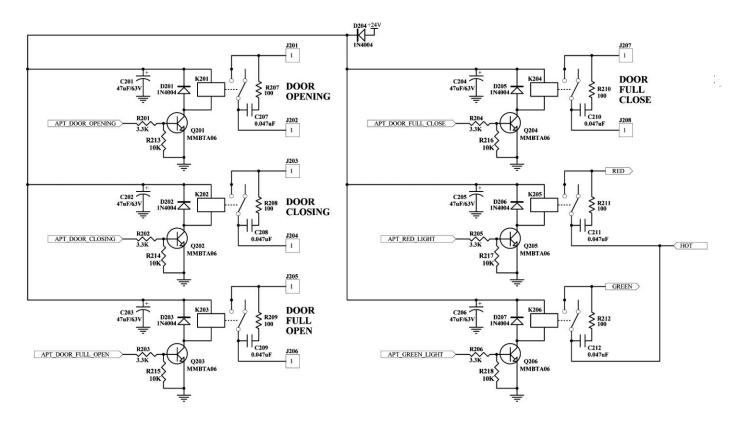
## Specification, Lynx LX400 Apartment board

An Apartment board (LX400) is an add-on board that will allow the user to connect a traffic light, horns, or other AC powered accessories to the operator. The board will provide a 'dry contact' (as shown below, a NO relay contact output) with a rating of 100-240 VAC, 8 Amps maximum total for the board. The board will have a connector to connect to the main logic board and ½ " spade lugs to connect to external devices.

It is typical that these functions work only in the B2 and T modes.

The following is a typical design for an apartment board:



Note: K### in the above design are the relays (there are total of 6 relays in this design).

- Two separate relay outputs are used for the RED and GREEN lights.
- Four separate relay outputs are used for different states of the door cycle (Door Opening, Door Closing, At Full Open, At Full Close). These relays provide flexibility to the user by allowing him to turn ON different devices under specific (four) conditions and turn them OFF when the specified condition is not met. These functions can be modified if desired.

## **Board Connections:**

### 1. <u>Inputs to the board:</u>

- A terminal that connects the board to the LX100 control board. This connection includes the DC power to control the board and logic lines from the LX100 to the board to control the relays.
- A 1/4" spade terminal for the Hot (100-240 VAC, 8Amps) AC line (used for direct connection to power the Traffic Lights (RED and GREEN). This connection will have a silkscreen identification marked "AC LINE" and "TRAFFIC LIGHT"

#### 2. Outputs from the board:

- Two user terminals for the following 4 relay outputs:
  - a. Connection for door fully open status
  - b. Connection for door fully closed status
  - c. Connection for door opening status
  - d. Connection for door closing status
- Two ½" spade terminals for Red and Green Light (direct connection). These two connections will have a silkscreen identification mark **RED** (for the Red light) and **GREEN** (for the Green light). The AC common is connected to the lights off board.

# **Board Logic:**

The sequence of the RED and GREEN lights should be as follows:

- When door is fully closed, Red and Green lights are OFF.
- When there is an OPEN command from a transmitter, wall station, loop detector, or by any other opening device, Red light is ON, Green light is OFF.
- When door reaches the full open (or mid-open, if activated) position, Green light is ON and RED light is OFF. The lights do not change until a CLOSE command is initiated (by any device or by the internal timer to close timer).
- Upon initiation of CLOSE command (by any device or by the internal timer to close timer), the Green light goes OFF and the Red light goes ON. The door closes after adjustable time (delay on close). Red light stays ON until door reaches full-close position.

Note: During the delay on closing (the adjustable time), if the board receives any open command or any reversing command, RED light goes off, Green light is ON until a close command is initiated once more.

The Red light stays ON whenever the door is stopped in any position other than open limit (until close command initiated), mid-stop limit (until close command is initiated), or at close limit is activated.