STR 2000 Series Transceiver Programming Manual

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01--05
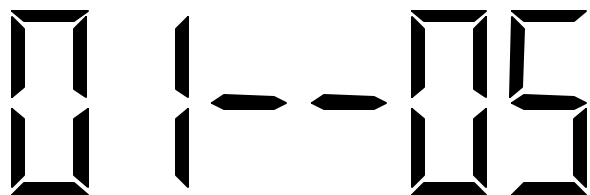
Once programming mode has been entered, the number "01" will appear in the far left position (see diagram). **This prompt allows you to set the year.** Use the "Set Minute" button to scroll from "00-99" on the display and set the year.
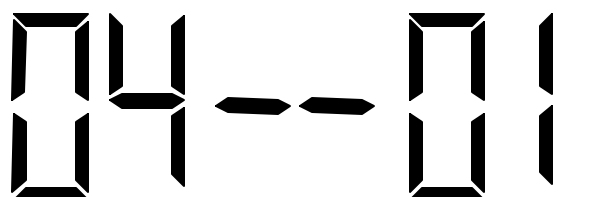
02--11

Press the "Set Hour" button to advance to option 2. A "02" will appear on the left side of the LED display. **This prompt allows you to set the month.** Use the "Set Minute" button to scroll between "01-12".
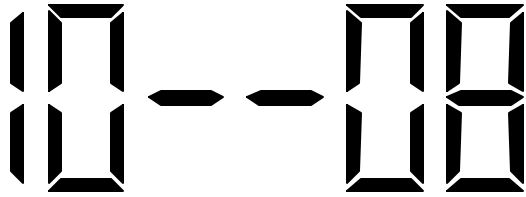
03--28
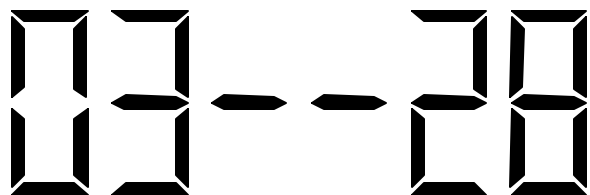
Press the "Set Hour" button to advance to option 3. A "03" will appear on the left side of the LED display. **This prompt allows you to set the day.** Use the "Set Minute" button to scroll between "01-31".

04--01

Pressing the "Set Hour" button will advance to option 04. A "04" will appear on the left of the LED display. **This option shows the user if daylight savings time is enabled (Left Digit 1 Enabled, 0 Disabled) and if the date is in the summer months (Right Digit 1 Summer, 0 Winter)**.

Left Digit   Right Digit

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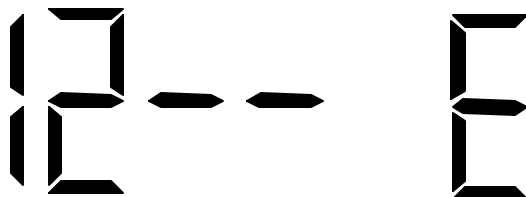
Press the "Set Hour" button to advance to option 10. A "10" will appear on the left side of the LED display. **This prompt allows you to enter into technical mode.** If technical mode is desired, press the "Set Minute" to "08" to enter technical mode. The scrolling will scroll through "00-99". Any other character will go directly to option "20".
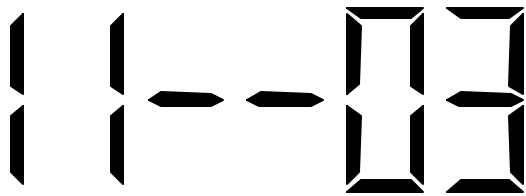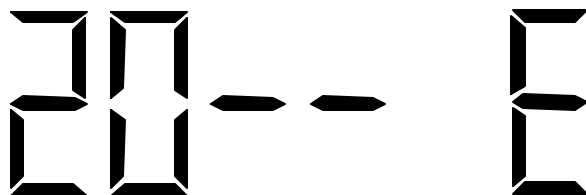
Press the "Set Hour" button to enter technical mode which starts with option 11. An "11" will appear on the left side of the LED display, if the option was chosen in option 10. **This prompt allows you to set the data transmission.** Press the "Set Minute" button to scroll between "01-12".

01 - Data is transmitted every second	07 - Data is transmitted every 2 minutes
02 - Data is transmitted every 5 seconds	08 - Data is transmitted every 5 minutes
03 - Data is transmitted every 10 seconds	09 - Data is transmitted every 10 minutes
04 - Data is transmitted every 15 seconds	10 - Data is transmitted every 15 minutes
05 - Data is transmitted every 30 seconds	11 - Data is transmitted every 30 minutes
06 - Data is transmitted every minute	12 - Data is transmitted every hour

Press the "Set Hour" button to enter option 12. A "12" will appear on the left side of the LED display. **This option allows the user to enable or disable Daylight Savings Time.** Press the "Set Minute" button to scroll between "E - D". "E" will enable this option. "D" will disable this option.

