

CytoBrite® Slide Incubation System USER MANUAL

Cat. #2019-00-1 (115/230V)



FOR RESEARCH USE ONLY

Serial Number

The following serial number identifies the specific instrument you have purchased and must be referenced when requesting service. A copy is affixed to the instrument.

Technical Service: (408) 733-7337, techserv@scigene.com

Warranty

SciGene warrants that the CytoBrite® 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.

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I. SAFETY NOTICES

A. Intended Use

The **CytoBrite® 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 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 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.

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.

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.



This symbol located on the back of the instrument warns the user to select the correct voltage before connecting the power cord. Operating with the voltage selector switch in the wrong position will damage the instrument and create a safety hazard.

Ce symbole situé à l'arrière de l'appareil avertit l'utilisateur de sélectionner la tension correcte avant de brancher le cordon d'alimentation. Fonctionnant avec le sélecteur de tension dans la mauvaise position peut endommager l'appareil et créer un risque de sécurité.

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 2002/96/EC, providing environmentally safe disposal of end of life equipment through recycling.

Contact your institution to provide environmentally safe disposal. If this is not available, contact your local SciGene distributor or SciGene Technical Support [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 in compliance 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 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 depassant 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

The **CytoBrite** instrument is shipped in a double carton. To unpack the instrument, open the outer box, take out the bag containing the manual and power cord and remove the protective cardboard corners. Then open the inner box, reach down the inside, and carefully lift out the instrument by its base. NEVER lift by the hinged lid. Place the instrument on the bench and raise the lid to remove two slide trays. Inspect parts for visible damage. *If any damage is evident, retain all shipping materials and contact SciGene [techserv@scigene.com] or your local distributor.*

B. Parts Provided

- 2x Slide Trays (shipped inside instrument)
- Power Cord
- User Manual

C. Coverslip Sealant Provided

One complimentary 100 ml bottle of CytoBond® Removable Coverslip Sealant (SciGene cat. # 2020-00-1) is shipped separately from the instrument. Use of CytoBond Sealant is required for sealing coverslips; to prevent probe evaporation without humidification. Contact *SciGene [custserv@scigene.com] or your local distributor to order additional bottles.*

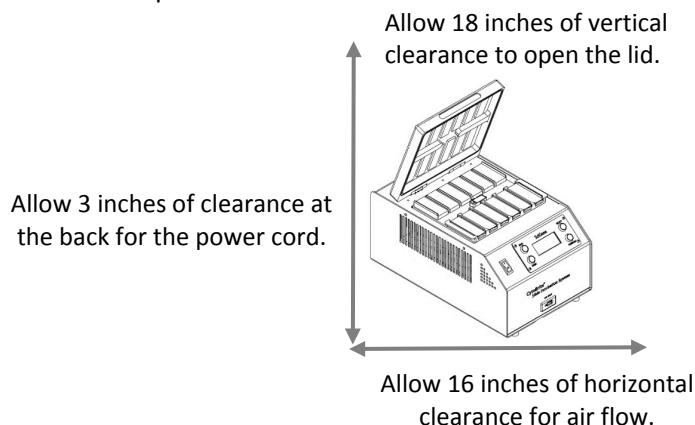
D. Environmental Requirements

Ensure that the area where the **CytoBrite 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

