

## Model 2035 Series II Deluxe Automation Instructions

The Kelmar Deluxe "Custom" Automation System is comprised of a Basic System with OPTIONAL features so that it can be suited to all applications.

### System Configurations:

1. Basic System
2. 0—60 Minute Show Start Timer Option
3. Built in SYNC Operation Option

ANY OR ALL OPTIONS CAN BE ADDED TO THE BASIC SYSTEM.

### \* BASIS SYSTEM FEATURES CONTROL OF:

- \* Projector Drive Motor
- \* Xenon Lamphouse
- \* Changeover Dowser
- \* Exciter Lamp
- \* Dolby Audio System (or similar)
- \* House Light Dimmer
- \* Stage Light Dimmer
- \* Screen Curtain
- \* Non—Sync (dry and 120 VAC Output)
- \* Lights up early for House Light Dimmer
- \* Built in Alarm
- \* Full Remote Control Capability
- \* Curtain Slide Projector

### \*\* MANUAL CONTROL SWITCHES PROVIDED FOR:

- \* Projector Drive Motor
- \* Xenon Lamp
- \* Exciter Lamp
- \* Changeover Dowser
- \* House Light Dimmer
- \* Stage Light Dimmer
- \* Curtain Projector
- \* Lens/Masking Switch

### BASIC SYSTEM SEQUENCE OF OPERATIONS

#### A. SHOW START: (Start Button or Clock Option)

1. Changeover CLOSE
2. Motor & Lamp ON
3. Non-Sync OFF
4. House Lights [MID] or DOWN
5. Stage Lights OFF
6. Changeover OPEN, Exciter ON
7. Dolby MONO

#### B. CROSS FRAME CUE:

1. House Light Dimmer DOWN
2. Lens/Masking SCOPE or FLAT Pre-Select
3. Audio System MONO or STEREO Pre-select

SEQUENCE OF OPERATIONS (continued)

C. INBOARD CUE:

1. House Light Dimmer [MID] or UP

D. OUTBOARD CUE:

1. House Light Dimmer [UP]
2. Stage Light Dimmer UP
3. Changeover CLOSE, Exciter OFF
4. Motor & Lamp OFF (Selectable, as C.O. Closes or as Film Runs thru)
5. Non-Sync ON
6. Dolby Non-Sync

\*\*\*\*OPTIONAL SHOW START CLOCK:

0-60 Minute Clock Timer can be Preset to Start the show after selected interval.

\*\*\*\*\*OPTIONAL SYNC OPERATION PACKAGE:

Provides SYNC [interlok operation with 2 Automation Systems, Additional Module installs in main cabinet, plugs into chassis, has control button on panel.

For Multiple Auditoriums a Sync Selector Unit is available to SYNC 4 Automations in any of 4 different combinations. The Sync Selector Units may be ganged together for 8, 12, or 16 Auditoriums, permitting any 4 SYNC operations at once.

I DENOTES DIMMER POSITION WITH KELMAR "H" Series DIMMER

CONTACT:

Kelmar Systems Inc.  
284 Broadway  
Huntington Station, New York 11746  
Phone (631) 421—1230

The Kelmar Deluxe Automation is contained in one steel enclosure with dimensions as follows:

WIDTH -16 1/4"  
HEIGHT -17 5/8"  
DEPTH -6 1/2"

The Deluxe Automation Cabinet should be mounted on the FRONT WALL of the Projection Room, Below the Observation Port, with the TOP of the cabinet 3'-6" A.F.F. (Above Finished Floor).

Refer to Riser Diagram (Drawing No. 1309), for the wires required between the Deluxe Automation and the various devices to be controlled. Verify the devices to be controlled, for example: is there a Curtain and a Masking motor?

Verify if the Automations will be INTERLOKED or not, if they are to be interlocked, verify how many and where the SYNC SELECTOR MODULE(S) should be located. Refer to Instructions included with the SYNC MODULE and the SYNC SELECTOR MODULE for Installation Details.

Verify what kind and type of REMOTE control system will be installed. The Kelmar Deluxe Automation can be used with the Kelmar Deluxe Automation Remote Control or with the Kelmar Remote Status System.

The Kelmar Deluxe Automation Remote Control provides Remote operation of the: START and STOP buttons, Mode, ALARM light and buzzer, Run Light, Fault Light, Stop light.