Press the "Set Hour" button to enter option 20. A "20" will appear on the left side of the LED display. **This option allows you to enter a programmable relay output mode.** Press the "Set Minute" button to scroll through "E - D". Prompting "D" will go directly to option 30. Prompting "E" will enter the programmable relay output mode.

21--14

Press the "Set Hour" button to enter option 21. A "21" will appear on the left side of the LED display. **This option allows you to set the hour that the user wishes the relay to close at.** Press the "Set Minute" button to scroll through "01-23".

22--30

Press the "Set Hour" button to enter option 22. A "22" will appear on the left side of the LED display. **This option allows the user to set the minute(s) they want the relay to close at.** Press the "Set Minute" button to scroll between "00-59".

23--45

Press the "Set Hour" button to enter option 23. A "23" will appear on the left side of the LED display. **This option allows the user to set the second(s) they want the relay to close at.** Press the "Set Minute" button to scroll between "00-59".

24--56

Press the "Set Hour" button to enter option 24. A "24" will appear on the left side of the LED display. **This option allows the user to set the duration of the relay closure.** Press the "Set Minute" button to scroll between "00-99" (seconds).

Press the "Set Hour" button to enter option 30. A "30" will appear on the left side of the LED display. **This option allows the user to allow an auxiliary input control.** Press the "Set Minute" button to scroll between "E - D". Setting the option to "D" will disable the option and go directly to option 40. Setting the option to "E" will enable the user to enter an input control mode.

Pressing the "Set Hour" button will go to option 31. A "31" will appear on the left side of the LED display. **This option allows the user select the input.** Pressing the "Set Minute" button will allow the user to scroll between "01-07 and 10".

01 - Internet Connection
02 - 59 Minute Correction
03 - 58 Minute Correction
04 - National Time/Rauland
05 - Dukane Digital
06 - Rauland Dig. Out
07 - Wireless Input
10 - Once A Day Pulse

Pressing the "Set Hour" button when option 31 is set to "01", will enter option 32. A "32" will appear on the left side of the LED display. **This option allows the user to set the positive offset of the user's location when the Internet Connection is selected.** Press the "Set Minute" button to scroll through "00-23".

Pressing the "Set Hour" button when option 31 is set to "01", will enter option 33. A "33" will appear on the left side of the LED display. **This option allows the user to set the negative offset of the user's location when the Internet Connection is selected.** Press the "Set Minute" button to scroll through "00-23".

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34--01

Pressing the "Set Hour" button when option 31 is set to "10", will enter option 34. A "34" will appear on the left side of the LED display. **This option allows the user to set the hour they want the time to go to when Once A Day Pulse is selected.** Press the "Set Minute" button to scroll through "00-23".

35--30

Pressing the "Set Hour" button will enter option 35. A "35" will appear on the left side of the LED display**. This option allows the user to set the minute they want the time to go to when Once A Day Pulse is selected.** Press the "Set Minute" button to scroll through "00-59".

36--00

Pressing the "Set Hour" button will enter option 34. A "34" will appear on the left side of the LED display. **This option allows the user to set the seconds they want the time to go to when Once A Day Pulse is selected.** Press the "Set Minute" button to scroll through "00-59".

40--76

Press the "Set Hour" button to enter option 40. A "40" will appear on the left side of the LED display. **This option displays the last time the clock received an input signal (in hours).** The display will be between 00 - 99. This option is read only. It cannot be modified.

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41-00

Press the "Set Hour" button to enter option 41. A "41" will appear on the left side of the LED display. **This option displays the current temperature of the clock itself.** The temperature will display in °C. This option is a read-only option.

44-00

Press the "Set Hour" button to enter option 44. A "44" will appear on the left side of the LED display. **This option displays whether the transceiver is receiving an Internet Connection.** A "01" will appear on the right side if the master is receiving an Internet Connection. A "00" will appear on the right side if it is not receiving an Internet Connection. This option is a read-only option.
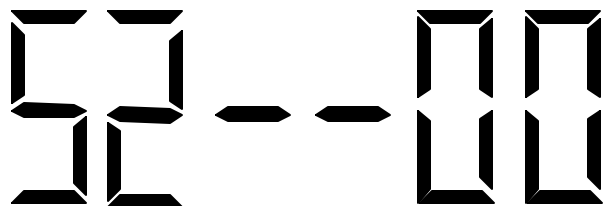
50-15

Press the "Set Hour" button to enter option 50. A "50" will appear on the left side of the LED display. **This option enters the self testing feature.** Press the "Set Minute" button to scroll between 00-99. To enter the Self Test mode, press the "Set Minute" button till a "15" is displayed to the right. Any other character will go directly to option 60. After it is set to "15", press the "Set Hour" button to enter the Self Test mode.
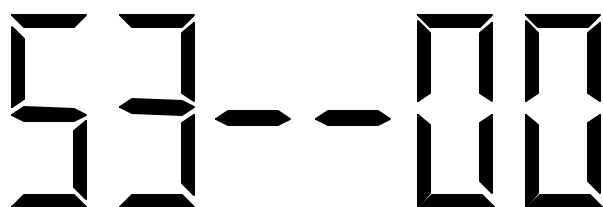
51-57

