

EyeSpecial C-V

DENTAL PHOTOGRAPHY
made easy



SHOFU *Gummy-V*



EyeSpecial C-V

More speed – more precision – more versatility

With its smart special features, the SHOFU EyeSpecial dental camera has become well-established in dental practices and laboratories for creating professional photo documentations. It is easy to operate, reproducibly takes good images, and its use can be delegated to your assistants without cost and time-intensive training.

The fifth generation of this lightweight and now even more compact camera is equipped with a Wi-Fi function, allowing you to save data directly to your computer. The video feature has also been expanded; now it permanently adjusts the sharpness of the recording with continuous autofocus. Just concentrate on subject and shutter – everything else will be done by the camera.

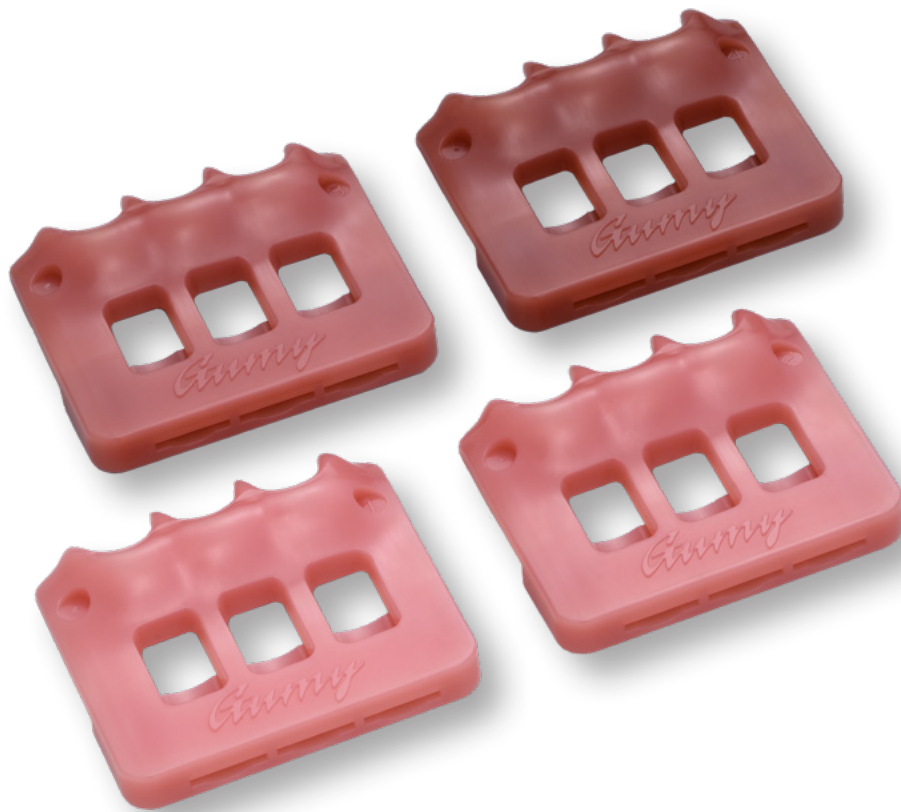


- Fast, intuitive menu navigation
- Brilliant display with touch panel
- Nine preset shooting modes for easy and reliable operation
- Video feature with permanent autofocus
- Wi-Fi function for image transfer
- Automatic flash control for optimal illumination
- Optional attachable cross polarizer
- QR code features

