

# Basic Programming

Programs can be edited or changed at any time while the Horizon Signal system is running. By plugging in the micro-terminal the user can create new programs without any effect on the current program. A new program that is created will be loaded during the next available Red Clearance time, and will be undetectable by motorists.

```
SYSTEM
Programming
```

1. From the Home Screen press “+” to access the System Menu. The first option is System Programming. Press E to begin.

```
PROGRAMMING
2 phase 2 contr
```

2. The micro-terminal has several program templates pre-built for you. These simple templates represent the most common types of workzones. To pick the correct template, you will need to know how many phases of traffic will be in your workzone and how many Horizon controllers your system has. When necessary, basic programs will automatically group Lights numerically based on their controller identities.

```
SPEED
25 mi/h
```

3. The speed of the workzone gets entered first.

```
DISTANCE
C1 → C2 250 yd
```

4. The distance of the workzone gets entered next. The microterminal will use these values to calculate a recommended Red clearance time.

```
RED TIME
C1 → C2 9s
```

5. The calculated Red time will be displayed based on the information already entered. This time can still be adjusted by using the + and -- buttons.

```
NUMBER PROGRAMS
1
```

6. Number of Programs refers to the amount of different timing sequences this system will run for this setup. This number is typically 1, unless day phasing is desired.

```
PROGRAM 1 C1
Green → 10s+ 20s
```

7. You will now be asked to enter Green times for Group #1 (C1 in the upper-right corner). The first number on the screen is the base green. This is the minimum amount of green time a given phase will allow without detection. The second number is the extension time. The extension will only be applied if the system is using some form of vehicle detection. If you are not using detection, the extension will be ignored.

```
PROGRAM 1 C1
Rest in red No
```

8. If you would like the signals in this group to remain Red until there is a vehicle detection, set Rest in Red to “Yes.” Otherwise, set it to “No” to allow the signals to cycle normally.

```
PROGRAM 1 C2
Green → 10s+ 20s
```

9. Next, set the green times for Group #2 (C2 in the upper-right corner). These times do not have to be the same as the times for Group #1.

```
PROGRAM 1 C2
Rest in red No
```

10. The Rest in Red option for Group #2 gets set next.

```
NUMBER TIMES
0
```

11. Number Times asks how many times per day the controller will change programs. The default setting is 0. This option is only used when you would like to run multiple programs throughout the course of a day or week, such as morning and evening rush hour programs.

```
2 phase 2 contr
Pr 1 Gr 2 Lig 2
```

12. Review the information you provided to the micro-terminal by viewing the summary screen at the end of the program. The type of program will be displayed at the top of the screen, followed by # of programs, # of groups, and total # of lights. When you are sure that the information is correct, press E to load the program.

```
1 :: :: 12,6v
R Program loading
```

13. The micro-terminal will show the progress of the radio programming (or cable if not in radio mode). When the counter reaches 100%, the micro-terminal will go back to the home screen and the program will begin to run.