

ECONOLITE
TYPE F TRAFFIC SIGNAL CONTROLLER
LOCAL INTERSECTION

Section C-1

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February, 1959

The unitized, building block design of Econolite Traffic Signal controllers permits selection of the features **you** require. Pages 4 and 5 list the features included as **standard** on the basic machines at no additional cost. Pages 6 through 8 list additional and alternate features that are most frequently required in intersection controllers, indicate the basic controllers to which they may be added, and any additional cost for adding these features to the controller at the time of manufacture.

In ordering, please designate the basic controller you need—2TC24—(F1, F21, F2 or F3) and then the alternate or additional features desired, using the reference numbers indicated.

Please contact Econolite if you require further information or assistance.

ECONOLITE

TYPE F TRAFFIC SIGNAL CONTROLLER

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TYPES F1 AND F21

FULLY EXPANSIBLE—INTERCONNECTED

The standard 2TC24F1 controller is mounted in an attractive weather-proof aluminum cabinet. Brackets permitting sturdy and convenient mounting on wood or metal poles are provided.

The timer comes equipped with one, single offset, "jack-in" timing dial. Reliable operation and elimination of maintenance problems are assured by use of the famous Telechron* heavy duty, totally enclosed synchronous motor which **always** maintains speed, and **never** requires oiling. A "Run-Resyn" switch on the base of the dial unit permits synchronization or offset of non-interconnected controllers establishing a pre-determined progression pattern on a given street.

The signal switching unit has fourteen signal circuits completely wired, with cams and contacts installed in the six circuits most generally required, (red, yellow and green, on the main and cross street). The standard unit is set up for a 12 interval signal sequence and shipped with cams unbroken to allow maximum flexibility at time of installation.

Reliable off-peak flashing operation is assured by the modern, synchronous motor driven, jack-in flasher, and any radio interference that might be created by its contacts is effectively filtered out. A convenient switch permits the selection of automatic (stop and go) operation, signals off (for testing etc.), or flashing operation of the signals.

Sturdy, built in barrier type terminals make it easy and safe to connect incoming power and outgoing signal circuits to the panel and to arrange the flashing circuits and motor drive circuits for various types of operation.

As your community grows, and the traffic problem becomes more complex, additional units may be jacked in on the timer. Extra signal circuits for pedestrian or special

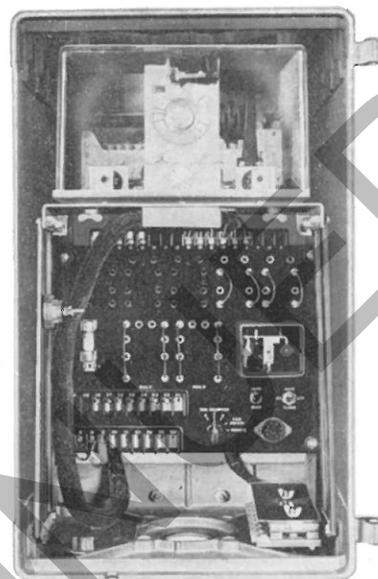


Photo No. 2121245

turning movements may be easily added. Several intersections may be interconnected and offsets added to the dial units. Speed and/or favored directional progress of vehicles can be controlled manually or automatically from a centrally located master controller by setting the 5 position selector switch to the "remote" position. A system of Type F controllers requires a minimum interconnecting cable size, and all interconnecting circuits enter the controller through a fused terminal panel.

The Type F controller is designed for economy and reliability today and an ability to grow and change with the ever changing traffic requirements of the modern community.

The "F21" controller is identical to the "F1" except that it provides a total of 19 signal circuits, plus control circuits.

*Reg. T.M. of General Electric Co.

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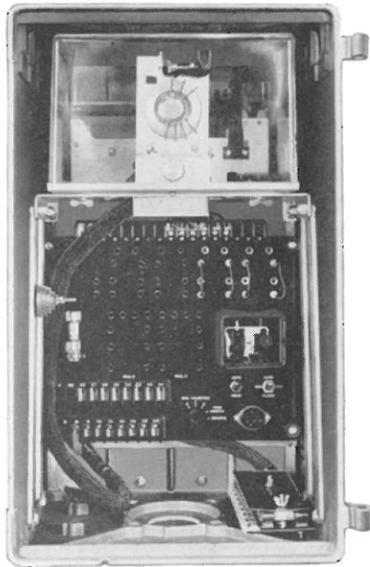


