

CytoBrite® *PLUS*

Slide Incubation System

USER MANUAL

Cat. #2019-50-1 (115/230V)



FOR RESEARCH USE ONLY

Warranty

SciGene warrants that the CytoBrite® *PLUS* Slide Incubation System described in this manual shall be free of defects in materials and workmanship for a period of 12 months from date of delivery. This warranty does not cover removable slide trays or accessories. In the event of a defect during the warranty period, SciGene's limit of liability will be to, at its sole discretion: (a) provide replacement parts; (b) perform factory repairs; or (c) replace the product. The foregoing warranty is void in the event the unit was abused or modified or used in a manner inconsistent with its intended purpose. SciGene makes no other warranty, expressed or implied including warranties of merchantability and fitness for a particular purpose. In no event shall SciGene be liable for any direct, indirect, special, incidental or consequential damages or for any damages resulting from loss arising out of or in connection with the sale, use or performance of the product.

Copyright

Copyright ©2018-2020 SciGene Corporation. All rights reserved. SciGene, CytoBrite and CytoBond are registered trademarks of SciGene Corporation, Sunnyvale, CA. All other trademarks used in this manual are the property of their respective owners.

Table of Contents

I. SAFETY NOTICES	3
A. Intended Use.....	3
B. Instrument Safety	3
C. Symbols and Conventions.....	3
D. Warnings	4
E. Cautions	5
F. Compliance	5
II. UNPACKING AND SET UP	7
A. Unpacking the Instrument	7
B. Items Provided	7
C. CytoBond® Removable Coverslip Sealant Provided.....	7
D. Environmental Requirements.....	7
E. Installing the Instrument	7
III. USING YOUR CYTOBRITE PLUS SYSTEM	8
A. System Components	8
B. Power On / System Preheat.....	8
C. Preparing Slides with CytoBond Sealant / Starting a Protocol	9
D. Preparing Slides with Rubber Cement and Humidity Strips / Starting a Protocol	9
E. Using the Controller.....	10
IV. CREATING AND EDITING PROTOCOLS.....	11
A. Creating a Protocol	11
B. Editing a Protocol.....	12
V. ONETEMP MODE	13
VI. RUNNING A PROTOCOL.....	14
VII. MANAGING FILES.....	15
A. Viewing a Protocol	15
B. Renaming a Protocol.....	15
C. Deleting a Protocol	15
VIII. SETTINGS AND PREFERENCES.....	16
A. Temperature Verification of Slide Positions	16
B. Calibrating the Temperature Controller	17
IX. MAINTENANCE	18
A. Cleaning the Instrument	18
B. Cleaning Air Vents.....	18
C. Checking and Replacing Fuses	18
X. TROUBLESHOOTING.....	19
XI. SPECIFICATIONS.....	19
XII. ORDERING INFORMATION	20
XIII. DECLARATION OF CONFORMITY	21
TEMPERATURE VERIFICATION LOG	22

I. SAFETY NOTICES

A. Intended Use

The **CytoBrite® PLUS Slide Incubation System** is intended for the heating and cooling of biological samples. The instrument should only be used according to instructions provided in this User Manual and other SciGene technical documents. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

La CytoBrite PLUS système est destiné pour le chauffage et le refroidissement d'échantillons biologiques. L'instrument ne devrait servir que selon les instructions fournies dans ce manuel de l'utilisateur et d'autres documents techniques de SciGene. Si l'équipement est utilisé de manière non spécifiée par le fabricant, la protection assurée par l'équipement peut être compromise.

B. Instrument Safety

Before operating the instrument, read the information in this section concerning hazards and potential hazards. Ensure that anyone involved with the instrument's operation is instructed in both general safety practices for laboratories and specific safety practices for the instrument.

Avant le fonctionnement de l'instrument, lisez les renseignements dans cette section concernant les risques et les dangers potentiels. S'assurer que toute personne impliquée avec le fonctionnement de l'instrument est instruit dans les pratiques générales de sécurité pour les laboratoires et les pratiques de sécurité spécifiques pour l'instrument. Avant le fonctionnement de l'instrument, lisez les renseignements dans cette section concernant les risques et les dangers potentiels. S'assurer que toute personne impliquée avec le fonctionnement de l'instrument est instruit dans les pratiques générales de sécurité pour les laboratoires et les pratiques de sécurité spécifiques pour l'instrument.

C. Symbols and Conventions

The following chart is an illustrated glossary of the electrical symbols used on the **CytoBrite PLUS System**. Whenever such symbols appear on instruments, please observe appropriate safety measures.

Le tableau suivant est un glossaire illustré des symboles électriques qui sont utilisées sur le système. Chaque fois que ces symboles apparaissent sur les instruments, veuillez observer les mesures de sécurité appropriées.

1. Electrical Symbols



This symbol indicates that this is a protected ground terminal that must be connected to earth ground before any other electrical connections are made to the instrument.

Ce symbole indique qu'il s'agit d'un terminal de terrain protégé qui doit être connecté à la terre avant que toutes les autres connexions électriques sont apportées à l'instrument.



CAUTION: This symbol alerts you to consult this Operator's Manual for further information and to proceed with caution.

ATTENTION: Ce symbole vous avertit à consulter ce guide de l'utilisateur pour plus d'informations et de procéder avec prudence.



This symbol indicates the OFF position of the main POWER switch.

Ce symbole indique la position OFF de l'interrupteur principal.



This symbol indicates the ON position of the main POWER switch.

Ce symbole indique la position ON de l'interrupteur principal.



