colorCONTROL LT

Brief Instruction

Parameterization Program

QuickTeach

Program Start

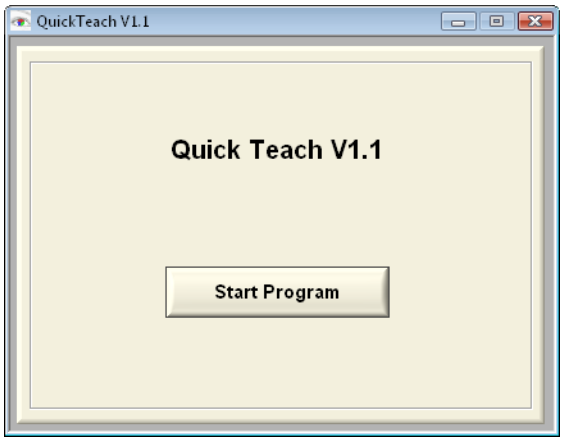


Fig. 1 Start window

Fig. 1 shows the window after the program call. By pushing “Start Program“ the program starts.

Hint:
The program detects sensors connected to the serial (COM1 to COM9) and the USB port of the PC. A Baud Rate of **28800** is required for detecting sensors at the serial port (default)!
The interfaces will be scanned in the following sequence:

- USB (if multiple sensors are detected at the USB port, the first is chosen)
- COM1
- COM2

.
.
.

- COM9

The first sensor that is detected will be used.

If no sensor is found at the ports the window from Fig. 2 appears.

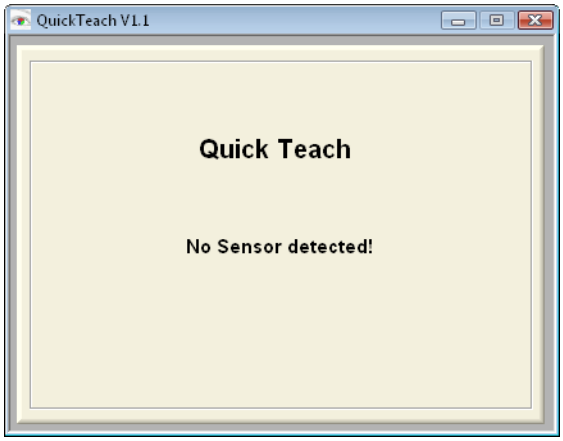


Fig. 2 Window if no sensor is detected

Program functions

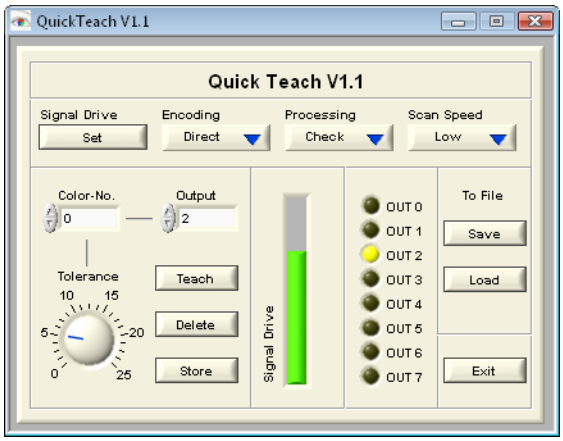
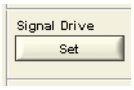
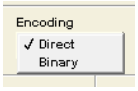
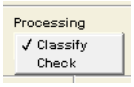
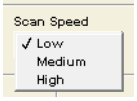
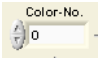
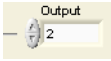
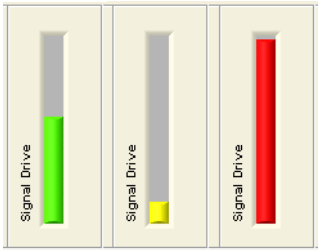
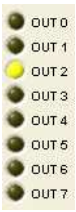
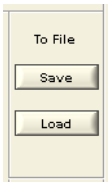


Fig. 3 Program window

Fig. 3 shows the program window.

Pos.	Program item	Function description
1		Pressing this button, an automatic signal drive of the sensor to **70 %** is performed. **Hint:** The Function is only available for sensors with variable gain and intensity adjustment!
2		By this switch the encoding of the sensor outputs is determined. • Direct: corresponds to one color for each output (1- HOT Encoding) • Binary: the output number is encoded binary, by which e.g. for 8 outputs up to 255 colors can be represented
3		By this switch the processing modes • Classify (most matching color) • Check (GO/NOGO, Tolerance adjustment required) can be adjusted.
4		By this switch the scan frequency of the sensor is determined. • Low (500 Hz) • Medium (2 kHz) • High (5 kHz) **Hint:** The effective response speed of the sensor depends also on the adjusted averaging!
5		By this selector the current color memory cell is chosen. The memory cells 0...255 are available. **Hint:** While occupying memory cells try to avoid gaps.

6		By this selector the desired output channel is assigned to the current color index. **Hint:** It is possible to assign multiple colors (max. 255) to one output.
7		By this rotary knob the tolerance for the color to be taught is adjusted.
8		By switching this button, the current color value and the adjusted parameters (Tolerance, Output channel) are stored assigned to the selected color memory cell.
9		By switching this button, the color values and the assigned parameters are deleted from the selected memory cell. **Hint:** The color indices move up if intermediate colors are deleted!
10		By switching this button, all parameters are stored in the flash memory of the sensor (to keep the values in case of power failure).
11		This display shows the drive of the sensor signal. The signal drive is divided into the following ranges: • green representation (recommended range 15-95 %) • yellow representation (weak drive > 15 %) • red representation (over- or under drive, resp.)
12		This display shows the state of the outputs of the sensor.
13		By the buttons in this field the adjusted parameters can be saved into a file or loaded from a file.

Operating steps

1. Pos. 1: Adjust sensor signal drive (if several color use the brightest one!)
2. *Optional: Pos. 2, 3and 4: Adjust output encoding (depending on number of colors), processing method or scan speed.*
3. Pos. 5: Select color index (memory cell)
4. Pos. 6: Assign desired output
5. *Only processing mode „Check“:* Pos. 7: Adjust tolerance
6. Pos. 8: Adopt colors and parameters
7. *Optional: For further colors repeat steps 3 to 5*
8. *Optional: Pos. 9: Delete current color*
9. Pos. 10: Store to Flash memory of sensor

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