Bailey® infi 90™

L760273

Reference Manual

REFERENCE MANUAL
OF
MODULE SWITCH AND JUMPER SETTINGS
FOR
NETWORK 90 / INFI 90

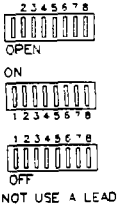
Bailey CANADA Bailey Canada Inc.

NDEX FOR MODULE SW TCH SETT NGS

NOMENCLATURE	SHEET NUMBER	NOMENCLATURE	SHEET NUMBER
CBC	74 75,76 77,78,79	MQPC01	11
CLC01	29 30,31 32,33	MQPC02	11
CLC02	29 30 31 32,33	MQRS02	34 35
CLC03	29 30,31 32 33	MR 002	66
CLC04	29 30 31 32,33	MSPM01	8 9
CSC	50 51,52 53	NB MC2	1
EATM01	96	NBTM01	7
EBMM01	93 94	N CT01	46 47
EDTM01	95	N T01	54 55
SAC01	84 85 86	N T02	FUTURE
MAMM03	37	N PT01	89 90
MAOM01	19	N PTC2	FUTURE
MAS 02	36	N TT01	48
MASM01	17	NL MC3	1,2,7
MASM02	18	NN S01	43 44
MASM03	18	NNPM01	67
MASM04	18	N PCT01	6
MASD01	71	NPPT01	87 88
MC SC2	34 35	NPTM01	2
MCDMC3	11	NS MC	4 5
MCDM04	11		
MDS 02	40		
MCSM04	24		
MCSM05	25		
MDS001	27		
MDS002	27		
MDS003	27		
MDSC04	27		
MFCS01	91		
MHSS01	69 70		
MLMM02	22		
MMFC03	20		
MMFC04	38		
MMFC05	39		
MMFP01	72, 73		
MMFP02	72, 73		
MMFP03	FUTURE		
MMPC01	20		

GENERAL N TES

1 SWITCH POS T NS " PEN FF AND "NOT ON" APE EQU VALENT SEE BELOW



2 DO NOT USE A LEAD PEN L T SLIDE THE SWITCHES GRAPH TE BU LD UP CAN CAUSE A SHORT CROU T SE A PROBE OR OTHER SU TABLE JBJ T

NETWORK 90/NF 30

Bailey CANADA

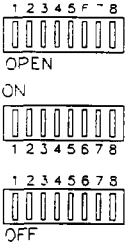
97600 006

AL760273K SHT P1
CAD FLE— 760273P1

NDEX FOR MODULE SW TCH SETT NGS CONT

GENERAL NOTES

1 SWITCH POS NS "OPEN", 'OFF AND "NOT ON AP= EQU VALENT SEE BELOW

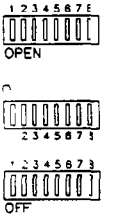


2 DO NOT USE A LEAD PENCL TO SL DE THE SW TCHES GRAPH TE BU LD UP CAN CAUSE A SHORT C RCU T USE A PROBE OR OTHEP SU TABLE OBJECT

NDEX FOR MODULE SW TCH SETTNGS cont

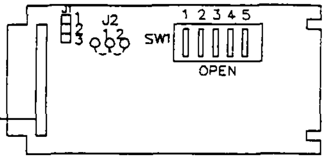
GENERAL NOTES

1 SW TCH POS TIONS "OPEN" "OFF" AND "NOT ON" ARE EQU VALENT SEE BELOW



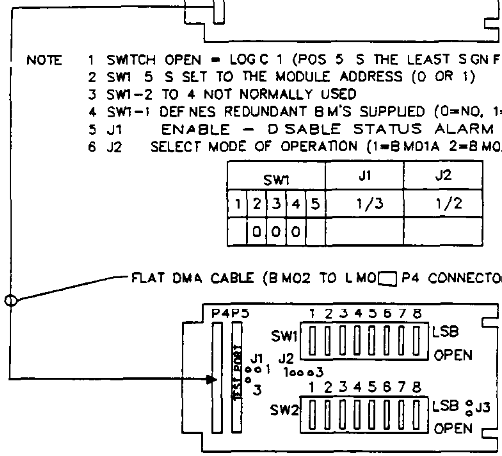
2 DO NOT USE A LEAD PENC L TC SLIDE THE SWITCHES GRAPH TE BU LE JP CAN CAUSE A SHOPT C RCU T USE A PROBE OP OTHER SL TABLE OBJECT

BUS AND LOOP NTERFACE MODULE SW TCH SETT NGS



NOTE 1 SWITCH OPEN = LOG C 1 (POS 5 S THE LEAST S GN F CANT B T)
2 SW1 5 S SET TO THE MODULE ADDRESS (0 OR 1)
3 SW1-2 TO 4 NOT NORMALLY USED
4 SW1-1 DEF NES REDUNDANT B M'S SUPPLIED (0=NO, 1=YES)
5 J1 ENABLE – D SABLE STATUS ALARM (1 2 ENABLE, 2-3-D SABLE)
6 J2 SELECT MODE OF OPERATION (1=B M01A 2=B M02)

SW1					J1	J2
1	2	3	4	5	1/3	1/2
	0	0	0			



NOTE 1 SWITCH OPEN = LOGIC 1 (POS 8 S THE LEAST S GN F CANT B T)
2 SW2 -3 TO 8 SELECTS PCU NODE ADDRESS (0 63)
-1 OPEN – ENABLES LIM TO CONTINUE RUNN NG 30 SECONDS AFTER A DOUBLE LOOP FAULT OCCURS
FOR TROUBLE SHOOTING PURPOSES ONLY SE· EN 670-N90 2667
CLOSED – NORMAL OPERATION
3 SW1 S D AGNOSTIC/DISPLAY SWITCH
4 REFER TO SHT. 3 FOR STANDARD JUMPER SETTINGS (NOT APPI CABLE TO NL M03)

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						

FOR MORE INFORMATION ON NBIM02/NLIM02 SEE PRODUCT NSTRUCTION E93 908-1
FOR MORE NFORMATION ON INB M02/INLIM03 SEE PRODUCT NSTRUCTION E96-605

AL760273E SHT 1
CAD FILE- 76027301

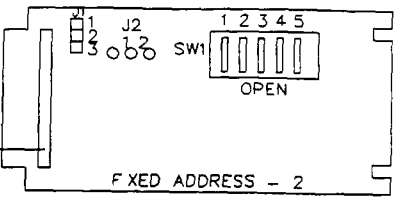
NETWORK 90/NF 90

Bailey CANADA

7/A100175

POINT TABLE AND LOOP INTERFACE MODULE SWITCH SETTINGS

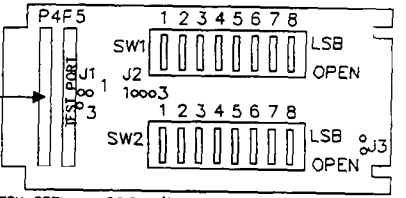
PART OF CUO1 PC 01



NOTE 1 SW1 IS NOT NORMALLY USED (DIAGNOSTIC/DISPLAY LEDS)
2 J1 ENABLE - DISABLE STATUS ALARM (1 2 ENABLE 2 3-DISABLE)
3 J2 = NOT USED

SW1					J1
1	2	3	4	5	1/3
X	0	0	0	X	

FLAT DMA CABLE (NPTM01A/NPTM01 TO NLM02/NLM03 P4 CONNECTOR)



NOTE 1 SWITCH OPEN = LOGIC 1 (POS 8 IS THE LEAST SIGNIFICANT BIT)
2 SW2 -3 TO 8 SELECTS PCU NODE ADDRESS (0 63)
-1 OPEN - ENABLES UM TO CONTINUE RUNNING 30 SECONDS AFTER A DOUBLE LOOP FAULT OCCURS FOR TROUBLE SHOOTING PURPOSE ONLY SEE EN 670-N90-2667
CLOSED - NORMAL OPERATION
3 SW1 IS DIAGNOSTIC/DISPLAY SWITCH ONLY.
4 REFER TO SHT 3 FOR STANDARD JUMPER SETTINGS (NOT APPLICABLE TO NLIM03)

SW1 (TYP CAL)								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						

SEE PRODUCT INSTRUCTION E93-905 FOR MORE INFORMATION ON NLIM02/NPTM01A
SEE PRODUCT INSTRUCTION E96-520 FOR MORE INFORMATION ON NLIM03/NPTM01

AL760273E SHT 2
CAD FILE- 76027302

NETWORK 90/INF 90

Bailey CANADA

7/A100175

MEMORY JUMPER SETTINGS

NL M02

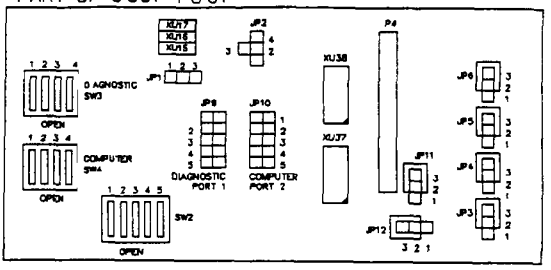
	STANDARD POS T ON	ALTERNATE POS TION
CH P TYPE=U4	25L32 2532/99401	2732
J1	2 [+ +] 1 3 +	2 [+] + 1 3 [+]
J2	1 2 3 [+ +] +	1 2 3 + [+ +]

J3	ALWAYS NSERTED (USED FOR COMPUTER ZED TEST SETUP ONLY)

SERIAL INTERFACE MODULE SWITCH SETTINGS

PART OF CU01 PC01

NSIM01
NS M01



NOTES

1. SWITCH SET OPEN = LOGIC 1
2. SW2 SELECT COMPUTER PORT ADDRESS
3. SW3 SELECT PORT OPTIONS AND SW4 SELECTS PORT OPERATION OPTIONS

SW3

NUMBER OF DATA BITS	NUMBER OF STOP BITS	TYPE OF PARITY	POLE NUMBER *1	2	3	4
7	2	EVEN	0	0	0	0
7	2	ODD	0	0	1	
7	1	EVEN	0	1	0	
7	1	ODD	0	1	1	
8	2	NO	1	0	0	
8	1	NO	1	0	1	
8	1	EVEN	1	1	0	
8	1	ODD	1	1	1	

* POLE 1 OF SW3 IS NOT USED

SW4

OPTIONS	POLE NUMBER 1	2	3	4 *
NORMAL MODE	0			
ECHO CHECK MODE	1			
COMMAND & REPLY CHECKSUMS		0		
NO COMMAND & REPLY CHECKSUMS		1		
SIM COMPUTER PORT ADDRESS SELECT				
PROTOCAL DISABLED			0	
PROTOCAL ENABLED			1	
MOST SIGNIFICANT BIT OF SIM COMPUTER PORT ADDRESS				X

X = DON'T CARE

SW2

COMPUTER PORT ADDRESS DEFINITION	POLE NUMBER 1	2	3	4	5
ADDRESS = (SW4 POLE 4) & (SW2 POLES 1-5)	X	X	X	X	X

ONLY VALID WHEN SW4 POLE 3 = 1

4. JP1 AND JP2 SELECT ROM TYPES

JUMPER	XU15 ONLY #2732	XU15 ONLY #2532	XU15,16,17 #2564	XU15,16,17 68764
JP1	1 2 3 + + +	1 2 3 + + +	1 2 3 + + +	1 2 3 + + +
JP2	+ 4 3+ + 2 + 1	+ 4 3+ + 2 + 1	+ 4 3+ + 2 + 1	+ 4 3+ + 2 + 1

5. JP3 TO JP6 AND JP9 TO JP12 OPTIONS

OPTION	PORT 1 / PORT 2	JP3 JP5	JP4 JP6	JP 1 JP12
SIM01 MONITORS RTS LINE		PIN 1 TO PIN 2		
SIM01 DOES NOT MONITOR RTS LINE		PIN 2 TO PIN 3		
SIM01 MONITORS DTR LINE			PIN 1 TO PIN 2	
SIM01 DOES NOT MONITOR DTR LINE			PIN 2 TO PIN 3	
SIM01 PROVIDES CTS/DSR SIGNAL				PIN 1 TO PIN 2
CTS/DSR LINE SET TO +15V				PIN 2 TO PIN 3

	BAUD	JP9 (PORT 1)	JP10 (PORT 2)
1	19 200	○ ○	○ ○
2	9 600	○ ○	○ ○
3	2,400	○ ○	○ ○
4	1 200	○ ○	○ ○
5	300	○ ○	○ ○

SEE SHEET 5 FOR FURTHER DETAILS

AL760273D SHT. 4
CAD FILE- 76027304

NETWORK 90/NF 90

Bailey CANADA

7/A100175

SERIAL INTERFACE MODULE SWITCH SETTINGS CONTINUED

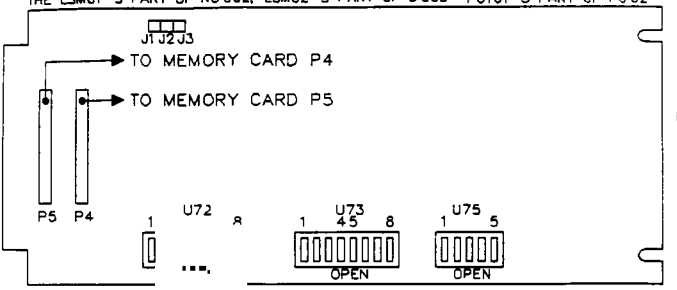
TYPICAL SETTINGS

SW2					SW3				SW4				JP9	JP10	JP1	JP2	JP3	JP4	JP5	JP6	JP11	JP12
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

SEE PRODUCT INSTRUCTION E93 905 FOR MORE INFORMATION ON NSM01
SEE PRODUCT INSTRUCTION E96-620 FOR MORE INFOMATION ON NSM01

LOOP STORAGE MODULE SWITCH SETTINGS

THE LSM01 IS PART OF NCU02, LSM02 IS PART OF CU03 PCT01 IS PART OF PC02



NOTES

1 SWITCH SET "OPEN" = 1

2 SWITCH U75 SELECTS PORT ADDRESS. POSN 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.

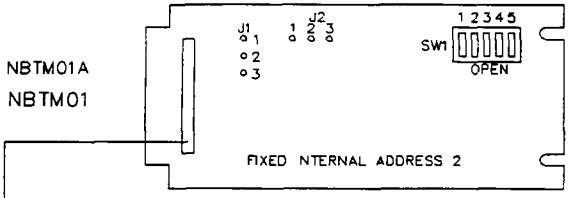
POLE 4 = PORT 1 OPTION (1 = UTILITY/0 = COMPUTER)
POLE 5 = MODEM PASSWORD PROTECTION (1 = ON/0 = OFF)
POLE 6 = PORT ADDRESSING MODE (1 = ON/0 = OFF)
POLE 7 = CHECKSUMMING (1 = ON/0 = OFF)
POLE 8 = PRIMARY/SECONDARY (DIFFERENT BETWEEN REDUNDANT LSM'S/ PCT'S)

REFER TO PROGRAMMER'S REFERENCE MANUAL E93–905–2 FOR FURTHER INFORMATION ON NLSM01 NLSM02
SEE PRODUCT INSTRUCTION E96–621 FOR MORE INFORMATION ON NPCT01

00 44 05 04 11 07

BUS TRANSFER AND LOOP INTERFACE MODULE SWITCH SETTINGS

PART OF CIU02 AND CIU03, PPG01 OR PPG02, PCI02, PPR01

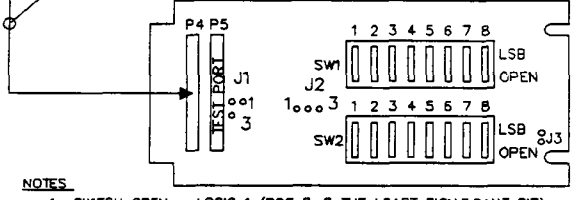


NOTES:

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

FLAT DMA CABLE (NBTM01A/INBTM01 TO NLM02/NLIM03 P4 CONNECTOR)



NOTES

1. SWITCH OPEN = LOGIC 1 (POS 8 IS THE LEAST SIGNIFICANT BIT)
2. SW2 -3 TO 8 SELECTS PCU NODE ADDRESS (0 - 63)
   1 OPEN -ENABLES LIM TO CONTINUE RUNNING 30 SECONDS AFTER A DOUBLE LOOP FAULT OCCURS FOR TROUBLE SHOOTING PURPOSES ONLY SEE EN 670-N90 2667
   CLOSE - NORMAL OPERATION
3. SW1 IS DIAGNOSTIC/DISPLAY SWITCH
4. REFER TO SHT 3 FOR STANDARD JUMPER SETTINGS (NOT APPLICABLE TO NLIM03)

SW1 (TYP CAL)								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 ON NBTM01A/NLM02

SEE PRODUCT INSTRUCTION E96 621 FOR MORE INFORMATION ON NBTM01/NLM03

NETWORK 90/INF 90

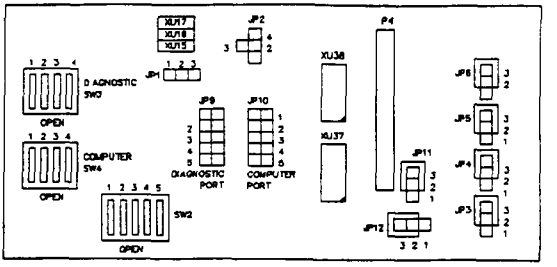
Bailey CANADA

7/A100175

AL760273F SHT. 7
CAD FILE- 76027307

SER AL PORT MODULE SW TCH SETT NGS

NSPM01
MSPM01



NOTES

1 SWITCH SET OPEN – LOG C 1
2 SW2 SELECT ADDRESS (5–LSB)
3 SW3 SELECT PORT OPT ONS AND SW4 SELECTS PORT OPERAT ON OPTIONS

SW3

NUMBER OF DATA BITS	NUMBER OF STOP BITS	TYPE OF PAR TY	POLE NUMBER *1	2	3	4
7	2	EVEN	0	0	0	
7	2	ODD	0	0	1	
7	1	EVEN	0	1	0	
7	1	ODD	0	1	1	
8	2	NO	1	0	0	
8	1	NO	1	0	1	
8	1	EVEN	1	1	0	
8	1	ODD	1	1	1	

* POLE OF SW3 S USED TO SELECT THE FOLLOWING
1– WITH SW3 IN THIS POSITION FRAMING AND PAR TY OPTIONS OF BOTH PORTS 1 AND 2 ARE SET BY SW3 ACCORDING TO TABLE 3.
0– PORT 1 (DIAGNOSTIC PORT) FRAMING AND PAR TY OPTIONS ARE SET BY SW3 ACCORDING TO TABLE 3 BUT PORT 2 FRAM NG OPTIONS ARE SET TO 8 DATA BITS, 1 STOP BIT AND EVEN PARITY

SW4

OPTIONS	POLE NUMBER 1	2	3	4
BINARY CODE	0			
ASCII CODE	1			
ROM SELF TEST DURING NORMAL OPERATION		0		
NOT ALLOWED				
NORMAL OPERATION			0	
ECHO CHECK				
COMMAND AND REPLY CHECKSUMS USED				0
COMMAND AND REPLY CHECKSUMS NOT USED				1

4. JP1 AND JP2 SELECT ROM TYPES

JUMPER	XU15 ONLY #2732	XU15 ONLY #2532	XU15,16,17 #2564	XU15,16,17 68764
JP1	1 2 3	1 2 3	1 2 3	1 2 3
JP2	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1

5. JP3 TO JP6 AND JP9 TO JP12 OPTIONS

OPTION	PORT 1 / PORT 2	JP3 / JP6	JP4 / JP5	JP11 / JP12
SPM0 MONITORS RTS LINE		PIN 1 TO PIN 2		
SPM01 DOES NOT MONITOR RTS LINE		PIN 2 TO PIN 3		
SPM01 MONITORS DTR LINE			PIN TO PIN 2	
SPM01 DOES NOT MONITOR DTR LINE			PIN 2 TO PIN 3	
SPM01 PROVIDES CTS/DSR SIGNAL				PIN 1 TO PIN 2
CTS/DSR LINE SET TO +15V				PIN 2 TO PIN 3

	BAUD	JP9 (PORT 1)	JP 0 (PORT 2)
	19 200	○ ○	○ ○
2	9 600	○ ○	○ ○
3	2,400	○ ○	○ ○
4	1 200	○ ○	○ ○
5	300	○ ○	○ ○

SEE SHEET 9 FOR FURTHER DETA LS

AL7602730 SHT 8
CAD FILE– 76027308

NETWORK 90/NF 90

Bailey CANADA

7/A100175

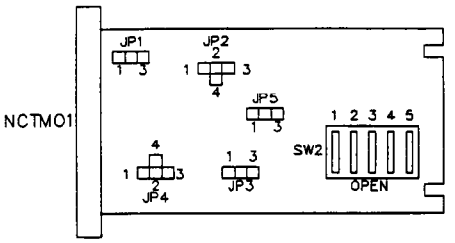
SERIAL PORT MODULE SWITCH SETTINGS CONTINUED

TYPICAL SETTINGS

SW2					SW3				SW4				JP9	JP10	JP1	JP2	JP3	JP4	JP5	JP6	JP11	JP12
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

SEE PRODUCT INSTRUCTION E93-905-1 FOR MORE INFORMATION ON NSPM01
SEE PRODUCT INSTRUCTION FOR MORE INFORMATION ON MSPM01

CONFIGURATION AND TUNING MODULE SWITCH SETTINGS



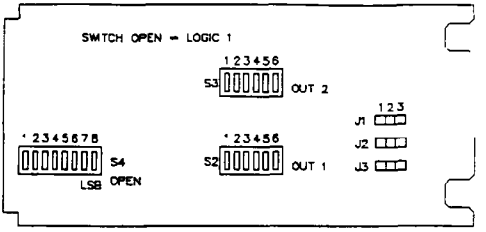
NOTE 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)
2) SW2 IS THE MODULE ADDRESS WHICH IS NORMALLY SET TO 2

MODLUE ADDRESS	SW2				
	1	2	3	4	5
TYPICAL	0	0	0	1	0

JUMPER TABLE			
JUMPER	POSITIONS CLOSED STD. (25L32) ALT. (2532)	ALT (2732)	COMP. DES.
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