CAUTION: This symbol alerts you to an electrical hazard. Consult this Operator's Manual for further information and proceed with caution.

ATTENTION: Ce symbole vous avertit d'un risque électrique. Consultez ce guide de l'utilisateur pour plus d'informations et de procéder avec prudence.



This symbol indicates the OFF position of the main POWER switch.

Ce symbole indique la position OFF de l'interrupteur principal.



This symbol indicates the ON position of the main POWER switch.

Ce symbole indique la position ON de l'interrupteur principal.

2. Non-Electrical Symbols



CAUTION: This symbol illustrates a heat hazard. Proceed with caution when working around these areas to avoid being burned by hot components.

ATTENTION: Ce symbole illustre un danger pour la chaleur. Faire preuve de prudence lorsque vous travaillez autour de ces zones pour éviter d'être brûlé par les composants du chauds.



CAUTION: This symbol alerts you to consult this Operator's Manual for further information and to proceed with caution.

ATTENTION: Ce symbole vous avertit à consulter ce guide de l'utilisateur pour plus d'informations et de procéder avec prudence.

D. Warnings

Failure to comply with the following warnings that are affixed to the product can lead to possible personal injury or death.

Défaut de respecter les avertissements suivants qui sont apposées sur le produit peut conduire à possibles lésions corporelles ou la mort.



This symbol on the rear of the instrument indicates the presence of the fuse box. **Warning: For Continued Protection Against Fire, Replace Only with Same Type Rating of Fuse.** Always disconnect the power cord before attempting to replace the fuse.

Ce symbole sur l'arrière de l'instrument indique la présence de la boîte de fusibles. Avertissement: Pour le maintien de la Protection contre l'incendie, remplacer uniquement avec la même cote de Type de fusible. Toujours débrancher le cordon d'alimentation avant d'essayer de remplacer le fusible.



This symbol indicates the presence of hazardous voltage. Always disconnect the power cord before servicing.

Ce symbole indique la présence d'une tension dangereuse. Toujours débrancher le cordon d'alimentation avant l'entretien.

E. Cautions

Failure to comply with the following cautionary statement affixed to the product may lead to possible personal injury.

Omission de se conformer à la mise en garde suivante apposée sur le produit peut entraîner des blessures possibles.



This symbol located both on and in front of the lid indicates the potential presence of a Hot Surface. Use care when working in this area to avoid being burned.

Ce symbole situé sur et devant le couvercle indique la présence possible d'une Surface chaude. Faire preuve de diligence lorsqu'il travaille dans ce domaine pour éviter d'être brûlé.

F. Compliance



1. European Conformity (CE)

This symbol indicates the instrument is in compliance with all applicable European Union Electromagnetic Compatibility and Low Voltage Directives.



2. Waste Electrical & Electronic Equipment Directive (WEEE)

This symbol indicates the instrument is required to comply with the European Union's Waste Electrical & Electronic Equipment (WEEE) Directive 2012/19/EU, providing environmentally safe disposal of end of life equipment through recycling. Contact your institution to provide environmentally safe disposal or your local SciGene distributor or SciGene [techserv@scigene.com] for assistance. Do not treat electrical and electronic equipment as unsorted municipal waste.

RoHS 3. Restriction of Hazardous Substances (RoHS)

This symbol indicates the instrument is compliant with the European Union's (RoHS 2) Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE).

4. Electromagnetic Compatibility (EMC)

The **CytoBrite PLUS System** is a Class A digital device under FCC Title 47 Part 15B and designated as Class A electrical equipment for measurement, control, and laboratory use (EN61326).

Note regarding Canadian EMC compliance: Le present appareil numerique n'emet pas de bruits radioelectrique dépassant les limites applicables aux appareils numeriques de class A prescrites dans le reglement sur le brouillage radioelectrique edicte par le Ministere des Communications du Canada.

5. FCC Warnings and Notes

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. The instrument qualifies as an “exempted device” under 47 CFR 15.103(c), in regard to the cited FCC regulations in effect at the time of manufacture. Shielded cables must be used with this unit to ensure compliance with the Class A FCC limits.

II. UNPACKING AND SET UP

A. Unpacking the Instrument

To unpack the instrument, open the shipping carton and remove the two foam inserts. Take out the bag containing the manual and power cord. Remove the instrument from the box by reaching down both sides to lift from the base and place it on the bench. Open the lid to verify two slide trays are present. Inspect the instrument and accessories. If any damage is evident, retain all shipping materials and contact your local distributor or SciGene [custserv@scigene.com] for assistance.

B. Items Provided

- Heating Unit
- 2x Slide Trays
- Humidity Strips
- Power Cord
- User Manual
- NIST-certified digital thermometer (T-type) with cable

C. CytoBond® Removable Coverslip Sealant Provided

A complimentary 100 ml bottle of CytoBond® Sealant (cat. # 2020-00-1) is shipped separately from the instrument. It is recommended, in place of rubber cement, for temporarily sealing coverslips; to prevent probe evaporation without humidification. Contact SciGene [custserv@scigene.com] or your local distributor to order CytoBond Sealant.