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TYPE F2
SINGLE DIAL—INTERCONNECTED

The standard 2TC24F2 controller is identical in construction to the "F1" controller just described, but some of the flexibility and provision for future expansion has been omitted. It is capable of all **standard** functions performed by the "F1" and may be expanded to a total of 15 signal circuits. It may be progressively timed without supervision of a master (by use of "Run-Resyn" switch) or may be interconnected by cable for manual or automatic supervision of offset selection (expandable to 3 offsets on dial 1), automatic (stop and go) operation, flash, or shutdown etc. The "F2" controller is limited to one dial, so it should be chosen for those areas where one cycle length (adjustable by gear change) and one division of total cycle time percentage between main and cross street (adjustable by key settings) is satisfactory.

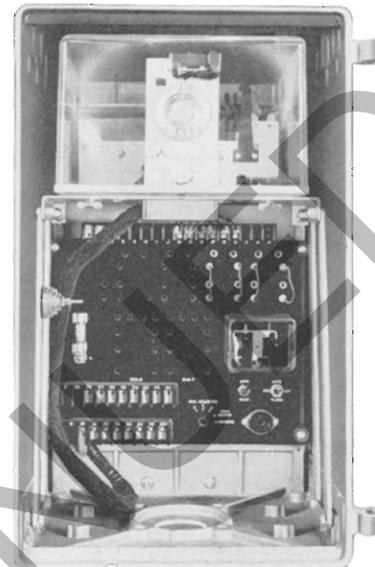


Photo No. 2121249

TYPE F3
SINGLE DIAL—NON-INTERCONNECTED

The standard 2TC24F3 controller is identical in construction to the "F1" and "F2" controllers just described, but is still further limited in its application. In addition to being restricted to only one timing dial, the "F3" is limited to isolated operation. It may be synchronized with adjacent controllers by use of the manual "Run-Resyn" switch to provide progression on a single pattern. Automatic selection of flash or shutdown can be accomplished by means of an optional time switch accessory installed in the cabinet. The "F3" should be selected where single dial operation and manual synchronization will suffice and where dependability with economy is most important.

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Standard Equipment

	Catalog No. 2TC24 - - -	F1	F2I	F2	F3
The STANDARD TIMER has . . .					
DIAL ONE, including—					
50 Second Gear installed, 40-60-70-80 Second Gears furnished (stored in cabinet)		Yes	Yes	Yes	Yes
Single Offset, with provision (space and wiring) for triple offset		Yes	Yes	Yes	No
Dial Keys as follows—					
(a) 11 "Drum Advance" (unpainted)		Yes	Yes	Yes	Yes
(b) 1 "Drum Release" (Green)		Yes	Yes	Yes	Yes
(c) 1 "Offset 1" (Red)		Yes	Yes	Yes	No
NOTE: If Controller is ordered with 16 Interval Drum, 15 Drum Advance Keys are furnished. If Controller is ordered with triple offset, Keys for Offsets 2 and 3 (yellow and white) are furnished.					
Manual "RUN-RESYN" Switch (control dial motor)		Yes	Yes	Yes	Yes
CONNECTIONS AND WIRING for TWO Additional Dials		Yes	Yes	No	No
SIGNAL SWITCHING UNIT as follows—					
Cams and contacts complete for SIX Signal Circuits		Yes	Yes	Yes	Yes
Stationary Contacts and wiring for additional (over 6) Signal Circuits as noted		8	13	9	9
Drum arranged for TWELVE interval signal sequence cams unbroken		Yes	Yes	Yes	Yes
Sixteen interval drum optional at no extra charge		Yes	Yes	Yes	Yes
NOTE: Cams will be broken out at factory if desired. Specify sequence on order.					
CONNECTOR PLUG— for connecting all circuits to controller panel. Permits quick, easy removal of complete Timer for inspection, maintenance or replacement		Yes	Yes	Yes	Yes
PLASTIC COVER— Protects Timer against dirt, moisture or tampering		Yes	Yes	Yes	Yes
The STANDARD PANEL has . . .					
FLASHER— Jack Mounted, Single Circuit type, with built-in Radio Interference Suppressor and separate Synchronous Motor Drive		Yes	Yes	Yes	Yes
JACKS and WIRING for FLASH Relays. Two Relays required for "Local Time Switch" or "Remote" selection of FLASH. Order relays separately if required.		Yes	Yes	Yes	Yes
TERMINALS for Flash Combination Selection. Any combination of Red or Yellow Signals may be flashed on THREE traffic phases.		Yes	Yes	Yes	Yes
SOCKET AND WIRING for plug-in connection of Time Switch(s) for selection of following functions at Local, Non-interconnected intersections - - -					
(a) Dial 1-2 or 3		Yes	Yes	No	No
(b) Flash		Yes	Yes	Yes	Yes
(c) Signal Shutdown or other spare function		Yes	Yes	Yes	Yes
JACKS and WIRING for Dial 2 and Dial 3 Transfer Relays. One Relay required for each dial unit added and is furnished when controller is ordered with additional dials		Yes	Yes	No	No
SWITCHES for LOCAL MANUAL SELECTION of . . .					
(a) Flashing—Off—Automatic (Stop and Go), operation		Yes	Yes	Yes	Yes
(b) Automatic—Hand control of signal timing		Yes	Yes	Yes	Yes
NOTE: Order Hand Switch and cord assembly if manual control of signal timing is anticipated.					
(c) Dial 2, Dial 3, Time Switch, Remote (from System Master)		Yes	Yes	No	No
TERMINALS and WIRING for . . .					
(a) Total Signal Circuits as noted		14	19	15	15
(b) Hand Switch and Cord (order Hand Switch and cord if required)		Yes	Yes	Yes	Yes