VLS CONTROLLER MODULE SWITCH SETTINGS

VLS
NCOM02/03/04
NQRC01/02
MCOM03/04
MQRC01/02



NOTES 1) SWITCH OPEN = LOGIC 1
2) S4 ADDRESS SWITCH (POSITION 8 IS LEAST SIGNIFICANT)
S4-1 TO S4-3 SELF TEST = NORMALLY CLOSED
S4-4 TO S4-8 ADDRESS (0-31)
3) S2 AND S3 ANALOG OUPUT CONFIGURATION
S2-OUTPUT #1 S3-OUTPUT #2
S_-1 OPEN 5.25V ON POWER-UP
CLOSED 0.75V ON POWER-UP
S_-2,3 2 OPEN AND 3 CLOSED HOLD LAST VALUE
2 CLOSED AND 3 OPEN POWER UP SETTING
S_-4,5,6 4 AND 6 CLOSED AND 5 OPEN VOLTAGE OUTPUT
4 AND 6 OPEN AND 5 CLOSED CURRENT OUTPUT

CAUTION
USER MUST VERIFY THAT SWITCHES S2 & S3 ARE PROPERLY SET UP FOR CURRENT/VOLTAGE ALONG WITH TU DPSHUNT CONFIGURATION PRIOR TO POWER UP, OTHERWISE POSSIBLE DAMAGE TO MODULE COULD OCCUR. FOR NON-CONFIGURED SYSTEMS ENSURE THAT S2 & S3 ARE ALL OPEN

4) J1, J2, J3 SELECT DIGITAL INPUT VOLTAGE (1-2=24VDC, 2-3=125VDC)

S4								S2						S3						J1	J2	J3
1	2	3	4	5	6	7	8	1	2	3	4	5	6	1	2	3	4	5	6	1/3	1/3	1/3
0	0	0																				

FOR FURTHER INFORMATION ON NCOM02/03/04 SEE PRODUCT INSTRUCTION E93-906-4
FOR FURTHER INFORMATION ON NQRC01 SEE PRODUCT INSTRUCTION E93 906-3
FOR MORE INFORMATION ON MCOM03/04, MQRC01/02 SEE PRODUCT INSTRUCTION E96 207

AL760273E SHT. 11
CAD FILE- 76027311

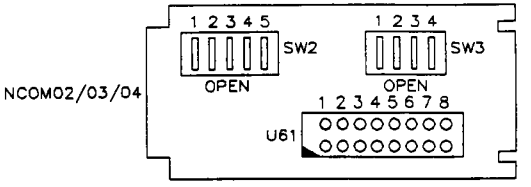
NETWORK 90/INF 90

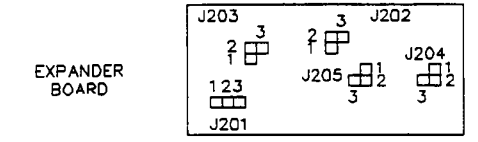
Bailey CANADA

7/A100175

CONTROLLER MODULE SWITCH SETTINGS

TYPE NCOM02/03/04





SW2					SW3				U61								EXPANDER J2DX (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													

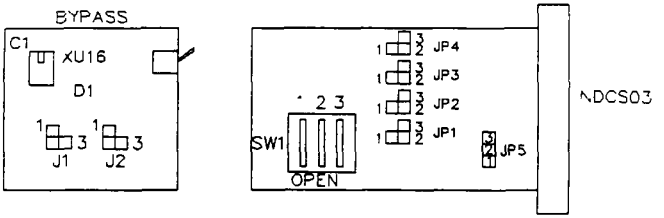
NOTE 1 SWITCH OPEN = LOGIC 1 (POS. 5 IS THE LEAST SIGNIFICANT BIT)
2 SW2 IS SET TO THE MODULE ADDRESS (0 THRU 31)
3 SW3-3 SELECTS POWER-UP OPTION FOR AO#1 (0=0%, 1=100%)
SW3-1, 2, 4 ARE NORMALLY CLOSED
4 U61-1, 2, 3 SELECTS TYPE OF AO#1 (010 = CURRENT 101 = VOLTAGE)
5 U61-4, 5, 6 SELECTS TYPE OF AO#2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

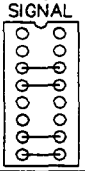
DIGITAL CONTROL SWITCH SETTINGS

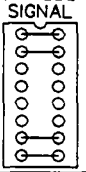


NOTE 1 SWITCH OPEN – LOGIC 1 (POS 3 IS THE LEAST SIGNIFICANT BIT)
2 SW1 IS SET TO THE STATION ADDRESS (0 TO 7)
3 BY-PASS CARD – XU16 DIPSHUNT (SEE BELOW)
J1 AND J2 NORMALLY (1–2)
4 JP1 TO JP5 SELECT OPTIONS PER TABLE
5 JP3 SELECTS VALUE TO BE DISPLAYED ON OUTPUT METER DURING NORMAL OPERATION
6 JP4 SELECTS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





NOTE.
XU8 ON T.U. TYPE NTCS0☐
MUST ALSO BE CONFIGURED IN
CONJUNCTION WITH THIS
(REFER DL780010)

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

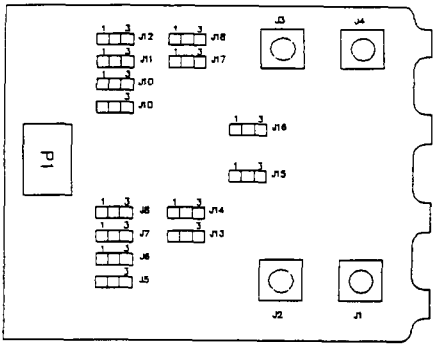
NETWORK 90/INF 90

AL760273C SHT 13
CAD FILE– 76027313

Bailey CANADA

7/A100175

PLANT LOOP /SUPER LOOP/ NF-NET TERMINATION UNIT



NTCL01
(6636997D1)

NOTES 1 THERE ARE TWO VERSIONS OF NTCL01's PLEASE NOTE ASSEMBLY NUMBER TO DETERMINE VERSION
SEE SHEET 63 FOR INFORMATION ON 6636997A1
(APPROXIMATE DATE OF BOARD CHANGES NOV 1990)

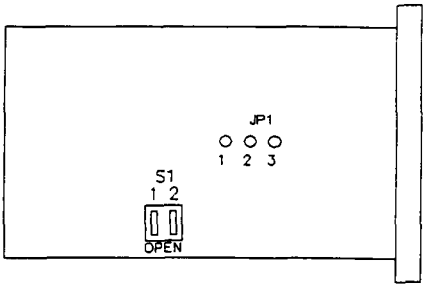
2 J1 TO J4 ARE BNC CONNECTORS FOR COAX CABLES.
J1 = LOOP 1 IN J4 = LOOP 2 IN
J2 = LOOP 1 OUT J3 = LOOP 2 OUT

3 J5 - J12 SELECTS MODULE TYPE (LM OR LS/NS)
(1 2) = LM
(2 3) = LS/NS

4. J13 TO J18 SELECTS CABLE TYPE (TWINAX OR COAX)
(1 - 2) = TWINAX
(2 - 3) = COAX

SEE PRODUCT INSTRUCTIONS E93 911 FOR MORE INFORMATION

DIGITAL INDICATING STATION SWITCH SETTINGS



IND S01

NOTES

1 SWITCH SET OPEN = LOGIC 1

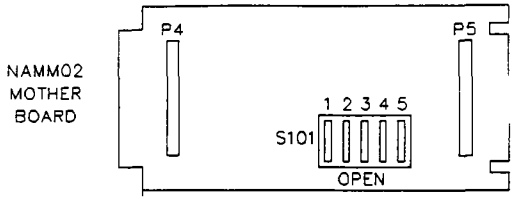
2 S1 SELECTS ADDRESS (2 = LSB)

STATION ADDRESS	S1-1	S1-2
8	0	0
9	0	1
10	1	0
11	1	1

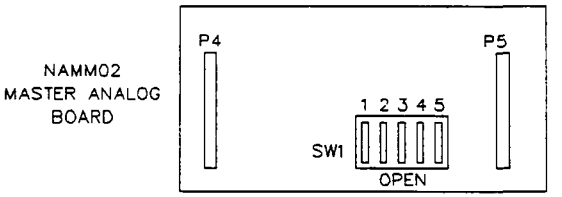
3 JP1 SELECT DISPLAY INTENSITY
1 = BRIGHT DISPLAY
3 = DIM DISPLAY

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

ANALOG MASTER MODULE SWITCH SETTINGS



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

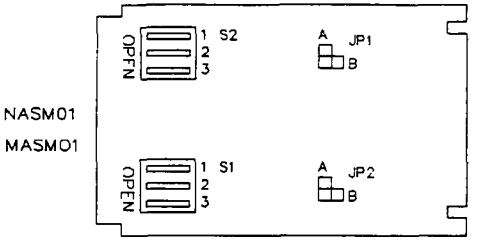


NOTES 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)
2) SW1 ON "ANALOG BOARD" SET FOR EAROM INITIALIZE MODE

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

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

REFER TO PRODUCT INSTRUCTION E93-912-4 FOR FURTHER INFORMATION ON NASM01
REFER TO PRODUCT INSTRUCTION E96-205 FOR FUTHER INFORMATION ON MASM01

AL760273D SHT.17
CAD FILE- 76027317

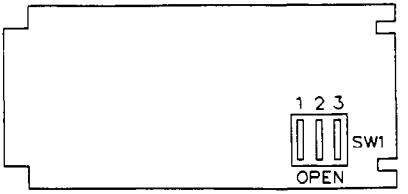
NETWORK 90/INFI 90

Bailey CANADA

7/A100175

LOW LEVEL ANALOG SLAVE MODULES SWITCH SETTINGS

SLAVE
NASM02/03/04
MASM02/03/04



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

TABLE 1

NOMENCLATURE	DESCRIPTION	PRODUCT INSTRUCTION #
NASM02	THERMOCOUPLE/mVOLT	E93-912-5
NASM03	100 Ω RTD	E93-912-6
NASM04	10 Ω RTD	E93-912-7
MASM02	THERMOCOUPLE/mVOLT	E96-205
MASM03	100 Ω RTD	E96-205
MASM04	10 Ω RTD	E96-205

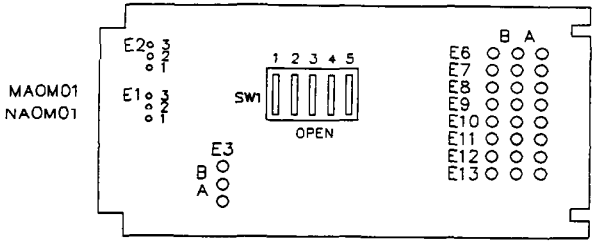
AL760273E SHT.18
CAD FILE- 76027318

NETWORK 90/INFI 90

Bailey CANADA

7/A100175

ANALOG OUTPUT MODULE SWITCH SETTINGS



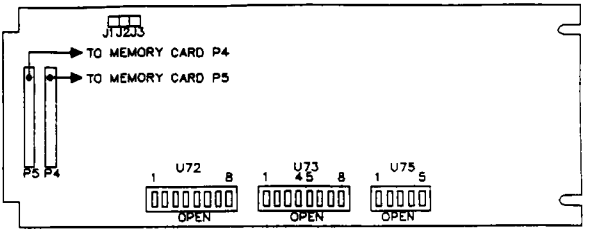
NOTES. 1) SWITCH OPEN = LOGIC 1 (POS 5 IS THE LEAST SIGNIFICANT BIT)
2) SW1 IS SET TO THE MODULE ADDRESS (0 TO 31)
3) E3 IS THE VOLTAGE RANGE (A – 1 5V/4 20mA, B – 0–10V)
4) E6–F13 SETS THE TYPE OF OUTPUT (A = VOLTAGE, B = CURRENT)

MEMORY TYPE USED	E1 AND E2
2532	2 & 3
25L32	2 & 3
2732	1 & 2
90401	2 & 3

REFER TO PRODUCT INSTRUCTION E93–912–3 FOR FURTHER INFORMATION ON NAOM01
REFER TO PRODUCT INSTRUCTION E96–206 FOR FUTHER INFORMATION ON MAOM01

MULT-FUNCTION CONTROLLER MODULE SWITCH SETTINGS

MMFC03
MMPC01
NMFC01
NMFC02
NMFC03
NMPC01
CPU
CARD



NOTE. -SLAVE ADDRESS 0 HAS LOWEST PRIORITY (AND 63 HIGHEST) RELATIVE TO SLAVE INTERRUPTS TO MFC

1 SWITCH SET "OPEN" = LOGIC 1

2 SWITCH U75 SELECTS MODULE ADDRESS (POSITION 5 = LSB)

NOTE. REDUNDANT MFC APPLICATIONS USE SAME ADDRESS.

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 = 3.6 K	15 = 19.2K

5 SWITCH U72 SELECTS OPERATING OPTIONS

POS'N 1 = SPECIAL OPERATIONS SWITCH - NORMALLY SET CLOSED

1,3 & 4 OPEN = SUPERLOOP MODE PLUS TIME STAMPING
1 & 4 OPEN = SUPERLOOP MODE
1 & 3 OPEN = PLANTLOOP MODE *

} SPECIAL INITIALIZATION PROCEDURES FOR NMFC03 ONLY REQUIRED ONCE ONLY (ALL OTHER POLES MUST BE CLOSED)

* THIS SWITCH SETTING IS USED TO INITIALIZE NVRAM CONFIGURATION SPACE
THIS ENABLES THE MODULES TO RECOVER FROM SOME ERROR MODES (MFC03 ONLY)

2 = ON-LINE CONFIGURATION = OPEN
3 = INHIBIT NVRAM CHECK = OPEN
4 = INHIBIT ROM CHECK(MEMORY) = OPEN
5 = INHIBIT ROM CHECK(CPU) = OPEN
6 = COMPACT NVRAM FREE SPACE = OPEN
7 = INITIALIZE NVRAM = OPEN
8 = MASTER/SLAVE MFC (OPEN - SLAVE)

} NORMALLY SET CLOSED

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)(J2-J3)
					0		0	0	0	0	0										

REFER TO PRODUCT INSTRUCTION E93-906-1 FOR FURTHER INFORMATION ON NMFC0 ☐
REFER TO TECHNICAL OVERVIEW FOR FURTHER INFORMATION ON NMPC01
REFER TO PRODUCT INSTRUCTION FOR MORE INFORMATION ON MMFC03
REFER TO PRODUCT INSTRUCTION FOR MORE INFORMATION ON IMMPC01

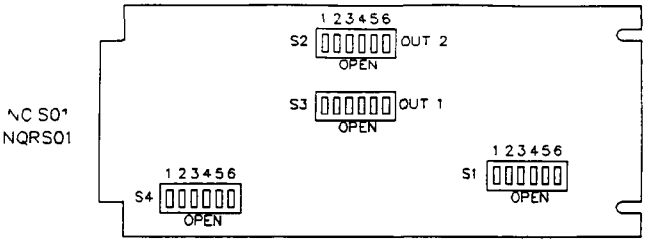
AL760273K SHT.20
CAD FILE- 76027320

NETWORK 90/NF 90

Bailey CANADA

7/A100175

CONTROL I/O SLAVE MODULE SWITCH SETTINGS



1 SWITCH SET OPEN – LOGIC 1
2 S1 – 1 SELECTS DIG NO.1 VOLTAGE
S1 – 3 SELECTS DIG NO 2 VOLTAGE
S1 – 5 SELECTS DIG. NO 3 VOLTAGE
} OPEN = 125VDC
CLOSED – 24VDC
S 2, 4 AND 6 ARE UNUSED
3 ANALOG OUTPUT OPTIONS (S2 – AO NO 2, S3 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 S4 S SLAVE ADDRESS (POS'N 6 – LSB)

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

NOTE: USE ONLY ADDRESS 0 TO 63

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

NETWORK 90/NF 90

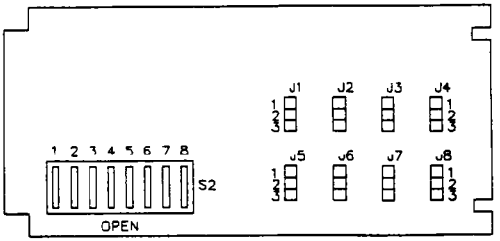
Bailey CANADA

7/A100175

AL760273E SHT.21
CAD FILE- 76027321 M. Schuster

ENHANCED LOGIC MASTER MODULE SWITCH SETTINGS

MLMM02
NLMM01A
NLMM02



NOTES:

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

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 ON NLMM02
REFER TO PRODUCT INSTRUCTION FOR FURTHER INFORMATION ON MLMM02

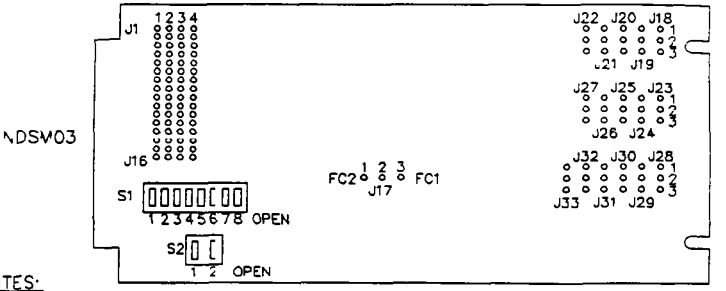
AL760273E SHT 22
CAD FILE- 76027322

NETWORK 90/INF 90

Bailey CANADA

W A 7/A100175

CONTACT NPUT SLAVE MODULE SW TCH SETT NGS



NOTES:

1 SWITCH SET OPEN = LOG C 1

2 J1 TO J16 SELECTS PO NT RESPONSE TME: 1 – 2 = D C SLOW
2 – 3 = D.C FAST
3 – 4 = A C

3. J17 SELECTS SLAVE USAGE: 1–2 – MFC/LMM02 (FC2).
2 – 3 LMM01/01A (FC1)

4 J18 TO J33 SELECTS PO NT VOLTAGE 1 – 2 = 24VDC
2 – 3 = 125VDC/120VAC

5. S1 SELECTS SLAVE ADRRESS
A IF LMM01/01A – GROUP "A" = POS'N 1 – 4 (4 = LSB)
GROUP "B" = POS'N 5 – 8 (8 = LSB)
B F MFC/LMM02 – USE POS'N 3 TO 8 (8 – LSB)

6 S2 SELECTS GROUP ENABLE– A IF LMM01/01A POS'N 1= GROUP "A" } OPEN
POS'N 2= GROUP 'B' } OPEN
– B. F MFC/LMM02 POS'N 1= NOT USED } ENABLE
POS'N 2– OPEN } ENABLE

REFER TO PRODUCT NSTRUCT ON E93–913–5 FOR FURTHER NFORMATION

NETWORK 90/NF 90

AL760273C SHT 23
CAD FILE– 76027323

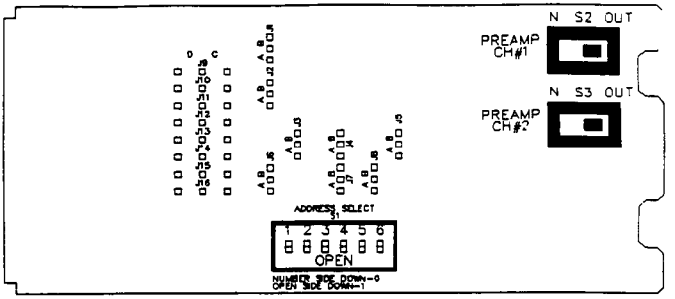
Bailey CANADA

7/A100175

PULSE NPUT SLAVE MODULE

NDSM04

MDSM04



NOTES

1 SW TCH SET OPEN – LOG C 1

2 S1 SELECTS SLAVE ADDRESS, 6 – LSB (USE ONLY ADDRESS 0 TO 63)

3 S2 – N =ROUTES CHANNEL 1 NPUTS THROUGH PRE–AMP
–OUT = CHANNEL 1 NPUTS BYPASS PRE–AMP

4 S3 – N = ROUTES CHANNEL 2 NPUTS THROUGH PRE–AMP
–OUT = CHANNEL 2 NPUTS BYPASS PRE–AMP

5 J1 TO J8 SELECT VOLTAGE RANGE FOR NPUTS.(CH 1 TO 8 RESPECT VELY)
A = LOG C 0 = 0 TO 1 VDC LOG C 1 4 TO 6 DC
B – LOG C 0 = 0 TO 2 VDC LOG C 1 = 21 TO 27 VDC

6 J9 TO J16 SELECT DEBOUNCE FOR NPUTS(CH.1 TO 8 RESPECT VELY)
C =NO DEBOUNCE
D = 8 5mSEC RESPONCE DELAY

REFER TO PRODUCT NSTRUCTION E93–913–6 FOR FURTHER NFORMATION ON ND SM04

REFER TO PRODUCT INSTRUCTION E96–308 FOR FUTHER NFORMATION ON MDSMC4

AL760273D SHT. 24
CAD FLE– 76027324 M. Schaefer

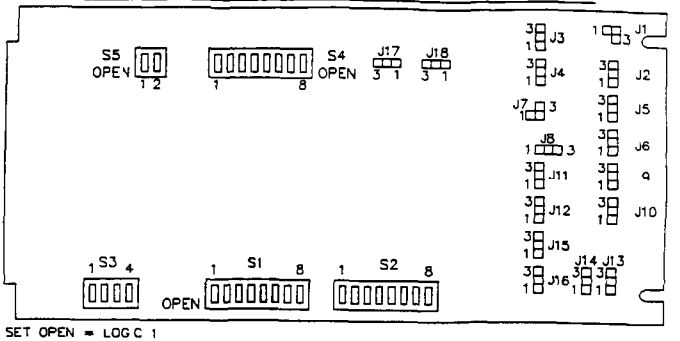
NETWORK 90/NF 90

Bailey CANADA

7/A100175

DIGITAL SLAVE MODULE SWITCH SETTINGS

NDSM05
MDSM05



NOTES.

