INXING JB60v45a-AB+TF100

INXING 52-60V 5600W Brushless DC Electric Motor Speed Control Box User Manual

Model: JB60v45a-AB+TF100

1. Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of your INXING JB60v45a-AB+TF100 Brushless DC Electric Motor Speed Control Box. This system is designed for 11-inch electric bicycles and scooters, offering precise speed control and reliable performance. Please read this manual thoroughly before use and retain it for future reference.

2. Package Contents

Verify that all items listed below are present in your package:

- 1 x JB60v45a-A FOC Controller (Front Wheel)
- 1 x JB60v45a-B FOC Controller (Rear Wheel)
- 1 x TF100 Display Unit
- Necessary connecting cables and wires (e.g., extension cable, 5-pin wire)

Image showing the complete kit including two controllers, a TF100 display, and various connecting cables.

3. Specifications

Feature	Specification
Model Number	JB60v45a-AB+TF100
Work Voltage	60 Volts
Matching Motor Type	Brushless DC Motor
Rated Motor Power (Max)	2400 Watts
Current Rating	45 Amps
Under Voltage Protection	60V ± 0.5V
Speed Governor (Throttle)	1-4 Volts

Feature	Specification
Product Dimensions (each controller)	6.2 x 6.2 x 1.8 inches (approx. 15.7 x 15.7 x 4.6 cm)
Product Weight	2.65 Pounds (approx. 1.2 kg)

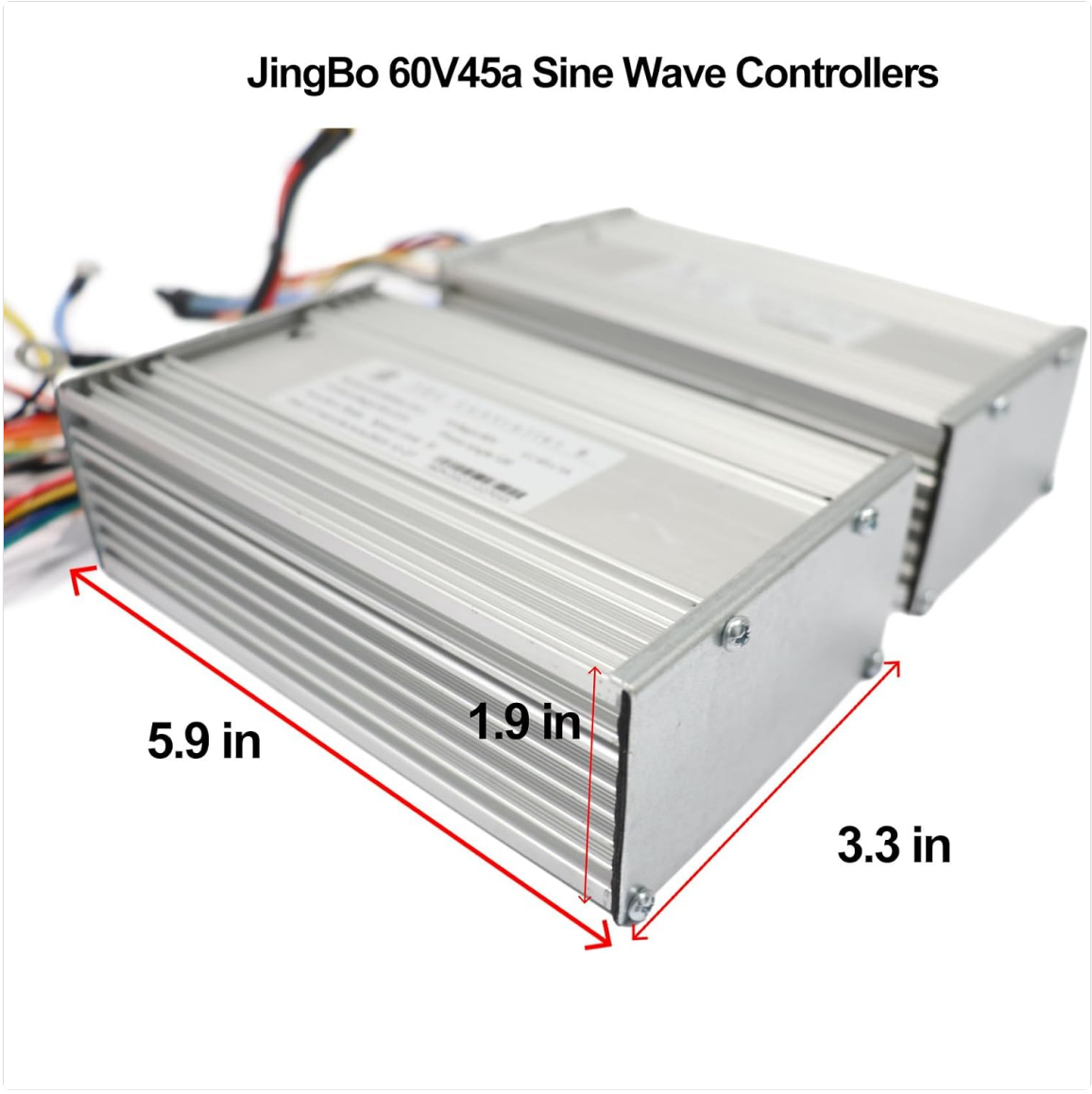

Image illustrating the physical dimensions of the controller unit.

