

LX100 PROGRAMMING AND OPERATION

⚠ WARNING

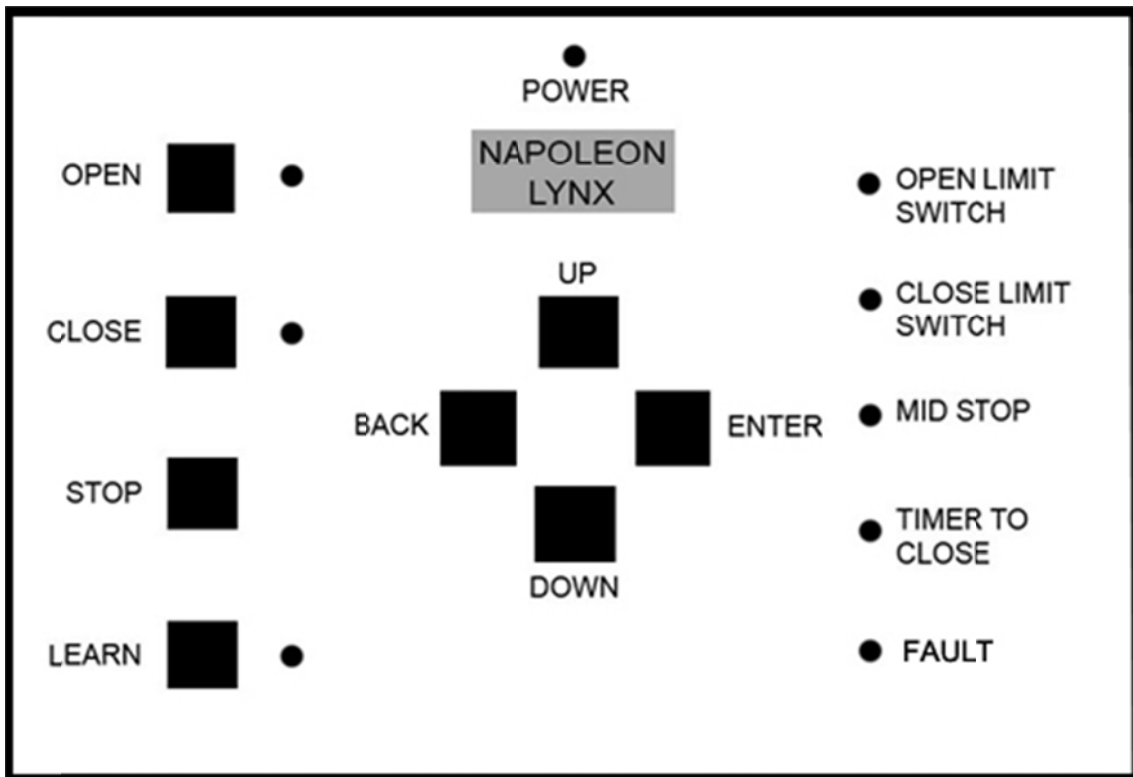


To reduce the risk of serious injury or death, follow these instructions carefully:

- Read and follow ALL instructions.
- Keep fingers and other body parts away from all moving parts of the door and gate operator system while it is being operated.
- Keep the radio controls away from children. Do not allow children to play with the controls.
- Keep away from the door when it is in motion. Watch the door while it is moving until completely closed or opened.
- Do not cross the path of a moving door.
- Disable and locks and remove any ropes connected to the garage door to avoid entanglement and prevent damage to the system.
- Do not make repairs to cable, springs, or other hardware; call a trained door systems technician. The system is under extreme tension and can cause serious injury or death.
- Ensure that the door is properly operating and balanced. If not, call a trained door systems technician to make repairs.



Controller front view



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Basic Operation:

Security feature:

Within a certain time, the front panel will lock itself for security reasons. When you approach the operator and the LCD screen is dark, the device is locked. To unlock the operator, press ENTER and then follow the instructions on the LCD screen. After unlocking the system, the display will read “Main Menu”. Press BACK to return to “Napoleon Lynx” and Run Mode. The operator is in run mode when the LCD screen says “Napoleon Lynx”. In this mode, the front panel controls will function for normal door operation.