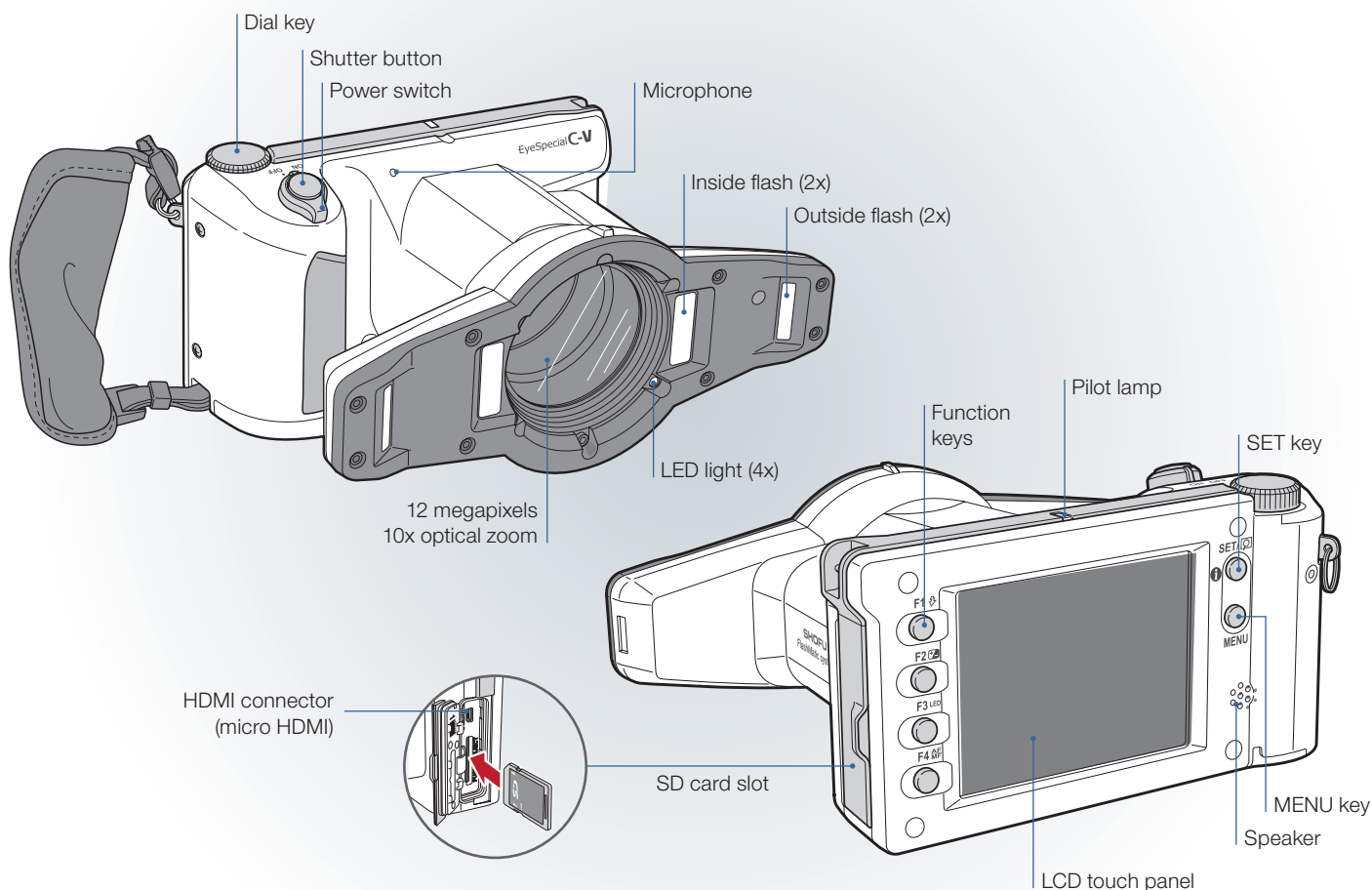
The same may not always look the same

Determining tooth shades and communicating the shade information gained between dental practices and laboratories is a great challenge in everyday dentistry. Numerous factors, such as illumination, background or tissues adjacent to the teeth, may considerably influence tooth shade perception.

Using the SHOFU Gummy-V and a shade tab, you can imitate the natural conditions of the oral cavity and neutralise the contrast effect created by the gingiva. And the Gummy-V supports not only visual shade matching with your shade guide, but also clinical case documentation (see page 8).



- Easy and precise shade determination
- Objective tooth shade reproduction
- Improved communication between dental clinicians and technicians
- Shade taking without external influences
- Versatile system
- Guidance for gingival reproduction
- Support for photo documentation
- Reduction of misunderstandings and time-intensive redos



The handy and compact "all-in-one" camera

This ultralight high-performance camera can easily be held with one hand, freeing the other to hold a cheek retractor or a mirror. It does not require any "heavyweight" accessories, like external flashes or interchangeable lenses. Equipped with everything you need, the EyeSpecial C-V allows you to take informative and professional dental photographs.

Intuitive menu navigation on the touchscreen

Thanks to the high-resolution 3.5" (8.89 cm) LCD touch panel, you can intuitively operate your camera. Immediately assess the image data on the display. Edit images using the desired options. Archive the data with one finger movement. Easy-to-understand icons help you to easily and quickly perform the respective actions.

The high-resolution LCD touch panel is intuitive to operate; easy-to-understand icons guide you through the menus.



Shooting modes



Standard

Standard intraoral photography with true-colour optimisation



Surgery

Intraoral photography from a greater distance



Mirror

Intraoral photography using a dental mirror. The image can be reversed afterwards.



Face

Facial photographs, half-body or full-body portraits



Nine preset shooting modes ensure ease and reliability of use.