Press the "Set Hour" button to enter option 51. A "51" will appear on the left side of the LED display. **This option tests the Real Time Clock.** When the "Set Minute" button is pressed, the display will count up from 57 to 00. If the Real Time Clock is working properly, the transceiver will advance to option 52. If it does not, it will stay at option 51.
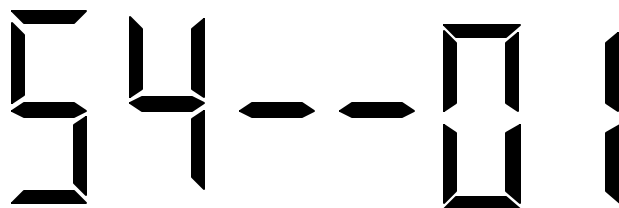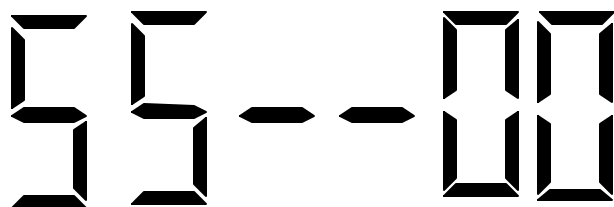
52--00

Press the "Set Hour" button to enter option 52. A "52" will appear on the left side of the LED display. **This option tests the output relay.** When the "Set Minute" button is pressed, the relay will close. When the "Set Hour" button is pushed, the relay will open and advance to the next option.

53--00

Press the "Set Hour" button to enter option 53. A "53" will appear on the left side of the LED display. **This option tests the segments of the LED display.** When the "Set Minute" button is pressed, the segments will test one segment at a time. To advance to the next option, press the "Set Hour" button.

54--01

Press the "Set Hour" button to enter option 54. A "54" will appear on the left side of the LED display. **This option tests the transceiver to see if it recognizes an input.** If there is no input, the digits to the right will read "00". If there is an input, the digits to the right will read "01".

55--00

Press the "Set Hour" button to enter option 55. A "55" will appear on the left side of the LED display. On the right side of the display, the left digit will be alternating every 200ms between "0" and "1". The right digit will stay at "0". **This option tests the RS485 and RS232 input and output.** To test the RS485, short the input and the output. When this occurs, the right digit will synchronize with the left digit. To test, the RS232, short the input and the output. When this occurs, the right digit will synchronize with the left digit.

Left Digit   Right Digit

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60-- E
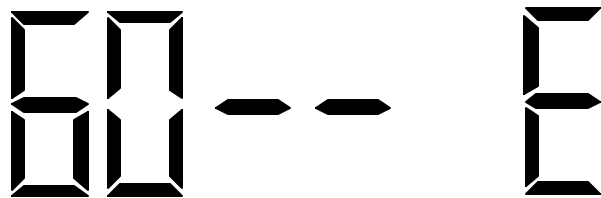
Press the "Set Hour" button to enter option 60. A "60" will appear on the left side of the LED display. **This option allows the user to enter diagnostic mode.** Press the "Set Minute" button scroll between "E - D". Setting the option to "E" will enable the option and will enter diagnostic mode. Setting the option to "D" will disable the option, then pressing the "Set Hour" button will bring the display back to the set time.

61--03
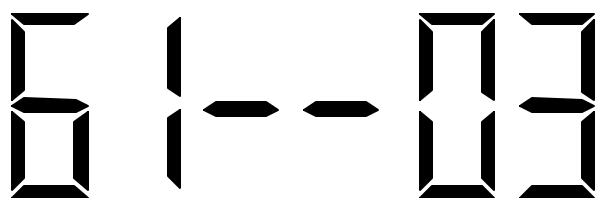
Press the "Set Hour" button to enter option 43. A "43" will appear on the left side of the LED display. **This option allows the user to send the diagnostic to the slave clocks.** Pressing the "Set Minute" button will scroll from "01-05".

01 - Protocol Verification
02 - Comprehensive Test
03 - Manufacturer's Default
04 - Combination of 02 & 03 (button must be pressed on SAM)
05 - Combination of 02 & 03 (no need to press button on SAM)
09 - Overrides the Previous Diagnostic and Goes Back to the Time

62--41

Pressing the "Set Hour" button will advance to option 62. A "62" will appear on the left of the LED display. **This option allows the user to set how long (in minutes) that the information display from the diagnostic will stay on the clock.** Pressing the "Set Minute" button will scroll from "00-99". Pressing the "Set Hour" button will go back to the displayed time.