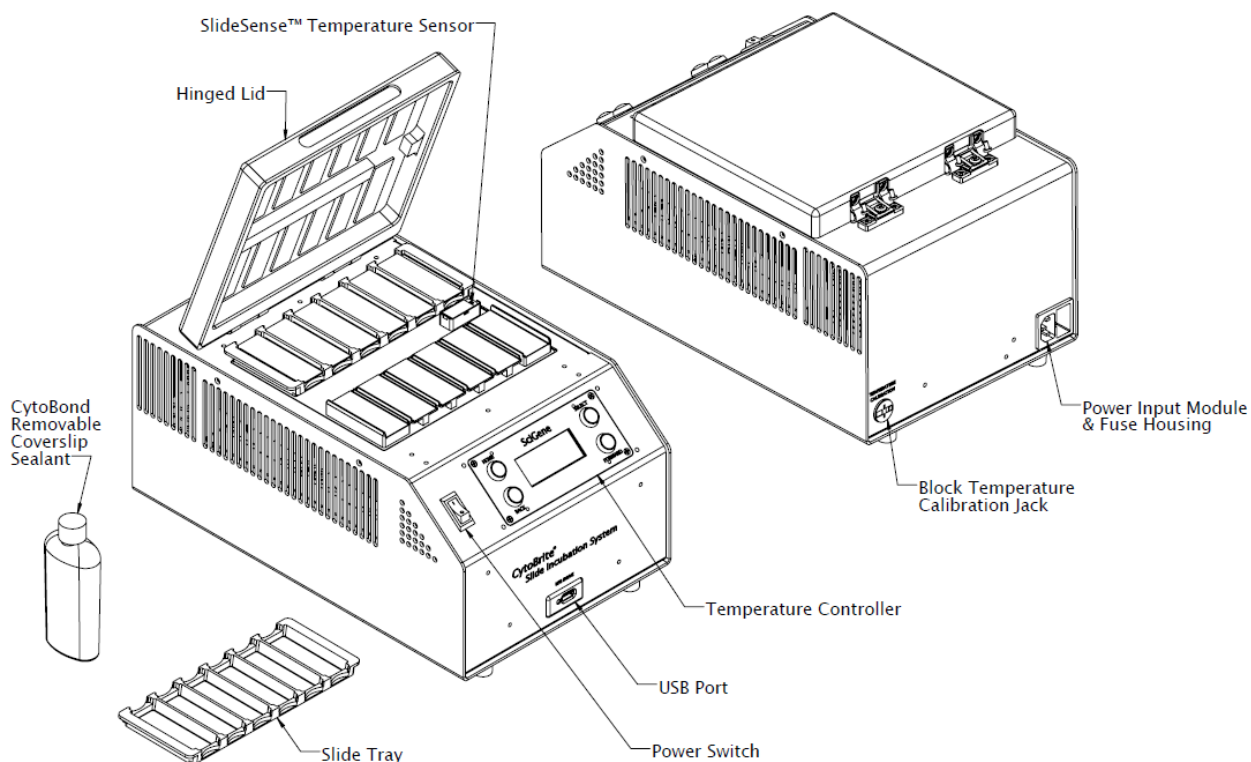
Place the instrument on a level surface within a few feet of the power source. Position the system so the lid can be easily opened without interference. Allow 18 inches of vertical clearance and 16 inches of horizontal clearance. Ensure 3 inches of clearance at the back to attach the power cord. Using 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 SYSTEM

A. System Components

Component	Function
SlideSense™ Temperature Sensor	Senses and transmits slide block temperature information to controller
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
USB Port	Used for saving datalog files and installing software
Hinged Lid	Covers slide trays during processing
Block Temperature Calibration Jack	Connection for digital thermometer cable to calibrate slide block temperature
Power Input Module and Fuse Housing	Location of main fuses and power cord connection
CytoBond Removable Coverslip Sealant	Seals coverslips to slides



B. Preparing Slides / Loading the Instrument / Starting a Protocol

Slides are prepared for molecular analysis following your standard procedures using the CytoBrite Slide Trays provided with the unit. 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. Place slides to be analyzed in the tray(s), pipet probes and place coverslips.
2. Seal coverslips by dispensing a continuous bead of CytoBond Sealant around edges.
3. Turn on power to the instrument, select and start the desired program (See section V for how to create programs.)
4. When the unit finishes pre-heating, the controller displays a prompt and beeps to load slides. Raise the cover, place the tray(s) into the unit and press **Select** to start the program.
5. The instrument then heats the slides to the programmed temperatures and times.

C. Powering On/Off

To turn **ON** the instrument, press the top of the power switch (the “I” position). To turn **OFF** the instrument, press the bottom of the power switch (the “O” position).

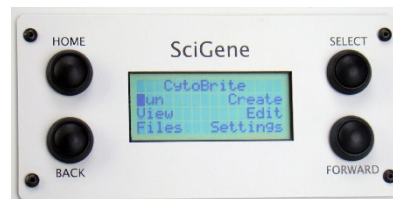
D. Using the Controller

A 4-line LED display controller is used to CREATE, RUN, EDIT and VIEW protocols, manage FILES (rename, copy, delete) and customize SETTINGS (including calibrating temperature and choosing alert sounds).

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

- **Home** — returns to the main menu 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.



E. Using the USB Drive

A USB key inserted into the USB DRIVE can be used to:

- Capture a time and temperature log when running a protocol
- Allow protocols to run directly from a USB key.
- Provide additional capacity for storing protocols beyond the 10 file storage limit on the controller.
- Upload new controller software.



