

# Bailey network 70 NEWSLETTER

RT Thirtyacre  
(FS-RPCC)  
SE

## Module Switch Settings

The attached sheets, developed by Bailey Canada, show the switch settings for the NETWORK 90 Modules. New modules, as they become available, will be added by supplement.



P. Handfield/D.J. Dziubakowski

PH/DJD:cf

87-11  
10-08-87

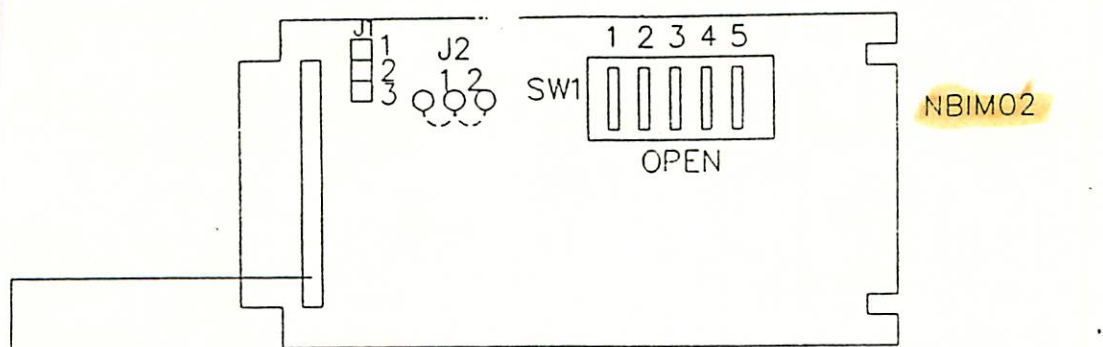
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GENERAL NOTES:

- SWITCH POSITIONS "OPEN" AND "OFF" ARE EQUIVALENT.

# BUS AND LOOP INTERFACE MODULE SWITCH SETTINGS

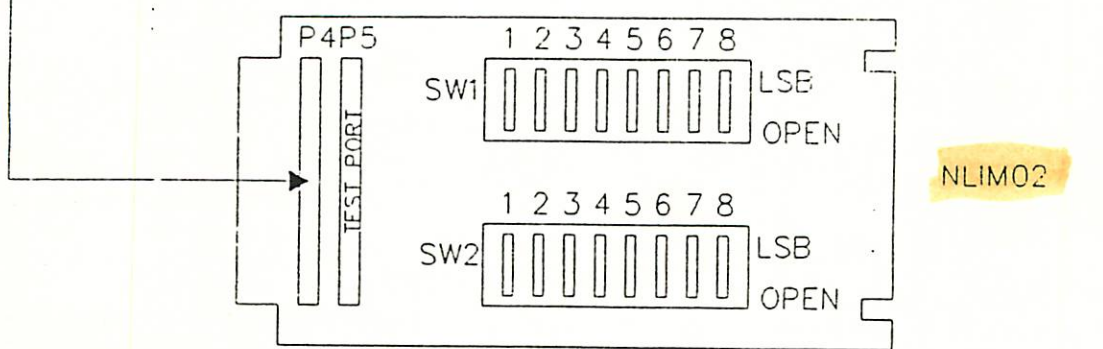


NBIM02

- NOTE: 1. SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)  
 2. SW1-5 IS SET TO THE MODULE ADDRESS (0 OR 1)  
 3. SW1-2 TO 4 NOT NORMALLY USED.  
 4. SW1-1 DEFINES REDUNDANT BIM'S SUPPLIED (0=NO, 1=YES).  
 5. J1 - ENABLE - DISABLE STATUS ALARM (1-2=ENABLE, 2-3=DISABLE)  
 6. J2 - SELECT MODE OF OPERATION (1=NEIM01A 2=NBIM02)

MODULE LOCATION	MODULE ADDRESS	SW1					J1	J2
		1	2	3	4	5		
		0	0	0			1/3	1/2

FLAT DMA CABLE (NBIM02 TO NLIM02 P4 CONNECTOR)



NLIM02

- NOTE: 1. SWITCH OPEN = LOGIC 1 (POS 8 IS THE LEAST SIGNIFICANT BIT)  
 2. SW2 IS SET TO THE PCU ADDRESS (TO 63)  
 3. SW1 IS DIAGNOSTIC/DISPLAY SWITCH.  
 4. REFER TO SHT. 3 FOR STANDARD JUMPER SETTINGS.

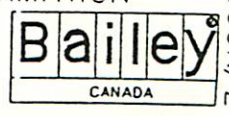
MODULE LOCATION	MODULE ADDRESS	SW1 (TYPICAL)								SW2							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
		0	0	1	1	0	0	1	0	0	0						

REFER TO PRODUCT INSTRUCTION E93-908-1 FOR FURTHER INFORMATION

AL760273A SHT. 1  
 CAD FILE - 7J080821

*M. Schreiber*

NETWORK 90

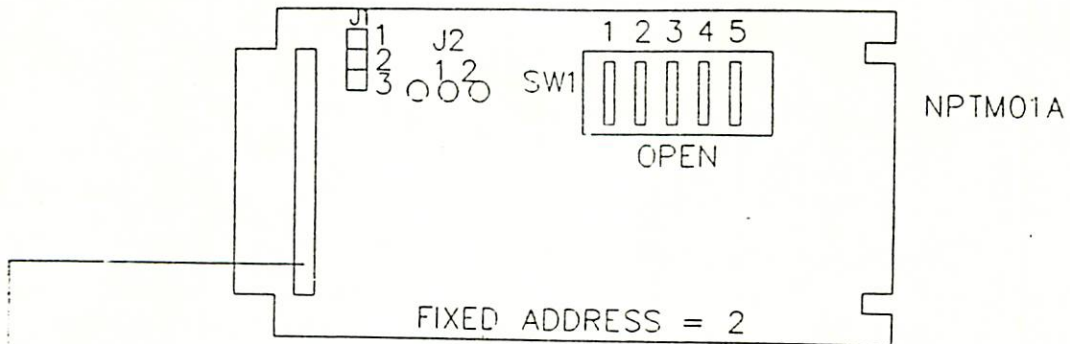


7/NO0175

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# POINT TABLE AND LOOP INTERFACE MODULE SWITCH SETTINGS

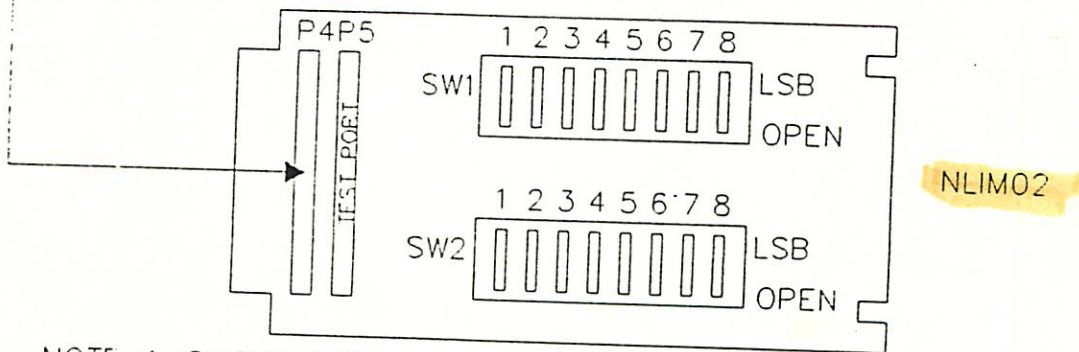
PART OF CIU01



- NOTE: 1. SW1 IS NOT NORMALLY USED (DIAGNOSTIC/DISPLAY LED'S)  
 2. J1 = ENABLE - DISABLE STATUS ALARM (1-2=ENABLE, 2-3=DISABLE)  
 3. J2 = NOT USED

MODULE LOCATION	MODULE ADDRESS	SW1					J1
		1	2	3	4	5	1/3
		X	0	0	0	X	

FLAT DMA CABLE (NPTM01A TO NLIM02 P4 CONNECTOR)



- NOTE: 1. SWITCH OPEN = LOGIC 1 (POS 8 IS THE LEAST SIGNIFICANT BIT)  
 2. SW2 IS SET TO THE PCU ADDRESS (1 TO 63)  
 3. SW1 IS DIAGNOSTIC/DISPLAY SWITCH ONLY.  
 4. REFER TO SHT. 3 FOR STANDARD JUMPER SETTINGS.