1 SWITCH SET OPEN = LOGIC 1

2. J1 TO J16 SELECT TYPE OF SIGNAL (3 = ISOLATED OUTPUT, 1 = OTHER)

3. J17 AND J18 SELECT INTERFACE TYPE (1 = LMM01/01A 3 = MFP/ MFC/LMM02)

4. S1 SELECTS DEFAULT VALUES FOR GROUP "A" POINTS
   S2 SELECTS DEFAULT VALUES FOR GROUP "B" POINTS
   (0 = DE-ENERGIZE, 1 = ENERGIZE)

5 S3 1 SELECTS I/O TYPE FOR GROUP "A" POINTS
S3 2 SELECTS I/O TYPE FOR GROUP "B" POINTS
} 0 = INPUT, 1 = OUTPUT
S3 3 SELECTS THE MODULE FUNCTION (0 = I/O, 1 = DIGITAL LOGIC STATION)
(IF S3-3=1 THEN S3-1 AND S3-2 MUST = 1 AND S3-4 MUST = 0)
S3-4 SELECTS THE I/O DEFAULT (0 = PRESET VALUES, 1 = HOLD OUTPUTS)

6 S4 SELECTS MODULE ADDRESS
A IF LMM01/01A — POSN 1 TO 4 = GROUP A (4 = LSB)
POSN 5 TO 8 = GROUP B (8 = LSB)
B IF MFC/MFP/LMM02-USE POSN 3 TO 8 (8 = LSB)

7 FOR LMM01/01A S5 1 ACTIVATES GROUP "A" POINTS
S5 2 ACTIVATES GROUP "B" POINTS
} 0 = DISABLE, 1 = ENABLE
FOR LMM02/MFC/MFP S5-2 ACTIVATES ALL POINTS

REFER TO PRODUCT INSTRUCTION E93-913-7 FOR FURTHER INFORMATION ON NDSM05

REFER TO PRODUCT INSTRUCTION E96-309 FOR FURTHER INFORMATION ON MDSM05

AL760273F SHT. 25
CAD FILE- 76027325

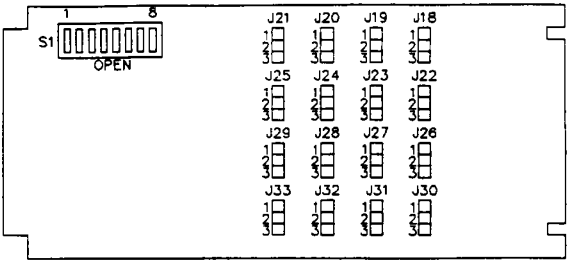
NETWORK 90/NF 90

Bailey CANADA

7/A100175 (W)(A)

DIGITAL SLAVE INPUT MODULE SWITCH SETTINGS

NDS 01



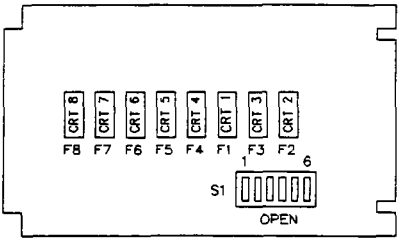
NOTES.

1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECTS SLAVE /GROUP ADDDRESSES.
   FOR LMM01/01A S1-1 TO S1-4 = GROUP A ADDRESS (4=LSB)
   S1-5 TO S1 8 = GROUP B ADDRESS (8=LSB)
   FOR LMM02/MFC S1-1 AND S1 2 MUST BE CLOSED
   S1-3 TO S1-8 = SLAVE ADDRESS (8=LSB)
3. J18 TO J33 SELECTS INPUT VOLTAGE LEVEL
   (3 125VDC, 120VAC 1 - 24VDC)
4. NDS 01 MUST HAVE PIGGY BACK BOARD INSTALLED (KIT #258355) WHEN WORKING WITH AN NLMM01 OR NLMM01A

REFER TO PRODUCT INSTRUCTION E93-913-15 FOR FURTHER INFORMATION

DIGITAL SLAVE OUTPUT MODULE SWITCH SETTINGS

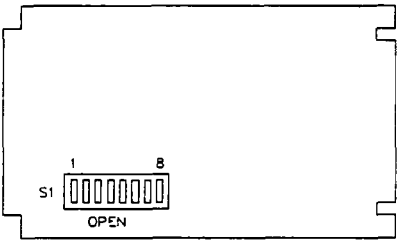
NDS001/02/03
MDS001/02/03



MODULE	OUTPUT TYPE
DS001	24VAC 240VAC
DS002	4VDC 50VDC
DS003	5VDC 160VDC

NOTES.
1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECT ADDRESS 6 LSB (ADDRESS 0 TO 63 ONLY)
3. F1 TO F8 FOR DS001 – 4.0 AMP NORMAL (WAS 7 AMP SLOW BLOW)
   FOR DS002 – 3.0 AMP NORMAL (WAS 4 AMP NORMAL)
   FOR DS003 1.5 AMP NORMAL

NDS004
MDS004



MODULE	OUTPUT TYPE
DS004	24VDC

NOTES.
1. SWITCH SET OPEN = LOGIC 1
2. S1 SELECT ADDRESS, 8 – LSB (ADDRESS 0 TO 63 ONLY)

REFER TO PRODUCT INSTRUCTION E93-913-10 FOR FURTHER INFORMATION ON NDS001/02/03/04
REFER TO PRODUCT INSTRUCTION E96-310 FOR FUTHER INFORMATION ON MDS001/02/03
REFER TO PRODUCT INSTRUCTION E96 313 FOR FUTHER INFORMATION ON MDS004

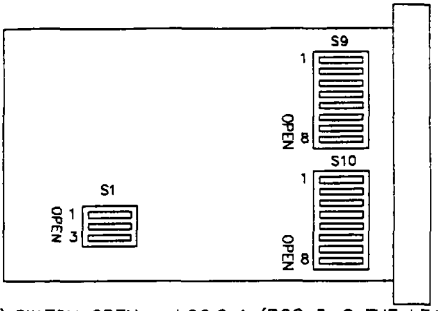
AL760273F SHT. 27
CAD FILE- 76027327

NETWORK 90/INF 90

Bailey CANADA

7/A100175

DIGITAL LOGIC STATION SWITCH SETTINGS



NOTE 1) SWITCH OPEN – LOGIC 1 (POS 3 IS THE LEAST SIGNIFICANT BIT)
2) S1 IS SET TO THE STATION ADDRESS (0 TO 7)
3) S9 & S10 SELECTS INTENSITY DEPENDING ON COLOR LED'S INSTALLED.
OPEN=RED/YELLOW CLOSED=GREEN

S9 POS		S10 POS	
1	– CR2	1	– CR10
2	– CR3	2	– CR11
3	– CR4	3	– CR12
4	– CR5	4	– CR13
5	– CR6	5	– CR14
6	– CR7	6	CR15
7	– CR8	7	– CR16
8	– CR9	8	CR17

4) LEDS ARE RED ON STANDARD MODULE LED'S MUST BE CHANGE TO OBTAIN OTHER COLORS.

REFER TO PRODUCT INSTRUCTIONS E93-904-1 FOR FUTHER INFORMATION

AL760273C SHT 28
CAD FILE– 76027328

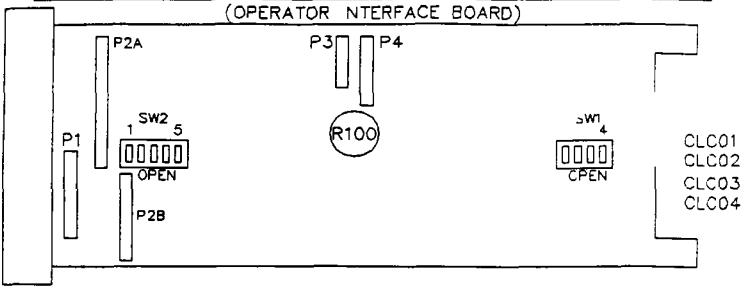
NETWORK 90/INF 90

Bailey CANADA

7/A100175

LOOP COMMAND CONTROLLER SWITCH SETTINGS

(OPERATOR INTERFACE BOARD)



NOTES:

1 R100 ADJUSTS BARGRAPH INTENSITY (ADJUST IN POWER-UP CONDITION)
DECREASE INTENSITY – ADJUST CLOCKWISE
INCREASE INTENSITY – ADJUST COUNTERCLOCKWISE

2 SW1 OPTIONS

OPTION	SETTING	DESCRIPTION	CUSTOMER SETTING
ANALOG INPUT DISPLAY	SW1-2,3 CLOSED SW1 1 4 OPEN	ANALOG INPUT TO BE GENERATED EXTERNALLY IN MANUAL OVERRIDE MODE.	
	SW1-2,3 OPEN SW1-1 4 CLOSED	ANALOG INPUT TAKEN FROM ANALOG OUTPUT OF INTERFACE BOARD IN MANUAL OVERRIDE MODE. (S1-6 AND S1 5 ON THE TERMINATION BOARD MUST ALSO BE SET)	

SEE DWG AL105033 SHT 30 FOR MORE DETAILS

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

AL760273C SHT. 29
CAD FILE– 76027329

NETWORK 90/INF 90

Bailey CANADA

7/A100175

LOOP COMMAND CONTROLLER SWITCH SETTINGS
(OPERATOR INTERFACE BOARD)

NOTES: (CON'T)

4 SW2 OPTIONS

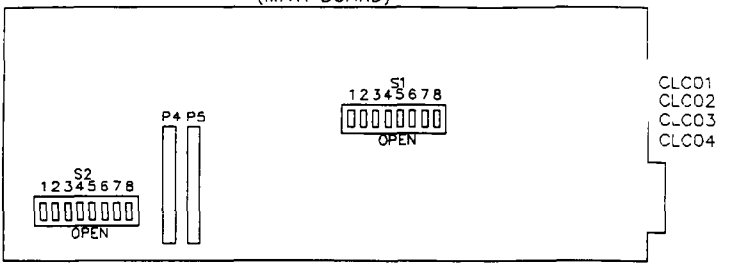
OPTION	SETTING		DESCRIPTION	CUSTOMER SETTING
DISPLAY TEST	SW2-5 SW2-2	CLOSED CLOSED	CONTROLLER FRONT DISPLAY WILL SEQUENCE THROUGH A GROUP OF INITIAL TEST DISPLAYS	
	SW2-5 SW2-2	OPEN OPEN	TEST DISPLAY DISABLED	
CUSTOMER DEFINABLE TAG	SW2-5 SW2-1	CLOSED CLOSED	CUSTOMER CAN PROGRAM LOOP TAGS AND ENGINEERING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

SEE SHEET 31 FOR FURTHER DETAILS

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

LOOP COMMAND CONTROLLER SWITCH SETTINGS

(MAN 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 = NVRAM INITIALIZED
CLOSED = NORMAL OPERATION

S2 3 OPEN = GENERAL PURPOSE SWITCH (HIGH)
CLOSED = GENERAL PURPOSE SWITCH (LOW)

(REFERENCE EXECUTIVE BLOCK 242 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	
	S1-1 CLOSED	YIELDS 0.75V OUTPUT FOR POWER UP	
	S1-2 OPEN S1-3 CLOSED	HOLDS LAST ANALOG OUTPUT VALUE ON TIMEOUT	
	S1-2 CLOSED S1-3 OPEN	GOES TO POWER-UP VALUE SET BY S1-1 ON TIMEOUT	
ANALOG OUTPUT No 2	S1-4 OPEN	YIELDS 5.25V OUTPUT FOR POWER UP	
	S1-4 CLOSED	YIELDS 0.75V OUTPUT FOR POWER UP	
	S1-5 OPEN S1-6 CLOSED	HOLDS LAST ANALOG OUTPUT VALUE ON TIMEOUT	
	S1-5 CLOSED S1-6 OPEN	GOES TO POWER-UP VALUE SET BY S1-4 ON TIMEOUT	

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

SEE SHEET 32 FOR FURTHER DETAILS

AL760273F SHT. 31
CAD FILE– 76027331

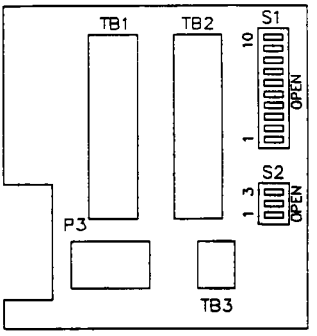
NETWORK 90/INF 90

Bailey CANADA

7/A100175

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 SHT 33 FOR MORE DETAILS.

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

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 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

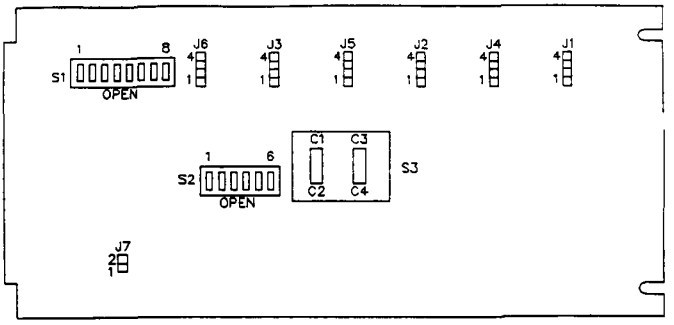
+ SEE SHEETS 13 AND 14 FOR ADDITIONAL SWITCH SETTINGS ON THE NDCS03.

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

CONTROL /O SLAVE MODULE SWTCH SETTNGS

QU CK RESPONSE CONTROL /O SLAVE SWTCH SETTNGS

NCIS02
NQRS02
MCS02
IMQRS02



1 SWTCH SET OPEN – LOGC 1
2 S1–3 TO 8 SELECT ADDRESS (POS'N 8 – LSB)
3 S1 – 1 AND 2 NOT USED
4 S2 – 1 AND 4 NOT USED
5 ANALOG OUTPUT OPTIONS

OPTIONS	TIMEOUT OPTION	POWER–UP STATE	OUTPUT TYPE (5,3)
ANALOG o/p 1	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	S2–5 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 DETA LS.

AL760273D SHT. 34
CAD FILE– 76027334

NETWORK 90/INFI 90

Bailey CANADA

7/A100175

CONTROL /O SLAVE MODULE SW TCH SETT NGS

5 D G TAL NPUT OPT ONS

OPTIONS	JUMPER	120VAC	125VDC SLOW	125VDC FAST	24VDC SLOW	24VDC FAST
D GITAL /P 1	J1	1 2	2-3	2-3	3 4	3-4
	J4	1-2	2-3	3-4	2-3	3-4
D G TAL /P 2	J2	1 2	2-3	2-3	3 4	3-4
	J5	1 2	2-3	3-4	2-3	3 4
D G TAL /P 3	J3	1-2	2-3	2-3	3-4	3 4
	J6	1 2	2-3	3-4	2-3	3-4

6. .7 S FACTORY SET AND SHOU_D NOT BE CHANGED BY USFR MUST ALWAYS BE NSTALLED

		POS T ONS													JUMPERS (1-2 2-3,3-4)							
USAGE	SWITCH	1	2	3	4	5	6	7	8	C1	C2	C3	C4	J1	J2	J3	J4	J5	J6	J7		
SLAVE ADD	S1	X	X	X																	1	2
ANALOG OPT ONS	S2							X	X													
	S3	X	X	X	X	X	X	X	X													

FOR NC S02 REFER TO PRODUCT INSTRUCTION E93 913 16
FOR FURTHER INFORMATION
FOR NQRS02 REFER TO PRODUCT INSTRUCTION E93-913 19
FOR FURTHER INFORMATION
FOR MCIS02 REFER TO PRODUCT NSTRUCT ON E96-306
FOR FURTHER NFORMAT ON
FOR MQRS02 REFER TO PRODUCT NSTRUCT ON E96-316
FOR FUTHER NFORMAT ON

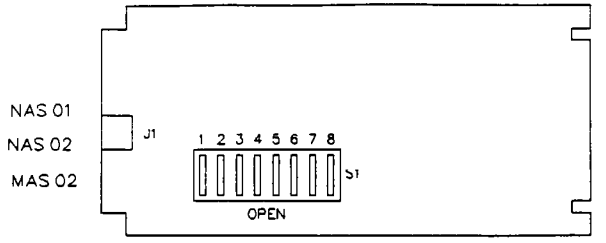
AL760273F SHT. 35
CAD FILE- 76027335 M. Schroeder

NETWORK 90/N- 90

Bailey CANADA

7/A1001/5

ANALOG NPUT SLAVE MODULE SWTCH SETTNGS



NOTES.

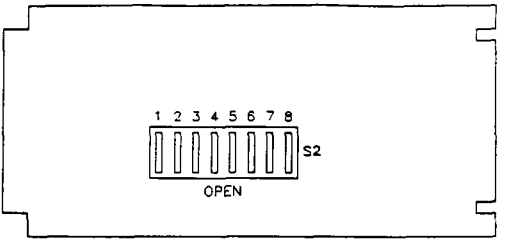
1 SWTCH SET OPEN LOGC 1
2 S1 SELECTS ADDRESS, 8=LSB (ADDRESS 0 TO 63 ONLY)
3 J1 ALLOWS THE NSTT01\NSTT02 TO CONNECT TO THE SLAVE

REFER TO PRODUCT NSTRUCTION E93-912-9 FOR FURTHER NFORMATION ON NAS 02

REFER TO PRODUCT NSTRUCTION E96-304 FOR FUTHER INFORMATION ON MAS 02

ANALOG MASTER MODULE SWITCH SETTINGS

NAMM03
NAMM02A
MAMM03



NOTES
1 SWITCH SET OPEN – LOGIC 1
2 S2 – ADDRESS AND DIAGNOSTIC SWITCH (8–LSB)

SWITCH S2								
POLE	1	2	3	4	5	6	7	8	DESCRIPTION
	0	0	0	MODULE ADDRESS					NORMAL
	0	0	1						CONFIGURATION LOCK
	0	1	0						INITIALIZE NVRAM
	0	1	1						INHIBIT CHECKSUMS
	1	0	0						PRIMARY
	1	0	1						PRIMARY & CONFIG LOCK
	1	1	0						UNUSED
	1	1	1	X	X	X	X	X	DIAGNOSTIC MODE

REFER TO PRODUCT INSTRUCTION E93–912–8 FOR FURTHER INFORMATION ON NAMM03

REFER TO PRODUCT INSTRUCTION E96–205 FOR FUTHER INFORMATION ON MAMM03

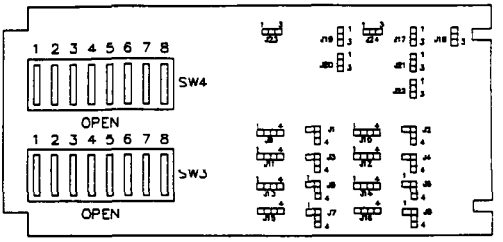
AL760273E SHT. 37
CAD FILE– 76027337 M. Schuster

NETWORK 90/INFI- 90

Bailey CANADA

8/A00542

MULTIFUNCTION CONTROLLER MODULE SWITCH SETTINGS



NMFC04
MMFC04

NOTES:

1 SWITCH SET OPEN = LOGIC 1

2 SWITCH SW3 – 4 TO 8 SELECTS MODULE ADDRESS (8=LSB)
SW3 – 1 MUST BE OPEN FOR PROPER MODULE OPERATION
SW3 – 2 CLOSED FOR NORMAL OPERATION
OPEN FOR DIAGNOSTIC MODE
SW3 – 3 NOT USED

3 SWITCH SW4 SELECTS OPERATING OPTIONS
POSITION 1 = SPECIAL OPERATIONS SWITCH – NORMALLY SET CLOSED

1 3 & 4 OPEN = SUPERLOOP MODE PLUS TIME STAMPING } SPECIAL INITIALIZATION PROCEDURES REQUIRED
1 & 4 OPEN = SUPERLOOP MODE } ONCE ONLY (ALL OTHER
1 & 3 OPEN = PLANTLOOP MODE * } POLES MUST BE CLOSED)

* THIS SWITCH SETTING IS USED TO INITIALIZE NVRAM CONFIGURATION SPACE THIS ENABLES THE MODULE TO RECOVER FROM SOME ERROR MODES

2 = ON-LINE CONFIGURATION = OPEN
3 = INHIBIT NVRAM CHECK = OPEN
4 = INHIBIT EPROM (U39) CHECK = OPEN
5 = INHIBIT EPROM (U40) CHECK = OPEN
6 = COMPACT NVRAM FREE SPACE = OPEN
7 = INITIALIZE NVRAM = OPEN
8 = CLOSED = PRIMARY MFC
OPEN = SECONDARY MFC
} NORMALLY SET CLOSED

4 J1 TO J16 NOT USED BY MFC04. FACTORY SET TO 3–4

5 J17 TO J22 FACTORY SET TO 1–2. (MUST REMAIN AT 1 2 FOR PROPER MODULE OPERATION)

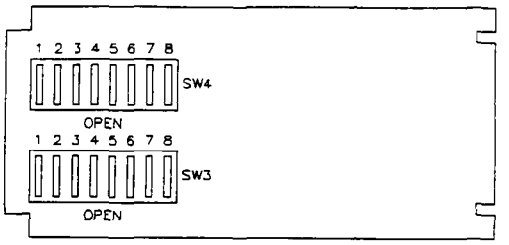
6 J23 AND J24 RESERVED FOR FUTURE USE

SW3								SW4								JUMPERS		
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	J1–J16	J17–J22	J23–J24
1	0	X						0		0	0	0	0	0		3–4	1–2	X

REFER TO PRODUCT INSTRUCTION E93-906-12 FOR FURTHER INFORMATION ON NMFC04

REFER TO PRODUCT INSTRUCTION FOR FURTHER INFORMATION ON MMFC04

MULTIFUNCTION CONTROLLER MODULE SWITCH SETTINGS



NOTES

1 SWITCH SET OPEN LOGIC 1

2 SWITCH SW3 4 TO 8 SELECTS MODULE ADDRESS (8=LSB)
SW3 1 MUST BE OPEN FOR PROPER MODULE OPERATION
SW3 – 2 CLOSED FOR NORMAL OPERATION
OPEN FOR DIAGNOSTIC MODE
SW3 – 3 NOT USED

3 SWITCH SW4 SELECTS OPERATING OPTIONS
POS'N 1 – SPECIAL OPERATIONS SWITCH – NORMALLY SET CLOSED

1,3 & 4 OPEN SUPERLOOP MODE PLUS TIME STAMPING
1 & 4 OPEN = SUPERLOOP MODE
1 & 3 OPEN – PLANTLOOP MODE *

} SPECIAL INITIALIZATION PROCEDURES REQUIRED ONCE ONLY (ALL OTHER POLES MUST BE CLOSED)

* THIS SWITCH SETTING IS USED TO INITIALIZED NVRAM CONFIGURATION SPACE. THIS ENABLES THE MODULE TO RECOVER FROM SOME ERROR MODES

2 – ON-LINE CONFIGURATION = OPEN
3 – INHIBIT NVRAM CHECK – OPEN
4 – INHIBIT EPROM = OPEN
5 – RESERVED
6 – COMPACT NVRAM FREE SPACE = OPEN
7 – INITIALIZE NVRAM = OPEN
8 – CLOSED = PRIMARY MFC
OPEN – SECONDARY MFC

} NORMALLY SET CLOSED

SW3								SW4							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
1	0	X						0		0	0	X	0	0	

REFER TO PRODUCT INSTRUCTION E93 906-13 FOR FURTHER INFORMATION ON NMFC05

REFER TO PRODUCT INSTRUCTION FOR FUTHER INFORMATION ON MMFC05

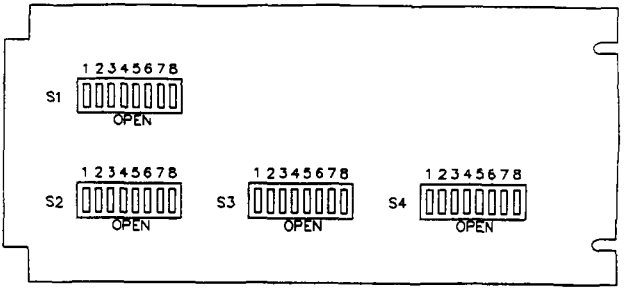
NETWORK 90/INFI 90

Bailey CANADA

8/A00542

AL760273E SHT. 39
CAD FILE– 76027339

REMOTE NPUT/OUTPUT MODULE SW TCH SETT NGS



NOTES.