D. Environmental Requirements

Ensure that the area where the **CytoBrite PLUS System** is installed meets the following conditions, for reasons of safety and performance:

Ambient temperature	+15 to +32°C (58 to 90°F)
Relative humidity	20 to 80% RH non-condensing
Air flow clearance	6 inches (15 cm) minimum on both sides

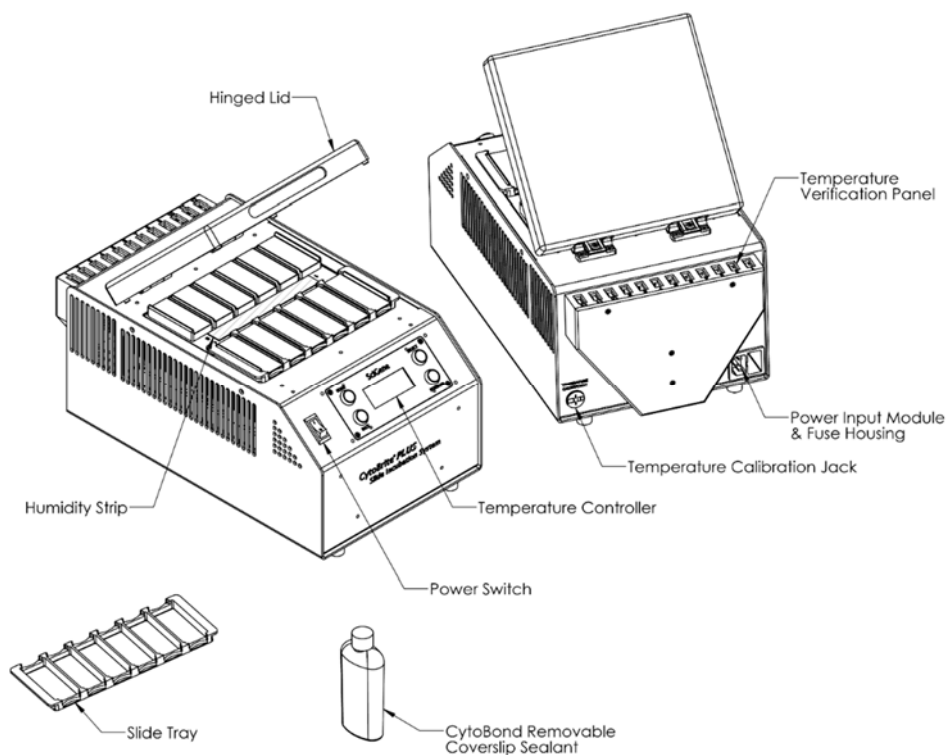
E. Installing the Instrument

Place the instrument on a level surface within a few feet of the power source. Position the system so the lid can be easily opened without interference. Allow 18 inches of vertical clearance and 16 inches of horizontal clearance. Ensure 3 inches of clearance at the back to attach the power cord. Using only the power cord provided, plug it into the back of the unit and then to a properly grounded outlet. Turn on power using the ON/OFF switch on the front control panel.

III. USING YOUR CYTOBRITE PLUS SYSTEM

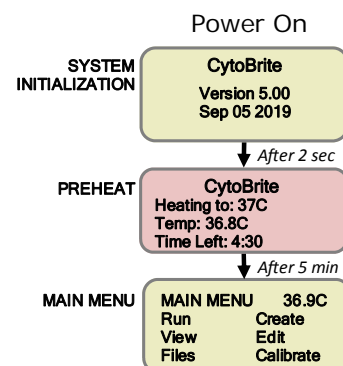
A. System Components

Component	Function
Temperature Controller	Used to program and monitor instrument operation and report slide block temperature
Slide Tray	Holds slides during sample preparation and incubation
Power Switch	Turns on main power to unit
Hinged Lid	Covers slide trays during processing
Temperature Calibration Jack	Connection for digital thermometer cable to calibrate slide block temperature
Temperature Verification Panel	Used to check temperature of slide positions
Power Input Module and Fuse Housing	Location of main fuses and power cord connection
CytoBond Removable Coverslip Sealant	Seals coverslips to slides
Humidity strip	Humidifies slides sealed with rubber cement



B. Power On / System Preheat

To turn ON the instrument, press the top of the power switch to the "I" position. The display briefly shows the software version and then automatically starts a five-minute pre-heating step to 37°C. Upon completion, the controller will beep three times and the main menu will appear, with the slide block temperature in the upper right corner. The instrument is now ready for use.



C. Preparing Slides with CytoBond Sealant / Starting a Protocol

Slides are prepared for molecular analysis, using the slide trays provided, following your standard procedures. CytoBond® Removable Coverslip Sealant (SciGene cat. # 2020-00-1) is used in place of rubber cement for sealing coverslips to prevent probe evaporation without humidification.

1. Turn ON the instrument. It automatically pre-heats to 37°C and then beeps three times to indicate it is ready for use.
2. Place slides to be analyzed in the CytoBrite tray(s), pipet probes and place coverslips.
3. Seal coverslips by dispensing a continuous bead of CytoBond Sealant around the edges.
4. Lift the instrument lid and insert the slide tray(s).
5. Select and start a protocol (See section **VI. Running a Protocol**).
6. The instrument follows the programmed denature and incubation temperatures and times and then holds at 37°C.
7. At the completion of the protocol, the instrument will beep three times, every 5 seconds. Press any button to stop and return to the main menu.
8. Lift the instrument lid and remove the slide tray(s) for further processing.

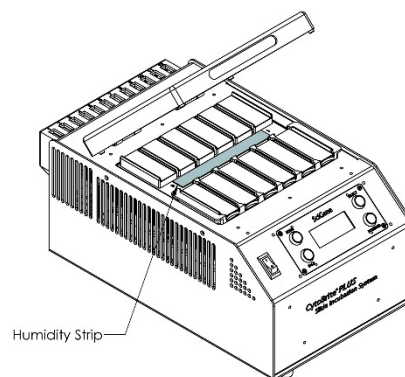


Applying and removing CytoBond

D. Preparing Slides with Rubber Cement and Humidity Strips / Starting a Protocol

Slides are prepared for molecular analysis, using the slide trays provided, following your standard procedures. When rubber cement is used in place of recommended CytoBond® Sealant, humidity strips must be added to prevent probe evaporation.

