



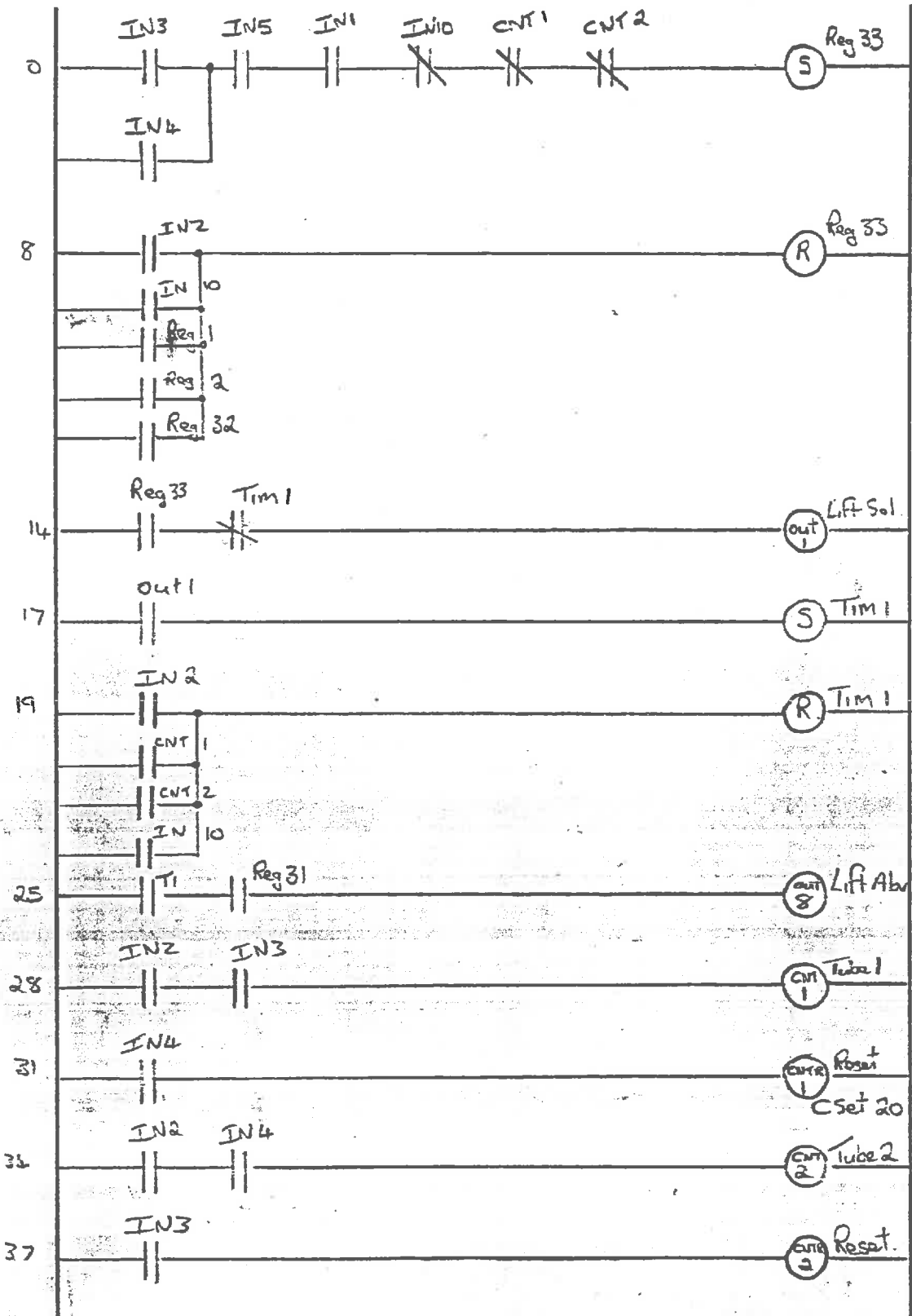
Stacker 2

Diagram No:

