

Film-Tech

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XeTRON

XeTRON "x" AUTOMATION SYSTEMS

1 AUGUST 1979

CEDAR KNOLLS, N. J. 07927
201 - 267-8200

All of the new XeTron MAXI "x" Automation Systems now use momentary and alternate action push buttons that also indicate system status and various modes of operation and circuit conditions. Be sure to read circuit descriptions and operation for a complete understanding of the various functions and indications.



CEDAR KNOLLS, N. J. 07927
201 - 267-8200

AUTOMATION
CONNECTION CHART

MARCH 1980

Installation of V-5, V-5S & V-9S with 7111-B, Maxi-7/X,
Maxi-8/X & Maxi-10/X.

Projector Wiring Changes:

1. Connect a jumper from Terminal #1 to Terminal #31 on the Cinemeccanica AC or DC exciter supply.
2. Move either wire on Terminal #8 to Terminal #7.
3. Move Wire #29 to Terminal #7.
4. Move Wire #30 to Terminal #8.
5. Remove the jumper between Terminals #22 & #23 if present.
6. Move Wire #16 to Terminal #18.
7. Move Wire #17 to Terminal #20.
8. Move Wire #27 to Terminal #28.

Note: For automatic sound changeover, the exciter switch must remain in the "On" position.

Automation Changes:

For #7111-B only, rewire sockets K6 & K12 as shown in 7111-B instruction manual.

PROJECTOR TO AUTOMATION TERMINAL NUMBERS							
V-5/V-5S/V-9S		7111-B		MAXI-7/X		MAXI-8/X	MAXI-10/X
MACHINE	MACHINE			UNIT	UNIT		
#1	#2	TB-1	TB-2	#1	#2		
#3		#3		#4 TB-2		#5 TB-2	#27
	#3		#3		#4 TB-2		
#31*		#2		#5 TB-2		#4 TB-2	#26
	#31*		#2		#5 TB-2		
#24		#6		#10 TB-2			#34
	#24		#6		#10 TB-2		
#25		#7		#11 TB-2		#13 TB-2	#35
	#25		#7		#11 TB-2		
#27		#17		#8 TB-2			
	#27		#17		#8 TB-2		
#28		#18		#18 TB-2			
	#28		#18		#18 TB-2		
#22						#12 TB-2	#34
#23						#15 TB-2	#37

*CINEMECCANICA EXCITER SUPPLY



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MAXI-10/X
SHOW MAKE-UP
WITHOUT INTERLOCK

1 OCTOBER 1979

1. For proper screen presentation, it is recommended that black leader stock be inserted where intermissions may occur, due to the fact that time must be allotted for machine shutdown and restart. Approximately 10 feet should be used between shows where an intermission would occur. This would mean 6 seconds of dark screen if the intermission was bypassed, which is not objectionable.

2. Cues on film provide the following:

- Outboard—end of show sequence
- Inboard—mid-reel intermission sequence if in INTER MODE—bypassed if in RUN MODE.

3. Cue Placement

Cues shall be placed on the film, so that contact is made between the cue roller and grounding roller. Leave enough length of the foil to assure good contact.

Place the foil on the film emulsion side from the edge of the perforations out to the edge. Wrap the excess over the edge of the film.

The inboard side of the film is used to program intermissions in the middle of the program. Place cue on the film so that contact is established at the cue detector 7 seconds prior to shut down for intermission if desired.

The outboard side (soundtrack) is used for end of show and should be placed far enough in advance of the end to allow proper timing of curtain and lights before changeover close. Trial and error will provide for exact placements.

Some types of foil have proven to be unsatisfactory especially where extended run programs are involved. If the metallic material starts flaking off, poor contact will result. Other tapes may not have the required flexibility and cracks or breaks will appear causing inconsistent operation. Always use XeTRON Type A cue tape.

XeTRON

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201 - 267 - 8200

OPERATION

XeTRON MAXI "x" AUTOMATION SYSTEMS

1 AUGUST 1979

General

In operating an automation system, it is important that certain good habits are developed which will insure proper operation at all times.

Keep the film path of the projector and sound reproducer clean at all times. It is recommended that before each reel is threaded, brush out the gate with a toothbrush, clean off the cue roller with a rag. We recommend the use of XeKote as a cleaning and lubricating agent for the cue roller, plastic rollers and film.

The Allen cap screw in the end of the cue roller must be tight for proper cue sensitivity.

After each reel is threaded, check the console to be certain that the auto/masking selector is set to the proper format, check that the proper mode and/or status (run or intermission) of the incoming machine has been selected.