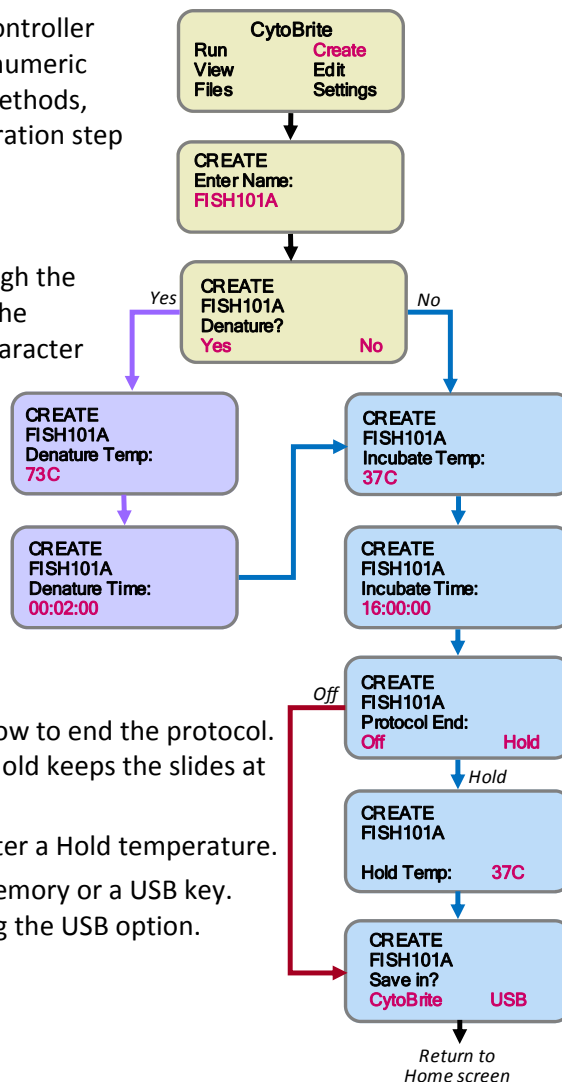
IV. CREATING AND EDITING PROTOCOLS

A. Creating a Protocol

Protocols are created and saved in memory on the controller (10 files maximum) or a USB key. Names are 8 alphanumeric characters in length including spaces. For FISH/ISH methods, protocols can be created with an optional co-denaturation step prior to probe hybridization.

1. From the Home screen, select Create.
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. On the next screen select Yes to use a Denature step. If chosen, enter the Denature time (hours | minutes | seconds) and temperature (15-90°C) on succeeding screens.
4. On the following screens, enter the slide incubation temperature and time for the probe hybridization step.
5. Complete creation of the protocol by choosing how to end the protocol. Selecting Off turns off the slide block. Selecting Hold keeps the slides at a selected temperature until removed.
6. If Hold is selected as the protocol end option, enter a Hold temperature.
7. Save the completed protocol to the controller memory or a USB key. Make sure a USB key is inserted BEFORE selecting the USB option.