LADDER DIAGRAM

Title: 2 Tube Stacker

Date: 21-11-90



- Inputs
- | | |
|----|----------------------------|
| 1 | Dish |
| 2 | UP Limit |
| 3 | Tube 1 Stack Pos |
| 4 | Tube 2 Stack Pos |
| 5 | Lift Down |
| 6 | Tube 1 clear |
| 7 | Tube 2 clear |
| 8 | - |
| 9 | Push Transverse |
| 10 | Stop |
| 11 | Stop Transverse |

Lift alarm Timer

Counter Tube 1

Counter Tube 2



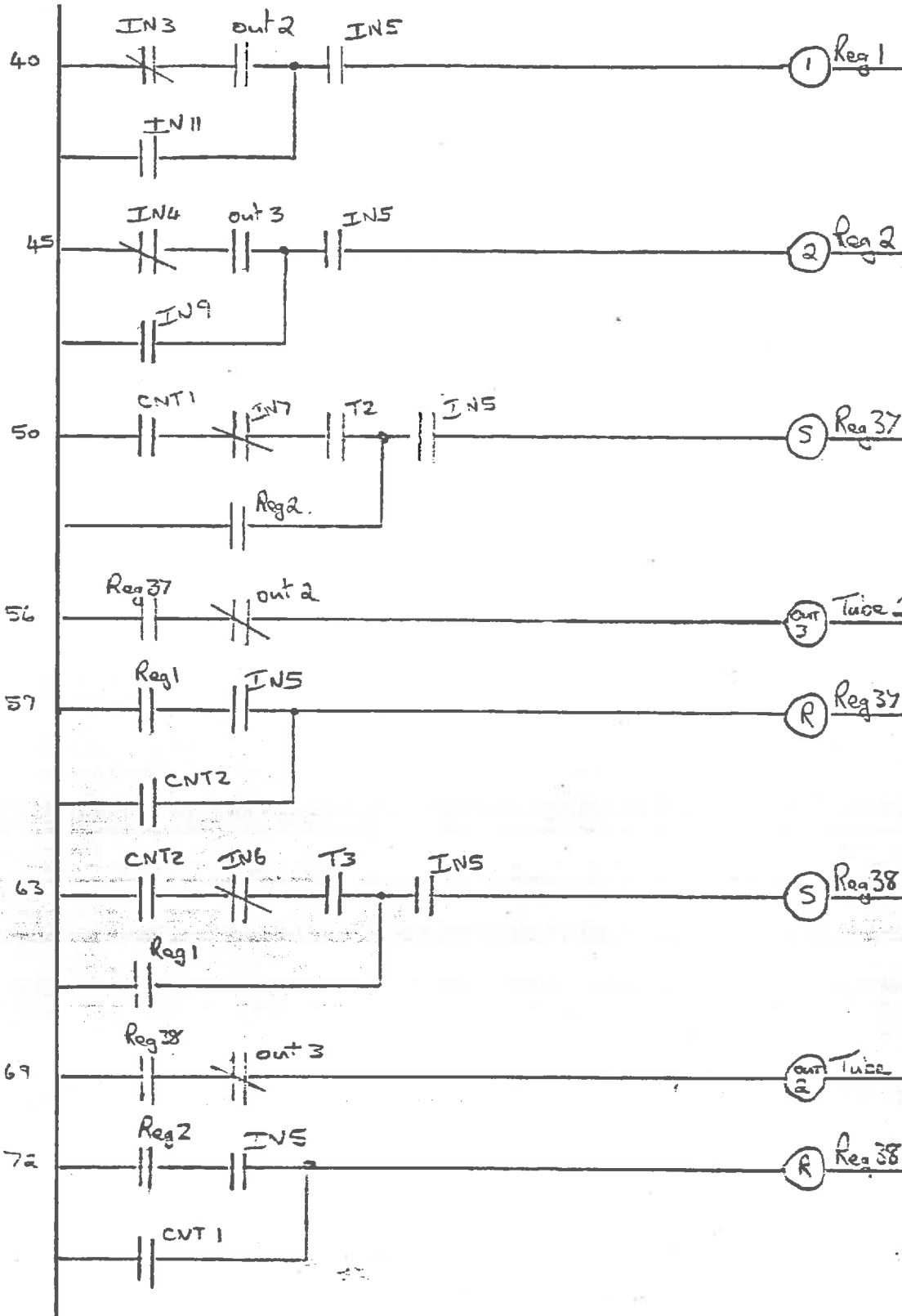
LADDER DIAGRAM

Diagram No:

