

# Cole-Parmer®

## CG-500 Freezer/Mill®

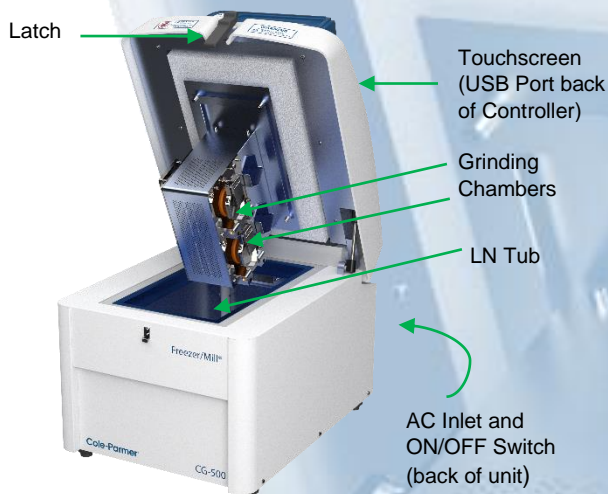
Cryogenic Grinder Designed for Milling Tough and Temperature Sensitive Samples

### Quick Start Guide

For 115V (04500-42) and 230V (04577-94)



For Product Information



### How To Operate CG-500 Freezer/Mill

Set up the CG-500 FM in a well ventilated, unconfined space. The Freezer/Mill should be run on an open countertop, in ambient air, with recommended maximum relative humidity 70% from 5°C – 31°C (40°F – 88°F).

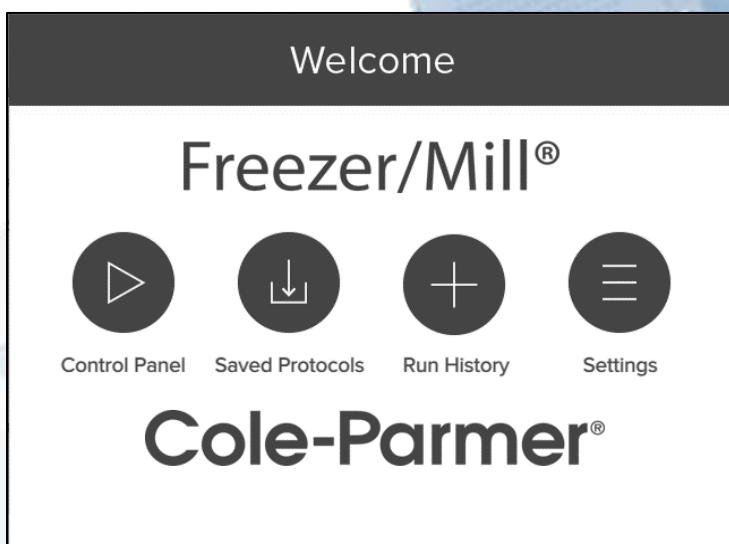
When working with liquid nitrogen directly or indirectly, the LN Tank valve or hose, or chilled Freezer/Mill components, cryogenic gloves must be worn to protect hands. A face shield is recommended to protect eyes from possible splashing. Wear the proper protection equipment (PPE).

**Step 1.** Connect the powercord to the AC Inlet located at the back of unit. Power On the CG-500 FM. When the power is switched ON at the back of the mill, “FreezerMill” appears during start-up as the software loads. Then the screen will switch to the **Home Screen**. From the Home screen the Control Panel, Saved Protocols, Run History, and Settings can be accessed by touching the buttons displayed.

**Step 2.** Fill the tub manually with liquid nitrogen to the fill mark (approx. 2 inches below lip of the tub).

**Always close the lid slowly to avoid splashing of LN and latch down.** It is normal to see a visible vapor stream exiting the vent at the back of the unit. Do not block the vent. See Manual, Section 4.3 LN Tank connection.