1. Turn ON the instrument. It automatically pre-heats to 37°C and then beeps three times to indicate it is ready for use.
2. Place slides to be analyzed in the CytoBrite tray(s), pipet probes and place coverslips.
3. Seal coverslips by dispensing a continuous bead of rubber cement around edges.
4. Place a humidity strip (filter paper) between the slide rack platforms and squirt diH₂O onto the paper.
5. Lift the instrument lid and insert slide tray(s).
6. Select and start a protocol (See section **VI. RUNNING A PROTOCOL**).
7. The instrument follows the programmed denature and incubation temperatures and times to completion then holds at 37°C.
8. At the completion of the protocol, the instrument will beep three times, every 5 seconds. Press any button to stop and return to the main menu.
9. Lift the instrument lid and remove the slide tray(s) for further processing.



E. Using the Controller

A 4-line LED display controller is used to CREATE, RUN, EDIT and VIEW protocols, manage FILES (rename, delete) and CALIBRATE to an external NIST-certified T-type digital thermometer [SciGene cat. #1051-52-0].

Navigating menus and selecting options is performed with four buttons on the display panel:

- **Home** — returns to the main menu or previous screen.
- **Select** — chooses the option highlighted in the display.
- **Forward** — increments or toggles between options.
- **Back** — returns to a previous screen or option.

Details on using controller menus can be found in later sections of this manual.

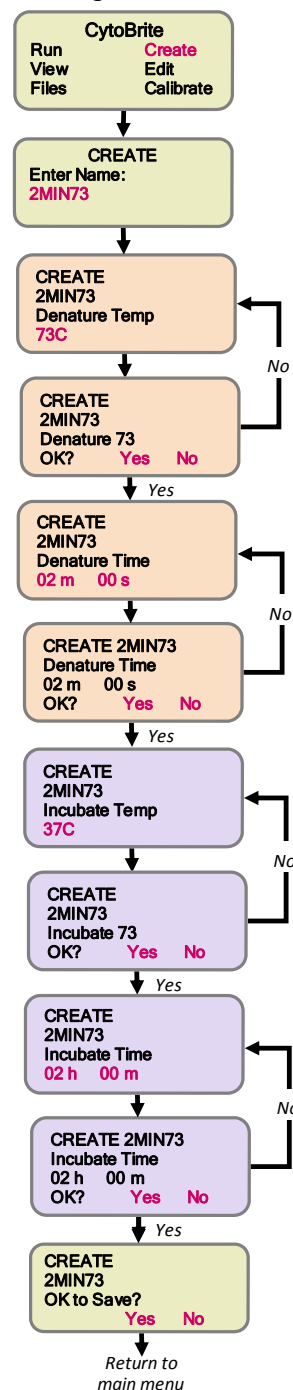
IV. CREATING AND EDITING PROTOCOLS

A. Creating a Protocol

Protocols are created and saved in memory on the controller (10 files maximum). Names are 8 alphanumeric characters in length including spaces.

1. From the main menu, press the **Forward** or **Back** buttons until the blinking cursor highlights Create. Press the **Select** button.
2. Enter the name of the protocol by scrolling through the alphanumeric characters (space: A-Z; 0-9) using the **Forward** button. Sequentially select a desired character using the **Select** button. Names must be 8 characters in length, including spaces.
3. Enter the desired denaturation temperature. Use the **Forward** button to choose the first digit and then press the **Select** button. Repeat for the second digit.
4. Select Yes to confirm the temperature or No to edit.
5. Enter the desired denaturation time. Use the **Forward** button to choose the number of minutes and then press the **Select** button. Repeat for the number of seconds.
6. Select Yes to confirm the time or No to edit.
7. Enter the desired incubation temperature. Use the **Forward** button to choose the first digit and then press the **Select** button. Repeat for the second digit.
8. Select Yes to confirm the temperature or No to edit.
9. Enter the desired incubation time. Use the **Forward** button to choose the number of hours and then press the **Select** button. Repeat for the number of minutes.
10. Select Yes to confirm the time or No to edit.
11. Select Yes to save the completed protocol to memory.

Creating a Protocol

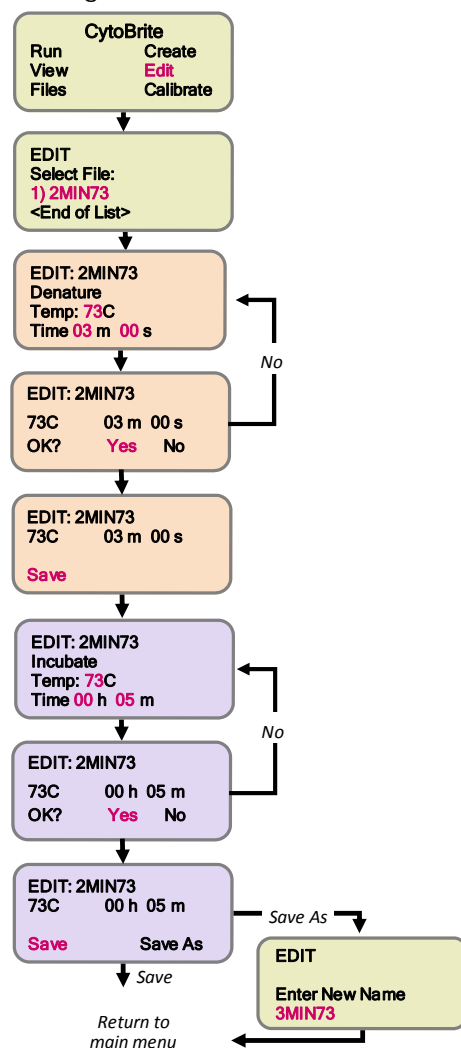


B. Editing a Protocol

The **Edit** function allows changes to the denature and incubation temperatures and times. Edited protocols may be saved under the existing name or be renamed (using the Save As function) to the controller memory.