The Kelmar Remote Status System is available in 4, 6, and 8 Auditorium Modules, with or without an Alarm latch, and provides PROJ. RUN, FAULT, and ALARM LIGHT and BUZZER for each Automation, and a RESET button for the latch module.

Since the Kelmar Deluxe Automation can be used with a variety of Projectors, Audio Systems, Xenon Lamps, Dimmers etc. Consult the instructions furnished with the device for terminations. The Kelmar Dimmers include an interface schedule for the automation terminations.

ALL CONTROL CIRCUITS (except the 120 VAC Non-Sync term. 19,20) ARE DRY SWITCH CONTROL CIRCUITS.

For assistance with terminations CONTACT:

Kelmar Systems Inc.  
284 Broadway  
Huntington Station, New York 11746  
Phone (631) 421-1230

KELMAR DELUXE AUTOMATION- TERMINATION SCHEDULE

Term. No. Term. No.

1.	OUTBOARD CUE ROLLER	26.	120 VAC INPUT AUTOMATION FEED *
2.	INBOARD CUE ROLLER	27.	120 VAC NEUTRAL AUTO. FEED
3.	FAILSAFE MICRO SWITCH	28.	GROUND (SWITCHING COMMON)
4.	GROUND (SWITCHING COM.)	29.	MOTOR FEED
5.	REMOTE START	30.	MOTOR
6.	REMOTE C.O. CLOSE [I/L]	31.	XENON LAMP
7.	REMOTE STOP BUTTON	32.	XENON LAMP
8.	REMOTE PROJ. RUN PL(12v)	33.	C.O. FEED
9.	REMOTE PROJ. STOP PL(12v)	34.	C.O. OPEN
10.	REMOTE FAULT PL(12v)	35.	C.O. CLOSE
11.	REMOTE ALARM OUT 12 VAC	36.	C.O. CLOSE [N.C.] (CINEMECCANICA)
12.	HOLD FOR INTERLOK	37.	EXCITER INPUT (EXCITER SUPPLY +)
13.	12 VAC OUTPUT	38.	EXCITER LAMP (+)
14.	GROUND (SWITCHING COM.) (STRAP,REMOVE FOR I/L)	39.	HOUSE DIMMER CONTROL FEED
15.	C.O. CLOSE (LOGIC)	40.	HOUSE DIMMER SHOW START OUT
16.	LENS/MASKING FEED	41.	HOUSE DIMMER FEATURE CUE (CROSS)
17.	LENS/MASKING FLAT	42.	HOUSE DIMMER INBOARD CUE
18.	LENS/MASKING SCOPE	43.	HOUSE DIMMER SHOW END
19.	LINE	44.	STAGE DIMMER FEED
20.	120 VAC NON-SYNC NEUTRAL	45.	STAGE DIMMER UP
21.	AUDIO SWITCHING FEED	46.	STAGE DIMMER DOWN
22.	AUDIO SWITCHING MONO	47.	SCREEN PROJECTOR FEED
23.	AUDIO SWITCHING STEREO	48.	SCREEN PROJECTOR OUTPUT
24.	AUDIO SWITCHING NON-SYNC	49.	NON-SYNC DRY INPUT
25.		50.	NON-SYNC DRY OUTPUT

\* FOR SYNC (INTERLOK) ALL INTERLOCKED AUTOMATIONS MUST BE POWERED FROM THE SAME PHASE

\*\* KELMAR DELUXE AUTOMATION-TERMINATION SCHEDULE Page 2 \*\*

- 51. CROSS FRAME CUE ROLLER
- 52. START LOGIC OUTPUT  
(STRAP, REMOVE ONLY FOR AUD. DELUXE MODULE)
- 53. START CIRCUIT INPUT
- 54. CURTAIN CONTROL FEED
- 55. CURTAIN CONTROL OPEN
- 56. CURTAIN CONTROL CLOSE
- 57. THIRD DIMMER FEED (OPTIONAL)
- 58. THIRD DIMMER LOWER (OPTIONAL)
- 59. THIRD DIMMER RAISE (OPTIONAL)
- 60.
- 61.
- 62.

