

LANDIS ELECTRIC TIME AND PROGRAM CLOCK SYSTEMS

Schools
Colleges
Hospitals
Railroad
Terminals

Banks
Libraries
Hotels
Public
Buildings

FILE # 731

LANDIS PROGRAM CLOCK CO.
WAYNESBORO, PA., U.S.A.

The Landis Program Clock Company

Waynesboro, Pennsylvania

Products

Master Clocks, Secondary Clocks, Program Machines, Push Button and Selector Boards, Relay Control and Rectifier Cabinets. Science Laboratory Voltage Distribution Systems.

Accessories

Program Bells, Buzzers, Horns, etc., Fire Alarm and Telephone Systems.

Landis Clock and Program Systems are approved by the UNDERWRITERS LABORATORIES.

All Equipment is Completely Automatic—Can be Furnished for Operation from A.C. or D.C. Lighting Service—NO BATTERIES REQUIRED—Type A System FULLY AUTOMATIC RESETTING.

LANDIS Electric Time and Program Clock Equipment is the result of 46 years' experience in this field. The present types of Landis systems incorporate all the latest and most modern developments of Time System Engineering, highest quality of workmanship, accuracy, ruggedness and simplicity.

The Landis System includes a complete line of high-grade Master Clocks, Secondary Clocks, Program Machines, Control Panels, Program Bell Push Button Boards and Special Time Control Apparatus. Its completeness and flexibility enables architects, engineers and owners to select equipment to meet the most exacting requirements for either the largest or the smallest institution.

All Program Bells, Buzzers, Horns, etc., also Fire Alarm and Telephone Systems furnished with Landis Equipment are of the highest quality.

Landis also manufactures a complete line of Laboratory Voltage Distribution Control Panels, Instructors Panels, Student Table Outlets, etc., of the highest approved quality, for use in Science Laboratories.

TYPE OF SYSTEMS

The Landis System is the minute impulse type of electric time system whereby any number of secondary clocks and automatic program machines for indicating and signaling time can be operated and controlled by one master clock.

The minute impulse type of system is by far the most rugged, simple and economical type of clock system manufactured. It is greatly preferred where there is a necessity for group controlling of clocks in an institution. This results in uniform time and signals, and makes possible co-ordinated action, activity and efficiency.

The Landis Minute Impulse System can be furnished in either of two types, as follows:

Type A—Minute Impulse Automatic Hourly Synchronized (automatic resetting) type of system, whereby all secondary clocks and program machines operate by minute impulses sent out thru the control of the master clock. By means of the **automatic hourly synchronizing control**, if any secondary clock or program machine is fast, due to any irregularity of normal operation, it will stop at its own 59th minute and wait for the master clock. Likewise, after the master clock has arrived at its 59th minute, if any secondary clock or program machine is slow, due to any irregularity or current failure, same will rapidly reset to correct time of the master clock. This **automatic hourly synchronization** compensates for fluctuations or interruptions of the source of operating current, tampering, improper maintenance, or any other outside irregularities which would possibly disturb the normal operation of the system. Thus **automatic hourly synchronization** of the system maintains **perfect uniformity** under all operation conditions.