Before starting a show, verify that the auditorium timer is in the "Inter" position. If not, press the cycle button to reset it to close curtain and bring up lights. Observe "Go/No Go" indicator to be sure failsafe is up and properly threaded.

If foil cues are poorly applied or break, they will not trigger the automation properly. This will cause missed changeovers, etc. Develop a habit of inspecting the foil cues as you rewind the film.

Manual auditorium switches are not intended for general operation. If curtain did not open, or lights did not lower, check the auditorium timer position lights first. Then press cycle button if out of sequence.

If trouble develops, try to determine the exact problem before proceeding. If a changeover was missed, check cues and cue roller first. If projector did not start, was mode selector set properly?

With any automation equipment, it is very important that good splices be made and, with extended run programs, these splices must be checked frequently. It is just as important to look for any type of film damage such as cracked out sprocket holes or tears in the sprocket hole areas.

Please do not be guilty of failing to remove your cues as they can be a great problem to the next projectionist to use the film. Some projection people have used a graphite base or silver type paint for the cues with little thought as to the problem of its removal. Careful inspection of each print for such cues before your first performance is very necessary.



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201 - 267-8200

MAXI-10/X

OPERATION

1 OCTOBER 1979

1. Thread projector with leader in aperture between 7 & 8 feet.
2. If intermission is programmed in middle of program, place selector switch in INTER position—machine will run to cue on inboard side and intermission sequence will take place.

If intermission has been programmed in middle of program and is not desired, place blue selector switch in RUN position and any inboard cue will be bypassed.

3. To start show—press start button on Maxi-10.

4. Sequence of operation

a) Show start or restart

1. Changeover dowsers will close
2. Motor will start
3. Lamp will ignite
4. Tape deck will turn off
- *5. Lights will dim—Cam #3
- *6. Curtain will open—Cam #9
- *7. Changeover will open and exciter will turn on—Cam #5

*Timing controlled by adjustable cams on timer unit

b) Intermission

1. Curtain will close—at cue
2. Lights will come on—timing controlled by adjustable Cam #4
- *3. Changeover will close
- *4. Projector will stop
- *5. Lamp will go off
- *6. Tape deck will come on
- *7. Exciter will turn off

*All at same time—controlled by Cam #6 (Changeover close)



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201 - 267-8200

MAXI-10/X

OPERATION

1 OCTOBER 1979

C) Show End—(With selector switch in RUN position)

1. Curtain will close
2. Lights will come on—timing controlled by Cam #4
3. Changeover will close and exciter will turn off—
timing controlled by Cam #6
- *4. Projector will stop
- *5. Lamp will go off
- *6. Tape deck will start

*All at same time when film runs out and failsafe drops

5. If film should break during operation, show will automatically begin intermission sequence and 12V alarm voltage will be available at Terminal #22 in Maxi-10/X for 7 seconds.

After repairing the break, restart the show by pressing start button—show start sequence will take place.

6. At the end of the show an outboard cue will begin show end sequence.

7. Transports

Maxi-10/X circuitry provides for transport pre-starts. This is accomplished by setting the chassis switch to the tower position. In this mode the tower circuits will be energized prior to the start of the projector and lamp. The period of this delay is determined by Cam #8, which may be field adjusted to suit all conditions.



CEDAR KNOLLS, N. J. 07927
201 - 267-8200

"GO-NO-GO FAILSAFE INDICATOR"

JUNE, 1979

All XeTRON Automation Systems are being, or eventually will be converted to a "GO-NO-GO FAILSAFE INDICATOR" on the stop pushbutton.

Explanation Of Operation Is As Follows:

When failsafe is down, red indicator light will be on, on stop pushbutton. When failsafe is up, i.e., film threaded in machine, red indicator light on stop pushbutton will be off.

All remote units will be fed the same logic information.



MAXI-10/x INTERFACE
w/RC-810x

30 January 1981

XETRON CORPORATION, Ten Saddle Rd., Cedar Knolls, NJ 07927 U.S.A. Telephone (201) 267-8200

RC-810x Terminal Numbers

MAXI-10/x

	Terminal #4
1	" 7
2	" 5
3	" 6
4	" 13
5	" 12
6	" 1
7	" 21
8	" 41
9	" 22
10	
11 **	
12 *	

* Place jumper wire from Terminal #12 to Terminal #10 on the RC-81x if the buzzer is desired.

