

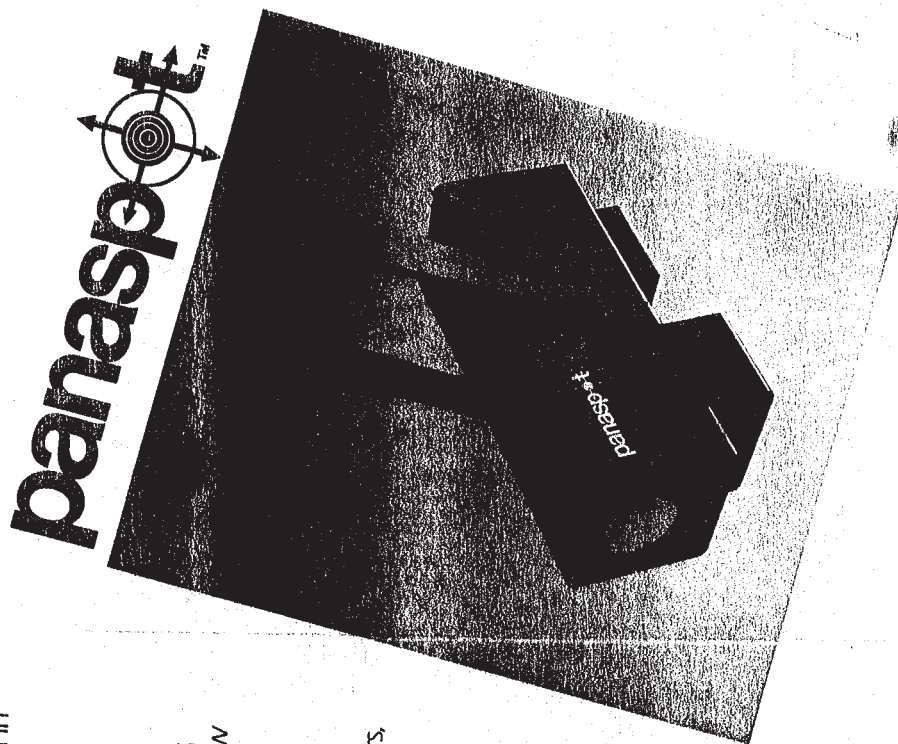
Design possibilities are now endless using the Panaspot. This versatile remote-controlled stage light features pan, tilt, fader, pattern holder and multiple edge filter. Panaspot brings the color choices. Panaspot brings the computer age to light.

DESIGN OPERATION FEATURES

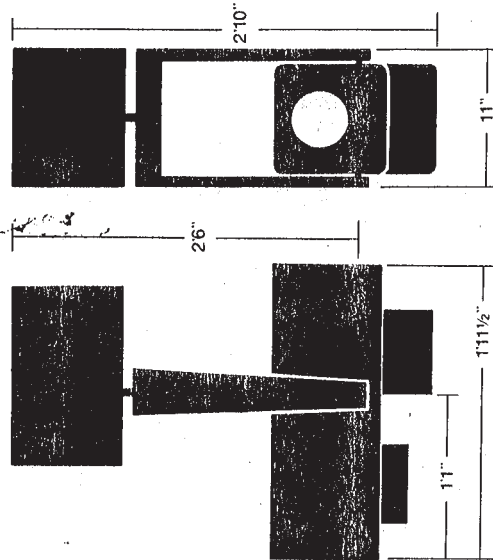
- Pan and tilt, capable of moving continuously or stopping at any designated coordinate.
- Controllable pan and tilt speed which allows accurate split second movements or smooth graceful position changes.
- Unlimited focusing range when mounted in any overhead location or position.
- Infinite control of light intensity from 0 to 100 percent.
- Shutter capable of strobe fast bumps or slow delicate fades.
- Beam spread ranges from 2 degrees to 25 degrees and changes size as fast or as slow as desired.
- Magnifying iris that increases intensity as beam size decreases.
- Color changer capable of mixing any combination of seven predesignated colors, allowing unlimited possibilities.
- Instant color changes on command.
- Diffusion filter frame for soft edge beam.
- Pattern holder frame for adding multiple beam effect.
- Consistent, accurate movement to programmed positions.
- All functions easily programmed and adaptable to most any computer lighting control.

MORPHEUS LIGHTS INC.

1271 Alma Ct.
San Jose, CA 95112
(408) 295-4866



panaspot™



SPECIFICATIONS

Weight: 50 lbs.

Power input: 10 amps, 120 VAC, 50/60 Hz

Lamp: GE Marc 350, or HMI

CONSTRUCTION

Rugged aluminum sheet metal housing.

Practical light weight aluminum part assemblies.

Durable black anodized finish.

High efficiency borosilicate glass lenses.

Special air cooling design for maximum lamp life.

Precision aircraft quality servomotors.

Modular electronics with pull out cards for all functions.

"State of the Art" components engineered specifically for the Panaspot.

Lab and field tested under grueling abnormal conditions.

*

PANASPOT I CHECKLIST

PRODUCTION _____

DATE OUT: _____

TECH: _____

- _____ Hang & connect lights, remove top fuse.
- _____ Remove hoods & open card side cover & blow out dust. Relube shaft.
- _____ Clean lenses & inspect hoods for loose screws and lenses.
- _____ Clean heat shields & route junction board wires.
- _____ Route lamp & striker wires.
- _____ Replace hoods & clean outside of spot.
- _____ Strike lamps.
- _____ Check gobo function for: Position, speed & pattern.
- _____ Check fader function for: Window, zero, speed, noise.
- _____ Check Iris function for: window, zero, speed, noise.
- _____ Check color functions for: Springs, speed, travel, noise.
- _____ Check tilt function for: Window, zero & speed.
- _____ Check Pan function for: Window, zero, speed, belt condition & tension.
- _____ Final test unit (Beat-Em).
- _____ Check all screws.
- _____ Log info & serial numbers in outgoing worksheet.
- _____ Accompany system test and report problems.

Have A Nice Day!

Finished: Date: _____

Sign _____

MELTDOWN

PARTS LIST

Spot I

P/N

INSULATOR, CAMP	15512
BLOCK, CAMP MNT.	15022
BUSHING, CAMP RT	15028
PAMOTOR, FAN	4600-X
OSRAM CAMP	HTI 400

Spot II

FAN CAMP DC TRW	19A1862
BUSHING CAMP	22414
INSLTR HIGH V WIRE	22483
BRACKET INSLTR	22333
INSLTR CONNECTOR	22331 *
STRIKE POST PCB	
OSRAM CAMP	HTI 400
HEAT SHIELDS 1 1/8" x 1 1/8"	23061
GRADE 7 BEARINGS (D.C. FAN)	SR2553

* PANASPORT *

CARD #1 CARD #2 CARD #3 CARD #4 + 5 CONNECTOR NO.

INPUT

PIN NO

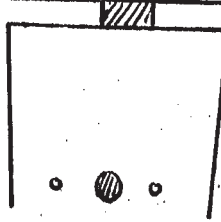
J1 15 PIN CONTROL	J2 22 POS SOL DRIVER	J3 22 POS SOL DRIVER	J4 22 POS OPEN	J5 22 POS MOTOR DRIVER	J6 22 POS MOTOR DRIVER	J7 9 POS POWER	J8 5 PIN PAN	J9 24 PIN SPOT HARNESS	COLOR CH HARNESS
CH 1 B	-15V	-15V	-15V	-15V	-15V	27 -15 BIK	27 GND BIK	SOL 2	A - 1 BIK
CH 2 C	+15V	+15V	+15V	+15V	+15V	28 GND GREEN	28 PAN MOTOR BIK	SOL 4	B + 1 RED
CH 3 D	—	—	RELAY A	—	—	GND GREEN	31 -15V BIK	SOL 6	C - 2 WHT
CH 4 E	—	—	RELAY B	FADER MOTOR	PAN MOTOR	-15 BIK	30 PAN FB GRN	SOL 8	D + 2 GRN
CH 5 F	SOL 1	SOL 2	SWITCH A	FADER MOTOR	PAN MOTOR	—	29 +15V RED	SOL 7	E - 3 GRN
CH 6 G	—	—	SWITCH B	IRIS MOTOR	TILT MOTOR	GND GREEN	—	SOL 3	F + 3 BIK
CH 7 H	SOL 3	SOL 4	—	IRIS MOTOR	TILT MOTOR	+15 RED	—	SOL 5	G - 4 BIK
CH 8 J	—	—	—	—	—	+15 RED	—	SOL 1	H + 4 RED
FADER LHK	—	—	—	FADER CH	PAN CH	GND GREEN	—	GND	J - 5 GRN
IRIS CH L	SOL 5	SOL 6	—	IRIS CH	TILT CH	—	—	GND	K + 5 BIK
PAN CH M	—	—	—	IRIS FB	TILT FB	—	—	-15	L - 6 BIK
TILT CH N	SOL 7	SOL 8	—	FADER FB	PAN FB	—	—	+15	M + 6 GRN
NC	GND	GND	GND	GND	GND	—	—	GND	N - 7 GRN
NC	GND	GND	GND	GND	GND	—	—	GND	P + 7 BIK
GND	GND	GND	GND	GND	GND	—	—	FADER MOTOR	Q - 8 BIK
P GREEN	50V A	50V A	50V A	GND	GND	—	—	IRIS MOTOR	R - 8 BIK
R WHITE COM	50V B	50V B	CT	-15 MOTOR	-15 MOTOR	—	—	IRIS FB	S - 8 BIK
S BLACK HOT	CH 1	CH 2	FADER CH	-15 MOTOR	-15 MOTOR	—	—	FADER FB	T - 8 BIK
Spot Beam	CH 3	CH 4	—	+15 MOTOR	+15 MOTOR	—	—	TILT FB	U - 8 BIK
P - K	CH 5	CH 6	—	+15 MOTOR	+15 MOTOR	—	—	TILT MOTOR	V - 8 BIK
S - B	CH 7	CH 8	—	+15 MOTOR	+15 MOTOR	—	—	RELAY A	W - 8 BIK
R - A	—	—	—	—	—	—	—	RELAY B	X - 8 BIK
A - L	—	—	—	—	—	—	—	GND	Y - 8 BIK
L - G	—	—	—	—	—	—	—	GND	Z - 8 BIK
M - E	—	—	—	—	—	—	—	Neto	AA - 8 BIK
N - F	—	—	—	—	—	—	—	HARNES	AB - 8 BIK
—	—	—	—	—	—	—	—	—	AC - 8 BIK
—	—	—	—	—	—	—	—	—	AD - 8 BIK
—	—	—	—	—	—	—	—	—	AE - 8 BIK