1. From the main menu, press the Forward or Back buttons until the blinking cursor highlights Edit. Press the **Select** button.
2. Use the Forward button to highlight a protocol to edit and press the **Select** button.
3. Use the Forward button to edit values and press the Select button to save.
4. Select Yes to save the edited protocol or click Save As to replace the file with a new name. To change the name, use the Forward button to choose each new character and press the Select button to save. Names must be 8 characters in length, including spaces.

Editing a Protocol



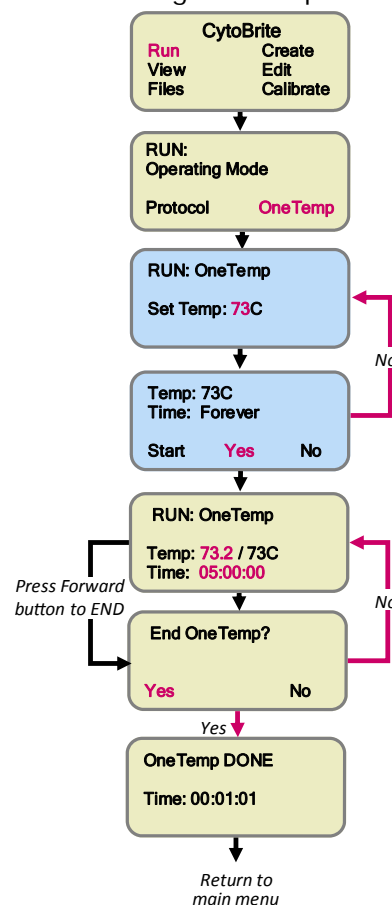
V. ONETEMP MODE

The **CytoBrite PLUS System** can be operated to maintain a single block temperature from 15 to 90°C using OneTemp mode.

For information on creating and saving multi-temperature and multi-step protocols, see section **IV. CREATING AND EDITING PROTOCOLS**.

1. Turn ON the instrument. It automatically pre-heats to 37°C and then beeps three times to indicate it is ready for use.
2. Lift the instrument lid and insert slide tray(s).
3. From the main menu, press the **Select** button to choose Run | OneTemp.
4. Enter the desired block temperature (15 to 90°C). Use the **Forward** button to advance to the first digit of the temperature value and press the **Select** button to save. Repeat for the second digit.
5. Press START to begin the program. The saved temperature for the block will be displayed. The instrument will maintain this temperature until stopped by the user.
6. To end the program, use the **Forward** or **Select** button to display the End Protocol screen and select “Yes”. The display will show “OneTemp DONE” along with the total elapsed time. The instrument will now return to 37°C.
7. Press the **Select** button again to return to the main menu.

Running OneTemp Mode



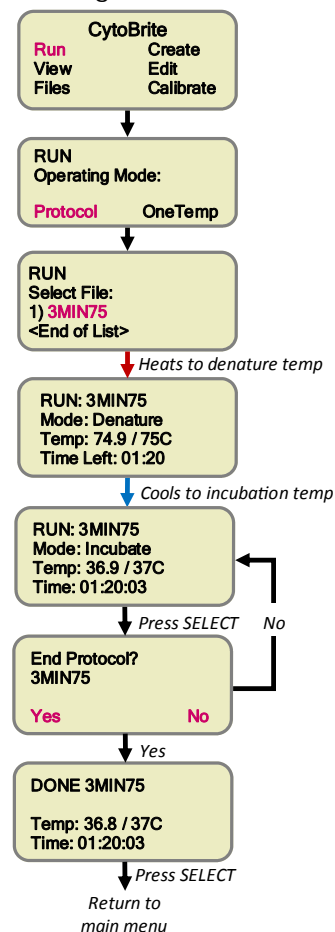
VI. RUNNING A PROTOCOL

The RUN function is used to run a previously created protocol stored in the memory.

For information on creating and saving protocols, see section **IV. CREATING AND EDITING PROTOCOLS.**

1. Turn ON the instrument. It automatically pre-heats to 37°C and then beeps three times to indicate it is ready for use.
2. Prepare slides and seal with CytoBond Sealant (without a humidity strip) or rubber cement (with a moistened humidity strip between slide platforms). See page 9 for details.
3. Lift the instrument lid and insert slide tray(s).
4. From the main menu, press the **Forward** or **Back** buttons until the blinking cursor highlights Run. Press the **Select** button.
5. Press the **Select** button to choose Protocol. A list of programmed protocols will be displayed.
6. Use the **Forward** button to advance to the desired protocol.
7. Press the **Select** button to run the protocol. The instrument will beep once and follow the programmed steps to heat to the denature temperature and then cool to the incubation temperature. At completion, the instrument will beep three times and return to 37°C.
8. The instrument will continue to hold slides at 37°C and beep three times every 5 seconds. Press any button to stop and return to the main menu.