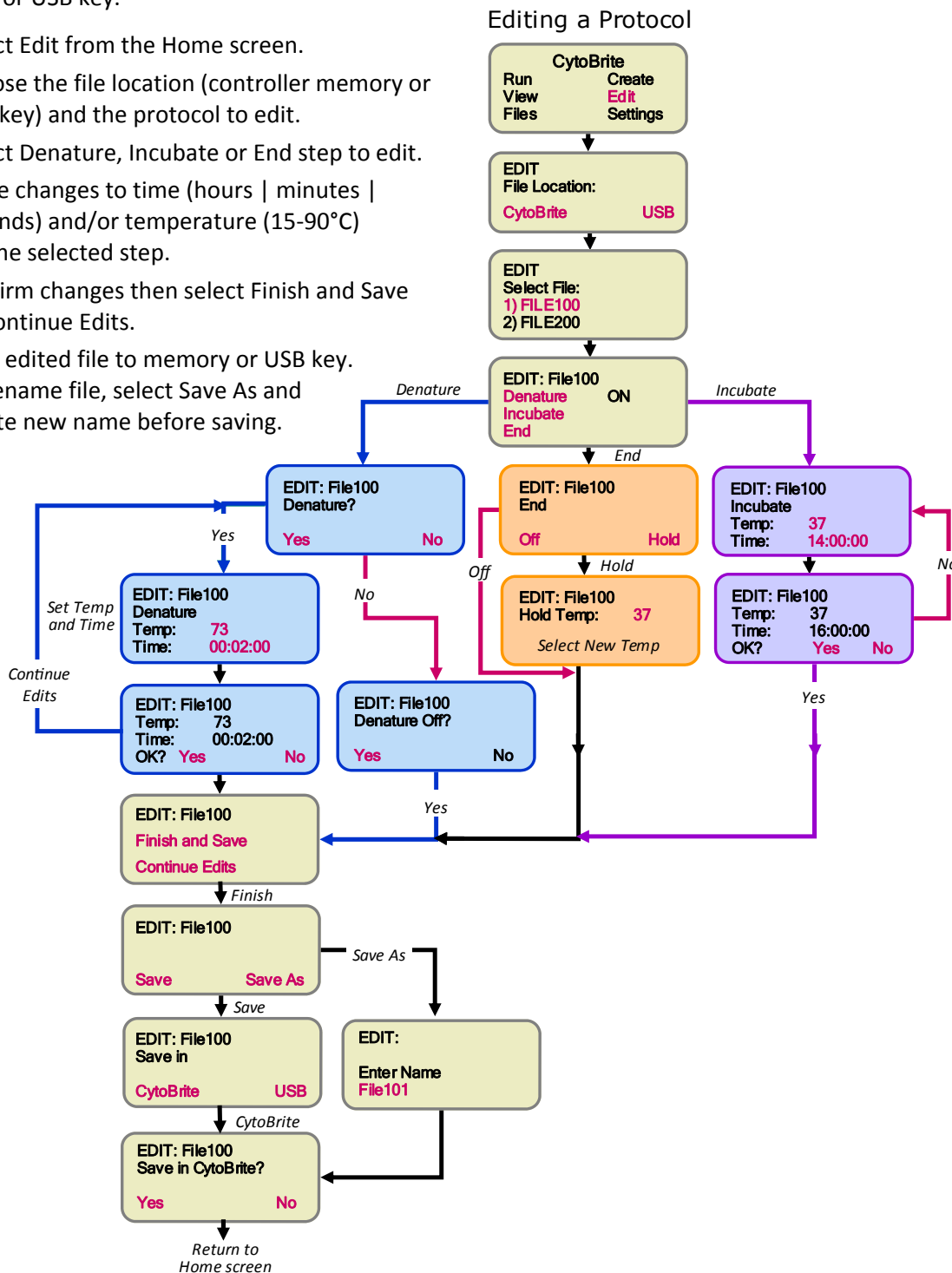
Creating a Protocol



B. Editing a Protocol

The **Edit** function allows changes to the Denature and Incubate times and temperatures as well as protocol end options (Off or Hold) in an existing protocol. Edited protocols may be saved under the existing name or be renamed (using the Save As function) to the controller memory or USB key.

1. Select Edit from the Home screen.
2. Choose the file location (controller memory or USB key) and the protocol to edit.
3. Select Denature, Incubate or End step to edit.
4. Make changes to time (hours | minutes | seconds) and/or temperature (15-90°C) for the selected step.
5. Confirm changes then select Finish and Save or Continue Edits.
6. Save edited file to memory or USB key. To rename file, select Save As and create new name before saving.



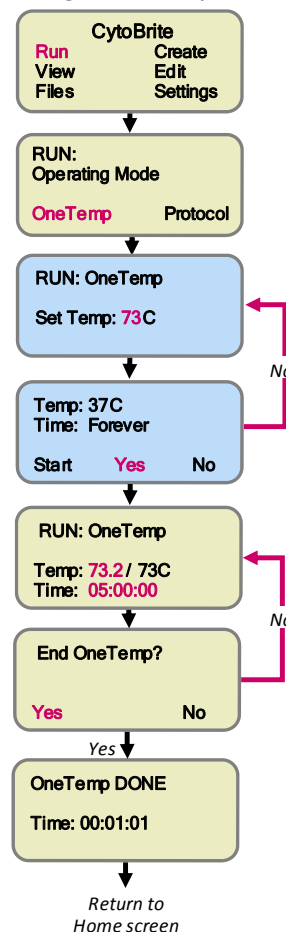
V. ONETEMP MODE

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

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

1. From the Home screen, choose Run | OneTemp.
2. Set the desired block temperature from 15 to 90°C.
3. Press Select “Yes” to start the program. Set temperatures for the block will be displayed. Time will be listed as “Forever” as the program will continue until stopped by the user.
4. To end the program, use the **Forward** button to display the End Protocol screen and Select “Yes”. The instrument will display “OneTemp DONE” and total elapsed time.