** Alarm reset is automatic when using the RC-810x with the MAXI-10/x automation system.



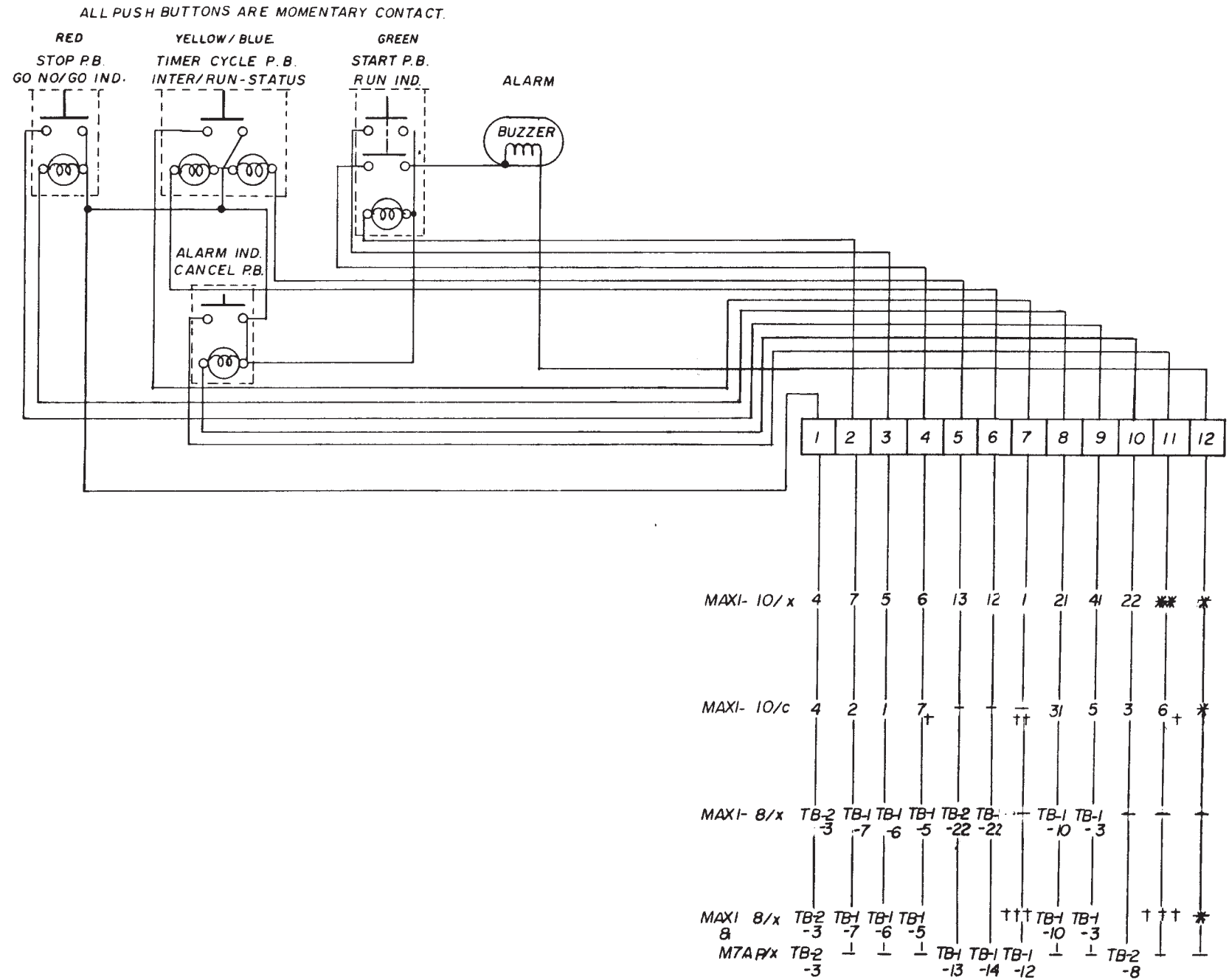
MAXI-10/X AUTOMATION
SPARE PARTS

20 MARCH 1980
REPLACES
1 OCTOBER 1979

XETRON CORPORATION, Ten Saddle Rd., Cedar Knolls, NJ 07927 U.S.A. Telephone (201) 267-8200

