



LEONARD
Bus Sales Inc

Driver's Guide for IC Electric School Buses

Please refer to the IC Bus Electric CE Series Operation and Maintenance Manual for detailed vehicle information. This booklet contains information for 2024 - 2025 Model Year IC Bus Electric CE school buses.



12-Volt Battery Voltage is Low.	Stability Control is Active when Flashing.	Parking Brake Is Applied.
Defect Detected in Drive or Charging System.	Less than 20% State of Charge.	Anti-Lock Braking System Fault Detected.
Regenerative Braking Unavailable.	Wheelchair Lift Door is Not Closed.	Red Warning Lights are Active.
Flashes When Traction Control is Turned Off.	An Emergency Exit is Open.	Amber Warning Lights are Active.
Critical Defect Detected. Safety Pull Over.	Drive power restricted. Possible low charge.	Steering System Fault Detected.
Ready to Drive.	Vehicle Requires Service Soon.	Brake System Fault Detected.

Battery State of Charge (SOC) Indicates the charge level of the high-voltage batteries and the approximate remaining range.	Thrust - Regeneration Indicates the propulsion in percent available torque. Positive values are thrust; negative values are regeneration.	Regenerative Braking Indicator Displays the selected regenerative braking system level.
Propulsion System Temperature Indicates the approximate temperature of the electric propulsion system.	High-Voltage Battery Temperature Indicates the approximate temperature of the high-voltage batteries.	

Please refer to the IC Bus Electric CE Series Operation and Maintenance Manual for detailed vehicle information. This booklet contains information for 2024 - 2025 Model Year IC Bus Electric CE school buses.



Starting an Electric CE Bus:

1. Unplug the charging cable from the bus.
2. Be sure the high-voltage battery switch and 12-Volt battery switch are on. These will have been on for charging.
3. Inside the bus, turn the key one click to the right, to the "ON" position. You may hear the air compressor activate.
4. Monitor the 12-Volt battery gauge. It will initially drop, then begin to stabilize. This should only take a few seconds.
5. After the 12-Volt system has stabilized, place your foot on the brake pedal.
6. Turn the key over to the start position and hold.
8. A green icon will appear on the dash once the system is active.
9. You may now release the key and begin operation.




Tips & Notes:


- Accelerate gently. Harsh acceleration will have an impact on battery range.
- The regenerative braking system will assist in charging drive batteries while the bus is coasting.
- Leave the regenerative braking (RBS) switch in the "on" position and adjust the severity of assistance using the switch labeled 1 – 2 – 3.
 - This feature will deactivate if the bus detects a slide or skid in inclement weather.
- Plug the bus into the charging station every time you park. Software will control when and for how long the bus charges.
- Avoid excessive "idle" time with heaters running. Cabin heaters will draw on the battery and reduce battery range.
- The pre-trip brake inspection will be conducted in the same manner as other buses; however, the air compressor may activate during your test. Avoid this by turning the key backward to accessory.
- Battery shut off switches are located:
 - In the electrical compartment under the driver window.
 - Inside the battery box.
- If charging did not start, release the charger plug using the release button on the bus charging port. Re-insert the cable.
- You may notice drivetrain noises that you are not accustomed to hearing. Some noise from the drive line and tires is normal. Take note if the sound changes suddenly or begins to behave abnormally.


Charging an Electric CE Bus:


1. Set the Parking Brake and place the drive mode selector into neutral (N).
2. Switch off the ignition.
3. Ensure that the 12-Volt disconnect switch in the battery box is in the ON position.
4. Insert the charger end into the charge port on the bus.
5. After the charging plug is locked, the charging process is started automatically. Lights (shown below) indicate status.
6. To disconnect the charger, press the button inside the lighted ring, then carefully remove the charger and hang up. Replace the caps on the port.


Charging Status Indicator Lights:


Solid Blue  Charging plug is successfully connected and unlocked OR charging plug is ready to be removed.


Flashing Amber  Bus is not ready to charge. The parking brake must be set, and the drive mode selector must be in Neutral (N).


Solid Amber  The charging plug is connected but the charger is not active.


White  Charging communication in progress.


Pulsing Green  Low power charge mode is active to sustain High-Voltage auxiliaries (if equipped).

Flashing Green  Charging is in progress.

Solid Green  Charging is Complete.

Flashing Purple  Discharging in Progress (if equipped).

Solid Purple  Discharge complete (if equipped).

Red  A fault is detected, and charging has stopped. Check for a fault message.