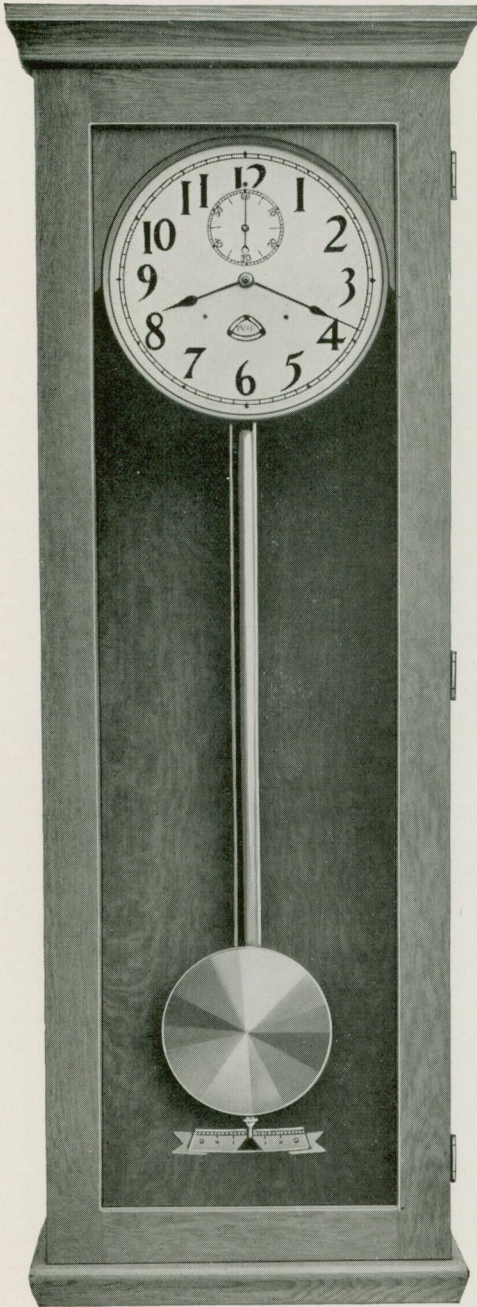
This **automatic hourly synchronizing control** will reset any units, at the end of the hour, if disturbed at any time by outside irregularities. The resetting capacity is 10 minutes fast or 30 minutes slow at the end of the first hour or a capacity of 49 minutes slow over a period of two hours. Emphasis is placed on the pickup of slow units to take care of current interruptions, should they occur, as this system is normally furnished to operate directly from lighting current source of power, without any reserve power battery.

Type SI—This system consists of the same mechanisms as are used with the Type A System except that the master clock, the secondary clocks, and the program machines, are not equipped with the automatic hourly synchronizing control features.

Master Control—The Type A System or the Type SI System can be furnished with either the automatic motor wound weight driven master clock or the automatic magnet wound master clock. The automatic motor wound weight driven master clock carries 7 days and the automatic magnet wound master clock carries several hours reserve operating power to keep the master clock in operation in case of current failure.

Power for Operation—Landis systems are generally furnished to operate from 110-120 volts A.C. thru copper oxide rectifiers and transformers. The systems can, when desired, be furnished with reserve power battery and automatic throw over switch to keep system in operation in case of power failure. The systems can also be furnished for operation from 110-120 volts D.C. or from any voltage of battery. The Type A system is recommended for operation without any battery or reserve unit as it will reset automatically from all but very long current interruptions.