AUTOMATION CONTROL SWITCHES:

SW	FUNCTION
S1	AUDIO FEATURE PRE-SELECT (CROSS CUE) Pre-set to MONO or STEREO for Feature Format. activated by CROSS CUE, or S4.
F1	MAIN FUSE
S2	POWER ON-OFF SWITCH Turns Power to Automation Unit ON or OFF.
PL-1	Feature Mode L.E.D. Lights after CROSS CUE has been detected or Manually advanced by S4.
S3	LENS/MASKING FEATURE PRE- SELECT (CROSS CUE) Pre-set to SCOPE or FLAT for FEATURE Format activated by CROSS CUE, or S4.
PB-1	AUTOMATION START BUTTON, press to START show with Automation. Button lights to indicate that PROJ. is running. PLEASE NOTE: Automation WILL NOT START WITH FAILSAFE DOWN.
PL-2	TIMER CYCLE LIGHT- Indicates that cam Timer is in CYCLE. Will light after start button is pressed or OUTBOARD CUE has been detected.
PB-2	AUTOMATION STOP /RESET BUTTON, press to STOP show while running Automation. Top light indicates that PROJ. is NOT Running, Bottom Light indicates that the FAILSAFE is DOWN (FAULT). The Automation WILL NOT START if the "Fault" Light is ON. The STOP Button also functions as a RESET for the Interval Show Start Timer (OPTIONAL) After the Timer has been started with S6, it can be turned OFF by pressing STOP.
S4	MANUAL CUE SWITCH-Used to MANUALLY provide an INBOARD or CROSS CUE. INBOARD position provides House Dimmer MID Output, CROSS position provides FEATURE preselects of S1 and S3. Use to RE-START the Show after a Film Break, or special showings.
PB-3	ALARM CANCEL PUSHBUTTON -used to turn off the ALARM Buzzer.
S5	SHOW END MODE used to select the Function of the OUTBOARD CUE to either NORMAL, the projector shuts off after the Tail runs through, or AUTO-STOP (Mid-Platter Intermission) the projector shuts off as the C.O. Closes.

OPTIONAL START TIMER SWITCH:

- S6 INTERVAL TIMER MODE \* [CLOCK OPTION] Used to START the Interval TIMER start Clock. 3 position toggle switch. NORMAL Position center. To START Interval Timer, Press to RIGHT. For a PRE-SET MID-PLATTER INTERMISSION (Clock Starts Automatically) set S6 to INTER. START (LEFT) and SHOW END MODE SWITCH S5 to AUTO-STOP. TIMER will START as Projector shuts OFF. IF MID-PLATTER Inter. is used, Reset S5 or S6 prior to end of show or timer will Re-start.  
NOTE: S8 Will NOT CLOSE C.O. if a NORMALLY CLOSED, energized while OPEN C.O. is used (term #36). A Normally Closed C.O. will function properly with Automation.

## AUTOMATION CONTROL SWITCHES:

SW	FUNCTION
S7	MANUAL MOTOR, Turns Projector Motor ON or OFF Manually. Leave in AUTO position for Automation Operation.
S8	MANUAL C.O., Opens or Closes CHANGEOVER Manually, PLEASE NOTE: S8 will NOT CLOSE C.O. if a NORMALLY CLOSED, energized while OPEN C.O. is used (term #36). A Normally Closed C.O. will function properly with Automation.
S9	MANUAL LENS/MASKING SWITCH, Manually controls LENS Changer or MASKING connected to terminals 16, 17, 18.
S10	MANUAL LAMP SWITCH, Turns Xenon Lamp ON or OFF Manually. Leave in AUTO position for Automation Operation.
S11	MANUAL HOUSE DIMMER, Controls DIMMER manually, Connected to Terminals 39, 41, 43.
S12	SYNC SELECTOR* [SYNC OPTION] used to select SYNC operation. Refer to instructions with SYNC OPTION.
S13	MANUAL EXCITER SWITCH, used to turn EXCITER LAMP On or OFF Manually. Leave in AUTO position for Automation Operation.
S14	MANUAL STAGE DIMMER, Controls STAGE DIMMER Manually, Connected to Terminals 44, 45, 46.
S15	LIGHT CURTAIN used for Light Curtain, or Intermission Slide Projector Control. In ON position the device will be ON at all times, in OFF, it will be OFF at all times in AUTO it will go OFF as the C.O. OPENS and come ON as the C.O. CLOSES. Leave in AUTO position for Automation Operation.

\* DENOTES SWITCH FURNISHED AS PART OF OPTIONAL ITEM, "BASIC" UNIT NOT PROVIDED WITH THIS SWITCH.

