

# STANDARD RELEASE PRINT

• MAKE UP AND PRACTICE •

**D**ESIGNED BY the Academy of Motion Picture Arts and Sciences, Technical Bureau, with the co-operation of technicians from all interested parts of the industry.

Adopted by major producing and distributing companies and put into effect in 1930.

(Some changes in the "Standard Release Print" are now being considered by the Academy of M. P. Arts and Sciences)

## STANDARD MAINTENANCE

### *Responsibility of the Exchange*

Exchange employees handling prints are expected to be familiar with the standard specifications and to make sure that every print inspected conforms exactly to them. Prompt attention should be given to any report from a theater that prints received do not conform to the standard.

1. If the *synchronous leader* becomes damaged or mutilated in any way, a complete new leader should replace it. Patches will destroy the precision of the change-over. Similarly, there should be no patches in the final twelve feet of picture which contain the change-over and motor cues.
2. The *protective leader* and the *protective trailer*, attached to the front and end of the leader and run-out respectively, are intended to facilitate threading and to protect the rest of the print. When either of these has been whipped down to four feet, the exchange in-

spector should restore the length to six feet before sending the reel out again.

3. The words **STANDARD PRINT MAKE-UP** should be stamped or printed on the band of every reel which fulfills the standard specifications.

If the exchange does its part in maintaining the standard by careful inspection, there will be no need for the projectionist to mark or alter the print in any way. The elimination of these marks should reduce materially the number of re-placements.

### *Makeup of Reels in the Studio*

The standard print will be a distinct convenience to the studio cutter and in the handling of negatives through the dubbing processes.

1. While each reel division involves an individual problem in cutting it is recommended that picture action start and finish on fades wherever possible. Otherwise significant sound should be kept at least five feet from the start and finish of the picture. This extra footage insures *steading down* of the projector carrying the incoming reel before significant sound is reproduced and also allows a margin of safety on the change-over.

2. In the case of change-over on a fade, the fade itself is considered as "picture" in the terms of the specifications. The change-over cue will be put 12 feet and the motor cue one foot from the end of the fade. The six feet of opaque run-out trailer is in addition to the fade.

3. The line across both the picture area and sound track twenty frames ahead of the start mark frame will serve as the base for all matching of sound track and picture in making up the original negative.

4. The protective leader and the protective trailer of course apply specifically to the release print. However, these lengths of either transparent or raw stock can with advantage be carried through most of the studio operations.

5. The form of the part title is definitely specified. The part title is to **occupy at least the first 32 frames of the Identification Leader**. It may be extended to the entire four feet if desired. Otherwise the second 32 frames may be left blank or provide space for cueing or other instructions according to individual studio policy.

6. As the synchronizing leader is uniform for all prints it is only necessary for the cutting department to specify it to the laboratory. If these leaders are applied by the cutting departments to sample prints, care should be exercised to see that the synchronizing leader has been retained in its full length.

7. The visible signal will show as a black dot against light background and as a white circle against dark background. No special cutting is necessary on account of the signal.

# USE OF THE STANDARD —IN PROJECTION—

On the next page is a chart of the standard print. Study it. Notice the leader lengths and change-over cues. Every reel which you receive from the exchanges marked **STANDARD PRINT MAKE-UP** should be exactly in accordance with the chart. If upon inspection you find that it is not, notify the exchange at once.

### *Change-over System*

The studio will start and finish picture action on fades whenever possible. Otherwise significant sound will be kept at least five feet from the start and finish of the picture. This insures *steading down* of the incoming projector before significant sound is reproduced, and also allows a margin of safety on the change-over.

The standard uses visible signals for motor and change-over cues. The visible signal will show as a *round black dot* against light background and as a *white circle* against dark background.

The *motor cue* consists of the standard visible signal printed in the upper right-hand corner of four consecutive frames. The first of these frames is exactly twelve feet from the end of the picture. This distance, like the length of the synchronizing leader, was designed to accommodate the variety of pick-up speeds among machines in use.

The *change-over cue* is a mark like the motor cue on four consecutive frames, the first of which is one foot from the end of the picture. In placing the change-over in this position, it was assumed that half a second is the average time it takes an alert projectionist to see the cue on the screen and throw the douser switch. *It is essential that the projectionist throw the change-over switch immediately the cue flashes on the screen if the change-over is to be perfect.*

*When you see the motor cue, start the incoming projector.*

*When you see the change-over cue, throw the douser switch.*

### *Differences in Motor Pick-up Speed*

The motor cue is twelve feet from the end of the picture on the outgoing reel. At ninety feet per minute, these twelve feet take eight seconds to run out. Your problem is to determine how many feet of leader your incoming projector will pick up in these eight seconds. This is the "actual change-over footage" for that particular projector. It will not be the same for all projectors, because the motor pick-up speed is always the same for any one projector, so that you can determine the actual change-over footage once and for all for each projector.