MASTER CLOCKS



Finest Quality
Construction



High Accuracy
Dependability
Ruggedness

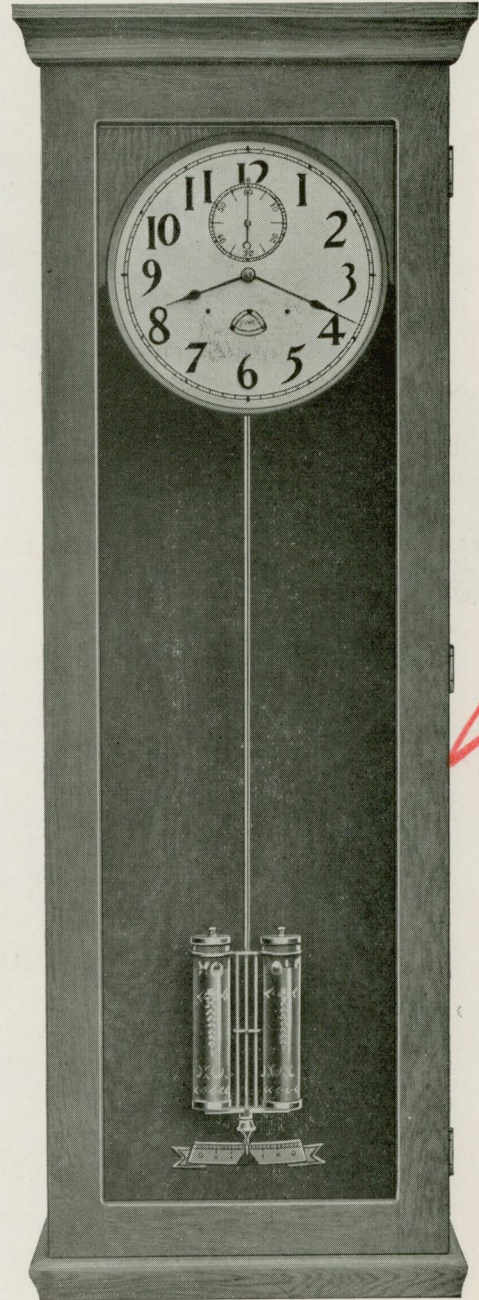


Finishes

*Light, Medium
or Dark Oak
Brown Walnut
Dark Mahogany*



*Motor Wound
Weight Driven
Movement
or
Magnet Wound
Movement*



STYLE

LM-60T (Motor Wound Weight Driven)

L-60T (Magnet Wound)

60 Beat Metal Ball Pendulum

STYLE

LM-60TD (Motor Wound Weight Driven)

L-60TD (Magnet Wound)

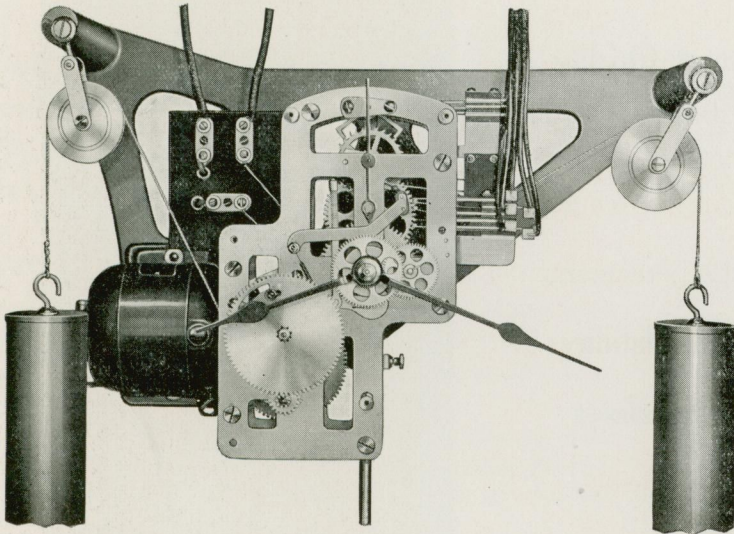
60 Beat Mercurial Pendulum
with
Course and Fine Adjustment

DIMENSIONS:

DIAL	HEIGHT	WIDTH	BODY WIDTH	DEPTH LM-60-T&D	DEPTH L-60T&D
12"	60"	20"	18"	10"	8 5/8"

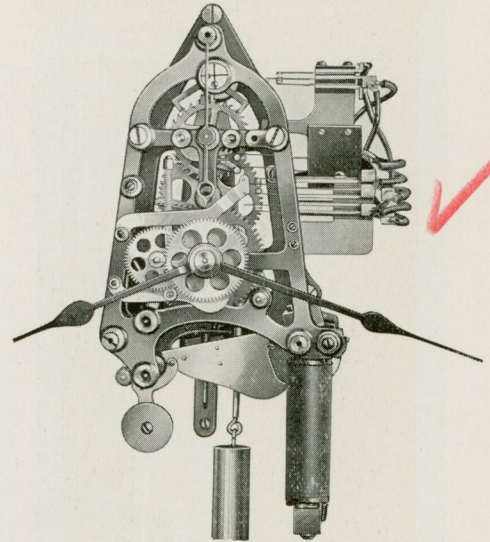
MASTER CLOCK MOVEMENTS

High Accuracy - Precision Construction - Micrometer Beat Adjustment
 Machined Gears and Pinions - Burnished Shafts and Bushings



Motor Wound Weight Driven Movement

$\frac{1}{50}$ H. P. Winding Motor 110-120 v., A. C. or D. C.
 Winds once a day with 7 days reserve.
 Constructed with Heavy Brass Plates.