\* KELMAR DELUXE AUTOMATION CUE PLACEMENT \* GENERAL- The Kelmar Deluxe

Automation utilizes 3 different Cues:

INBOARD CUE- Emulsion Side

OUTBOARD CUE-Emulsion Side

CROSS CUE-Base Side, Across Frame Line.

CUES ARE TO BE USED AS FOLLOWS:

CROSS CUE- Directs Automation to Pre-Selected "Feature" Mode Format. Switches S1 and S3, and Dimmer Down.

INBOARD CUE- Lights up early. (Dimmer MID).

OUTBOARD CUE- Show End. (Dimmer UP).

CUE PLACEMENT:

FOR PRESENTATION WITH SHOW START TRAILERS AND 1 FEATURE

1. Place a CROSS FRAME CUE Between the show start trailers and the Feature. This Cue should be placed 2'-6" BEFORE the FEATURE.
2. Place an INBOARD CUE at the START of the CREDITS.
3. Place an OUTBOARD CUE 10'-6" BEFORE the LAST frame of the show.

SET switches S1 and S3 to Feature Format  
SET switch SS to NORMAL

FOR PRESENTATIONS WITH 2 FEATURES: (NO INTERMISSION BETWEEN FEATURES)

1. Place a CROSS FRAME CUE between the show start trailers and the Feature. This Cue should be placed 2'-6" BEFORE the FEATURE.
2. Place an INBOARD CUE at the START of the CREDITS (feature 1).
3. Place a CROSS FRAME CUE 2'-6" BEFORE Feature 2.
4. Place an INBOARD CUE at the START of the CREDITS (feature 2).
5. Place an OUTBOARD CUE 10'-6" BEFORE the LAST frame of the show (feature 2).

SET switches S1 and S3 to Feature 1 Format  
Re-SET switches S1 and S3 during Feature 1 to Feature 2 Format.  
SET SW. S5 to NORMAL.



\*\* KELMAR DELUXE AUTOMATION-CUE PLACEMENT Page 2 \*\* FOR PRESENTATIONS WITH 2

FEATURES (INTERMISSION BETWEEN

FEATURES):

1. Place a CROSS FRAME CUE between the show start trailers and the feature. This cue should be 2'-6" BEFORE feature 1.
2. Place an INBOARD CUE at the START of the CREDITS (feature 1).
3. Place an OUTBOARD CUE 10'-6" BEFORE the END of feature 1.
4. Place a CROSS FRAME CUE 25'-0" AFTER the START of Feature 2.
5. Place an INBOARD CUE at the START of the CREDITS (feature 2)
6. Place an OUTBOARD CUE 10'-6" BEFORE the END of feature 2.

SET Switches S1 and S3 to feature 1 Format.

Switch SS to AUTO-STOP

Interval Timer for Intermission length

Switch S6 to INTER. START

DURING FEATURE 1

Re-Set switches S1 and S3 to Feature 2 Format. DURING FEATURE 2

Re-Set switch SS to NORMAL.

GENERAL- A CROSS Cue provides Lens/Masking and Audio Output from selector switches S1 and S3 and also a Dimmer Down Command. S1 and S3 have center OFF positions, if there is no format change, these switches may be left in the CENTER OFF position. An INBOARD Cue provides a Dimmer MID command. If it is desired, to raise and lower the House lights, cue the show accordingly.

## KELMAR DELUXE AUTOMATION OPTIONAL START TIMER

GENERAL - The Optional Show Start Timer mounts in the center of the control panel and plugs in to the Automation chassis plug P2. Clock Option includes timer control switch S6.

If the Clock option was ordered with the automation, it will be installed in the system at the factory. If a clock option is to be added to an existing unit, install as follows:

1. Remove Blank off plate from control panel.
2. Remove clock from housing by removing screw at bottom of dial face, lift up handle, slide clock out.
3. Mount Clock housing to control panel, note TOP.
4. Mount control switch S6, so that the MOMENTARY Side is to the right.
5. Plug harness into plug P2 on chassis.
6. Slide clock back into housing, fold handle, secure.

OPERATION- The Interval Timer is used to start the show after a selected delay or it may be used to provide a timed intermission and then re-start.

DO NOT SET CLOCK DIAL LOWER THAN 1 MINUTE ~

FOR SHOW START- Verify that the projector is properly threaded and the "Fault" light in stop button is OFF. Set clock to desired delay and press control switch S6 to the RIGHT (START). The indicator light in the clock will come on. As it times out, it will start the show. The clock may be stopped after it has been started by pressing the STOP BUTTON PB-2. If it is necessary to change the time setting, turn the clock OFF (PB-2) and then back ON (S6-START).

