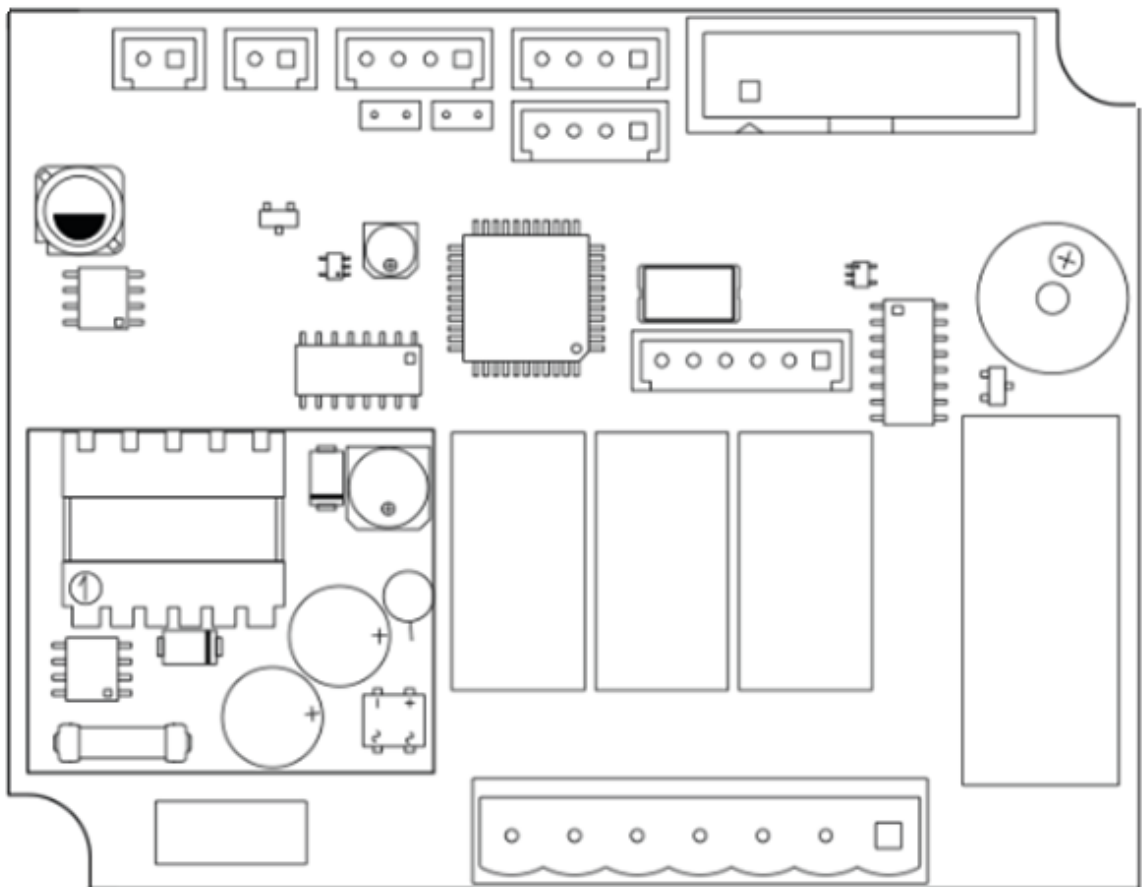


## Coffee Machine Control Board

# CGSZ1G

## Instruction Manual



## PREFACE

Thank you for purchasing our **CGSZ1G**, Control board for the Coffee machine.

This manual contains instructions for the mounting, functions, operations, and notes when operating the **CGSZ1G**. To ensure safe and correct use, thoroughly read and understand this manual before using this instrument.

To prevent accidents arising from the misuse of this instrument, please ensure the operator receives this manual.

## HAZARD INTENSITY LEVELS

The level of risk and importance of the notification is determined by the following definitions. Always observe the warnings to ensure safety and prevent potential injury and product damage.



### *Important:*

Alerts against unsafe practices. Observe *Important* notifications to prevent possible minor personal injury or damage to the board.



### *Warning:*

Indicates a potentially hazardous situation that, if the *Warning* is ignored, could result in injury or death.



### *Note:*

Gives additional information which may be helpful for the proper operation of the board.

**WARNINGS:**

*Note: TIFATECH Co., Ltd declines all responsibility for damage to persons or property resulting from failure to follow the instructions and warning listed below when installing and using this board.*

- Ensure every part of the machine including actuators and sensors is working properly before replacing the new control board.
- Ensure that the power supply voltage does not fluctuate by more than 6%.
- Before mounting or removing the control board, disconnect it from the power supply and wait a while for it to cool down.
- Do not remove any original electrical part of the board.
- Repairing, cleaning, or parts replacement should only be performed by **TIFATECH** or other qualified service personnel.
- Children should never be allowed to play with the board.
- This board is intended to only use for the espresso coffee machine control board. Do not use it for any other purpose.

