Board Dimensions: 149x122mm.

J5: TCP/IP
Interface.
(See next page).

Communication indicators:
Rx (Green) blinks when PC is
communicating.
Tx (Red) blinks when
SMART-L is answering.

**J7:
Tamper switch**

ROM

J6:
Battery

JP4

JP2

1A Fuse. (Use only
a "LittelFuse" fuse,
PN: 372-1100-0411)

BAT
0v

0v
Alarm 4
Alarm 3
Alarm 2
Alarm 1
0v

J3: Alarm inputs

**J3: ALARM INPUTS
CONNECTION:**
2 conductors wire 22 AWG.
Maximum length: 100 meters
I1 to I4 inputs may be supervised.

4,7 Kohms

I1-I4   4,7K

0v
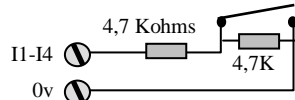
Example of a Normally Open
switch with (optional) resistors.

WARNING!
Do not apply voltage higher than
30VAC/DC to alarm inputs.

JP3

**J4: Relays 1,2
(Relay 1 = door relay)**

J1: Reader 1

J2: Reader 2

JP1

DS1

0v
Relay #2 NO
Relay #2 NC
Relay #2 C
12Vdc
Relay #1 NO
Relay #1 NC
Relay #1 C
Buzzer
Red Led
Green Led
Data1
Data0
12Vdc
0V
Buzzer
Red Led
Green Led
Data1
Data0
12Vdc
0V

J4: 2 OUTPUT RELAYS
RiC   : Relay # i Common contact (i=1,2)
RiNC : Relay # i Normaly Closed contact
RiNO : Relay # i Normaly Open contact
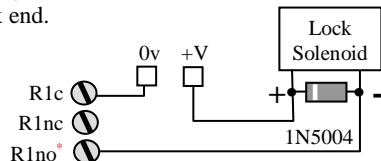
RELAY RATING:
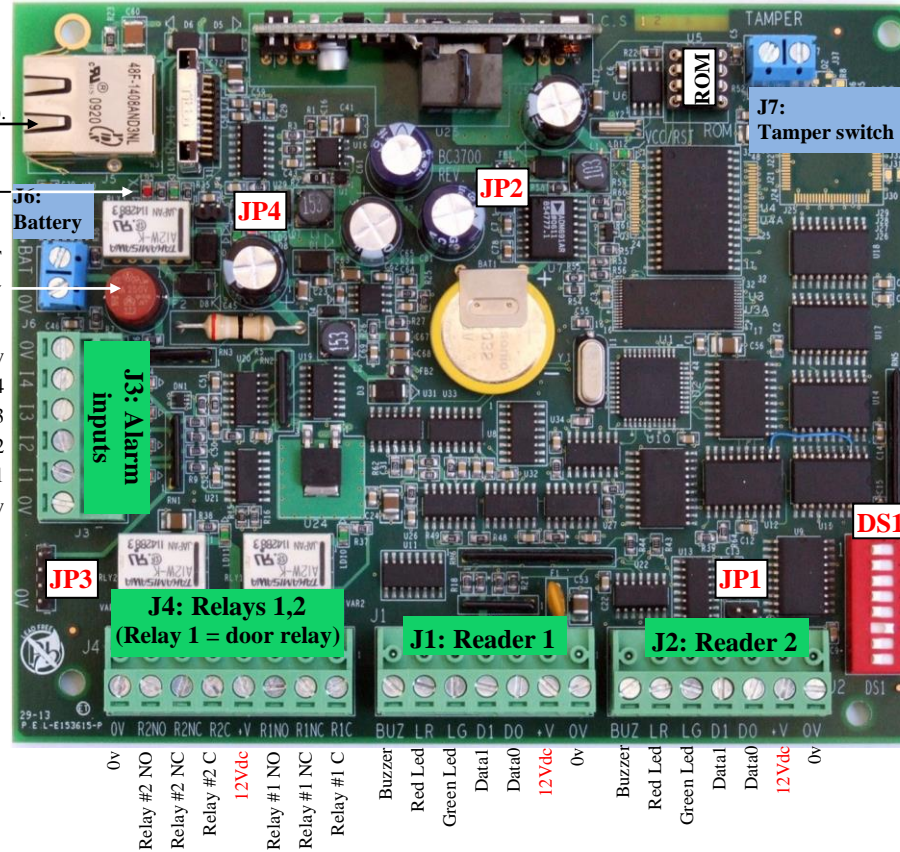max. 24V AC/DC / 1A or 12V AC/DC / 2A

CONNECTION :
2 conductors wire 18 AWG.
Standard length : 10 meters
For more than 10m, depends on wire resistance and
load current consumption

WARNING !
Always fit a Diode across a DC electric lock, at the
lock end.