Operation from the Front Panel:

OPEN

If the door is stopped, pressing the button will open the door.
If it is opening or at open limit, pressing the button will do nothing.
If it is closing, pressing the button will stop the door and then open it.
Open LED is lit when door is opening.
Open Limit Switch LED blinks when the door is opening and is solid when the door is at open limit.

CLOSE

If the door is stopped, pressing the button will close the door.
If it is closing or at close limit, pressing the button will do nothing.
If it is opening, pressing the button will do nothing.
Close LED is lit when door is closing.
Close Limit Switch LED blinks when door is closing and is solid when door is at close limit.

STOP

Pressing the button will stop door motion.
If the door is not moving, pressing the button will do nothing.
Pressing stop disables TTC if set.

LEARN

Press and hold the LEARN button for about 3 seconds until the Learn LED lights to program a remote. The LED is solid when looking for a signal from a remote. At this time, press the button on the radio control you wish to program and the Learn LED will blink four (4) times to indicate that the radio control has learned to interact with the operator.
If no transmitter is learned within 15 seconds, the LED will turn OFF and the learn function is disabled.
To erase all stored transmitters, hold the LEARN button for 10 seconds. The LED will blink several times to indicate that all transmitters were cleared.
A maximum of 20 different transmitters can be learned by the on board receiver.

Navigation Keys

- Up, Down, Enter, and Back
- Enter Key: Press to enter programming mode from main screen or to select current menu option.
 - Back Key: Press to move back in the menu, or to cancel current option.
 - Up Key: Press to move up in the menu.
 - Down Key: Press to move down in the menu.

LED Indicators

Mid-Stop LED is lit when the door is at the mid-stop position defined by the user.
Timer to Close (TTC) LED blinks when the door is open and the timer to close is active.
Fault LED is lit when the photo beam or the safety edge is blocked or when the pass door terminals are not shorted. The LED will blink if there is a momentary obstruction, but is solid when there is a permanent obstruction or a defective safety device.

MODES of Operation:

This controller has six (6) different modes of operation. All operators leave the factory in B2 mode setting. Choose the one that fit your needs by programing the controller as described on page 16 of this manual:

B2 Mode

Momentary press of OPEN or CLOSE buttons.

Delay on Close timer is active. After pressing CLOSE, the door will not move until Delay on Close timer counts out. See page 8 to set or disable the Delay on Close timer. (Factory default = 0 seconds, disabled).

If a fault is generated, momentary presses of CLOSE will not close the door. You can override this by using constant pressure on the CLOSE button until the door is fully closed; if the pressure is released before the door is fully closed it will reverse to full open.

C2 Mode

Momentary press of OPEN, constant pressure required on CLOSE for the door to close. Releasing pressure on the CLOSE button will stop the door.

If you press STOP while holding CLOSE, door will stop.

If you press OPEN while holding CLOSE, door will stop and then reverse to open.

D1 Mode

Constant pressure required on OPEN and CLOSE. Releasing the pressure will cause the door to stop where it is.

If you press STOP while holding OPEN or CLOSE, the door will stop.

E2 Mode

Same as C2 mode with the exception that releasing pressure on CLOSE will cause the door to reverse to open.

T Mode (Timer Mode)

Timer to Close (TTC) can be set for being active at mid-stop and fully open positions or at mid-stop only.

When the door reaches this point the TTC starts to count and the TTC LED blinks. The door will close when the timer ends.

When the TTC is counting, press STOP to cancel the timer and the auto close function. If you have cancelled the timer with the STOP, press OPEN to start the timer again.

If TTC is counting at Mid-Stop, press OPEN to open the door to full open. The TTC will start again if enabled.

If TTC is counting, you can still press CLOSE to close the door.

A fault will restart the TTC if the door is stopped and the TTC had begun. However, a fault after the door has started moving will cause the door to reverse and the TTC will NOT start again when the door gets to mid-stop or full open.

Buttons function like in the B2 mode.

See page 8 to set TTC length and see page 9 to set TTC mode.

