal outlet because this does not provide positive ground protection.

WARNING **Electrical fire hazard**

Before turning on the instrument, make sure that the fuses are properly installed. The use of improper fuses can damage the wiring system and cause a fire.

To reduce the chance of electrical shock, do not remove covers that require tool access. No user-serviceable parts are inside.

The 3-prong power cord and receptacle contain the grounding connector. Grounding circuit continuity is vital for safe operation of equipment. Never operate equipment with the grounding connector disconnected. To avoid electrical shock, disconnect the power cord before servicing.

To protect against fire hazard, replace only with same-rated fuses as described in "Replacing a fuse" on page 27.

WARNING **Risk of personal injury**

Use care when using the instrument to avoid being burned by hot components.

2.3 Environment

CAUTION **Risk of personal injury and material damage**

Do not use in the presence of flammable or combustible materials or explosive gases.
Do not use in the presence of pressurized or sealed containers.
Fire or explosion may result causing death or severe injury.

CAUTION **Risk of material damage**

Do not operate in a cold room or refrigerated area.

CAUTION **Risk of improper operation**

Evaluate the electromagnetic environment prior to operation of the device. Do not use this device in close proximity to sources of strong electromagnetic radiation (e.g. unshielded intentional RF sources), as these can interfere with the proper operation.

2.4 Biological safety

WARNING **Hazardous substances**

The products used with this instrument may contain hazardous substances. When working with chemicals, always wear a suitable lab coat, disposable gloves and protective goggles. For more information, please consult the appropriate safety data sheets (SDSs). These are available online in PDF format at **www.qiagen.com/safety** where you can find, view and print the SDS for each QIAGEN kit and kit component. For further information see the instructions for use that come with the kit.

WARNING/ CAUTION **Risk of personal injury and material damage**

Consider any laboratory equipment used for research or clinical analysis a potential biohazard that requires decontamination before reuse.

WARNING **Risk of personal injury**

Sodium hypochlorite solution is caustic; wear rubber gloves and eye protection when handling it.

To dispose of the HCS Microplate Heater 1, follow all national, state, and local health and safety regulations and laws for disposing of laboratory waste. For disposal of Waste Electrical and Electronic Equipment (WEEE compliance), see "Appendix A – Waste Electrical and Electronic Equipment (WEEE)," page 34.

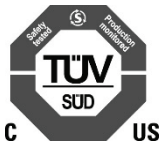
2.5 Waste disposal

Waste may contain certain hazardous chemicals or contagious/biohazardous materials and must be collected and disposed of properly in accordance with all national, state and local health and safety regulations and laws.

2.6 Symbols

The following symbols may be found on the instrument, in this user manual or on labels associated with the instrument.

Symbol	Location	Description
	On the instrument	General warning sign
	On the instrument	Warning, hot surface
	On the instrument	Warning, biological hazard
	Type plate on the back of the instrument	RCM mark for Australia
	Type plate on the back of the instrument	CE mark for Europe
	Type plate on the back of the instrument	In vitro diagnostic medical device

Symbol	Location	Description
	Type plate on the back of the instrument	The instrument complies with applicable standards for electrical safety of laboratory equipment
	Type plate on the back of the instrument	RoHS mark for China (the restriction of the use of certain hazardous substances in electrical and electronic equipment)
	Type plate on the back of the instrument	Waste Electrical and Electronic Equipment (WEEE)
	Type plate on the back of the instrument	Serial number
	Type plate on the back of the instrument	Manufacturer
	Front cover	Catalog number
	In this user manual	Consult instructions for use

Symbol	Location	Description
GTIN	Label of the instrument	Global Trade Item Number
	Label of the instrument	Fragile, handle with care
EC REP	Front cover of this user manual	Authorized representative in the European Community

3 Installation

3.1 Unpacking

Before using the HCS Microplate Heater 1 for the first time, examine the exterior carton and the equipment itself for damages. In the event of shipping damage, call your local QIAGEN representative or QIAGEN Technical Services.