0v   +V

R1c

R1nc   Lock
                    Solenoid
R1no*
                    + 1N5004 -
* Connect to R1nc for Fail Safe operation.

SWITCHES DS1	
DS1/1-5	Controller Address (See below)
DS1/6, 7, 8	Reader Technology:
off, off, off	Mag. ISO2 / Bar Code 39 (If Bar Code, short 'D1' to 0v).
on, off, off	Wiegand with parity check
off, on, off	Wiegand without parity check
on, off, on	Radio
on, on, on	Mag. ISO1 / Bar Code 2/5 (If Bar Code, short 'D1' to 0v).

DS1/1-5: Controller Address:

DS1/1:	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
DS1/2:	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
DS1/3:	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
DS1/4:	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
DS1/5:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Addr:	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15

DS1/1:	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
DS1/2:	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
DS1/3:	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
DS1/4:	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
DS1/5:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Addr:	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

1=Switch ON, 0=Switch OFF

EXTERNAL CONNECTORS	
J1, J2	Card Readers No.1,2
J3	4 supervised Alarm inputs I1-I4 (±30v max)
J4	Relays 1 & 2 (24v /1A max).
J5	10/100 base-T connector (RJ45)
J6	12V/1,2A Lead Acid Battery Connection only.
J7	Tamper Switch

Total Max. allowed current consumption
for Door opener and readers: **700mA !!!**

JUMPERS	
JP1	Never installed
JP2	Lithium Cell: must be always installed
JP3	Serial Port (TTL levels). (For serial adapter)
JP4	Never installed

J1,J2: CARD READERS :
LR/LG: Red/Green leds Active low.
     50 mA through internal 110 Ohms resistors.
BUZ: Buzzer Reader: open collector, active low,
     Max. voltage : 12Vdc.
     20mA without limit. resistor.
D0: Data0/Clock (D0/D1:Max. voltage allowed:
D1: Data1/Data   30v AC/DC.)
+V = 12Vdc for card readers.
     Max. Total consumption (2 readers): 250mA.

In order to comply with local Electricity and Safety standards,
always connect the IC550 to an approved IEEE802.3af PoE Midspan

Lantronix TCP/IP Interface configuration

1. TCP/IP Initialization via the 'DeviceInstaller' tool of Lantronix

a) DeviceInstaller setup
Launch the setup file of 'DeviceInstaller' located on the setup CD of the access control application and also available for download from Here

b) IP address and Subnet mask setting
The initial (first time) IP address setting can only be done when both the PC (from which the configuration is set) and the controller are on the same network segment.

If there is a router between the PC and the IC550, two methods are possible: either install 'DeviceInstaller' on a PC located on the same network segment as the controller and configure the interface from that PC or temporarily connect the IC550 to the local network segment, configure the interface, then re-connect the controller to its intended location.

Once the IC550 is connected through its RJ45 connector to the **local** segment of your TCP LAN, go to 'Start/ Programs/Lantronix/DeviceInstaller' and start the program. Click on '**Search**' to detect the interface through the network, select it, go to the 'Web Configuration' tab and confirm with the '➜' button. A message may appear indicating a security risk. Ignore it and click on '**Network**'. The following screen should appear:

Set the new IP Address and Subnet Mask in the corresponding fields in accordance with the recommendations of your network administrator.

In any case, never set it to 0.0.0.0 !

Changes are applied only after clicking **OK** and then clicking '**Apply Settings**'.

Note: the changes might not be reflected on the screen even after clicking 'Apply Settings'. If so, restart the 'Device Installer' or view the settings via a standard Web browser.

c) Set the communication speed
Click '**Serial Settings**'. Select Protocol '**RS232**' and the appropriate Baud Rate (9600 by default). To apply the changes, click **OK** and then '**Apply Settings**'.

d) Set the communication port
Click '**Connection**' and select the appropriate Local Port (10001 by default).). To apply the changes, click **OK** and then '**Apply Settings**'.