DO NOT TURN THE DIAL ONCE THE CLOCK IS STARTED ~

To use the clock for a timed Intermission. Cue the show as called for in Show Make-up. Set Switch S6 to INTER. START position and SHOW END MODE switch SS to AUTO STOP. As the Automation cycles for the Intermission, the Clock will START and count down and restart the show. After the show has re-started, Switch SS should be set to NORMAL, so that the clock does not re-start at the end of the show.

**GENERAL-** There are 2 kinds of relays used in the Kelmar Deluxe Automation. The small relays are 4 pole double throw 12 VAC and the large relays are 3 pole double throw 12 VAC. RELAYS ARE PLUG IN STYLE AND MAY BE INTERCHANGED.

#### Designation

**K1 START RELAY 4PDT, LATCHES via. TM2~ Activated by Start Button or Interval Timer, Provides 120 VAC to timer motor, output to Latch K2 and K3 and 12 VAC to latch KS Hold relay. Drops out as TM2 opens. Will not activate with K6 activated (failsafe down)**

**K2 START LATCH RELAY 4PDT, LATCHES via TM3, Activated by K1, energizes K7 ALARM Latch, Connects TM2 to Interlok plug, Connects TM4 to K11. Drops out as TM3 opens.**

**K3 SHOW START RELAY 4PDT, LATCHES via TM3,- Activated by K1, Switches C.O. Pulse from TM5 to K14 or K15. Switches Stage and House light dimmer circuits for Show Start. Drops out as TM3 opens.**

**K4 SHOW END RELAY 4PDT, LATCHES via TM3, Activated by OUTBOARD Cue Relay K17 via 55. Provides 120 VAC to timer motor, switches stage and house light dimmer circuits to Show End. Drops out as TM3 opens.**

**K5 HOLD RELAY 4PDT, LATCHES via K6, Activated by K1, stays latched until K6 activates, Opens Non-Sync Circuit when latched, provides 12 VAC to POWER relay K12, and K9, K10 and term. 8**

**K6 FAILSAFE RELAY 4PDT, Activated by Failsafe Micro Switch or Stop button. Drops out KS, provides 12 VAC to Fault light, switches ground to Auto Intermission Circuit.**

**K7 ALARM RELAY 4PDT, LATCHES via K11. Activated by K1, switches fault voltage to Alarm circuit, disconnects Interval Timer, connects Auto Inter. Circuit. Drops out when K11 opens or PB3 is pressed.**

**KB AUTO STOP RELAY 4PDT, LATCHES via TM3. Activated by OUTBOARD Cue Relay K17 via 55. Energizes K4, provides 120 VAC to Interval Timer, connects Auto Stop circuit from K11 to K6. Drops out as TM3 opens.**

**K9 CROSS CUE RELAY 4PDT, MOMENTARY, Activated by CROSS CUE, (term. 51) provides switching logic to Pre-Select switches S1 and S3. Provides Dimmer Output to terminal 41, latches K19 relay. Will only activate with KS latched.**

**K10 INBOARD CUE RELAY 4PDT, MOMENTARY, Activated by INBOARD CUE, (term. 2) provides Dimmer output to terminal 42. Will only activate with KS latched.**

**TM Relates to the timer module. The numerical designator is the deck in sequence from the drive end.**

**K11 C.O. CLOSE LOGIC RELAY 4PDT, MOMENTARY, Activated by TM5 via K3 or TM4 via K2, or terminal 6. Provides Hold for; Interlok (term 12), Alarm Relay K7, and Exciter Relay K13. Provides Auto Stop logic to K8.**

**K12 POWER RELAY 3PDT LATCHES activated when KS latched. Switches Motor (term. 29,30) and Lamp (term. 31,32) Activated as long as KS latched.**

**K13 EXCITER RELAY 3PDT LATCHES via K11, Switches Exciter (term.37, 38) and Screen Projector (term. 47, 48). Activated by K14,drops out when K11 opens.**

Designation continued

K14 C.O. OPEN RELAY 3PDT MOMENTARY, activated by TM5 via K3. Provides C.O. Open, logic to K13, and provides a MONO audio pulse (term. 22)

K15 C.O. CLOSE RELAY 3PDT MOMENTARY, activated by TM5 via K3 or TM4 via K2, or terminal 6. Provides C.O. Close (term. 3S), C.O. N.C. (term. 36), NON-SYNC (term. 24), and AUTO FLAT to board switch S1.