MODULE LOCATION	SW1 (TYPICAL)								SW2							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
	0	0	1	1	0	0	1	0	0	0						

REFER TO PRODUCT INSTRUCTION E93-905 FOR FURTHER INFORMATION

AL760273A SHT. 2  
 CAD FILE- 7J080822

NETWORK 90

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MEMORY JUMPER SETTINGS

NLIM02

	STANDARD POSITION	ALTERNATE POSITION
CHIP TYPE=U4	25L32 2532/99401	2732
J1	2 <input type="checkbox"/> + <input type="checkbox"/> 1 3 +	2 <input type="checkbox"/> + 1 3 <input type="checkbox"/>
J2	1 2 3 <input type="checkbox"/> + <input type="checkbox"/> +	1 2 3 + <input type="checkbox"/> + <input type="checkbox"/>
J3	ALWAYS INSERTED (USED FOR COMPUTERIZED TEST SETUP ONLY)	

AL7602-3A SHT. 3  
CAD FILE - 7J080823

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NETWORK 90



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# SERIAL INTERFACE MODULE SWITCH SETTINGS. CONTINUED

## TYPICAL SETTINGS

MODULE	SW2					SW3				SW4				JP9	JP10	JP1	JP2	JP3	JP4	JP5	JP6	JP11	JP12	
LOCATION	1	2	3	4	5	1	2	3	4	1	2	3	4	1 TO 5	1 TO 5	1/3	1/4	1/3	1/3	1/3	1/3	1/3	1/3	
	0	0	0	0	0	0	1	0	1	0	0	0	1			3	3	3	3	3	3	3	3	3

AL760273A SHT. 5  
CAD FILE - 7J080847

*M. Schreiber*

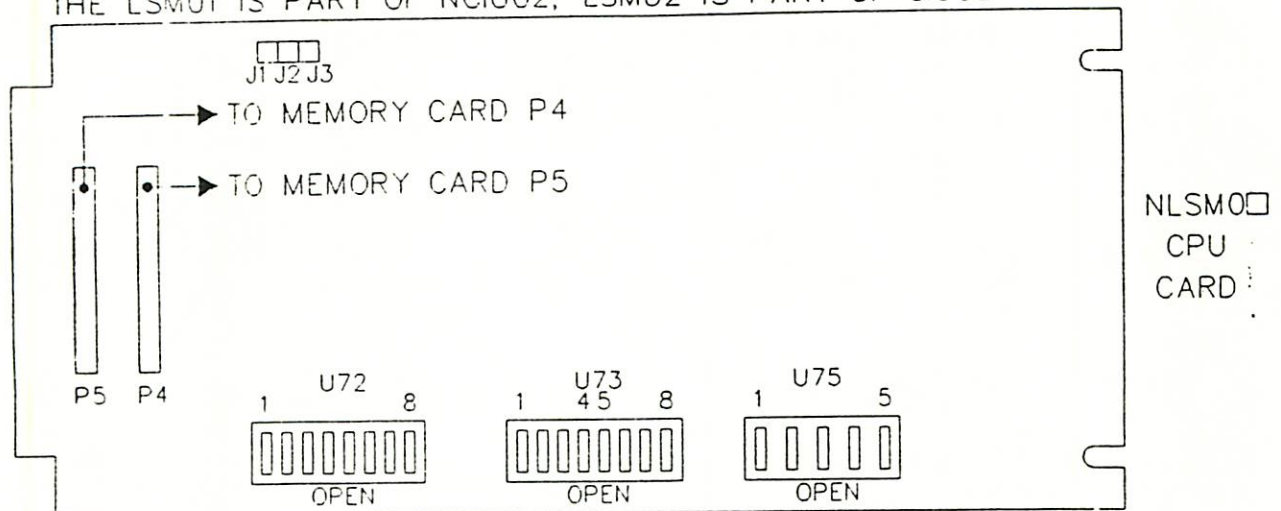
NETWORK 90



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# LOOP STORAGE MODULE SWITCH SETTINGS

THE LSM01 IS PART OF NCIU02; LSM02 IS PART OF CIU03



## NOTES:

1. SWITCH SET "OPEN" = 1
2. SWITCH U75 SELECTS PORT ADDRESS:  
POS'N 5 IS LEAST SIGNIFICANT BIT
3. J1-2-3 SELECTS EPROM TYPE INSTALLED J1-J2 = 27256  
J2-J3 = 27128
4. SWITCH U73 SELECTS TRANSMISSION RATES FOR TWO RS232 PORTS:  
POS'N 1 TO 4 = TERMINAL PORT (POS'N 1 = LSB)  
POS'N 5 TO 8 = PRINTER PORT (POS'N 5 = LSB)  
BAUD RATES: 0 = 50      4 = 150      8 = 1.8K      12 = 4.8K  
1 = 75      5 = 300      9 = 2K      13 = 7.2K  
2 = 110      6 = 600      10 = 2.4K      14 = 9.6K  
3 = 134.5      7 = 1.2K      11 = 3.6K      15 = 19.2K
5. SWITCH U72 SELECTS OPERATING OPTIONS:  
POLE 1 = ROM CHECKSUMMING, 1 = OFF; 0 = ON  
POLES 2 & 3 = PORT 0 & 1 DATA CHARACTERISTICS  
00 -8 BITS, 1 STOP BIT, NO PARITY  
01 -8 BITS, 1 STOP BIT, EVEN PARITY  
10 -8 BITS, 1 STOP BIT, ODD PARITY  
11 -8 BITS, 2 STOP BITS.  
POLE 4 = PORT 1 OPTION (1 = UTILITY/0 = COMPUTER)  
POLE 5 = MODEM PASSWORD PROTECTION (1 = ON/0 = OFF)  
POLE 6 = PORT ADDRESSING MODE (1 = ON/0 = OFF)  
POLE 7 = CHECKSUMMING (1 = ON/0 = OFF)  
POLE 8 = PRIMARY/SECONDARY (DIFFERENT BETWEEN REDUNDANT LSM'S)

MODULE LOCATION	U75					U72								U73								J1-J2-J3	
	1	2	3	4	5	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	J1-J2 OR J2-J3	

REFER TO PROGRAMMER'S REFERENCE MANUAL E93-905-2 FOR FURTHER INFORMATION.

AL760273A SHT. 6  
CAD FILE - 7J080840

*M. Schreiber*

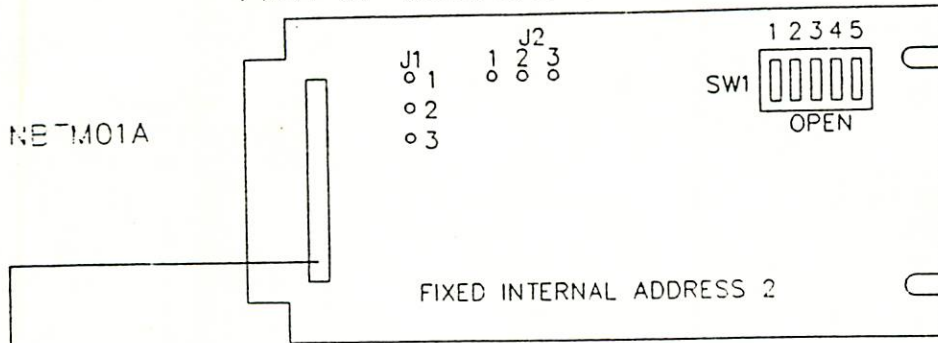
NETWORK 90

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CANADA

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# BUS TRANSFER AND LOOP INTERFACE MODULE SWITCH SETTINGS

PART OF CIU02 AND CIU03

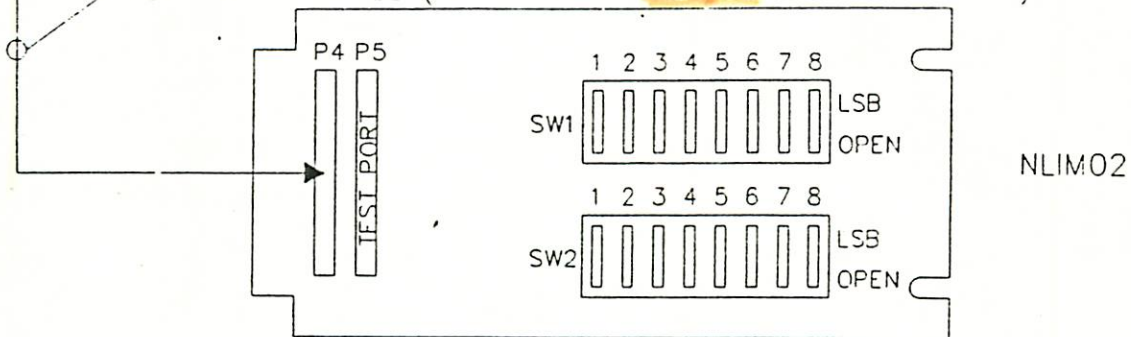


**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. SW1 IS NOT NORMALLY USED (DIAGNOSTICS)
3. J1 - ENABLE/DISABLE STATUS ALARM (1-2=ENABLE, 2-3=DISABLE)
4. J2 - NOT USED

MODULE LOCATION	MODULE ADDRESS	SW1					J1
		1	2	3	4	5	1/3
	2	0	0	0	0	0	

FLAT DMA CABLE (NETM01A TO NLIM02 P4 CONNECTOR)



**NOTES:**

1. SWITCH OPEN = LOGIC 1 (POS 8 IS THE LEAST SIGNIFICANT BIT)
2. SW2 IS SET TO THE PCU ADDRESS (1 TO 63)
3. SW1 IS DIAGNOSTIC/DISPLAY SWITCH
4. REFER TO SHT. 3 FOR STANDARD JUMPER SETTINGS.