Movie

Permanent autofocus during filming enables consistently sharp videos



Low Glare

Photographing details of anterior teeth, working models or indirect restorations outside the patient's mouth



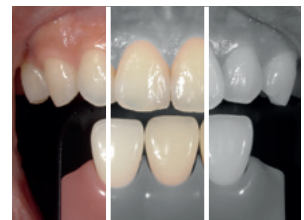
Whitening

Comparison of tooth shades before and after whitening/bleaching



Tele macro

Detailed close-ups of anterior teeth with the close-up lens attached



Isolate Shade

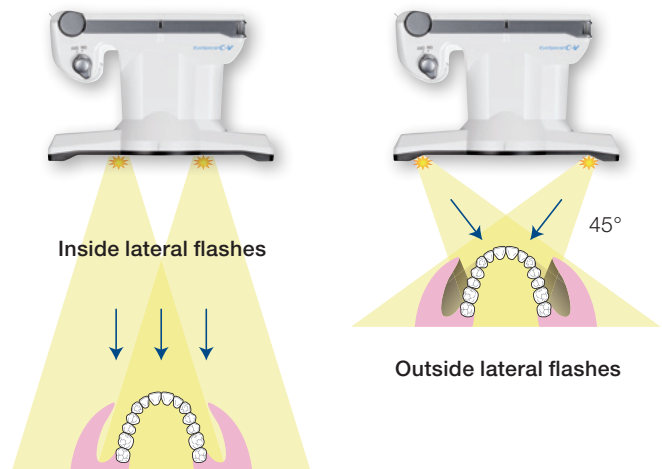
Automatic isolation of the gingival shade for optimal shade taking

Optimally illuminated – sharp in every detail

The integrated autofocus system and the shooting modes presented on the left guarantee precise and detailed photographs in any situation, with maximal depth of field across the entire dental arch – and help to minimise errors!



The depth of field is specifically designed for the focal range of dental photographs, ensuring high-contrast intraoral images of outstanding quality.



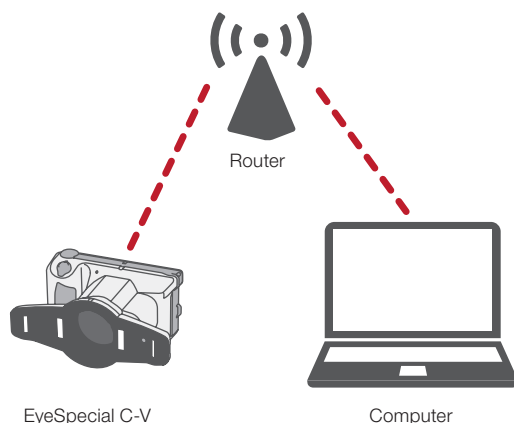
Four flashes – Two lighting modes

The intelligent FlashMatic system provides the right light. It automatically adjusts flash duration and intensity, creating controlled conditions for optimal exposure and true-colour images irrespective of ambient light conditions.

The combination of lateral flashes perfectly lights the oral situation and minimises reflections on the tooth surfaces.

Transferring images to your computer via Wi-Fi

Using the Wi-Fi function of the EyeSpecial C-V, you can now automatically transfer your images to a computer and file them with the SHOFU image sorting software "SureFile". Simply establish a WLAN connection via your router.



Exemplary hygiene



The completely smooth body of the EyeSpecial C-V is water and chemical-resistant and can be quickly and thoroughly disinfected with ethanol sprays and wipes. This optimally prepares the camera for use in your practice in accordance with current hygiene guidelines.

Practical accessories

Close-up lens for more detail

The EyeSpecial C-V features an optical zoom for magnification rates of up to 1.4:1. If you wish to capture more detail, you can use the tele macro mode in combination with the high-quality close-up lens by Kenko for magnification rates of up to 2:1.

Simply screw the close-up lens onto the camera lens clockwise, confirm in the menu, and take excellent images of the smallest anatomical details. In addition to the tele macro mode, the close-up lens is also needed when using the optional cross polarizer.



Glare-free to show more of the tooth – with the cross polarizer

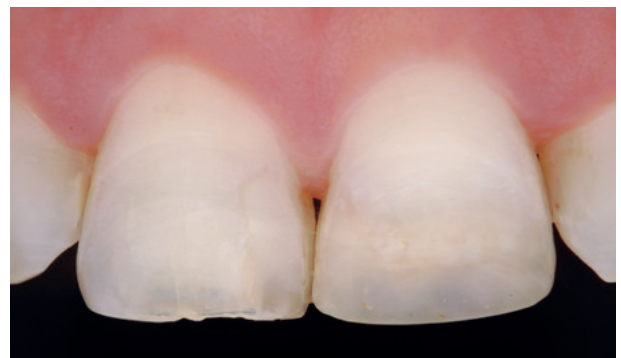


With the cross polarizer attached, the EyeSpecial C-V allows you to look inside a tooth: Chroma, internal light effects and individual tooth characteristics are visualised without being distorted by light reflections occurring on the enamel surface. Shade and colour effects of hard and soft tissues can also be assessed more accurately when using the cross polarizer.