Carefully unpack the unit and verify the contents of the package. The package should contain the following:

- 1 HCS Microplate Heater 1
- 1 Power cord
- 1 T-type Thermocouple (used for calibration)
- HCS Microplate Heater 1 User Manual Compact Disc
- 1 Aluminum heat block

If any of these items are missing, please contact your local QIAGEN representative or QIAGEN Technical Services immediately.

Save the original packaging until the unit has been operated successfully.

Note: For Technical Data, see page 31.

3.2 Start up

Follow procedure for startup.

1. Verify the unit is rated for the proper voltage by checking the panel on the back of the unit.
2. Place the HCS Microplate Heater 1 on a non-flammable flat surface and in a location where surrounding objects will not be affected by the heat it generates.
3. Do not block the circulation of air to the vents located on the sides of the unit.

   A minimum of 6 inches (15 cm) of clearance on all sides of the unit is needed for proper ventilation.
4. Allow sufficient access to the power cord after installation to ensure it can be disconnected.
5. Insert the aluminum heat block into the HCS Microplate Heater 1. Orient the heat aluminum block so that the thermometer well is toward the front of the instrument.
6. Before plugging the unit into any power source, be certain that the outlet is the correct voltage and is properly grounded.
7. Do not plug the unit into an electrical outlet until all packing materials have been removed from the HCS Microplate Heater 1.
8. Plug the cord into the power inlet module located at the rear of the HCS Microplate Heater 1 and then into a grounded outlet that meets the electrical specifications on the unit's equipment type plate.

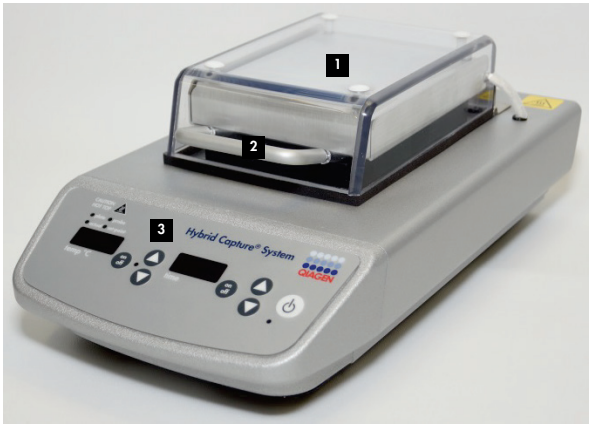
4 Functional Description

The Hybrid Capture System (HCS) Microplate Heater 1 is an electronically controlled heating unit composed of a heater base with dual (upper and lower) heating elements with an incorporated resistance temperature detector block temperature sensor and a high-grade aluminum heater block

The heater block is designed to accept 96-well microplates used in conjunction with *digene* HC2 DNA tests. The dual heating elements and the heat capacity of the block provide the thermal characteristics necessary for incubation/hybridization steps of the *digene* HC2 DNA tests. These characteristics are controlled and maintained by an integrated electronic device that also provides a digital light emitting diode display.

4.1 Control elements

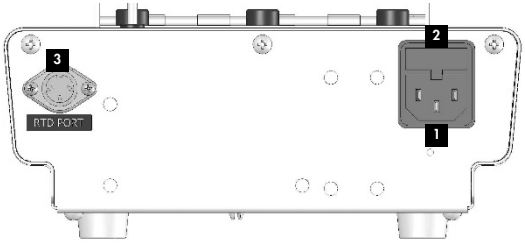
All of the operating controls for the HCS Microplate Heater 1 are located on the top front. The following figures show the major components of the instrument.



