

# Film-Tech

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AM-3 AUTOMATION SYSTEM

CHRISTIE AM-3  
SINGLE PROJECTOR ECONOMY AUTOMATION

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## CHRISTIE AM-3 SINGLE PROJECTOR ECONOMY AUTOMATION

### GENERAL COMMENTS

The AM-3 automation unit is mounted entirely in the Christie Console, and is prewired for simple installation.

The AM-3 has been designed to work with most types of projectors and sound reproducers.

In addition to projection room functions, the AM-3 controls the theatre lighting dimmer. A 15 second travel motor driven type is recommended, such as Superior Luxtrol #15MD-2000 or #15MD-5000.

### CONTROL PANEL

- S1     Manual Motor Switch  
Controls projector drive motor. To be used for manual operation of motor. Should be left in off position when running automation.
- S2     Manual Exciter Lamp Switch  
Controls exciter lamp. To be used for manual operation or testing only. Should be left in normal position when running automation.
- S3     Manual Changeover Dowser Switch  
Controls picture changeover dowser. Operates up to open dowser, down to close. To be used for manual operation of the dowser. Not used when running automation.
- S4     Inter Select Switch  
Used to select an intermission during the running of the platter. Used where different formats are combined onto a single platter. When intermission button is on and a foil is placed on the inside edge of the film, as the cue is detected, the dimmer will raise and after 7 seconds, the dowser will close, exciter will turn off, projector motor will stop and lamp will turn off. To restart show after intermission, press S5 Start Button.
- S5     Automation Start Button  
Used to start show when running automation. Thread projector with 8 foot mark in aperture. Press start button, dowser will close, lamp will ignite, motor will start, dimmer will lower, non-sync will turn off. Seven seconds after pressing start button dowser will open and exciter lamp will come on. Button will light when projector is running.

S6 Automation Stop Button  
Emergency stop when running automation. Not used for normal operation. When pressed, motor will turn off, lamp will turn off, exciter will turn off, motor will stop, and non-sync will turn on. Button will light with machine at rest.

It should be noted that the stop button is not in the circuit for a period of 5 seconds after start button (S5) is pressed. If necessary to stop machine on start, hold finger on stop button until unit shuts down.

#### INSTALLATION

1. Install the module in the console. (Note: Unit should be factory mounted.)
2. Connect external equipment as indicated in the termination schedule. Most circuits of the AM-3 are dry control circuits. It is therefore necessary to check that all feed wires are terminated.
3. Verify that all jumpers are installed for the type of audio system. If a remote control has been provided, check that it has been properly terminated.
4. Unit is now ready to be tested.

#### TEST PROCEDURE

1. Before turning on automation, turn on dimmer control and test dimmer completely by using dimmer switch (provided by others).
2. Turn on power to Xenon and test for proper operation with toggle switch on Xenon lamp control panel.
3. Turn on motor circuit and test operation with S1.
4. Turn on circuit breaker controlling changeover dowser and test with S3.
5. Turn on audio system and test for operation of exciter lamp using S2.
6. Holding onto failsafe arm, press the start button. The following should take place simultaneously:

Picture changeover dowser will close  
Motor will start  
Xenon will ignite  
Dimmer will lower  
Tape player or non-sync will turn off

After 7 seconds the following will take place:

Picture dowser will open  
Exciter lamp will come on

7. Now let go of the failsafe arm. The motor will stop, exciter lamp will go off, Xenon will go out, and non-sync will come on.
8. Using a piece of wire, set the failsafe arm so that it is held in the normal film position. Skin both ends of a piece of wire (to be used for checking cues).
9. Press start button and wait until unit goes through cycle. Turn off S4 and ground inboard side of cue roller. Nothing should happen.
10. Turn on S4 Inter Selector and ground inboard cue roller. The unit should:

Raise dimmer

Then after 7 seconds:

Close dowser  
Turn off exciter lamp  
Turn off motor  
Turn off non-sync

11. Restart using the Start Button (S5). After timer completes its cycle (30 seconds), ground outboard cue roller. The unit should do the same as in step 10, except that the motor and Xenon will remain on after the dowser closes. Remove wire holding failsafe arm. Motor and Xenon will then stop.

This completes the testing of the automation. Refer to schematic for relay designations, timer adjustments, etc.

#### CUEING AND SHOW MAKE-UP

1. Foil cues are to be placed on the film so that they make continuity across the cue detector roller and ground as the normal motor start cues are viewed in the aperture.
2. To determine the distance ahead of the motor start cue, thread the projector with blank film. Place a mark at the aperture and mark at the cue roller. Remove the film and measure the distance between the marks.

3. Always place one foil cue in the above position, on the sound track side of the film, at the end of the platter. This will trigger the end of the show by raising the dimmer, except that as dowsers closes and exciter is turned off, the motor and lamp will stay on until the film runs out, then non-sync will come on.
4. For mid platter intermissions, place foil cue on inside edge of film 10-1/2 feet from end of feature, which will trigger the mid platter intermission. It is recommended that 10-1/2 feet of blank film be placed between the features for restart after the mid platter intermission. This will provide a nice changeover between shows when the mid platter intermission is bypassed, by leaving switch S4 turned off.
5. It is sometimes desirable to use this mid platter feature for lens and aperture changes. In this case, a one minute intermission can be run using the inboard cue. Be certain to let timer come to rest before restarting show.

CHRISTIE AM-3 AUTOMATION UNITS  
TERMINATIONS

Serial Number 358 on

- 1 MOTOR IN
- 2 MOTOR OUT
- 3 XENON IN
- 4 XENON OUT
- 5 PICTURE DOWSER FEED
- 6 DOWSER OPEN *FL*
- 7 DOWSER CLOSE *BL*
- 8 EXCITER OUTPUT (FILM ON PULSE)
- 9 EXCITER INPUT (AUDIO SWITCHING COMMON)
- 10 DIMMER CONTROL FEED *W*
- 11 DIMMER CONTROL RAISE *Y*
- 12 DIMMER CONTROL LOWER *B*
- 13 OUTBOARD CUE DETECTOR ROLLER
- 14 INBOARD CUE DETECTOR ROLLER
- 15 FAILSAFE MICRO SWITCH
- 16 12VAC CONSTANT
- 17 GROUND (SWITCHING COMMON)
- 18 NON-SYNC IN
- 19 NON-SYNC OUT
- 20 REMOTE START
- 21 REMOTE FAILSAFE C.O.
- 22 REMOTE RUN INDICATOR LIGHT
- 23 12V ALARM (REMOTE)
- 24 HOLD FOR INTERLOCK
- 25 INTER. INPUT