Running OneTemp Mode

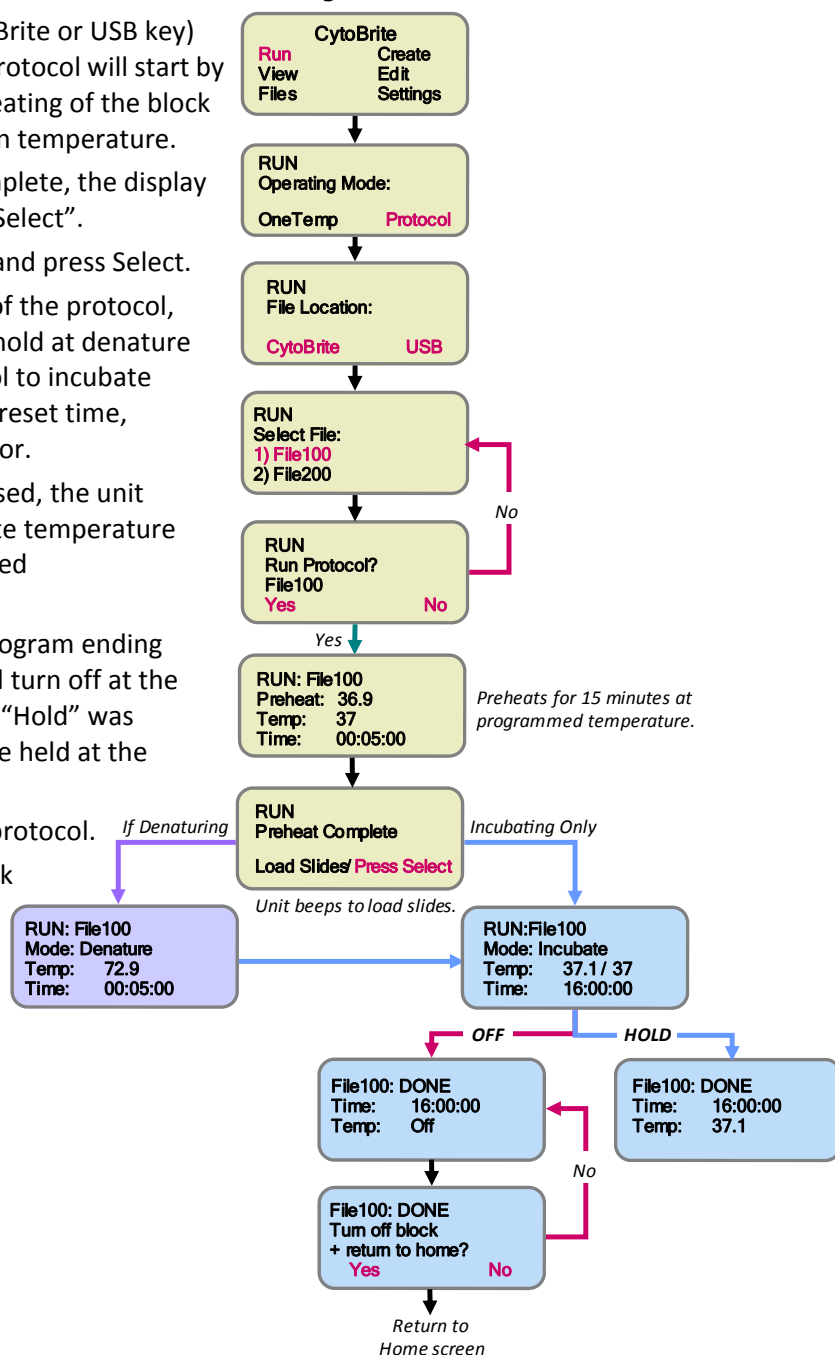


VI. RUNNING A PROTOCOL

The RUN function is used to run a previously created protocol stored in the controller memory or on a USB key. To operate the CytoBrite instrument at a single temperature without a timer see section V. ONETEMP MODE.

1. Select Run | Protocol from the Home screen.
2. Choose the file location (CytoBrite or USB key) and select the protocol. The protocol will start by performing a 15 minute preheating of the block to the programmed incubation temperature.
3. When the preheat step is complete, the display will flash “Load Slides / Press Select”.
4. Open the lid, load the tray(s) and press Select.
5. If a denaturation step is part of the protocol, the unit will rapidly heat and hold at denature temperature, then rapidly cool to incubate temperature, warming for a preset time, as programmed by the operator.
6. If a denaturation step is not used, the unit will simply heat to the incubate temperature where the slides will be warmed for the programmed time.
7. If “Off” was selected as the program ending option, slide block heating will turn off at the completion of the protocol. If “Hold” was selected, the slide block will be held at the programmed temperature.
8. Press any key to terminate a protocol.
9. Select Yes in the Turn Off Block confirmation screen to return to the Home screen.

Running a Protocol



VII. MANAGING FILES

A. Viewing a Protocol

Saved protocols can be reviewed in read-only mode.

1. Select View from the Home screen.
2. Choose the file location (controller memory or USB key) and protocol.
3. Use **Forward** to advance through the protocol in the following order:
 - Denature temperature and time
 - Incubate temperature and time
 - Final hold temperature or OFF
4. Press the **Forward** or **Back** buttons to continue.

B. Copying a Protocol

A protocol can be copied and saved under a new name in the controller memory or USB key.

