



Seedburo[®]
Equipment Company

INSTALLATION & OPERATING INSTRUCTIONS



Model A3920

ACHIEVA GERMINATORS

Wet Series

A3920 Fully Automated With
Recording Thermometer

Dry Series

SDA8700 Fully Automated With
Recording Thermometer

DISTRIBUTED EXCLUSIVELY BY

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Heat Cycle / Cold Cycle • Light / Dark Mode • Wet or Dry Chamber

Accurate and reliable temperature control allows for tetrazolium testing, chemical storage, accelerated aging, plant growth, seed germination, prechill and biological research.

CAUTION

CAUTION!

Read this entire "Installation and Operating Instructions" carefully prior to plugging equipment into a power source and/or into service. Information found in this manual is important for safe operation and proper use / maintenance.



WARNING!

Verify the electrical requirements of equipment and verify the intended electrical power receptacle. The intended power receptacle must be compatible with the operational electrical requirements of the equipment and be properly grounded. The electrical data plate of your equipment is located near the electrical power supply cord (extension cord).



WARNING!

Do not apply more than intended rating to the supply (power cord). Use only the specified power cord and connector. Refer to a qualified service technician for changes to the electrical supply cord.



WARNING!

If there are any questions with regards to wiring, adequate electrical supply, proper power to you building / outlets or service for your equipment, a qualified electrician should be contacted before using your equipment.



WARNING!

Follow local regulations of electrical codes, installation methods and proper use of equipment.



CAUTION!

Germinator and or Lab Test Chamber equipment should only be used for its intended purpose, of typical testing with requirements of temperatures between 35°F and 130°F / 1.6°C and 54.4°C and light level intensity not to exceed the manufacture standard, and those standard test in a professional setting with qualified technicians, to prevent personal injury or a hazard to property including equipment. Consistent with tests, such as: pre-chiller, seed germination, seed tests and research, plant test and research, plant growth, propagation, accelerated aging, photo stability tests, zoology, botany, tetrazolium, biological research and tissue cultures tests.



DANGER

DANGER!

Failure to read, follow all installation / operation instructions, as well as safe working habits, can result in a situation that personal injury hazards may exist that may not be apparent, or a condition where a hazard to property including the product itself.

CAUTION

INSTALLATION

REMOVE THE PACKING MATERIAL

Great care has been taken to protect the unit and content during shipping. After uncrating the unit, make sure to remove all cardboard, padding, wood, tape, plastic ties, and other packing material that secure shelves, racks, humidifier, water reservoir, etc... in place during transit.

SERIAL AND MODEL NUMBER

These numbers are found on the nameplate (serial tag) affixed to the lower back or side of the unit. Please record these numbers along with the voltage, amperage and code number in this booklet, in the space provided on the back cover for easy and quick reference. If you ever need technical information or parts, this information will be required in order to provide you proper assistance.

INSTALLATION & LOCATION

ALWAYS:

- Install equipment to assure that the location for your equipment is level.
- Install equipment away from heat sources and extreme cold areas.
- Install equipment to assure sufficient clearance to side and back walls of 6" (152.4 mm).
- Install equipment only in appropriate areas that are conducive to electrical appliances.
- Install equipment in an appropriate safe working environment.

NEVER:

- Never install equipment in an area of standing water.
- Never install equipment in an area with overhead power-lines
- Never install equipment in an area not conducive to safe and proper operator use.

PROPER ELECTRICAL HOOK-UP

Caution:

To protect operator as well as equipment from a possible power surge:

- Verify that the power switch is in the “OFF” position before plugging in the electrical cord.
- Verify the electrical requirements of equipment and verify the intended electrical power receptacle. The intended power receptacle must be compatible with the operational electrical requirements of the equipment and be properly grounded. The electrical data plate of your equipment is located near the electrical power supply cord (extension cord), indicating voltage, amp, wattage, Hz, and phase.
- Plug the power cord into a proper voltage and grounded outlet only.



Danger:

DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE GROUNDING PRONG (Earth Ground) FROM THE CORD PLUG.



WARNING:

If the product loses the ground connection, usage of knobs, controls, hinges latches and all other parts may become conductive of electricity can cause an electrical shock. Electrical products may be hazardous if misused.