II

Title:

Date:



- Inputs
- 1 Dish
 - 2 Up limit
 - 3 Tube 1 Stack Pos
 - 4 Tube 2 Stack Pos
 - 5 Left Down
 - 6 Sensor Tube 1
 - 7 Sensor Tube 2
 - 8
 - 9 Push tube 2 Start
 - 10 Push Tube 1 Start
 - 11 Stop Button

To Stack Pos.

to Stack Pos

TWO TUBE STACKER.

INPUTS:

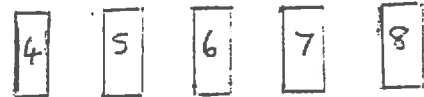
- I N 1 - Dish Stack position - Fibro optic.
- I N 2 - Lift up-limit Micro Switch.
- I N 3 - Tube 1 Stack position Microswitch.
- I N 4 - Tube 2 Stack Position Microswitch.
- I N 5 - Lift down Limit Microswitch.
- I N 6 - Sensor No. 1 Tube
- I N 7 - Sensor No. 2 Tube.
- I N 8 - -
- I N 9 - Push Button Tube 2 to Stack Position
- I N 10 - Stop Button.
- I N 11 - Push Button Tube 1 to StACK Position.

OUT puts on Hinged Panel

OUTPUTS:

- 1 - Lift Solenoid.
- 2 - Traverse to Tube 1 Stacking postion.
- 3 - Traverse to Tube 2 Stacking Position.
- 4 - Alarm Indicator - *1/2 cycle Light on Pole - 230v.*
- 5 - Tube 1 Stack Position Indicator.
- 6 - Tube 2 Stack Position Indicator.
- 7 - Lift down Indicator.
- 8 - Alarm Indicator - Failed to lift.

Note output 4
is on Back Panel
230v int.



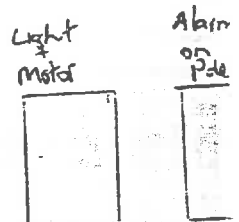
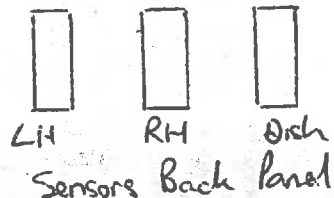
SENSORS:

- Tube clear Sensors - Sun x Cy D100D N
- Diffuse Reflective Type.
- N.D.A.

Dish Sensing - Festo - Plummer Pneumatics.

Module SOE L Q PSO K LED
Part No. 31327.

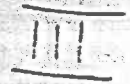
Cable SOE LK RT 1000-4
Part No. 31729.