TS Mode (Timer Secure Mode)

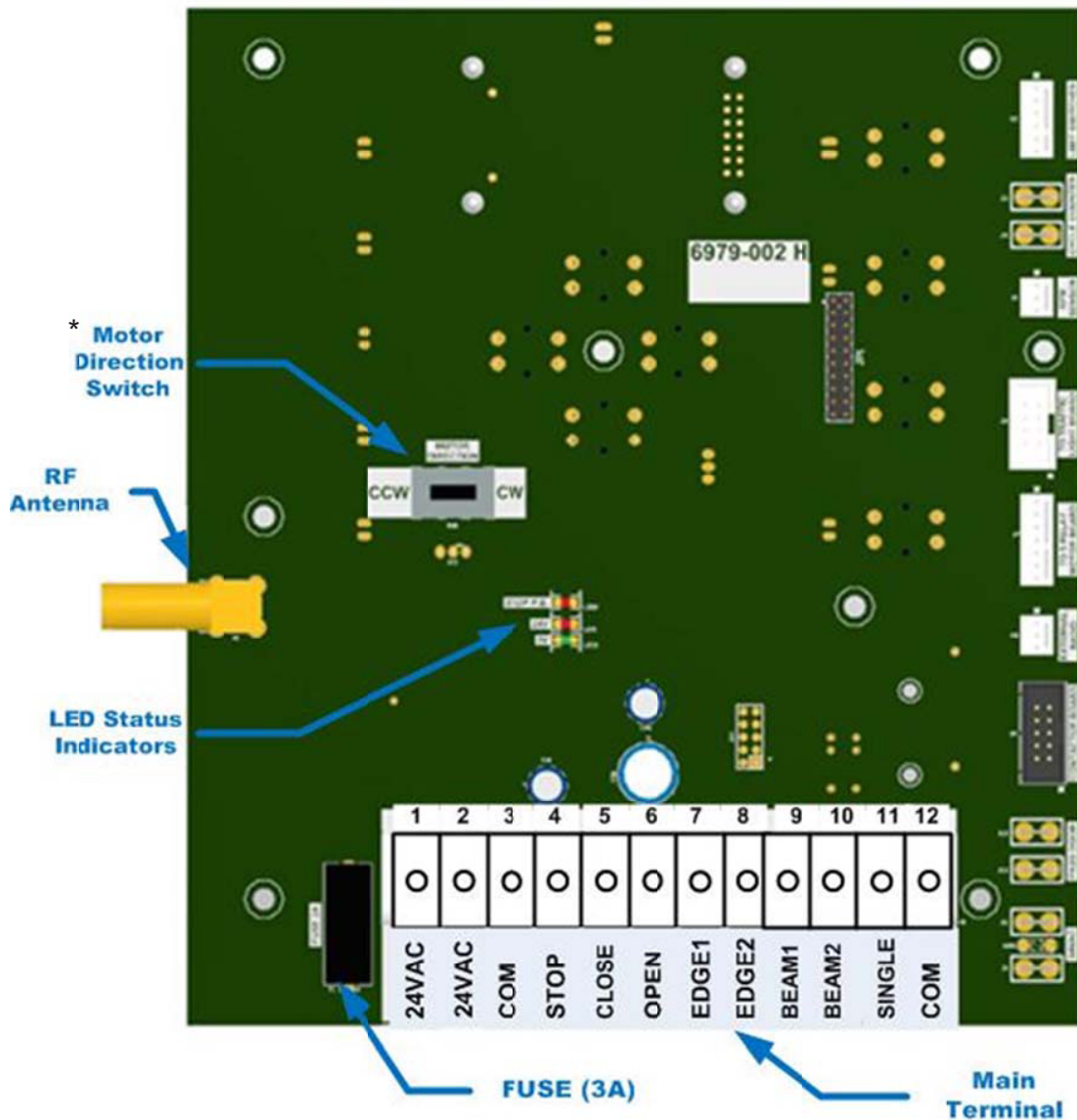
Same as T Mode except:

Delay on Close is active. After the TTC has expired, the Delay on Close timer, if set, will start and when it expires, the door will close. (Delay on Close factory default = 0 seconds, disabled).

After both the timers have expired and the door is closing, a fault will cause the door to reverse. When the door gets to mid-stop or full open position, the TTC DOES start again followed by the Delay on Close timer.

LX100 DIGITAL CONTROLLER

LX100 Digital controller Overview



Notes: Before programming the controller, set the operator's open and close limits.

