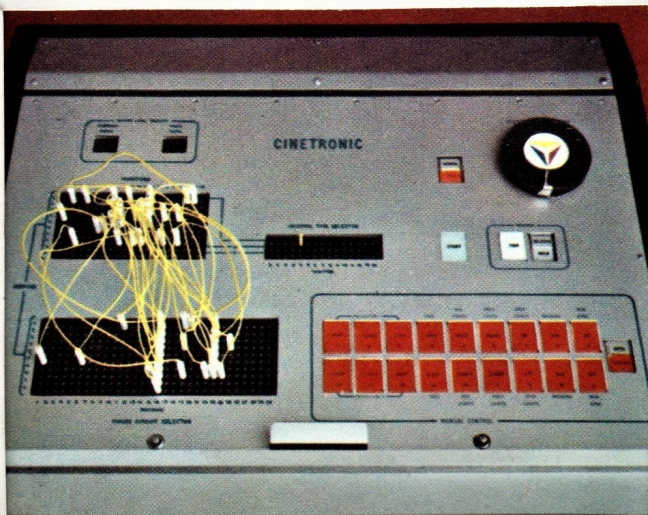


Cinetronic

automatic cinema control system



Cinetronic

automatic cinema control system

Why automation?

The Cinetronic system has been developed to automate many of the operations at present performed manually in the projection room.

The Cinetronic system is based on the accurate timing of the various sequences that form a complete programme. These sequences are groups of operations, termed "routines" in this system, which come into effect at various points during a programme. Examples are Start of Performance, Start and End of Interval and End of Performance. The routine for End of Performance can consist of six sequential operations: (a) close curtains; (b) close projection shutter; (c) raise house lights; (d) raise footlights; (e) stop projector, and (f) fade-up non-synchronous sound. Routines are initiated by a coding system that is unique in the field of cinema automation.

Exact time sequence

In the Cinetronic system, the film itself acts as the medium for storing the data required for the automation process. This data is therefore presented to the system in a correctly timed sequence, irrespective of any variations in projector running time. The data coded on the film is detected by reflected light pickup, and the cues are passed on as pulses into a pulse counting device whose output is related exactly to the number received. This information is fed into a processing unit, where the relevant functions are primed to await instructions to commence, which in turn are initiated by a clock unit.

Therefore, two sets of information are necessary for any routine to commence:— (a) definition of the group of functions required, provided by the pulse counted, and (b) order and timing of operations, derived from the routine clock. The clock is set in motion when a cue is received, and resets the counter and processing units at the completion of the routine.

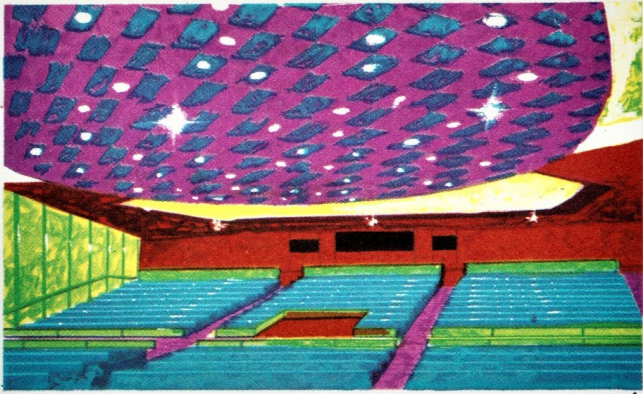
An additional clock operates during the interval, when no cues are available from the film; this clock can programme up to three routines during the interval, and restarts the cinema programme. A "hold" button permits the interval to be prolonged, which may be necessary if an audience is larger than normal.