MODULE LOCATION	SW1(TYPICAL)								SW2							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
	0	0	1	1	0	0	1	0	0	0						

REFER TO PRODUCT INSTRUCTION E93-905-2 FOR FURTHER INFORMATION

AL760273A SHT. 7  
CAD FILE-7J080842

NETWORK 90



7/N00175

7



# SERIAL PORT MODULE SWITCH SETTINGS. CONTINUED

## TYPICAL SETTINGS

MODULE	SW2					SW3				SW4				JP9	JP10	JP1	JP2	JP3	JP4	JP5	JP6	JP11	JP12	
LOCATION	1	2	3	4	5	1	2	3	4	1	2	3	4	1 TO 5	1 TO 5	1/3	1/4	1/3	1/3	1/3	1/3	1/3	1/3	
						1	1	0	1	0	1	0	0			3	3	3	3	3	3	3	3	3

AL760273A SHT. 9  
CAD FILE - 7J080848

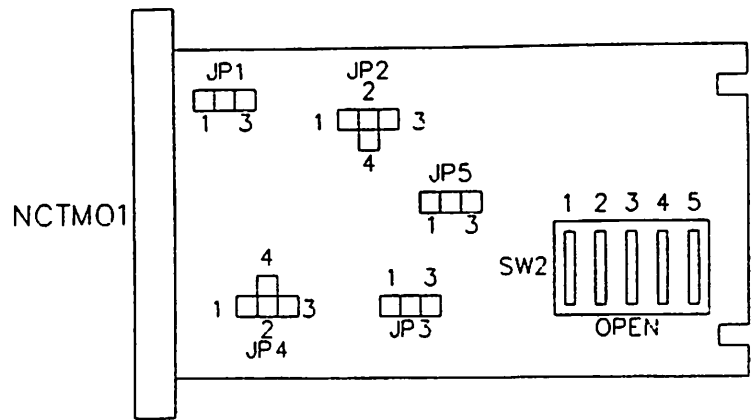
*M. Schuster*

NETWORK 90



7/NO0175

# CONFIGURATION AND TUNING MODULE SWITCH SETTINGS



NOTE: 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)  
 2) SW2 IS THE MODULE ADDRESS WHICH IS NORMALLY SET TO 2

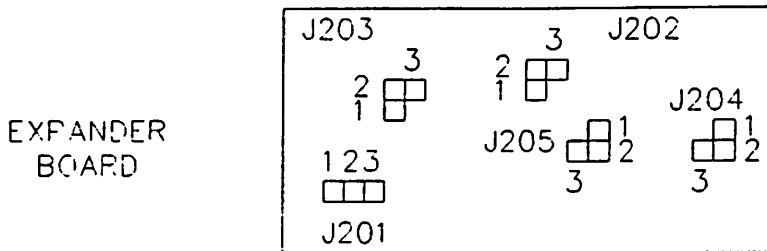
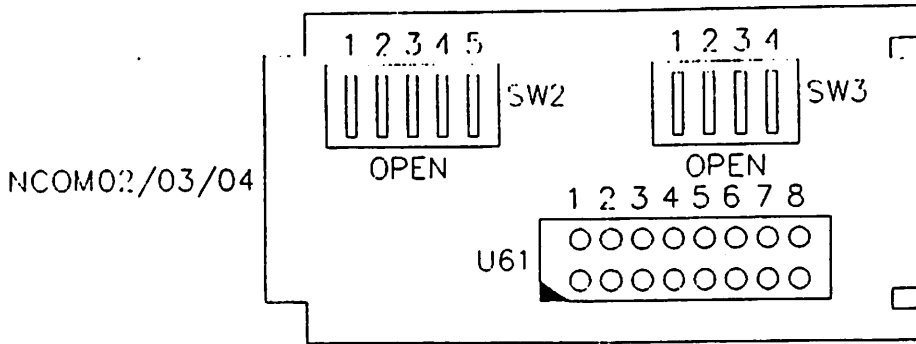
MODULE ADDRESS	SW2				
	1	2	3	4	5
TYPICAL	0	0	0	1	0
ACTUAL					

JUMPER	JUMPER TABLE		COMP. DES.
	POSITIONS CLOSED		
	STD. (25L32) ALT. (2532)	ALT. (2732)	
JP1	2 - 3	1 - 2	U22
JP2	1 - 2	2 - 3	
JP3	2 - 3	1 - 2	U21
JP4	1 - 2	2 - 3	
JP5	1 - 2	1 - 2	U21, U22



# CONTROLLER MODULE SWITCH SETTINGS:

TYPE: NCOM02/03/04



MODULE ADDRESS	SW2					SW3				U61								EXPANDER J20X (1/3)				
	1	2	3	4	5	1	2	3	4	1	2	3	4	5	6	7	8	1	2	3	4	5
						0	0		0													

- NOTE: 1. SWITCH OPEN = LOGIC 1 (POS. 5 IS THE LEAST SIGNIFICANT BIT)  
 2. SW2 IS SET TO THE MODULE ADDRESS (3 THRU 31)  
 3. SW3-3 SELECTS POWER-UP OPTION FOR AO#1 (0=0%, 1=100%)  
 SW3-1, 2, 4 ARE NORMALLY CLOSED  
 4. U61-1, 2, 3 SELECTS TYPE OF AO#1 (010 = CURRENT: 101 = VOLTAGE)  
 5. U61-4, 5, 6 SELECTS TYPE OF AO#2 (010 = CURRENT: 101 = VOLTAGE)  
 6. U61-7 + 8 SELECTS TIME OUT OPTION FOR AO#1

AO#1	7	8
TO HOLD	1	0
TO POWER-UP	0	1

7. J201, 2, 3 SELECT DIGITAL INPUT VOLTAGE (1 = 24VDC, 3 = 125VDC)  
 8. J204 SELECTS TIME-OUT OPTION FOR AO#2 (1 = HOLD, 3 = POWER-UP)  
 9. J205 SELECTS POWER-UP OPTION FOR AO#2 (1 = 100%, 3 = 0%)  
 10. SW3-1 IS USED TO ZERO MEMORY

REFER TO PRODUCT INSTRUCTION E93-906-2 FOR FURTHER INFORMATION

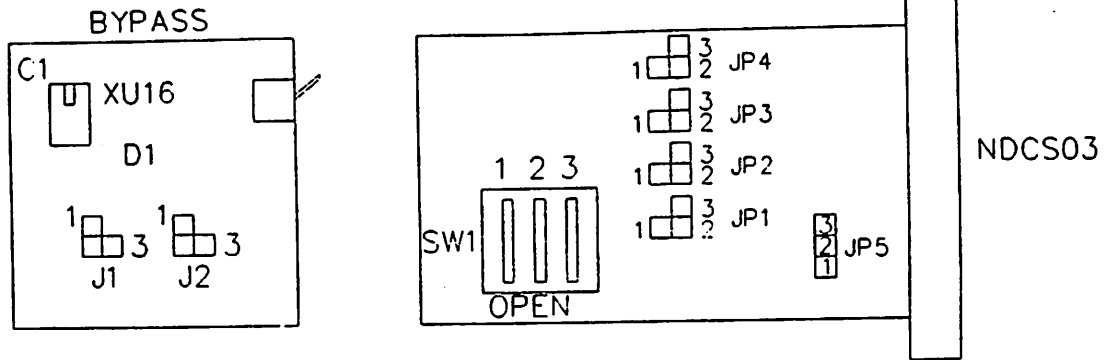
AL760273A SHT.12  
 CAD FILE-7J080820

NETWORK 90



7/N00175

# DIGITAL CONTROL SWITCH SETTINGS

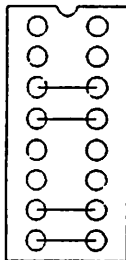


- NOTE: 1. SWITCH OPEN = LOGIC 1 (POS 3 IS THE LEAST SIGNIFICANT BIT)  
 2. SW1 IS SET TO THE STATION ADDRESS (0 TO 7)  
 3. BY-PASS CARD - XU16 DIPSHUNT (SEE BELOW)  
 - J1 AND J2 BOTH V.  
 4. JP1 TO JP5 SELECT OPTIONS PER TABLE.  
 5. JP3 SELECTS VALUE TO BE DISPLAYED ON OUTPUT METER DURING NORMAL OPERATION.  
 6. JP4 SELECTS ON WHICH METER THE ANALOG INPUT IS DISPLAYED DURING BYPASS.

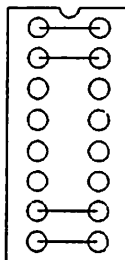
JUMPER	SELECT	OPTION
JP1	1-2 2-3	AUTO BYPASS CANCEL AUTO BYPASS
JP2	1-2 2-3	REVERSE ACTING CANCEL REVERS ACTING
JP3	1-2 2-3	COM OUTPUT DISPLAYED (SEE NOTE 5) ANALOG INPUT DISPLAYED
JP4	1-2 2-3	ANALOG INPUT DISPLAYED ON CO SCALE (SEE NOTE 6) ANALOG INPUT DISPLAYED ON PV SCALE
JP5	1-2 2-3	BRIGHT INTENSITY SELECTED DIM INTENSITY SELECTED

XU16- FOR ANALOG SIGNALS ONLY  
 (IF DCS03 IS USED FOR DRIVER REFER TO INSTRUCTION BOOK)

INTERNAL  
ANALOG  
SIGNAL



EXTERNAL  
ANALOG  
SIGNAL



**NOTE:**

XU8 ON T.U. TYPE NTC50□  
 MUST ALSO BE CONFIGURED IN  
 CONJUNCTION WITH THIS.  
 (REFER DL780010)

REFER TO PRODUCT INSTRUCTION E93-902-1 FOR FURTHER INFORMATION.