1 SWITCH SET OPEN = LOG C 1

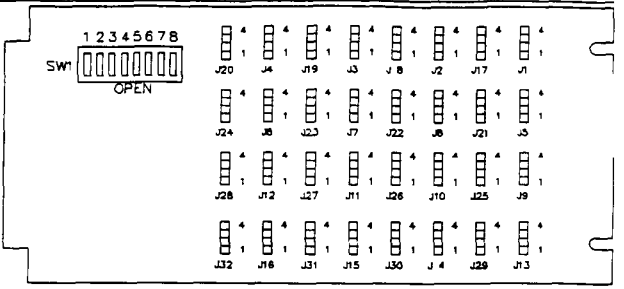
2 S1 HAS 2 FUNCT ONS DEPENDING ON WH CH MODE THE NR 001 S OPERATING N

N REMOTE MODE S1 SELECTS NODE ADDRESS (8=LSB)
N LOCAL MODE S1 SELECTS SLAVE ADDRESS
S1 – 3 TO 8 SELECTS ADDRESS (8=LSB)
S1 – 1 TO 2 NOT USED

3 S2 SELECTS OPERATION MODES
S2 – 1 OPEN = D AGNOSTIC MODE
CLOSED = NORMAL RUN
S2 2 OPEN = REMOTE MODE (REMOTE MASTER PROCESSOR)
CLOSED = LOCAL MODE (REMOTE SLAVE PROCESSOR)
S2 3 OPEN – NH B T CHECKSUM ROUT NE
CLOSED = PERFORM CHECKSUM ROUT NE
S2 – 4 TO 8 = MODULE BUS ADDRESS
00000 = D SABLE MODULE BUS
00001 = D SABLE MODULE BUS
00010 TO 11111 = ENABLE MODULE BUS (D AGNOSTIC MODE ONLY)

SEE SHEET 42 FOR FURTHER DETA LS

DIGITAL SLAVE INPUT MODULE SWITCH SETTINGS



NOTES

1 SWITCH SET OPEN = LOGIC 1

2 SW1 SELECTS SLAVE /GROUP ADDRESS
FOR LMM01/01A SW1 – 1 TO 4 = GROUP A ADDRESS (4=LSB)
SW1 – 5 TO 8 = GROUP B ADDRESS (8=LSB)
FOR LMM02/MFC/MFP SW1 – 1 AND 2 MUST BE CLOSED
SW1 – 3 TO 8 SELECT SLAVE ADDRESS (8=LSB)

3 J1 TO J16 SELECTS POINT VOLTAGE. 1–2 = 120VAC
2–3 = 125VDC 3–4 = 24VDC

4 J17 TO J32 SELECTS POINT RESPONSE TIME 1–2 = AC,
2 3 = DC SLOW 3 4 = DC FAST

5 DS 02 MUST HAVE PIGGY BACK BOARD INSTALLED
(KIT # 258355) WHEN WORKING WITH AN NLMM01 OR NLMM01A

REFER TO PRODUCT INSTRUCTION E93-913-20 FOR FURTHER INFORMATION ON NDSI02

REFER TO PRODUCT INSTRUCTION E96-307 FOR FUTHER INFORMATION ON MDS 02

AL760273D SHT 40
CAD FILE– 76027340

NETWORK 90/NF 90

Bailey CANADA

8/A00542

REMOTE NPUT/OUTPUT MODULE SW TCH SETT NGS (con't)

4 S3 AND S4 SELECTS MODE AND CABLE TYPE

N REMOTE MODE

S3							
1	2	3	4	5	6	7	8
X	X	X	Y	1	0	0	0

S4							
1	2	3	4	5	6	7	8
0	0	0	0	0	0	0	0

N LOCAL MODE

S3							
1	2	3	4	5	6	7	8
X	X	X	Y	0	1	1	1

S4							
1	2	3	4	5	6	7	8
1	1	1	1	1	1	1	1

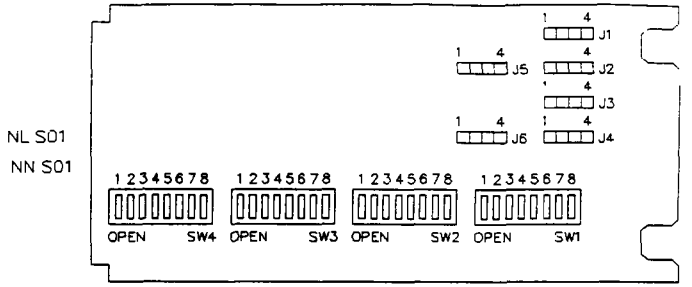
WHERE X = SW TCH MAY BE OPEN OR CLOS_D
Y – OPEN = F BER OPTIC CABLES ARE USED
CLOSED = ELECTR CAL CABLES ARE USED

S1								S2							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
								0		0	0	0	0	0	0
S3								S4							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

SEE PRODUCT INSTRUCTION E93–908–18 FOR FURTHER INFORMATION

LOOP NTERFACE SLAVE MODULE SWTCH SET NGS

NETWORK INTERFACE SLAVE MODULE SW TCH S' TT NGS



NOTES

1 SWITCH SET OPEN = LOG C 1
2. SW1 SELECTS NODE ADDRESS 1 THROUGH 250 (8=LSB)
3 SW2 SELECTS R NG ADDRESS 1 THROUGH 250 (8=LSB)
4 SW3 SELECTS OPERAT ON MODES
SW3–1 OPEN = BR DGE MODE
CLOSED = PCU/C U/N U/ C / T MODE
SW3–2 OPEN PERFORM ROM CHECKSUM
CLOSED = NHIBIT ROM CHECKSUM
SW3–3 OPEN = TEST MODE, NO TMEOUT FOR HANDSHAKE FA LURE
CLOSED = NORMAL OPERATING MODE
SW3 4 OPEN – BUSY NAK ALL LOOP MESSAGES
CLOSED – NORMAL OPERATING MODE
SW3–5 OPEN = WILL TOGGLE ON/OFF GROUP A LEDS F LOOP 1 IS DLE OR SHORTED OUT WLL TOGGLE ON/OFF GROUP B LEDS F LOOP 2 S DLE OR SHORTED OUT F BOTH LOOPS ARE GOOD, NORMAL LED D SPLAY AS DEF NED BY SW4
CLOSED = LED DISPLAY AS DEF NED BY SW4
SW3 6 OPEN = ENABLE XM TTER "ERROR TYPE" CHECK
CLOSED = D SABLE XM TTER 'ERROR TYPE' CHECK
SW3 7/8 CLOSED/CLOSED = 10 MHZ LOOP (SUPER LOOP/NF NET)
CLOSED/OPEN = 2 MHZ LOOP (SUPER LOOP/NF NET)
OPEN/CLOSED = NOT USED
OPEN/OPEN = 500KHZ LOOP (PLANT LOOP)

SEE SHEET 44 FOR FURTHER DETA LS

NETWORK 90/NF 90

Bailey CANADA

8/A00542

AL760273F SHT. 43
CAD FILE– 76027343 Marion Schrader

LOOP INTERFACE SLAVE MODULE SWITCH SETTINGS con't

5. SW4 POLES 1 TO 3 SELECTS THE NLS01/NNS01 EXPANDER BUS ADDRESS (3=LSB)
   SW4 POLES 4 TO 8 SELECT EVENT/ERROR COUNTERS ADDRESS (8-LSB)

6 J1 TO J6 SELECTS BAUD RATE (MUST MATCH SW3 POLES 7/8)
   ALL SX JUMPERS MUST BE SET TO SAME POSITION

   1-2 = 500Khz (PLANT LOOP)
   2-3 = 2MHz (SUPER LOOP/NF-NET)
   3-4 = 10 MHz (SUPER LOOP/INFI-NET)

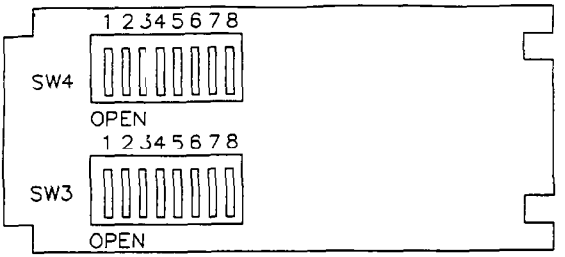
7. SW1,SW2 & SW3 MUST BE SET IDENTICALLY ON
   REDUNDANT NLIS01'S/INNS01'S (670-N90-2842)

SW1								SW2								SW3								SW4								(1-2)	(2-3)	(3-4)			
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	J1	J2	J3	J4	J5	J6
									0	0	0	1	0																									

FOR FURTHER INFORMATION ON NLIS01 SEE PRODUCT INSTRUCTION E93-908-7

FOR FURTHER INFORMATION ON INNIS01 SEE PRODUCT INSTRUCTION E96-801

SUPER LOOP BUS MODULE SWITCH SETTING



NOTES

1. SWITCH SET OPEN = LOGIC 1
2. SW3-1 OPEN = MFC MODE, ALWAYS SET TO 1
   SW3-2 OPEN = HARDWARE DIAGNOSTIC MODE ENABLED
   CLOSED = HARDWARE DIAGNOSTIC MODE DISABLED
   SW-3 TO 7 NOT USED
   SW3-8 OPEN = MODULE BUS ADDRESS 1
   CLOSED = MODULE BUS ADDRESS 0
3. SW4 SELECTS OPERATION MODES (MUST BE SET IDENTICALLY ON REDUNDANT NSBM01 S ,67D-N9D-2842)
   SW4-1 OPEN = NHBT ROM CHECKSUM
   CLOSED = PERFORM ROM CHECKSUM
   SW4-2 OPEN = FAIL OVER TO REDUNDANT SBM ON POWER SYSTEM STATUS FAILURE (670 NF90-2871)
   CLOSED = DISABLE FAIL OVER TO REDUNDANT SBM ON POWER SYSTEM STATUS FAILURE (670 NF90 2871)
   SW4-3 OPEN = REDUNDANCY SELECTED (BOTH MODULES MUST BE SET)
   CLOSED = NO REDUNDANCY
   SW4-4 OPEN = SUPER LOOP DIAGNOSTICS ENABLED
   CLOSED = SUPER LOOP DIAGNOSTICS DISABLED
   SW4-5/6 (EXCEPTION REPORT POLL RATES)
   OPEN/OPEN = 8 POLLS/SECOND (FAST)
   CLOSED/CLOSED = 1 POLL/SECOND (SLOW)
   CLOSED/OPEN = 2 POLLS/SECOND (SLOW)
   OPEN/CLOSED = 4 POLLS/SECOND (STANDARD)
   SW4-7 OPEN = TEST MODE ENABLED
   CLOSED = TEST MODE DISABLED
   SW4-8 NOT USED (NOTE. MUST BE SET IDENTICALLY ON REDUNDANT SBMS SEE EN 670-N90-2842)

SW3								SW4							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
		0	0	0	0	0									

FOR NSBM01 SEE PRODUCT INSTRUCTION E93-908-7

AL760273G SHT. 45
CAD FILE- 76027345

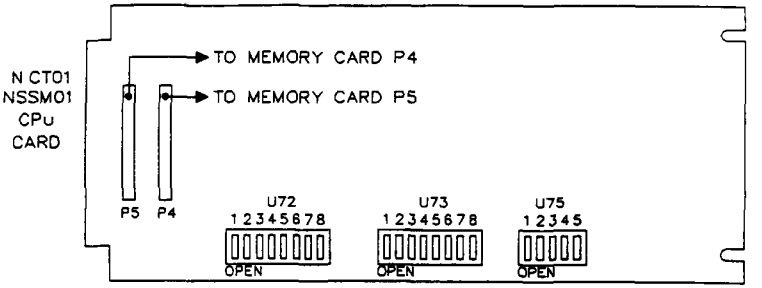
NETWORK 90/INFI 90

Bailey CANADA

B/A00542

SUPER LOOP STORAGE MODULE SWITCH SETTINGS

NF-NET TO COMPUTER INTERFACE SWITCH SETTINGS



NOTES.

1. SWITCH SET OPEN = LOGIC 1

2 SWITCH U72 SELECTS OPERATING OPTIONS:

- U72-1 OPEN = INHIBIT ROM CHECKSUM
  CLOSED = PERFORM ROM CHECKSUM
- U72-2/3 = PORT 0 & 1 DATA CHARACTERISTICS
  CLOSED/CLOSED = 8 BITS, 1 STOP BIT, NO PARITY
  CLOSED/OPEN = 8 BITS, 1 STOP BIT, EVEN PARITY
  OPEN/CLOSED = 8 BITS, 1 STOP BIT, ODD PARITY
  OPEN/OPEN = 8 BITS, 2 STOP BITS NO PARITY
- U72-4 OPEN = PORT 1 OPTION = MCS/OS OR TERMINAL (UTILITY)
  CLOSED = PORT 1 OPTION = EWS(COMPUTER)
- U72-5 OPEN = MODEM PASSWORD PROTECTION ON
  CLOSED = MODEM PASSWORD PROTECTION OFF
- U72-6 OPEN = PORT ADDRESSING MODE ON
  CLOSED = PORT ADDRESSING MODE OFF
- U72-7 OPEN = CHECKSUMMING ON
  CLOSED = CHECKSUMMING OFF
- U72-8 OPEN = SECONDARY SSM/ICT
  CLOSED = PRIMARY SSM/ICT

SEE SHEET 47 FOR MORE DETAILS

SUPER LOOP STORAGE MODULE SWITCH SETTINGS con't

3 SWITCH U73 SELECTS TRANSMISSION RATES FOR TWO RS232 PORTS

POLES 1 TO 4 – TERMINAL PORT (1–LSB)
POLES 5 TO 8 – PRINTER PORT (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

4 U75 SELECTS ADDRESS AND TEST MODE

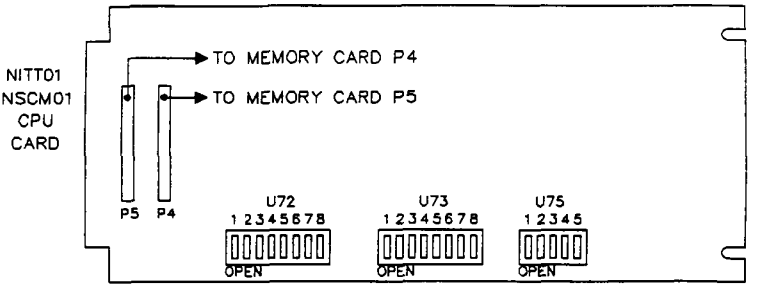
U75–1 OPEN = TEST MODE ENABLE (LS/NIS HANDSHAKE TIMEOUTS IGNORED)
CLOSED = NORMAL OPERATING MODE
U75–2 OPEN – LS/NIS DIAGNOSTICS ENABLED
CLOSED – NORMAL OPERATING MODE
U75–3 OPEN – DIAGNOSTICS ENABLED
CLOSED – NORMAL OPERATING MODE
U75–4/5 CLOSED/CLOSED = SSM/ICT ADDRESS 0
CLOSED/OPEN = SSM/ICT ADDRESS 1
OPEN/CLOSED = SSM/ICT ADDRESS 2
OPEN/OPEN = SSM/ICT ADDRESS 3

U72								U73								U75				
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5
																0	0	0		

REFER TO PRODUCT INSTRUCTION E93–908–7 FOR FURTHER INFORMATION ON NSSM01
REFER TO PRODUCT INSTRUCTION E96–601 FOR FURTHER INFORMATION ON NCT01

SERIAL COMMUNICATION MODULE SWITCH SETTINGS

NF-NET TO TERMINAL TRANSFER MODULE SWITCH SETTINGS



NOTES:

1 SWITCH SET OPEN = LOGIC 1

2 SWITCH U72 SELECTS OPERATING OPTIONS.

U72-1 OPEN = INHIBIT ROM CHECKSUM
CLOSED = PERFORM ROM CHECKSUM
U72-2 FUTURE
U72-3/4 CLOSED/CLOSED = NO PARITY - PORT 0
CLOSED/OPEN = ODD PARITY PORT 0
OPEN/CLOSED = EVEN PARITY - PORT 0
OPEN/OPEN = NO PARITY - PORT 0
U72-5 OPEN = 2 STOP BITS - PORT 0
CLOSED = 1 STOP BIT - PORT 0
U72-6 OPEN = DATA LENGTH 8 BITS - PORT 0
CLOSED = DATA LENGTH 7 BITS - PORT 0
U72-7 OPEN = INITALIZE MODULE
CLOSED = NORMAL OPERATING MODE
U72-8 = NOT USED

3. SWITCH U73 SELECTS TRANSMISSION RATES FOR TWO RS232 PORTS.

POLES 1 TO 4 = TERMINAL PORT (1=LSB)
POLES 5 TO 8 = PRINTER PORT (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

SEE SHEET 49 FOR FURTHER DETAILS

SERIAL COMMUNICATION MODULE SWITCH SETTINGS cont

4 U75 SELECTS PORT 1 OPTIONS
U75 1 OPEN – PORT 1 DTE SELECT
CLOSED PORT 1 DCE SELECT
U75–2/3 CLOSED/CLOSED – NO PARITY PORT 1
CLOSED/OPEN ODD PARITY PORT 1
OPEN/CLOSED EVEN PARITY PORT 1
OPEN/OPEN – NO PARITY – PORT 1
U75 4 OPEN = 2 STOP BITS PORT 1
CLOSED – 1 STOP BIT – PORT 1
U75–5 OPEN DATA LENGTH 8 BITS – PORT 1
CLOSED = DATA LENGTH 7 BITS PORT 1

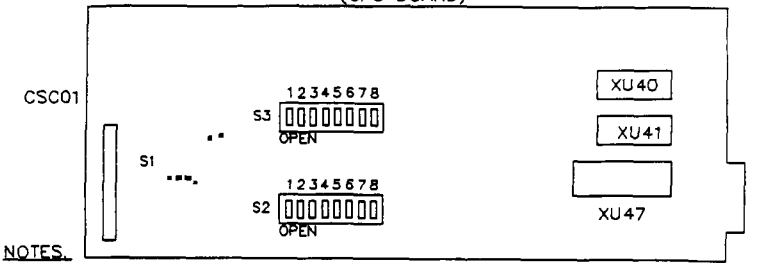
U72								U73								U75				
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5
0	0					0	0													

REFER TO PRODUCT INSTRUCTION E93-905 11 FOR FURTHER INFORMATION ON NSCM01

REFER TO PRODUCT INSTRUCTION FOR FUTHER INFORMATION ON NTT01

SEQUENCE COMMAND CONTROLLER SWITCH SETTINGS

(CPU BOARD)



NOTES.