Unique advantages

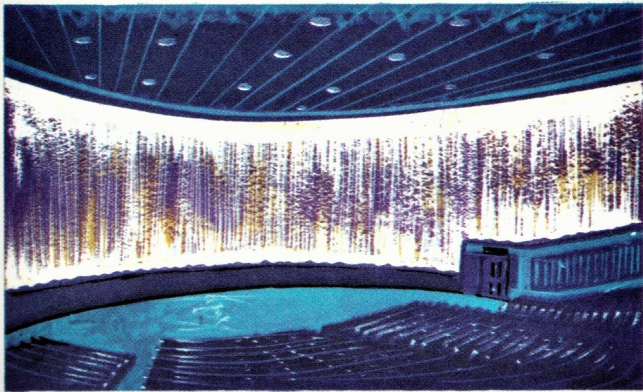
The Cinetronic system is unique in the use of two identical codes on the film, which overcomes the problem of stray pulse pickup. The codes feed two separate counters. When a routine is initiated, two illuminated displays denote the appropriate function. If they do not agree, an alarm warns the projectionist, who can check the operation of the equipment and, if necessary, take over manual control.

Standard pinboard matrix panels are provided for Routine and Timing selection. The output from the processing unit activates one of ten routines in the Routine Matrix. At the same time it also activates one of ten gating circuits driven by a 30-second event-timing register. The output from the Time Gating circuits is then plugged into the Time Matrix, whereupon the equipment carries out any necessary operations at programmed times.

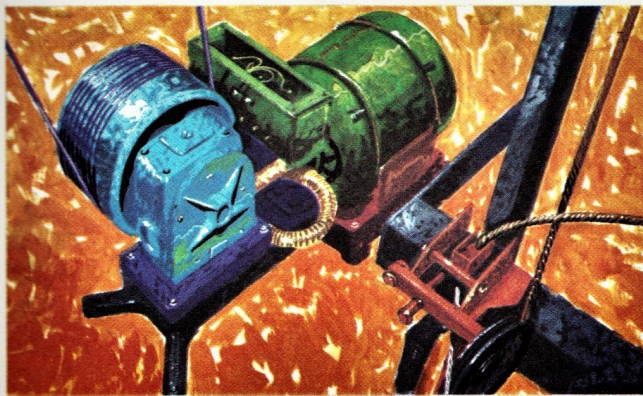




1

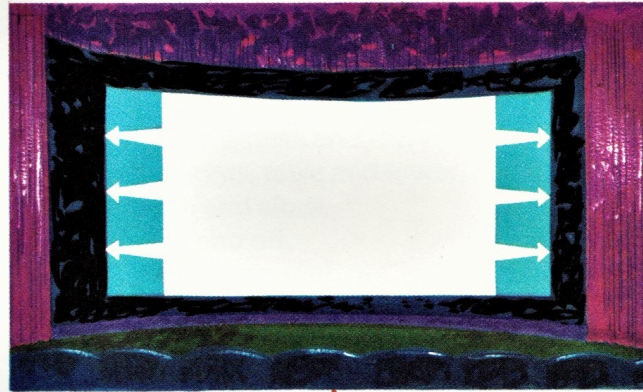
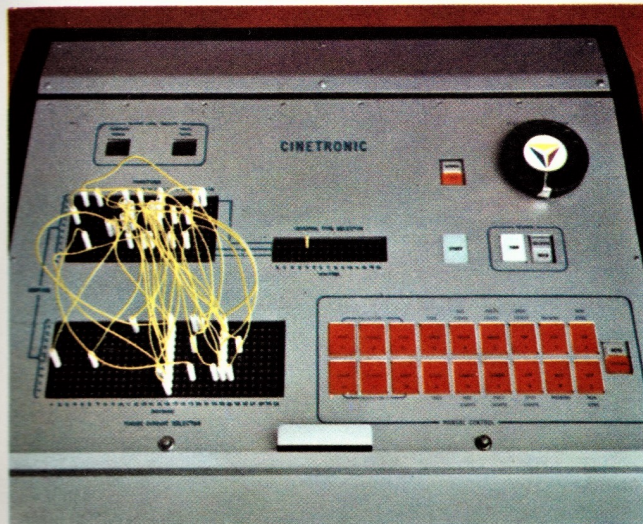