AL760273A SHT. 13  
 CAD FILE - 7J080825

*M. Scl...*

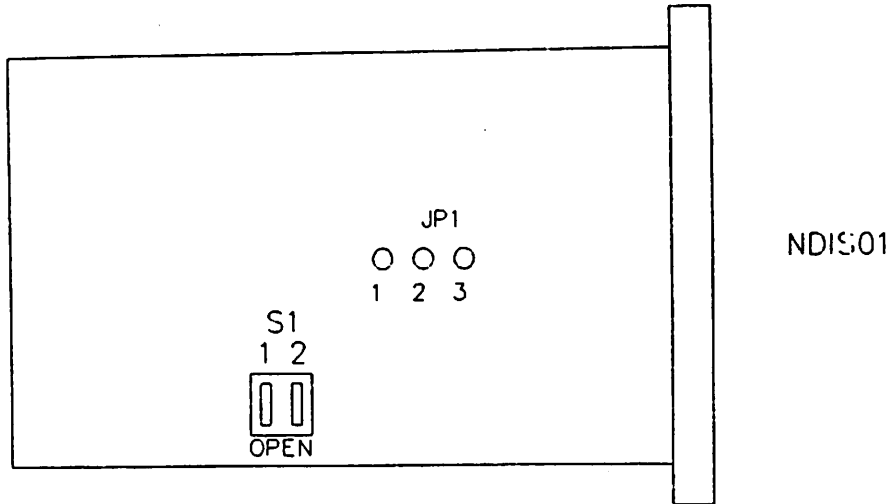
NETWORK 90



7/N00175



# DIGITAL INDICATING STATION SWITCH SETTINGS



**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECTS ADDRESS (2 = LSB)
 

STATION ADDRESS	S1-1	S1-2
8	0	0
9	0	1
10	1	0
11	1	1
3. JP1 SELECT DISPLAY INTENSITY
  - 1 = BRIGHT DISPLAY
  - 3 = DIM DISPLAY

TAG NO.	STATION SERVICE	STA ADD	S1		JP1	TU LOC	CONNECTED TO P2 OR P3
			1	2	1/3		

REFER TO PRODUCT INSTRUCTION E93-904-2 FOR FURTHER INFORMATION

AL760273A SHT.15  
CAD FILE - 7J080841

M. S. D. ...

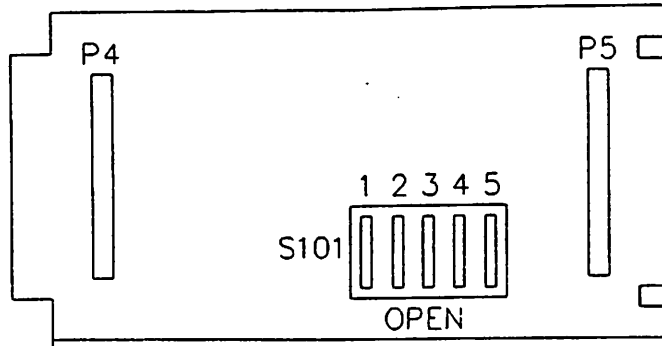
NETWORK 90



7 N00175

# ANALOG MASTER MODULE SWITCH SETTINGS

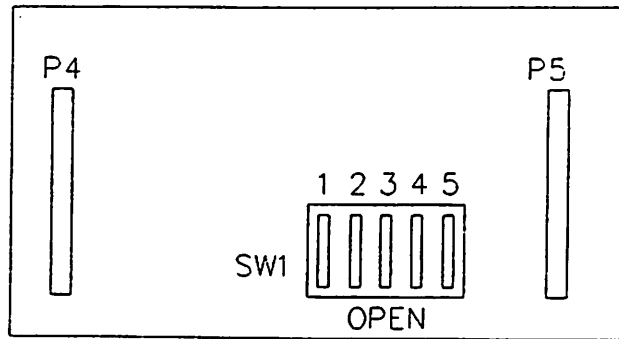
NAMM02  
MOTHER  
BOARD



- NOTES: 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)  
2) S101 IS SET TO THE MODULE ADDRESS (3 TO 31)

MODULE LOCATION	MODULE ADDRESS	S101				
		1	2	3	4	5

NAMM02  
MASTER ANALOG  
BOARD



- NOTES: 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)  
2) SW1 ON "ANALOG BOARD" SET FOR EAROM INITIALIZE MODE.

INITIALIZE	1	2	3	4	5
CONFIG. EAROM	0	0	0	1	0
CALIB. EAROM	0	0	0	1	1
BOTH EAROMS	0	0	1	0	0

REFER TO PRODUCT INSTRUCTION E93-912-2 FOR FURTHER INFORMATION

AL760273A SHT. 16  
CAD FILE- 7J080830

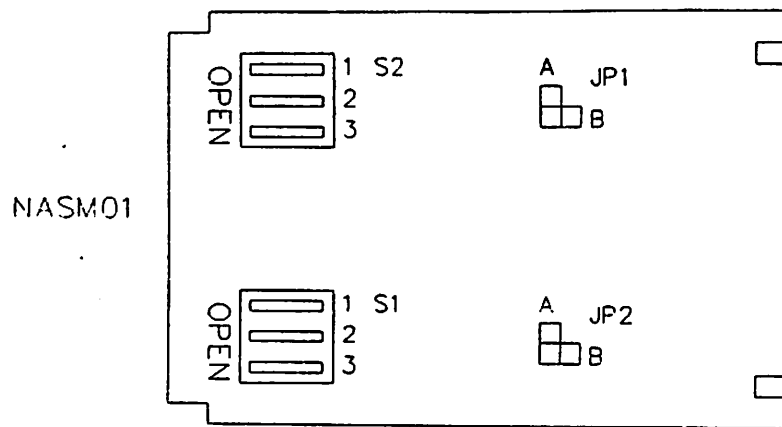
*Used master*

NETWORK 90



7/N00175

# HIGH LEVEL ANALOG SLAVE SWITCH SETTINGS



- NOTES: 1) SWITCH OPEN = LOGIC 1 (POS 3 IS THE LEAST SIGNIFICANT BIT)  
 2) JP1 SELECTS GROUP A, JP2 GROUP B (A=DISABLE, B=ENABLE)  
 3) S1 IS SET TO GROUP B ADDRESS, S2 TO GROUP A ADDRESS

MASTER ADDRESS	SLAVE #	SLAVE ADD GROUP A	S2			SLAVE ADD GROUP B	S1			JP1 A/B	JP2 A/B
			1	2	3		1	2	3		
	1										
	2										
	3										
	4										

REFER TO PRODUCT INSTRUCTION E93-912-4 FOR FURTHER INFORMATION

AL760273A SHT. 17  
 CAD FILE - 7J080828

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NETWORK 90

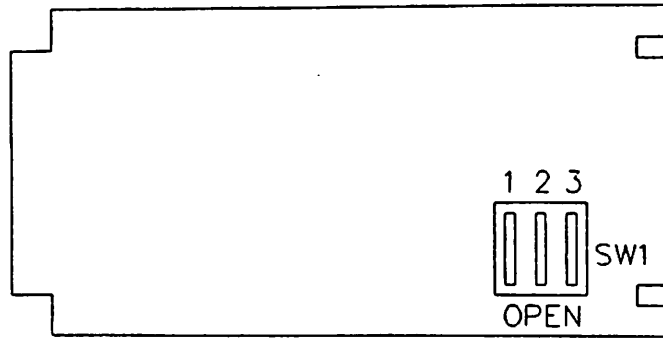
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 CANADA

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# LOW LEVEL ANALOG SLAVE MODULES SWITCH SETTINGS

TYPE: NASM02/NASM03/NASM04

SLAVE  
NASM02/03/04



- NOTES: 1) SWITCH OPEN = LOGIC 1 (POS 3 IS THE LEAST SIGNIFICANT BIT)  
2) S1 IS SET TO SLAVE ADDRESS (0 TO 7)

MASTER ADDRESS	MASTER LOCATION	SLAVE ADDRESS	SLAVE LOCATION	SW1			SLAVE TYPE SEE TABLE 1
				1	2	3	

TABLE 1

NOMENCLATURE	DESCRIPTION	PRODUCT INSTRUCTION #
NASM02	THERMOCOUPLE/mVOLT	E93-912-5
NASM03	100 Ω RTD	E93-912-6
NASM04	10 Ω RTD	