Running a Protocol

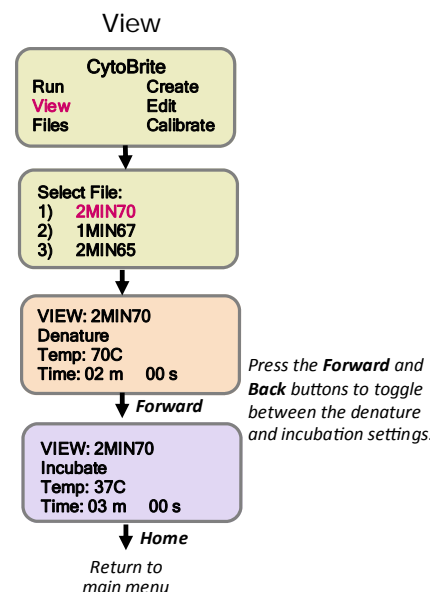


VII. MANAGING FILES

A. Viewing a Protocol

Saved protocols can be reviewed in read-only mode.

1. From the main menu, press the **Forward** or **Back** buttons until the blinking cursor highlights View.
2. Press the **Select** button to view a list of programmed protocols.
3. Use the **Forward** (or **Back**) buttons to move to the desired protocol and press the **Select** button to view.
4. Use the **Forward** and **Back** buttons to toggle the display between the programmed denature and incubation temperatures and times.
5. Press the **Home** button to return to the main menu.

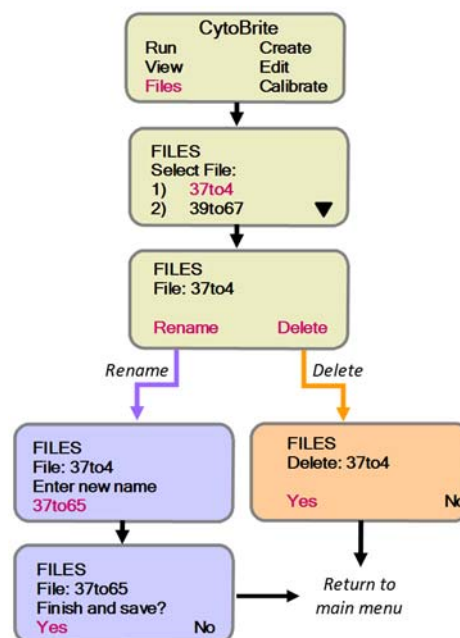


B. Renaming a Protocol

An existing file may be renamed and saved in the controller memory.

1. From the main menu, press the **Forward** or **Back** buttons until the blinking cursor highlights Files.
2. Press the **Select** button to view saved files.
3. Use the **Forward** (or **Back**) button to move to the desired filename and press the **Select** button.
4. Press the **Select** button to Rename. Enter a new name by using the **Forward** or **Back** buttons to choose the first character and press the **Select** button to save. Allowable characters are a space; letters A-Z and numbers 0-9. Repeat the selection process for 7 additional characters. Protocol names must be 8 characters in length, including spaces.
5. When finished renaming, select Yes to save.

Rename or Delete a Protocol



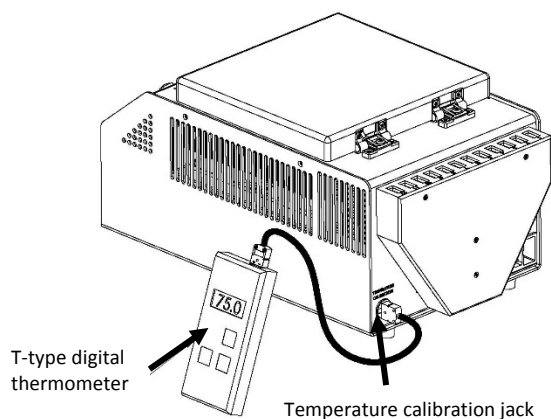
C. Deleting a Protocol

1. From the main menu, press the **Forward** or **Back** buttons until the blinking cursor highlights Files.
2. Press the **Select** button to view saved filenames.
3. Use the **Forward** button to advance to the desired filename and press the **Select** button. Press the **Forward** button to highlight Delete and press the **Select** button.
4. Select Yes to confirm.

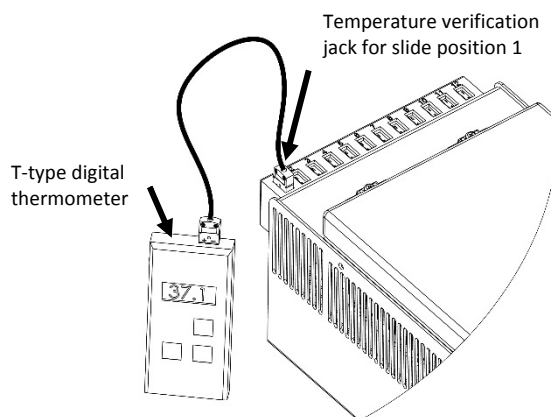
VIII. SETTINGS AND PREFERENCES

A. Temperature Verification of Slide Positions

1. Turn ON the instrument and wait 15 minutes for it to pre-heat and stabilize.
2. From the RUN screen, select OneTemp and enter the temperature used for the denaturation step in your protocol (normally 72-75°C). Wait five minutes.
3. Check temperature calibration by plugging in the NIST-certified T-type digital thermometer (SciGene cat. #1051-52-0) provided with your instrument into the calibration jack. The temperature shown on the thermometer should be within $\pm 0.4^{\circ}\text{C}$ from that shown on the controller. If the difference is greater, recalibrate following the procedure in the next section: **B. Calibrating the Temperature Controller**.



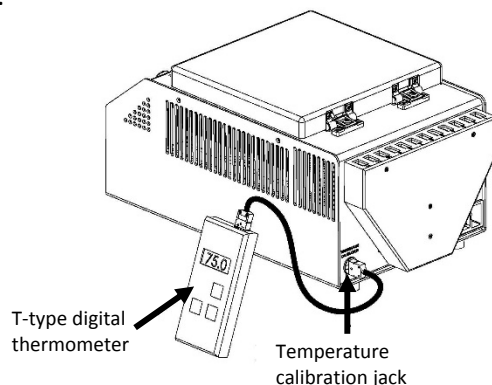
4. After verifying calibration, plug the thermometer into the jack for slide position 1. Wait 3 seconds and then record the temperature in the *Slide Temperature Verification Log*. A log template can be found in the back of this manual.



5. Repeat for additional slide positions 2-12.
6. Press the **Forward** button to end the protocol.
7. Repeat the above procedure for verification of the slide incubation temperature and then enter the temperature of each slide position in the log.

B. Calibrating the Temperature Controller

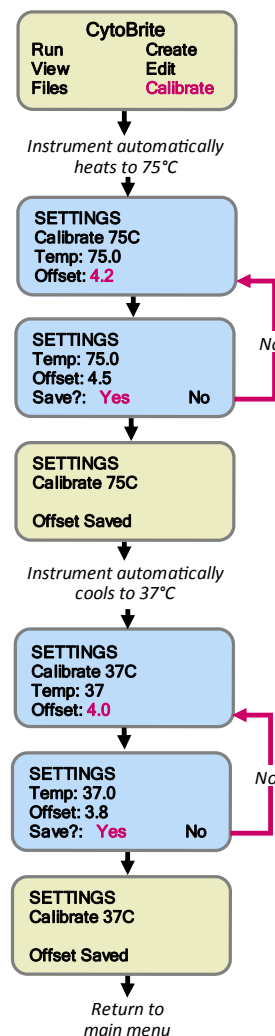
The **CytoBrite PLUS System** comes calibrated from the factory to provide accurate slide temperatures from 15 to 90°C ± 1.0°C. Temperature accuracy should be checked periodically (according to your lab schedule) with the NIST-certified T-type digital thermometer (SciGene cat. #1051-52-0) provided with your instrument.



The system is calibrated by entering offset values at 75°C and 37°C as follows:

- Using the cable supplied with the T-type NIST certified digital thermometer (SciGene cat. # 1051-52-0), connect it to the blue jack on the rear of the instrument labeled “Temperature Calibration” and turn on power to the CytoBrite PLUS.
 - From the main menu, press the **Forward** or **Back** buttons until the blinking cursor highlights **Calibrate** and press the **Select** button. The instrument will automatically heat to 75°C.
 - After the instrument reaches temperature and the controller displays 75°C, wait an additional five minutes before proceeding.
 - After five minutes, subtract the controller temperature from the thermometer temperature to determine the offset. For example, if the thermometer reads:
 - 75.5 and the controller reads 75.0, **add 0.5**.
 - 74.5 and the controller reads 75.0, **subtract 0.5**.
 - Enter the new offset in the Calibration screen by using the **Forward** or **Back** buttons to change the value and then press the **Select** button. The controller now displays temperature using the new offset.
 - Compare the controller and thermometer temperatures.
 - If the temperatures match to ± 0.2°C, press Yes to save the new offset.
 - If not, press No to enter a new offset value.
- Once the new offset is confirmed, the instrument will automatically cool to 37°C.
- After the instrument reaches temperature and the controller displays 37°C, wait an additional five minutes before proceeding.
 - Repeat steps 4 - 6 at 37°C to determine a new offset value. Confirm the second offset to return to the main menu. **Calibration is complete.**

Temperature Calibration



IX. MAINTENANCE

A. Cleaning the Instrument

Clean outer metal surfaces and the heated lid using a soft cloth and mild, detergent-based cleaner. Avoid abrasive cleaners that can scratch surfaces.

Do **NOT** clean with caustic or alkaline solutions (e.g., strong soaps, ammonia or bleach). If running radioactive or biohazardous reactions, consult your institution's radiation safety officer or biosafety office for assistance.



Turn the power switch to the OFF position and unplug the power cord before performing any cleaning procedure!!

Tournez le commutateur d'alimentation sur la position OFF et débranchez le cordon d'alimentation avant d'effectuer toute opération de nettoyage!



Remove liquid or condensation (wipe dry) while instrument is OFF and block is cool or at room temperature!!

Enlever le liquide ou la condensation (essuyer), tandis que l'instrument est éteint et le bloc est frais ou à température ambiante!

B. Cleaning Air Vents

Clean the air intake (bottom of instrument) to prevent vents from becoming clogged. Remove any dust and debris, airflow may be hampered, affecting performance of the instrument and damage by overheating of components.

C. Checking and Replacing Fuses

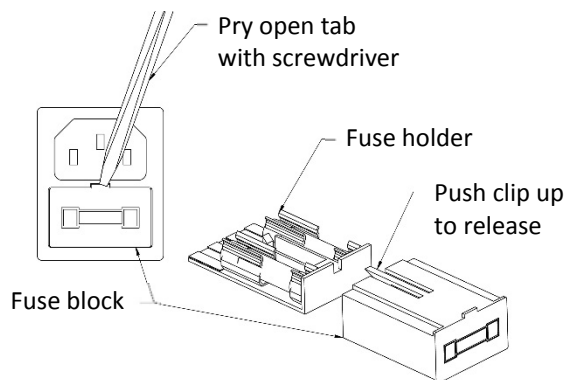
There are two fuses located in a removable fuse block below the power cord receptacle on the back of the unit. A blown fuse appears dark. Always replace fuses with those of the same amperage and voltage as shown on the label below the fuse block.



Turn the power switch to the OFF position and unplug the power cord before performing any service procedure.

To remove fuses:

1. Insert a small, flat blade screwdriver into the tab recess just below the plug receptacle.
2. Push down to release the fuse block.
3. Slide fuse holder out from the fuse block while holding the retaining tab out of the way.
4. Gently pry out the fuses.



X. TROUBLESHOOTING

Symptom	Cause	Solution
Instrument does not turn on.	No power or blown fuse	Check power source and power cord connection. Replace fuse beneath power cord (on back of unit) if necessary.
Block is not reaching set temperature.	Paper or other object blocking fans	Check underneath base for objects blocking the fans. Ensure proper clearance.

XI. SPECIFICATIONS

Electrical	
Cat. #2019-00-1	115/230V AC; 50/60 Hz; 6A/3A
Dimensions (cover closed)	
Outside (H x W x D)	8.25 x 9.5 x 15 inches (21 x 24 x 38 cm)
Weight	
Instrument	20 lbs. (9 kg) net
Performance	
Temperature Range	15 to 90°C
Temperature Regulation	± 0.2°C
Temperature Uniformity & Accuracy	± 1.0°C
Heating Rate	37 to 75°C in < 2 minutes
Cooling Rate	75 to 37°C in < 2 minutes
Controller	
Controller Type	Digital PID, single loop
Display	Four-line LED
Calibration Output	Thermocouple
Environmental	
Ambient temperature	Operation: +15 to +32°C (58 to 90°F)
	Storage: -20 to +60°C (-4 to 140°F)
Relative humidity	Operation: 20 to 80% RH non-condensing
	Storage: 10 to 90% RH non-condensing
Overvoltage category	II

XII. ORDERING INFORMATION

INSTRUMENTS AND ACCESSORIES		
Cat. #	Description	UoM
2019-50-1	CytoBrite <i>PLUS</i> Slide Incubation System, 115/230V.	EA
2019-10-0	CytoBrite Slide tray. Holds 1 to 6 slides.	EA
1051-52-0	Digital thermometer, handheld. Includes cable and NIST certificate.	EA
2040-70-1	MicroFISH Hybridization Oven, 115V. Includes humidity system.	EA
1080-70-1	Little Dipper Processor for FISH, 115V.	EA

FISH REAGENTS		
Cat. #	Description	Volume
2010-00-1	FISH Wash Buffer 1 (0.4xSSC/0.3% IGEPAL, pH 7), 4L.	4L
2010-00-2	FISH Wash Buffer 2 (2xSSC/0.1% IGEPAL, pH 7), 4L.	4L
2020-00-1	CytoBond Removable Coverslip Sealant, 100 ml.	100 ml
2022-02-1	CytoZyme HC Stabilized Pepsin, 5 ml.	5 ml
2022-02-2	CytoZyme HC Stabilized Pepsin, 20 ml.	20 ml
2022-00-2	CytoZyme Stabilized Pepsin, 50X Concentrate, 20 ml.	20 ml
2022-00-3	CytoZyme Stabilized Pepsin, 50X Concentrate, 100 ml.	100 ml
2022-10-2	CytoZyme Reaction Buffer, 1L.	1L
2022-10-3	CytoZyme Reaction Buffer, 4L.	4L
2030-00-1	Sodium Thiocyanate Pretreatment Reagent, 1L.	1L
2030-00-2	Sodium Thiocyanate Pretreatment Reagent, 4L.	4L

XIII. DECLARATION OF CONFORMITY

CytoBrite® Slide Incubation System

SciGene
1287 Reamwood Ave
Sunnyvale, CA 94089 USA



Declares that the above referenced product(s) meets the essential requirements of the following European Union Directives by using the relevant standards shown below to indicate compliance.

EMC Directive 2014/30/EU

EN 61326-1	2013	Electrical equipment for measurement, control and laboratory use to include:
EN 55011	2010	Class A
EN 61000-3-2	2009	
EN 61000-3-3	2013	
EN 61000-4-2	2009	
EN 61000-4-3	2006	
EN 61000-4-4	2012	
EN 61000-4-5	2006	
EN 61000-4-6	2014	
EN 61000-4-8	2010	
EN 61000-4-11	2004	

LVD Directive 2014/35/EU

IEC 61010-1	2010	Safety requirements for measurement, control and laboratory use 3rd Edition Part 1: General requirements
--------------------	-------------	--


RoHS Directive 2011/65/EU

Terry Gill
Name of Authorized Representative

Sunnyvale, California, USA
Place of Issue

Director of Product Manufacturing
Title of Authorized Representative

September 13, 2019
Date of Issue


Signature of Authorized Representative

Serial Number:

Temperature Verification Log

Date	Set Temp (°C)	Slide Position Temp (°C)												Initials
		1	2	3	4	5	6	7	8	9	10	11	12	

Note: If the digital thermometer provided with the instrument displays a temperature exceeding ± 1.0°C from the controller, perform the Calibrate Temperature procedure.