K16 DIMMER OPTION RELAY 4PDT (OPTIONAL)

K17 OUTBOARD CUE RELAY 4PDT MOMENTARY, Activated by OUTBOARD Cue, provides cue logic to SS, and Curtain Close (term. S6)

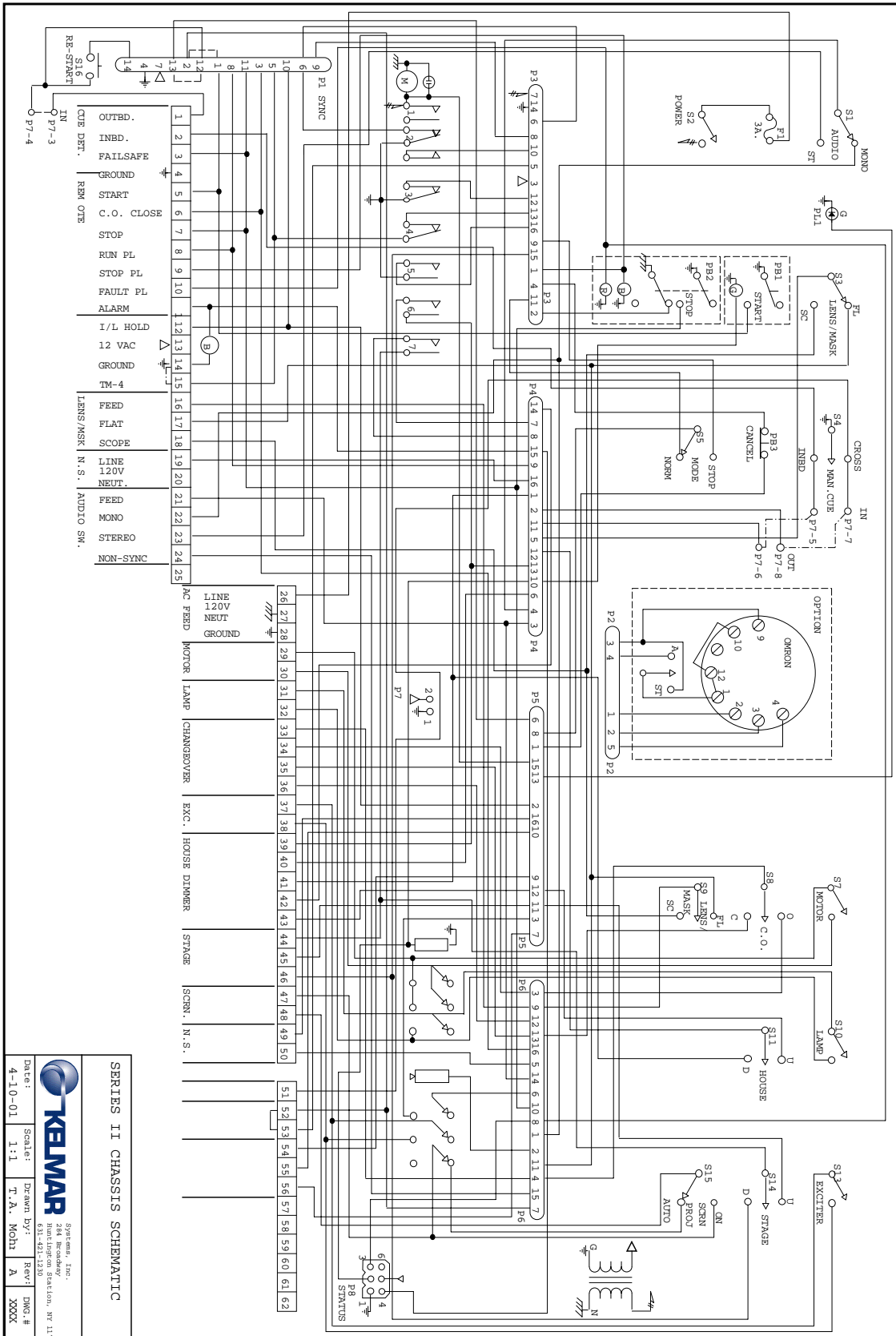
K18 CURTAIN OPEN RELAY 4PDT MOMENTARY, Activated by TM5 via K3, provides Curtain Open logic (term. SS)

K19 FEATURE LATCH RELAY 4PDT LATCHES via K9, provides logic to PL-I feature L.E.D. Stays latched until K5 opens. Will not activate unless K5 is latched.