Spill

Panasport I

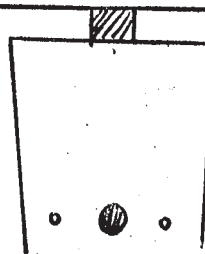
SPOT I

360 VAC		WALKER					HTI 400
1	2	3	4	5	NOTE: Solenoid DRV. #1 = Colors 1, 3, 5, 7 Solenoid DRV #2 = Colors 2, 4, 6 + Gobo		
Solenoid Driver	Solenoid Driver	Striker Enable "B"	Fader / Iris	Pan / Tilt			
					+15 VDC POWER SUPPLY		
					-15 VDC " (VOLTS D.C.)		



SPOT II

360 VAC		WALKER					HTI 400
1	2	3	4	5	NOTE: 15 VDC WIRING FOR SPOT I AND II		
Diagnostic Card	Striker Enable "A"	Gobo Wheels 1+2	Fader / Iris	Pan / Tilt			
					+15 VDC POWER SUPPLY		
					-15 VDC " (VOLTS D.C.)		



P.S. II

MOTORS

PAN → 186-2
TILT → 187-2
FADER → 002-2
IRIS → 017-2
GOBO → 002-2

TRW motors.

we use
Hall-Mark.
408 422-0900 electronics
San Jose.
There are other reps.

BELTS

PAN → 221037
TILT → 192037
FADER → 088012
COLOR → 221012
long lead

11in Stock Drive Products
7in New York

~~the~~ Contact. West Coast
rep.
Western Component
Sales

415 594-1272
Steve Meriam.

POTS

PAN → 5250-574 10K $\pm 20\%$ LIN $\pm 0.5\%$ ABS DUNCAN
OK) 132-0-0-103 10K $\pm 3\%$ LIN $\pm 0.5\%$ 8810 SPECTROL
TILT → 11
FADER → 5250-574 10K $\pm 10\%$ LIN $\pm 0.5\%$ ABS DUNCAN
IRIS → 3852A-282-103A 10K 8535X BOURNS
GOBO → 5250-574 10K $\pm 20\%$ LIN $\pm 0.5\%$ ABS DUNCAN
COLOR → 73JA 10K $\pm 5\%$ LIN $\pm .25\%$ UK8732 CLARDSTH

Duncan Electronics 714-545 8261

Bourns - { Hallmark Electronics
Hamilton Avnet
Schweber Electronics

Charostat - Zack Electronics
Alcon Electronics

Spectrol - Arrow Electronics
Aparatus
Newark "

through
dist.

PANASPOT - MOTORS

TILT ----- TRW 409A6197-2

* Modification - 4 holes in mounting block
for roll pins.

1. RED IN KEY
2. Black

PAN ----- TRW 409A6187-2

* Modification - hole in shaft for gear
mounting roll pin.

1. BLACK IN KEY
2. Red

FADER ----- TRW 407A6012-2

1. BLACK IN KEY
2. Red

IRIS ----- TRW 407A6017-2

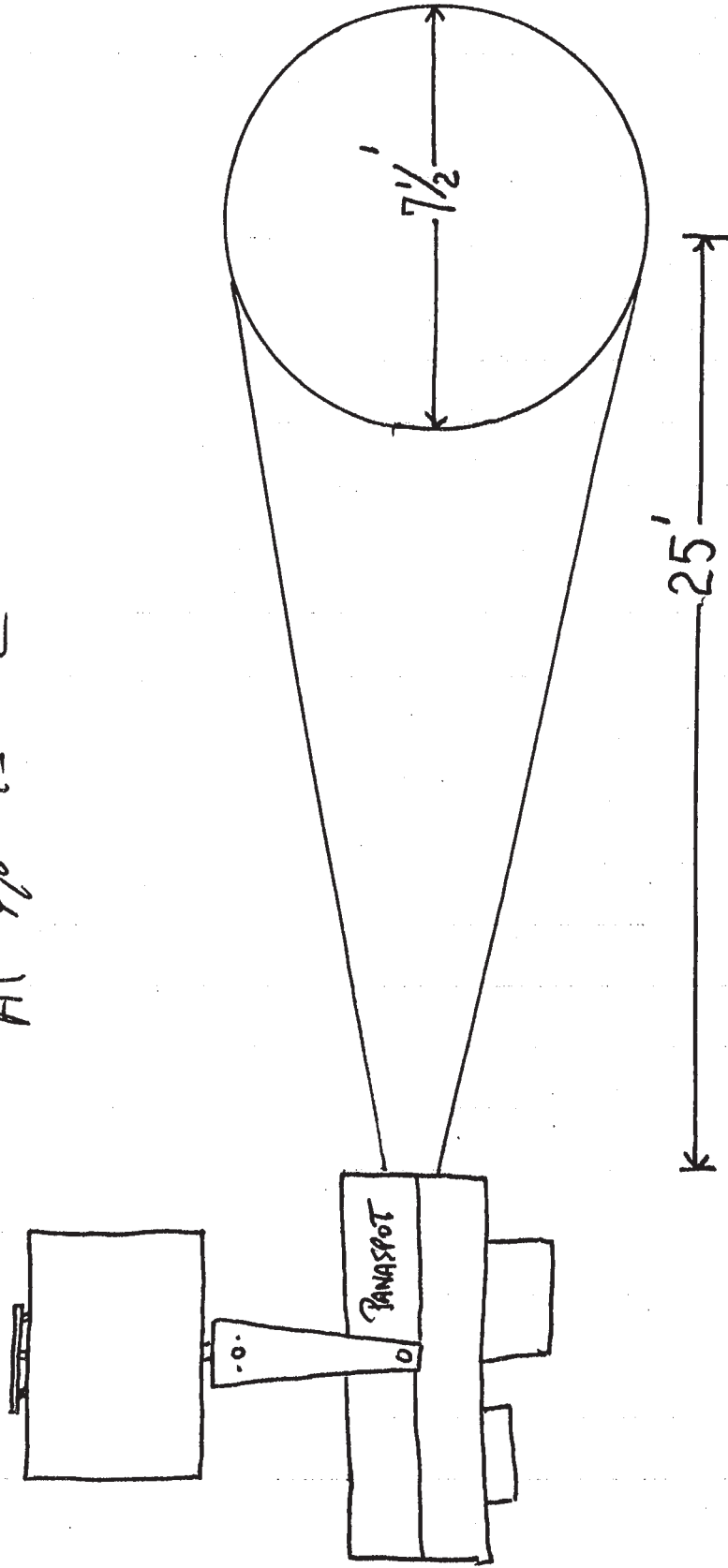
1. BLACK IN KEY
2. Red

ALL MOTORS GET RED LOCKTITE IN HOUSING SCREWS

* REFERENCE DRAWING #15109 MOTOR, MODIFICATION

PANASPOT I IRIS AT 100%
25 FEET AWAY IS 7 FEET 6 IN. IN
DIAMETER

AT 6% IS 2'

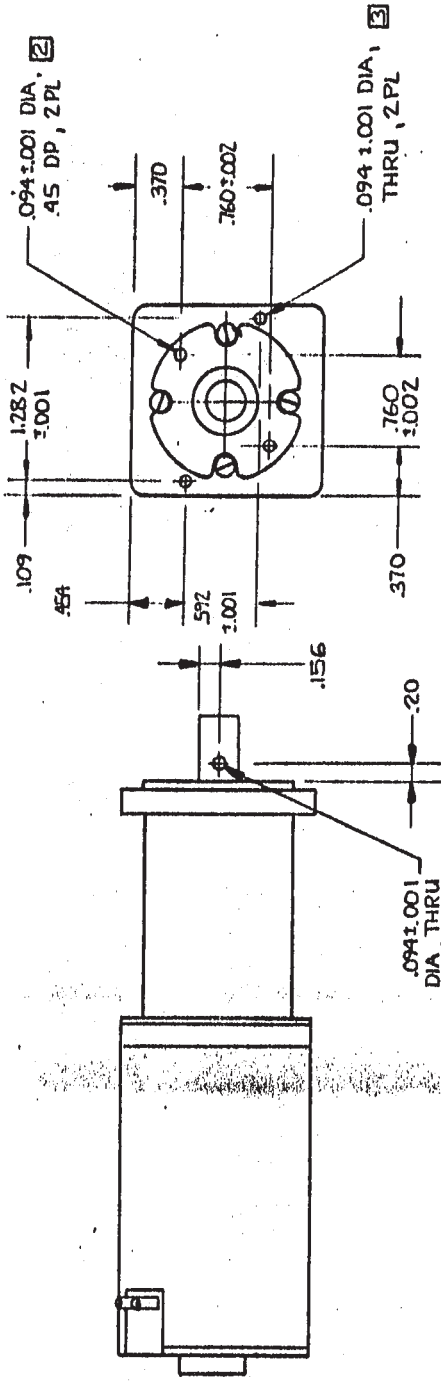


3/14/8

PREPARED BY: SEAN ROWLAND

186-2 MOD: 1 2
 187-2 MOD: 1 2
 197-2 MOD: 2 3
 195-2 MOD: 2 23

REVISIONS		
LTR	DESCRIPTION	DATE
1	PRODUCTION	7-30-82
2	REVISED	3-7-85
3	REVISED	5-9-85
4	REVISED	5-8-86



TABULATION			
DASH #	APPLICATION	MOD. REQ.	MAKE FROM PN
-00	FAN	MODIFICATION 1 ONLY	14029
-01	TILT	MODIFICATION 2 ONLY	14028
-02	—	MODIFICATION 3 ONLY	—