1 SWITCH SET OPEN = LOGIC 1

2. S1-4 TO 8 SELECTS ADDRESS (8=LSB)
   S1-2/3 SELECTS BAUD RATE FOR RS232 PORT
   - CLOSED/CLOSED = 300
   - CLOSED/OPEN = 1 2K
   - OPEN/CLOSED = 2.4K
   - OPEN/OPEN = 9 6K

   S1-1 UNUSED

3 S2 SELECTS D AGNOSTIC TESTS OR FACEPLATE OPTIONS AND STAT ON ADDRESS
   - S2-1 TO 3 SELECTS STATION ADDRESS (1=LSB)
   - S2-4 UNUSED
   - S2-5 OPEN = FACEPLATE LED'S ARE GREEN FOR "OFF" COND TION OF /O
     CLOSED = FACEPLATE LED'S ARE RED FOR "OFF" COND TION OF /O
   - S2-6 OPEN = FACEPLATE LED'S ARE B COLOR FOR /O STATUS
     CLOSED = FACEPLATE LED'S ARE MONOCOLOR FOR /O STATUS
   - S2-7 OPEN = SELECTS FACEPLATE OPT ONS (NORMAL MODE)
     CLOSED = SELECTS DIAGNOSTIC MODE, REMA N NG POLE SELECTS VARIOUS TESTS
   - S2-8 OPEN = ENABLE AUD BLE ANNUNC ATOR WHEN ALARM CONDITION EXISTS
     CLOSED = DISABLE AUD BLE ANNUNCIATOR

4. S3 SELECTS OPERATION MODE
   - S3-1 NOT USED
   - S3-2 NOT USED
   - S3-3 OPEN = NH B T NVRAM CHECKSUM
     CLOSED = PERFORM NVRAM CHECKSUM

SEE SHEET 51 FOR FURTHER DETA LS

AL760273C SHT. 50
CAD FILE- 76027350

NETWORK 90/NF 90

Bailey CANADA

8/A00542

SEQUENCE COMMAND CONTROLLER MODULE

SW TCH SETTINGS con't

S3 4 OPEN = NH B T EPROM CHECKSUM
CLOSED = P_RFORM EPROM CHECKSUM
S3 5 UNUSED
S3-6 OPEN = COMPACTS NVRAM
CLOSED NH B T NVRAM COMPACT ON
S3-7 OPEN = N T AL ZE NVRAM
CLOSED = NORMAL OPERAT ON
S3-8 OPEN = SECONDARY CSC01
CLOSED = PR MARY CSC01

5 XU40 W TH D PSHUNT NSTALLED (NO STRAPS BROKEN) ENABLES RS232 PORT
XU41 WITH D PSHUNT NSTALLED (NO STRAPS BROKEN) ENABLES REDUNDANCY L NK
E THER D PSHUNT S NSTALLED N XU40 OR XU41 BUT NOT BOTH

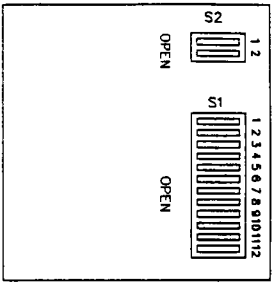
6 XU47 WITH DIPSHUNT INSTALLED (NO STRAPS BROKEN) ENABLES CSC TO BEHAVE AS MASTER
XU47 W TH NO D PSHUNT NSTALLED ENABLES CSC TO BEHAVE AS SLAVE

S1								S2								S3								XU40	XU41	XU47
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	N/OUT	N/OUT	N/OUT
0											0					0	0			0						

SEE SHEET 52 FOR FURTHER DETA LS

SEE PRODUCT NSTRUCT ON E92-500-4 FOR FURTHER NFORMAT ON E92-500-4

SEQUENCE COMMAND CONTROLLER MODULE
SWITCH SETTINGS con't



OPTIONAL MANUAL
CONTROL BOARD

OPTION	OPTION	SETTING	DESCRIPTION
DIGITAL OUTPUT MANUAL CONTROL SELECT	S2-1	OPEN	OUTPUTS HOLD LAST VALUE UPON CPU FAILURE OR REMOVAL
		CLOSED	OUTPUTS CAN BE CONTROLLED BY THE DEFAULT SWITCHES (S1) UPON CPU FAILURE OR REMOVAL
	S2-2	—	UNUSED
DIGITAL CONTROL (WITH S2-1 CLOSED)	S1-1 S1-1	OPEN CLOSED	DIGITAL OUTPUT 1 IS OFF DIGITAL OUTPUT 1 IS ON
	S1-2 S1-2	OPEN CLOSED	DIGITAL OUTPUT 2 IS OFF DIGITAL OUTPUT 2 IS ON
	S1-3 S1-3	OPEN CLOSED	DIGITAL OUTPUT 3 IS OFF DIGITAL OUTPUT 3 IS ON
	S1-4 S1-4	OPEN CLOSED	DIGITAL OUTPUT 4 IS OFF DIGITAL OUTPUT 4 IS ON
	S1-5 S1-5	OPEN CLOSED	DIGITAL OUTPUT 5 IS OFF DIGITAL OUTPUT 5 IS ON
	S1-6 S1-6	OPEN CLOSED	DIGITAL OUTPUT 6 IS OFF DIGITAL OUTPUT 6 IS ON
	S1-7 S1-7	OPEN CLOSED	DIGITAL OUTPUT 7 IS OFF DIGITAL OUTPUT 7 IS ON
	S1-8 S1-8	OPEN CLOSED	DIGITAL OUTPUT 8 IS OFF DIGITAL OUTPUT 8 IS ON
	S1-9 S1-9	OPEN CLOSED	DIGITAL OUTPUT 9 IS OFF DIGITAL OUTPUT 9 IS ON
	S1-10 S1-10	OPEN CLOSED	DIGITAL OUTPUT 10 IS OFF DIGITAL OUTPUT 0 IS ON
	S1-11 S1-11	OPEN CLOSED	DIGITAL OUTPUT 11 IS OFF DIGITAL OUTPUT 11 IS ON
	S1-12 S1-12	OPEN CLOSED	DIGITAL OUTPUT 12 IS OFF DIGITAL OUTPUT 12 IS ON

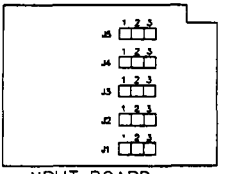
REFER TO PRODUCT INSTRUCTION E92-500-4 FOR FURTHER INFORMATION
SEE SHEET 53 FOR FURTHER DETAILS

NETWORK 90/NF 90

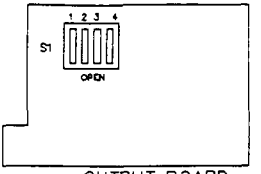
Bailey CANADA

8/A00542

SEQUENCE COMMAND CONTROLLER MODULE
SW TCH SETT NGS con't



NPUT BOARD



OUTPUT BOARD

NOTE·

1. SWITCH SET OPEN = LOGIC 1
2 JUMPERS J1 TO J5 DETERMINE NPUT VOLTAGE LEVELS

NPUT BOARD JUMPER	POSITION	DESCR PT ON
J1	1–2	CONF GURES D 1–D 12 FOR AC OPERATION
	2–3	CONF GURES NON– SO_ATED D G TAL NPUTS 1 THROUGH 12(D 1–D 12) FOR DC OPERAT ON
J2	1–2	CONFIGURES D 13 FOR AC OPERAT ON
	2–3	CONFIGURES SOLATED D G TAL NPUT 13 (DI13) FOR DC OPERAT ON
J3	1–2	CONF GURES DI14 FOR AC OPERAT ON
	2–3	CONFIGURES ISOLATED D G TAL NPUT 14 (DI14) FOR DC OPERAT ON
J4	1–2	CONF GURES D 15 FOR AC OPERAT ON
	2–3	CONF GURES ISOLATED D G TAL NPUT 15 (DI15) FOR DC OPERAT ON
J5	1–2	CONFIGURES D 16 FOR AC OPERAT ON
	2–3	CONFIGURES SOLATED D GITAL NPUT 16 (DI16) FOR DC OPERAT ON

3 S1 DETERMINES /O ADDRESS THE LEAST S GN F CANT BIT S FABR CATED ON BOARD SO THAT THE NPUT CARD HAS AN EVEN ADDRESS AND THE OUTPUT CARD HAS AN ODD ADDRESS (ADDRESSES 0 OR 1 ARE NVAL D) THE NEXT LEAST S GN F CANT BIT IS POLE 1.

8/A00542 (W) (A)

REFER TO PRODUCT NSTRUCTION E92–500–4 FOR FURTHER NFORMATION.

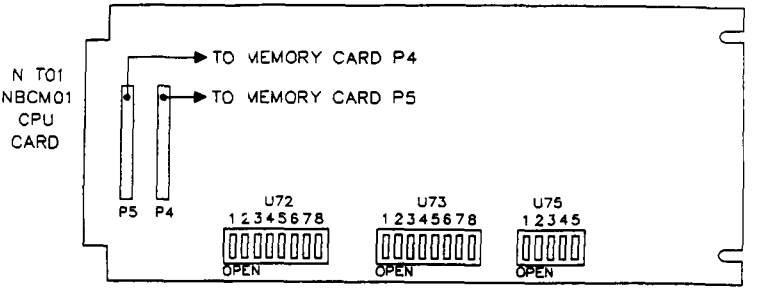
NETWORK 90/INF 90

Bailey CANADA

AL760273E SHT. 53
CAD FILE– 76027353

BRIDGE COMMUNICATION MODULE SWITCH SETTINGS

NF-NET TO NF-NET TRANSFER MODULE SWITCH SETTINGS



NOTES:

1 SWITCH SET OPEN = LOGIC 1

2 SWITCH U72 SELECTS OPERATING OPTIONS:
- U72-1 OPEN = NO BOOT ROM CHECKSUM
  CLOSED = PERFORM ROM CHECKSUM
- U72-2/3 PORT 0 & 1 DATA CHARACTERISTICS
  - CLOSED/CLOSED = 8 DATA BITS, 1 STOP BIT, NO PARITY
  - CLOSED/OPEN = 8 DATA BITS, 1 STOP BIT, EVEN PARITY
  - OPEN/CLOSED = 8 DATA BITS, 1 STOP BIT, ODD PARITY
  - OPEN/OPEN = 8 DATA BITS, 2 STOP BITS, NO PARITY
- U72-4/5 EXCEPTION REPORTING RATES (TIME BETWEEN SCANS)
  - CLOSED/CLOSED = 2.0 SECONDS
  - CLOSED/OPEN = 1.0 SECONDS
  - OPEN/CLOSED = 0.5 SECONDS
  - OPEN/OPEN = 0.25 SECONDS
- U72-6/7 UNUSED
- U72-8 OPEN = REDUNDANCY REQUIRED
  (SET THE SAME ON REDUNDANT MODULES)
  CLOSED = REDUNDANCY NOT REQUIRED

3 U73 SELECTS TRANSMISSION RATES FOR TWO RS232 PORTS
- POLES 1 TO 4 = TERMINAL PORT (1=LSB)
- POLES 5 TO 8 = PRINTER PORT (5=LSB)

BAUD RATES:

0 = 50	4 = 150	8 = 1.8K	12 = 4.8K
1 = 75	5 = 300	9 = 2.0K	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

SEE SHT 55 FOR FURTHER DETAILS

Ⓦ Ⓐ

BRIDGE COMMUNICATION MODULE SWITCH SETTINGS (CON'T)

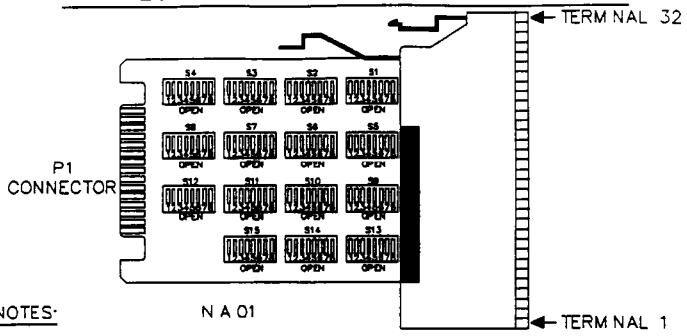
4 U75-1 OPEN = TEST MODE ENABLED (LS/NS HANDSHAKE TIMEOUTS IGNORED)
CLOSED = NORMAL OPERATING MODE
U75-2 UNUSED
U75-3 OPEN - DIAGNOSTIC PORT ENABLED
CLOSE = NORMAL OPERATING MODE
U75-4 CONTROLS TIME-SYNC ISOLATION BETWEEN THE CENTRAL AND SATELLITE RINGS (EN-670-N90-2725A)
CLOSED - CENTRAL AND SATELLITE RINGS ARE SYNCHRONIZED TO A COMMON TIME BASE

OPEN - CENTRAL SATELLITE RINGS WILL HAVE INDEPENDENT TIME BASES AND MASTER NODES
U75-5 SELECTS MODULE BUS ADDRESS (EACH MODULE OF A REDUNDANT SET MUST HAVE A UNIQUE ADDRESS EN 670 NF 90-3014)
CLOSED - MODULE ADDRESS 0
OPEN = MODULE ADDRESS 1

U72								U73								U75				
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5
					0	0											0		0	0

SEE PRODUCT INSTRUCTION E93-908-7 FOR FURTHER INFORMATION ON NBCM01
SEE PRODUCT INSTRUCTION E96-601 FOR FURTHER INFORMATION ON NTO1

ANALOG NPUT TERM NAT ON MODULE



NOTES:

N A 01

1 THE D PSWTCH NUMBER CORRESPONDS NUMER CALLY TO THE AN ALOG NPUT NUMBER

2 SWITCH SET OPEN = 0

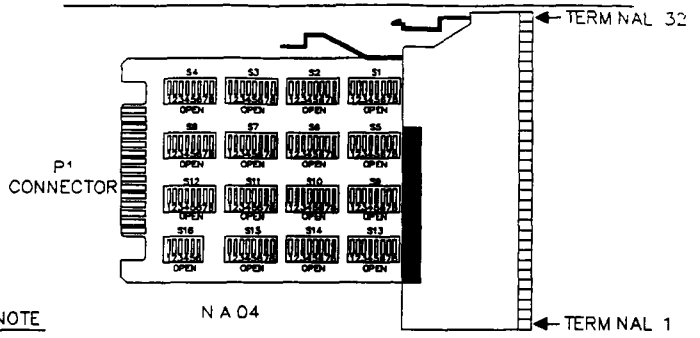
APPL CAT ON/S GNAL TYPE ANALOG NPUT VAR ATIONS	D PSWITCH S1–S15 1 2 3 4 5 6 7 8
SYSTEM POWERED 4–20mA	1 1 1 1 1 1 0 0
EXTERNALLY POWERED 4–20mA	0 0 0 0 1 1 1 1
D FFERENT AL VOLTAGE	0 0 0 0 0 0 1 1
S NGLE ENDED VOLTAGE	0 0 0 1 0 1 1 1

REFER TO PRODUCT NSTRUCT ON E93–911 FOR FURTHER NFORMAT ON
AL760273C SHT 56 NETWORK 90/NF 90
CAD FILE– 76027356

Bailey CANADA

8/A00542 (W) (A)

ANALOG INPUT TERMINATION MODULE



NOTE

1 SWITCH SET OPEN – 0

2 S1 TO S15 SELECT ANALOG INPUT OPTIONS. (DIPSWITCH NUMBER CORRESPONDS NUMERICALLY TO THE ANALOG INPUT NUMBER)

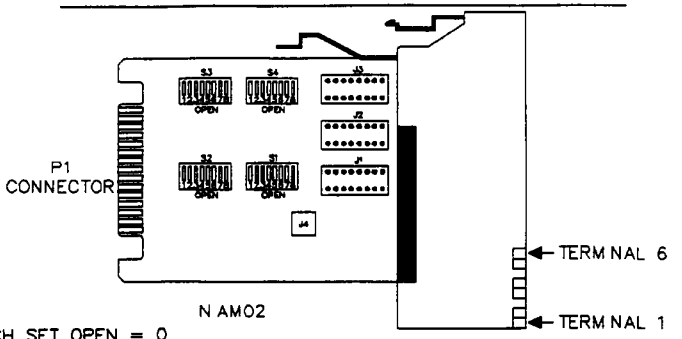
	POLE: 1	2	3	4	5	6	7	8
SYSTEM POWERED 4–20mA	1	1	1	1	1	1	0	0
EXTERNALLY POWERED 4–20mA	0	0	0	0	1	1	1	1
DIFFERINTIAL VOLTAGE	0	0	0	0	0	0	1	1
SINGLE ENDED VOLTAGE	0	0	0	1	0	1	1	1

3 S16 SELECTS WHICH MODULE/SLAVE THE NA04 IS INTERFACED WITH

	POLE	1	2	3	4	5	6
AMM01/ASM01		1	0	0	1	1	0
AS01 /AS02		0	1	1	0	0	1

REFER TO PRODUCT INSTRUCTION E96–463 FOR FURTHER INFORMATION

ANALOG MASTER TERMINATION MODULE



NAM02

NOTE:

1 SWITCH SET OPEN = 0

2 SWITCH S1 MANIPULATES RTD'S FOR THE AMM02/AMM03 WHEN ASM02'S ARE USED

NUMBER OF ASM02'S	S1								RTD PAR
	1	2	3	4	5	6	7	8	
1	1	1	0	0	0	0	0	0	A
2	0	0	0	0	0	0	0	0	
3	0	0	1	1	0	0	0	0	B
4	0	0	0	0	0	0	0	0	
5	0	0	0	0	1	1	0	0	C
6	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	1	1	D
8	0	0	0	0	0	0	0	0	

3 SWITCH S2, S3 & S4 ENABLES PROPER COMMUNICATION BETWEEN REDUNDANT AMM03'S

	S2, S3, S4							
	1	2	3	4	5	6	7	8
PRIMARY NIAM02	1	0	1	0	1	0	1	0
SECONDARY NAM02	0	1	0	1	0	1	0	1

REFER TO PRODUCT INSTRUCTION E93-911 FOR FURTHER INFORMATION

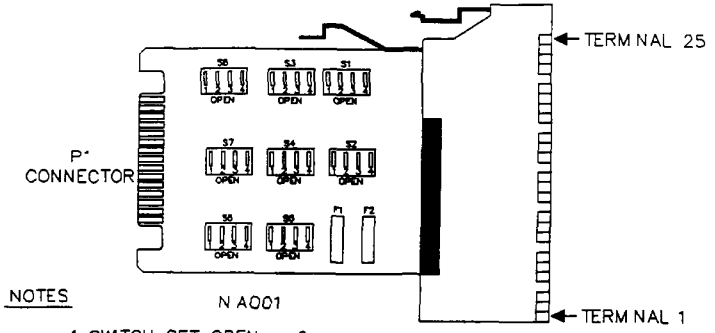
AL7602730 SHT 58
CAD FILE- 76027358

NETWORK 90/INFI 90

Bailey CANADA

8/A00542

ANALOG OUTPUT TERMINATION MODULE



NOTES

NAO01

1 SWITCH SET OPEN = 0

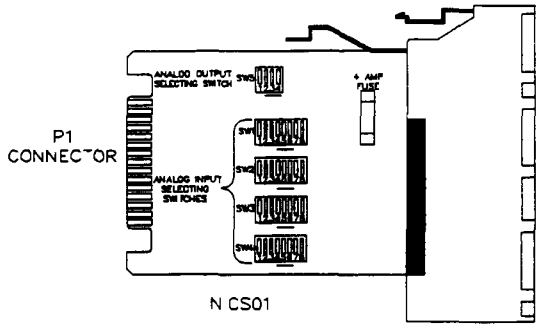
2 SWITCH S1 TO S8 SELECTS OUTPUT OPTIONS

POLE NUMBER	1	2	3	4
1–5 VDC	0	1	1	1
4–20mA	1	0	0	0

3 FUSES F1 & F2 = 3 AMPS

REFER TO PRODUCT INSTRUCTION E93–911 FOR FURTHER INFORMATION

CONTROL NTERFACE SLAVE/CONTROLLER/STAT ON TERM NAT ON MODULE



NOTE. 1. THE ANALOG NPUT D PSWITCH NUMBER CORRESPONDS NUMERICALLY TO THE ANALOG INPUT NUMBER

2 SWITCH OPEN = 0

ANALOG NPUT VARIATIONS	D PSWITCHES S1-S4 1 2 3 4 5 6 7 8
SYSTEM POWERED 4-20mA	1 1 1 1 1 1 0 0
EXTERNALLY POWERED 4-20mA	0 0 0 0 1 1 1 1
S NGLE ENDED VOLTAGE (1-5VDC)	0 0 0 1 0 1 1 1
D FFERRNTIAL VOLTAGE (1-5VDC)	0 0 0 0 0 0 1 1
ANALOG OUTOUT VARIAT ONS	**DIPSWITCH S5 1 2 3 4**
BOTH OUTPUTS ARE 1-5 V DC	1 1 1 1
OUTPUT 1 S 1-5VDC, OUTPUT 2 IS 4-20mA DC	1 1 0 0
OUTPUT 1 S 4-20mA DC, OUTPUT S 1-5VDC	0 0 1 1
BOTH OUTPUTS ARE 4-20mA DC	0 0 0 0

REFER TO PRODUCT NSTRUCTION E93-911 FOR FURTHER NFORMATION

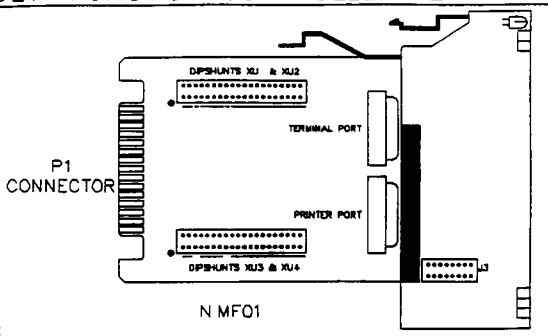
AL760273D SHT 60
CAD FILE- 76027360

NETWORK 90/NF 90

Bailey CANADA

8/A00542 (W) (A)

MULT-FUNCTION CONTROLLER TERMINATION MODULE



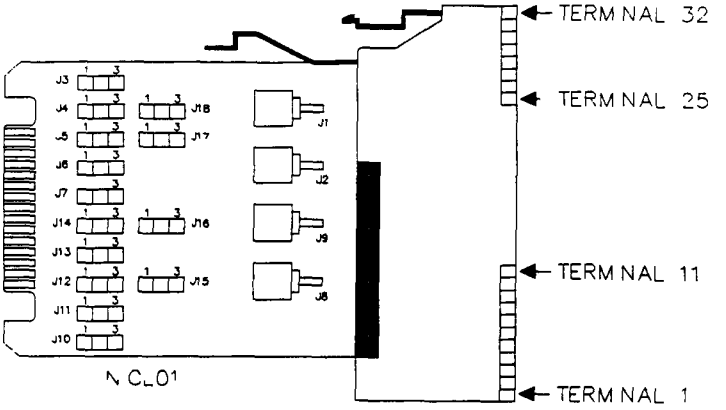
NMF01

NOTE:
1 1-10 REPRESENT STRAP NUMBERS ON DIPSHUNTS XU1 THRCUGH XU4
WHERE 0 REPRESENTS A CUT STRAP AND 1 REPRESENTS A STRAP LEFT NTACT

APPLICATION SIGNAL TYPE	DIPSHUNTS	DIPSHUNT CONFIGURATION 1 2 3 4 5 6 7 8 9 10
COMPUTERS - IBM PC® AND COMPATIBLE, COMPAQ® - ALSO -	XU1/XU3	1 1 1 0 0 1 1 0 1 0
TERMINALS-VT1___, ADM3 VISUAL 50, WYSE (WY50) TELEVIDEO	XU2/XU4	0 0 1 0 1 0 0 0 0 0
SEQUENTIAL EVENTS RECORDER	XU1/XU2	NOT USED
	XU3	1 1 1 0 0 0 0 0 1 0
	XU4	0 0 0 0 1 1 1 0 0 0

REFER TO PRODUCT INSTRUCTION E93-911 FOR FURTHER INFORMATION

PLANT LOOP/SUPER LOOP TERMINATION MODULE



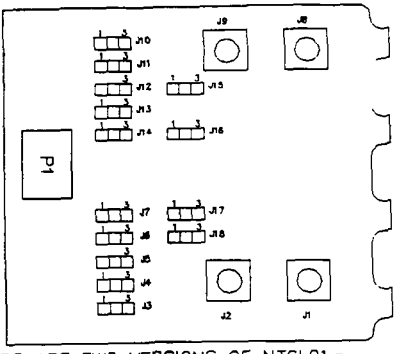
NOTES

1. THERE ARE TWO VERSIONS OF NCL01's THE BOARD MUST BE VISUALLY INSPECTED TO DETERMINE VERSION
   SEE SHEET 92 FOR INFORMATION ON THE OTHER VERSION
   (APPROXIMATE DATE OF BOARD CHANGE IS MAR 1990)
2. J3 TO J7 AND J10 TO J18 SELECTS CABLE TYPE USED FOR PLANT LOOP OR SUPER LOOP
3. J1, J2, J8, AND J9 ARE BNC CONNECTORS FOR COAX CABLES

	PLANT LOOP		SUPER LOOP	
	TWINAX	COAX	TWINAX	COAX
JUMPER No	(1-2)OR(2-3)	(1-2)OR(2-3)	(1-2)OR(2 3)	(1 2)OR(2-3)
J3, J10	(1-2)	(2-3)	(1-2)	(2-3)
J4 - J7, J11 - J14	(1-2)	(2-3)	(2-3)	(2 3)
J15 - J18	(2 3)	(2-3)	(1-2)	(2 3)

REFER TO PRODUCT INSTRUCTION E93-911 FOR FURTHER INFORMATION

PLANT LOOP/SUPER LOOP/NF -NET TERMINATION UNIT



NTCL01

(6636997A1)

NOTES.