4. Setup and Installation

Before beginning installation, ensure the power source is disconnected. It is recommended that installation be performed by a qualified technician. Incorrect wiring can damage the controllers or other components.

4.1 Controller A Wiring (Front Wheel)

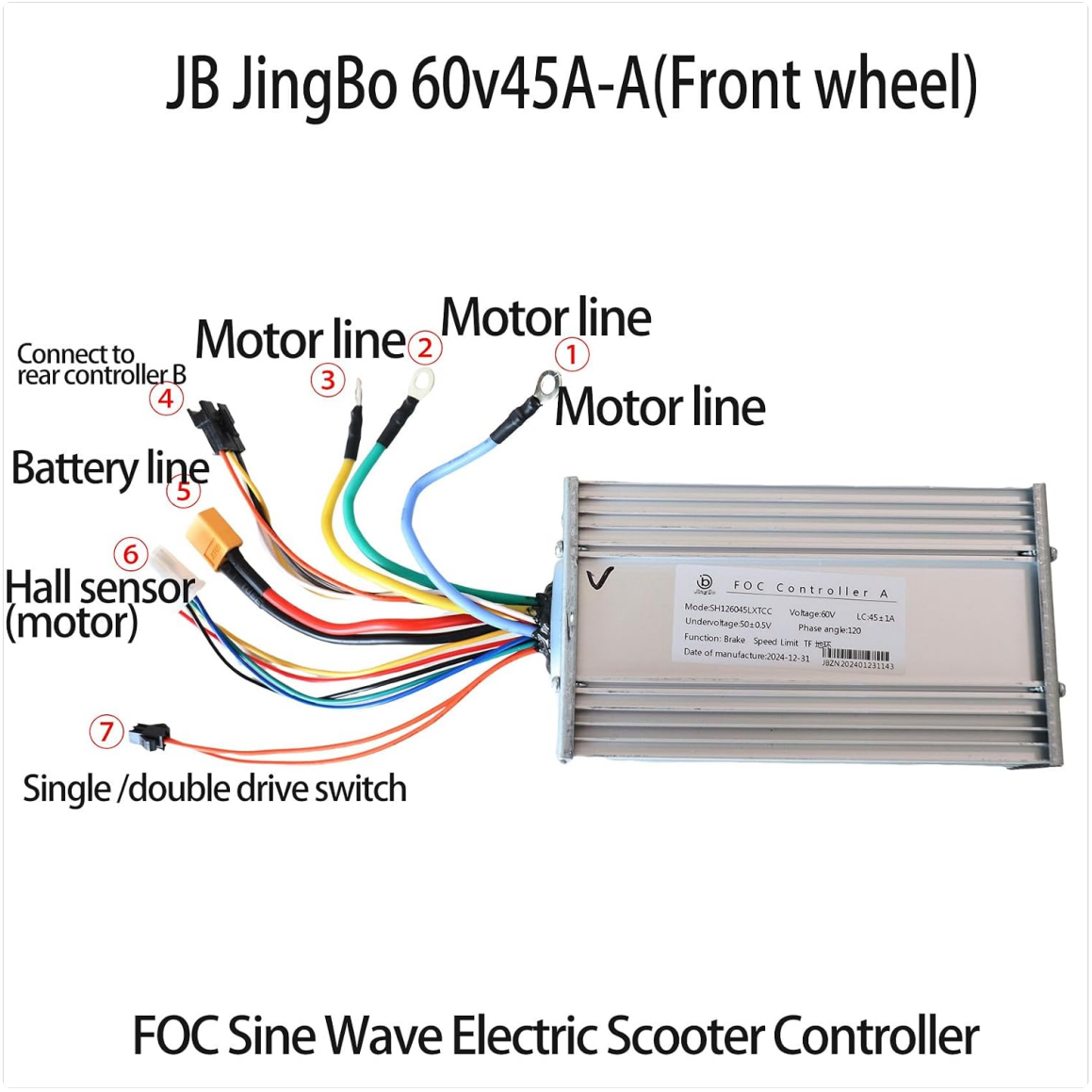

Diagram of Controller A (Front Wheel) with labeled wiring connections.

1. **Motor Line (1, 2, 3):** Connect the three motor phase wires (typically green, blue, yellow) from the front wheel motor to the corresponding motor lines on Controller A.
2. **Battery Line (5):** Connect the main positive and negative power lines from your battery pack to the battery input on Controller A. Ensure correct polarity.
3. **Hall Sensor (Motor) (6):** Connect the Hall sensor wires from the front wheel motor to the Hall sensor input on Controller A.
4. **Single/Double Drive Switch (7):** Connect this wire to your single/double drive switch if applicable. This allows switching between single motor operation (Controller A only) and dual motor operation (Controller A and B).
5. **Connect to Rear Controller B (4):** This connection links Controller A to Controller B for synchronized dual motor operation.