CONTRACT NO. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .01 ± .005 ± .1		MORPHEUS LIGHTS INC.	
APPROVALS DRAWN: <i>[Signature]</i> CHECKED: DATE: 7-30-82	REV 4	SCALE 1:1	DRAWING NUMBER 15109-XX
MATERIAL SEE TABULATION		MODIFICATION, MOTOR	
FINISH NONE		SIZE B	DATE 10

TILT
...STOR

TILT
F.B.
(TILT Pa)

COLOR

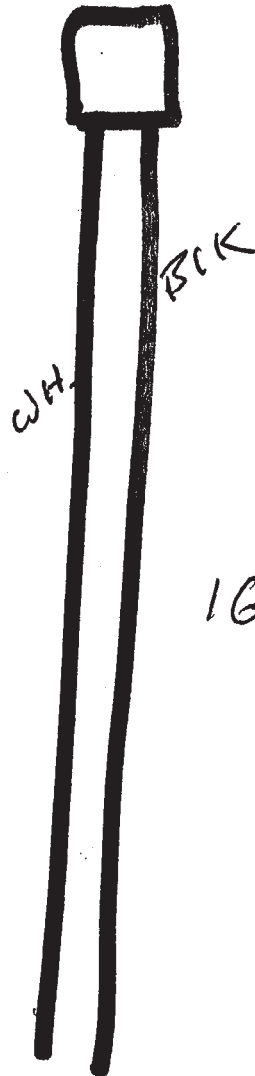
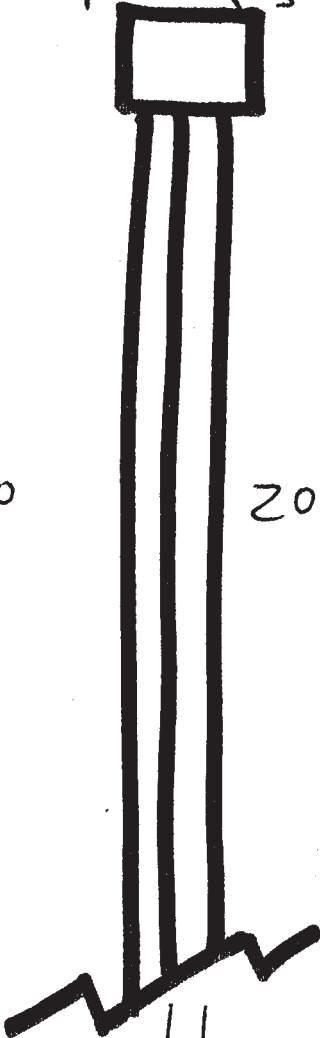
CAMP

1 BRN
2 GRN (KEY)

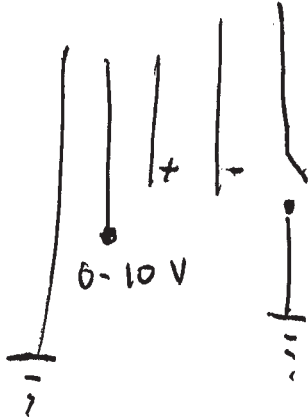
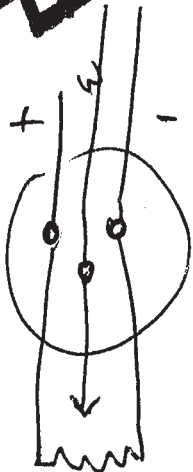
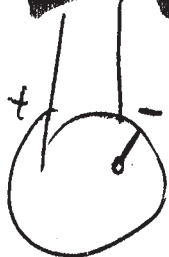
1 ORG
2 YEL
3 PUR (KEY)

1 BLUE (KEY)
2 BIK
3 REP
4 WHT
5 GRN

1 WHT (KEY)
2 BIK



4'



(line)

PANASpot Cables

- New -

A
B
C
D
E
F
G
H
J
K
L
M
N

BLACK
WHITE
RED
GREEN
ORANGE
BLUE
BROWN
YELLOW
VIOLET
GREY
WHITE / BLACK
WHITE / RED
WHITE / BROWN

P
R
S

GREEN
WHITE
BLACK } 16 AWG (POWER GROUP)
★

★ Solder both bare wires
to ground (green wire) in
the power group.

ALSO: MALE CONNECTOR HAS THE COLLAR
FEMALE with/out

PIN CONNECTOR FROM S TO A

PANASDOT CABLE

A	BLK
B	WHT
C	RED
D	GRN
E	DRG
F	BLU
G	BRN
H	YEL
J	VIO
K	GRY
L	WHT/BLK
M	WHT/RED
N	WHT/BRN
P	GRN - 16 GA.
R	WHT - 16 GA.
S	BLK - 16 GA.

PANASPOT CABLE

<u>USE</u>	<u>OLD STYLE</u>	<u>PIN</u>	<u>WIRE</u>	<u>GUAGE</u>	<u>MOLEX</u>
Control Common	R	A	Black	20	15
Color 1	A	B	White	20	1
Color 2	B	C	Red	20	2
Color 3	C	D	Green	20	3
Color 4	D	E	Orange	20	4
Color 5	E	F	Blue	20	5
Color 6	F	G	Brown	20	6
Color 7	G	H	Yellow	20	7
Gobo	H	J	Violet	20	8
Shutter	J	K	Grey	20	9
Iris	K	L	White/Black	20	10
Pan	L	M	White/Red	20	11
Tilt	M	N	White/Brown	20	12
Ground		P	Green	16	
Common		R	White	16	
Hot		S	Black	16	

*SOLDER BOTH BARE WIRES TO GROUND (GREEN, 16 AWG.)

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>MANUFACTURES P/N</u>
16 Pin Connector - Male	1 ea	MS3126J20-16P { W/O
16 Pin Connector - Female	1 ea	MS3121J20-16S { End
Kellems	2 ea	074-01-017 { Bells
Cable		SP 3120

PANASPOT INPUT HARNESS

<u>COLOR</u>	<u>MOLEX PIN</u>	<u>INPUT PIN</u>	<u>USE</u>
BLACK	1	B	Color 1
WHITE	2	C	2
RED	3	D	3
GREEN	4	E	4
ORANGE	5	F	5
BLUE	6	G	6
BLACK/WHITE	7	H	7
WHITE/BLACK	8	J	Gobo
RED/BLACK	9	K	Shutter
RED/WHITE	10	L	Iris
GREEN/BLACK	11	M	Pan
GREEN/WHITE	12	N	Tilt
BLUE/WHITE	13	A	Control Common
		P	Ground
		R	Common
		S	Hot

CON. Spot harness

SPOT I

1 BLACK

B RED

2 WHITE

0 GREEN

3 ORANGE

4 BLUE

BROWN

1 YELLOW

7 PURPLE

2 GREY

PINK

1 TAN

1 RED / GREEN

2 RED / YELLOW

CONNECTOR SPOT HARNESS BACKPLANE SIDE

1	BLACK
2	RED
3	WHITE
4	GREEN
5	ORANGE
6	BLUE
7	BROWN
8	YELLOW
9	PURPLE
10	GREY
11	PINK
12	TAN
13	RED/GREEN
14	RED/YELLOW
15	RED/BLACK
16	WHITE/BLACK
17	WHITE/RED
18	WHITE/GREEN
19	WHITE/YELLOW
20	WHITE/BLUE
21	WHITE/BROWN
22	-
23	WHITE/ORANGE
24	-
25	WHITE/GREY
26	WHITE/PURPLE
27	BLACK 16 AWG.
28	WHITE 16 AWG.
29	RED 16 AWG.
30	GREEN 16 AWG.
31	BROWN 16 AWG.
32	-
33	WHITE/BLACK/RED
34	-
35	WHITE/GREEN/BLACK
36	WHITE/YELLOW/BLACK

Tanaspot Harness

.093 4 pos Male
LAMP power

.062 2 pos. Male
FAN power

.062 .24 pos
MALE

solder
drain to grn
on this end only
(Heatshrink)

cut drain
on this end only

3/4"
HEATSHRINK

#6 Spade
lug
16-14 AWG

Red sockets

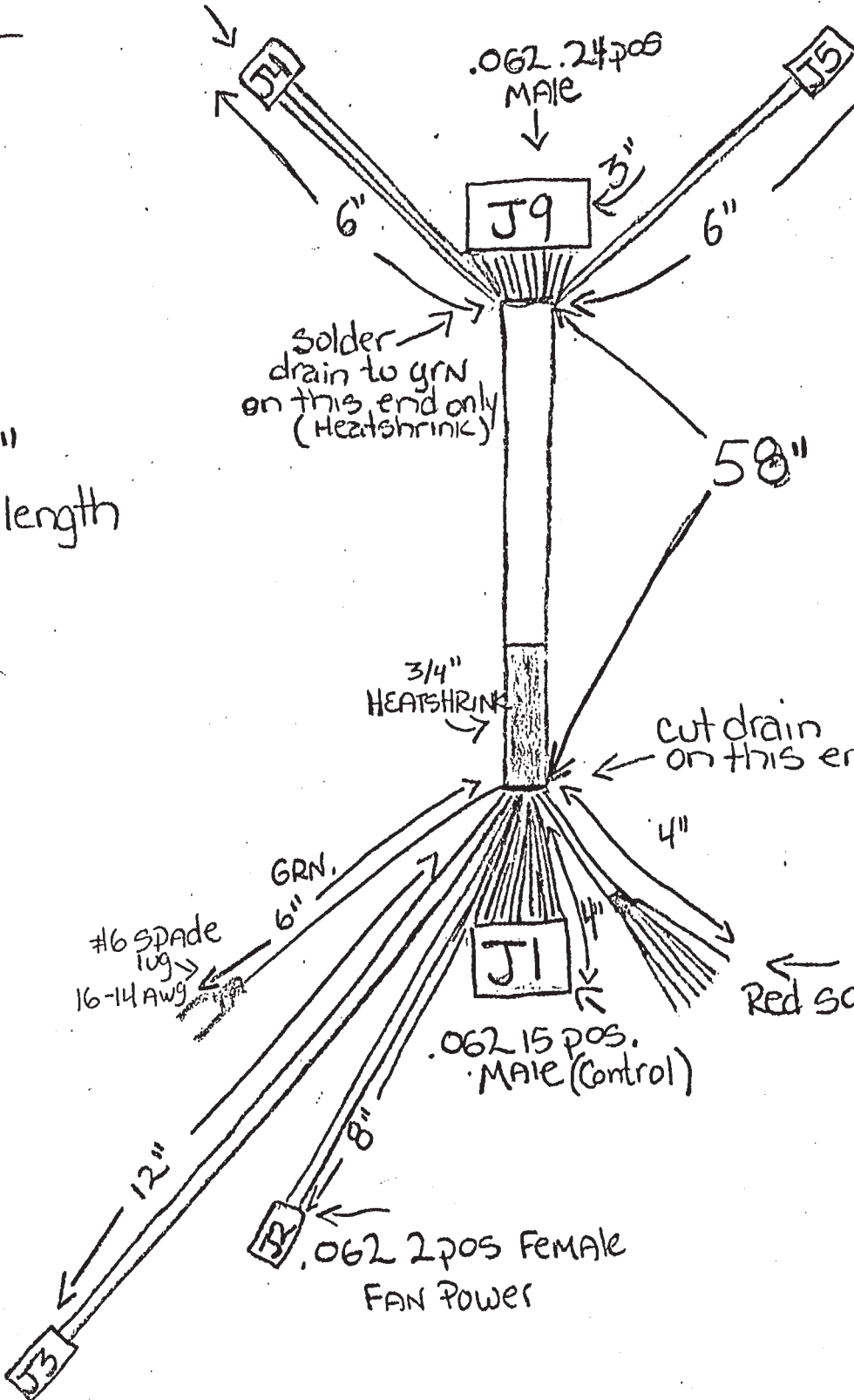
.062 15 pos.
MALE (Control)

.062 2 pos Female
FAN Power

red, green, blue
wires = 16 AWG

All other wires = 20 AWG

1/2" length



Panaspot Harness (color code)

J4 = 1. - red
2. - blue → 16 Awg
3. - green
4. - not used
wires before plugging

J2 = 1. WHITE
2. WHT/BLK
Wire before Plugging

J1

T/Yellow
T/BLK/orange
T/BLK/yellow
T/BLK/green
T/BLK/Blue
T/BLK/violet
T/Black/gray
T/red/Brown
T/red/orange
T/red/yellow
T/red/green
T/red/blue
T/red/violet
T/org/green
T/org/yellow

J5 = 1. white = 20
2. WHT/BLK Awg
Twist wires before plugging

Heatshrink J1 end
using 3/4" tubing
cut at 6"

J9

1. WHT/yel.	13. WHT/BLK/gray
2. WHT/org.	14. WHT/BLK/vio
3. WHT/red.	15. WHT/BLK/Blu
4. WHT/Brn.	16. WHT/BLK/green
5. WHT/gray.	17. WHT/red/gray
6. WHT/vio.	18. WHT/red/yel
7. WHT/Blu	19. WHT/red/org
8. WHT/green	20. WHT/red/brn
9. WHT/BLK/yel	21. WHT/org/yel
10. WHT/BLK/org	22. WHT/org/green
11. WHT/BLK/red	23. WHT/red/vio
12. WHT/BLK/Brn	24. WHT/red/Blu

J3 = 1. Red = 16 Awg
2. Blue
Twist wires before plugging

green wire on
J1 end, gets #6
spade lug 16-14 Awg

41 pin conn. socket
Panel Mount (red socket wires)

D. WHT/Brn
H. WHT/Red
M. WHT/org
B. WHT/green
F. WHT/Blu
K. WHT/vio
P. WHT/gray

41 pin conn. socket
Panel mount (red socket wires)

WHT/BLK/brn = cut back
WHT/BLK/red = to 2"

both wires
soldered to 20 Awg
WHT. cut at 2 1/2"

(A), (C), (E), (G),
(J), (L), (N).

REMEASURE All
lengths when
finished.

TEST
Cable

Control HARNESS

PANA Spot

(BACK PLANE SIDE)

BLACK

RED

WHITE

GREEN

ORANGE

BLUE

BROWN

YELLOW

PURPLE

GREY

PINK

W

RED / GREEN

RED / YELLOW

RED / BLACK

WHITE / BLACK

WHITE / RED

WHITE / GREEN

WHITE / YELLOW

WHITE / BLUE

WHITE / BROWN

/

WHITE / ORANGE

/

WHITE / ~~pink~~ grey

WHITE / PURPLE

/ *

28 / *

29 / *

30 / *

31 / *

32 /

33 WHITE / RED / BLACK

34 /

35 WHITE / GREEN / BLACK

36. WHITE / YELLOW / BLACK



27. (16 AUG.) black

28. " " WHITE

29. " " RED

30. " " GREEN

31. " " BROWN

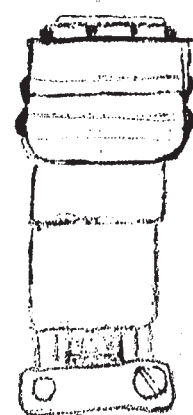
WHITE / BROWN / BLACK 3

WHITE / BLUE / BLACK ARE MOLEKED
w/ male pins

Panaspot Color Changer Harness

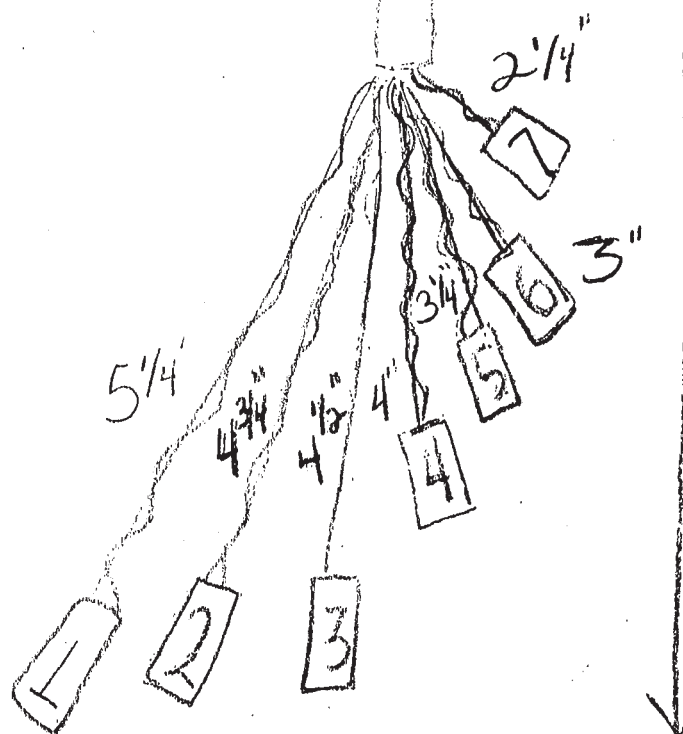
(Pin)	(Molex)	(Pos)
A.	1	1
B.	1	2
C.	2	1
D.	2	2
E.	3	1
F.	3	2
G.	4	1
H.	4	2
J.	5	1
K.	5	2
L.	6	1
M.	6	2
N.	7	1
P.	7	2

19 Pin Male Conn



Total Length 15"

(Molex)	(Pos 1)	(Pos 2)
1. =	Blk	Red
2. =	Wht	Grn
3. =	Org	Blu
4. =	blk/wht	Red/Blk
5. =	Red/wht	Wht/Blk
6. =	grn/blk	grn/wht
7. =	Org/blk	Blu/blk



* CABLE PIN Belden 8458
cut length 14"

.063 2 pos fem. con

24 Pos

T9

15 POS/CC
J1/CC

USE

1	WHITE / YELLOW	1	GOBO
2	" / ORANGE	RED SOCKET	COLOR 6
3	" / RED	" "	COLOR 4
4	" / BROWN	" "	COLOR 2
5	" / GREY	" "	COLOR 7
6	" / VIOLET	" "	COLOR 5
7	" / BLUE	" "	COLOR 3
8	" / GREEN	" "	COLOR 1
9	" / BLACK / YELLOW	3	+ 15V
10	" / BLACK / ORANGE	2	- 15V
11	" / BLACK / RED	COMMON CC	COLOR CHANGER COMMON
12	" / BLACK / BROWN	" "	" "
13	" / BLACK / GREY	7	IRIS MOTOR
14	" / BLACK / VIOLET	6	FADER "
15	" / BLACK / BLUE	5	GROUND
16	" / BLACK / GREEN	4	GROUND
17	" / RED / GREEN	11	TILT MOTOR
18	" / RED / YELLOW	10	TILT FB
19	" / RED / ORANGE	9	FADER FB
20	" / RED / BROWN	8	IRIS FB
21	" / ORANGE / YELLOW	15	GROUND
22	" / ORANGE / GREEN	14	GROUND
23	" / RED / VIOLET	13	STRIKER ENABLE { RELAY 'B' RELAY 'A'
24	" / RED / BLUE	12	

SPOT CABLE

A - BLACK

B - WHITE

C - RED

D - GREEN

E - ORANGE

F - BLUE

G - BROWN

H - YELLOW

J - VIOLET

K - GREY

L - WHT/BLK

M - WHT/RED

N - WHT/BRN

P - GREEN

R - WHITE

S - BLACK

24 POS AMP CON

1. - BLACK

2. - BRN 16 AWG

3. - + 15 YELLOW

4. - - 15 ORANGE

5. - WHITE

6. - GREEN

7. - VIOLET

8. - YELLOW

9. - BROWN

10. - WHITE

11. - WHT/RED

12. } NOT

13. } USED

14. }

15. - BLUE

16. - GREEN

17. - WHT/BRN

18. - WHT/BLK

19. - GREY

20. - ORANGE

21. - BLACK

22. } NOT

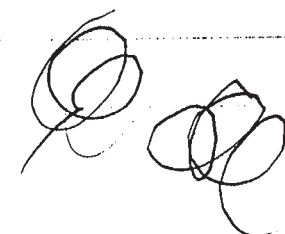
23. } USED

24. - RED

~~1. - BLACK~~
~~2. - BRN 16 AWG~~

} 16 AWG

16 AWG COMMON - AC

ENABLE, BEAM LEVEL
16 AWG (other end goes to on-off switch)

Circuit

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

CC *F

+ 15 volt
- 15 volt
Return
Neutral

21

Not used

22

23

Pin

5
24
20
15
9
6
7
8
11
12
13
14
17
18
19
16
1

VOLTA
READ OUT

.2
.9
1.5
2.2
2.8
3.5
4.1
4.8
5.4
6.1
6.8
7.4
8.1
8.7
9.4
10.0
CC

SB1

3
4
2
10

21 Ø PHASE, BEA

★

METER SHOULD BE SET
AT 200 DVC.

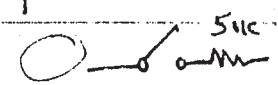
MULTI CABLE

NEW Cable order

600 V 16/37 Type TC

- 37) BLACK
- 36) BROWN
- 35) YELLOW
- 34) ORANGE
- 33) BLUE
- 32) PINK
- 31) PINK/BLACK
- 30) PINK/BLUE
- 29) ORANGE/BLUE
- 28) BLUE/BLACK
- 27) ORANGE/BLACK
- 26) YELLOW/BLACK
- 25) BROWN/BLACK
- 24) BLACK/RED
- 23) BLUE/RED
- 22) ORANGE/RED
- 21) YELLOW/RED
- 20) BROWN/RED
- 19) BLACK/BLUE
- 18) BLACK/BROWN
- 17) BROWN/YELLOW
- 16) ORANGE/YELLOW
- 15) BLUE/YELLOW
- 14) PINK/YELLOW
- 13) BLACK/YELLOW
- 12) BROWN/ORANGE
- 11) YELLOW/ORANGE
- 10) BLUE/ORANGE
- 9) PINK/ORANGE
- 8) BLACK/ORANGE
- 7) BROWN/BLUE
- 6) YELLOW/BLUE
- 5) BLACK
- 4) YELLOW/BROWN
- 3) ORANGE/BROWN
- 2) BLUE/BROWN
- 1) PINK/BROWN

200 4K
5m

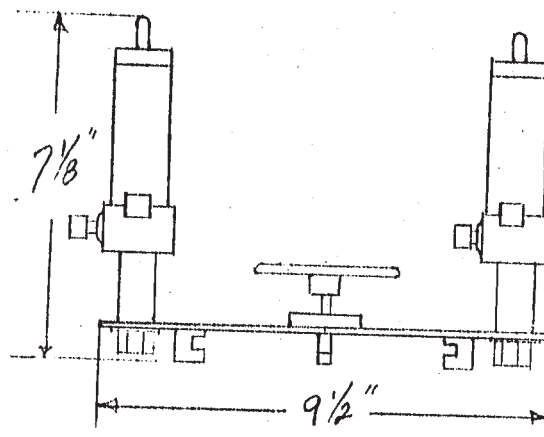
PIN #	FUNCTION	WIRE SIZE	TO
1	CEOM	20	A
2	RGT	16	PS RGT
3	+25	16	PS +
4	-25	16	PS -
5	LEVEL	20	B
6	SIZE	20	
7	G1	20	J
8	EFFECT	20	H
9	DESIGN	20	G
10	NEUTRAL	16	NEUTRAL
11	Yellow	20	L
12			
13			
14			
15	TILT	20	F
16	HV ENABLE	20	PS 
17	MAGENTA	20	M
18	BLUE CYAN	20	N
19	B2	20	K
20	PAN	20	E
21	AC HOT	16	AC-HOT
22	N/C		
23	N/C		
24	SIZE	20	

Q

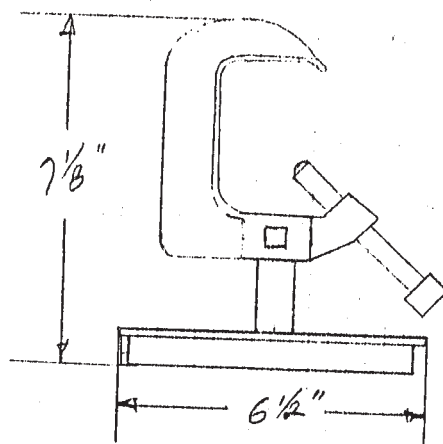
IS GREEN, WHITE, BLACK ←

RANA PLATE

SIDE VIEW



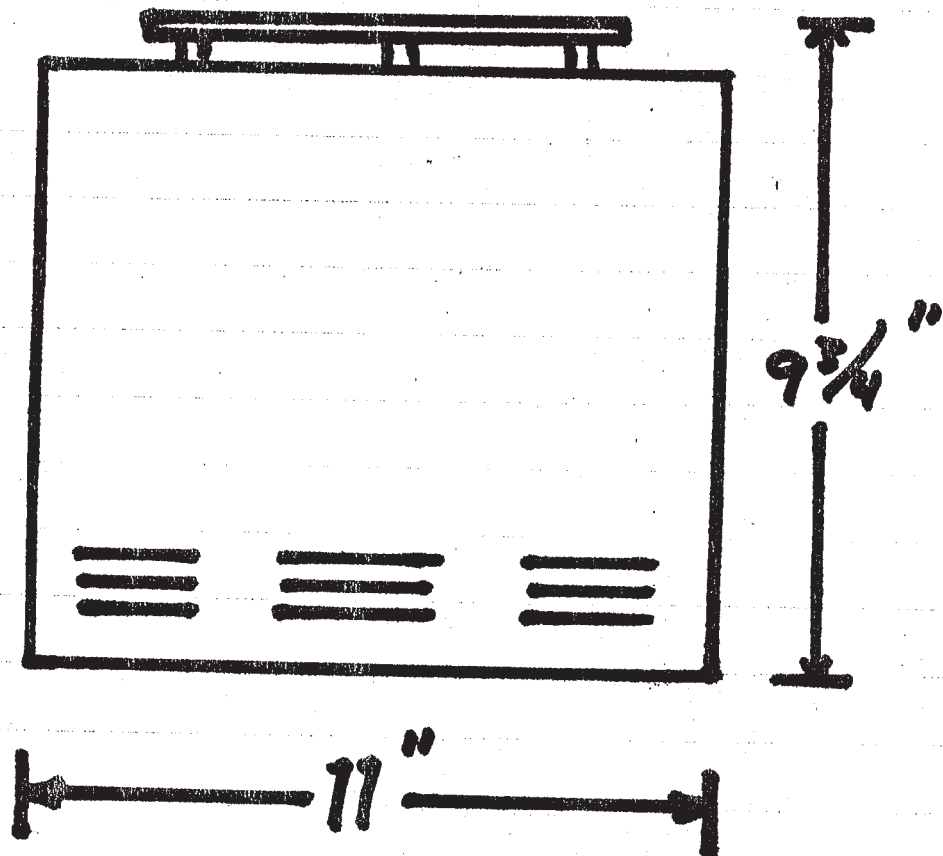
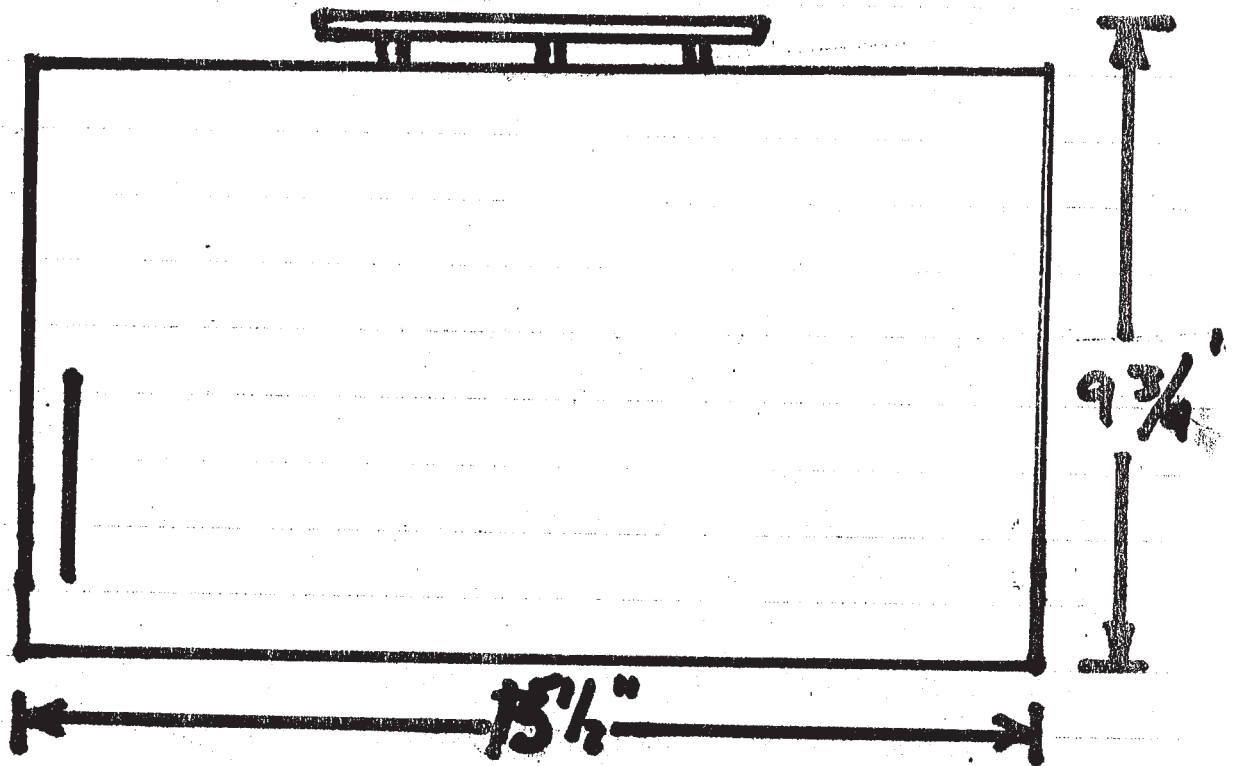
END VIEW



SCALE 3" = 1'

Rob K 5/16

PANASPOT UPPER HOUSING



TODAY'S DATE 2/29/88 DATE REQUESTED 2/29/88 PRODUCTION Soul Train DATE OUT _____

☒ PRODUCTION

☐ MANUFACTURING

JOB DESCRIPTION BUILD TEN PANABEAM II HARNESS'

DEPARTMENT MANUFACTURING

QUANTITY	DESCRIPTION
10 ea.	PANABEAM II HARNESS', MAIN
	3 Pos FEM .062
	20 GA. 1. VIO 2 Pos FEM .062 2. Yell 3. ORG
	TILT POT
	2 Pos FEM .093
	1. WHT 16 GA. 2. BIK 16 GA.
	A.C.
20 GA.	1. BRN 2. GRN
	TILT MOTOR
	1 BLU 2 BIK 3 RED 4 WHT 5 GRN
	5 Pos. FEM .062
	COLOR CHANGER (RANGER)
	TILT MOTOR
	TILT POT
	RANGER 34"
	28 1/2"
	31"
	AC.
	BARE CUT LENGTHS

REQUESTED BY

SEAN ROWLAND

AUTHORIZED BY

[Signature]

ORIGINAL

- 1 Blue
- 2 Red
- 3 Orange
- 4 —
- 5 —
- 6 Green
- 7 Brown
- 8 white (thin)
- 9 Purple
- 10 Yellow
- 11 Black (thin)
- 12 Grey

1. Pull harness thru shaft open ends into beam mainframe
2. Guide mox for motor (brown grey) to one side of yoke
3. Guide remaining moxes to other side of yoke
4. Connect all moxes
5. Using pin assignment above insert appropriate color to proper numbered ~~hole~~ hole (crimp pins on all 12 wires) (numbers are on mox back)



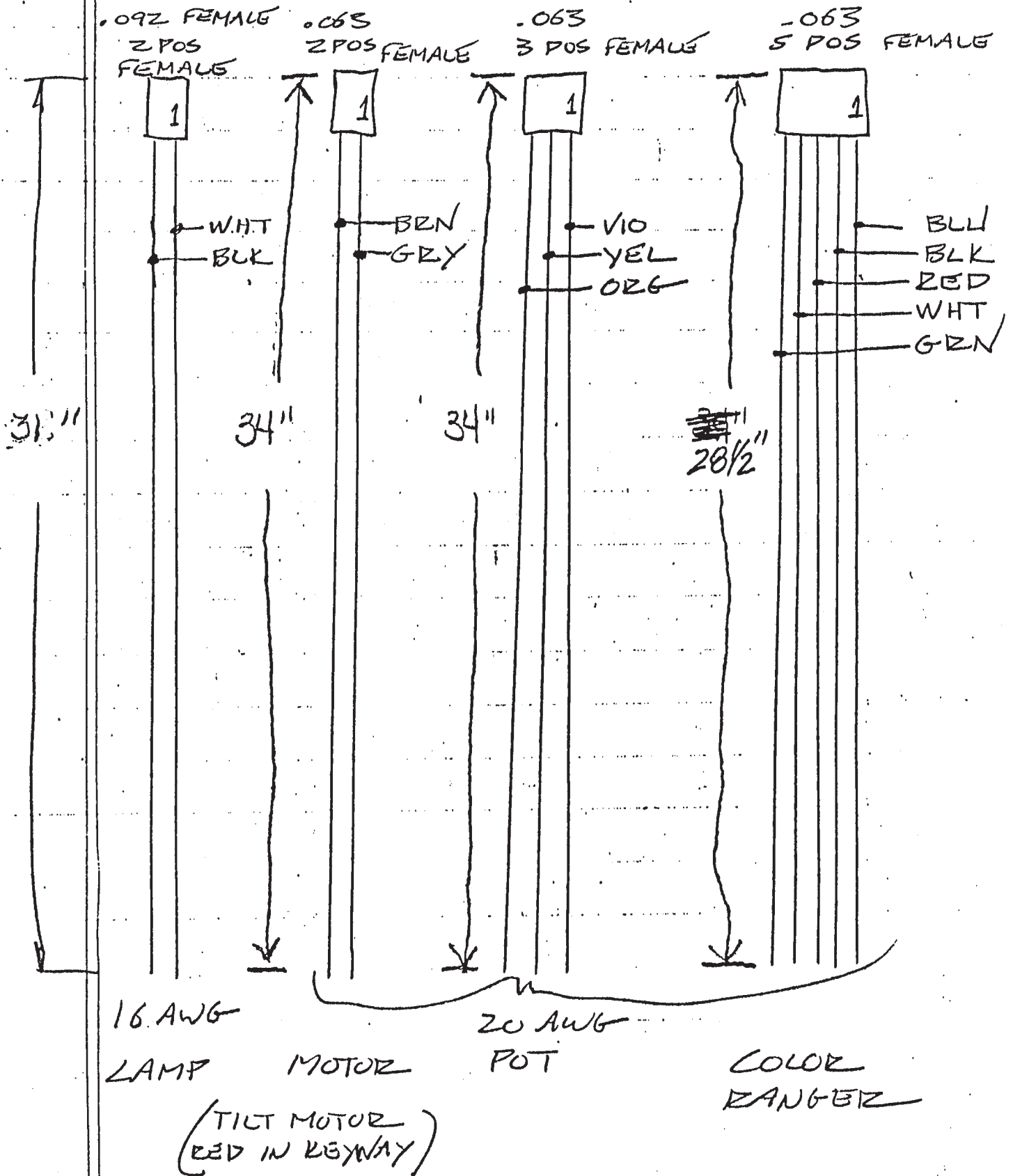
五

PAUL BEAN WINE

[illegible]

5-6-86

PANABEAM HARNESS CONDUCTORS



PANA BEAN CABLE

PIN	WIRE	GUAGE
A	BLACK	16
B	RED	16
C	WHITE	20
D	GREEN	20
E	ORANGE	20
F	BROWN	20
G	GREY	20
H	BLUE	16
J	YELLOW	16
K	VIOLET	16
L	WHITE/BLACK	20

(* RED/WHITE IS NOT USED SO CLIP IT OFF.)

