## OVERVIEW

The Kouba Basic Automatic Door Control unit (LDAADC4) will operate with any electronic access control system including older or legacy control systems.

The LDAADC4 monitors three Request To Open signals from the Access Control System or local push buttons as well as two system control signals to control a door lock and automatic door operator at secured automatic doors.

Lock Output Relays control the door lock, secondary lock and automatic door trigger. A "Request to Exit" output relay is provided for the access control system to monitor. An additional isolated auxiliary relay is provided for fire alarm interface.
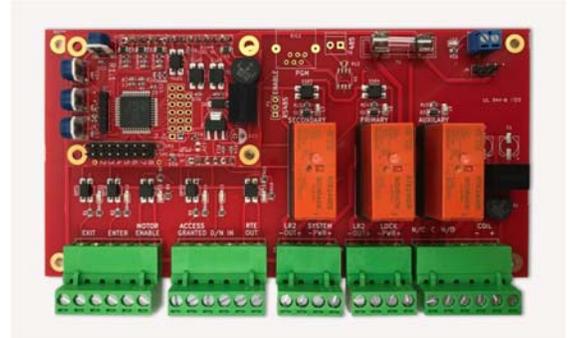
FEATURES

◊ Lock Output Relay

◊ Automatic Door Trigger Relay Output

◊ Access Granted Input Card Reader System

◊ Request to Exit Pushbutton Input

◊ Day/Night Mode

◊ Isolated Auxiliary Relay

◊ Secondary Lock Relay

◊ Request to Exit Relay Output

◊ Request to Enter Pushbutton Input

◊ Fail Secure or Fail Safe Lock Operation

◊ LED Indicators, to show systems operation

◊ Field Adjustable Time Delays

SYSTEM OPERATIONS

DOOR READY—The door is closed and locked ready for use. The System Ready LED indicator is on when the door is ready for use. It turns off when the door is in use.

ENTRY ACCESS GRANTED—An Access Control System (ACS) uses card readers or biometric readers to grant entry access to persons using the door. The ACS generates a Request To Unlock (RTU) relay contact to the LDAADC4 when a valid card or biometric is read. Activating this input will start the door operation.

REQUEST TO ENTER BUTTON—A Normally Open request to use pushbutton is located at the entry side of the door. Pressing this button during Day Mode will start the door operation. Pressing this button during Night Mode will not start the door operation.

REQUEST TO EXIT BUTTON—A Normally Open request to use pushbutton is located at the exit side of the door. Pressing this button will start the door operation.

ACCESS DELAY—When a request to use input is activated, the Lock Output Relay and the Secondary Lock Relay activates and the adjustable access delay starts. The time delay sets the amount of time that the door is unlocked before the Automatic Door Relay is activated. It is adjustable from 0 to 10 seconds.

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DOOR OPEN DELAY ACTIVE—Once the Access Delay is competed and the Lock Voltage Sense shows that the lock is actually unlocked, then the Automatic Door Trigger Relay is activated and the adjustable door open delay starts. This time delay set the amount of time that the automatic door trigger relay is active. It is adjustable from 1 to 15 seconds.

DOOR OPEN DELAY DONE—Once the door open delay is completed, the Automatic Door Trigger Relay, the Lock Output Relay and the Secondary Lock Relay are reset and the automatic door closes. Once the door is closed and the lock voltage sense detects that the door is actually locked, then the system is ready for use again.

SYSTEM STATUS INDICATOR LED'S—An indicator LED for each input and output relay shows the operational status of the inputs and coil status of the output relays.

The SYSTEM READY LED indicator is on when the system is ready for use. The LED is off when the system is in use.

TECHNICAL SPECIFICATIONS

Power	12VDC or 24VDC @ 1/2 Amp. On-board power supply has an automatic short circuit protection.
Inputs	The Access Granted, Entry Request to Use Button and Exit Request to use Button inputs are all normally opened.
Outputs	Lock output relays are single pole double throw rated @ 8 Amps. Motor enable and rex outputs are single pole single throw rated @ 1 Amps. Integrated LED's show relay active status
Time Delay Adjustments	Unlock Delay (TMR1) - Adj 0—10 sec. Sets the length of time that the Primary Lock is unlocked before the Motor Enable is activated.
	Motor Activated Time (TMR2) Adj 1—15 sec. Sets the length of time that the Motor Enable is activated.
	Spare time delay adjustment (TMR3-4) - currently unused, but available for future delays.