WARNING:

For your protection, do not bypass any interlocks, electrical safety devices or fuses. Only a qualified electrician should attempt repair or replacement of electrical wiring and or components.



Danger: BE SURE THE EQUIPMENT IS UNPLUGGED FROM ELECTRICAL SOURCE BEFORE REMOVING CONTROL PANEL.

DEFINITIONS



Heated Test: *Above* room ambient temperatures
Cool Test: *Below* room ambient temperatures
Cycle: A given period of time within either a hot or cold test

FILL WATER RESERVOIR BEFORE OPERATING



Fill the self-contained **water reservoir** inside the chamber (below the tray racks) to the water level mark or 1.5" (3.8 cm) with water.



Tap water can be used, but *distilled water is preferred.*

Tap water may contain minerals that will cause a residue build-up in the reservoir.

Without using water, humidity levels will be low and heating will be uneven.



SPECIFICATIONS

4 Trays Included:

- Controlled environment test chamber.
- Double walled insulation between interior and exterior walls.
- Versatile testing with single point or alternating tests.
- 28 Tray positions.

Controls Per Chamber:

- Touch panel.
- Fully programmable.
- User friendly.
- Audio and visual icons and alarms.

Heating:

- Indirect forced circulated heating system.
- Warm air evenly distributed throughout the chamber by efficient long life heating element(s).
- Stable and even temperature sensitivity for cyclic and growth.

Cooling:

- Indirect forced circulated refrigeration system.
- Cool air evenly distributed throughout the chamber with even temperature sensitivity for cyclic and growth.
- High end CFC free sealed fan cooled compressor.

Temperature Range:

- 0°C (32°F) to 56°C (132°F).

Illumination:

- Highly efficient long lasting LED lights.
- The illumination has adjustable settings.

WET SERIES

Rain Water Spray Timer:

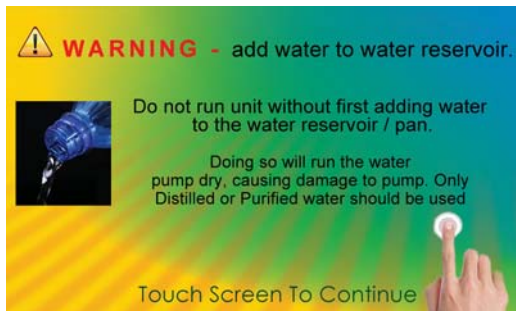
- Control spray interval time.
- Control length of spray-on time.

CONTROLLER MENU PROMPTS TITLE SCREEN & MAIN MENUS



FILL WATER RESERVOIR FOR HUMIDITY CYCLE

Fill the self-contained **water reservoir** inside the chamber (below the tray racks) to the water level mark or 1.5" (3.8 cm) with water. *Distilled water is preferred.*



PRE-CONDITION CHAMBER

Before loading the germinator chamber with test samples, operate the unit for approximately 45 minutes to allow chamber to "pre-condition" and reach temperature and humidity levels.

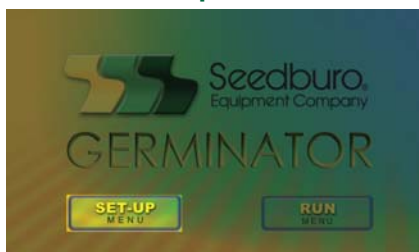
CONTROL SCREEN OPERATING INSTRUCTIONS

1. Plug unit in to proper outlet.
2. Turn the "ON / OFF" rocker switch on the face of the control panel to "ON".



- Wait approximately 20 seconds:
3. The control panel will illuminate, showing the "Title Screen".
 4. The controller is a soft-touch interactive display screen. Touch the screen to continue.
 5. The Main Menu screen allows two choices of "Set-Up Menu" or "Run Menu".