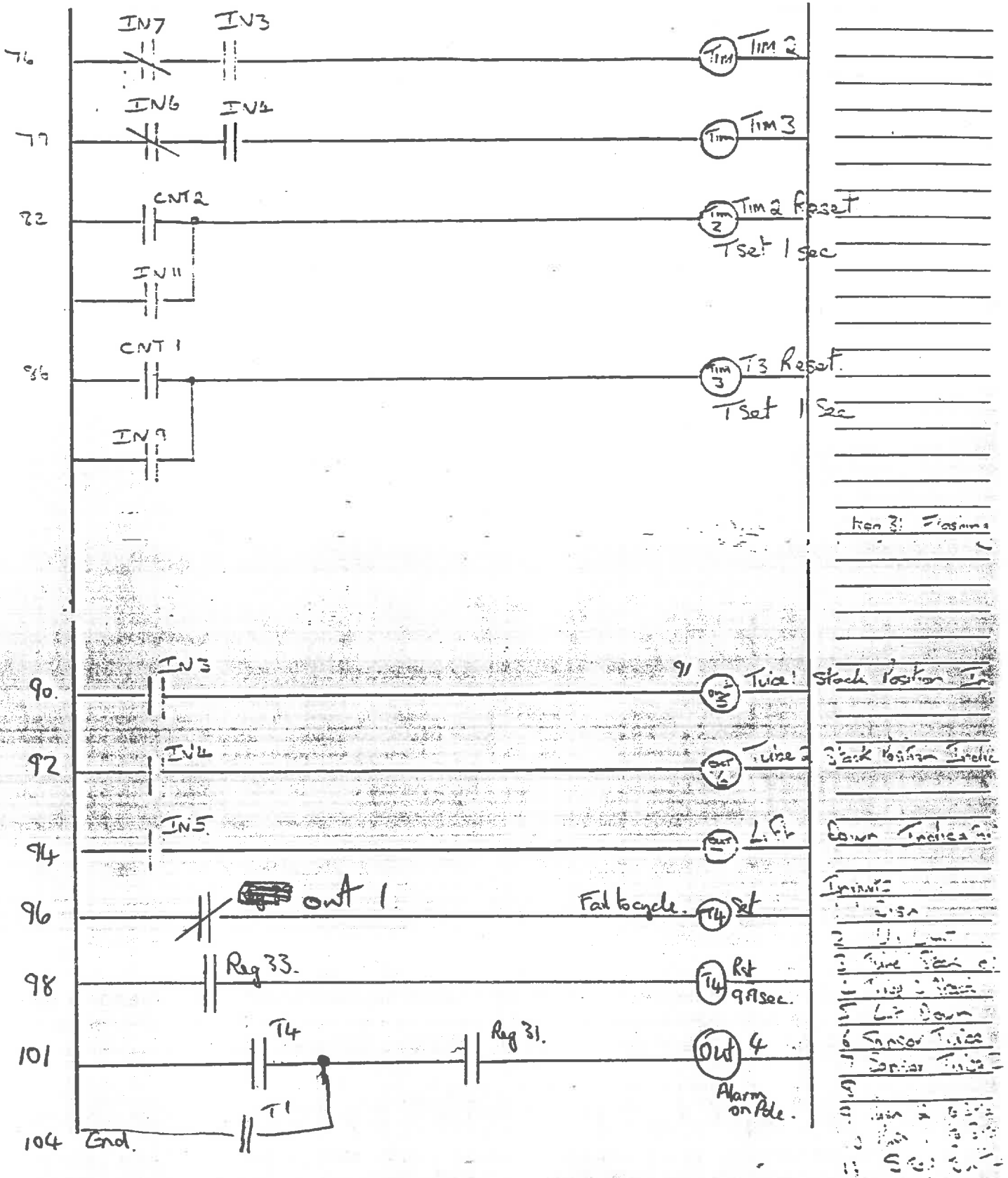
LADDER DIAGRAM

Diagram No:



Title:

Date:



TWO TUBE STACKER.

INPUTS:

- I N 1 - Dish Stack position - Fibro optic.
- I N 2 - Lift up-limit Micro Switch.
- I N 3 - Tube 1 Stack position Microswitch.
- I N 4 - Tube 2 Stack Position Microswitch.
- I N 5 - Lift down Limit Microswitch.
- I N 6 - Sensor No. 1 Tube
- I N 7 - Sensor No. 2 Tube.
- I N 8 -
- I N 9 - Push Button Tube 2 to Stack Position
- I N 10 - Stop Button.
- I N 11 - Push Button Tube 1 to StACK Position.

out puts on Hinged Panel

OUTPUTS:

- 1 - Lift Solenoid.
- 2 - Traverse to Tube 1 Stacking position.
- 3 - Traverse to Tube 2 Stacking Position.
- 4 - Alarm Indicator - *is cycle Light on Pole - 230v.*
- 5 - Tube 1 Stack Position Indicator.
- 6 - Tube 2 Stack Position Indicator.
- 7 - Lift down Indicator.
- 8 - Alarm Indicator - Failed to lift.

Note output 4
is on Back Panel
230v out.



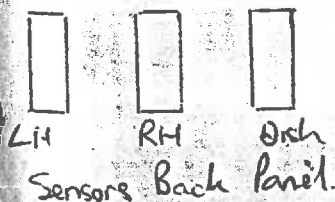
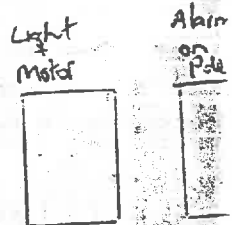
SENSORS:

Tube clear Sensors - Sun x Cy D100D N
- Diffuse Reflective Type.
- N.D.A.