<u>Part #</u>	<u>Description</u>
7609*	Sheet Metal - Chassis
7610*	Cabinet
7611-A*	Control Panel
7612*	Front Cover
RS-1	Relay Socket 4PDT
RS-2	Relay Socket 3PDT
RLY-1	Relay 4PDT
RLY-2	Relay 3PDT
TB-2	Terminal Block
TS-1	Terminal Strip
TM-4	Timer Assembly
F1	Fuseholder
SW-10	SPST Switch - Motor, Lamp, Exciter, Transport
SW-11	SPDT Momentary Switch - C.O., Lights, Curtain
SW-30	Chassis Slide Switch
SW-12	Mode Switch
PB-1	Start Push Button Switch
PB-2	Stop Push Button Switch
PB-6	Power Push Button Switch
PB-8	Timer Cycle Push Button Switch
PBC-1	Start Push Button Lens (Green)
PBC-2	Stop Push Button Lens (Red)
PBC-3	Mode Indicator Push Button Lens (Yellow/Blue)
PBC-4	Power Push Button Lens (White)
T1	Power Transformer
PL-73	Pilot Lamp Bulb
CON-2	Timer Connector
GR-1	Grommet - Large
GR-2	Grommet - Small
SN-1	Switch Mounting Nut

*Quoted On Request



Place jumper wire from Terminal
* #12 to Terminal #10 on the RC-810X
if the buzzer is desired.

** Alarm reset is automatic when using
the RC-810X with the MAXI-10/X
automation system.

† If remote reset of alarm is required,
make the following circuit changes:

On the RC-810X, cut the buss wire
going to the switch common on the
alarm pushbutton (make sure the
green (ground) wire from harness
is attached to the pilot lamp
terminal and not on the switch
common). Move the brown wire from
the normally open (N.O.) terminal
to the normally closed (N.C.)
terminal. Remove the red wire from
the start switch and connect it to
the switch common of the alarm
pushbutton.

On your MAXI-10C, disconnect either
wire from the alarm pushbutton and
connect it to Terminal #6 on the
interface terminal block on your
MAXI-10C (you will have to carefully
splice a length of #18 or #20 wire
to this wire). Then connect a wire
from Terminal #7 to the empty terminal
on the alarm reset pushbutton. Use
interface chart for connection of the
RC-810X.

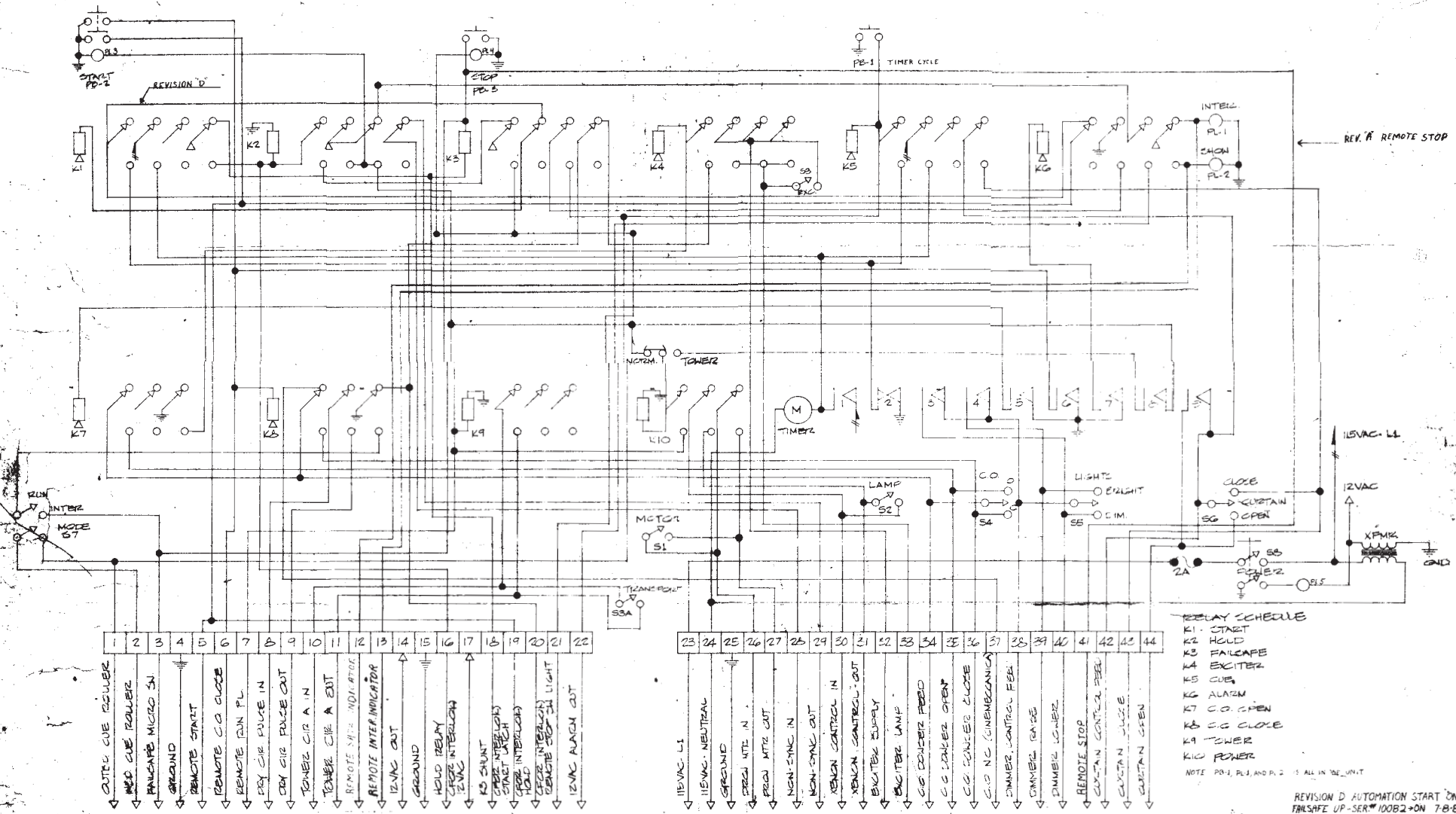
†† The timer cycle pushbutton can be
connected to any one momentary function
on the MAXI-10C. We suggest "house
lights raise".