1 THERE ARE TWO VERSIONS OF NTCL01 s
PLEASE NOTE ASSEMBLY NUMBER FOR VERS ON
SEE SHEET 14 FOR INFORMAT ON ON 6636997D1
(APPROX MA'E DA'E OF BCARD CHANGE S NOV '990

2 J3 TO J7 AND J10 TO J18 SELECTS CABLE TYPE USED FOR PLANT LOOP OR SUPER LOOP/NF NET

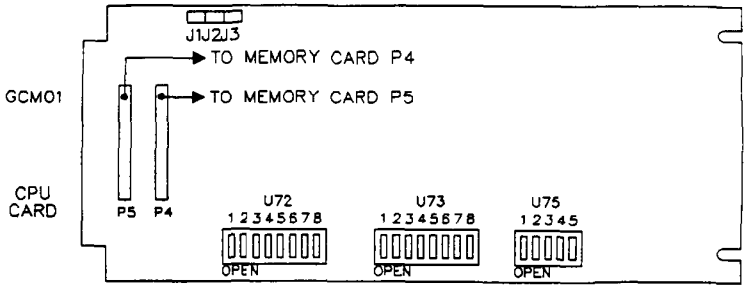
3 J1, J2 J8, AND J9 ARE BNC CONNECTORS FOR COAX CABLES

J1 - LOOP 1 N
J2 = LOOP 1 OUT
J8 = LOOP 2 N
J9 = LOOP 2 OUT

	PLANT LOOP		SUPER LOOP	
	TWINAX	COAX	TWINAX	COAX
JUMPER No	(1-2)OR(2-3)	(1-2)OR(2-3)	(1-2)OR(2 3)	(1 2)OR(2-3)
J3, J10	(1-2)	(2-3)	(1-2)	(2-3)
J4 - J7, J11 - J14	(1-2)	(2-3)	(2-3)	(2-3)
J15 - J18	(2-3)	(2-3)	(1 2)	(2-3)

REFER TO PRODUCT NSTRUCTION E93-911 FOR FURTHER NFORMAT ON

GATEWAY CONTROLLER MODULE SWITCH SETTINGS



NOTES:

1 SWITCH SET "OPEN" = LOGIC 1

2 J1 – 2 – 3 SELECTS EPROM TYPE INSTALLED J1 – J2 = 27256
J2 – J3 = 27128

3 U72 SELECTS OPERATING OPTIONS:
- U72–1 OPEN = NHIBIT ROM CHECKSUM
  CLOSED = PERFORM ROM CHECKSUM
- U72–1 OPEN = DTE MODE SELECTED
  CLOSED – DCE MODE SELECTED
- U72–3 OPEN = EQUIPMENT SELECT OUTPUT ENERGIZED
  CLOSED = EQUIPMENT SELECT OUTPUT DE–ENERGIZED
- U72–4 OPEN = UTILITY
  CLOSED = GATEWAY COMMUNICATION
- U72–5 OPEN = REMOTE } GATEWAY D
  CLOSED = LOCAL
- U72–6 OPEN = ONE WAY CONTROL
  CLOSED = TWO WAY CONTROL
- U72–7 OPEN = INITIALIZE MODULE
  CLOSED = NORMAL OPERATING MODE
- U72–8 OPEN = SECONDARY GCM
  CLOSED = PRIMARY GCM

SEE SHEET 65 FOR MORE DETAILS

GATEWAY CONTROLLER MODULE SWITCH SETTINGS con't

4 SWITCH U73 SELECTS TRANSMISSION RATES FOR TWO RS232 PORTS

POLES 1 TO 4 – TERMINAL PORT (1–LSB)
POLES 5 TO 8 – PRINTER PORT (5–LSB)

BAUD RATES.

0 = 50	4 = 150	8 = 1 8K	12 – 4 8K
1 – 75	5 = 300	9 – 2 0K	13 – 7 2K
2 = 110	6 = 600	10 – 2 4K	14 – 9 6K
3 = 134 5	7 – 1 2K	11 – 3 6K	15 – 19 6K

5 SWITCH U75 SELECTS NODE ADDRESS 0 THROUGH 31 (5–LSB)

U72								U73								U75				
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5
0																				

REFER TO PRODUCT INSTRUCTION E93–908–14 FOR FURTHER INFORMATION

AL760273C SHT.65
CAD FILE– 76027365

M. Schrader

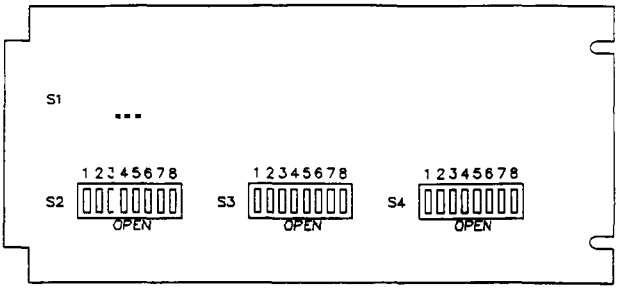
NETWORK 90/NF 90

Bailey CANADA

8/A00542

REMOTE NPUT/OUTPUT MODULE SW TCH SETT NGS

MR 002
NR 002



NOTES.

1 SWITCH SET OPEN = LOG C 1

2 S1 HAS 2 FUNCT ONS DEPENDING ON WH CH MODE THE NR 002 S OPERAT NG

N REMOTE MODE S1 SELECTS NODE ADDRESS (8=LSB)
N LOCAL MODE S1 SELECTS SLAVE ADDRESS
S1 – 3 TO 8 SELECTS ADDRESS (8=LSB)
S1 – 1 TO 2 NOT USED

3 S2 PROVIDES NO USER OPTIONS AND MUST BE SET AS SHOWN

MODE	S2							
	1	2	3	4	5	6	7	8
REMOTE	0	0	0	0	0	0	0	0
LOCAL	0	1	0	0	0	0	0	0

4 S3 AND S4 SELECTS MODE AND CABLE TYPE

N REMOTE MODE

S3							
1	2	3	4	5	6	7	8
X	X	X	Y	1	0	0	0

S4							
1	2	3	4	5	6	7	8
0	0	0	0	0	0	0	0

N LOCAL MODE

S3							
1	2	3	4	5	6	7	8
X	X	X	Y	0	1	1	1

S4							
1	2	3	4	5	6	7	8
1	1	1	1	1	1	1	1

WHERE X = SWITCH MAY BE OPEN OR CLOSED
Y = OPEN = F BER OPTIC CABLES ARE USED
CLOSED = ELECTR CAL CABLES ARE USED

SEE PRODUCT NSTRUCT ON E93-908-21 FOR FUTHER NFORMATION ON NR1002
SEE PRODUCT NSTRUCT ON E96-317 FOR FUTHER NFORMATION ON MR 002 (W) (A)

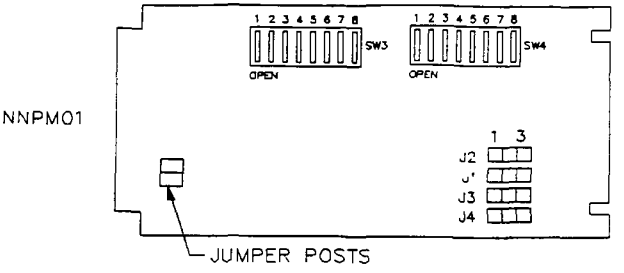
AL760273C SHT. 66
CAD FILE– 76027366

NETWORK 90/NF 90

Bailey CANADA

8/A00542

NETWORK PROCESSOR MODULE SWITCH SETTINGS



NOTES

1 SWITCH SET "OPEN" = LOGIC 1

2 SWITCH SW3 1 CLOSED FOR NORMAL OPERATIONS

OPEN FOR MFP DIAGNOSTIC MODE ENABLED

SW3-2 UNUSED

SW3 3 CLOSED FOR CONTROL WAY MODE (1 MHz)

OPEN FOR MODULE BUS MODE (83.3 kHz)

SW3 4, 5, 6, 7 UNUSED

SW3 8 CLOSED FOR MODULE BUS ADDRESS "0"

OPEN FOR MODULE BUS ADDRESS "1"

3 SWITCH SW4 SELECTS OPERATING OPTIONS

SW4-1 CLOSED – PERFORMS ROM CHECKSUM (NORMAL OPERATION)
OPEN – INHIBITS ROM CHECKSUMMING (USED BY DEVELOPMENT PERSONNEL)

SEE SHEET 68 FOR MORE DETAILS

NETWORK PROCESSING MODULE SWITCH SETTINGS cont

SW4-2 CLOSED = FAIL OVER ON POWER SYSTEM STATUS FAILURE DISABLED
OPEN = FAIL OVER ON POWER SYSTEM STATUS FAILUR ENABLED

SW4 3 CLOSED = NO REDUNDANT MODULE EXPECTED
OPEN = REDUNDANT MODULE EXPECTED (SET THE SAME ON REDUNDANT MODULES)

SW4 4 CLOSED = SUPER LOOP DIAGNOSTICS DISABLED
OPEN = SUPER LOOP DIAGNOSTICS ENABLED

SW4-5/6 SELECTS EXCEPTION REPORT POLL RATE
CLOSED/CLOSED = 1 POLL PER SECOND (SLOW)
CLOSED/OPEN = 2 POLLS PER SECOND (SLOW)
OPEN/CLOSED = 4 POLLS PER SECOND (STANDARD)
OPEN/OPEN = 8 POLLS PER SECOND (FAST)

SW4-7 CLOSED = DISABLED TEST MODE (DISABLES NIS HANDSHAKE TIMEOUT)
OPEN = ENABLES TEST MODE

SW4-8 UNUSED (MUST BE CLOSED ON PRIMARY/SECONDARY NPM'S)

ALL OPTION SWITCHS MUST BE SET IDENTICALLY ON REDUNDANT NNPM01 CONFIGURATIONS

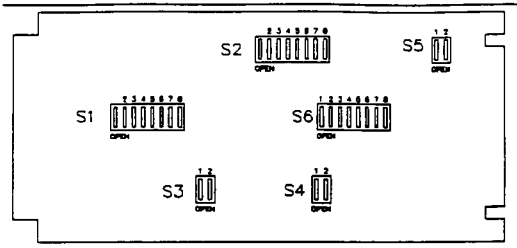
JUMPERS J1 TO J4 ARE FACTORY SET TO 1 AND 2 DO NOT CHANGE

SW3								SW4							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
0	0		0	0	0	0		0			0			0	0

SEE PRODUCT INSTRUCTIONS E96-601 FOR FUTHER INFORMATION

HYDRAULIC SERVO SLAVE SWITCH SETTINGS

NHSS01
MHSS01



NOTES.

1 SWITCH SET OPEN = LOGIC 1

2. SWITCH S1 1 MUST BE OPEN
S1–2 TO 8 SELECTS EXPANDER BUS ADDRESS
0 THROUGH 63 (8 = LSB)

3 SWITCH S2 SELECTS THE GAIN FOR INTERNAL ERROR AMPLIFIER WHICH COMPARES POSITION DEMAND TO FEEDBACK

S2	CLOSE POLE *	FOR A GAIN
	1	20 50
	2	18 25
	3	15 05
	4	13 10
	5	10 00
	6	5 00
	7	2 01
	8	1.10

* ALL OTHER POLES ARE OPEN

4. SWITCH S3 SELECTS OTHER OSCILLATOR FREQUENCY

S3	POLE		FREQUENCY
	1	2	
	0	1	300 Hz (HIGH)
	1	0	200 Hz (LOW)

SEE SHEET 70 FOR FURTHER INFORMATION

HYDRAULIC SERVO SLAVE SWITCH SETTINGS con't

5. SWITCH S4 SELECTS DITHER OSCILLATOR CURRENT AMPLITUDE.

S4 POLE 1	S4 POLE 2	AMPLITUDE
0	0	DO NOT USE
0	1	2.4 MA
1	0	1.2 MA
1	1	DITHER DISABLED

6. SWITCH S5 SELECTS EXCITATION VOLTAGE OF THE LINEAR VARIABLE DIFFERENTIAL TRANSFORMER (LVDT)

S5 POLE 1	S5 POLE 2	VOLTAGE
0	0	3.5 V P-P
0	1	10.0V P-P
1	0	5.0 V P-P
1	1	DO NOT USE

7 SWITCH S6 SELECTS DEMODULATER AND FEEDBACK GAIN.

S6 CLOSE POLE *	FOR A GAIN OF
1	150
2	100
3	75
4	49
5	20
6	10
7	4.99
8	2.00

* ALL OTHER POLES ARE OPEN

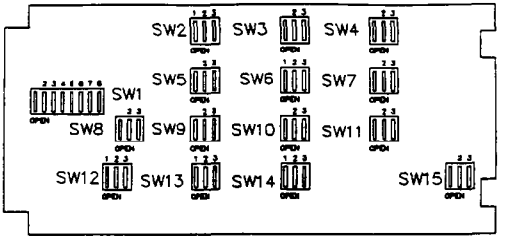
S1								S2								S3	S4	S5		S6							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	1	2	1	2	3	4	5	6	7	8
1																											

REFER TO PRODUCT INSTRUCTION E93-913-17 FOR FURTHER INFORMATION ON NHSS01

REFER TO PRODUCT INSTRUCTION E96-315 FOR FUTHER INFORMATION ON MHSS01

ANALOG SLAVE OUTPUT MODULE SWITCH SETTINGS

NAS001
MAS001

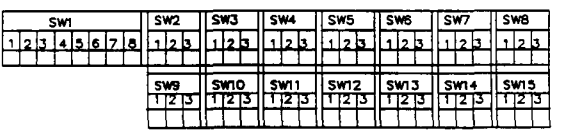


NOTES:

1 SW1 SELECTS EXPANDER BUS ADDRESS 0 THROUGH 63
(8 = LSB ; SWITCH SET OPEN = LOGIC 1)
2 SW2 THROUGH SW15 SELECTS OUTPUT MODE OF
OUTPUTS 1 THROUGH 14 RESPECTIVELY.

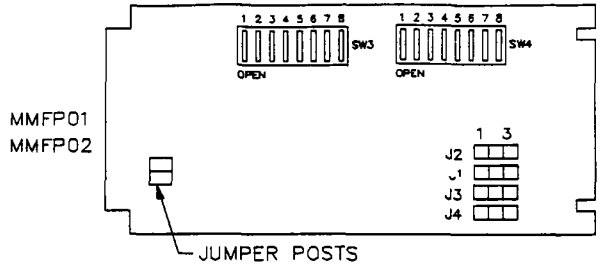
SW2 – SW15	POLE *			MODE
	1	2	3	
	1	0	1	VOLTAGE
	0	1	0	CURRENT

* OPEN – 0 , CLOSED = 1



REFER TO PRODUCT INSTRUCTION E93-912-11 FOR FURTHER NFORMATON ON NAS001
REFER TO PRODUCT INSTRUCTION E96-303 FOR FURTHER NFORMATON ON MAS001

MULTIFUNCTION PROCESSOR MODULE SWITCH SETTINGS



NOTES

1 SWITCH SET "OPEN" = LOGIC 1

2 SWITCH SW3 – 4 TO 8 SELECTS MODULE ADDRESS (8=LSB)
SW3 – 1 CLOSED FOR NORMAL OPERATIONS
OPEN NVOKES DIAGNOSTICS USING SW4
SW3 – 2 RESEVED (MUST BE CLOSED)
SW3 – 3 CLOSED = CONTROLWAY (1 MHz)
OPEN – MODULE BUS (83.3 KHz)

3. SWITCH SW4 SELECTS OPERATION OPTIONS AND DIAGNOSTICS
(REFER TO PRODUCT INSTRUCTIONS FOR DIAGNOSTIC INFORMATION)
SW4 – 1 SPECIAL OPERATION – CLOSED = DISABLED
– OPEN = ENABLED
SW4 – 2 ON-LINE CONFIGURATION – CLOSED = DISABLED
– OPEN – ENABLED
SW4 – 3 BATRAM CHECKSUM ROUTINE – CLOSED = ENABLED
– OPEN = DISABLED
(DO NOT DISABLE CHECKSUM ROUTINE IN NORMAL OPERATION MODE
THIS SWITCH IS USED BY DEVELOPMENT PERSONNEL)
SW4–4 ROM CHECKSUM ROUTINE – CLOSED = ENABLE
– OPEN = DISABLE
(DO NOT DISABLE CHECKSUM ROUTINE IN NORMAL OPERATION MODE.
THIS SWITCH IS USED BY DEVELOPMENT PERSONNEL)
SW4 5 RESERVED (SET TO CLOSED)
SW4 – 6 NVRAM FREE SPACE – CLOSED = NORMAL
– OPEN = COMPACT (NOTE
SWITCH MUST BE CLOSED BEFORE ENTERING CONFIGURATION MODE)

SW4–7 INITIALIZE NVRAM – CLOSE = DISABLE
– OPEN = ENABLE (SWITCH MUST BE CLOSED
BEFORE ENTERING CONFIGURATION MODE)

SW–8 CLOSED = PRIMARY MFP
OPEN = SECONDARY MFP

SEE SHEET 73 FOR FUTHER DETAILS

MULTIFUNCTION PROCESSOR MODULE SWITCH SETTINGS (CON'T)

4 SW4 SPECIAL OPERATION SETTINGS
- 00H – RESERVED DO NOT USE
- 81H – RESERVED FOR FUTURE OPTIONS
- 82H – INITIALIZE NVRAM CONFIGURATION SPACE
- 83H – RESERVED DO NOT USE
- 84H – NF–NET PROTOCOL ENABLED (THIS ALLOWS THE MFP TO TAKE ADVANTAGE OF THE NF–NET/SUPER LOOP CAPABILITIES)
- 85H PERMIT SEGMENT MODIFICATIONS (ALLOWS CHANGE TO SEGMENT SCHEME CONFIGURED WITH FC 82 SPEC 1)
- 86H – ENABLE TIME STAMPING

5. JUMPERS J1 TO J4 ARE FACTORY SET TO 1 AND 2 DO NOT CHANGE

6 JUMPER POST LOCATED TOWARD FRONT EDGE OF BOARD SHOULD NEVER HAVE A JUMPER ACROSS THE PINS. THESE POST ARE USED BY DEVELOPMENT PERSONNEL ONLY.

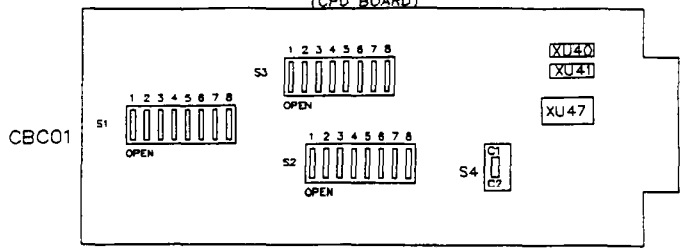
SW3								SW4								J1	J2	J3	J4
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
0	0							0		0	0	0		0		2	1-2	-2	1-2

REFER TO PRODUCT INSTRUCTION E96 – 201 FOR FURTHER INFORMATION ON MMFP01

REFER TO PRODUCT INSTRUCTION E96–202 FOR FUTHER INFORMATION ON MMFP01

BATCH COMMAND CONTROLLER MODULE SWITCH SETTINGS

(CPU BOARD)



NOTES

1 SWITCH SET "OPEN" = LOGIC 1

2 SWITCH S1 4 TO 8 SELECTS ADDRESS (8 = LSB)
S1 - 1 NOT USED (MUST BE CLOSED)
S1 - 2/3 SELECTS RS-232 PORT BAUD RATE
CLOSED/CLOSED = 300
CLOSED/OPEN = 1200
OPEN/CLOSED = 2400
OPEN/OPEN = 9600

3 SWITCH S2 SELECTS DIAGNOSTIC TESTS OR FACEPLATE OPTIONS AND STATION ADDRESS
S2 - 1 TO 3 SELECTS STATION ADDRESS (1 = LSB)
S2 - 4 UNUSED
S2 - 5 RESERVED FOR FACTORY TEST FUNCTION (MUST BE CLOSED)
S2 6 OPEN = FACEPLATE L1 AND L2 INDICATING LED'S ARE RED FOR AUTOMATIC MODE OF THE LOOP
CLOSED = FACEPLATE L1 AND L2 INDICATING LED'S ARE GREEN FOR AUTOMATIC MODE OF THE LOOP
S2 7 OPEN = SELECT FACEPLATE OPTIONS AND STATION ADDRESS (NORMAL MODE)
CLOSED = SELECTS DIAGNOSTIC MODE. REMAINING POLES SELECTS VARIOUS TESTS
S2 - 8 OPEN = ENABLE AUDIBLE ANNUNCIATOR WHEN ALARM CONDITION EXISTS.
CLOSED = DISABLE AUDIBLE ANNUNCIATOR

4 SWITCH S3 SELECTS OPERATIONS MODE.
S3 - 1/4 CLOSED/CLOSED = NVRAM REFORMAT DISABLED
OPEN/OPEN = NVRAM REFORMAT ENABLED
(ALL OTHER POLES ON S3 MUST BE CLOSED
USE ONLY WHEN CONTROLLER HAS CHECKSUM ERROR THEREFORE NORMALLY NOT USED)

SEE SHEET 75 FOR FUTHER DETAILS

BATCH COMMAND CONTROLLER MODULE SWITCH SETTINGS (CONT)

(CPU BOARD)

S3 3/4 CLOSED/CLOSED = NVRAM AND EPROM CHECKSUM ROUTINE ENABLED (NORMAL OPERATION)
OPEN/OPEN = NVRAM AND EPROM CHECKSUM ROUTINE DISABLED (USED BY DEVELOPMENT PERSONNEL)

S3 2/5 CLOSED/CLOSED = UNUSED

S3 – 6 CLOSED = INHIBIT NVRAM FREE SPACE COMPACTION
OPEN = PERFORM NVRAM FREE SPACE COMPACTION (NOTE SWITCH MUST BE CLOSED BEFORE ENTERING CONFIGURATION MODE)