When power is applied to the operator, the following can be observed on the front panel:

The LCD screen displays "NAPOLEON LYNX" with the backlight on. At the same time, all LEDs will flash once each, while scrolling three times. Then the software version of the Logic Board will be flashed using the LEARN, CLOSE, and OPEN LEDs. For example, if the software version is 1.3.3 the following will occur: LEARN LED will flash once, then the CLOSE LED will flash three times, then the OPEN LED will flash three times.

At this point, the OPEN and LEARN buttons are locked out and the LCD backlight goes off. The LCD control buttons are also locked out except for the ENTER button. To unlock the front panel, press ENTER and follow the directions on the LCD screen. After you have pressed the correct button sequence per the directions on the LCD, the display shall show "MENU UNLOCKED" for about 2 seconds, then it will display "OPERATOR MODE". To control the Operator from the front panel, you must depress the BACK button so the display will state "NAPOLEON LYNX". At this point all front panel buttons are functional and the LCD backlight is lit. The Operator will automatically lock out the Front Panel controls after 10 minutes of non-use.

OPEN, STOP and CLOSE buttons are mounted directly on the cover of the operator, making it easy to control the door.

*Motor Direction Switch is only used for irregular mounting (i.e. upside down, thru-the-wall) and not intended for phase correction

LX100 PROGRAMMING AND OPERATING

PROGRAMMING THE OPERATOR:

From the “NAPOLEON LYNX” screen press ENTER to get to the main menu. Included in the main menu are the Operator Mode, Timer Menu, and Parameters Menu. Use UP or DOWN to select the feature you want and then press ENTER.

Operator Mode is where you can select one of the 6 pre-set operation modes.

The Timer Menu is where you can set up the four timers, Run Timer, Mid-Stop Timer, Timer to Close, and Delay on Close.

The Parameters Menu is where you can select different options, view the cycle counter or reset the operator to factory defaults.

Operator Mode

Once you have selected the Operator Mode and press ENTER, you will be able to press UP or DOWN to scroll to the desired mode of operation: B2, C2, D1, E2, T, or TS.

Press ENTER to implement the selected mode.

Press BACK to cancel and go back to the main menu; the current mode will be the same as before you went into the Operator Mode menu.

Timer Menu

In this menu you can select from Set Run Timer, Mid-Stop Timer, Timer to Close, or Delay on Close. Some of these features are only used in certain modes and can be set, but they may not be used in the selected mode.

Set Run Timer

Make sure that the door is fully closed. If you select “Set Run Timer” and the door is not closed, you will be prompted to close the door; you must then re-enter the Run Mode and press CLOSE.

From the Timer Menu select “Set Run Timer” and press ENTER.

The display will prompt you to press OPEN to start the process or BACK to cancel and maintain the original duration of the timer. You can also press STOP to reset the factory default value.

After you press OPEN, you can let the door open to the limit switch or press STOP at any time. This amount of time, with the addition of 5 seconds, will be saved as the motor run timer.

Set Mid-Stop Timer

Make sure that the door is fully closed. If you select “Mid-Stop Timer” and the door is not closed, you will be prompted to close the door. You must then re-enter the Run Mode and press CLOSE.

From the Timer Menu select “Set Mid-Stop Timer” and press ENTER.

The display will prompt you to press OPEN to start the process or BACK to cancel and maintain the original duration of the timer. You can also press STOP to reset the factory default value.

After you press OPEN you must press STOP at the time when the door is at the desired mid-stop height. This amount of time will be saved as the mid-stop timer.

How Mid-Stop Timer works in different modes:

MODE	FUNCTION
B2	Start at fully closed. Stop at Mid-Stop Press OPEN; go to Full Open Press CLOSE Press STOP below Mid-Stop Press OPEN Door stops at Mid-Stop
C2	Same as in B2 mode; use CP on close.
D1	Once at Mid-Stop, if you go above Mid-Stop, Mid-Stop is cancelled until next Fully Closed. If at Mid-Stop, and you close (not all the way to Fully Closed), OPEN again will stop at Mid-Stop. D1 is constant pressure on OPEN and CLOSE.
E2	Same as in C2 mode.
T	Once at Mid-Stop, if you go above Mid-Stop, Mid-Stop is cancelled until next Fully Closed. If at Mid-Stop, and you close (not all the way to Fully Closed), OPEN again will stop at Mid-Stop.
TS	Same as in T mode.

