Ultra Centrifuge Instructions

Introduction:

The Ultra-8 centrifuge is available in three models: the Ultra-8F (fixed speed), the Ultra-8V (variable speed) and the Ultra-8 Select (4-speed selector).
The Ultra-8F is the lowest-cost unit, designed for blood separations at 3300 rpm's only. The Ultra-8V will separate blood at 3300 rpm's, and can be slowed to separate other fluids at lower G-forces such as urine specimens as outlined by C.L.I.A. regulations. The Ultra Select offers pre-set speeds at 800, 1500, 1800, and 3300 rpm's for accuracy and simplicity.

Features:

30 minute timer, on/off switch (indicator light), variable speed control (not on U8F), 8 tube capacity (3-15 ml), locking lid, safety switch in lid (unlatching the lid turns the centrifuge off), one –piece metal housing, high impact plastic view port allows for observation of samples and strobing for speed calibrations.

Installation & Setup:

1. Remove the centrifuge from the shipping container and inspect for any possible shipping damage. If the centrifuge appears to be damaged from shipping, please contact your distributor immediately.
2. Read and fill out the warranty card and return the address portion (mail or fax it to InfraTec). The warranty card documents your purchase. Failure to return the warranty card may void any warranty claims on the unit. Place the centrifuge on a sturdy, level surface. Verify that there are no loose objects or packing material in the tube chamber.
3. The large plastic tube shields (ITTS-15ML) are designed for large tubes up to 15 ml, and smaller tube shields (ITTC-1375) are included for shipping shorter tubes (75 mm length). Special size rubber tube cushions can be ordered from InfraTec for a small cost. Verify that all tube shields are installed and balanced (see /6 below).
4. Verify that the power (timer) switch is in the "OFF" position and plug the line cord into an approved and properly grounded 220V AC outlet. Do not insert specimen tubes at this time!
5. Close the lid and latch, turn the centrifuge on, and turn the timer to 5 minutes. If there is a smooth whirring sound and the unit accelerates with little or no vibration, your Ultra-8 centrifuge is ready to operate. If there are loud or unusual sounds, or if you experience excessive vibration, DO NOT OPERATE – Contact your dealer or InfraTec.
6. Spin only balanced loads. Make sure that all tube shields are filled with equal weight tubes. Tubes of equal weight and size should be placed opposite each other. Use water-filled tube to provide balance. Proper sample balancing will improve sample separation and will extend the life of the centrifuge. Out of balance loads may break glass test tubes.

Care & Maintenance:

With proper care and maintenance, the Ultra-8 centrifuge will provide years of laboratory service. Please follow the following recommended guidelines:

- Use only quality test tubes. Lower quality glass tubes may fracture and release their contents into the tube chamber, even under the normal vibrations and stress loads experienced in typical laboratory centrifugation.
- Never force a tube into the tube shield. The tube shields were designed to hold the most common sized tubes, Vaccutainers, and SST's. Some plastic, conical, and glass test tubes are too large and should not be used in the Ultra-8.
- Keep the tube shields clean. If a tube does break, either dispose of the entire tube shield (and remove the opposite shield-for proper balance) or safely dispose of the sample and broken glass and thoroughly clean and disinfect the inside and outside of the tube shield. Additional tube shields are available from InfraTec.
- Motor and electrical maintenance: The Ultra-8 utilizes a brushless induction-type motor and its bearings are permanently lubricated. It should not need servicing for the life of the centrifuge. Likewise, the electrical components were designed for high reliability and should not need regular service. However, if repairs should be needed, please contact InfraTec.

Warranty:

Your Ultra-8 model centrifuge is covered by a limited one year warranty on parts and labor. If the centrifuge or any of its parts should fail during this period, simply contact InfraTec for a "Return Merchandise Authorization" number for repair or replacement. Any attempts to repair the centrifuge or replace any of its parts without authorization from InfraTec may void the warranty.

Specifications	
Nominal Speed:	800-3,300 RPM (+/-100)
Nominal RCF:	1,327 g
Max volume:	120 ml
Max Power:	220 volt
Fuse:	3 amp / 250 volt
Height:	266 mm
Width:	330 mm
Depth:	330 mm
Weight:	7 kg

Fluid recommendations:		
	Speed	**Time**
Whole Blood	3300	10 min.
Urine	1800	10min.

Average Speeds for Variable Unit:	
Dial Setting	RPM Range
Low	1200-1500
Medium	1800-2200
High	3050-3200

RCF (g's)	**Radius (mm)**	**RPM's**
20	109	400
44	109	600
78	109	800
122	109	1,000
175	109	1,200
239	109	1,400
312	109	1,600
395	109	1,800
487	109	2,000
590	109	2,200
701	109	2,400
823	109	2,600
955	109	2,800
1,096	109	3,000
1,247	109	3,200
1,327	109	3,300