Magnet Wound Movement

With several Hours Reserve.
 Constructed of Cast Plates with Brass Bushings or
 with Heavy Brass Plates.

Master Clock Movements are equipped with Drop Finger and Cam Type Minute Impulse Contacts
 and Automatic Synchronizing Switches.
 Contact Points of Heavy Grade .999 Fine Silver.

PROGRAM MACHINES

All Metal Type



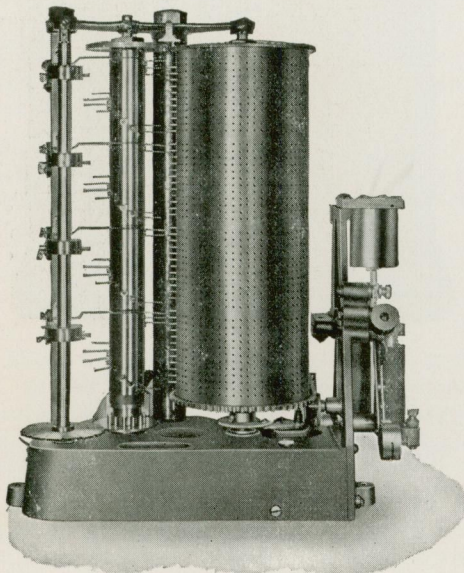
High Accuracy

Dependability

Ruggedness

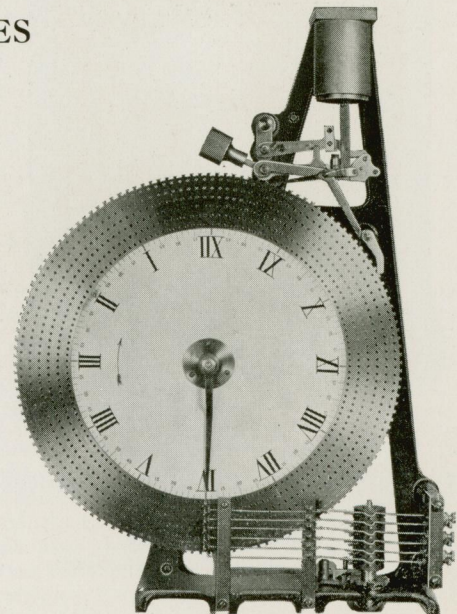


Equipped with
 Adjustable
 Signal-Duration
 Contact



One Minute Interval Type

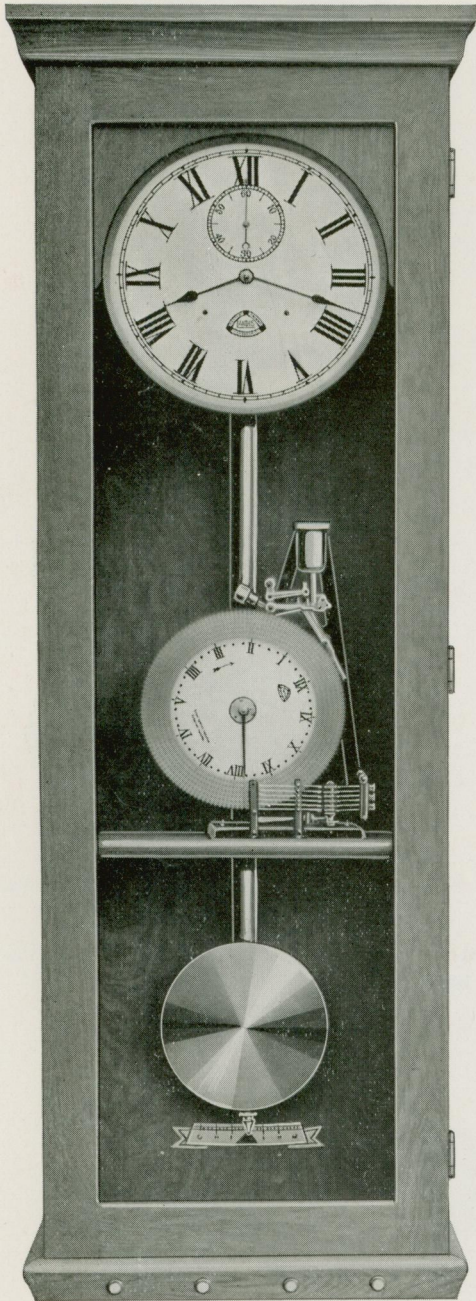
With Automatic Calendar Switch
 Made in 2, 4, 6 and 8 Program Sizes.



