

# What's the Answer?

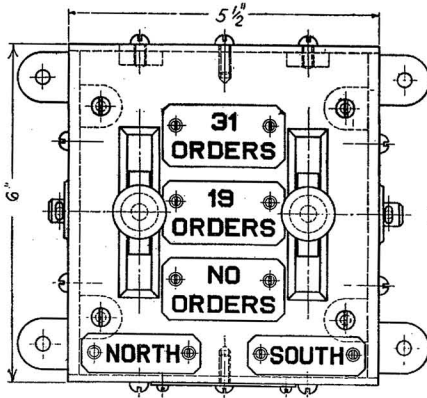
## Light Signals as Train-Order Signals

*"Do you use light signals as train-order signals? If so, how are the signals controlled, and what check is made to determine whether the proper aspect is being displayed?"*

### At Interlocking Plants

C. J. KELLOWAY  
Supt. of Signals, Atlantic Coast Line,  
Wilmington, N. C.

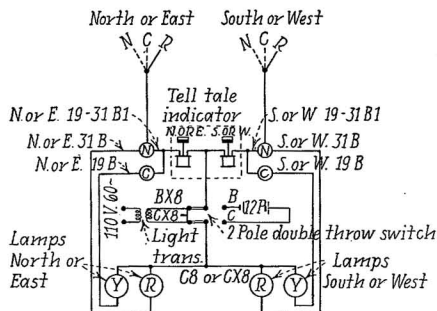
We use color-light type signals as train-order signals at interlocking plants only. These signals display



Plan view of two-lever machine

red for "31" orders, yellow for "19" orders, and are dark when there are no orders.

These color-light type signals are controlled by a small two-lever machine, shown on the accompanying



Circuit connections

drawing, and are connected as indicated in the accompanying circuit sketch. A tell-tale indicator indicates whether the aspect is displayed properly. At two-story signal towers, the lights are located under the eaves of the tower. At one-story towers and at station buildings which also house interlockings, they are usually placed

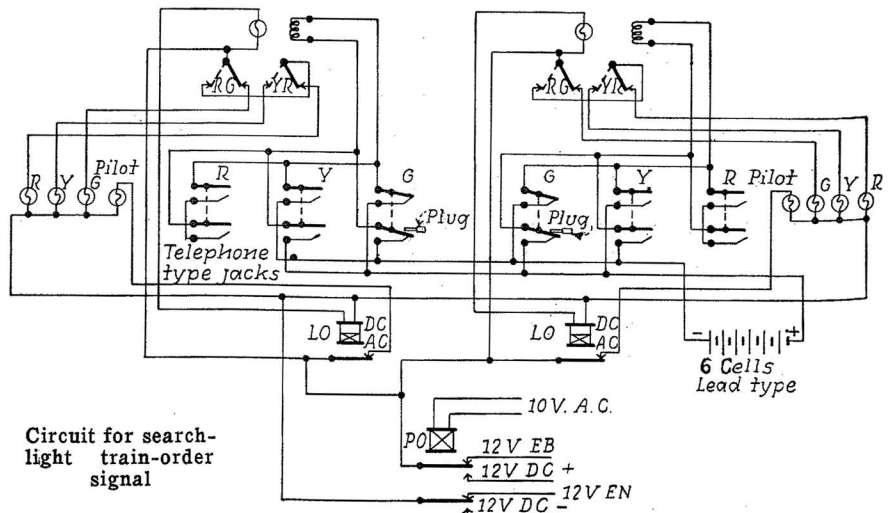
on a mast which is mounted on the structure. The special rule for the use of color-light type train-order signals is as follows:

"At interlocking stations, a red light or a yellow light displayed from the office, in view of the approaching train, in addition to the interlocking home signal at stop, will indicate that orders are held for an approaching train. The red light will indicate that trains are to be stopped for train orders; the yellow light will indicate that trains are to receive '19' orders without stopping. Enginemen finding light signal displayed at the office and home signals indicating stop, will acknowledge signal displayed by two short blasts of the whistle. Operator then, if other conditions permit, will clear home signal authorizing train to pull up to office for orders. Trains will not leave when such signals are displayed, without clearance card."

### Searchlight Train-Order Signal

A. VALLEE  
Supervisor of Signal Construction, D. & H.,  
Albany, N. Y.

We have designed a circuit and installed a searchlight type, color-light



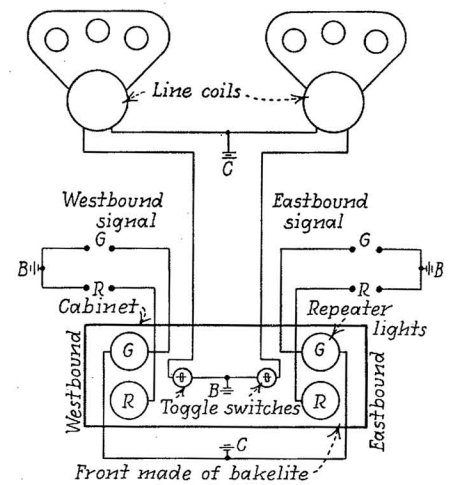
Circuit for searchlight train-order signal

signal for train-order purposes at La-colle station, Lacolle, Quebec, on the Napierville Junction railway. The accompanying sketch shows the circuit and the apparatus used, which have given very satisfactory results. The circuit should be self explanatory.

### Control Panel Designed

C. P. MAXWELL  
Signal Maintainer, Canadian Pacific,  
Quebec, Que.

The accompanying diagram illustrates a method of controlling searchlight signals used as train-order signals from a small cabinet on the



Layout of control panel and circuits

operator's desk. The two toggle switches, on the panel, control the position of the train-order signal, while the small indication lights repeat the positions of the signals. The indication lights also may be controlled through the power-off relay.