The cross polarizer is designed in such a way that the polarizing components are positioned at right angles to the flash and lens part, eliminating any reflections on the tooth surface.



Without cross polarizer

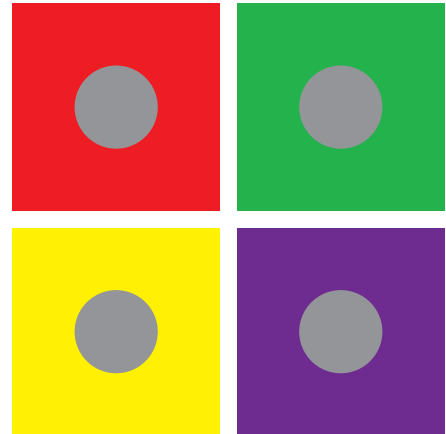


With cross polarizer

Make the same look the same

The human eye cannot see colours objectively. Various factors, such as light conditions, individual vision, surface structure and surroundings, strongly influence the way we perceive colours.

In tooth shade perception, the contrast between teeth and adjacent gums plays an important role. For instance, teeth may look more conspicuous when gums are very red – this is referred to as a contrast effect.



Example of a contrast effect:
The grey dots are exactly the same shade, but look different due to the different background colours.

In general, natural teeth appear yellowish-green when viewed against a background with gums, as compared to a background without gums. Besides, the shade guide appears brighter in a dark intraoral environment. The reason is often an optical illusion. It is caused by the fact that we usually assess the shade tabs against the dark background of the oral cavity without the pink gum tissues. This may lead to incorrect decisions in shade determination, which then need to be corrected in the laboratory after the restoration has been made.



The gingiva-coloured SHOFU Gummy-V shade tab holder effectively helps you to accurately determine tooth shades intraorally, using the VITA* Classical shade guide, and avoid optical illusions – because teeth and shade guide will then be viewed and assessed under the same conditions.

Proper shade matching in three steps



1. Analyse the basic shade

First determine the tooth shade with a conventional shade guide. If possible, select three suitable shade tabs to determine the basic shade.



2. Select a Gummy-V

Select the Gummy-V matching the patient's gingival situation as closely as possible. Gummy-V comes in four colours: Light, Medium, Dark and Violet.



3. Perform a final check

After determining the basic shade with one or more shade tabs, place the tabs in the Gummy-V. Make sure that the cervical areas can no longer be seen, if possible, and check the shade.

Photo documentation

It is advisable to support visual shade matching by precise photo documentation. Photographic comparison of the natural tooth shade with the corresponding shade tabs provides important additional details.



These photos were taken using the EyeSpecial C-V in the "Isolate Shade" mode.

A high-quality photo gives your dental technician useful information on the shape and other individual characteristics of the tooth, such as enamel cracks or white spots. It also creates a realistic impression of the natural oral situation.

The SHOFU Gummy-V is suitable for both dental clinicians wishing to determine the tooth shade chairside and play it safe, and dental technicians offering shade determination, e.g. for anterior crowns, as a service to the dentists they work with.

EyeSpecial C-V – Specifications

Sensor

Type	Primary colour filter, CMOS sensor
Size	1/2.3 inch
Total pixels	Approx. 12 million (4,163 x 3,062)
Effective pixels	Approx. 12 million (4,000 x 3,000)
Sensitivity	ISO 100 to 3,200

Lens

Focal length (35 mm equivalent)	50 - 217 mm (total 8 focal lengths)
Maximum aperture	Wide: 4.6 - 5.3 Tele: 6.5 - 7.5
Zooming method	Optical and digital zoom
Digital zoom	10 steps from x1.05 to x2
Optical filter	IR cut filter

Autofocus

Method	Contrast autofocus
AF area	Center-weighted / spot
Focus mode	Photo: Single shot autofocus and manual focus by adjusting the distance Movie: Continuous autofocus
AF assist light	4 white LED lights

Automatic Exposure (AE)