2

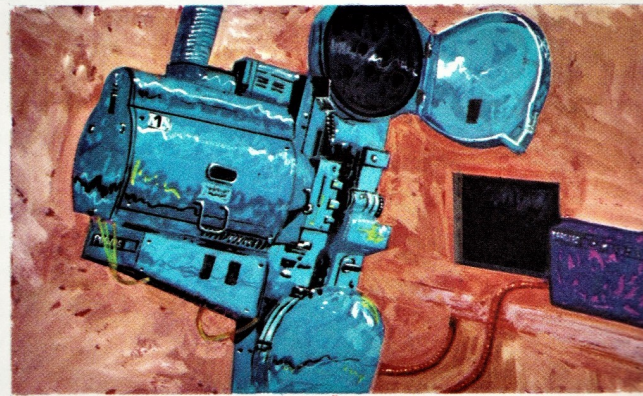


3

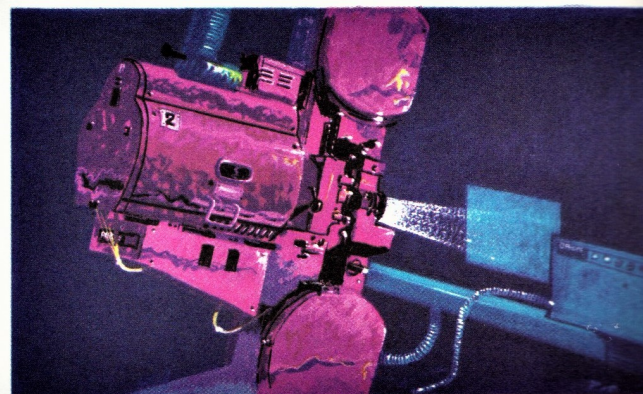
Cinetronic control panel.



4



5



6

1. Auditorium Lighting.
2. Presentation Lighting.
3. Curtain Control.
4. Screen Ratio.
5. Projector No. 1.
6. Projector No. 2.
7. Non-synchronous sound.
8. Sales Spotlights.



7



8

Flexibility in programming

Cinetronic equipment offers remarkable flexibility in programming, with the option of manual control at any time, and reversion to automatic operation at will. Integrated circuits are incorporated wherever practicable, with transistors throughout, so that the equipment is not only exceptionally reliable, but also very compact, being contained in a console of small dimensions.

A very wide range of applications can be carried out by a Cinetronic system. In a typical U.K. presentation, the following functions can be automated:

- Start, stop and change on Projector 1.
- Start, stop and change on Projector 2.
- Auditorium lights, raise and lower.
- Presentation lights, raise and lower.
- Curtains, open and close.
- Spotlights, on and off.
- Screen Ratio, Widescreen or Cinemascope.
- Non-synchronous sound, fade up or down.

An important aspect of the Cinetronic system is that it can be set to control as many, or as few, functions as required.

Intensively tested

Cinetronic equipment has been satisfactorily tested and proved in both commercial and preview theatres. It was used to control the projector, auditorium lights, footlights, spotlights, curtains, synchronous and non-synchronous sound. Logic signals from the control equipment also operated automatic fade amplifiers. The test programme was made up as follows:—

- (1) background music; (2) featurette;
- (3) refreshment advertisements with sales spotlight; (4) interval, including music and sales spotlight; (5) advertisements; (6) newsreel;
- (7) forthcoming programmes; (8) featurette;
- (9) background music.

The cue detection system functioned perfectly throughout a long series of tests and demonstrations, and the system proved so reliable that it is being adopted for use in cinemas of the Associated British Picture Corporation.

Cinetronic

automatic cinema control system

Pathe Equipment Limited

167-169 Wardour Street, London W1. Telephone 01-437 1544

Branches :

59 John Bright Street, Birmingham. Tel : 021 MID 1292

Holst House, Museum Place, Cardiff, CF1 3BD. Tel : 0CA2 21865

41 St. Vincent Place, Glasgow C1. Tel : 041 CIT 4169

52/53 Britannia House, Wellington Street, Leeds 1. Tel : 0LE2 30325

432 The Royal Exchange, Manchester, M2 7EP. Tel : 061-834 9702