

# Central door locking system

## CL-20A

(CL-20A2)

v. 1.1.e

### Description:

This electromechanical locking system is suitable for all cars equipped with 12V voltage and a negative ground.

The set includes two actuators for the front doors, two actuators for the rear doors, a control unit and a wire harness. An assortment of mechanical components for easy installation of the actuators to the doors is also provided.

Model CL-20A2 is a modification for cars with only two doors (it does not include rear door actuators).

The actuator's mechanical output should be connected to the mechanical locking system inside the door so that it performs the same movements as when the locks are operated manually.

The front door actuators are equipped with position detectors. The position information is processed by the control unit. If there is any position change detected, the control unit gives instruction to the others actuators to make the same position change. This allows all door locks to be operated from one point (either of the front door locks).

The control unit can also be connected to a remote control. Use only a car alarm or remote control unit with "Floating Code" ability. This type of system provides a much higher safety level than systems with only a fix code. We recommend to combine the central locking system with the Jablotron car alarm model CA-300SP or remote controller model CL-301S.

### Specifications

operating voltage	10 to 15VDC
stand by consumption	max. 0.1mA
max. working current	14A
actuator force	40N
actuator range	18mm
reaction time	max. 0.3sec.
remote control inputs are sensitive to negative signals (ground)	

### Installation

Mechanical installation of actuators to some car models can be complicated. Therefore we recommend professional installation.

The actuators must be installed in such a way that the actuator movement axis is the same as the movement axis of the moving door lock. The actuators with five wires are for the front doors. Actuators with two wires are for the rear doors. After actuator installation, check by hand that the locks can move easily and smoothly.

Before you install the control unit, disconnect the car battery. Then, remove the fuse from the holder on the wire harness provided with the system. Keep in mind that if your car has some memory functions built in, then these may be erased if you disconnect the battery. Refer to the car owners' manual before disconnecting the battery.

Install the control unit in the passenger compartment. The recommended location is under the dash board.

Route the wire harness cables to each door. Be sure that the cables will not be broken when opening or closing the door. The end of the cables are equipped with connectors: connect the wires so that the colors corresponds.

If one or more of the door locks require an opposite movement of the actuator for locking, substitute the blue wire of the corresponding actuator for the green wire. In the case that it is front door actuator, you also have to substitute the brown wire for the white wire.

Positive Supply - The red wire with a fuse holder (15A) should be connected directly to the positive terminal of the battery cable.

Grounding - connect the black wire to the original GND point in the car. Do not use any temporary grounding.

Remote control - the white colored wire with blue stripe (unlock) and the white colored wire with black stripe (lock) are inputs for the remote control. They are sensitive to negative potential (connection with ground). If you are going to connect CL-20A with a remote control, do it after completing the installation of the locking system and after testing. If you do not want to use remote

control inputs, you can remove the wires from the flat connector by pressing the corresponding tab on the side of connector body and pulling the wire out.

Plug the flat connector into the control unit. Be sure that the connector is properly positioned and oriented. Check the wiring and then install the fuse on the red cable (15A) and connect the battery.

Check the function of the locking system by using the key in the front door locks. If any of the front door locks do not trigger the function of the others, check position of the corresponding actuator. The moving part of the actuator must be adjusted in such a way that when you lock or unlock with the key, the moving part is centered in the middle of its possible movement trajectory.

### The fifth door

It is also possible to control a fifth door lock, if you install an extra actuator there. Use model CM-2 (two wires) and connect it parallel to one of the front door actuators. This way the locking system can only be operated from the front doors.

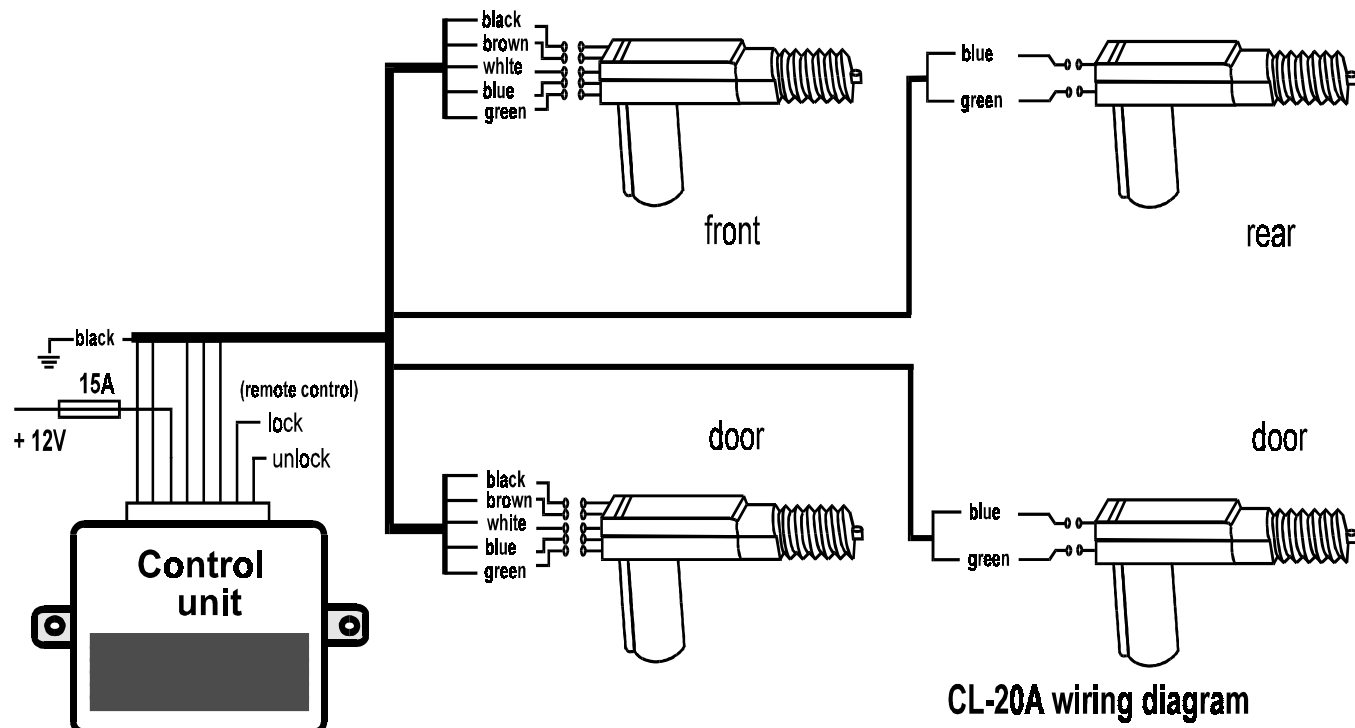
If you install model CM-5 (five wires), you can also control the system with a key in the fifth door lock.

*Note: study the function of the fifth door lock carefully before you decide to install an actuator. Some systems do not allow it.*

### Maintenance

The system does not need any special maintenance. Occasionally check if the locks can be operated easily by hand from time to time. Lubricate the locks before and after each winter season.

If a lock freezes in winter, or is mechanically blocked for any reason, remove the control unit fuse to avoid damage to the actuator.



CL-20A wiring diagram