

Designed, Engineered &
Assembled Proudly in USA

Introduction

Administering IV fluids close to body temperature has become increasingly viewed as a valuable therapeutic modality. Veterinary patients, either small in size or possibly in hypovolemic shock, benefit greatly from receiving warm IV fluids (~100 degrees F) versus room temperature fluids. Additionally, emergency abdominal flushes can be administered in an instant with warm fluids on standby. The new Ready Warm fluid bag warmer maintains up to 4 IV bags at ready-to-use temperatures, with digital controls programmed to show the correct temperature of the fluids at all times. The bags can be left on the warmer for extended periods of time to be ready for emergencies.

Notes for Safe Use

- Do not operate unit in or near open liquids.
- Unplug unit before cleaning or repairing.
- Do not use if electrical cord is damaged.

Note: All hard surfaces of the Ready Warm may be cleaned with common laboratory disinfectants. Do not autoclave.

Unpacking & Set Up

- 1 Carefully unpack the Ready Warm and included power adapter, saving packing materials in the unlikely event you need to return the item. Immediately contact your distributor if you detect any damage. If you need to return the Ready Warm to Jorgensen Laboratories, please use the original packing material.
- 2 Place Ready Warm on a flat, stable surface away from the edges. Ensure that the power switch is set in the "OFF" position.
- 3 Connect the included power adapter to the Ready Warm, attach the provided line cord, and then plug it into a properly grounded electrical outlet. (Use only the supplied power adapter and plug.)

 **Caution:** As with any temperature controlled equipment, take care not to touch the platform while the equipment is in use. Hot surfaces can cause serious injury or burns.

Jorgensen Laboratories is not responsible for any injury caused by misuse or abuse of this equipment.

Panel Description

Panel Instructions:

-  Power button (For Temperature Controller ONLY)
-  Set button (Press and hold this button to modify a parameter)
-  Up button
-  Down button

Heat Indicator Light:

-  ON: Unit is heating
-  OFF: Heat is off

Set Parameter Indicator Light:


SET ON: Program Mode (Parameters can be changed)

Quick Start Guide

Platform Placement

Fluid bags should be placed in the following layouts to allow even heat distribution on the Ready Warm's heated platform. Leave a 1/8" - 1/4" space between each fluid bag. **Fluid bags should not touch one another.**



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Quick Start Guide - Continued

The Ready Warm ships from the manufacturer preset to 100°F, the most common setting for warming fluid bags.

- 1 Turn on the red main power switch located on the top of the unit. When the Ready Warm is first powered on, the unit will show the ACTUAL temperature.
- 2 Press "↑" button once and the display will show the PRESET temperature (factory PRESET is set at the common temperature of 100°F). After 3 seconds, the display will revert back to ACTUAL temperature.
- 3 If no temperature changes are needed, the Ready Warm should stabilize at 100°F in 45 minutes.

Manufacturer recommendations:

- 1 It is not necessary to turn the Temperature Controller On / Off using the "⏻" button. Use the main power switch to power the Ready Warm On / Off.
- 2 Though the Ready Warm is capable of operating continuously, it is recommended that the unit be powered off at the end of each work day.

Temperature Controller - Detailed Instructions

Operation:

- 1 Press and hold "⏻" button for 3 seconds to turn on the Temperature Controller. When Temperature Controller is on, press and hold "⏻" button for 3 seconds to turn off the Temperature Controller.
- 2 The system starts heating when the measured temperature value is below the temperature set value. The "Heat" indicator light will illuminate, indicating the unit is heating. When the measured temperature value is higher than the temperature set value, the "Heat" indicator light is off, and the unit is not heating.

Key Operation Instruction:

- 1 To check a parameter:

Press and release "↑" button to display the set temperature value.

Press and release "↓" button to display the temperature variance value.

*The display will return to the normal temperature display within a few seconds.

- 2 To set a parameter:

Press the "Set" button for 3 seconds or more to enter parameter modification mode. The Temperature Controller will display the first menu code "F1".

Press "↑" button or "↓" button to display the menu item codes available, F1, F2, F3 or F4.

Press the "Set" button to display the parameter value of the current menu.

Press and hold the "Set" button and press the "↑" button or "↓" button simultaneously to choose and adjust the parameter value of the current menu value. After setting the parameter, press and release the "⏻" button to save the parameter modified value and return to display the normal temperature value. If there is no button operation within 10 seconds, the system won't save the modified parameter.

The screen will display "Er" if error appears during parameter saving, and will revert back to normal operating status in a few seconds.

Code	Function	Set Range	Default	Notes
F1	Temperature set value	-58°F to 120°F	100°F	N/A
F2	Variance set value	1°F to 18°F	1°F	N/A
F3	Compressor delay time	1 to 10 mins	3 mins	*Unused
F4	Temperature offset value	-18°F to 18°F	Various	N/A

WARNING: Never set Temperature Value above 120°F.

3 Restore system data:

When the Temperature Controller is turned on, the system will do a self diagnostic check. The screen will display “Er” if an error exists. Press any button at this time and the Temperature Controller will restore the default values and enter into normal operating mode. It is advised to reset the parameter value under such conditions.

Error Descriptions:

The Temperature Controller will activate the sensor error alarm if it detects the sensor has an open or short circuit. Temperature Controller operation will shut off while the buzzer alarms and the Temperature Controller will display “EE.” Press any button to cancel the alarm sound. The Temperature Controller will display the normal temperature when the error and the fault are cleared.

If the measured temperature exceeds the measurement range, the Temperature Controller will activate the error alarm. Temperature Controller operation will shut off while the buzzer alarms and the controller will display “HH.” Press any button to cancel the alarm sound. The Temperature Controller will return to the normal display when the temperature is restored to the normal measurement range.

Parts List

Part Number	Description	Quantity
100099	Power switch; illuminated red	1
100131	Power Jack; 2.1 x 5.5 mm	1
100682	Temperature controller; 12v w/ sensor	1
100690	Power adapter; 12v / 10A	1
100099	Silicone heating element; 50w/12v	2
100131	Disc thermostat	1
100682	Front label; Ready Warm	1
100690	Rubber feet; 8-32 Thread	5