Dish Sensing - Festo - Plummer Pneumatics.

Module SOE L Q PSO K LED
Part No. 31327.

Cable SOE LK RT 1000-4
Part No. 31729.





PROGRAMMING SHEET

1

date:

Memory location	INSTRUCTION	OPERAND	Title:	date:
0	Load	IN 3		
1	OR	IN 4		
2	And	IN 5		
3	And	IN 1		
4	And	Not IN 10		
5	And	Not CNT 1		
6	And	Not CNT 2		
7	=	Reg 33		
8	Load	IN 2		
9	OR	IN 10		
10	OR	Reg 1		
1	OR	Reg 2		
2	OR	Reg 32		
3	=	Reset Reg 33		
14	LOAD	Reg 33		
5	And	Not TIM 1		
6	=	OUT 1	Lift Solenoid	
7	Load	OUT 1		
8	=	Set TIM 1		
9	LOAD	IN 2		
20	OR	CNT 1		
1	OR	CNT 2		
2	OR	IN 10		
3	=	RST TIM 1		
4		TSet 50		
5	LOAD	TIM 1		
6	And	Reg 31	Flash	
7	=	OUT 8		
8	LOAD	IN 2		
9	And	IN 3		
30	=	CNT 1		
1	LOAD	IN 4		
2	=	CNTR 1		
3		CSet 20		
4	LOAD	IN 2		
5	And	IN 4		
6	=	CNT 2		
7	Load	IN 3		
8	=	CNTR 2		
9		Cset 20		
40	Load	(NOT) IN 3		
1	And	OUT 2		
2	OR	IN 11		
3	And	IN 5		
4	=	Reg 1		
5	Load	Not IN 4		
6	And	OUT 3		
7	OR	IN 9		
8	And	IN 5		
9	=	Reg 2		



PROGRAMMING SHEET

Memory location	INSTRUCTION		OPERAND		Title:	date:
50	LOAD		CNT	1		
1	And	Not	IN	7		
2	And		Tim	2		
3	OR		Reg	2		
4	And		IN	5		
5	=	Set	Reg	37		
6	LOAD		Reg	37		
7	And	Not	out	2		
8	=		out	3	Traverse	
9	LOAD		Reg	1		
60	And		IN	5		
1	OR		CNT	2		
2	=	RST	Reg	37		
3	LOAD		CNT	2		
4	And	Not	IN	6		
5	And		Tim	3		
6	OR		Reg	1		
7	And		IN	5		
8	=	Set	Reg	38		
9	LOAD		Reg	38		
70	And	Not	out	3		
1	=		out	2	Traverse	
2	LOAD		Reg	2		
3	And		IN	5		
4	OR		CNT	1		
5	=	Rst	Reg	38		
6	LOAD	NOT	IN	7		
7	And		IN	3		
8	=	Set	Tim	2		
9	LOAD	NOT	IN	6		
80	And		IN	4		
1	=	Set	Tim	3		
2	LOAD		CNT	2		
3	OR		IN	11		
4	=	RST	Tim	2		
5		T Set		10		
6	LOAD		CNT	1		
7	OR		IN	9		
8	=	Rst	Tim	3		
9		T Set		10		
90	LOAD		IN	3		
1	=		out	5		
2	LOAD		IN	4		
3	=		OUT	6		
4	LOAD		IN	5		
5	=		OUT	7		
6	LOAD	NOT	Reg	33	out 1	
7	=	Set	Tim	4		
8	Load		Reg	33		
9	=	RST	Tim	4		



Sheet No: _____

PROGRAMMING SHEET

Memory location	INSTRUCTION	OPERAND		Title:	date:
10 0	T Set		99		
1	LOAD	Tim	A		
2	OR	Tim	1		
3	And	Reg	81		
4	=	ORt	4	Light on bulb 230v	
5	END				
6					
7					
8					
9					
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
0					
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9					