Five Minute Interval Type

With Automatic Calendar Switch
 Made in 6 Program Size only.

COMBINED MASTER AND PROGRAM CLOCKS



Finest Quality
Construction

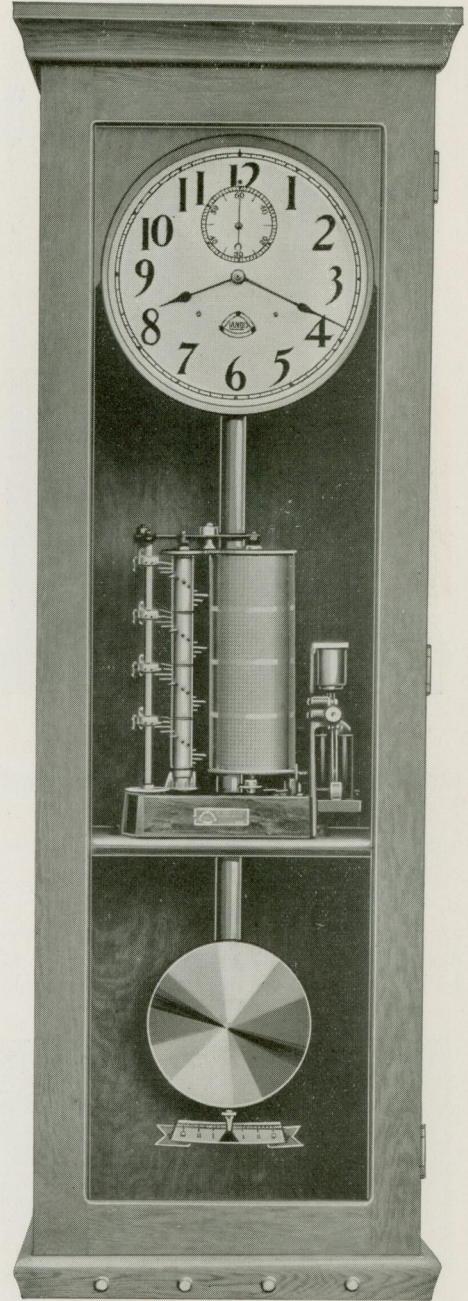
High Accuracy
Dependability
Ruggedness

Finishes

Light, Medium
or Dark Oak
Brown Walnut
Dark Mahogany

Motor Wound
Weight Driven
Movement
or
Magnet Wound
Movement

Metal Ball
or
Mercurial
Pendulum



Style LM-60TF (Motor Wound Weight Driven)
Style L-60TF (Magnet Wound)

Program Clock

(Not arranged to operate Secondary Clocks)

Style LM-60F (Motor Wound Weight Driven)
Style L-60F (Magnet Wound)

Style LM-60TM (Motor Wound Weight Driven)
Style L-60TM (Magnet Wound)

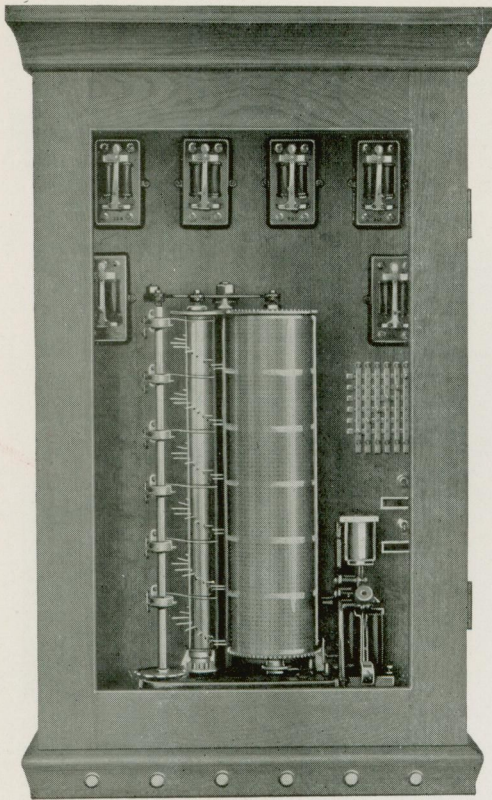
Program Clock

(Not arranged to operate Secondary Clocks)