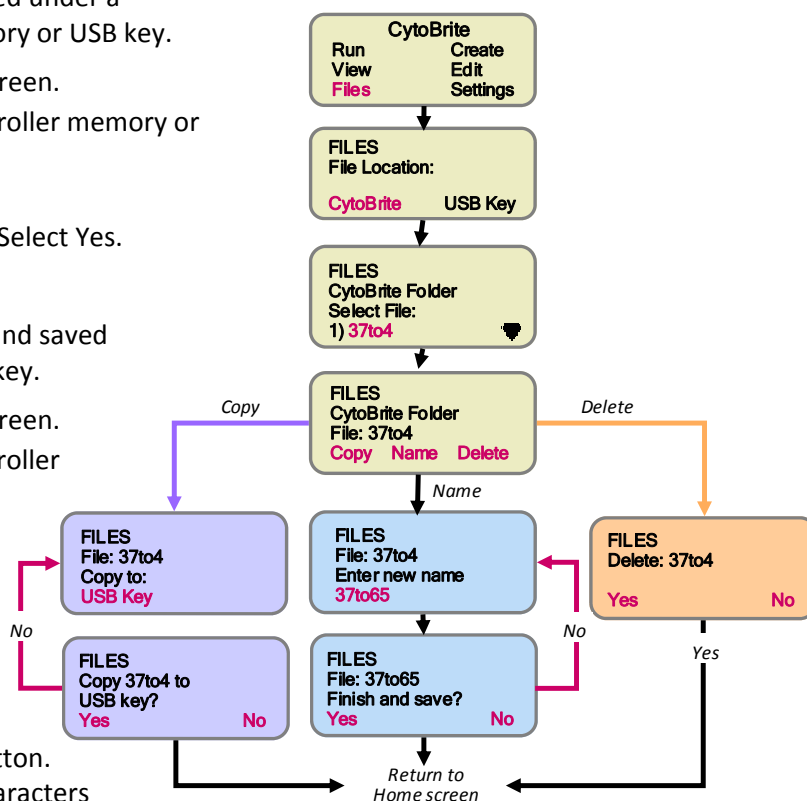
1. Select Files from the Home screen.
2. Choose the file location (controller memory or USB key) and protocol.
3. Select Copy.
4. Choose new file location and Select Yes.

C. Renaming a Protocol

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

1. Select Files from the Home screen.
2. Choose the file location (controller memory or USB key).
3. Select Name.
4. Enter a new name by choosing characters (space; A-Z; 0-9) using the **Forward** button. Sequentially select a desired character using the **Select** button. Protocol names must be 8 characters in length, including spaces.
5. Select Yes to save.

Copy/Rename/Delete a Protocol



D. Deleting a Protocol

1. Select Files from the Home screen.
2. Choose the file location (controller memory or USB key) and protocol.
3. Choose Delete and press **Select**.
4. Select Yes to confirm.

VIII. SETTINGS AND PREFERENCES

A. Datalogging to USB Key

A text file that captures the block time and temperature while a protocol is running can be created and written to the USB key.

1. From the Home screen, go to Settings | Datalog
2. Following the prompts on the screen, turn on datalogging and enter the data sampling frequency (5 sec to 60 min).
3. Insert a USB key into the USB DRIVE to capture a log file.
While in use, the drive light will flash as data is transferred to the USB key.

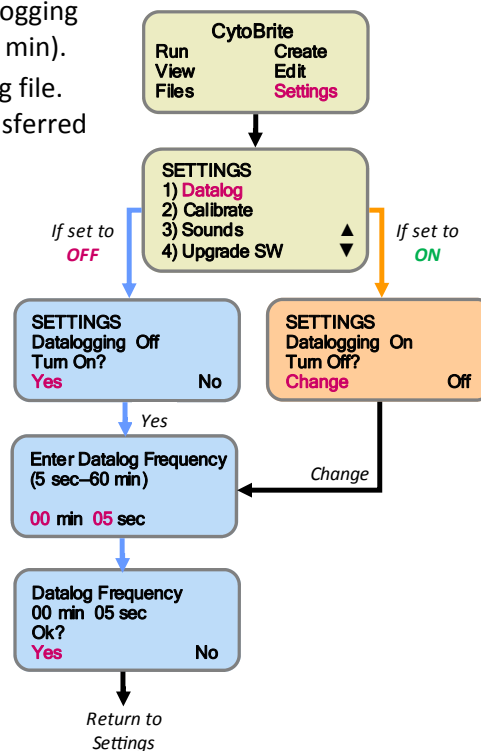
A datalog file for a typical protocol is shown below:

```

CytoBrite_Datalog_Example - Notepad
File Edit Format View Help
Datalog for Protocol: TEST.CYT
Protocol Summary:
Preheat 37C / 00hrs 15mins 00secs
Denature 75C / 00hrs 10mins 00secs
Incubate 37C / 00hrs 10mins 00secs
Hold Temperature: 37C
Run Data
Step Time at Step Set Temp Actual Temp
Preheat 00:00:00 37C 21.4C
Preheat 00:01:00 37C 38.8C
Preheat 00:02:00 37C 35.1C
Preheat 00:03:00 37C 37.6C
Preheat 00:04:00 37C 37.4C
Preheat 00:05:00 37C 36.7C
Preheat 00:06:00 37C 37.1C
Preheat 00:07:00 37C 37.0C
Preheat 00:08:00 37C 36.9C
Preheat 00:09:00 37C 37.0C
Preheat 00:10:00 37C 37.0C
Preheat 00:11:00 37C 37.1C
Preheat 00:12:00 37C 36.9C
Preheat 00:13:00 37C 37.0C
Preheat 00:14:00 37C 36.9C
Preheat 00:15:00 37C 37.0C
Preheat 00:16:00 37C 36.9C
Preheat 00:17:00 37C 37.1C
Denature 00:18:00 75C 37.2C
Denature 00:19:00 75C 62.1C
Denature 00:20:00 75C 75.0C
Denature 00:21:00 75C 75.1C
Denature 00:22:00 75C 75.0C
Denature 00:23:00 75C 75.0C
Denature 00:24:00 75C 75.0C
Denature 00:25:00 75C 75.1C
Denature 00:26:00 75C 75.1C
Denature 00:27:00 75C 75.0C
Denature 00:28:00 75C 75.0C
Denature 00:29:00 75C 75.1C
Incubate 00:30:00 37C 73.3C
Incubate 00:31:00 37C 48.3C
Incubate 00:32:00 37C 37.0C
Incubate 00:33:00 37C 36.8C
Incubate 00:34:00 37C 36.8C
Incubate 00:35:00 37C 36.8C
Incubate 00:36:00 37C 37.0C
Incubate 00:37:00 37C 36.9C
Incubate 00:38:00 37C 36.9C
Incubate 00:39:00 37C 36.9C
Incubate 00:40:00 37C 36.9C
Incubate 00:41:00 37C 37.1C
END PROTOCOL
    
```