AL760273A SHT. 18  
CAD FILE - 7J080831

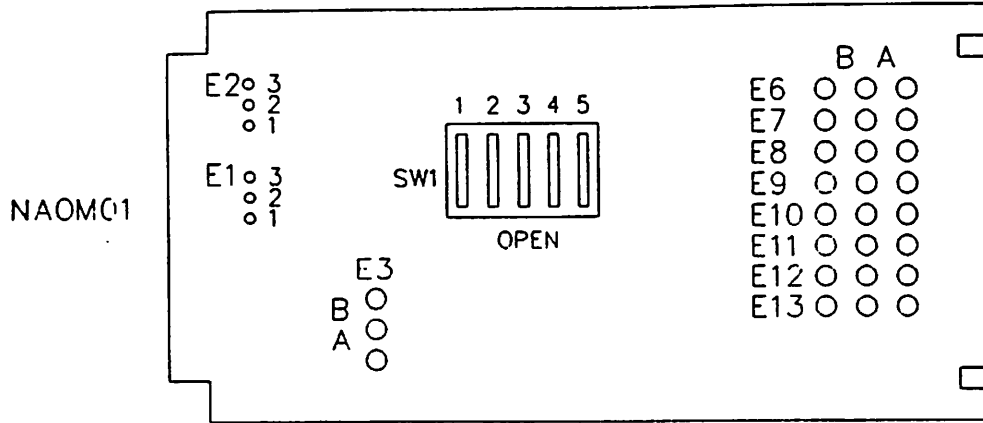
*Handwritten signature/initials*

NETWORK 90



7/N00175

# ANALOG OUTPUT MODULE SWITCH SETTINGS



- NOTES: 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)  
 2) SW1 IS SET TO THE MODULE ADDRESS (3 TO 31)  
 3) E3 IS THE VOLTAGE RANGE (A = 1-5V/4-20mA, B = 0-10V)  
 4) E6-E13 SETS THE TYPE OF OUTPUT (A = VOLTAGE, B = CURRENT)

ADD	SW1					E3	E6	E7	E8	E9	E10	E11	E12	E13
	1	2	3	4	5	A/B	A08	A07	A06	A05	A04	A03	A02	A01

MEMORY TYPE USED	E1 AND E2	OUTPUT NO.	USED BY BLOCK	DRAWING
2532	2 & 3	A01		
25L32	2 & 3	A02		
2732	1 & 2	A03		
		A04		
90401	2 & 3	A05		
		A06		
		A07		
		A08		

REFER TO PRODUCT INSTRUCTION E93-912-3 FOR FURTHER INFORMATION

AL760273A SH1. 19  
 CAD FILE - 7J080829

*M. Schuster*

NETWORK 90



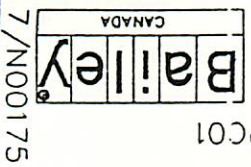
7/N00175

20

CAD FILE - 7J080834  
AL7602738 SHT.20

*W. Scott*

NETWORK 90

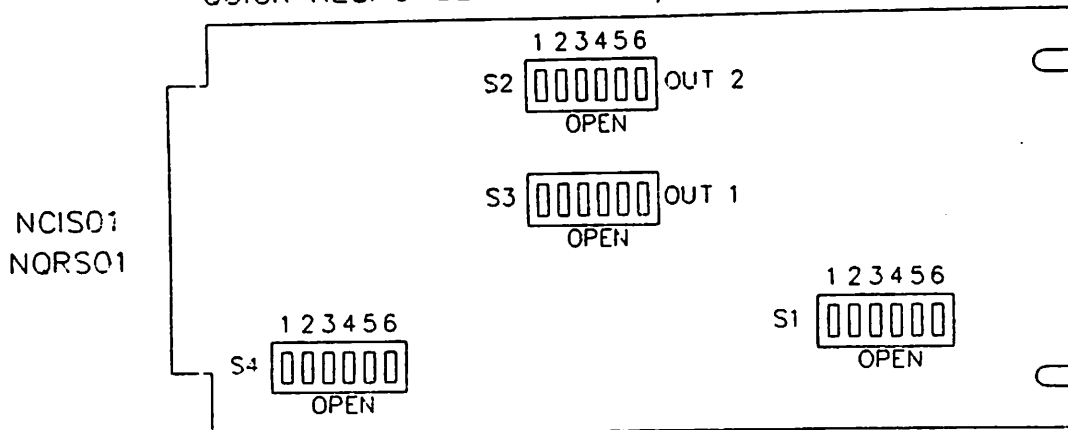


REFER TO PRODUCT INSTRUCTION E93-906-1 FOR FURTHER INFORMATION ON NMFC01  
REFER TO TECHNICAL OVERVIEW FOR FURTHER INFORMATION ON NMFC01

MODULE ADDRESS	LOC	MODULE
1	2	U75
2	3	U75
3	4	U75
4	5	U75
5	1	U72
6	2	U72
7	3	U72
8	4	U72
9	5	U72
10	6	U72
11	7	U72
12	8	U72
13	9	U72
14	10	U72
15	11	U72
16	12	U72
17	13	U72
18	14	U72
19	15	U72
20	16	U72
21	17	U72
22	18	U72
23	19	U72
24	20	U72
25	21	U72
26	22	U72
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# CONTROL I/O SLAVE MODULE SWITCH SETTINGS

QUICK RESPONSE CONTROL I/O SLAVE SWITCH SETTINGS.



1. SWITCH SET OPEN = LOGIC 1

2. S<sub>1</sub> - 1 SELECTS D.I. NO.1 VOLTAGE

S<sub>2</sub> - 3 SELECTS D.I. NO.2 VOLTAGE

S<sub>3</sub> - 5 SELECTS D.I. NO.3 VOLTAGE

S<sub>1</sub> - 2, 4 AND 6 ARE UNUSED

} OPEN = 125VDC  
CLOSED = 24VDC

3. ANALOG OUTPUT OPTIONS (S<sub>2</sub> = AO NO. 2, S<sub>3</sub> = AO NO. 1):

POS'N 1 - 3 = CURRENT = 101

VOLTAGE = 010

POS'N 4 = SLAVE FAULT DEFAULT VALUE (CLOSED = 0%,  
OPEN = 100%)

POS'N 5 = TIME-OUT OPTION (OPEN = HOLD, CLOSED = POWER-UP)

POS'N 6 = POWER-UP STATE (OPEN = 100%, CLOSED = 0%)

4. S<sub>4</sub> IS SLAVE ADDRESS (POS'N 6 = LSB)

**NOTE: DO NOT USE ADDRESS ZERO**

MASTER ADDRESS	SWITCH	USAGE	POSITIONS					
			1	2	3	4	5	6
	S1	D.I. VOLTAGE		X		X		X
	S2	A.O. NO.2 OPTIONS						
	S3	A.O. NO.1 OPTIONS						
	S4	SLAVE ADDRESS						
	SLAVE LOCATION							

**NOTE: USE ONLY ADDRESS 1 TO 63**

REFER TO PRODUCT INSTRUCTION E93-913-9 FOR FURTHER INFORMATION

AL760273A SHT. 21  
CAD FILE - 7JG80835

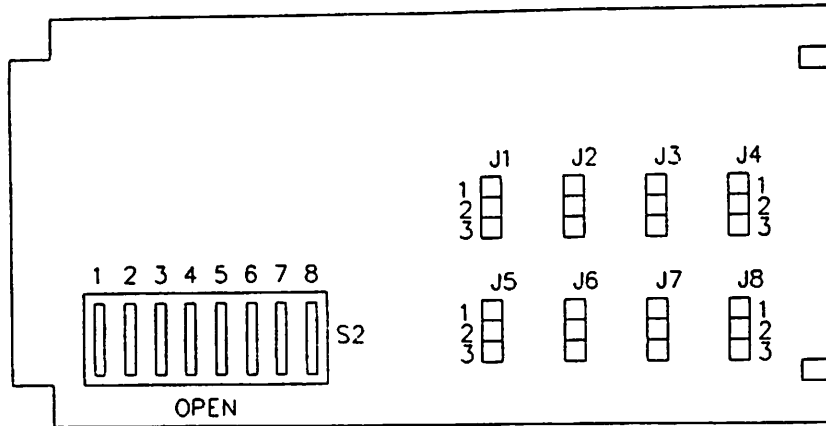
NETWORK 90

**Bailey**  
CANADA

7/N00175

# ENHANCED LOGIC MASTER MODULE SWITCH SETTINGS

NLMM01A  
NLMM02



**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. SW2--4 TO 8 IS MODULE ADDRESS (POS. 8 IS LEAST SIGNIFICANT BIT)
3. SW2--1 TO 3 IS MODULE SELF TESTS:  
NORMALLY ALL SET CLOSED.
4. SW2-2 OPEN INITIALIZES EEPROM.  
SW2-2 AND S2-3 OPEN COMPRESSES EEPROM.
5. JUMPERS J1 TO J8 SELECT DIGITAL INPUT VOLTAGE:  
1-2 = 125VDC/120VAC  
2-3 = 24VDC

MASTER ADDRESS	MASTER LOC	S2								J1	J2	J3	J4	J5	J6	J7	J8
		1	2	3	4	5	6	7	8	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
		0	0	0													