### *Finding Your Actual Change-over Footage*

Plan to spend fifteen or twenty minutes' rehearsal per projector when you receive your first standard print, in order to determine your "actual

change-over footage." Place the footage frame numbered 11 in the aperture of the incoming projector. Then change-over according to the cues, starting the motor of your incoming machine the instant you first see the start motor cue and throwing the douser switch the instant you see the change-over cue. If there is a lapse between the two reels showing on the screen try it again by placing the footage frame number 10 in the aperture of the incoming machine. Continue this process with the same machine trying footage frame numbers 9, 8, 7 and so on until you have found the *foot*, and the *frame* in the foot, which when threaded up at the aperture will give you the exact change-over. This frame then marks your exact change-over footage for that machine. Suppose, for example, it is the third frame ahead of the 7 mark. Then you know that on every standard print, if you place the third frame ahead of the 7 mark in the aperture of that incoming projector, the change-over will be perfect.

Repeat this process for each projector you have, as there is often a difference between the pick-up speed of projectors even in the same projection room.

### *Checking Synchronism*

In projecting sound on film if you wish to test the length of your loops to insure synchronism, thread up so that the start frame, or any other numbered footage frame, is at the aperture. A diamond mark should show at the sound gate, as the diamonds are placed twenty frames ahead of each footage numeral. You can then turn down to have the correct frame in the aperture for the change-over.

### *Threading for Disc*

Set the needle on the disc at the synchronizing mark, and thread the start mark frame into the picture aperture of the projector. Then turn down the projector until the correct frame for change-over appears at the picture aperture. While turning down, note the number of revolutions of the turntable, so that you can short-cut this process next time.

*Note: Partial Exceptions to the Standard*—The dubbing process of some producers releasing on disc necessitates the use of more than twelve feet of leader between the start frame and the action. These prints will be standard in other respects, and, as the footage will be numbered at every foot up to the start frame, the projectionist can readily see the length of his leader without measuring.

**Standard Specifications**

**PROTECTIVE LEADER**

Either transparent or raw stock.  
When the protective leader has been reduced to a length of four feet it is to be restored to a length of six feet.

**IDENTIFICATION LEADER (Part Title)**

Shall contain not less than 32 frames in each of which is plainly printed in black letters on white background, type of print (See Nomenclature), part number (Arabic numeral not less than 1/4 of frame height), and picture title.

**SYNCHRONIZING LEADER**

First section shall be opaque.

Start mark shall be one frame in which is printed START (inverted) in black letters on white background 1/2 of frame height.

A white line 1/32 inch wide upon which is superimposed a diamond 1/8 inch high by 1/4 inch wide shall be printed across the picture and sound track area at a point exactly 20 frames ahead of the center of the start frame.

Beginning 3 ft. from the first frame of picture, each foot is to be plainly marked by a transparent frame containing an inverted black numeral at least 1/2 frame height. Footage indicator numerals shall run consecutively from 3 to 11, inclusive.

This section shall be opaque and contain frame lines thruout entire length which do not cross sound track area.

At a point exactly 20 frames ahead of the center of each footage numeral frame there shall be a diamond (white on black background) 1/8 inch high by 1/4 inch wide.

**PICTURE**

It is recommended that picture action start and finish on fades whenever possible, otherwise significant sound should be kept at least five feet from the start and finish of the picture.

**MOTOR CUE**

Shall be circular opaque marks with transparent outline printed from the negative which has had four consecutive frames punched with a serrated edge die .094 inch in diameter. The center of these holes is to be half-way between the top and second sprocket holes .281 inch from the right-hand edge of the film with heads up and emulsion toward the observer.

**CHANGE-OVER CUE**

Shall be the same as Motor Cue.

**RUNOUT TRAILER**

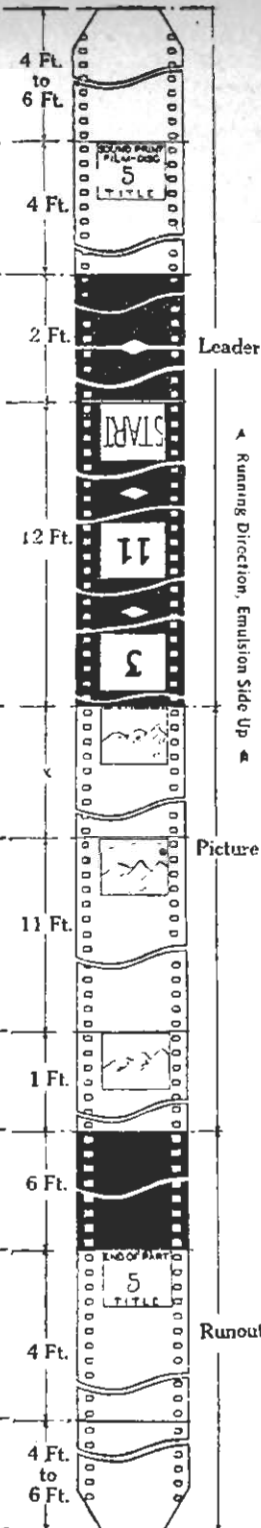
Shall be opaque.

**IDENTIFICATION TRAILER (End-of-part title)**

Shall contain not less than 32 frames in each of which is plainly printed in black letters on white background: End of Part, part number (Arabic numeral not less than 1/4 of frame height), and picture title.

**PROTECTIVE TRAILER**

Same as protective leader.



# THEATERS

A complete listing of both the sound and silent theaters in the U. S. and Canada, designating closed houses and major circuit theaters as of Jan. 1, 1933. Also a list of circuits with four or more houses showing the theaters each circuit controls.