S3 – 7 CLOSE = INHIBIT NVRAM INITIALIZATION
OPEN = INITIALIZE NVRAM (NOTE SWITCH MUST BE CLOSED BEFORE ENTERING CONFIGURATION MODE)

S3 – 8 CLOSED = PRIMARY CONTROLLER
OPEN = SECONDARY CONTROLLER

5 SWITCH S4 SELECTS STATION LINK BAUD RATE C1 = 5000 BAUD
C2 = 40000 BAUD

6 XU40 WITH DIPSHUNT INSTALLED (NO STRAPS BROKEN) ENABLES RS 232 PORT

XU41 WITH DIPSHUNTS INSATALLED (NO STRAPS BROKEN) ENABLES REDUNDANCY LINK

EITHER DIPSHUNTS INSTALLED IN XU40 OR XU41 BUT NOT BOTH

7 XU47 WITH DIPSHUNT INSTALLED (NO STRAPS BROKEN) ENABLES CBC TO ACT AS MASTER CONTROLLER I/O ON EXPANSION BUS

XU47 WITH NO DIPSHUNT INSTALLED ENABLES CBC TO ACT AS SLAVE WITH NO DIRECT CONTROL OVER I'S /O

S1								S2								S3								S4	XU40	XU41	XU42
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	C1/C2	N/OUT	N/OUT	N/OUT
0											X	0		1		0	0	0	0	0	0	0					

SEE SHEET 76 FOR FUTHER DETAILS

REFER TO PRODUCT INSTRUCTION E92-500-3 FOR FUTHER INFORMATION

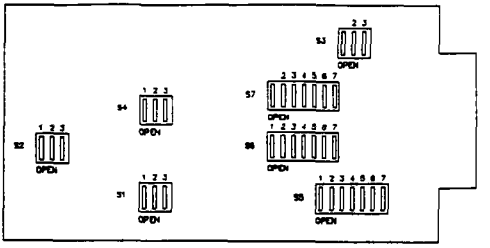
M. Schuetz

Bailey CANADA

8/A00542

BATCH COMMAND CONTROLLER MODULE SWITCH SETTINGS (CONT)

(ANALOG BOARD)



ANALOG BOARD OPTION	CONTROL	SETTING	DESCRIPTION
ANALOG INPUT No 1	S3-1 S3-1	OPEN CLOSED	FOR VOLTAGE INPUTS FOR CURRENT SETTINGS
ANALOG INPUT No 2	S3-2 S3-2	OPEN CLOSED	FOR VOLTAGE INPUTS FOR CURRENT INPUTS
ANALOG INPUT No 3	S3-3 S3-3	OPEN CLOSED	FOR VOLTAGE INPUTS FOR CURRENT INPUTS

	ANALOG INPUT No 4			ANALOG INPUT No 5			ANALOG INPUT No 6		
ANALOG BOARD OPTION	S1 1 2 3	S5 1 2 3 4 5 6 7		S2 1 2 3	S6 1 2 3 4 5 6 7		S4 1 2 3	S7 1 2 3 4 5 6 7	
FOR VOLTAGE INPUT (1-5 V dc)	C O O	O C O O O O O		C O O	O C O O O O O		C O O	O C O O O O O	
FOR CURRENT INPUT (4-20 mA)	C O O	C C O O O O O		C O O	C C O O O O O		C O O	C C O O O O O	
FOR THERMOCOUPLE INPUT	C C C	O C C C O O O		O C C	O C C C O O O		O C C	O C C C O O O	
FOR 3 WIRE RTD INPUT	C C C	O O O O C C C		O C C	O O O O C C C		O C C	O O O O C C C	
FOR 2-WIRE RTD INPUT	C C C	O O O C C C C		O C C	O O O C C C C		O C C	O O O C C C C	
FOR-20 TO 50 mV INPUT	C C C	O C O O O O O		O C C	O C O O O O O		O C C	O C O O O O O	

SEE SHEET 77 FOR FUTHER DETAILS

REFER TO PRODUCT INSTRUCTION E92-500-3 FOR FUTHER INFORMATION

AL760273C SHT. 76
CAD FILE- 76027376 M Schaefer

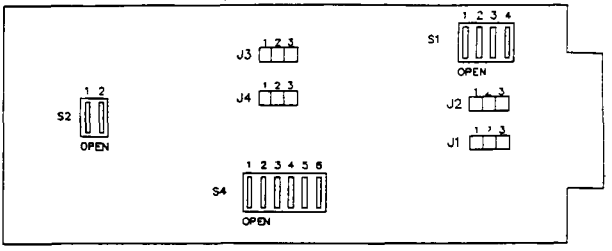
NETWORK 90/INF 90

Bailey CANADA

97600 006

BATCH COMMAND CONTROLLER MODULE SWITCH SETTINGS (CONT)

(DIGITAL BOARD)



NOTES

1 SWITCH S1 SELECT /O ADDRESS (1 = LSB) ADDRESS 0 S NVALID

2 SWITCH S2 SELECTS DEBOUNCE OPTION FOR 2 PULSE NPUTS
S2 -1 OPEN = PULSE NPUT No 1 NO SWITCH DEBOUNCE
(50 KHz MAX FREQUENCY)
CLOSED = PLUSE NPUT No1 SWITCH DEBOUNCE ACTIVATED
(40 Hz MAX FREQUENCY)

S2 -2 OPEN = PULSE NPUT No 2 NO SWITCH DEBOUNCE
(50 KHz MAX FREQUENCY)
CLOSED = PULSE NPUT No 2 SWITCH DEBOUNCE ACTIVATED
(40 Hz MAX FREQUENCY)

3 SWITCH S4 SELECTS ANALOG OUTPUT OPTIONS

OPTION	CONTROL	SETTING	DESCRIPTION
ANALOG OUTPUT No 1	S4 1	OPEN CLOSED	PROVIDES CURRENT OUTPUT PROVIDES VOLTAGE OUTPUT
	S4-2	OPEN CLOSED	YIELDS 5 25 V (105%) OUTPUT FOR POWER UP YELDS 0 75 V (-5%) OUTPUT FOR POWER UP
	S4-3	OPEN CLOSED	HOLDS LAST ANALOG OUTPUT VALUE ON MFT TIMEOUT GOES TO POWER-UP VALUE SET BY S4-2 ON MFT TIMEOUT
ANALOG OUTPUT No 2	S4-4	OPEN CLOSED	PROVIDES CURRENT OUTPUT PROVIDES VOLTAGE OUTPUT
	S4-5	OPEN CLOSED	YIELDS 5 25 V (105%) OUTPUT FOR POWER UP YELDS 0 75 V (-5%) OUTPUT FOR POWER UP
	S4-6	OPEN CLOSED	HOLDS LAST ANALOG OUTPUT VALUE ON MFT TIMEOUT GOES TO POWER-UP VALUE SET BY S4-5 ON MFT TIMEOUT

SEE SHEET 78 FOR FUTHER DETALS

BATCH COMMAND CONTROLLER MODULE SWITCH SETTINGS (CON'T)

(DIGITAL BOARD)

4 JUMPER J1 SELECTS VOLTAGE MODE OPERATION FOR DIGITAL INPUT No 1

J1 1-2 = AC OPERATION
2-3 = DC OPERATION

5 JUMPER J2 SELECTS VOLTAGE MODE OPERATION FOR DIGITAL INPUT No 2

J2 1-2 = AC OPERATION
2-3 = DC OPERATION

6 JUMPER J3 SELECTS THE AMPLITUDE RANGE FOR PULSE INPUT No 1

J3 1-2 = VALID LOW -50.0 V TO 6.0 V
VALID HIGH - 14.0 V TO 30.0 V
2-3 = VALID LOW = 50.0 V TO 2.3 V
VALID HIGH - 3.5 V TO 8.0 V

7 JUMPER J4 SELECTS THE AMPLITUDE RANGE FOR PULSE INPUT No 2

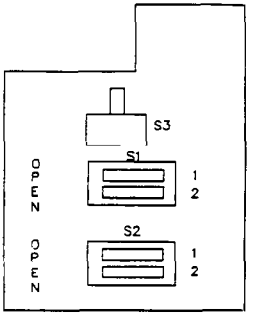
J4 1-2 = VALID LOW = -50.0 V TO 6.0 V
VALID HIGH = 14.0 V TO 30.0 V
2-3 = VALID LOW = -50.0 V TO 2.3 V
VALID HIGH = 3.5 V TO 8.0 V

SEE SHEET 79 FOR FUTHER DETAILS

REFER TO PRODUCT INSTRUCTION E92-500-3 FOR FUTHER INFORMATON

BATCH COMMAND CONTROLLER MODULE SWITCH SETTINGS (CONT)

(MANUAL CONTROL BOARD)



NOTES

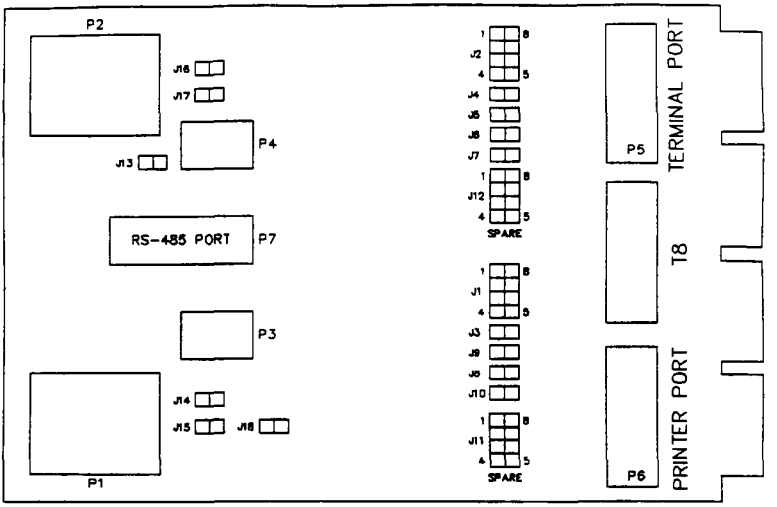
1 SWITCH S1 SELECTS MANUAL CONTROL OPTION FOR DIGITAL OUTPUTS
S1 1 OPEN – OUTPUT HOLD LAST VALUE UPON CPU FAILURE OR REMOVAL
CLOSED = OUTPUT CAN BE CONTROLLED BY DEFAULT SWITCHS (S2) UPON CPU FAILURE OR REMOVAL
S1-2 UNUSED

2 SWITCH S2 SELECTS DEFAULT FOR DIGITAL OUTPUTS (S1-1 CLOSED)
S2-1 OPEN = DIGITAL OUTPUT 1 IS OFF
CLOSED = DIGITAL OUTPUT 1 IS ON
S2-2 OPEN = DIGITAL OUTPUT 2 S OFF
CLOSED – DIGITAL OUTPUT 2 S ON

3 SWITCH S3 SELECTS ANALOG OUTPUT MANUAL CONTROL
S3 OPEN (SWITCH NOT DEPRESSED) = OUTPUTS WILL DEFAULT TO SWITCH SETTINGS ON DIGITAL BOARD
CLOSED (SWITCH DEPRESSED) = DEFAULT OUTPUTS OVERRIDDEN BY SCREWDRIVER ADJUSTMENTS UPON CPU FAILURE OR REMOVAL.

REFER TO PRODUCT INSTRUCTION E92 500-3 FOR FUTHER INFORMATION

MMFP0☐ TERM NAT ON UNIT



NTMP01

NOTES

1 J1 AND J2 SELECTS THE NTERFACE MODE OF THE MFP
J1 CONTROLS P6 AND J2 CONTROLS P5
FOR STANDARD DCE NTERFACE TO AN BM COMPUTER CONFIGURE
J1 AND/OR J2 AS FOLLOWS

J1,J2 1☐☐8
2☐☐7
3☐☐6
4☐☐5

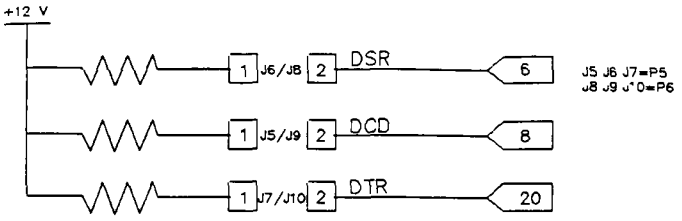
FOR DTE NTERFACE CONF GURE J1 AND/OR J2 AS FOLLOWS:

J1,J2 1☐-☐8
2☐-☐7
3☐-☐6
4☐-☐5

SEE SHEET 81 FOR FUTHER DETA LS

NTMP01 TERM NAT ON UN T CON'T

2 J5 TO J10 ENABLE THE HANDSHAKE FOR THE COMMUN CATION L NK AND MUST BE SET TO MATCH EQU PMENT BE NG USED JUMPERS NSTALLED (TO +12V SUPPLY) CORRESPONDS TO LOG C 0



3 J3 NSTALLED CONNECTS P6'S CABLE SH ELD (P N 1) TO CHASS S GROUND
J4 NSTALLED CONNECTS P5'S CABLE SH ELD (P N 1) TO CHASSIS GROUND

4 JUMPER POSTS LABELLED J11 AND J12 ARE PROVIDED TO STORE JUMPERS USED BY J3 THROUGH J10.

5 J18 JUMPERS NSTALLED ACROSS P NS 1 AND 2 SELECTS RS-485 OPERAT ON VIA P7 (P5 IS NOW NACTIVE AND THE JUMPERS ASSOC ATED WITH T HAS NO EFFECT ON P7 P7 HAS A F XED P NOUT)

6 J13 NSTALLED CONNECTS P7 CABLE SH ELD (P N 1) TO CHASS S GROUND

7 JUMPERS J14 THROUGH J17 MUST BE LEFT N THE FACTORY NSTALLED POS T ON (JUMPERS NSTALLED ACROSS P NS 1 AND 2.)

P5 CONNECTOR

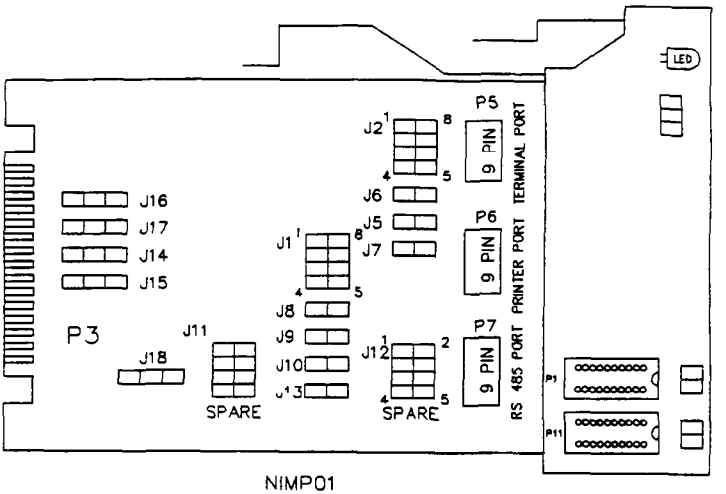
J2				J4	J5	J6	J7	J12	J13	J14	J15	J16	J17	J18
1-2 OR 1-8	3-4 OR 3-6	5-6 OR 5-4	7-8 OR 7-2	IN/OUT	IN/OUT	IN/OUT	IN/OUT	SPARE	IN/OUT	IN/OUT	IN/OUT	IN/OUT	IN/OUT	IN/OUT
								X			N	IN	N	N

P6 CONNECTOR

J1				J9	J8	J6	J10	J11
1-2 OR 1-8	3-4 OR 3-6	5-6 OR 5-4	7-8 OR 7-2	IN/OUT	IN/OUT	IN/OUT	IN/OUT	SPARE
								X

SEE PRODUCT NSTRUCTION E96-427 FOR FURTHER DETA LS

IMMFP0☐ TERMINATION MODULE



NIMP01

NOTES

1 J1 AND J2 SELECTS THE NTERFACE MODE OF THE MFP
J1 CONTROLS P6 AND J2 CONTROLS P5

FOR STANDARD DCE NTERFACE TO AN IBM COMPUTER CONFGURE
J1 AND/OR J2 AS FOLLOWS.

J1 J2 1☐☐8
2☐☐7
3☐☐6
4☐☐5

SEE SHEET 83 FOR FUTHER DETAILS

AL7602738 SHT. 82
CAD FILE- 76027382 M. Schuster

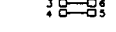
NETWORK 90/NF 90

Bailey CANADA

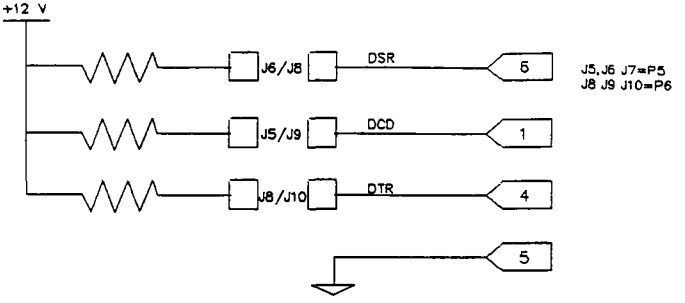
97600 006

NTMP01 TERMINATION MODULE (CON'T)

FOR DTE INTERFACE CONFIGURE J1 AND/OR J2 AS FOLLOWS



2 J5 TO J10 ENABLE THE HANDSHAKE FOR THE COMMUNICATION LINK AND MUST BE SET TO MATCH EQUIPMENT BEING USED. JUMPERS INSTALLED (TO +12V SUPPLY) CORRESPONDS TO LOGIC 0



3 JUMPERS POST LABELLED J11 AND J12 ARE PROVIDED TO STORE THE JUMPERS NOT USED BY J5 THROUGH J10

4 J18 JUMPER INSTALLED ACROSS PINS 1 AND 2 SELECTS RS-485 OPERATION VIA P7 (P5 IS NOW INACTIVE AND THE JUMPERS ASSOCIATED WITH IT HAS NO EFFECT ON P7. P7 HAS A FIXED PINOUT.)

5 J13 INSTALLED CONNECTS P7's CABLE SHIELD (PIN 1) TO CHASSIS GROUND

6 JUMPERS J14 THROUGH J17 MUST BE LEFT IN THE FACTORY INSTALLED POSITION (JUMPERS INSTALLED ACROSS PINS 1 AND 2.)

P5 CONNECTOR

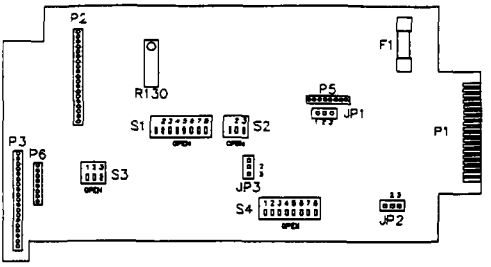
J2				J5	J6	J7	J12	J13	J16	J14	J15	J16	J17
1-2 OR 1-8	3-4 OR 3-6	5-6 OR 5-4	7-8 OR 7-2	IN/OUT	IN/OUT	IN/OUT	SPARE	IN/OUT	IN/OUT	N/OUT	IN/OUT	IN/OUT	N/OUT
							X			N	IN	IN	IN

P6 CONNECTOR

J3				J8	J9	J10	J11
1-2 OR 1-8	3-4 OR 3-6	5-6 OR 5-4	7-8 OR 7-2	IN/OUT	IN/OUT	N/OUT	SPARE
							X

SEE PRODUCT INSTRUCTION E96-413 FOR FURTHER DETAILS

ANALOG CONTROL STATION SWITCH SETTINGS



NOTES
1. SWITCH SET "OPEN" = LOGIC 1
2. S1 - 1 OPEN ENABLES DIAGNOSTICS
   CLOSE FOR NORMAL OPERATION
   S1 - 2 OPEN FOR 40K BAUD SERIAL COMMUNICATIONS
   CLOSED FOR 5K BAUD SERIAL COMMUNICATIONS
   S1 - 3 TO 8 SELECTS STATION ADDESS (8 = LSB)
3. S2 - 1 OPEN ENABLES AUTO BYPASS
   CLOSED DISABLES AUTO BYPASS
   S2 - 2 OPEN FOR REVERSE DO OUTPUT
   CLOSED FOR NORMAL DO OUTPUT
   S2 - 3 OPEN ENABLES ELECTRIC DRIVE
   CLOSE DISABLES ELECTRIC DRIVES
4. S3 SELECTS DISPLAY OPTIONS FOR STAND ALONE

DISPLAY OPTIONS					
DIPSWITCH S3 SWITCH POSITIONS 1 2 3			BAR GRAPH DISPLAY		
			VAR	OUT	SET
0	0	0 [1]	BLANK	BLANK	NA
0	0	1 [1]	BLANK	A1	NA
0	1	0	BLANK	A1&DO [2]	NA
0	1	1	A1	BLANK	NA
1	0	0	BLANK	DO	NA
1	0	1	A1	DO	NA
1	1	0	A2	A1	NA
1	1	1	A2	DO	NA

1. ONLY DISPLAY OPTIONS AVAILABLE WHEN ELECTRIC DRIVE OPTION IS ENABLED
2. VAR SWITCH TOGGLES THE DISPLAY FROM A1 TO DO

SEE SHEET 85 FOR MORE INFORMATION

ANALOG CONTROL STATION SWITCH SETTINGS (cont)

5 S4-1 OPEN ENABLES SQUARE ROOT (ON ANALOG INPUT 1 ONLY)
CLOSED DISABLES SQUARE ROOT (ON ANALOG INPUT 1 ONLY)
S4-2 TO 4 SELECTS NORMAL MODE DISPLAY OPTIONS

DISPLAY OPTIONS					
DIPSWITCH S4 SWITCH POSITIONS			BAR GRAPH DISPLAY		
1	2	3	VAR	OUT	SET
0	0	0	PV	CO	SP
0	0	1	PV	A1	SP
0	1	0	PV	BLANK	SP
0	1	1	PV	ALL ON	SP
1	0	0	A2	CO	SP
1	0	1	A2	A1	SP
1	1	0	A2	BLANK	SP
1	1	1	A2	ALL ON	SP

S4-5 TO 8 SELECTS BYPASS MODE DISPLAY OPTIONS

DISPLAY OPTIONS						
DIPSWITCH S4 SWITCH POSITIONS				BAR GRAPH DISPLAY		
5	6	7	8	VAR	OUT	SET
0	0	0	0[1]	BLANK	AI1	NA
0	0	0	1	BLANK	DO	NA
0	0	1	0	A1	DO	NA
0	0	1	1	DO	DO	NA
0	1	0	0	DO	A1	NA
0	1	0	1	AI2	AI1	NA
0	1	1	0	AI2	DO	NA
0	1	1	1	PV(MFP)	AI1	NA
1	0	0	0	PV(MFP)	DO	NA
1	0	0	1[1]	BLANK	BLANK	NA