**PRECAUTIONS****❖ Installation precautions**

Read thoroughly the following conditions before installing the **CGSZ1G** board to the coffee machine.

The mounting location must be:

- No flammable, explosive gases
- No exposure to water.
- An ambient temperature of 0 to 70°C that does not change rapidly, and no icing.
- An ambient non-condensing humidity of 35 to 85 %RH.

**❖ Operation and Maintenance Precautions**

- Do not touch live terminals. This may cause an electrical shock or problems in operation.

- Ensure the board surface is completely dry before powering.
- Periodic cleaning will reduce the risk of damaging the board.

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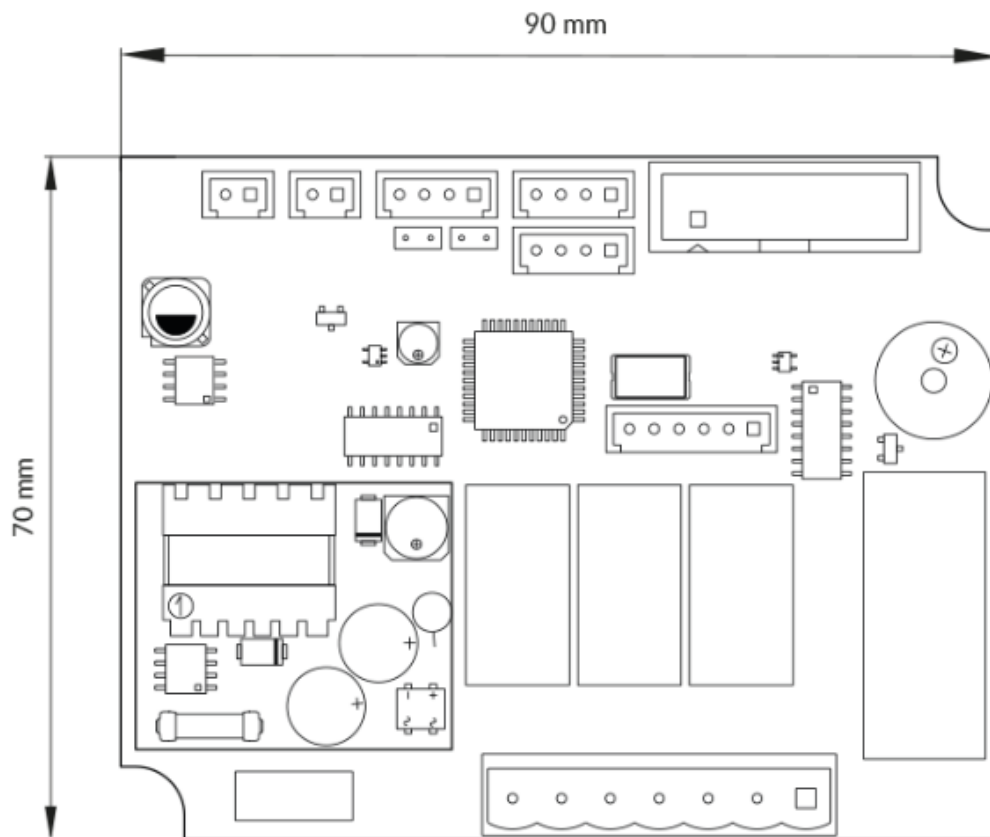
## I. GENERAL

### 1. Introduction

- This manual contains important instructions regarding the safe intended use of the machine.
- If any damage or loss to this manual, request a copy from the **TIFATECH** manufacturer.