2. Addressing the IC550 within access control application
In the "Controller Network" screen of the access control application, set the network as TCP and set the IP address with the port number as in this example: **192.175.33.140:10001**
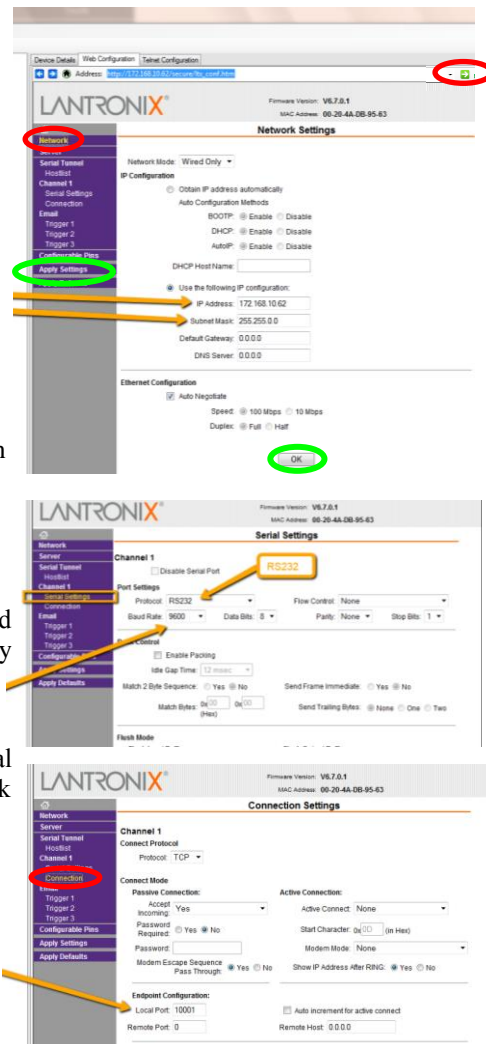
3. The IC550 must be connected to the Ethernet network through a standard IEEE 802.3af midspan which must meet the local electricity requirements.

Mechanical dimensions (in mm.)
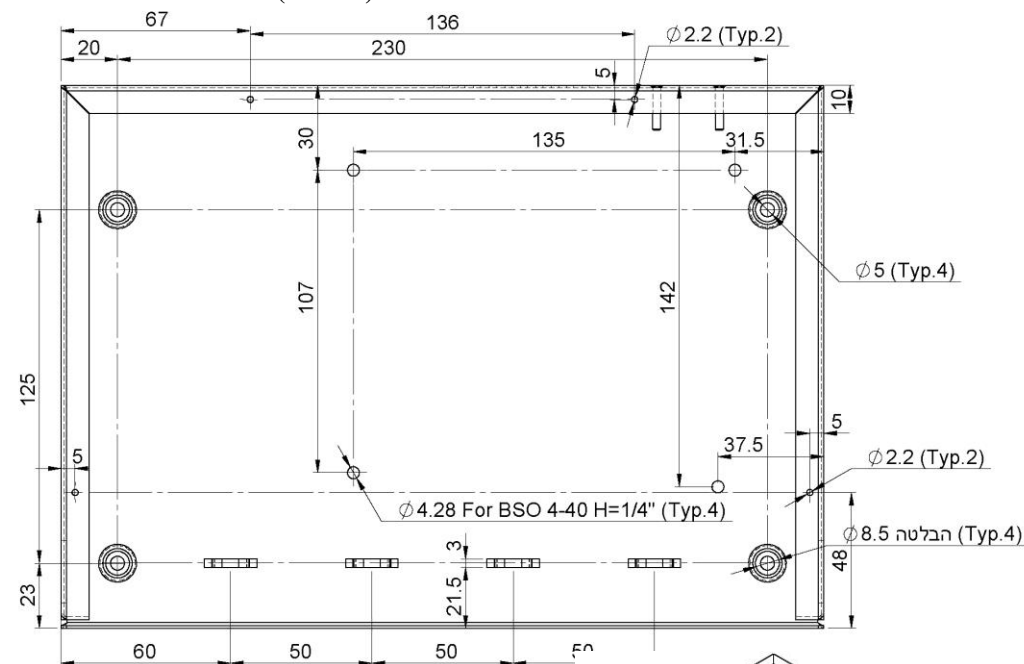
Installation Instructions:
1. Attach the metal box base to the wall using 4 x #4-40 - 11/2" Flat Phillips head screws.

2. Connect each of the system's cables as defined in the previous page.

3. Connect the attached battery wires to J6 connector and plug them to the Battery - Red wire from J6 "BAT" to (+) of the Battery and Black wire from J6 "0V" to (-) of the Battery.

4. Place the metal cover and fix it with the attached 4 screws.
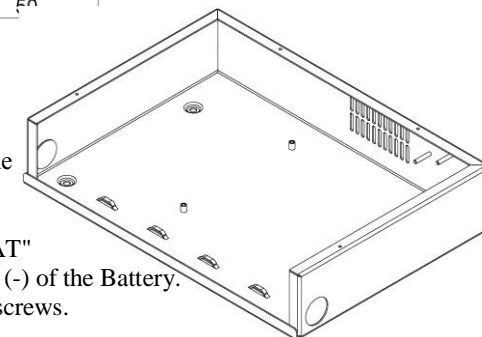
Use only Lead Acid rechargeable battery 12V/1.2Ah with appropriate discharging/overcharging means of protection and safety approvals accepted by the national requirements.

CAUTION ! RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS