Film-Tech

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RGM INDUSTRIES

SPATS II-A-LC

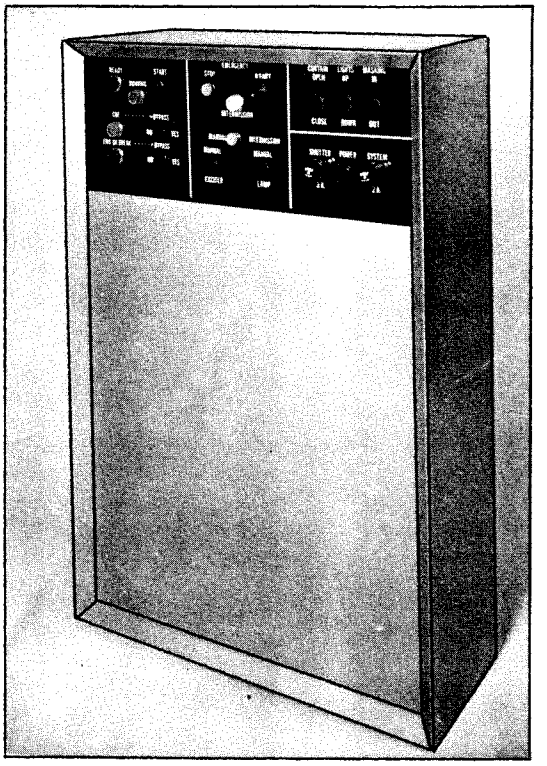
OPERATING INSTRUCTIONS

AUTOMATION UNIT

Automation

SPATS II

SINGLE PROJECTOR AUTOMATED THEATRE SYSTEM



Features:

- **Multifaceted Automation System**
- **Improve Projection Booth Efficiency**
- **Consistent Theatre Presentation**
- **Central & Remote Controls**
- **Control Multiple Theatres**
- **Single Reel or Platter**

SPATS II will:

1. Turn house lights off
2. Turn music system off
3. Start projector motor
4. Turn on projection lamp
5. Open dowser and turn on projector sound at beginning of picture.

When show is over SPATS II will:

1. Turn the house lights on
2. Turn music system on
3. At final frame of picture, close dowser and shut off film sound.
4. Shut off projector motor and lamp when film runs out in projector.

SIZE: 16" High, 14.25" Wide, 5.5" Deep
WEIGHT: 30 LBS

SPATS II Automation System provides completely unattended projection functions for theatres using a single projector with platter or single reel film systems. Once the projector has been threaded the show can be started from the projection booth or any remote location by activating a switch, thereafter requiring no attention from theatre personnel.

Practical Products From Imaginative Thinking

RGM

INDUSTRIES, INC.
3342 LILLIAN BLVD.
TITUSVILLE, FL 32780
TELEPHONE: 305-269-4720

SPECIFICATIONS

SPATS II -SERIES A-LC

SINGLE PROJECTOR AUTOMATED THEATRE SYSTEM

SPATS II will program the following functions:

1. Turn house lights off.
2. Turn music system off.
3. Start projector motor.
4. Turn on projection lamp.
5. Open dowser and turn on projector.

*6. Select flat or scope lens.

*7. Turn on surround channel.

During projection of the film, SPATS II will monitor the complete projection operation and will shut down the projector and lamp, if a film break occurs. Should this occur, a signal lamp will light or (optional) alarm will be sounded. Upon repair and re-threadeng of film, a manual re-start will allow SPATS II to continue automatic operation of the theatre until the film is completed.

From a completion cue on the film, SPATS II will begin a termination sequence:

1. Turn the house lights on
2. Turn intermission music system on
3. At final frame of picture, close dowser and shut off film sound .
4. Shut off projector motor and lamp when film runs out in projector.
5. Shut off surround channel
6. Change lens to flat

In addition to these routine features, SPATS II provides for emergency shutdown of projector and lamp by push button form the booth or (optionally) a remote location.

*Select lens and surround operation prior to show start.

INSTRUCTION MANUAL
SPATS II-SERIES A-LC
DESCRIPTION OF OPERATION

SPATS,for Single Projector Automated Theatre System, is designed for use with platter film systems or with large single reel projectors.

OPERATION

When the projector is properly threaded and on leader start mark 8 or 7, house lights are up and theatre music system operating. SPATS at the push of the START button will:
Immediately turn house lights off and start music fader (optional IMP 100).
The projector motor and lamp will be started, however, no picture or sound will appear in the theatre while the film leader is passing through the projector.
7.5 seconds into the sequence the change over shutter will open and the exciter lamp will turn on, putting a picture and sound in the theatre.
SPATS II will now wait for the end cue to start a reverse sequence to bring the theatre up to an intermission condition, but, continuously monitoring the projector for a film break or split film.
If a film break or film split occurs, SPATS II will shut down the projector motor and lamp and signal with a red light that this has happened. The red light will remain on until the projector has been re-threaded.
The projector motor, lamp and sound can be re-started after threading by pushing the Show Start button and SPATS II will begin a sequence exactly the same at the beginning of the show.
During normal operation the Emergency Stop button will shut down the projector, lamp and sound; turning the house lights on. Re-starting from an emergency stop is with the start button.

INSTRUCTION MANUAL
SPATS II-SERIES A-LC
DESCRIPTION OF OPERATION

When the foil cue at the end of the film passes the sense roller, SPATS II begins on intermission and shut down sequence.
Immediately following the cue, the change over shutter closes and the exciter lamp is cut off.
The projector continues to run until the film passes completely through, and then the projector motor and lamp are shut off. At this time the red light is on signaling the end of show (start of intermission). The house lights turn on and music system is activated.

SPATS II now waits for the projector to be re-threaded and will start the next show exactly the same as the foregoing.

At any time during the show, an intermission may be commanded by the Manual Intermission button. This will bring about the same condition as the end of film cue, in the same sequence. Picture and sound will be shut off. HOWEVER, The projector and lamp will continue to run until the film runs out or the Emergency Stop button is pushed. SPATS II will be in intermission mode and re-start will require using the Show Start button.

In the event that two cue foils are used on a double feature presentation, the cue between features can be ignored by placing the CUE...BYPASS switch in the YES position. This will allow the show to continue from one feature to the next without an intermission. The switch must be placed in the NO position after the first cue has passed in order to obtain a normal show and sequence at the last cue.

IF the switch is in the NO position and a cue between features is detected, the picture and sound will be turned off. However, the projector must be immediately stopped with the EMERGENCY STOP button or it will continue to run until all the film has passed. Re-start is the same as the beginning of a new show. Push the START button.

The area of house lights maybe controlled by automatic or manual function. In order to operate automatically it will be necessary to place the (Auto Lights-Manual) switch into the "Auto Lights" position. This will now enable the house lights to come (on and off) automatically, as programed by the automation system.

To operate the lights in a manual mode place the (Auto Lights-Manual) switch to "Manual" and utilize the (Lights Up-Lights Down) spring return toggle switch for raising or lowering the lights in the auditorium. In order to have the lights operate in the auto mode again it is necessary to transfer the (Auto Lights-Manual) switch to the "Auto" position.

Cue foil should be placed on inboard lens change and surround channel turn on. Film sensor is connected to TB 6.
Lens changer and surround controls are wired to TB-4.
Remote controls are wired to TB 5.
Above TB's are located on the printed circuit board mounted on the wall-mounted chassis.

RACK MOUNT

SPECIFICATIONS

SPATS II-SERIES A-LC (LENS CHANGE)

SINGLE PROJECTOR AUTOMATED SYSTEM

MASTER CONTROL CONSOLE

DIMENSIONS:	H 7" xW 19" xD 11"
WEIGHT:	SYSTEM SHIPPING WEIGHT 30 LBS
FINISH:	BLUE GRAY HAMMERTONE
MOUNTING:	RACK (RELAY TYPE)
POWER INPUT:	3A, 110/125 VAC 60 HZ (15 AMP SERVICE)
CONNECTIONS:	BARRIER TYPE TERM STRIPS PROVIDED WITH UL SPADE LUGS-WHERE APPLICABLE
CONTROLS: AUTOMATIC	HOUSE LIGHT CIRCUIT (NON-TIMED) PROJECTOR MOTOR LAMP HOUSE EXCITER LAMP SHUTTER INTERMISSION (NON-SYNC) MUSIC STEREO-SURROUND CHANNEL LENS CHANGING (FLAT-SCOPE)
CONTROLS: MANUAL	HOUSE LIGHT CIRCUIT ON-OFF HOUSE LIGHT AUTO MANUAL LAMP HOUSE EXCITER LAMP LENS CHANGE (RESET)
RELAY TYPES:	DPDT 24 VDC
RELAY CONTACT RATINGS:	10 AMP, 120/240 VAC 7 5 AMP,120 VAC
FUNCTION INDICATORS:	28 VDC INTEGRAL LAMP ASSEMBLIES WITH QUICK DISCONNECT LEADS
PROGRAMMER:	SOLID STATE PULSE AND DELAY CIRCUITS

WALL MOUNT

SPECIFICATIONS

SPATS II-SERIES A - LC[Lens Changer]

SINGLE PROJECTOR AUTOMATED SYSTEM

MASTER CONTROL CONSOLE

DIMENSIONS:	H 16" xW 14½ x D 5½"
WEIGHT:	System shipping weight 30 lbs
FINISH:	Blue grey hammertone and black
MOUNTING:	Wall
POWER INPUT:	3A, 110/125 VAC 60 HZ [15 AMP service]
CONNECTIONS:	Barrier type term strips provided with UL spade lugs-where applicable
CONTROLS: [Automatic]	House light circuit [Non-timed]
	Projector motor
	Lamp house
	Exciter lamp
	Shutter
	Intermission [Non-sync] Music
	Stereo-surround channel
	Lens changing [Flat-scope]
CONTROLS: [Manual]	House light circuits On-Off
	House light auto manual
	Lamp house
	Exciter lamp
	Lens change [Reset]
RELAY TYPES:	DPDT 24 VDC
RELAY CONTACT RATINGS:	10 AMP, 120/240 VAC
	7 5 AMP, 120 VAC
FUNCTION INDICATORS:	28 VDC integral lamp assemblies with quick disconnect leads
Programmer:	Solid state pulse and delay circuits

SPATS II Automation System provides completely unattended projection functions for theatres using a single projector with platter or single reel film systems. Once the projector

has been threaded, the show can be started from the projection booth or any remote location by activating a switch, thereafter requiring no attention from theatre personnel.

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GRAVITY DROP FAILSAFE, CUE SENSOR

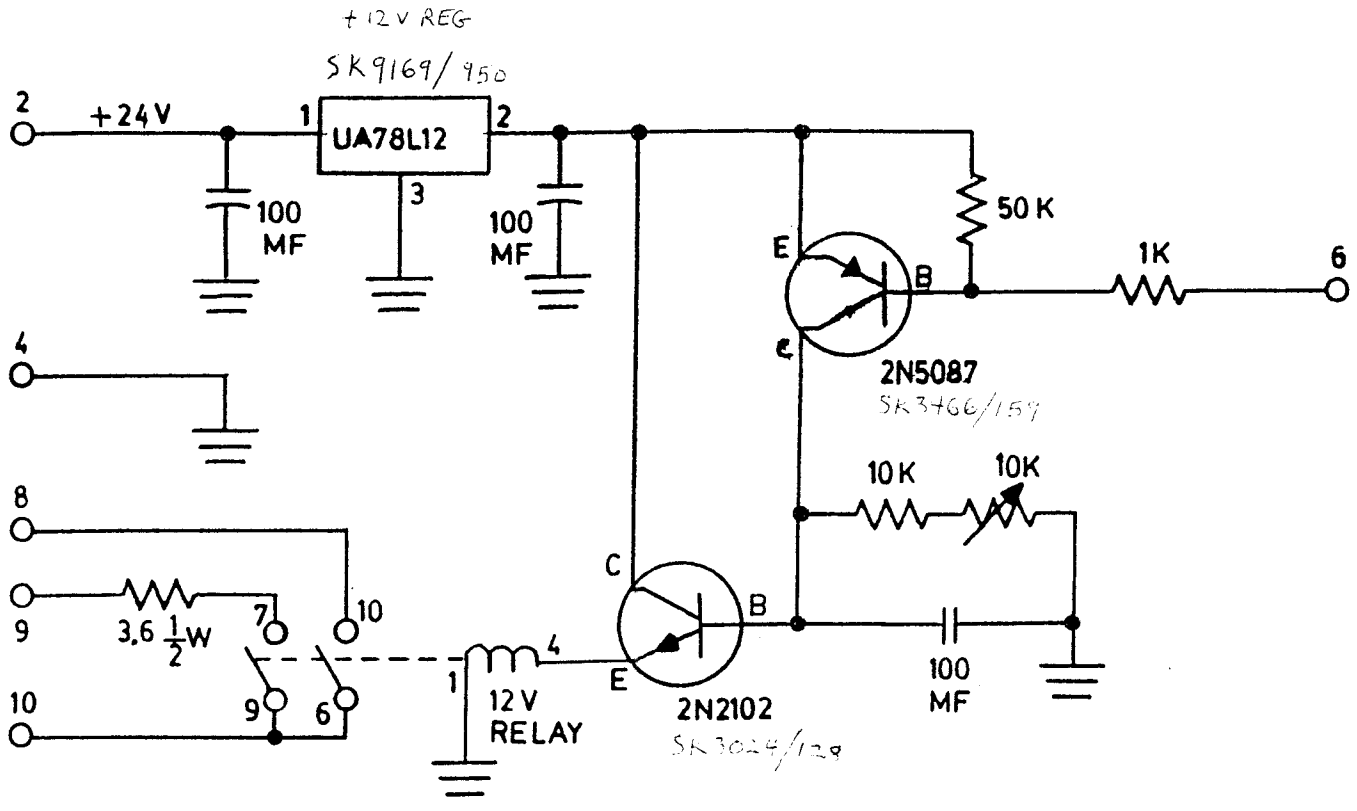
RGM MODEL 0910-002

Wire: #1 - Black
#2 - White
#3 - Green
#4 - Red
#5 - Brown

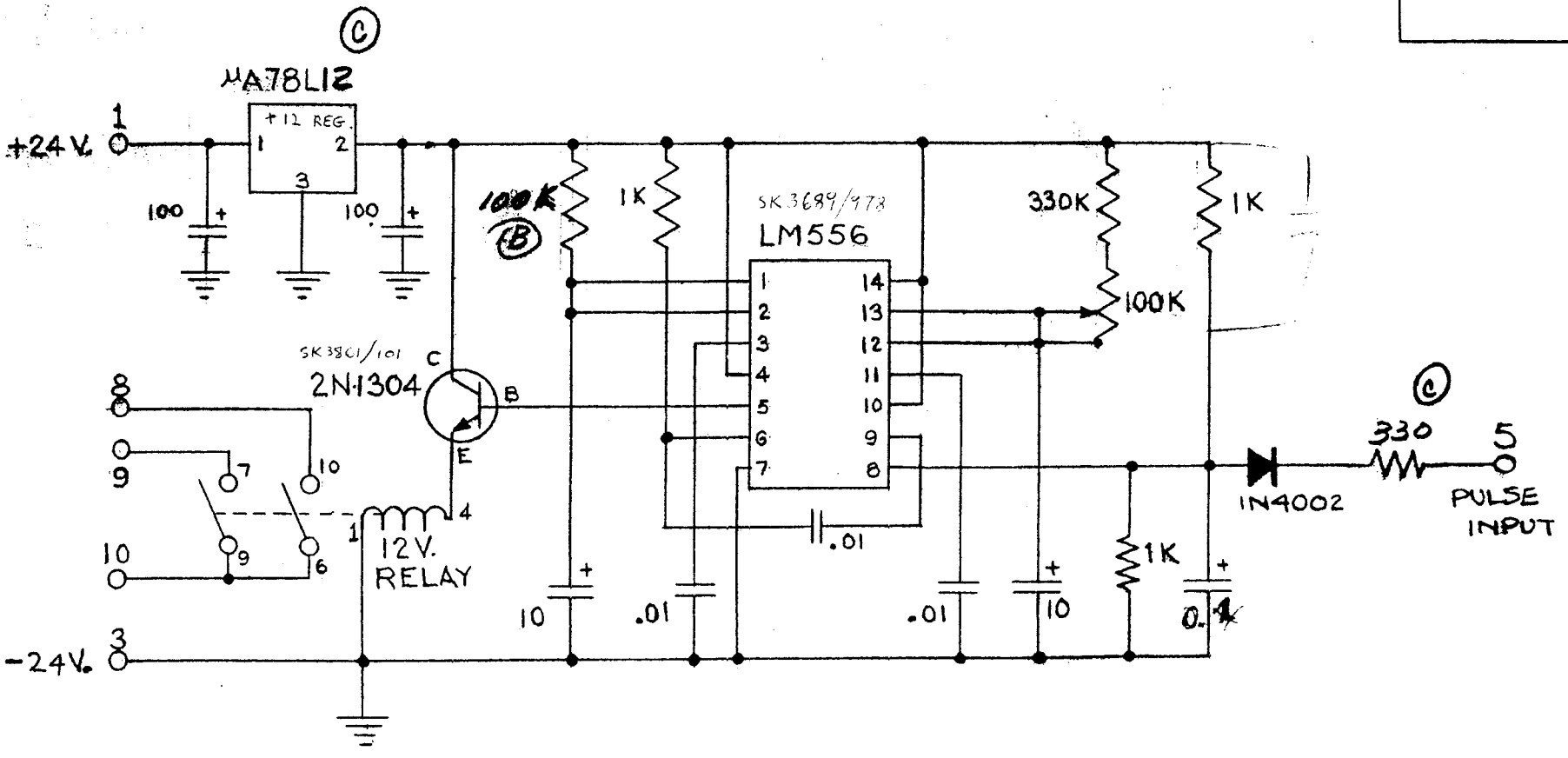
Connect wires to barrier strip terminal for failsafe cue sensor.

White (outboard roller) wire is for standard cue functions.

Brown wire is for S.O.B. Interlock or special function program.



REV. F REDESIGN 2/17/81 G CHANGED E,C ON 2N5087 PC	PULSE STRETCHER SCHEMATIC DIAG FOR SPATS & TAPS		
	DATE	DRAWN BY S. CONVEY	APPROVED BY
	SCALE 8/12/79	REVISED	
			DRAWING NUMBER AS 0021 19B



A ORIGINAL
B WAS 150K
C CORRECTED PART # 10/26/78
WAS 560
DWG #ADDED

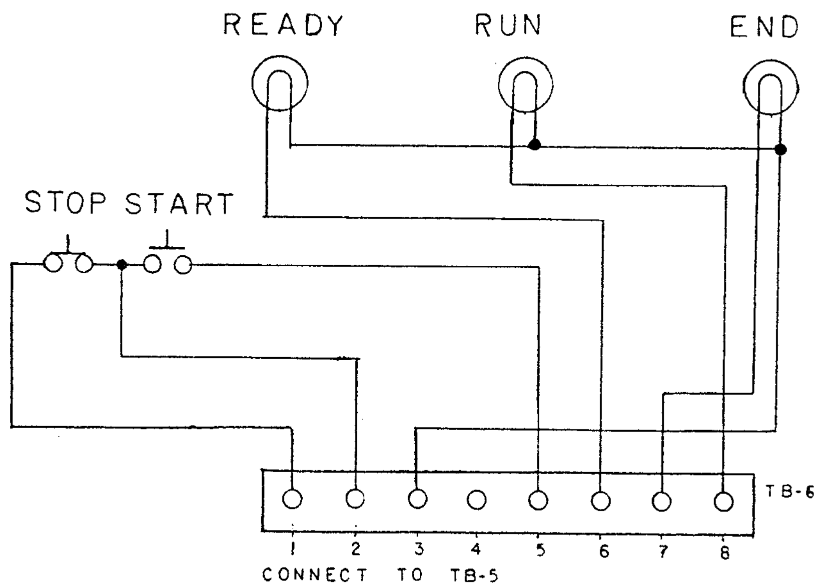
7.3 SEC. TIME DELAY UNIT
SCHEMATIC

SCALE:	APPROVED BY	DRAWN BY
DATE: 12/8/76		R.F. DOWNEY

TAPS

PART NUMBER 0908-002

DRAWING NUMBER
AS-0015-76 C



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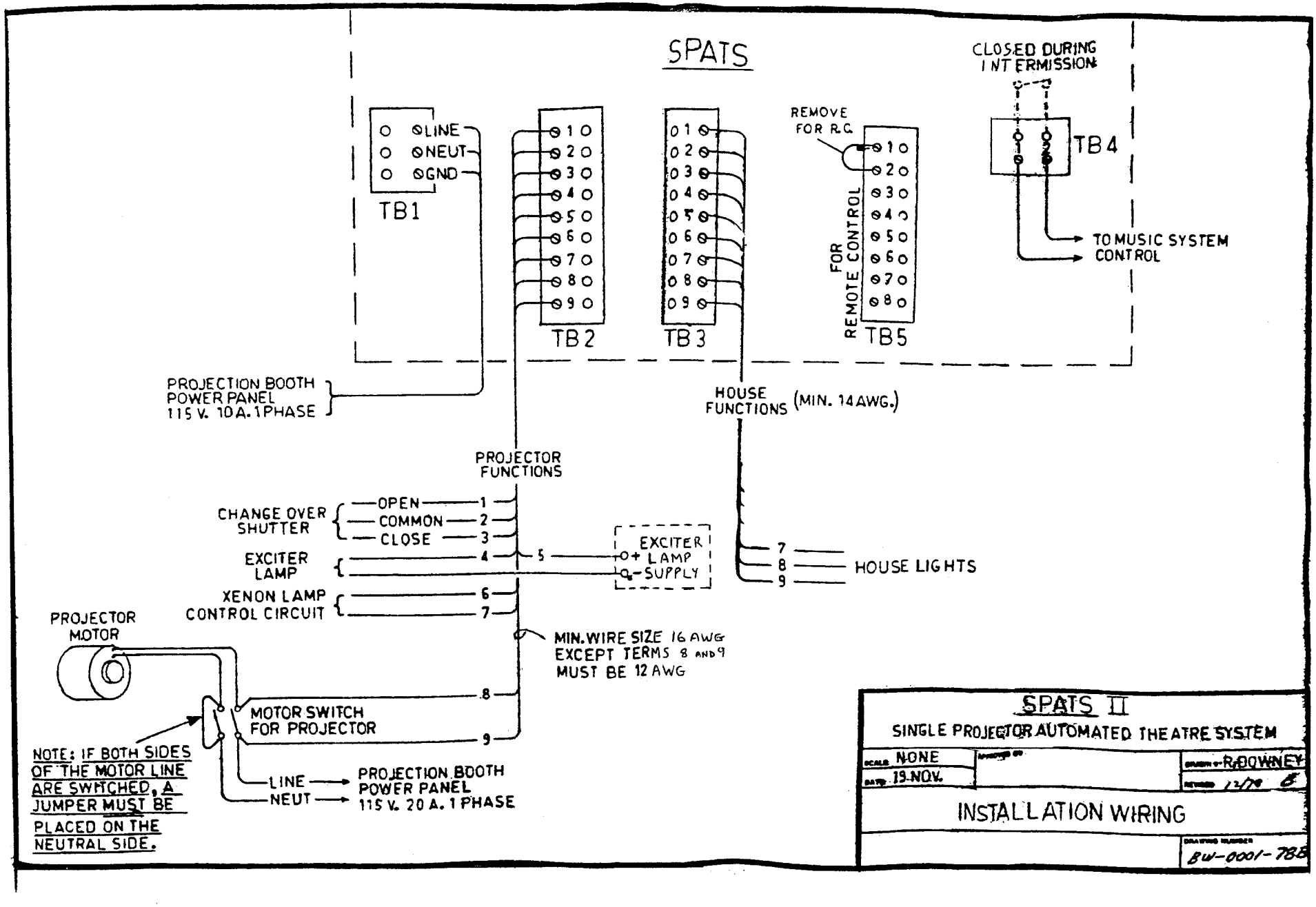
DATE: 10/77		REVISED

REMOTE CONTROL SPATS II

DRAWING NUMBER BS-0011-79A

11X17 PRINTED ON NO. 1000H CLEARPRINT


SPATS
CLOSED DURING INTERMISSION
TB4
TO MUSIC SYSTEM CONTROL
REMOVE FOR R.C.
FOR REMOTE CONTROL
TB5
LINE
NEUT
GND
TB1
TB2
TB3
PROJECTION BOOTH POWER PANEL 115 V. 10 A. 1 PHASE
HOUSE FUNCTIONS (MIN. 14 AWG.)
PROJECTOR FUNCTIONS
CHANGE OVER SHUTTER
OPEN
COMMON
CLOSE
EXCITER LAMP
EXCITER LAMP SUPPLY
HOUSE LIGHTS
XENON LAMP CONTROL CIRCUIT
PROJECTOR MOTOR
MIN. WIRE SIZE 16 AWG EXCEPT TERMS 8 AND 9 MUST BE 12 AWG
MOTOR SWITCH FOR PROJECTOR
NOTE: IF BOTH SIDES OF THE MOTOR LINE ARE SWITCHED, A JUMPER MUST BE PLACED ON THE NEUTRAL SIDE.
LINE
NEUT
PROJECTION BOOTH POWER PANEL 115 V. 20 A. 1 PHASE
SPATS II
SINGLE PROJECTOR AUTOMATED THEATRE SYSTEM
SCALE NONE
DATE 19 NOV.
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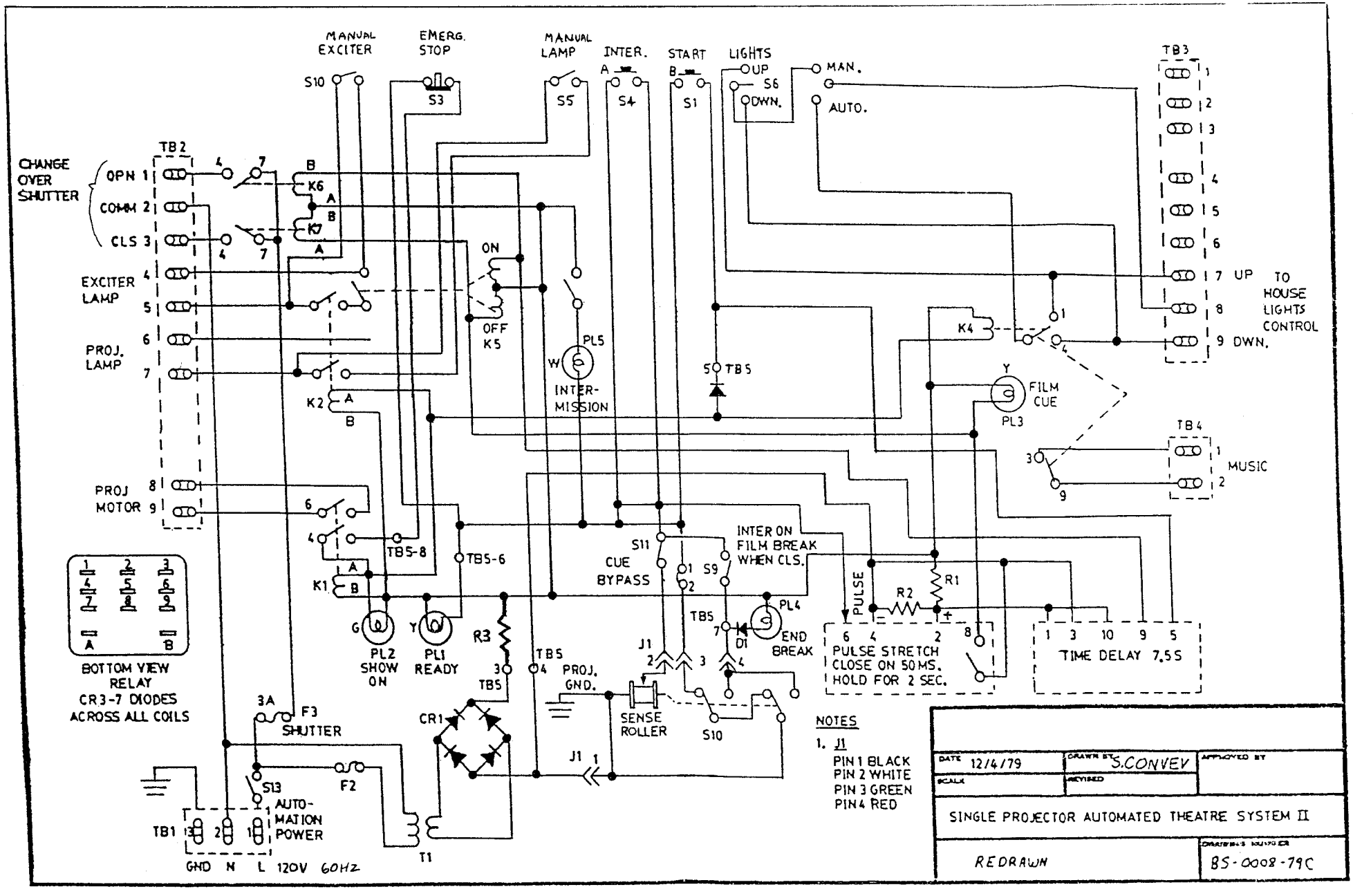
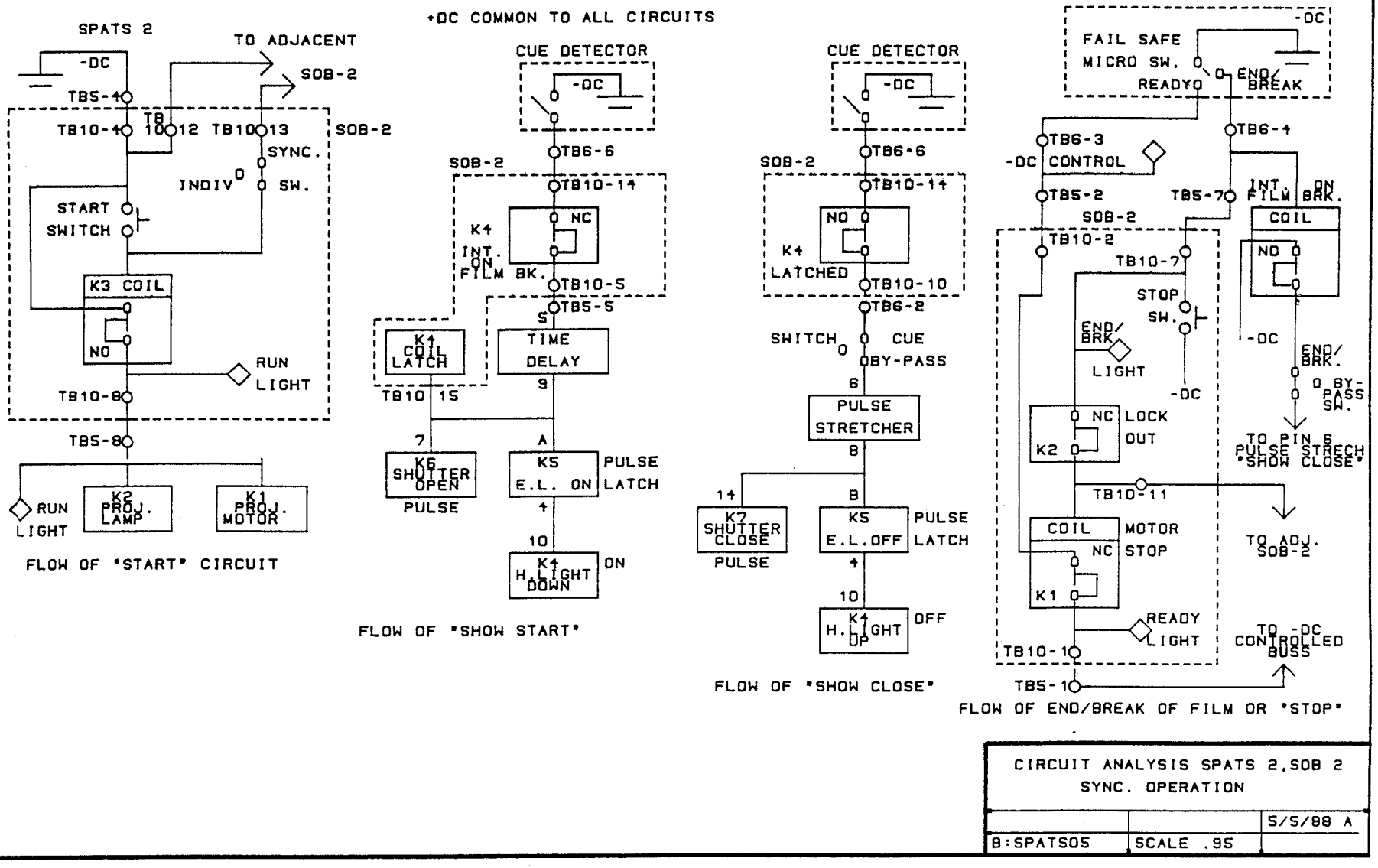
REVISED 12/79 E
INSTALLATION WIRING
DRAWING NUMBER BW-0001-785


MANUAL EXCITER
EMERG. STOP
MANUAL LAMP
INTER.
START
LIGHTS
S10
S3
S5
S4
S1
S6
UP
DWN.
MAN.
AUTO.
TB3
TB2
CHANGE OVER SHUTTER
OPN 1
COMM 2
CLS 3
EXCITER LAMP
PROJ. LAMP
PROJ MOTOR
K6
K7
K2
K1
ON
OFF
K5
PL5
INTER-MISSION
TB5
K4
FILM CUE
PL3
TB4
MUSIC
UP TO HOUSE LIGHTS CONTROL
DWN.
TB5-8
TB5-6
S11
CUE BYPASS
S9
INTER ON FILM BREAK WHEN CLS.
PULSE
R1
R2
PL4
END BREAK
D1
PULSE STRETCH CLOSE ON 50 MS. HOLD FOR 2 SEC.
TIME DELAY 7.5S
PL2 SHOW ON
PL1 READY
R3
PROJ. GND.
J1
SENSE ROLLER
S10
CR1
BOTTOM VIEW RELAY
CR3-7 DIODES ACROSS ALL COILS
3A
F3
SHUTTER
S13
F2
AUTO-MATION POWER
TB1
GND N L 120V 60Hz
T1
NOTES
1. J1
PIN 1 BLACK
PIN 2 WHITE
PIN 3 GREEN
PIN 4 RED
DATE 12/4/79
DRAWN BY S.CONVEY
SCALE
REVISED
SINGLE PROJECTOR AUTOMATED THEATRE SYSTEM II
REDRAWN
BS-0008-79C


+DC COMMON TO ALL CIRCUITS
SPATS 2
-DC
TO ADJACENT
SOB-2
TB5-4
TB10-4
TB 10
12
TB10
13
SOB-2
SYNC.
INDIV
SW.
START
SWITCH
K3 COIL
NO
RUN
LIGHT
TB10-8
TB5-8
RUN
LIGHT
K2
PROJ.
LAMP
K1
PROJ.
MOTOR
FLOW OF "START" CIRCUIT
CUE DETECTOR
-DC
TB6-6
SOB-2
TB10-14
K4
INT.
ON
FILM
BK.
NC
TB10-5
TB5-5
5
K1
COIL
LATCH
TIME
DELAY
TB10
15
9
7
A
K6
SHUTTER
OPEN
PULSE
K5
E.L. ON
PULSE
LATCH
4
10
K4
H.LIGHT
DOWN
ON
FLOW OF "SHOW START"
CUE DETECTOR
-DC
TB6-6
SOB-2
TB10-14
NO
K4
LATCHED
TB10-10
TB6-2
SWITCH
CUE
BY-PASS
6
PULSE
STRETCHER
8
14
B
K7
SHUTTER
CLOSE
PULSE
K5
E.L.OFF
PULSE
LATCH
4
10
K4
H.LIGHT
UP
OFF
FLOW OF "SHOW CLOSE"
FAIL SAFE
MICRO SW.
READY
END/
BREAK
-DC
TB6-3
-DC CONTROL
TB6-4
TB5-2
TB5-7
INT. FILM
ON
BRK.
COIL
NO
SOB-2
TB10-2
TB10-7
STOP
SW.
END/
BRK
LIGHT
-DC
-DC
END/
BRK.
BY-
PASS
SW.
NC
LOCK
OUT
K2
TO PIN 6
PULSE STRECH
"SHOW CLOSE"
TB10-11
COIL
MOTOR
NC
STOP
TO ADJ.
SOB-2
K1
READY
LIGHT
TO -DC
CONTROLLED
BUSS
TB10-1
TB5-1
FLOW OF END/BREAK OF FILM OR "STOP"
CIRCUIT ANALYSIS SPATS 2,SOB 2
SYNC. OPERATION
5/5/88 A
B:SPATSOS
SCALE .95