



MINOLTA Digital Camera RD-175

Instruction Manual



MINOLTA



Minolta User Manual

Julia Schneider

Minolta User Manual:

The Complete Minolta SLR Camera and Accessory Guide ,1983 **Systematic Research and Analysis of the Tooth Colour** André Hoffmann, 2005-10-31 Andr Hoffmann innovator researcher and developer pioneer in the field of optical technologies photonics systematically researched the tooth colour and its origin with highest precision see publication in 2000 This book shows an excerpt of this systematic original research at human teeth and dental shade guides with high precision measuring systems and high precision positioning system in vitro Due to his basic scientific research he was able to quantify and isolate manifold factors influencing the colour of teeth These include for example the light or measuring light and the type of light illuminant and illumination and colour temperature the optical beam path of the light or the measuring geometry the observation angle 2 10 the size of the measuring surface and measuring opening the gloss the liquid content with scientific evidence of the relationship between liquid content and tooth colour effect of drying moisture and rehydration the correlation between the liquid content and the gloss effect the subjectivity of visual subjective shade matching crown curvature type of system spectrophotometer tristimulus colorimeter measuring mode contact or non contact system object relation positioning repeatability or reproducibility lens shift displacement between sample and measuring surface and further intra and interindividual factors In addition subjective visual determinations and objectified measurements were examined in subjective objective comparisons using colour coordinates comparisons All these influencing factors are investigated on moist drying drier various specific dehydration and rehydration states and dry teeth based on the brightness L on colour measurement values such as a b CIELAB C h CIELCH E on the metamerism index on spectral values and curves tabs of dental shade guides and on tooth colour spaces As part of this exploration phenomena e g changes and breaks in behaviour as well as highly individual developments in colour values paradoxes between the values of subjective determination using shade guides and the values of objective measurements were identified and insights into the very complex colour dynamics through dehydration and rehydration were shown up to more than 8 days The development of the individual colour measurement values was based on the liquid flow through the tooth and its tissues in particular during drying and rehydration and gave information about dynamics and the temporal extent of these processes On the basis of this data Hoffmann had developed several methods for research and practice suggestions for feasible innovations such as monitoring of dental treatment to protect against pulp damage based on drying and reconstructing the colour of naturally moist teeth on those that have already dried the identification of the living and the dead human and animals via the dental fingerprint and a novel method of measuring the time of death for forensic medicine He also described a time limit of drying up to which relatively natural suitable colour values and shade matching results can be obtained and after which no colour determination should be carried out and he established the rehydration time after the end of the drying or dental treatment which must be waited in order to regain a natural tooth colour and to get correct values and results again His findings also

show that teeth are able to store information on for example the condition liquid content colour values and the time within the drying and liquid re absorption chronology The author articulates a dental chronometer tooth clock dental data store tooth data store and a dental memory tooth memory and believes that significant progress in this field may include and could be achieved via a neural network for colour measurement apparatus A book for anyone interested in the natural sciences

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