1 Heater cover

2 Heater cover handle

3 Heater control panel

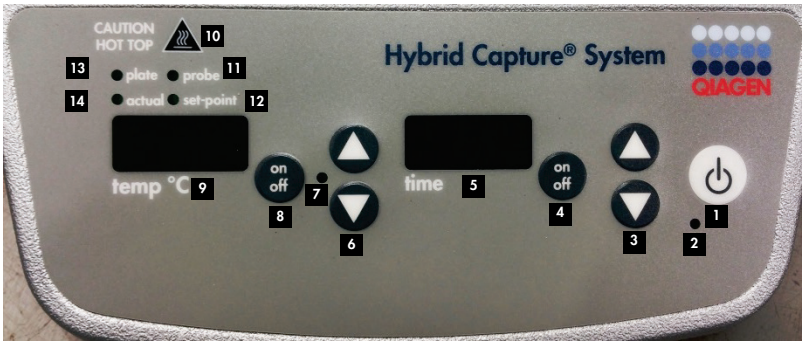


1 Power inlet

2 Fuse drawer

3 RTD Port

4.2 Heater control panel



1 **Power/Standby button:** Turns the unit on or places it into standby mode.

2 **Standby indicator light:** Illuminates when unit is in standby mode.

3 **Timer up/down arrows:** Increases/decreases time set-point.

4 **Timer on/off button:** Turns the timer function on or off.

5 **Time display:** Displays accumulated time or how much time is remaining.

6 **Temperature up/down arrows:** Controls temperature set-point.

7 **Heater indicator light:** Illuminates when the heating function is turned on.

8 **Heater on/off button:** Turns the heating function on or off.

9 **Temperature display:** Displays the actual/set-point temperatures.

10 **Caution hot top indicator light:** Illuminates when the plate temperature is above 40°C.

11 **Probe indicator light:** Illuminates if an external RTD probe is plugged in.

12 **Set-point indicator light:** Illuminates when the set-point temperature is displayed.

13 **Plate indicator light:** Illuminates when the heat plate temperature is displayed.

14 **Actual indicator light:** Illuminates when the actual heat plate/RTD probe temperature is displayed.

4.2.1 Heater plates

The aluminum heater block of the HCS Microplate Heater 1 is heated by 2 heater plates. One heater plate heats the bottom of the block and the other heater plate is in the cover. The block temperature sensor probe uses a platinum resistance temperature detector. A microprocessor-based controller simultaneously turns each of the plate heaters on and off, proportionally, to maintain the desired temperature set-point. The parameters of the temperature controller are optimized for this specific application.

The HCS Microplate Heater 1 has an upper temperature limit of 120°C.

4.2.2 Heater Control Panel

The heater control panel has a user-friendly interface. When power/standby button on the HCS Microplate Heater 1 is turned on, the temperature display will cycle between the actual plate temperature and the set-point. To begin heating, press the heater on/off button.

4.2.3 RTD Port

Note: The RTD port is not used for *digene* HC2 DNA tests.

The HCS Microplate Heater 1 has an internal RTD on the heat plate to detect and control the temperature of the heat block. Optionally, an external RTD plugged into the RTD port can be used to detect and control the heat block's temperature. With the RTD probe plugged into the back of the unit, place the thermometer portion in the thermometer well of the heat block. The probe indicator light will be illuminated. The RTD probe will now control the heat block temperature and not the internal RTD on the heat plate.

5 General Operation

5.1 Setting the temperature

Note: The HCS Microplate Heater 1 must equilibrate to temperature for 60 minutes from a cold start before being used in a test procedure.

1. Press the main power/standby button to turn the unit on.
2. Press the heater on/off button to begin heating. The Heater indicator light will illuminate when the heating function is turned on.
3. Check the temperature set-point by observing the temperature display when the set-point indicator light is illuminated.
4. If necessary, change the set-point by pressing the temperature up/down arrows (▲ or ▼) to adjust the temperature set-point of the HCS Microplate Heater 1.
5. Allow 60 minutes for the HCS Microplate Heater 1 to equilibrate to the set temperature.

5.2 Inserting a plate

1. Using the heater cover handle, open the cover.
2. Insert the microplate into the block.
3. Close the cover as promptly as possible.

5.3 Managing the temperature

5.3.1 Viewing the set-point

The temperature display will cycle approximately every 3 seconds between the set-point and the actual plate temperature. The set-point is displayed when the set-point indicator light illuminates.