## II. TECHNICAL SPECIFICATIONS

### 1. Dimensions (mm)



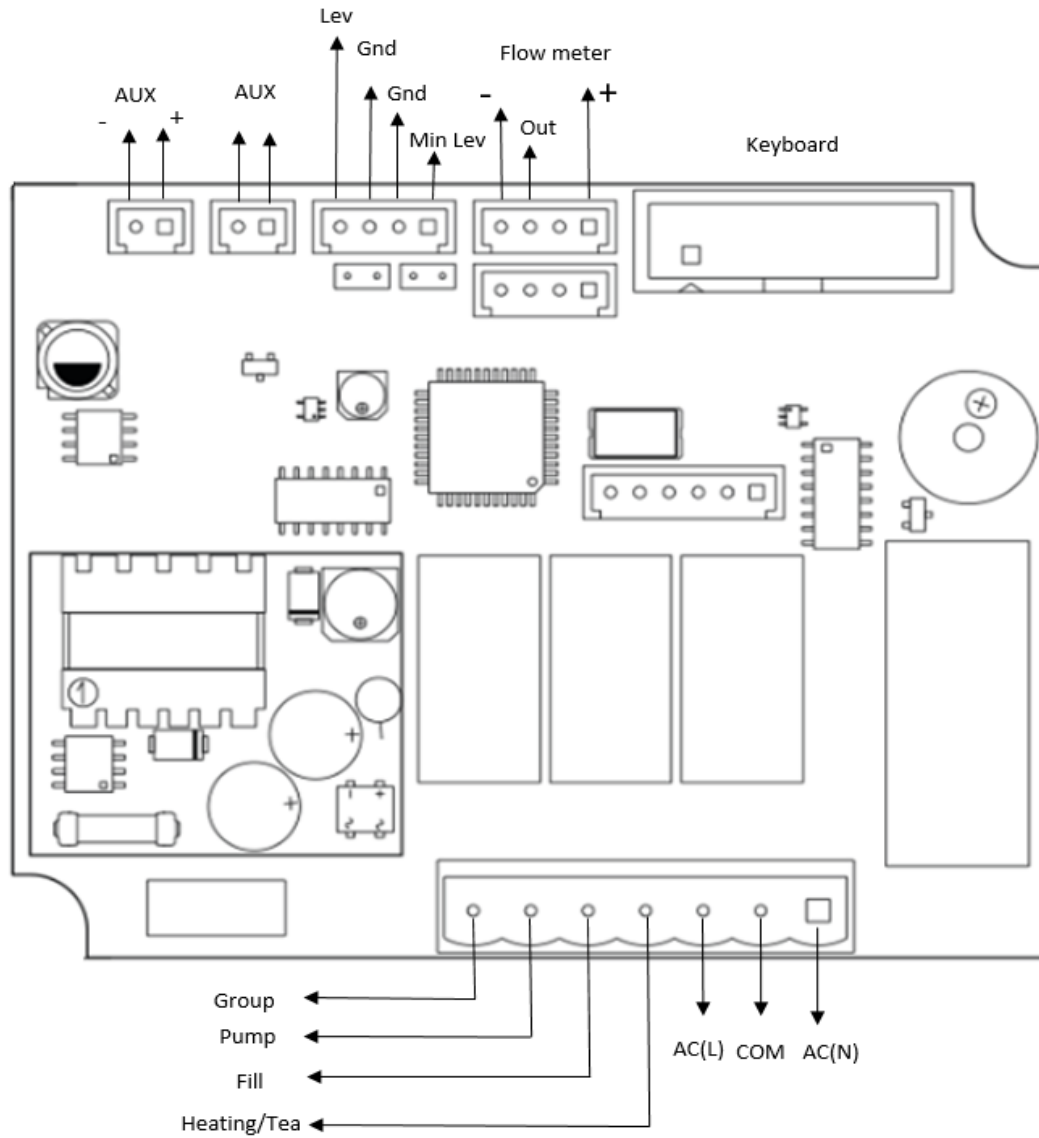
### 2. Specifications

- ❖ Power supply: 230V AC 50/60Hz
- ❖ Actuator voltage: 230V AC



Note: Please contact us if your country doesn't support the power supply required above.

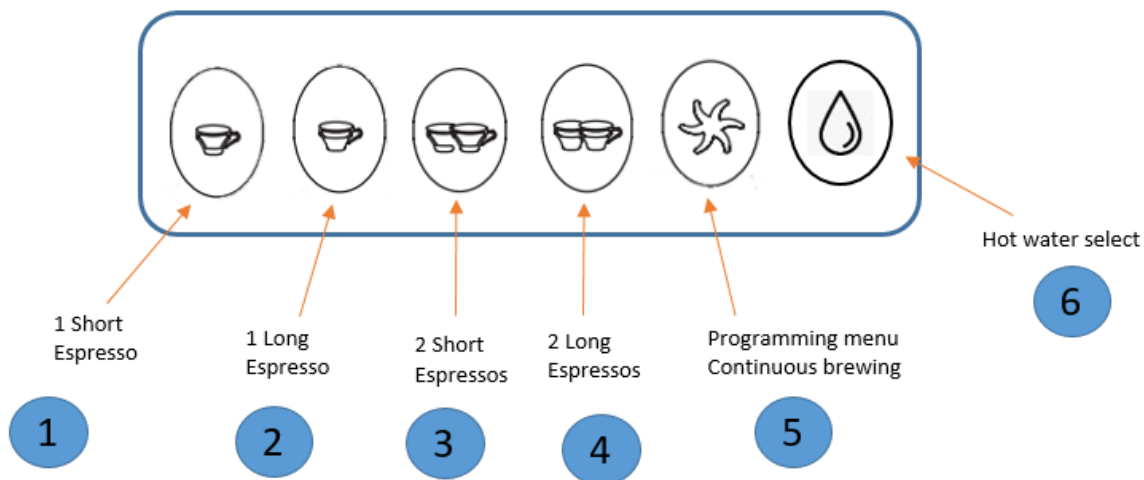
### III. WIRING



**Important:** Any mistake in connecting actuators will affect the normal operation of the coffee machine, and even cause damage.