Style LM-60M (Motor Wound Weight Driven)
Style L-60M (Magnet Wound)

DIMENSIONS:

DIAL	HEIGHT	WIDTH	BODY WIDTH	DEPTH	DEPTH L-60TF & L-60F
12"	60"	20"	18"	10"	8 5/8"



Style 432

One-minute Interval Program Machine

6 Program 6 Circuit Size

Also made in 2, 4, and 8 Program and Circuit Sizes
For use with a Master Clock

DIMENSIONS

	HEIGHT	WIDTH	DEPTH	BODY WIDTH
2-4-6-Program	33 1/4"	17"	8 5/8"	15"
8-Program	37 3/4"	17"	8 5/8"	15"

Finest Quality
Construction

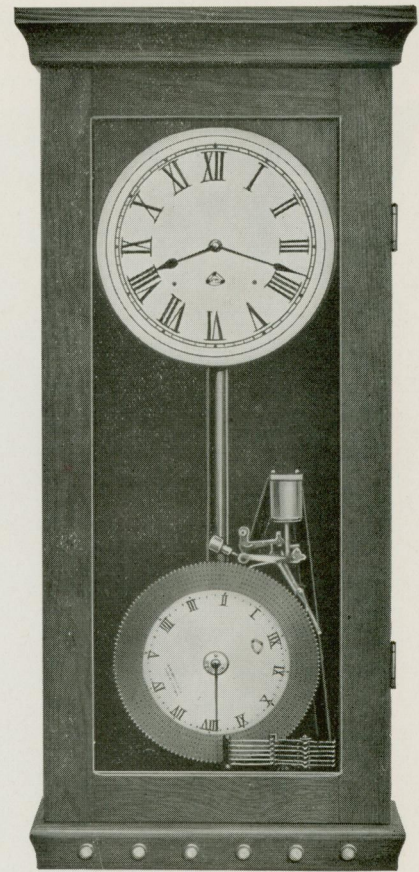


High Accuracy
Dependable
Ruggedness



Finishes

Light, Medium
or Dark Oak
Brown Walnut
Dark Mahogany



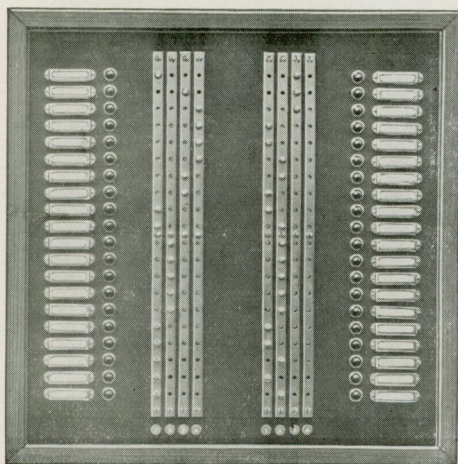
Style E-80-F

Program Clock

6 Program 6 Circuit Five-minute Interval

DIMENSIONS

DIAL	HEIGHT	WIDTH	DEPTH	BODY WIDTH
10"	37 1/4"	17"	8 5/8"	15"

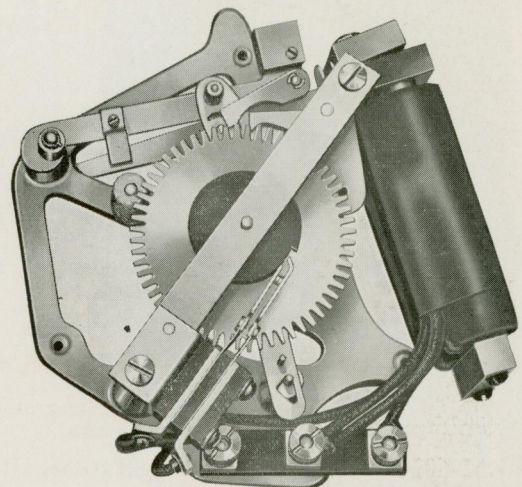


Style BCP

Push Button and Cross Connecting Board

Made in all sizes, 15 points upward.