Datalog file for a typical protocol

Creating a Datalog



B. Calibrating Slide Block Temperature

The **CytoBrite System** comes calibrated from the factory to provide accurate slide temperatures from 15 to 90°C ± 0.5°C. The accuracy of block temperatures should be checked periodically (according to your lab schedule) with a T-type NIST certified digital thermometer (SciGene cat. #1051-52-0).

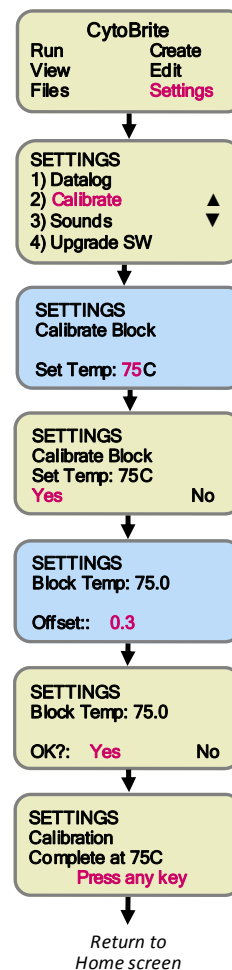
The controller needs calibration *only if* the block temperature shown on the NIST-certified thermometer differs by more than one degree (1°C) from the temperature shown on the controller display.

1. Connect a T-type NIST certified digital thermometer (SciGene cat. # 1051-52-0) to the blue jack on the back of the unit labeled “Temperature Calibration”.
2. From the Home screen, go to Settings | Calibrate.
3. Enter 75°C as set temperature and confirm. The block temperature and current offset will be shown.
4. Wait 30 minutes.
5. Calculate the difference between the temperature shown on the digital thermometer and the block temperature shown on the controller display to determine the needed offset adjustment.

For example, if the thermometer reads 76.0°C and the controller reads 75.0°C, the offset adjustment is 1.0.

6. **Add** this adjustment value to the existing offset shown on the controller display to determine a new offset then enter the new value using the Forward and Back buttons.
For example, if the offset value on the display before adjustment is 0.3, and the adjustment value from step 5 is 1.0, the new offset value to be entered into the controller would be 1.3.
7. Select Yes to confirm the new offset and return to Home screen.

Calibrating Block Temp



C. Upgrading Software

The **CytoBrite System** displays the current software version on the controller when powering on the instrument (during boot up). New software versions are installed via the USB DRIVE. Current software versions may be downloaded from www.scigene.com.

1. From the Home screen, go to Settings | Upgrade SW.
2. Following the on-screen prompts, insert a USB key containing new software into the USB DRIVE and press Select.
3. A flashing progress indicator displays as the software is loading. This process may take several minutes.
4. When loading is finished, an “Upgrade Complete” message will display. Press any key to display the new software version number and date. After a few seconds the Home screen will appear. The instrument is now ready for use.