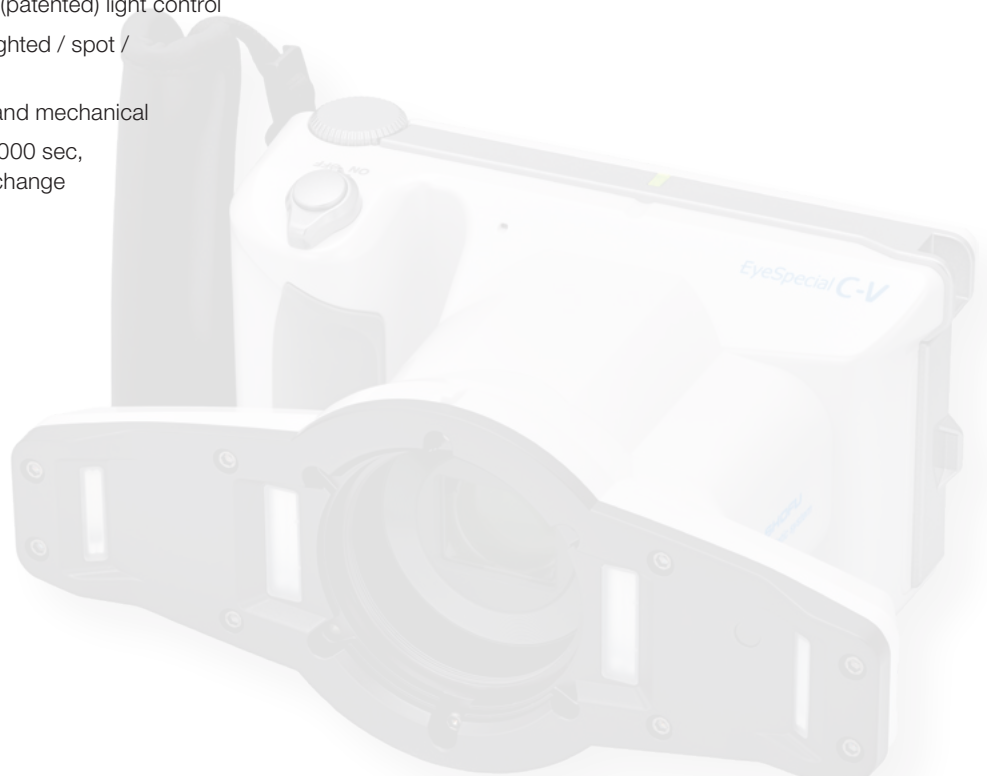
Method	TTL (through the lens) metering / FlashMatic (patented) light control
AE area	Center-weighted / spot / standard
Shutter release	Electronic and mechanical
Shutter speed	1/15 to 1/1,000 sec, automatic change

Image storage

Storage media	SD/SDHC/SDXC card (max. 512 GB)
File format	JPEG / MOV (with patient information file (.MIF))
SD card record format	DCF (standard / date)
Photo size (JPG)	Aspect ratio 4:3 12M / 8M / 5M / 3M / 2M / VGA Aspect ratio 3:2 10.6M / 8M / 4M / 3M
Movie size (MOV)	HD (1,280x720), 59.94 fps
Image quality	Extra fine / fine / standard
Information imprinting	Date and time + shooting conditions + patient information

Camera

Power supply	4 alkaline AA batteries / 4 rechargeable nickel metal hydride batteries (NiMH)
External power supply	None
Power save function	Off / 1 / 2 / 3 / 5 min
Dimensions	W 176 x H 80 x D 115 mm (without accessories)
Weight	Approx. 540 g (without accessories)
Water resistance	Complying with IPX4
Chemical resistance	Ethanol disinfection
WLAN specification	Standards compliance: IEEE802.11 b/g/n/a/ac Security: WEP, TKIP, AES



Order information



- Camera EyeSpecial C-V
- Close-up lens (49 mm) from Kenko
- Lens cap
- Hand strap
- 16 GB SDHC memory card
- SHOFU gray card
- User manual
- Quick reference
- Important safety instructions

REF E0027



REF E0027NK

REF	Product
E0027	EyeSpecial C-V incl. accessories
E0022	Cross Polarizer
E0002	Hand strap
E0004	SHOFU gray card
E0005	Lens cap
E0027NK	Case for EyeSpecial C-V
P0510	SHOFU Gummy-V set, Shades: Light, Medium, Dark, Violet (1 each)



REF P0510



* VITA is a registered trademark of VITA Zahnfabrik, Bad Säckingen, Germany.



SHOFU INC. 11 Kamitakamatsu-cho, Fukuine, Higashiyama-ku, Kyoto 605-0983, Japan
SHOFU DENTAL GmbH An der Pönt 70, 40885 Ratingen, Germany, www.shofu.de

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