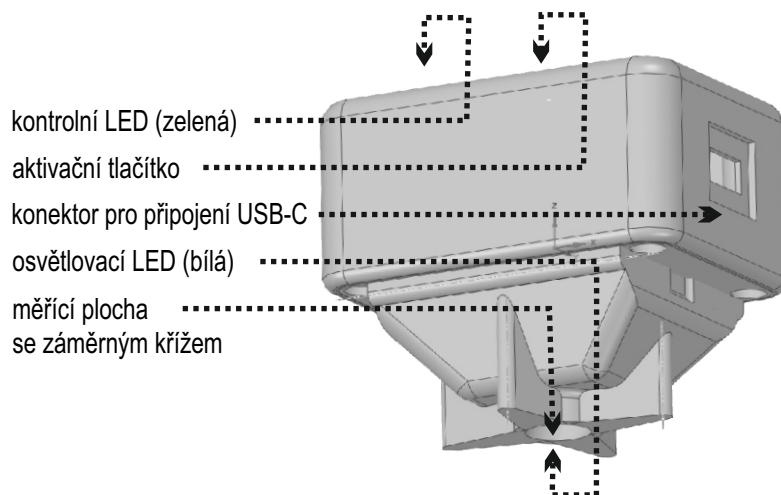




NINJACOLORIMETER TB01

User Manual



- kontrolní LED (zelená)
- aktivační tlačítko
- konektor pro připojení USB-C
- osvětlovací LED (bílá)
- měřicí plocha se záměrným křížem

Dimensions:	50x36x45 mm
Power supply:	+ 5 V, +/- 10%,
Connection:	USB C connector
Measuring range:	R=0-255, G=0-255, B=0-255
Color Resolution:	16,581,375 colors
Accuracy:	+/- 1.5% in each RGB channel
Basic calibration table:	6,750 values
Ambient temperature:	+10 to +50 °C
Ambient humidity:	10 to 70%
Illumination:	LED, 3,000 lx
Angle of incidence of light on the measurement area:	15°
Size of the measuring area:	Size of the measuring area: the aperture adjacent to the measuring area has a diameter of 8 mm. The shape of the aiming cross allows a reliable measurement of the reflected radiation if the area to be measured is larger than a circle with a diameter of 10 mm
Number of sensing elements:	3x4 matrix
Arrangement of sensing elements:	3 elements 100x100 µm
R channel	3 elements 100x100 µm
G channel	3 elements 100x100 µm
B channel	3 elements 100x100 µm
W channel	The RGB colour filters are complemented by an IR filter that crops with 90-95% efficiency wavelengths >650 nm. The W element is without a color filter with only an IR filter.
Measurement speed:	Measurement speed: When measuring two identical colours in succession, one measurement takes 700 ms. When changing colour or moving the colorimeter, the measurement (from command to result transmission) can take several seconds (the firmware always ensures that at least two internal measurements are taken and checks that the results match. If the white channel measurement results differ by more than 0.2%, the colorimeter firmware adds another measurement. Only if the last measurement is not significantly different from the previous one, the result is displayed.)