REFER TO PRODUCT INSTRUCTION E93-907-5 FOR FURTHER INFORMATION

AL760273A SHT. 22  
CAD FILE - 7J080839

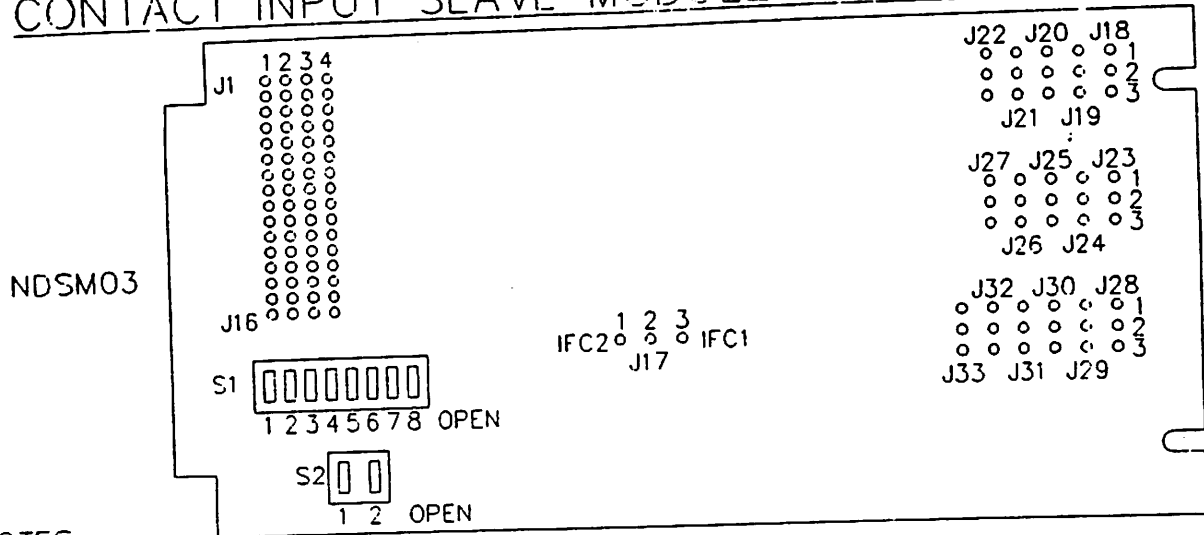
*MSd. j. ates*

NETWORK 90



7/N00175

# CONTACT INPUT SLAVE MODULE SWITCH SETTINGS



**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. J1 TO J16 SELECTS POINT RESPONSE TIME:
  - 1 - 2 = D.C. SLOW
  - 2 - 3 = D.C. FAST
  - 3 - 4 = A.C.
3. J17 SELECTS SLAVE USAGE: 1-2 = MFC/LMM02 (IFC2),  
2 - 3 LMM01/01A (IFC1)
4. J18 TO J33 SELECTS POINT VOLTAGE: 1 - 2 = 24VDC.  
2 - 3 = 125VDC/120VAC
5. S1 SELECTS SLAVE ADDRESS
  - A. IF LMM01/01A - GROUP "A" = POS'N 1 - 4 (4 = LSB)
  - GROUP "B" = POS'N 5 - 8 (8 = LSB)
  - B. IF MFC/LMM02 - USE POS'N 3 TO 8 (8 = LSB)
6. S2 SELECTS GROUP ENABLE - A. IF LMM01/01A POS'N 1= GROUP "A"  
POS'N 2= GROUP "B" } OPEN= ENABLE
- B. IF MFC/LMM02 POS'N 1= NOT USED  
POS'N 2= OPEN

MASTER ADDRESS	SLAVE LOCATION										
	J1	J2	J3	J4	J5	J6	J7	J8			
RESPONSE TIME	J9	J10	J11	J12	J13	J14	J15	J16			
	J18	J19	J20	J21	J22	J23	J24	J25			
POINT VOLTAGE	J26	J27	J28	J29	J30	J31	J32	J33			
	J17	ADDRESS	1	2	3	4	5	6	7	8	
SLAVE USAGE	S1								S2	1	2

NOTE: USE ONLY (FOR MFC/LMM02) ADDRESS 1 TO 63

REFER TO PRODUCT INSTRUCTION E93-913-5 FOR FURTHER INFORMATION NETWORK 90

AL760273A SHT. 23  
CAD FILE - 7JC80836

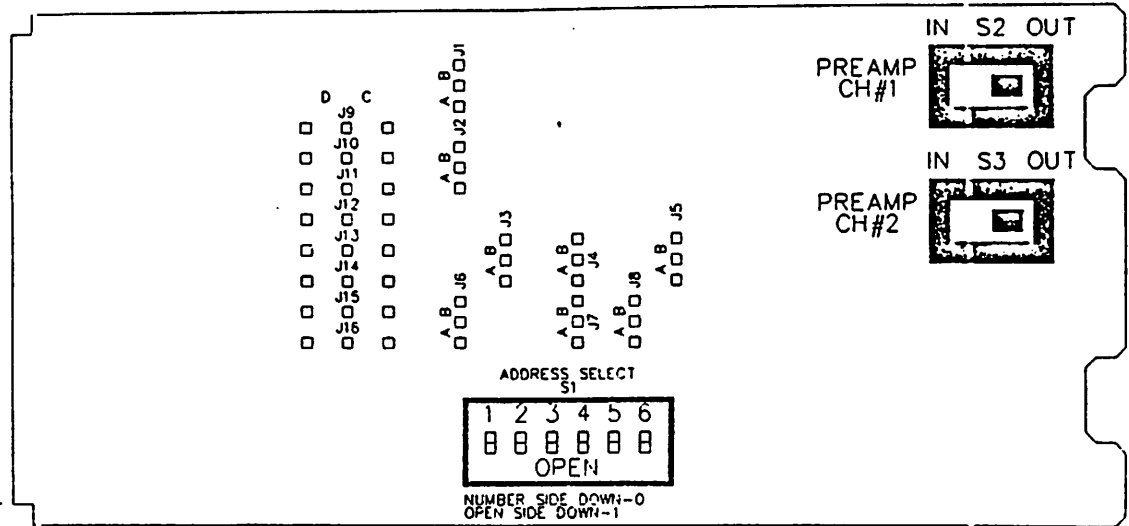
Msd. notes



7/N00175

# PULSE INPUT SLAVE MODULE

NDSM04



**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECTS SLAVE ADDRESS; 6 = LSB.(USE ONLY ADDRESS 1 TO 63)
3. S2 -IN = ROUTES CHANNEL 1 INPUTS THROUGH PRE-AMP.  
-OUT = CHANNEL 1 INPUTS BYPASS PRE-AMP.
4. S3 -IN = ROUTES CHANNEL 2 INPUTS THROUGH PRE-AMP.  
-OUT = CHANNEL 2 INPUTS BYPASS PRE-AMP.
5. J1 TO J8 SELECT VOLTAGE RANGE FOR INPUTS.(CH. 1 TO 8 RESPECTIVELY)  
A = LOGIC 0 = 0 TO 1 VDC; LOGIC 1 = 4 TO 6 VDC  
B = LOGIC 0 = 0 TO 2 VDC; LOGIC 1 = 21.6 TO 27 VDC
6. J9 TO J18 SELECT DEBOUNCE FOR INPUTS(CH.1 TO 8 RESPECTIVELY)  
C = NO DEBOUNCE  
D = 8.5mSEC RESPONSE DELAY.

MASTER ADDRESS	SLAVE LOC	SLAVE ADDRESS	S1				S2	S3	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15	J16
			1	2	3	4	5	6	OUT	OUT	A/B	A/B	A/B	A/B	A/B	A/B	A/B	C/D	C/D	C/D	C/D	C/D	C/D	C/D

REFER TO PRODUCT INSTRUCTION E93-913-6 FOR FURTHER INFORMATION.

AL760273A SHT. 24  
CAD FILE - 7J030837

*M. Schrotter*

NETWORK 90



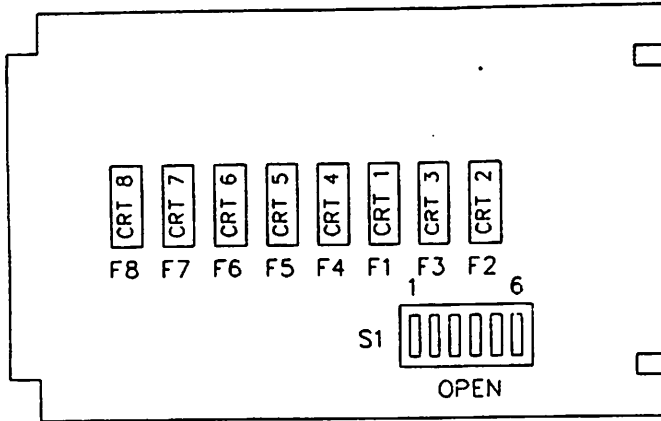
7/N00175





# DIGITAL SLAVE OUTPUT MODULE SWITCH SETTINGS

NDS001, 02/03

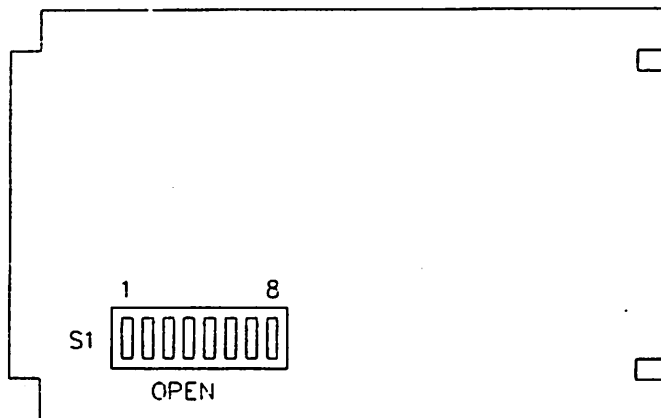


MODULE	OUTPUT TYPE
NDS001	24VAC-240VAC
NDS002	4VDC-50VDC
NDS003	5VDC-160VDC

**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECT ADDRESS; 6 = LSB (ADDRESS 1 TO 63 ONLY)
3. F1 TO F8 FOR NDS001 - 7.0 AMP SLOW BLOW  
FOR NDS002 - 4.0 AMP NORMAL  
FOR NDS003 - 1.5 AMP NORMAL