5.3.2 Changing the set-point

1. While the current set-point temperature is showing on the temperature display, press one of the temperature up/down buttons (▲ or ▼) to change the set-point.

   Note: The longer the temperature adjustment buttons (▲ or ▼) are pressed, the faster the set-point display will change.
2. Once the desired set-point is shown on the temperature display, the set-point has been changed. Three audible beeps will indicate the set-point has been reached.

5.4 Timer function – Accumulated time

1. By default, the timer will begin at zero (0:00) minutes. Press the timer on/off button to begin timing.
2. Press the timer on/off button to stop timing. Press the timer on/off button again to resume timing.
3. To reset the time to zero (0:00) minutes, make sure the timing is stopped, and press and hold the timer on/off button for 3 seconds. Alternately, while of the timing is stopped, simultaneously press the timer up and down arrows to reset the time to zero (0:00) minutes.

5.5 Timer function – Remaining time

1. Press the timer up/down arrows until you reach the desired time remaining.
2. Press the timer on/off button to start the countdown.
3. **Important:** If the timer is used in conjunction with the heating function and the time display reaches zero (0:00), both the time and heating functions will shut off automatically. Four audible beeps will indicate the countdown function is complete, and the time display will default back to the set time.
4. To repeat for the same time, press the timer on/off button again.

5. To interrupt an automatic timing cycle before it is completed, press the on/off button to the right of the time display. The time display will flash until you resume the time function by pressing the on/off button again. This interruption will not stop the heating function; the heating function will stop only when the timer reaches zero (0:00).

5.6 Beeper Preference

1. To silence beeper operation (except for error codes): with the unit in standby mode, press and hold the time on/off button and press the power/standby button.
2. To restore normal beeper operation: remove AC power to unit for 10 seconds and then restore. Alternately, you may have to turn the unit on and simultaneously press and hold the power/standby button and press and hold the time on/off button.

5.7 Temperature calibration

QIAGEN recommends that users verify the temperature of the HCS Microplate Heater 1 every 6 months.

Use only the T-type thermocouple included with the HCS Microplate Heater 1 when performing temperature calibration. The T-type thermocouple is most accurate within the temperature range utilized by the HCS Microplate Heater 1. Not using a T-type probe, such as a K-type probe, will produce a mismatch bias that is accentuated at higher temperatures.

5.7.1 Calibration tool

The following equipment or equivalent is required for calibration; this equipment is not supplied with the HCS Microplate Heater 1:

- Digital thermometer compatible with T-type thermocouple connector; accuracy of ±0.1%, resolution of 0.1°C. (TEGAM, Model 819 or equivalent; **www.tegam.com**).

Calibrate thermometers and thermocouples together as a pair at least every 12 months. Use a standardized thermometer (such as one traceable to the National Institute of Standards and Technology or the National Physical Laboratory) to conduct this calibration.

Calibration procedure:

1. Attach the T-type thermocouple included with the HCS Microplate Heater 1 to a calibrated digital thermometer. Set the digital thermometer mode to T-type.
2. Place the thermometer portion of the thermocouple in the thermometer well of the Heat Block.
3. Route the thermocouple wire under the heater cover so that the seal between the heater cover and the heater body is minimally disrupted.
4. Power ON the HCS Microplate Heater 1, adjust the set-point to 65°C, turn the heating function on, and allow the temperature to equilibrate.

   Note: The HCS Microplate Heater 1 requires 60 minutes to equilibrate to 65°C from a cold start.
5. After a minimum of one hour, determine the measured temperature.

   If the measured temperature varies less than one degree from the displayed temperature, a temperature calibration value change is not needed.

   If the measured temperature varies one degree or more from the displayed set temperature, adjust the temperature calibration value.

Adjusting the calibration value

1. Press and hold the power/standby button, then press the temperature down button once to clear the previous calibration value. The unit will beep two (2) times, confirming that the previous calibration value has been cleared.
2. Allow the HCS Microplate Heater 1 to stabilize for one hour.
3. Press and hold the power/standby button, then press the temperature up button once. The unit will beep two (2) times, confirming calibration mode. The display will now be flashing.
4. Press the temperature up/down arrows until the display matches the temperature probe/thermometer.
5. Press power/standby button to exit calibration mode and return to normal heating.
6. Repeat the temperature calibration.