Set-Up Menu



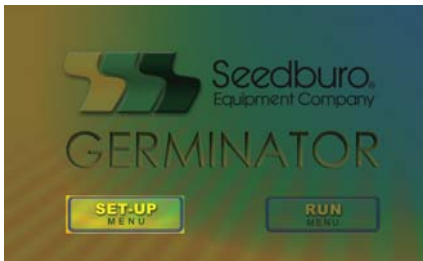
This function is for setting up the following parameters:

- "CLOCK / CALENDAR" (Real Time)
- "DATA STORAGE" (Data Logging Set-Up)
- "TEMPERATURE UNITS" (°F or °C Scales)
- "CALIBRATE" (Internal machine parameters - Password Protected)

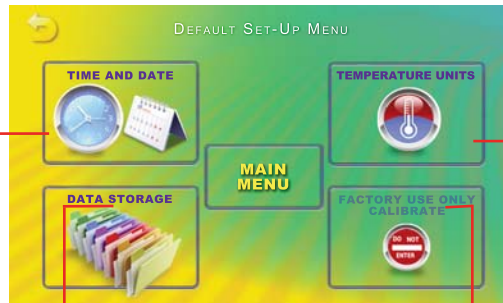
Once these parameters have been set, they become the defaults and remain the settings for all tests, until changed or modified.

CONTROL SCREEN INSTRUCTIONS

Set-Up Menu



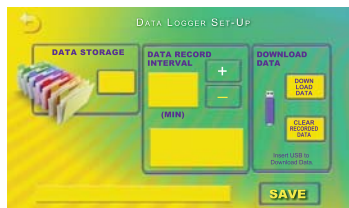
Before running the unit, you must first set-up the CLOCK /CALENDAR, DATA STORAGE, TEMPERATURE UNITS (°F or °C SCALES), and CALIBRATE. These become the settings for all tests until changed.



Password Protected



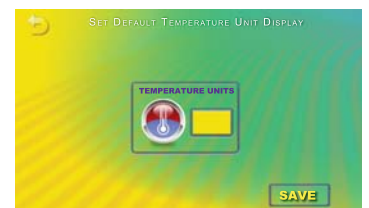
Clock / Calendar



Data storage allows variable time interval in collection of test values.



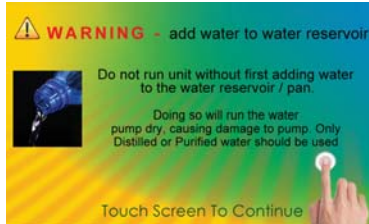
SETTING DEFAULTS
 Min Temp = 0°C (32°F)
 Max Temp = 56°C (132°F)
 Min RH% = 0%
 Max RH% = 100%



°F / °C Scale

CONTROLLER MENU INSTRUCTIONS

Run Menu

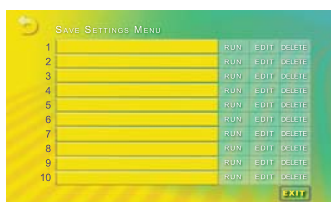
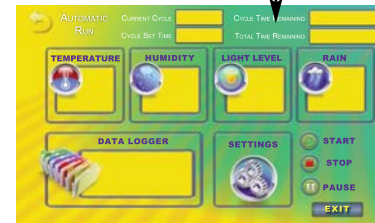
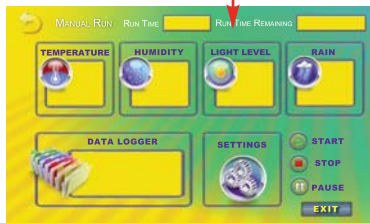
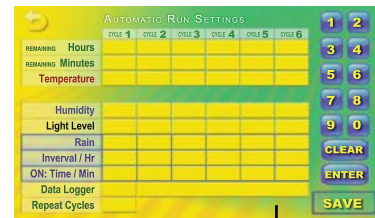


Pressing "RUN" without going through "SET-UP" will default to running the last program that was loaded.



Manual Mode

Automatic Mode



MAINTENANCE INSTRUCTIONS

CLEANING

CLEANING DANGER:

Never allow electrical parts to become wet, as this may cause electrical shock or death!



WARNING:

Use only distilled water or water that has been boiled. Mineral deposits will collect and damage sensors found in the unit, causing fluctuation in factory tolerances.

To keep your cabinet clean, simply wipe the interior and exterior, as needed, with damp cloth or sponge with a mild soapy solution or white vinegar to aid in deliming.

Never use abrasives, acids, or strong cleaners.

Do not flood or allow electrical parts to become wet.

The interior racks are removable without tools for easy cleaning.

Do not use wax or strong cleaners on door gaskets.