NDS004



MODULE	OUTPUT TYPE
NDSM04	24VDC

**NOTES:**

1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECT ADDRESS; 8 = LSB (ADDRESS 1 TO 63 ONLY)

MASTER ADDRESS			SW1								F1 TO F8							
SLAVE TYPE	SLAVE LOC	SLAVE ADD	1	2	3	4	5	6	7	8	F1	F2	F3	F4	F5	F6	F7	F8

REFER TO PRODUCT INSTRUCTION E93-913-10 FOR FURTHER INFORMATION

AL760273B SHT. 27  
CAD FILE - 7J080843

*M. S. ...*

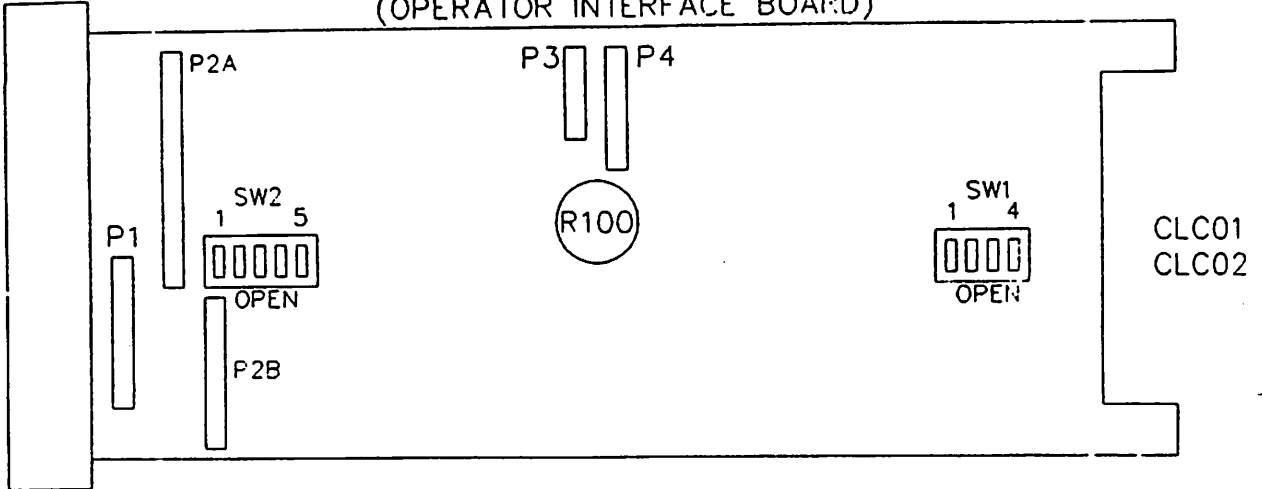
NETWORK 90



7/N00175



# LOOP COMMAND CONTROLLER SWITCH SETTINGS (OPERATOR INTERFACE BOARD)



**NOTES:**

1. SWITCH OPEN = LOGIC 1
2. R100 ADJUSTS BARGRAPH INTENSITY (ADJUST IN POWER-UP CONDITION)  
 DECREASE INTENSITY - ADJUST CLOCKWISE  
 INCREASE INTENSITY - ADJUST COUNTERCLOCKWISE
3. SW1 OPTIONS

OPTION	SETTING	DESCRIPTION	CUSTOMER SETTING
ANALOG INPUT DISPLAY	SW1-2,3 CLOSED	ANALOG INPUT TO BE GENERATED EXTERNALLY IN MANUAL OVERRIDE MODE.	
	SW1-1,4 OPEN		
	SW1-2,3 OPEN	ANALOG INPUT TAKEN FROM ANALOG OUTPUT OF INTERFACE BOARD IN MANUAL OVERRIDE MODE.	
	SW1-1,4 CLOSED		

SEE DWG. AL105033 SHT. 30 FOR MORE DETAILS.

REFER TO PRODUCT INSTRUCTION E92-500-1 FOR FURTHER INFORMATION

AL760273A SHT. 29  
 CAD FILE - 73231030

*M. Sch...*

NETWORK 90



7/N00175

# LOOP COMMAND CONTROLLER SWITCH SETTINGS

## (OPERATOR INTERFACE BOARD)

NOTES: (CON'T)

### 4. SW2 OPTIONS

OPTION	SETTING	DESCRIPTION	CUSTOMER SETTING
DISPLAY TEST	SW2-5 CLOSED SW2-2 CLOSED	CONTROLLER FRONT DISPLAY WILL SEQUENCE THROUGH A GROUP OF INITIAL TEST DISPLAYS.	
	SW2-5 OPEN SW2-2 OPEN	TEST DISPLAY DISABLED.	
CUSTOMER DEFINABLE TAG	SW2-5 CLOSED SW2-1 CLOSED	CUSTOMER CAN PROGRAM LOOP TAGS AND ENGINEERING UNITS FOR PROCESS VARIABLE, AND INTERNAL/EXTERNAL SET POINTS.	
	SW2-5 OPEN SW2-1 OPEN	CUSTOMER TAG AND ENGINEERING UNITS PROGRAMMING DISABLED.	
NORMAL MODE	SW2-1 CLOSED	IN NORMAL MODE, ANALOG INPUT No.3 IS DISPLAYED ON THE OUT SCALE.	
	SW2-1 OPEN	IN NORMAL MODE, THE CONTROL OUTPUT IS DISPLAYED ON THE OUT SCALE.	
MANUAL OVERRIDE	SW2-2 CLOSED	IN MANUAL OVERRIDE, AN ANALOG INPUT APPEARS ON THE VAR SCALE.	
	SW2-2 OPEN	IN MANUAL OVERRIDE, AN ANALOG INPUT APPEARS ON THE OUT SCALE.	
REVERSE ACTING	SW2-3 CLOSED	REVERSE ACTION IN EFFECT. CAUSES A REVERSE DISPLAY OF THE OUTPUT BARGRAPH AND REVERSES THE DIRECTION OF THE MANUAL OVERRIDE CURRENT OUTPUT.	
	SW2-3 OPEN	NO REVERSE ACTION.	
AUDIBLE ANNUNCIATION	SW2-4 OPEN	AUDIBLE ANNUNCIATION (BEEP) PRESENT WHEN ALARM CONDITION EXISTS.	
	SW2-4 CLOSED	DISABLES AUDIBLE ANNUNCIATOR (BEEP)	

REFER TO PRODUCT INSTRUCTION E92-500-1 FOR FURTHER INFORMATION

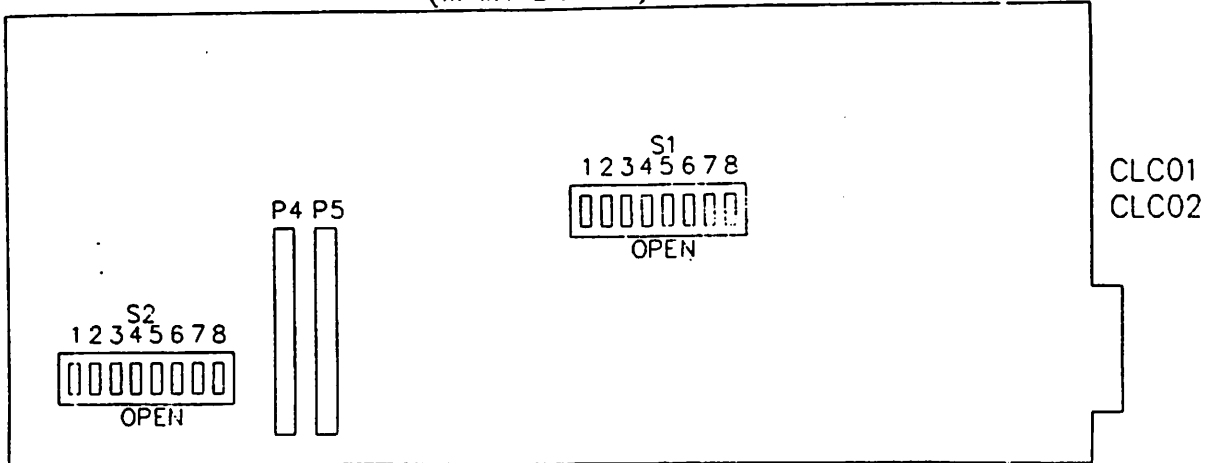
AL760273A SHT. 30  
CAD FILE - 73231033

NETWORK 90



7/N00175

# LOOP COMMAND CONTROLLER SWITCH SETTINGS (MAIN BOARD)



**NOTES:**

1. SWITCH OPEN = LOGIC 1
2. S2 - 4 TO 8 SELECTS ADDRESS (8 = LSB)
  - S2 - 1 - CLOSED = NORMAL OPERATION  
OPEN = FACTORY TEST ENABLED
  - S2 - 2 - OPEN = EEPROM INITIALIZED  
CLOSED = NORMAL OPERATION
  - S2 - 3 - OPEN = GENERAL PURPOSE SWITCH (HIGH)  
CLOSED = GENERAL PURPOSE SWITCH (LOW)
 (REFERENCE EXECUTIVE BLOCK 240 AND FUNCTION CODE 53 IN FUNCTION CODE MANUAL E93-900-20)
3. S1 - ANALOG OUTPUT OPTIONS