PANABEAM CABLE

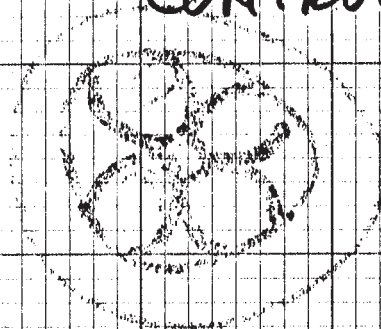
<u>USE</u>	<u>PIN</u>	<u>WIRE</u>	<u>GAUGE</u>
Common	A	Black	16
Hot	B	Red	16
-	C	White	20
Pan	D	Green	20
Tilt	E	Orange	20
Color	F	Brown	20
-	G	Grey	20
Hot - Lamp	H	Blue	16
Common - Lamp	J	Yellow	16
Ground	K	Violet	16
Control Common	L	White/Black	20

*SOLDER BARE WIRE TO GROUND (VIOLET, 16 AWG)
(WHITE/RED IS NOT USED SO CLIP IT OFF)

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>MANUFACTURES P/N</u>
11 Pin Connector - Male	1 ea	MS3121J18-11P {W/O
11 Pin Connector - Female	1 ea	MS3126J18-11S {End
Kellems	2 ea	074-01-017 {Bells
Cable		SP 3130

PANABEAM INPUT CONNECTOR

PIN	COLOR CODE	FUNCTION	GAUGE
A	WHITE	AC NEU.	16
B	BLACK	AC HOT	16
C	—	—	—
D	WHITE	PAN	20
E	RED	TICT	20
F	GREEN	COLOR	20
G	—	—	—
H	BLACK	AC HOT	16
I	WHITE	AC NEU.	16
K	GREEN	GROUND (AC)	16
L	BLACK	CONTROL COM	20



WALL BEAM ADAPTER

<u>USE</u>	<u>SPOT MALE</u>		<u>BEAM FEMALE</u>
Common	R	Black	A
Hot	S	Red	B
Pan	B	Green	D
Tilt	C	Orange	E
Color	D	Brown	F
Ground	P	VIOLET	K
Control Common	A	White/Black	L

SOLDER BARE WIRE TO GROUND (VIOLET, 16 AWG)

CLIP OFF ALL REMAINING WIRES

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>MANUFACTURES P/N</u>
Connectors	2	1 ea. MS 3126J20-16P 1 ea. MS 3126J18-11S
Kellems	2	074-01-017
Cable	36"	

PANABEAM BOX PIN SCHEDULE

<u>FUNCTION</u>	<u>PANASPOT</u> <u>MALE</u>	<u>PANABEAM</u> <u>FEMALE</u>	<u>JOURNEY</u> <u>MALE</u>	<u>RANGER II</u> <u>CONVERSION</u> <u>SPOT</u> <u>BEAM</u>
COMMON	A	L	--	A L
PAN (#1)	B	D (#1)	--	B D1
PAN (#2)	C	D (#2)	--	C D2
PAN (#3)	D	D (#3)	--	D D3
PAN (#4)	E	D (#4)	--	-- --
TILT (#1)	F	E (#1)	--	E E1
TILT (#2)	G	E (#2)	--	F E2
TILT (#3)	H	E (#3)	--	G E3
TILT (#4)	J	E (#4)	--	-- --
COLOR (#1)	K	F (#1)	--	H F1
COLOR (#2)	L	F (#2)	--	J F2
COLOR (#3)	M	F (#3)	--	K F3
COLOR (#4)	N	F (#4)	--	-- --
GROUND	P	K (ALL)	A,D,G,K	-SAME-
CONTROL NEU.	R	A (ALL)	--	-SAME-
CONTROL HOT	S	B (ALL)	--	-SAME-
		(NEU) J (#1)	B	
		(HOT) H (#1)	C	
		(NEU) J (#2)	E	
		(HOT) H (#2)	F	
		(NEU) J (#3)	H	
		(HOT) H (#3)	J	
		(NEU) J (#4)	L	
		(HOT) H (#4)	M	

S.B. Beam Control wiring

PIN SCHEDULE - AMP 24 Pos

S.B. 1

J1 PIN#	Harness wire
+ 1 BLK	CKT # 17
- 2 -16 AWG	RTN Brn.
- 3 -16 AWG	+ 15 V YEL.
- 4 -16 AWG	- 15 V ORG.
+ 5 - GRN	CKT # 1
+ 6 - WHT-BLK	CKT # 6
+ 7 - RED-BLK	CKT # 7
+ 8 - ORG-BLK	CKT # 8
+ 9 - WHT	CKT # 5
- 10 -16 AWG	Neutral, WHT
+ 11 - GRN-BLK	CKT # 9
+ 12 - BLK-WHT	CKT # 10
+ 13 - RED-WHT	CKT # 11
+ 14 - GRN-WHT	CKT # 12
+ 15 - BLUE	CKT # 4
+ 16 - BLUE-RED	CKT # 16
+ 17 - BLUE-WHT	CKT # 13
+ 18 - BLK RED	CKT # 14
+ 19 - RED-GRN	CKT # 15
+ 20 - ORG	CKT # 3
- 21 -16 AWG	Ø, BLK
- 22 - Ø	Do not use
- 23 - Ø	Do not use
+ 24 - RED	CKT # 2