CINEMECCANICA V-5 TERM. No.	FUNCTION	KELMAR SERIES II TERM No.
4	MOTOR	29
5	MOTOR	30
7	C.O. FEED	33
8	C.O. CLOSE	35
9	C.O. OPEN	34
14	EXCITER	37
15	EXCITER	38
30	XENON LAMP	31
31	XENON LAMP	32
36	TURRET	16
37	TURRET	18*

CINEMECCANICA V-8 TERM. No.	FUNCTION	KELMAR SERIES II TERM No.
4	MOTOR	29
5	MOTOR	30
7	C.O. FEED	33
9	C.O. CLOSE	35
10	C.O. OPEN	34
15	EXCITER	37
16	EXCITER	38
30	XENON LAMP	31
31	XENON LAMP	32
36	TURRET	16
37	TURRET	18*

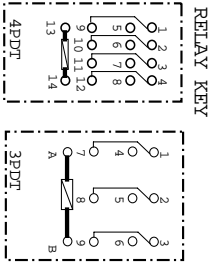
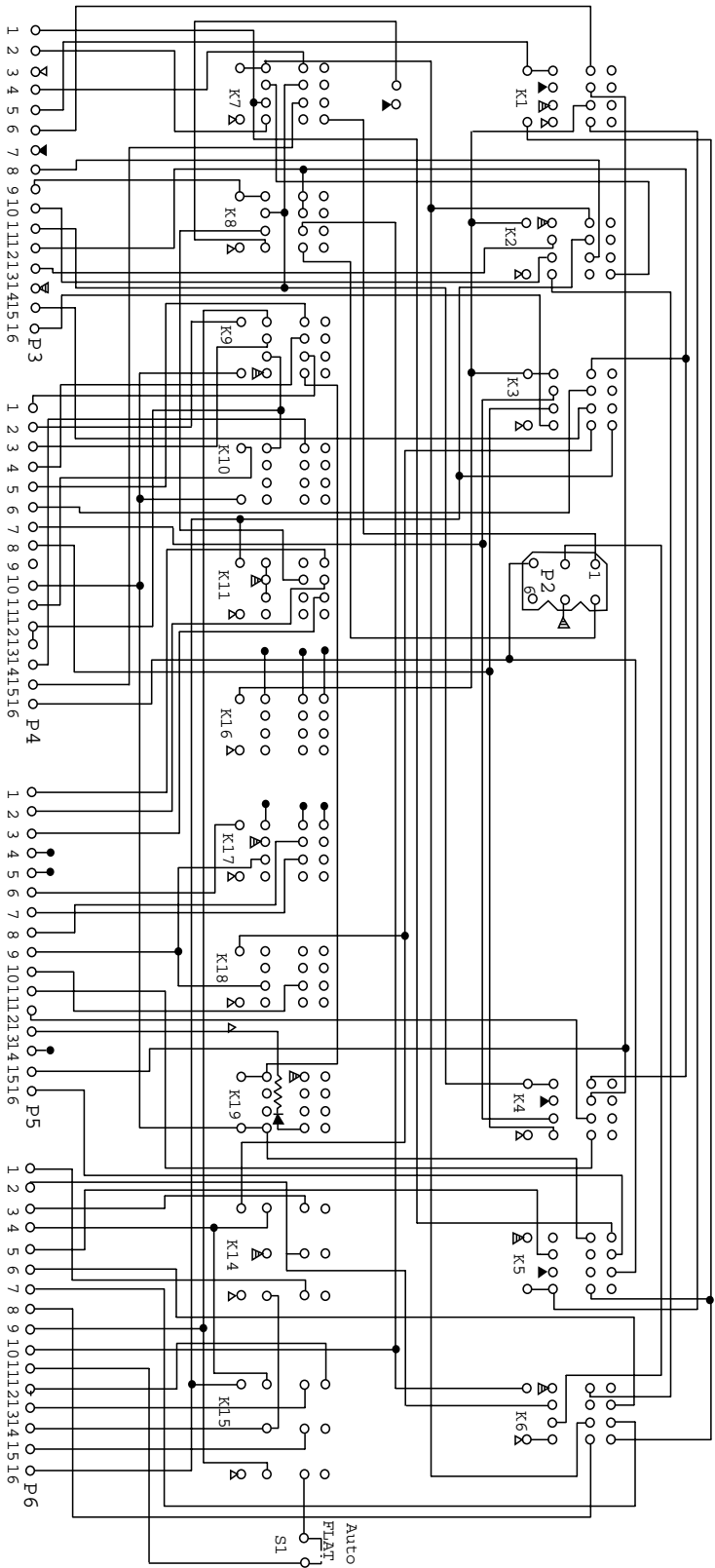
\* FOR LENS CHANGE, SET SERIES II SELECTOR SWITCH TO TURRET IS NOT ADDRESSABLE. THERE IS NO  
AUTO/FLAT