OPTIONS	SETTING	DESCRIPTION	CUSTOMER SETTING
ANALOG OUTPUT No.1	S1-1 OPEN	YIELDS 5.25V OUTPUT FOR POWER UP. YIELDS 0.75V OUTPUT FOR POWER UP.	
	S1-1 CLOSED		
	S1-2 OPEN	HOLDS LAST ANALOG OUTPUT VALUE ON TIMEOUT.	
	S1-3 CLOSED		
ANALOG OUTPUT No.2	S1-4 OPEN	YIELDS 5.25V OUTPUT FOR POWER UP. YIELDS 0.75V OUTPUT FOR POWER UP.	
	S1-4 CLOSED		
	S1-5 OPEN	HOLDS LAST ANALOG OUTPUT VALUE ON TIMEOUT.	
	S1-6 CLOSED		
	S1-5 CLOSED	GOES TO POWER-UP VALUE SET BY S1-4 ON TIMEOUT.	
	S1-6 OPEN		

REFER TO PRODUCT INSTRUCTION E92-500-1 FOR FURTHER INFORMATION

AL760273A SHT. 31  
CAD FILE - 73231031

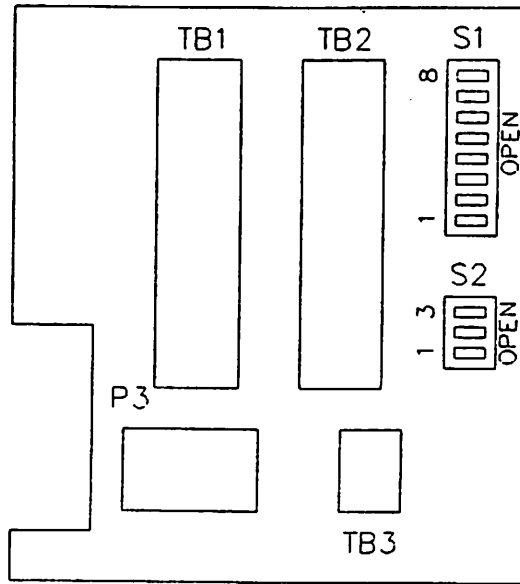
*M. S. ...*

NETWORK 90



7/N00175

# LOOP COMMAND CONTROLLER SWITCH SETTINGS (TERMINATION BOARD)



**NOTES:**

1. SWITCH OPEN = LOGIC 1
2. S2 OPTIONS

OPTION	SETTING	DESCRIPTION	CUSTOMER SETTING
DIGITAL INPUT No. 1	S2-3 OPEN CLOSED	SET FOR ISOLATED INPUT SET FOR NON-ISOLATED INPUT	
DIGITAL INPUT No. 2	S2-2 OPEN CLOSED	SET FOR ISOLATED INPUT SET FOR NON-ISOLATED INPUT	
DIGITAL INPUT No. 3	S2-1 OPEN CLOSED	SET FOR ISOLATED INPUT SET FOR NON-ISOLATED INPUT	

SEE DWG. AL105033 SH. 33 FOR MORE DETAILS.

REFER TO PRODUCT INSTRUCTION E92-500-1 FOR FURTHER INFORMATION

AL760273A SH. 32  
CAD FILE - 73231032

*M. Schindler*

NETWORK 90



7/N00175

# LOOP COMMAND CONTROLLER SWITCH SETTINGS (TERMINATION BOARD)

NOTES: (CON'T)

## 3. S1 OPTIONS

OPTION	SETTING	DESCRIPTION	CUSTOMER SETTING
ANALOG INPUT No.1	S1-10 OPEN CLOSED	FOR VOLTAGE INPUT. FOR CURRENT INPUT.	
ANALOG INPUT No.2	S1-9 OPEN CLOSED	FOR VOLTAGE INPUT. FOR CURRENT INPUT.	
ANALOG INPUT No.3	S1-8 OPEN CLOSED	FOR VOLTAGE INPUT FOR CURRENT INPUT.	
ANALOG INPUT No.4	S1-7 OPEN CLOSED	FOR VOLTAGE INPUT. FOR CURRENT INPUT.	
OPERATOR INTERFACE DISPLAY OPTION	+S1-6 & S1-5 OPEN  CLOSED	DISPLAY OPTION ON THE MAIN OPERATOR INTERFACE BOARD USING ANALOG INPUT No.3 IS NON-ACTIVATED.  DISPLAY OPTION ON THE MAIN OPERATOR INTERFACE BOARD USING ANALOG INPUT No.3 IS ACTIVATED.	
SECONDARY UNIT DISPLAY OPTION	+S1-4 & S1-3 OPEN  CLOSED	DISPLAY OPTION OF A SECONDARY UNIT DISPLAY STATION USING ANALOG INPUT No.4 IS NON-ACTIVATED.  DISPLAY OPTION OF A SECONDARY UNIT DISPLAY STATION USING ANALOG INPUT No.4 IS NON-ACTIVATED.	
ANALOG OUTPUT No.1	S1-2 OPEN CLOSED	FOR CURRENT OUTPUT. FOR VOLTAGE OUTPUT.	
ANALOG OUTPUT No.2	S1-1 OPEN CLOSED	FOR CURRENT OUTPUT. FOR VOLTAGE OUTPUT.	

- \* SEE ANALOG INPUT DISPLAY OPTION ON SHEET 29 FOR ADDITIONAL SWITCH SETTINGS ON THE INTERFACE BOARD.
- + SEE SHEETS 13 AND 14 FOR ADDITIONAL SWITCH SETTINGS ON THE NDCS03.

REFER TO PRODUCT INSTRUCTION E92-500-1 FOR FURTHER INFORMATION

AL760273A SHT. 33  
CAD FILE- 73231034

*M. Schuler*

NETWORK 90

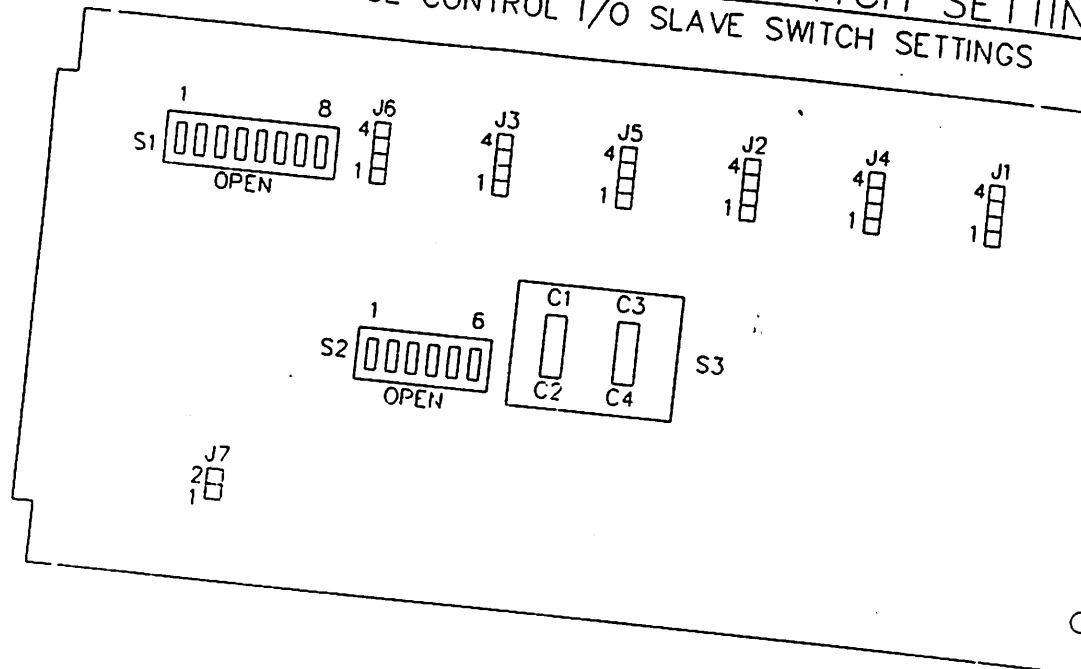


7/NO0175

# CONTROL I/O SLAVE MODULE SWITCH SETTINGS

## QUICK RESPONSE CONTROL I/O SLAVE SWITCH SETTINGS

NCIS02  
NORS02



1. SWITCH SET OPEN = LOGIC 1
  2. S1-4 TO 8 SELECT ADDRESS (POS'N 8 = LSB)
- NOTE: DO NOT USE ADDRESS ZERO**
3. S1 - 1 TO 3 NOT USED
  4. ANALOG OUTPUT OPTIONS

OPTIONS	DEFAULT	TIMEOUT OPTION	POWER-UP STATE	OUTPUT TYPE
ANALOG o/p 1	S2-1 CLOSED = 0% S2-1 OPEN = 100%	S2-2 CLOSED = POWER-UP S2-2 OPEN = HOLD	S2-3 CLOSED = 0% S2-3 OPEN = 100%	C1 = CURRENT C2 = VOLTAGE
ANALOG o/p 2	S2-4 CLOSED = 0% S2-4 OPEN = 100%	S2-5 CLOSED = POWER-UP S2-5 OPEN = HOLD	S2-6 CLOSED = 0% S2-6 OPEN = 100%	C3 = CURRENT C4 = VOLTAGE

SEE DWG AL760273 SHT. 35 FOR MORE DETAILS.

AL760273A SH1.34  
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