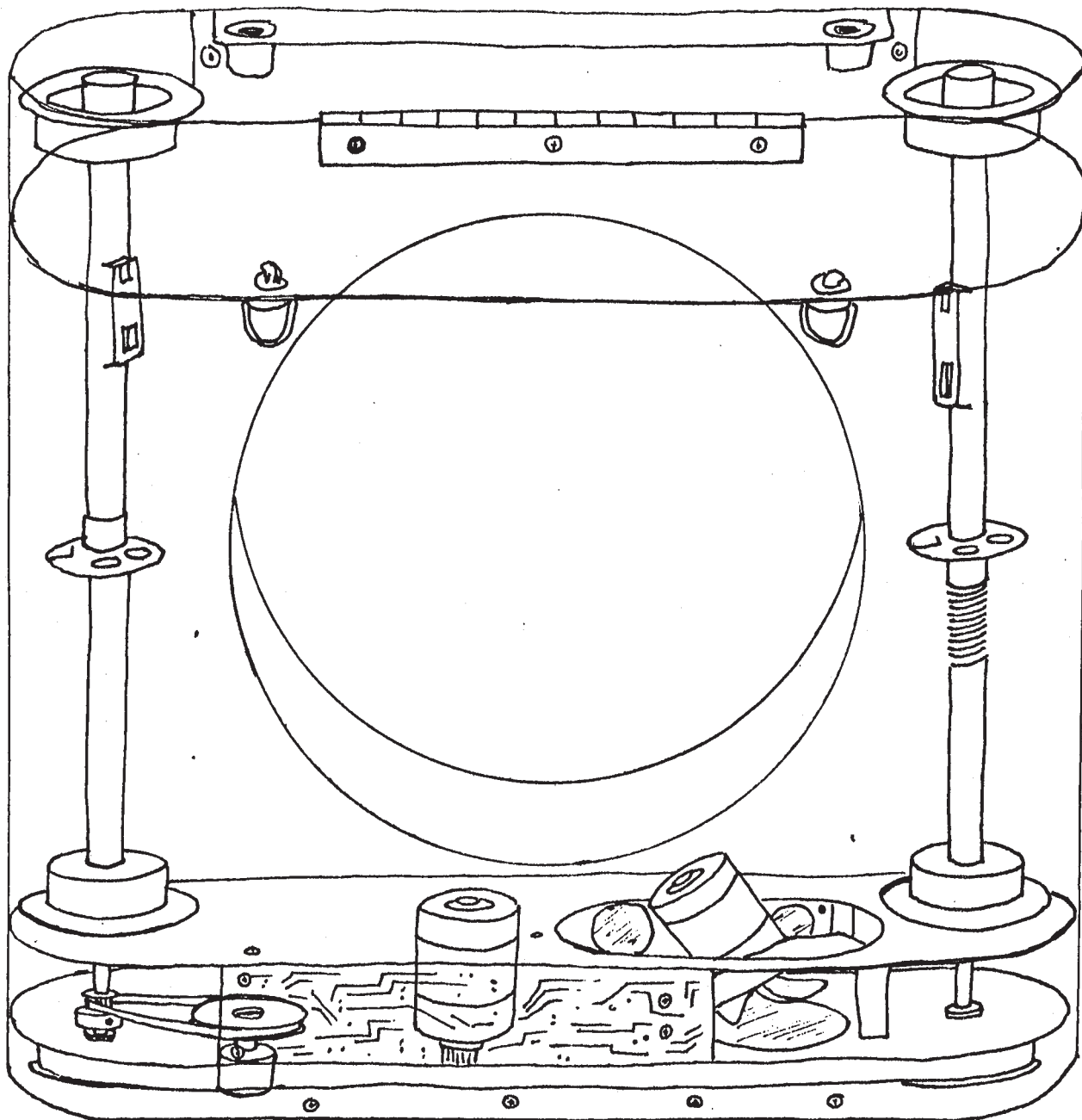
CUT OFF

- 1) shield
- 2) WHT/RED
- 3) ORG/RED
- 4) BLU/BLK

WALL TO COMPUTER ADAPTER

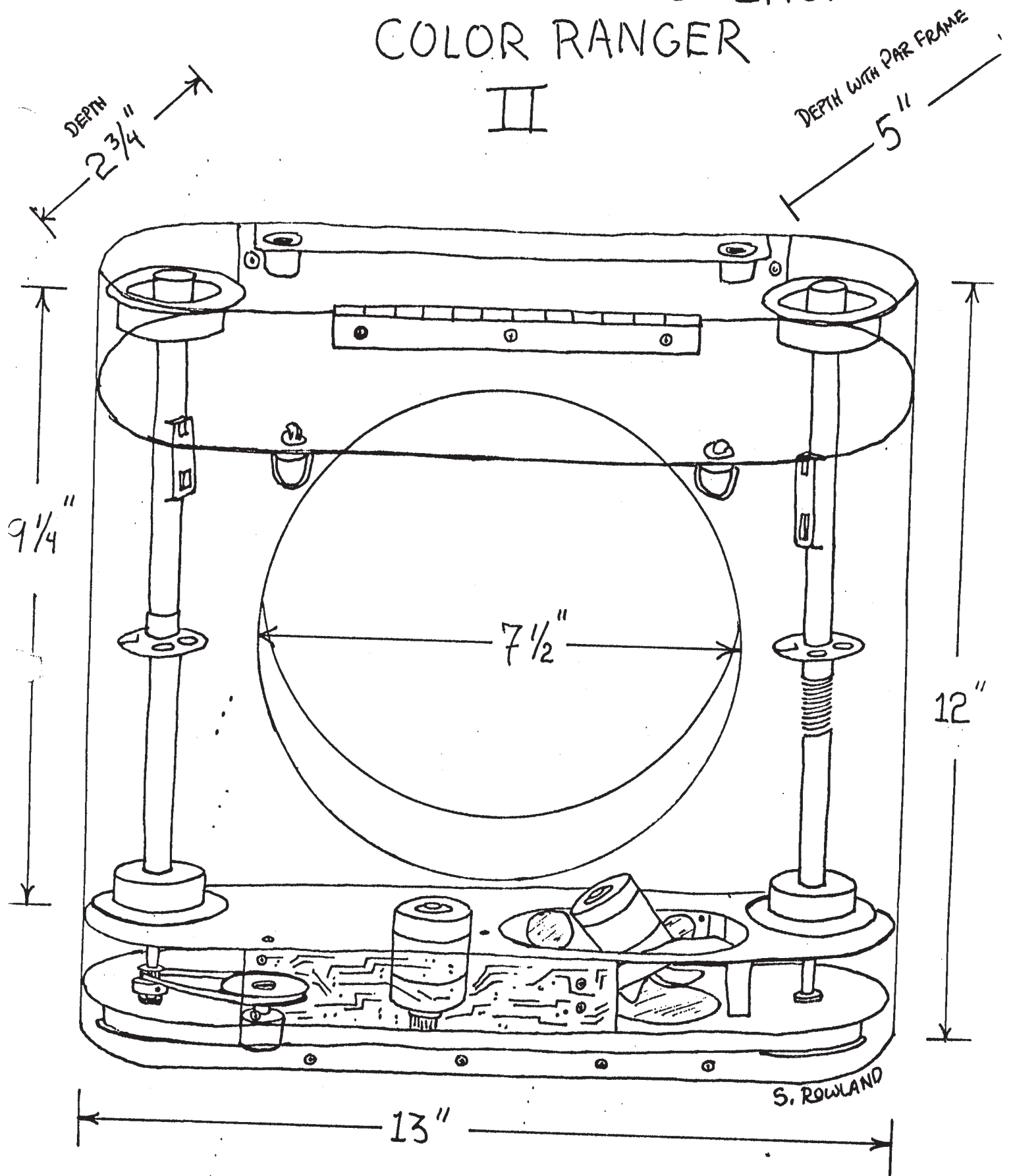
Panaspot Female			Amphenol Male
	<u>PIN</u>	<u>WIRE</u>	<u>#</u>
Common	A	Green	33
Color #1	B	Black	1
Color #2	C	Red	2
Color #3	D	Black	3
Color #4	E	White	4
Color #5	F	Black	5
Color #6	G	Green	6
Color #7	H	Black	7
Gobo	J	Blue	8
Shutter	K	Black	9
Iris/(Beam Color)	L	Yellow	10
Pan	M	Black	11
Tilt	N	Brown	12

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>MANUFACTURES P/N</u>
16 Pin Connector - Female	1 ea	MS3121J20-16S
36 Pin Amphenol - Male	1 ea	57-303060
Kellem	1 ea	074-01-017
Cable	36"	



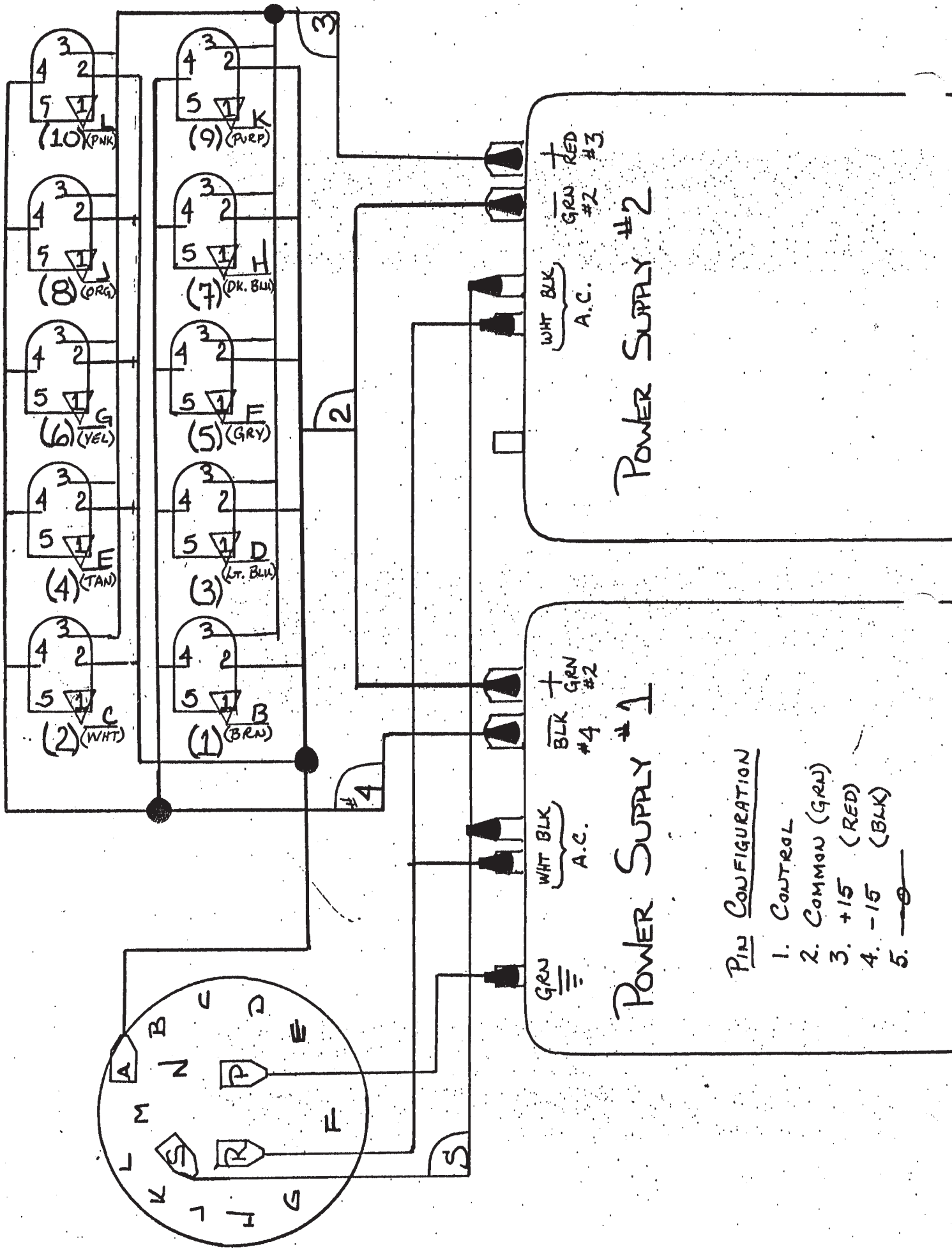
MORPHEUS LIGHTS INC. COLOR RANGER

II



— RANGER II —

COLOR KANGER



PIN CONFIGURATION

1. CONTROL
2. COMMON (GRN)
3. +15 (RED)
4. -15 (BLK)
5. —

RANGER CABLE

<u>USE</u>		<u>WIRE</u>
Control Channel	1	Black
Hot	2	Blue
Common	3	Brown
Hot	4	Black
-	5	Green

* 1/8" HEATSHRINK ON ALL SOLDER POINTS

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>MANUFACTURES P/N</u>
Switchcraft 5 Pin - Male	1 ea	A5M
Switchcraft 5 Pin - Female	1 ea	A5F
Olflex 5 Conductor - 20 Gauge		0010003R

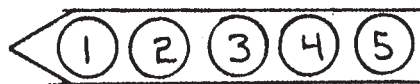
NOTICE:

We are changing the MOLEX connector pin out for the color changer and Ranger board.

The old style pinout looked like this:

old

1	color in	Red
2	comm	BLK
3	+15V	BLU
4	-15V	BRN
5	motor	WHT



But the new style looks like this.

new

1.	color in	Red
2.	comm	BLK
3.	motor comm	WHT
4.	-15V	BRN
5.	+15V	BLU

This new pin out is the same order on the new Junction board and the single mtr driver P.C. Boards.

① ② ③ ④ ⑤

Junction Board

* Single motor driver.
P.C. Packs.

1. color in

2. com

3. MTR COMM

4. -15V

5. +15V

PANABEAM COLOR Ranger wiring

PIN	MOLEX YOKE	MOLEX LAMP	XLR	MOLEX COLOR RANGER
1	COLOR IN	COLOR IN	COLOR IN	COLOR IN
2	COM	COM	COMM	COMM
3	+15V	+15V	+15V	MOTOR COMM
4	-15V	-15V	-15V	-15V
5	MOTOR COM	MOTOR COM	MOTOR COMM	+15V

XX-XXXX-XX