6 Maintenance

If you have a problem with maintenance of the HCS Microplate Heater 1, contact QIAGEN Technical Services. QIAGEN charges for repairs that are required due to incorrect maintenance.

6.1 Cleaning and decontamination

WARNING/ CAUTION

Risk of personal injury and material damage

Consider any laboratory equipment used for research or clinical analysis a potential biohazard that requires decontamination before reuse.

Before using any cleaning or decontamination method, except those recommended in this user manual, check with QIAGEN Technical Services to make sure that the proposed method will not damage the equipment.

The user is responsible for decontaminating the instrument if hazardous materials are spilled on or inside the aluminum block well.

Wear powder-free gloves when handling potentially contaminated equipment.

Wipe down exposed surfaces of the HCS Microplate Heater 1 using a cleaning pad wetted with a solution of 0.5% sodium hypochlorite (NaOCl or bleach).

Industrial bleach contains 10% NaOCl; household bleach contains 5% NaOCl. When using industrial bleach, prepare a 1:20 mixture of bleach to water. When using household bleach, prepare a 1:10 mixture of bleach to water.

Clean the outside of the unit with a mild detergent.

WARNING **Risk of personal injury**

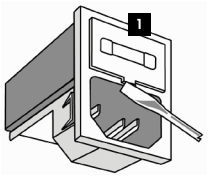
Sodium hypochlorite solution is caustic; wear rubber gloves and eye protection when handling it.

6.2 Replacing a fuse

Only use fuses of the same type and rating for the voltage in your location.

Voltage	HCS Microplate Heater 1 catalog number	Amp	Type
120 V	6000-1110U	5 AMP 250 volt	5 x 20 mm fast acting UL-listed fuse
230 V	6000-1240U	5 AMP 250 volt	5 x 20 mm fast acting UL-listed fuse

The following graphic shows the location to pry open the fuse drawer.



1 Fuse drawer

1. Remove the power cord from the rear of the HCS Microplate Heater 1.
2. Pry open the fuse drawer with a small flathead screwdriver (see graphic, above).
3. Gently remove the fuse.
4. Replace the fuse.
5. Slide the fuse drawer in until the drawer snaps in place.
6. Connect the power cord.

6.3 Servicing

Maintain your instrument in good working order. In the event that the instrument is subjected to adverse conditions, such as a fire, flood or earthquake, schedule a service inspection of the instrument to ensure safe operation. Do not attempt to repair the instrument. Removing the case will nullify the warranty. In the event that the product is inoperable, please contact QIAGEN Technical Services and provide full failure details. When making your call, please ensure that you have the serial number of the instrument.

Do not ship the instrument back for repair until advised to do so by QIAGEN Technical Services.

In the event that you are requested to return the instrument or any part thereof, it is your legal requirement to ensure that the unit is fully decontaminated. QIAGEN Technical Services may request a certificate is included with the instrument to verify the decontamination. Failure to

do this may result in the refusal to repair the unit. Contact QIAGEN Technical Services for a Return Goods Authorization (RGA) number. Mark this number on the outside of the shipping box.

7 Troubleshooting

Refer to this section for error handling and troubleshooting. If the recommended steps do not resolve the problem, contact QIAGEN Technical Services for assistance.

Possible problem or cause	Corrective action
Blank display	
a) The power cord is not plugged in properly	Make sure that the power cord is plugged into a known, grounded, working power source.
b) A fuse may be missing or blown	Replace the fuse. See "Replacing a fuse", page 27.
Error code is displayed	
Notes: Pressing the standby button will clear error codes Errors will cause heating function to cease. Timing functions will be unaffected.	
c) E1: Faulty temperature sensor	This error cannot be fixed by the end user. Contact QIAGEN Technical Services
d) E2: Internal RTD failure or heating element failure.	This error cannot be fixed by the end user. Contact QIAGEN Technical Services for assistance.
e) E3: Unit cannot reach set-point or Probe not in thermometer well	Contact QIAGEN Technical Services for assistance.