SEE SHEET 86 FOR MORE INFORMATION

ANALOG CONTROL STATION SWITCH SETTINGS (con't)

6 JP1 TO JP3 SELECTS CONTROL STATION OPTIONS

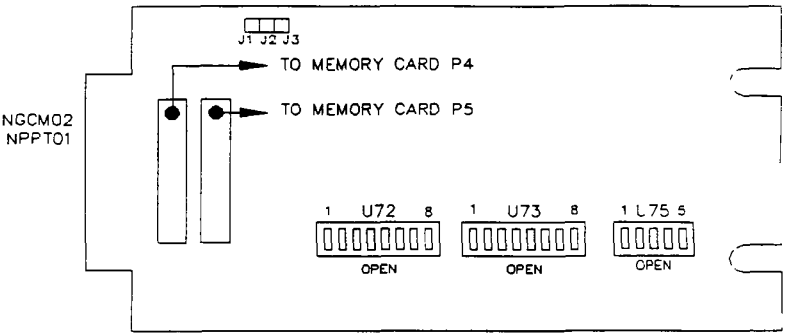
OPTION	JUMPER	JUMPER SETTING	OPTION STATUS
MANUAL OVERRIDE SWITCH	JP1	1 2	ENABLE MANUAL OVERRIDE SWITCH
		2-3	DISABLE MANUAL OVERRIDE SWITCH
ELECTRIC DRIVE TYPE	JP2[2]	1-2	RW DRIVE
		2-3	UNIVERSAL DRIVE
MICROCOMPUTER MODE OF OPERATION	JP3	1 2	NORMAL OPERATION
		2 3	FACTORY SETTING

1. SHORT PINS BY INSERTING A JUMPER OVER THEM TOSELECT THE OPTION
2. THIS JUMPER IS LABELED JP4 ON STATIONS THAT ARE REVISION 663809SA1

SWITCH	POLES								JUMPERS (1 OR 3)		
	1	2	3	4	5	7	8		JP1	JP2	JP3
S1	O										
S2				X	X	X	X				
S3				X	X	X	X				
S4											

SEE PRODUCT INSTRUCTION E96-117 FOR MORE INFOMATION

GATEWAY COMMUNUCAT ONS MODULE SW TCH SETT NGS
(PLANT LOOP TO PLANT LOOP TRANSFER MODULE SW TCH SETT NG,



NOTES
1 SWITCH SET "OPEN - LOG C 1
2 SWITCH U72 SELECTS OPERATING OPTIONS
U72-1 CLOSED ENABLES ROM CHECHSUMM NG (NORMAL OPERATION)
OPEN D SABLES ROM CHECKSUMM NG (USED BY DEVELOPMENT PERSONNEL
U72 2 CLOSED = RS232 PORT N DCE MODE (D RECT CONNECT ONS)
OPEN = RS232 PORT N DTE MODE (MODEM CONNECTIONS)
U72 3 CLOSED = EQU PMENT SELECT OUTPUT DE-ENERG ZED
OPEN EQU PMENT SELECTS OUTPUT ENERG ZED
(A UN QUE EQU PMENT SELECT MAY EX ST BETWEEN THE PR MARY AND SECONDARY PPT/GCM THE EQU PMENT SELECT OUTPUT IS DIGITAL OUTPUT 3 OF A DIGITAL SLAVE (MDSM05/MDS01/02/03/04 AND NDSM05, NDS001/02/03/04)
U72 4 CLOSED = PORT 1 OPT ON NTERFACE/GATEWAY COMMUN CAT ON
OPEN = PORT 1 UTILITY OPTION (PORT 1 RESPONDS AS DCE WHEN T S CONF GURED AS UTIL TY PORT, SET U72-4 OPEN F PORT S NOT USED AS A COMMUN CATION NTERFACE)

SEE SHEET 88 FOR MORE DETA LS

GATEWAY COMMUNICATIONS MODULE SWITCH SETTINGS (cont)

PLANT LOOP TO PLANT LOOP REMOTE TRANSFER MODULE SWITCH SETTING (cont)

U72 5 CLOSED – INTERFACE/GATEWAY D LOCAL (DEFINE ONLY ONE INTERFACE AS THE LOCAL)
OPEN = INTERFACE/GATEWAY D REMOTE
U72–6 OPEN = INTERFACE/GATEWAY MODE ONE WAY CONTROL
CLOSED = INTERFACE/GATEWAY MODE TWO-WAY CONTROL (THE FOLLOWING CONDITIONS APPLY WHEN USING TWO-WAY CONTROL
A THE PORT 1 OPTION DEFAULTS TO INTERFACE/GATEWAY COMMUNICATION (U72–4 CLOSED)
B THE LOCAL NPPR01/NPPG02 USES PORT 0 AS T'S COMMAND PORT AND PORT 0 AS T'S REPLY PORT
C THE REMOTE NPPR01/NPPG02 USES PORT 1 AS T'S COMMAND PORT AND PORT 0 AS T'S REPLY PORT
D BOTH THE LOCAL AND REMOTE INTERFACE/GATEWAY MUST HAVE A LOOP ADDRESS OF 0 (U75)
U72–7 CLOSED INHIBITS NVRAM INITIALIZATION
OPEN PERFORMS NVRAM INITIALIZATION
U72–8 SELECTS PRIMARY/SECONDARY (ONE MODULE OF A REDUNDANT PAIR IS SET TO CLOSED AND THE OTHER IS SET OPEN)

3 SWITCH U73 SELECTS TRASMISSION RATES FOR TWO RS232 PORTS
POSITION 1 TO 4 = PORT 0 (POSITION 1 – LSB)(LABELLED AS TERMINAL PORT ON TU/TM)
POSITION 5 TO 8 = PORT 1 (POSITION 5 = LSB)(LABELLED AS PRINTER PORT ON TU/TM)

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

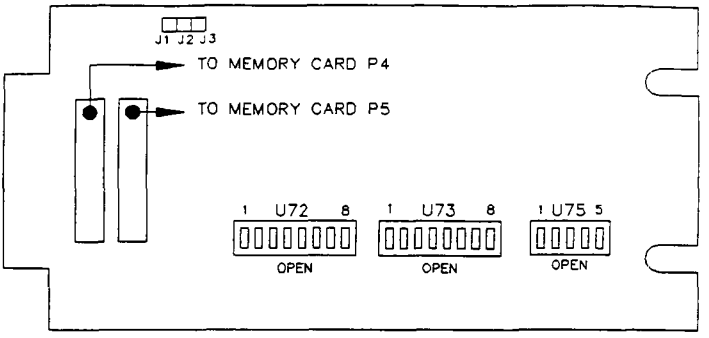
4 SWITCH U75 SELECTS THE LOOP ADDRESS 0 TO 31 (5 = LSB)

5 J1–2–3 SELECTS EPROM TYPE INSTALLED J1 J2 = 27256
J2 – J3 – 27128

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)(J2–J3)
					C						0										

SEE PRODUCT INSTRUCTION E93–908–22 FOR MORE INFORMATION ON NGCM02
SEE PRODUCT INSTRUCTION E96–624 FOR MORE INFORMATION ON NPPT01

NF-NET TO PLANT LOOP TRANSFER MODULE SWITCH SETTINGS



NPT01

NOTES.
1. SWITCH SET "OPEN" = LOGIC 1
2. SWITCH U72 SELECT OPERATION OPTIONS
   - U72-1 CLOSED PERFORMS ROM CHECKSUMMING (NORMAL OPERATION)
     OPEN INHIBITS ROM CHECKSUMMING (USED BY DEVELOPMENT PERSONNEL)
   - U72-2/3 SELECTS PORT 0/1 DATA CHARATERISTICS
     - CLOSED/CLOSED - 8 DATA BITS, 1 STOP BIT NO PARITY
     - CLOSED/OPEN - 8 DATA BITS, 1 STOP BIT, EVEN PARITY
     - OPEN/CLOSED - 8 DATA BITS, 1 STOP BIT, ODD PARITY
     - OPEN/OPEN - 8 DATA BITS, 2 STOP BITS, NO PARITY
   - U72-4/5 NOT USED
   - U72-6 CLOSED DISABLES POWER SYSTEM STATUS FAILURE
     OPEN ENABLES POWER SYSTEM STATUS FAILURE
   - U72-7 CLOSED DISABLES NVRAM INITIALIZATION
     OPEN ENABLES NVRAM INITIALIZATION
   - U72 8 CLOSED IF REDUNDANCY IS NOT REQUIRED
     OPEN IF REDUNDANCY IS REQUIRED

SEE SHEET 90 FOR MORE DETAILS

NF –NET TO PLANT LOOP TRANSFER MODULE SWITCH SETTINGS (con t)

3 SW TCH U73 SELECTS TRANSM SS ON RATES FOR RS232 PORT
POS'N 1 TO 4 – UNL SED
POS N 5 TO 8 = RS232 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

4 SW TCH U75 SELECTS TEST OPT ONS AND MODULE ADDRESS

U75 1 CLOSED = NORMAL OPERAT NG MODE
OPEN – TEST MODE ENABLED (N S HANDSHAKE T MEOUTS GNORED)
U75-2 NOT USED (SET CLOSED)
U75-3 CLOSED = NORMAL OPERATING MODE
OPEN – D AGNOST C PORT ENABLE
U75-4 CLOSED = CROSS-LOOP T ME SYNC ENABLED
OPEN – TIME SYNC SOLATED
U75-5 CLOSED = PR MARY PT
OPEN = SECONDARY PT

5 J1-2-3 SELECTS EPROM TYPE NSTALLED J1 – J2 = ∠7256
J2 – J3 = ∠7128

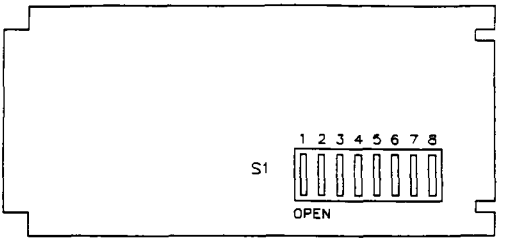
U75					U72							U73								J1 J2 J3
1	2	3	4	5	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	(J1-J2)(J2-J3)
0	0	0			0			0	0		0										

SEE PRODUCT NSTRUCTION E96-602 FOR MORE DETA LS

FREQUENCY COUNTER SLAVE SWITCH SETTINGS

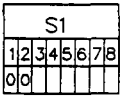
NFCS01

MFCS01



NOTES:

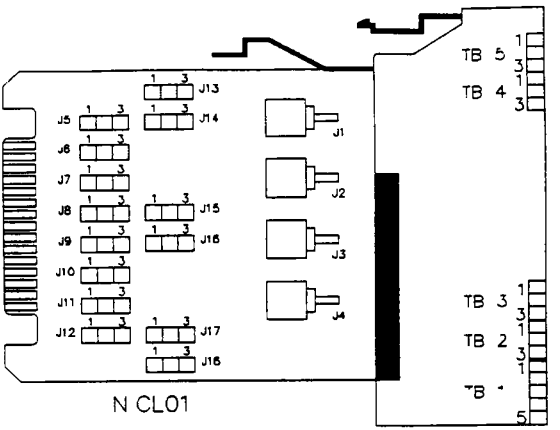
1. SWITCH SET OPEN = LOGIC 1
2. SWITCH S1 – 1 AND 2 MUST BE CLOSED
   S1 – 3 TO 8 SELECTS EXPANDER BUS ADDRESS 0 THROUGH 63
   (8 = LSB)



REFER TO PRODUCT INSTRUCTION E93 913-17
FOR FURTHER INFORMATION ON NFCS01

REFER TO PRODUCT INSTRUCTION E96-314
FOR FURTHER INFORMATION ON MFCS01

PLANT LOOP/SUPER LOOP TERMINATION MODULE



NCL01

NOTES

1 THERE ARE TWO VERSIONS OF NCL01's THE BOARD MUST BE VISUALLY INSPECTED TO DETERMINE VERSION.
SEE SHEET 62 FOR INFORMATION ON THE OTHER VERSION
(APPROXIMATE DATE OF THE BOARD CHANGE IS MARCH 1990)

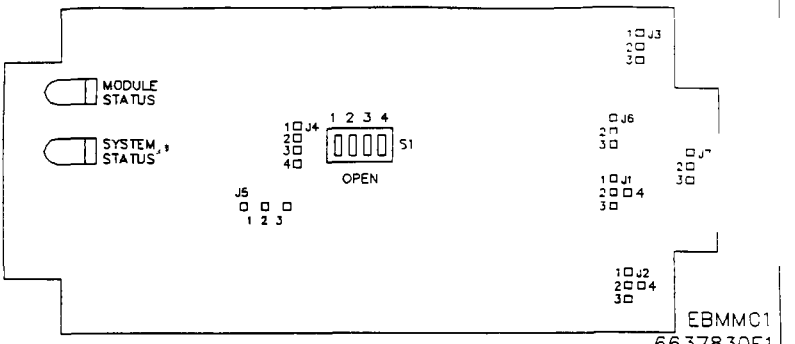
2 J1 TO J4 ARE BNC CONNECTORS FOR COAX CABLES
J1 - LOOP 1 IN J4 = LOOP 2 IN
J2 - LOOP 1 OUT J3 = LOOP 2 OUT

3 J5 TO J12 SELECTS MODULE TYPE (LM OR LS/NIS)
(1 - 2) - LM
(2 - 3) = LS/NIS

4 J13 TO J18 SELECTS CABLE TYPE (TWINAX OR COAX)
(1 - 2) = TWINAX
(2 - 3) = COAX

REFER TO PRODUCT INSTRUCTION E93-911 FOR FURTHER INFORMATION

BUS MONITOR MODULE SWITCH SETTINGS



THERE ARE TWO VERSIONS OF EBMMC. PLEASE NOTE ASSEMBLY NUMBER FOR VERSION. SEE SHEET 94 FOR INFORMATION ON EARLIER ASSEMBLIES

SWITCH S1

- S1 1 CLOSED = MONITOR +5, +15 AND -15 VDC ENABLED (FACTORY SETTING)
  OPEN = MONITOR +5, +15 AND -15 VDC DISABLED
- S1 2 CLOSED = MONITOR SYSTEM 24 VDC ENABLED (FACTORY SETTING
  OPEN = MONITOR SYSTEM 24 VDC DISABLED
- S1 3 CLOSED = MONITOR EXTERNAL POWER CH1 SUPPLY ENABLED
  OPEN = MONITOR EXTERNAL POWER CH1 SUPPLY DISABLED (FACTOR SETTING)
- S1 4 CLOSED = MONITOR EXTERNAL POWER CH2 SUPPLY ENABLED
  OPEN = MONITOR EXTERNAL POWER CH2 SUPPLY DISABLED (FACTORY SETTING

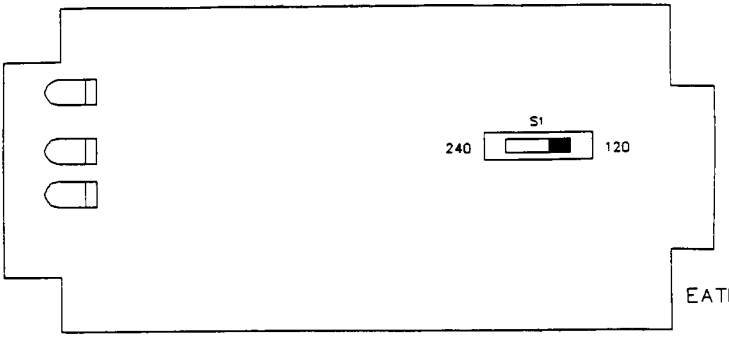
2 J1 TO J7 JUMPER SETTINGS

CHANNEL	JUMPER	SETTING	FUNCTION
AUX BUS MONITOR CH1	J1	1 2	SELECTS 24 VDC LEVEL FOR EXTERNAL POWER
		2-4	SELECTS 48 VDC LEVEL FOR EXTERNAL POWER
		2 3	SELECTS 125 VDC LEVEL FOR EXTERNAL POWER
AUX BUS MONITOR CH2	J2	1-2	SELECTS 24 VDC LEVEL FOR EXTERNAL POWER
		2 4	SELECTS 48 VDC LEVEL FOR EXTERNAL POWER
		2-3	SELECTS 125 VDC LEVEL FOR EXTERNAL POWER
(NOT USED WHEN INSTALLED IN PEP04)	J3	1 2	SELECTS 120 VAC INPUT VOLTAGE FOR LINE 2
		2-3	SELECTS 240 VAC INPUT VOLTAGE FOR LINE 2
AUX STATUS IN 1	J4	1 2	NORMALLY OPEN STATUS INPUT
		2-3	NORMALLY CLOSED STATUS INPUT
		1-4	NOT USED
AUX STATUS IN 2	J5	1-2	NORMALLY OPEN STATUS INPUT
		2 3	NORMALLY CLOSED STATUS INPUT
(MUST BE SET TO 1-2 FOR PEP03)	J6	1-2	24 VDC POWER INPUT
		2 3	NOT USED
(NOT USED WHEN INSTALLED IN PEP04)	J7	1 2	SELECTS 120 VAC INPUT VOLTAGE FOR LINE 1
		2-3	SELECTS 140 VAC INPUT VOLTAGE FOR LINE 1

FOR MORE INFORMATION PLEASE REFER TO THE FOLLOWING PRODUCT INSTRUCTION
FOR AC SYSTEMS (PEP03) E96-506
FOR DC SYSTEM (PEP04) E96-508

00 45 27 04/11/07

AC TRANSFER MODULE SWITCH SETTINGS



1 SET SWITCH S1 TO EITHER 120 OR 240 VAC

FOR FUTHER INFORMATION PLEASE REFER TO PRODUCT INSTRUCTION E96-506

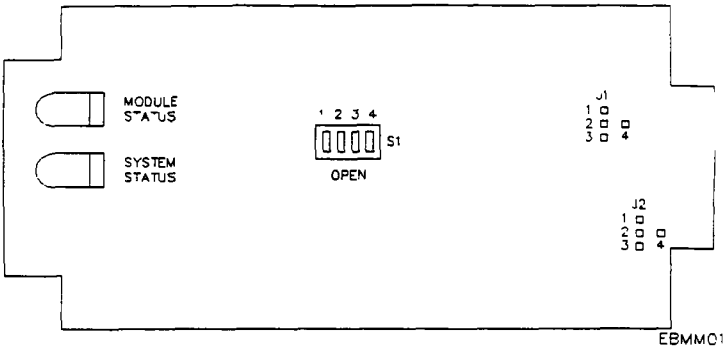
AL760273A SHT. 96
CAD FILE- 76027396

NF 90/NETWORK 90

Bailey CANADA

97600 006

BUS MONITOR MODULE SWITCH SETTINGS



EBMM01
6637930D1
OR EARLIER

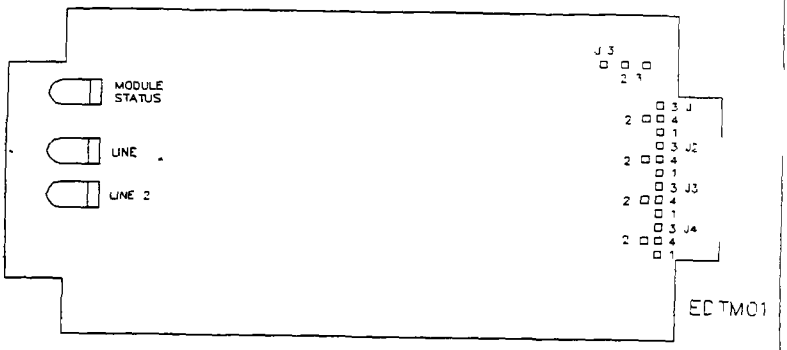
THERE ARE TWO VERSIONS OF EBMM01. PLEASE NOTE ASSEMBLY No FOR VERSION
SEE SHEET 93 FOR INFORMATION ON 6637830E1

1 SWITCH S
S1-1 CLOSED = MONITOR +5, +15 AND -15 VDC ENABLED (FACTOR SETTING)
OPEN = MONITOR +5 +15 AND -15 VDC DISABLED
S1-2 CLOSED = MONITOR SYSTEM 24VDC ENABLED (FACTORY SETTING)
OPEN = MONITOR SYSTEM 24 VDC DISABLED
S1 3 CLOSED = MONITOR EXTERNAL POWER CH1 SUPPLY ENABLED
OPEN = MONITOR EXTERNAL POWER CH1 SUPPLY DISABLED (FACTORY SETTING)
S1-4 CLOSED = MONITOR EXTERANL POWER CH2 SUPPLY ENABLED
OPEN = MONITOR EXTERNAL POWER CH2 SUPPLY DISABLED (FACTORY SETTING)

CHANNEL	JUMPER	SETTINGS	FUNCTION
AUX BUS MONITOR CH1	J1	1-2	SELECTS 24 VDC LEVEL FOR EXTERNAL POWER
		2-4	SELECTS 48 VDC LEVEL FOR EXTERNAL POWER
		2-3	SELECTS 125 VDC LEVEL FOR EXTERNAL POWER
AUX BUS MONITOR CH2	J2	1-2	SELECTS 24 VDC LEVEL FOR EXTERNAL POWER
		2 4	SELECTS 48 VDC LEVEL FOR EXTERNAL POWER
		2 3	SELECTS 125 VDC LEVEL FOR EXTERNAL POWER

FOR MORE INFORMATION PLEASE REFER TO THE FOLLOWING PRODUCT INSTRUTIONS
FOR AC SYSTEM (PEP03) - E96-506
FOR DC SYSTEMS (PEP04) - E96-508

DC TRANSFER MODULE SWITCH SETTINGS



1 JUMPER SELECTION FOR J1 TO J4 J13

INPUT POWER	JUMPER	SETTING	FUNCTION
LINE 1	J1	1 – 4	24 VDC HIGH DETECT
	J2	1 – 4	24 VDC LOW DETECT
LINE 2	J3	1 – 4	24 VDC HIGH DETECT
	J4	1 – 4	24 VDC LOW DETECT
	J13	2 – 3	24 VDC EXTENTED POWER SOURCE

FOR MORE INFORMATION PLEASE REFER TO PRODUCT INSTRUCTION E96-508

AL760273A SHT 95
CAD FILE– 76027395

NF 90/NETWORK 90

Bailey CANADA

97600 006