

## Route Controller

- Set up to 433 switches (points) by a single push
- Divide into groups of ten with freely assignable elements
- Up to 48 routes can be managed
- Settable operating speed

### 1. Description

In a digital control system, signals and switches (points) equipped with a decoder can be individually controlled by appropriate input units. The present software extension allows for operation of signals and switches (points) grouped into routes by a single keystroke on the Intellibox panel, thus eliminating the need for additional input units. In „memo-mode“, all 16 panel keys represent a group of 16 routes. A total of three different groups can be defined resulting in a total of 48 routes to your disposition.

### 2. Group Selection

Three different groups containing 16 routes each can be defined. The active group's number is shown on the display:



In order to change over from one group to another, proceed as follows:

#### How to do it

- Depress [mode]-key consecutively until "memory-mode" is displayed.
- Depress [menu]-key.



- In the left corner of the display "Gr.-Nr." is shown. Key in the group number by depressing number key 1 – 3.
- Acknowledge input by depressing [+]-key and return to keyboard mode.

### 3. Route Programming

Each route may contain up to 10 steps of setting a signal or a switch (point), which may be freely combined. The settings will be defined by the parameters R (red or branch) and G (green or straight). Moreover, each route has to be assigned to a group and a route key.

Programming is done in "memory-mode".

#### How to do it

- Depress [mode]-key consecutively until "memory-mode" is displayed.
- Depress [menu]-key.



- In the left corner of the display "Gr.-Nr." is shown. Key in the group number by depressing number key 1-3.
- Change over to the right corner of the display by depressing the [→]-key.
- Depress the [+]-key to arrive in programming mode.



- Behind "route-nr" key in the route number from 1 – 16.
- Acknowledge input by depressing [+]-key.



- Left part of display will show group number, e.g. 1, and route number, e.g. 13. Cursor will blink in "step" position. Key in step number here. Accept default value of zero for the first step.
- Continue by depressing [→]-key.
- In "adr" position key in digital address (1-2000) of element to be operated.
- Continue by depressing [→]-key.
- In "RG" position select parameter R (red, branch) or G (green, straight) by depressing the [+] or [↓]-key until the proper setting shows.
- Acknowledge input by depressing [+]-key. Cursor will jump back to "step" position and the next step can be programmed. You can scroll up or down through the step list by depressing the [+] or [↓]-key. Each step's settings will be displayed.
- Depress [+]-key to invoke programming of another route.
- Finish programming by depressing [menu]-key and return to keyboard mode.

### 4. Insertion of wait states

Input of address 0 generates a step that has no output, but puts in a wait state. For instance, this wait state may be necessary in a chain of steps to compensate for a slow-moving switch machine (point-motor) without extending the total switching time.

Wait state duration will be set by option 451 in slices of 50 ms and can be adjusted from 1 to 200. A value of 10 will give 500 msecs for example. Default value is 20 rendering 1 sec's duration. All wait states will use the set value.

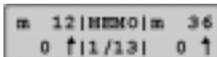
Wait state duration will be set by option 451 in slices of 50 ms. A value of 10 f.e. will give 10 x 50 = 500 msecs. All wait states will use the set value. Wait state duration can be adjusted from 1 to 200. Default value is 20 rendering 1 sec's duration.

### 5. Route setting

In "memo-mode", each number key calls up a preprogrammed route.

Depress [mode]-key consecutively until "memo-mode" is displayed. Now the center panel keys represent routes 1 to 16.

When depressing the assigned key, a route will be set.



Group number and route number are displayed. In between, a rotating slash will be shown for as long as all route elements need to be set.

When the display stays blank, this indicates that no route has been assigned to that key.

### 6. Concatenation of routes

Concatenation of routes means that one route may include another route as one step function. A total of 433 switching steps can therefore be called up by pushing one button.

Concatenation can only be called up as the last step in a route. Steps programmed behind it will not be recognized. Loops formed by mutual concatenation will be checked automatically and will not be accepted.

To form a concatenation, the step element's address is replaced by a four-digit number. The leftmost digit is the indicator, a 9, followed by the group digit 1-3, and the route number digits 1-16.

#### How to do it

- Program route as described in chapter 3 "Route Programming".
- For the last step, use this procedure:



- In "step" position, key in step number, e.g. 6.
- Continue by depressing the [→]-key.
- In "adr" position, key in the route you wish to include:
  1. figure = 9 as key for the indicator
  2. figure = group number (1-3, e.g. 2)
  3. and 4. figure = route number (1-16, e.g. 04)
- The "RG" position is left blank.
- Acknowledge input by depressing [+]-key. Cursor will jump back to "step" position.
- Depress [→]-key to invoke programming of another route.
- Finish programming by depressing [menu]-key and return to keyboard mode.

### 7. Setting the Working Speed

Option 450 of Intellibox is used to set the working speed of each step. Step duration can be set in slices of 50 msec between 2 and 100. Default value is 10 rendering 0.5 sec duration per step.

### 8. Registration Data

My software's serial number \_\_\_\_\_

Intellibox serial number \_\_\_\_\_

### If you have questions, we'll answer them!

Mo - Tu - Th - Fr 14 - 16 CET, We 16 - 18 CET

Hotline 00 49 20 45 - 85 83 27

Your direct way to our technician!