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Timer to Close

From the Timer Menu select “Timer to Close” and press ENTER.

Use the UP and DOWN to adjust the time in 1second intervals for the first 10 seconds and then in 5 second intervals.

You can hold these keys to scroll and the display will stop scrolling at the minimum and maximum values.

Press ENTER to select the new value or BACK to keep the original value.

Delay on Close

From the Timer Menu select “Delay on Close” and press ENTER.

Use UP and DOWN to adjust the time in 5-second intervals. You can hold these keys to scroll and the display will stop scrolling at the minimum and maximum values.

Press ENTER to select the new value or press BACK to keep the original value.

Delay on Close factory default = 0 seconds.

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Parameter Menu

In this menu you can select from Timer to Close Mode, Delay on Reverse, Single Button Mode, Cycle Counter, and Reset All Parameters.

Timer to Close Mode

From the Parameter Menu, select “Timer to Close Mode” and press ENTER.

Use UP and DOWN keys to select “Mid-Stop & Full Open” or “Mid-Stop Only.”

Press ENTER to select the new option or press BACK to cancel the operation and keep the original choice.

Delay on Reverse Time

This is the time it takes for the motor to slow down and engage in the opposite direction once a safety reverse is detected or OPEN is pressed, when the door is closing.

From the Parameter Menu, select “Delay on Reverse” and hit ENTER.

Use UP and DOWN keys to adjust the time in 0.1second intervals. You may use these keys to scroll and the display will stop scrolling at the minimum and maximum limits, 1 and 1.9 seconds respectively.

Press ENTER to select the new option or press BACK to cancel.

Single Button Mode

From the Parameter Menu select “Single Button Mode” and press ENTER.

Use UP and DOWN to select “Normal Sequence” or “Refresh Timer.” Normal Sequence is used for the open-close-stop-reverse operation. Refresh can be used in T or TS modes to reset TTC while in the open position.

Press ENTER to select the new option or press BACK to cancel.

MODE	P0 (Start)	P1 (Push 1)	P2	P3	P4
B2 – Norm	FC ¹	OPEN	STOP	CLOSE	REV(OPEN) ²
B2 – Refresh	Same as B2 – Norm				
C2 – Norm	FC	OPEN	STOP	CP CLOSE	RELEASE STOP
C2 – Refresh	Same as C2 – Norm				
D1	There is no single button in D1 mode.				
E2 – Norm	FC	OPEN	STOP	CP CLOSE	RELEASE REV
E2 – Refresh	Same as E2 – Norm				
T – Norm	FC	OPEN	STOP	CLOSE(or TTC) ³	REV(OPEN)
T – Refresh	FC	OPEN	TTC Refresh ⁴	TTC Refresh	After TTC finish, REV(OPEN) ⁵
TS – Norm	FC	OPEN	STOP	CLOSE(or TTC)	REV(OPEN)
TS – Refresh	FC	OPEN	TTC Refresh	TTC Refresh	After TTC finish, REV(OPEN)

1. FC – Fully Closed
2. Reverse to Open position
3. Door will close if you press the single button or wait for the timer to end
4. Restart the Timer to Close
5. After the TTC has ended and the door is closing, if button is pressed the door will Reverse to Open position

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Internal Cycle Counter

From the Parameter Menu select “Cycle Counter” and press ENTER.
Press ENTER again when display says “Counter Show Val.”
The cycle counter will be displayed and cannot be erased because it is used for maintenance.
Press BACK when done.

Reset All Parameters

From the Parameter Menu select “Reset All Parameters” and press ENTER.
Press ENTER again.
You will be prompted to hold the ENTER key for 10 seconds. The display will count down to zero. This will restore the operator to factory defaults except for the internal cycle counter. If you let go before the 10 seconds are up, the parameters are not reset.
Press BACK when done.

RADIO CONTROLS

Three Button Open, Close, Stop

These buttons are mapped to the same functions as the wired control.
CLOSE will not work in modes that require constant pressure: C2, D1, E2.

Single Button

This function is mapped to the same functions as the Single Push Button.
The CLOSE function does not work in C2 or E2. None of the functions work in D1.

Three Button, Three Door

Each button works independently to control three different doors.
The function of each button is mapped to the same functions as the Single Push Button.
The CLOSE function does not work in C2 or E2. None of the functions work in D1.