

Note 1. Safe Area Apparatus

Associated protective barrier or galvanic isolator, CSA certified for Canadian installations and UL listed for US installations, with entity parameters that meet the following requirements: -

Voc or Vt equal to or less than Vmax
Isc or It equal to or less than Imax
La equal to or greater than Lcable + Li
Ca equal to or greater than Ccable + Ci

Certified Product
No modifications permitted without reference to Certifying Authority

Note 2. Other Safe Area Apparatus

Terminals J1#9 - J1#12 of the Sequence Card have the following parameters:

Voc = 7.2V
Isc = 13.2mA
Pout = 24mW

The total capacitance and inductance of the load connected to these terminals must not exceed the values given in the table below.

Group	Capacitance (µF)	Inductance (mH)
IIC	14.5	180
IIB	43.5	540
IIA	116	1440

Note 3. Intrinsically Safe Loudspeaker

Terminals J1#3 and J1#4 of the Sequence Card are for the connection of an intrinsically safe loudspeaker (horn) and have the following parameters.

Voc = 7.2 V
Isc = 135 mA
Pout = 0.244 W

The total capacitance and inductance of the load connected to these terminals must not exceed the values given in the table below.

Group	Capacitance (µF)	Inductance (mH)
IIC	14.5	1.9
IIB	43.5	5.7
IIA	116	15.2

Note 4. Remote Push Buttons

Terminals J1#5 - J1#8 and J1#12 of the Sequence Card are for the connection of remote push buttons which can be connected in parallel with the push buttons on the LN1000 front panel. The remote push buttons must meet the requirements of NEC, NFPA 70 article 504-2.

The terminals have the following parameters:

Voc = 7.2 V
Isc = 9.5 mA
Po = 17.1 mW

The total capacitance and inductance of the load connected to these terminals must not exceed the values given in the table below.

Group	Capacitance (µF)	Inductance (mH)
IIC	14.5	320
IIB	43.5	660
IIA	116	2560

Note 5. Connections to Alarm Cards

a) Terminals J1#7 and J1#8 (CH1 & CH2 Inhibit)

Terminals J1#7 and J1#8 (CH1 & CH2 Inhibit) are connected to Alarm Card Terminal J1#1 (Vcc) only; these connections must be separately completed on each Alarm Card.

b) Connections to Terminals J1#1 - J1#6 and J1#9 - J1#12

Only apparatus meeting the requirements of NEC, NFPA 70 article 504-2 can be connected to these terminals. For each Alarm Card, the total capacitance and inductance of the load connected to these terminals must not exceed the values given in the table below.

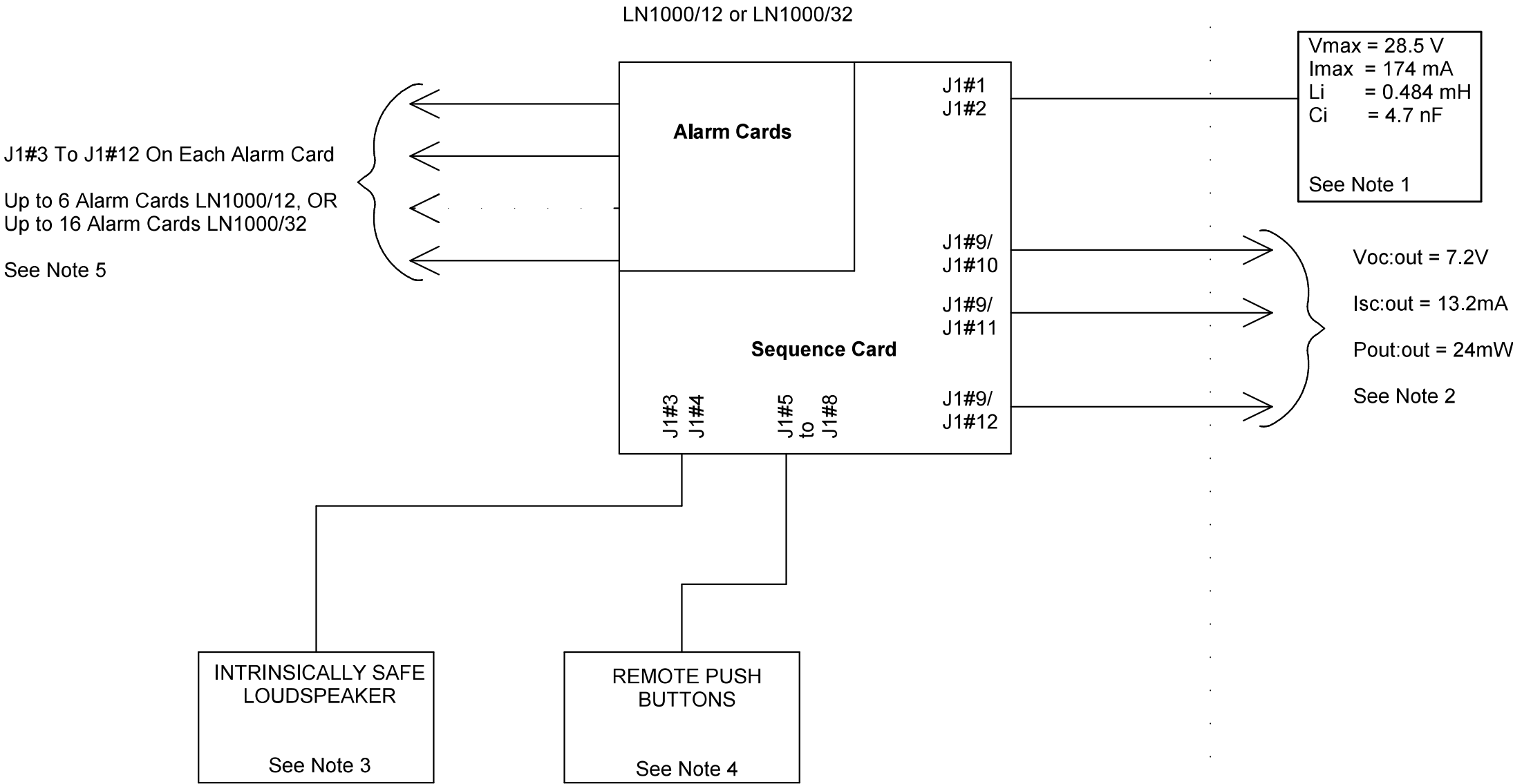
Group	Capacitance (µF)	Inductance (mH)
IIC	14.5	32
IIB	43.5	96
IIA	116	256

Note 6. General

Installation should be in accordance with the Canadian Electrical Code (CEC) for Canadian installations, and ANSI/ISA RP12.6 and the National Electrical Code ANSI/NFPA 70 for US installations.

NOTE:
Terminal Identities, e.g. J1#5
Refer to Terminals of Printed
Circuit Board Edge Connectors

NOTE:
Maximum safe area voltage
must not exceed 250 V



HAZARDOUS AREA

SAFE AREA

Scale
1:1

Tolerance
±0.2mm
±2°

Material

Finish

RTK
ENGINEERING LTD

HARROGATE,
NORTH YORKSHIRE,
HG2 0NP,
ENGLAND.
Copyright © RTK Engineering Ltd. 1998

Title

CONTROL DRAWING FOR
LN 1000
I.S. ANNUNCIATOR

Drawn
APR

Checked

Approved

Project

P852

Date

22-09-1999

Source

Cross Reference

Drawing Number

CE4412