D. Changing Alert Sounds

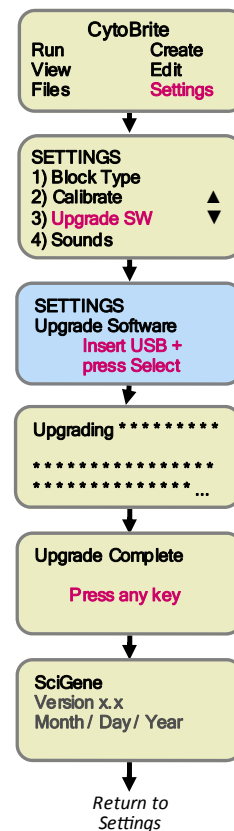
The **CytoBrite System** comes from the factory with alert sounds set to OFF. Alert sounds can be turned ON to notify the user of the following events:

- **Protocol End** – two long beeps at protocol completion
- **Each Select** – one short beep each time **Select** button is pressed
- **Preheat** – continuously beeps upon reaching set temperature until **Select** button is pressed
- **Denature** – one short beep indicates this step has completed

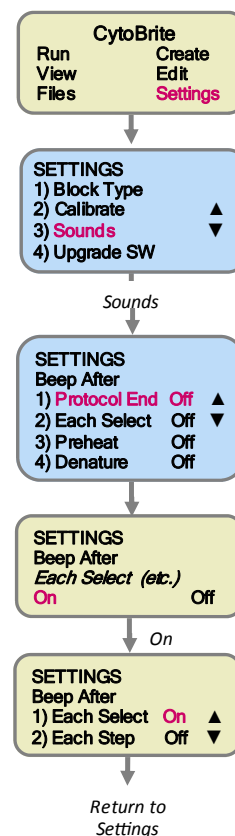
To turn sounds on or off:

1. From the Home screen, go to Settings | Sounds.
2. Use the **Forward** button to choose an alert from the list and press **Select**.
3. Use **Forward** to choose ON or OFF and press **Select**.
4. Continue to change alert settings as in step 2 above or exit to the Home screen by pressing the **Back** button twice.

Upgrading Software



Changing Sounds



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** use caustic or strongly alkaline solutions (e.g., strong soaps, ammonia, or bleach at a higher concentration than specified above). 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, effecting performance of the instrument and damage by overheating of components.

C. Checking and Replacing Fuses

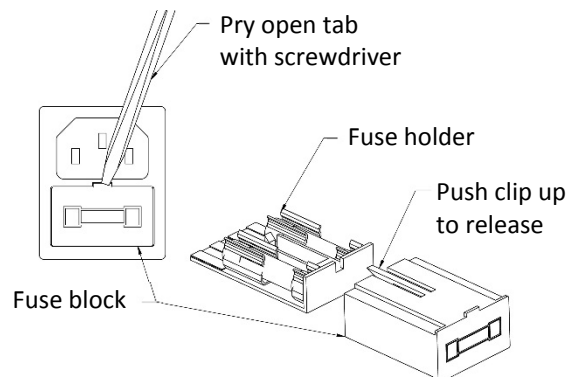
There are two fuses located in a removable fuse block below the power cord receptacle on the back of the unit. A blown fuse appears dark. Always replace fuses with those of the same amperage and voltage as shown on the label below the fuse block.



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.	Blown fuse(s)	Replace fuse(s) on back of unit, beneath power cord receptacle.
Block is not reaching set temperature.	Paper or other object blocking fans	Check underneath CytoBrite™ base for objects blocking the fans. Ensure proper clearance.

XI. SPECIFICATIONS

Electrical	
Cat. #2019-00-1	115/230V AC; 50/60 Hz; 3A/1.6A
Dimensions (cover closed)	
Outside H x W x D	9.25 x 9 x 12.75 inches (24 x 23 x 32 cm)
Weight	
Instrument	15 lbs (7 kg) net
Performance	
Block Temperature Range	15 to 90°C
Block Temperature Regulation	± 0.2°C from set point
Block Temperature Accuracy	± 0.5°C
Slide-to-slide Temperature Variation	< 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

Cat. #	Description	UoM
2019-70-1	CytoBrite Slide Oven, 115V. Includes ten 6-slide racks.	EA
2019-20-1	CytoBrite Duo Slide Incubation System, 115/230V. Includes two 6-slide racks.	EA
2019-10-0	CytoBrite Slide tray. Holds 1 to 6 slides.	EA
2010-00-1	FISH Wash Buffer 1 (0.4xSSC/0.3% IGEPAL, pH 7).	EA
2010-00-2	FISH Wash Buffer 2 (2xSSC/0.1% IGEPAL, pH 7).	EA
2020-00-1	CytoBond Removable Coverslip Sealant, 100 ml.	EA
2022-00-2	CytoZyme Stabilized Pepsin, 50X Concentrate, 20 ml.	EA
2022-00-3	CytoZyme Stabilized Pepsin, 50X Concentrate, 100 ml.	EA
2022-10-2	CytoZyme Reaction Buffer, 1L.	EA
2022-10-3	CytoZyme Reaction Buffer, 4L.	EA
2030-00-1	Sodium Thiocyanate Pretreatment Reagent, 1L	EA
2030-00-2	Sodium Thiocyanate Pretreatment Reagent, 4L	EA
1051-52-0	Digital thermometer. Includes cable and NIST certificate	EA