4, 6 or 8 Circuits with or without Push Buttons.

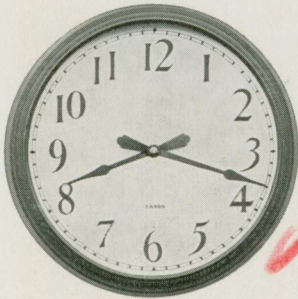


Landis Secondary Clock Movement

Gravity actuated—free from springs—Machine Cut Gears and Parts—Heavily Plated to prevent rust—Heavy Duty size for large dials and Heavy hands—Moistureproof Coils.

SECONDARY CLOCKS

Made in a wide range of regular styles and sizes. Moistureproof, Gauge, Outside, Ornamental, Illuminated and other special clocks can be furnished to meet individual requirements.



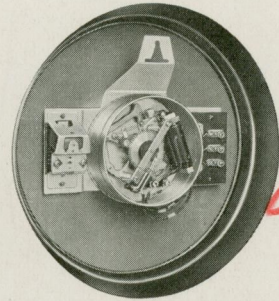
Style

2M (Surface)
2FM (Semi Flush)

Style 2M or 2FM furnished with 8-10-12-14-18-24" white enameled dials.
Case of spun metal finished to sample.

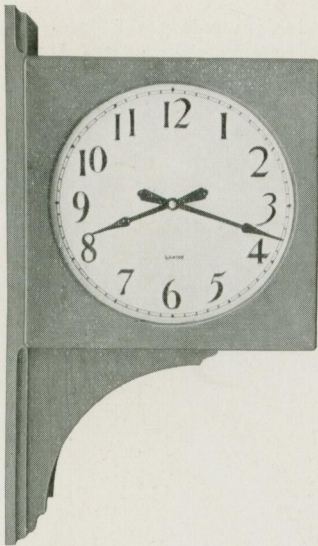


Also furnished as a Double Dial Clock, Style 2MD, in above sizes, with side wall or ceiling bracket or chain suspension.



Back View of Style 2M

With Movement cover removed also showing Buzzer Mounting

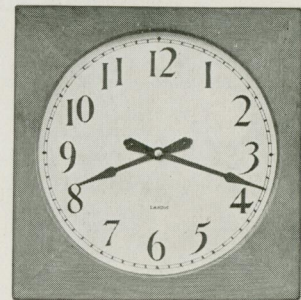


Style 3SD (Double Dial)

Style 3S furnished with 8-10-12-14-18-24" white enameled dials.
Case of square wood finished to sample.



Also furnished as a Double Dial Clock, Style 3SD in above sizes, with side wall or ceiling bracket or chain suspension.

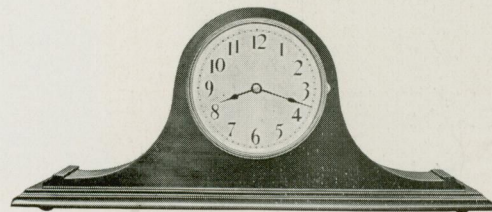


Style S3 (Surface)

Style 6M1 MANTEL SECONDARY CLOCK

Furnished in Brown Walnut or Dark Mahogany finish, with silvered dial.

Special Mantel Clocks can also be furnished to meet individual requirements.