††† Terminal #11 on the RC-810X can be
jumped to Terminal #7 on the RC-810X.
When this is done, pressing the alarm
pushbutton will cycle the M7AP/X timer
and cancel the alarm light and buzzer.

Indicates No Connection



TOLERANCES	PROJECT	SCALE	DRAWN BY	APPROVED
			JK	
TITLE				
RC 810x SCHEMATIC REMOTE CONTROL				
DATE				
10-30-80	DRAWING NUMBER			
	387			



- RELAY SCHEDULE**
- K1 - START
 - K2 - HOLD
 - K3 - FAULTSAFE
 - K4 - EXCITER
 - K5 - CUE
 - K6 - ALARM
 - K7 - C.C. CLOSE
 - K8 - C.C. OPEN
 - K9 - TOWER
 - K10 - POWER
- NOTE: PE-1, PL-1, AND PL-2 ARE ALL IN THE UNIT

- 1 OUTG CUE ROULER
- 2 ING CUE ROULER
- 3 FAULTSAFE MICRO SW
- 4 GROUND
- 5 REMOTE START
- 6 REMOTE C.C. CLOSE
- 7 REMOTE RUN PL
- 8 CRY CIR PULSE IN
- 9 CRY CIR PULSE OUT
- 10 TOWER CIR A IN
- 11 TOWER CIR A OUT
- 12 REMOTE START INDICATOR
- 13 REMOTE INTERLOCK
- 14 12VAC OUT
- 15 GROUND
- 16 HOLD RELAY
- 17 CRY INTERLOCK
- 18 115VAC
- 19 K3 SHUNT
- 20 TOWER INTERLOCK START LATCH
- 21 TOWER INTERLOCK HOLD
- 22 CRY INTERLOCK LIGHT
- 23 12VAC ALARM OUT

- 23 115VAC-L1
- 24 115VAC-NEUTRAL
- 25 GROUND
- 26 FREQ INT IN
- 27 FREQ INT OUT
- 28 NON-FUNC IN
- 29 NON-FUNC OUT
- 30 REMON CONTROL IN
- 31 REMON CONTROL OUT
- 32 EXCITER SUPPLY
- 33 EXCITER LAMP
- 34 C.C. POWER FEED
- 35 C.C. POWER OPEN
- 36 C.C. POWER CLOSE
- 37 C.C. NC (MECHANICAL)
- 38 EXCITER CONTROL FEED
- 39 EXCITER CONTROL FEEL
- 40 EXCITER GATE
- 41 DIMMER LOWER
- 42 REMOTE STOP
- 43 CRYSTAL CONTROL FEEL
- 44 CRYSTAL PULSE
- 45 CRYSTAL OPEN

XETRON "MAXI-10%" SCHEMATIC

CARBONS INC 10 SABLE ROAD CEDAR BROOK, N.J. 07007

DWG NO 259 196876

REVISION D AUTOMATION START ONLY WITH
 FAULTSAFE UP-SER# 100B2+ON 7-8-80
 REVISION C SER# 10001+ON 6-8-79 DGRABSKI
 SCHEM# 224 ON 11-2-79 DGRABSKI
 REV B REMOTE START/INTER INDICATOR
 REV A REMOTE STOP 4-1-79 DGRABSKI

541140-001 100W 000000-001 NON-MAXI-HOK 6-8-79

CHEMANS