Operation Selection Jumpers:

J1 installed = Primary Lock is Fail-secure operation

J1 removed = Primary Lock is Fail-safe operation
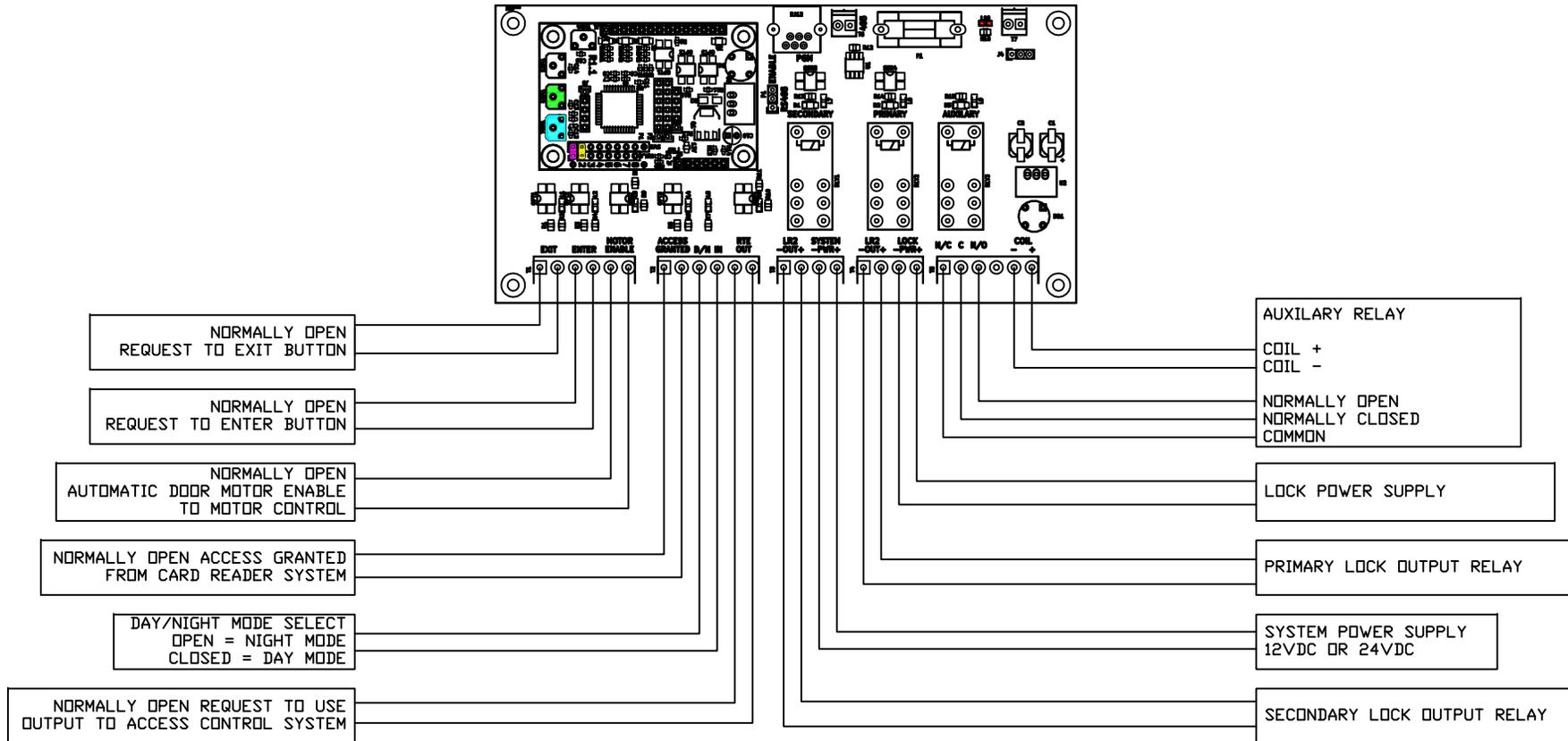
J2 installed = Secondary Lock activates the same as the Primary Lock

J2 removed = Secondary Lock activates the same as the Motor Enable

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OPTIONS AND ADJUSTMENTS

● TMR2 ADJUSTS UNLOCK TIME 0 TO 10
● TMR1 ADJUSTS MOTOR ON TIME 1 TO 15 SECONDS

● J1 INSTALLED = PRIMARY LOCK RELAY IS FAIL SECURE
● J1 REMOVED = PRIMARY LOCK RELAY IS FAIL SAFE

● J2 INSTALLED = SECONDARY RELAY ACTIVATES THE SAME AS PRIMARY RELAY
● J2 REMOVED = SECONDARY RELAY ACTIVATES THE SAME AS THE MOTOR ENABLE

● SYSTEM READY INDICATOR LED L10:
ON WHEN SYSTEM IS READY FOR USE
OFF WHEN THE SYSTEM IS BUSY

NORMALLY OPEN
REQUEST TO EXIT BUTTON

NORMALLY OPEN
REQUEST TO ENTER BUTTON

NORMALLY OPEN
AUTOMATIC DOOR MOTOR ENABLE
TO MOTOR CONTROL

NORMALLY OPEN ACCESS GRANTED
FROM CARD READER SYSTEM

DAY/NIGHT MODE SELECT
OPEN = NIGHT MODE
CLOSED = DAY MODE

NORMALLY OPEN REQUEST TO USE
OUTPUT TO ACCESS CONTROL SYSTEM

AUXILARY RELAY

COIL +
COIL -

NORMALLY OPEN
NORMALLY CLOSED
COMMON

LOCK POWER SUPPLY

PRIMARY LOCK OUTPUT RELAY

SYSTEM POWER SUPPLY
12VDC OR 24VDC

SECONDARY LOCK OUTPUT RELAY

KOUBA SYSTEMS AUTOMATIC DOOR CONTROLLER LDAADC4
SYSTEM WIRING DIAGRAM