8 Technical Data

8.1 Operating conditions

Condition	Parameter
Unit Dimensions (l x w x h)	37 x 20.3 x 13.7 cm (14.5 x 8 x 5.4 inches)
Unit Weight (including heat block)	5.1 kg (11.2 lbs)
Shipping Dimensions (l x w x h)	53.4 x 30.5 x 35.6 cm (21 x 12 x 14 inches)
Shipping Weight	7.7 kg (17 lbs)
Power requirements for 6000-1110U	120 Volts AC, 50/60Hz, 3.0 A
Power requirements for 6000-1240U	230 Volts AC, 50/60Hz, 1.65 A
Main supply voltage fluctuations	Voltage fluctuations are not to exceed 10% of the nominal supply voltage
Fuse rating for 6000-1110U	5 A (250 V) fast-acting UL-listed fuse
Fuse rating for 6000-1240U	5 A (250 V) fast-acting UL-listed fuse

Condition	Parameter
Air temperature	18–33°C
Relative humidity	20–80% (noncondensing)
Place of operation	For indoor use only
Pollution level	II
Altitude	Up to 2000 meters (6562 feet)
Temperature Range	Ambient +5°C to 120°C

8.2 Transport conditions

Condition	Parameter
Air temperature	–20°C to 65°C in manufacturer's package
Relative humidity	20–80% (noncondensing)

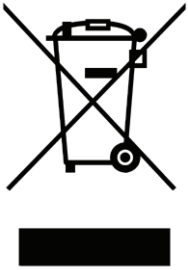
8.3 Storage conditions

Condition	Parameter
Air temperature	-20°C to 65°C
Relative humidity	20–80% (noncondensing)

Appendix A – Waste Electrical and Electronic Equipment (WEEE)

This section provides information about disposal of waste electrical and electronic equipment by users.

The following crossed-out wheeled bin symbol (see below) indicates that this product must not be disposed of with other waste; it must be taken to an approved treatment facility or to a designated collection point for recycling, according to local laws and regulations.



Separate collection and recycling of waste electronic equipment at the time of disposal helps to conserve natural resources and make sure that the product is recycled in a manner that protects human health and the environment.

QIAGEN provides recycling upon request at additional cost. To recycle electronic equipment, you should contact your local QIAGEN sales office for the required return form. After you submit the form, QIAGEN will contact you either to request follow-up information for scheduling the collection of your electronic waste or to provide you with an individual quote.

Appendix B – Warranty

The Hybrid Capture System (HCS) Microplate Heater 1 is warranted against defects in materials and workmanship for a period of one year from the date it is shipped from the manufacturer. If notified of such defects during the warranty period, the manufacturer will, at its option, either repair or replace products that prove to be defective.

The warranty shall not apply to defects resulting from improper or inadequate maintenance by the customer, unauthorized modification or service, misuse, operation outside of the environmental specifications for the product or units returned with inadequate packaging.

Appendix C – FCC Declaration

The ''United States Federal Communications Commission'' (USFCC) (in 47 CFR 15. 105) declared that the users of this product must be informed of the following facts and circumstances.

''This device complies with part 15 of the FCC:

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 Class B digital apparatus complies with Canadian ICES-003.''

The following statement applies to the products covered in this manual, unless otherwise specified herein. The statement for other products will appear in the accompanying documentation.

Note: 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 and meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003 for digital apparatus. 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 the 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/T.V. technician for help.

QIAGEN is not responsible for any radio television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connection cables and equipment other than those specified by QIAGEN. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Ordering Information

Product	Contents	Cat. no.
Microplate Heater 1	96-well microplate heater, 120 V	6000-1110U
Microplate Heater 1	96-well microplate heater, 230 V	6000-1240U

Ordering **www.qiagen.com/contact** | Technical Support **support.qiagen.com** | Website **www.qiagen.com**