SERIES II CHASSIS SCHEMATIC

Date:	4-10-01
Scale:	1:1
Drawn by:	T.A. Mohr
Rev:	A
DWG #	XXXX

Systems, Inc.  
 884 Broadway  
 Easton, NY 12120  
 518-481-1230



**LEGEND**

- ▲ 120 VAC
- ◄ 12 VAC
- △ GROUND
- WIRE HOLE
- CONNECTION

**RELAY LEGEND**

- K1- START
- K2- START LATCH
- K3- SHOW START
- K4- SHOW END
- K5- HOLD
- K6- FAULTSAFE
- K7- ALARM
- K8- AUTO. STOP
- K9- CROSS CUE
- K10- INBOARD CUE
- K11- C.O. CLOSE LOGIC
- K14- C.O. OPEN
- K15- C.O. CLOSE
- K16- DIMMER OPTION
- K17- OUTBOARD CUE
- K18- CURTAIN OPEN
- K19- FEATURE LATCH

**7864 AUTOMATION LOGIC BOARD**  
For Series II, III, AM-7, 8 Automations

Systems, Inc.  
284 Broadway  
Huntington Station, NY 11744  
631-421-1230

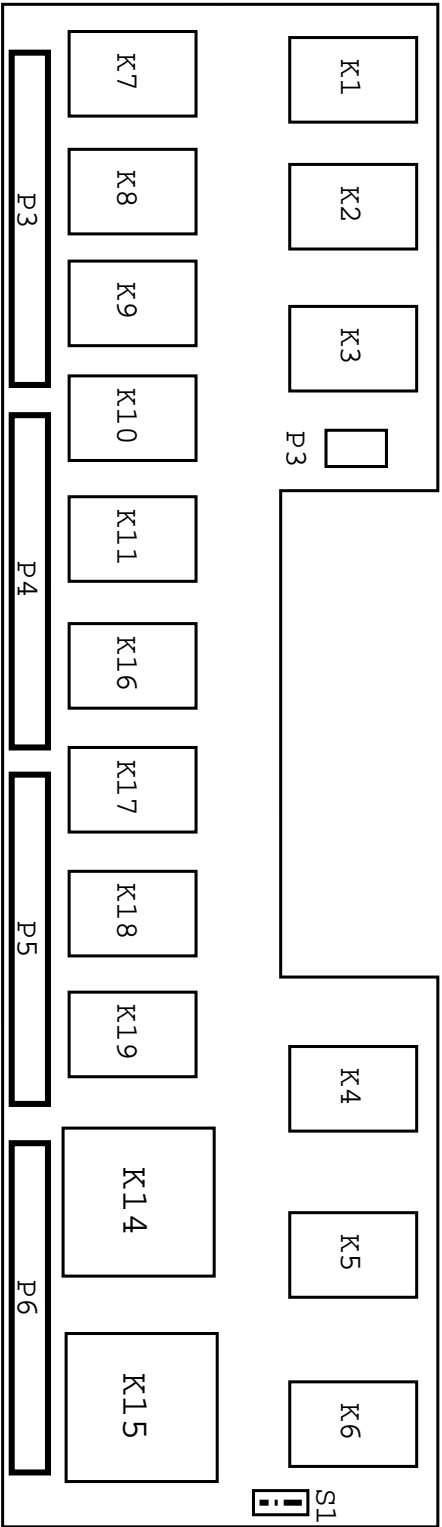
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Drawn By: T. A. Mohr

Rev: A

KELMAR PART# PC7864 AUTOMATION LOGIC BOARD



TO ELEMİNATE THE AUTO-FLAT COMMAND  
DURING CHANGEOVER CLOSE CUT THIS STRAP