Terminal	Description
AUX	Temperature probe
AUX-+	Solid state relay (SSR) for heating control
Lev	Level probe for boiler
Min Lev	Level probe for tank
Gnd	Ground
Flow meter	Water flow meter signal input
Keyboard	Keyboard input
Group	Solenoid valve of group
Pump	Pump input
Fill	Solenoid valve of filling
Tea	Solenoid valve of hot water
COM	Load common
AC(L), AC(N)	Power supply AC 220V

#### IV. PROGRAMMING AND USE






## 1. Programming standard dose

Keys will be identified by a number between 1 and 6 like the image above.

To program coffee doses dispensed automatically by each drink button, follow the steps below:

**Step 1:** Press and hold the  key for 5 seconds to enter the setting mode. This button light starts to blink at 1 second period.

**Step 2:** Press the dispensing option that you wish to program. The selected button light will be on along with the fifth button.


**Step 3:** After reaching the desired dose, press the concerned button to save its dose.

**Step 4:** Repeat the steps above to program for other options. Otherwise, move to the next step.

**Step 5:** Wait for 5 seconds until all lights turn on to finish the setting process.



## 2. Coffee dispensing

- Press any drink button between 1 and 4 to start to dispense coffee. The light on pressed button is on and the rests are off.

- Press the  key to stop dispensing immediately or it will stop automatically when reaching the programmed dosage. All lights return to on state.

## 3. Pre-infusion

Power up the machine and make it ready to use.

Switch the machine off while pressing and hold down the  button for activating or the  button for deactivating, then turn the machine on again.

#### 4. Automatic group cleaning

- Press buttons 1 and 5 simultaneously to perform auto-cleaning on the group. These buttons' lights blink at 1 second period.
- The pump and group valve will begin to turn on in 5 seconds and then turn off in the next 5 seconds. This process repeats 10 times before finishing.
- Press button 5 twice to stop the cleaning process immediately. All lights are on.

#### 5. Delivery hot water

To program for the hot water function, enter the programming mode like the instruction above (see *IV.1*).

Press the hot water selection at button 6 to start dispensing hot water through the hot water nozzle. Press this key again for stopping and saving water delivery time.

Wait for at least 5 seconds to confirm the new setting and return to the regular state.

#### 6. Sleep mode

When the machine is turned on, press button 3 while keep pressing button 5, all lights turn off except for button 5 flashes every 1 second.

Press any drink button to exit from this mode.

#### 7. Reset to the factory default

Turn the machine off, press and hold down buttons 1, 3, and 5 then turn it on again. Release them if the setting button light begins to flash at the 2s period.

Switch off then on again to restart the machine.

### V. Filling

When the machine detects the boiler level falling below the low limit, the pump and filling solenoid valve will be opened for filling the boiler up.

## **VI. Heating control**

For this product, SSR is used to control the heating element.

If the machine is in the filling process or encountering one of the malfunctions mentioned below (see *WII.*), it will stop heating until these states end.

## **VII. ERROR DETECTION AND TROUBLESHOOTING**

### **1. Filling time-out**

If the filling time is longer than 120s but the boiler's level is still under the minimum, the siren will start to sound while all lights blink. The heating element will also be shut down.

⇒ Tried restarting the machine and checking for the level sensor, filling the solenoid valve or the water supply source if the situation continue.

### **2. Tank level is low**

- If the tank level falls below the minimum threshold, a siren will sound and all lights will flash.
- When being in this condition, the heating element will continue to work unless the boiler also runs out of water.
- All relevant alarms will also temporarily stop if any dispensing process occurs.

**TIFATECH Co., Ltd**

**Address:** 14 Tran Tu Binh Street, Hoa Chau Ward, Hoa Vang District, Da Nang City, Viet Nam

**Email:** [tifatech.vn@gmail.com](mailto:tifatech.vn@gmail.com)

**Tel:** +84(0)899.600.009

**Website:** <https://tifatech.vn/>

<https://hardtech.vn/>