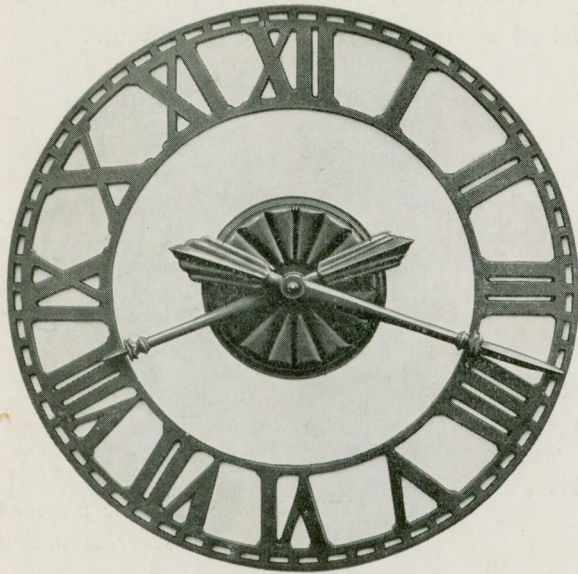
Style 6M1

22 1/4" Wide, - 9 3/8" High - 5" Dial

Our Regular style Secondary Clocks can be furnished with ornamental dials at extra cost.

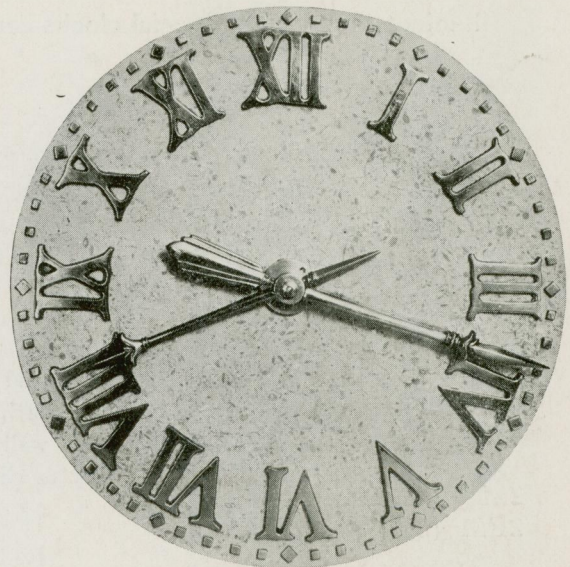
ORNAMENTAL SECONDARY CLOCKS

12-14-16-18-24-30-36-42-48" Dial Sizes



Style SD Skeleton Dial

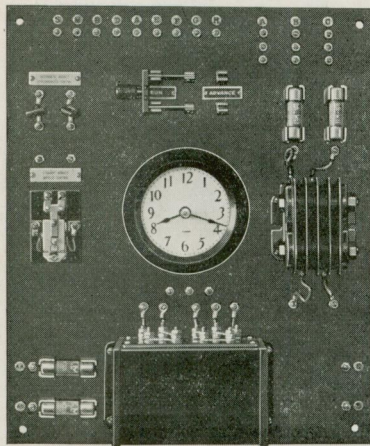
Raised Bronze Numerals with or Without Numeral Rings



Style 7 Marble Dial

Raised Bronze or Etched Numerals and Minute Marks
All Different Kinds and Colors of Marble.

RELAY CONTROL AND RECTIFIER PANELS



Style SAC-M

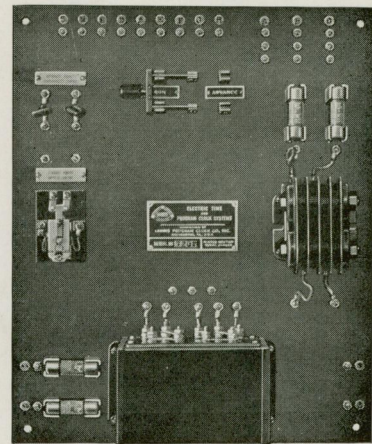
With Pilot Clock

For 110-120 v. A. C. Supply

Relay Control Equipment can be furnished in either Surface or Flush Metal Cabinets or mounted in Master Clock or Program Cabinets.

✓ Various Combinations for operation from 12 to 115, v. D. C. or 110-120 v. A. C. source of power.

Can also be furnished with Automatic Throw-over Switch and Reverse Power Unit.



Style SAC-M

Without Pilot Clock

For 110-120 v. A. C. Supply

Landis Program Clock Co.

Waynesboro, Pennsylvania, U. S. A.

Represented in all Principal Cities