### The Touchscreen Display

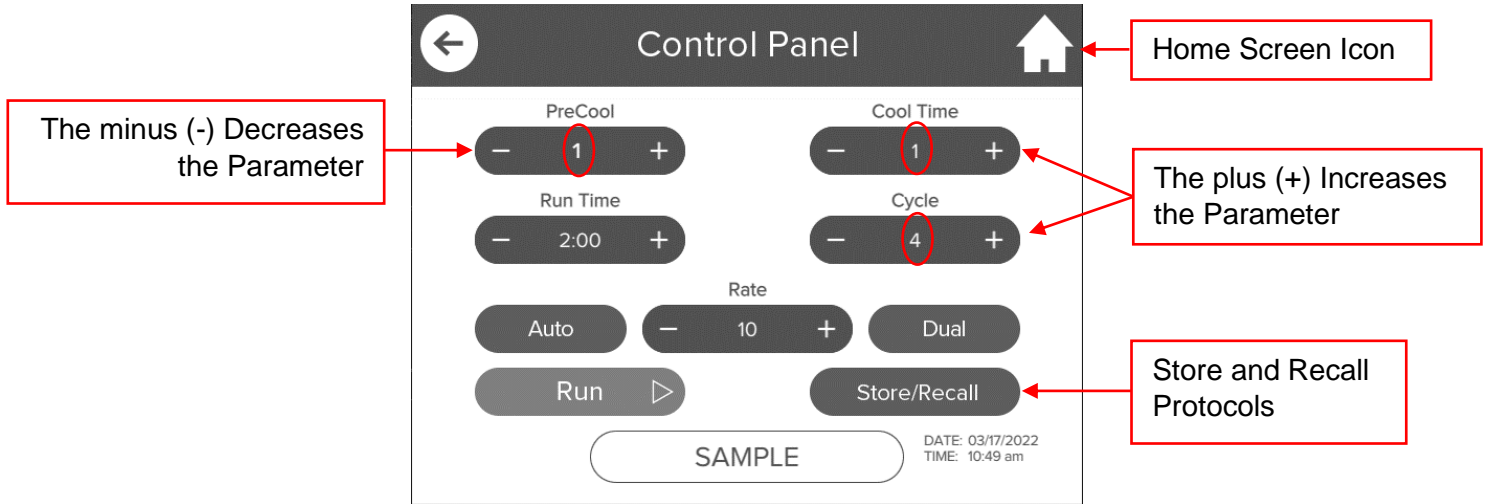


From the Home Screen the Control Panel, Saved Protocols, and Run History, and Settings can be accessed by the user.

Programmable operating commands through a series of touchscreen displays. USB to imports/export saved protocols, run history, diagnostic data, or upgrade the system software.

# Changing the Parameters

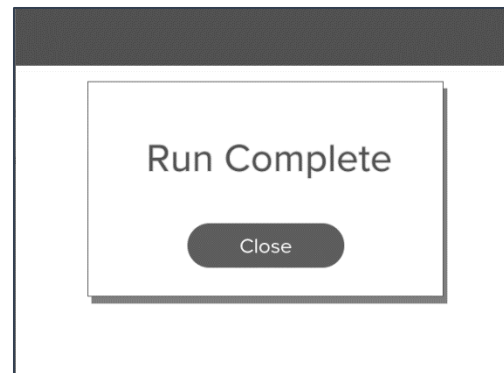
To change parameters (pre-cool time, run time, cool time, cycles, and rate), touch the plus (+) and minus (-) buttons on **CONTROL PANEL** screen. (10 minute pre-cool time is recommended.) To activate Mono or Dual grinding modes are made from this screen. In Mono mode the programmed run parameters will **Only** operate Chamber 1. If Dual mode is selected the run parameters, will operate Chamber 1 and Chamber 2 simultaneously. To pause the program, touch the PAUSE button. To continue the program, touch the RESUME button. To abort the program, touch the STOP button.



During a run a green check mark is placed next to a field when complete.



When the grinding program has ended, the screen will display Run Complete.



Our Application Specialists at Cole-Parmer are here to help with advice on accessories and grinding protocols.

Call USA Tel: +1.800.323.4340 or [techinfo@coleparmer.com](mailto:techinfo@coleparmer.com)