4.2 Controller B Wiring (Rear Wheel)

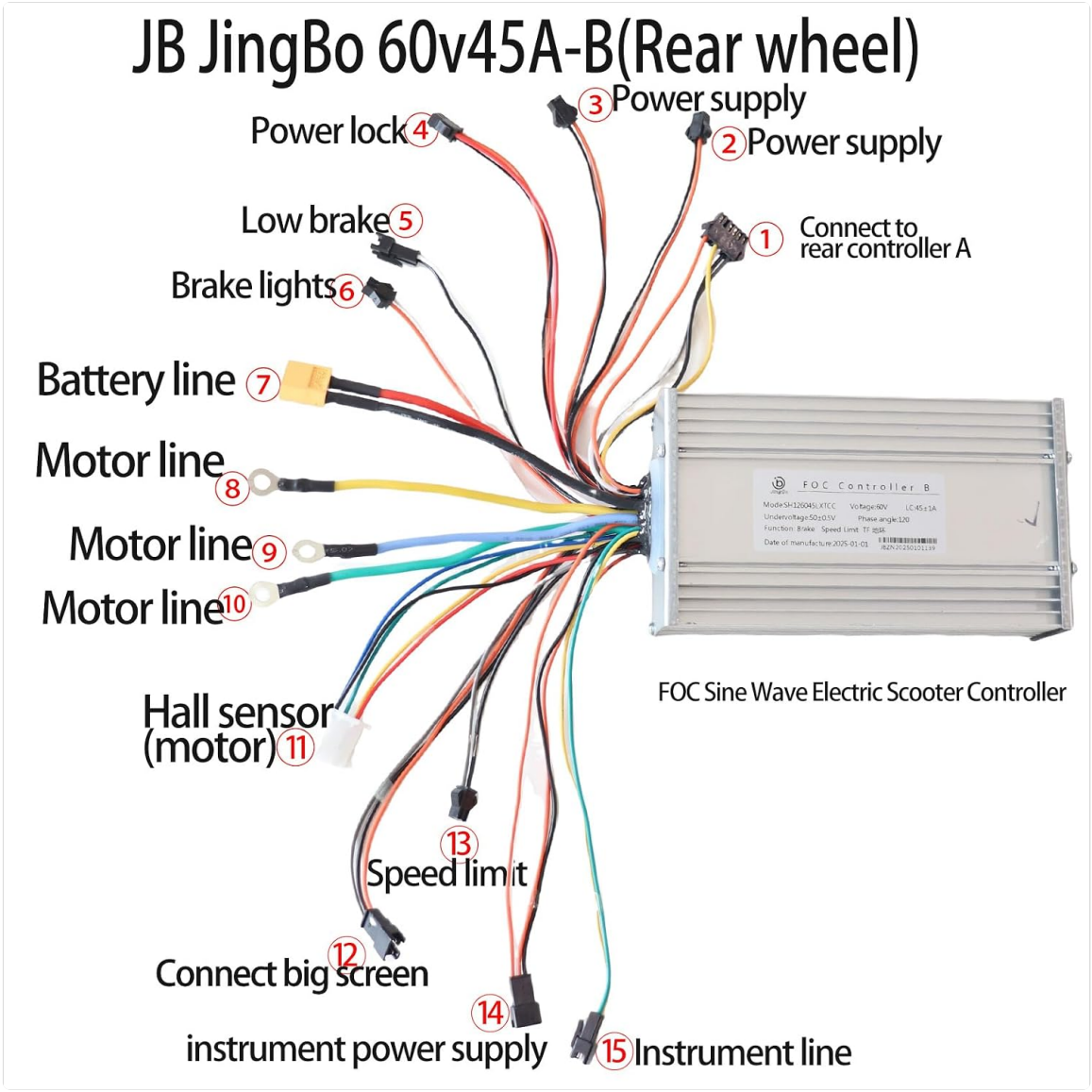

Diagram of Controller B (Rear Wheel) with labeled wiring connections.

1. **Power Supply (2, 3):** Connect the main positive and negative power lines from your battery pack to the battery input on Controller B. Ensure correct polarity.
2. **Motor Line (8, 9, 10):** Connect the three motor phase wires from the rear wheel motor to the corresponding motor lines on Controller B.
3. **Hall Sensor (Motor) (11):** Connect the Hall sensor wires from the rear wheel motor to the Hall sensor input on Controller B.
4. **Power Lock (4):** Connect to the ignition or power switch of your scooter.
5. **Low Brake (5) & Brake Lights (6):** Connect these to your scooter's brake levers and brake light system.
6. **Battery Line (7):** Additional battery connection point, often used for accessories or secondary power.
7. **Speed Limit (13):** Connect this wire if you wish to enable a speed limit function.
8. **Connect Big Screen (12):** This connection is for the main display unit (e.g., TF100).
9. **Instrument Power Supply (14) & Instrument Line (15):** These provide power and data communication to the TF100 display.

4.3 TF100 Display Connection

Connect the TF100 display unit to the designated