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Standard Equipment

Catalog No. 2TC24 - - -	F1	F21	F2	F3
The STANDARD PANEL has . . . (continued)				
TERMINAL PANEL with fuses for interconnecting System Cable	Yes	Yes	Yes	No
Permits Remote Selection (from System Master) of—				
(a) Dial 1, 2 or 3	Yes	Yes	No	No
(b) Offsets 1, 2 or 3	Yes	Yes	Yes	No
(c) Emergency All Red	Yes	Yes	Yes	No
(d) Flash	Yes	Yes	Yes	No
(e) Signal Shutdown or other spare function	Yes	Yes	Yes	No
CONNECTOR CABLE and SOCKET for Connecting All Circuits to Timer	Yes	Yes	Yes	Yes
FUSE, Cartridge Type for Controller power	Yes	Yes	Yes	Yes
The STANDARD 24" CABINET has . . .				
PANTAGRAPH ARMS and Table to permit lowering the timer for inspection or adjustment	Yes	Yes	Yes	Yes
Aeroplane type fasteners to permit easy removal of complete timer from cabinet	Yes	Yes	Yes	Yes
Mounting Brackets for attaching cabinet to metal pole (wood pole brackets optional)	Yes	Yes	Yes	Yes
Provision for easy attachment of pedestal adapter	Yes	Yes	Yes	Yes
Green baked enamel finish, 3 coats	Yes	Yes	Yes	Yes
Sturdy lock with one key	Yes	Yes	Yes	Yes
Sponge Rubber Gasket on door	Yes	Yes	Yes	Yes

BASIC CONTROLLER

CATALOG NO.	APPLICATION (TYPE OF SYSTEM)	STANDARD EQUIPMENT AND EXPANSIBILITY					APPROX. WEIGHT	
			DIALS	OFFSETS PER DIAL	SIGNAL CIRCUITS	DRUM POSITIONS*	NET	SHIP
2TC24F1	Isolated or Interconnected 1-2 or 3 Dials 1-2 or 3 Offsets	Basic	1	1	6	12 or 16	61	71
		Expansible up to	3	3	14	Specify		
2TC24F21	Isolated or Interconnected 1-2 or 3 Dials 1-2 or 3 Offsets	Basic	1	1	6	12 or 16	64	74
		Expansible up to	3	3	19	Specify		
2TC24F2	Isolated or Interconnected Single Dial 1-2 or 3 Offsets	Basic	1	1	6	12 or 16	60	70
		Expansible up to	Single Only	3	15	Specify		
2TC24F3	Isolated Only Single Dial Manual Resynchronize	Basic	1	None	6	12 or 16	59	69
		Expansible up to	Single Only	None	15	Specify		

*NOTE: All Controllers furnished with 12 Interval Drum—16 Interval is optional.

FOR FACTORY INSTALLED ALTERNATE AND ADDITIONAL FEATURES SEE PAGE 6 THROUGH 8

