



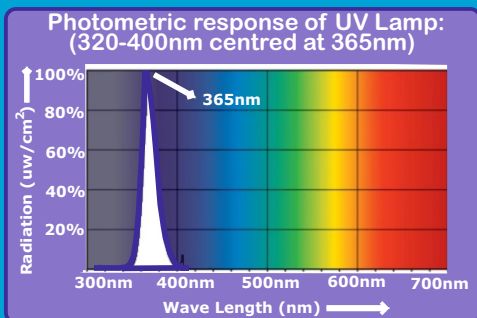
An ISO 9001:2015 Certified Co.

BIS Approved
IS 15885 (Part 2/
Sec 13):2012



R-72001511

HAND BOOK & INSTRUCTION MANUAL OF WOODS LAMP (UV BASED EXAMINATION SYSTEM)



A Unique & Innovative device helps to diagnose & identify various skin conditions having pigmentary, infections & skin imperfecion such as: Vitiligo, Melasma, Fungal, Bactarial, Scabies, Corneal abration, Porphyria, Acne, Aging, Milia, Forensic & Scientific applications and many more.....



ABOUT US:

Vision Tech Electronics was established during the year 2000 in Ahmedabad (Gujarat, India) and attained the Registered trade mark (Under Trade Mark Registry, class 9 & 11, Govt. of India), entitled: **VISION TECH**

Vision Tech Electronics is an ISO 9001:2015, CE Certified, ROHS, Certified. Our AC TO DC Control gears are approved by BIS (BUREAU OF INDIAN STANDARD). We have wide experience, more than 20 yrs in highly specialized Lighting and UV related applications and apparatus.

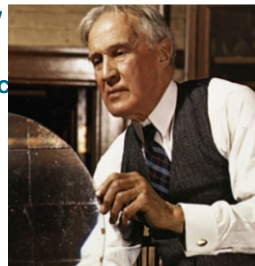
We are very delighted and confident to present **Woods Lamp** with State of The Art Technology which will be inseparable device for Dermatologist/skin experts. In addition to this device has become versatile asset for General Practitioner too!

Problems of conventional Woods Lamp:

Most of the available brands of Woods Lamp are very conventional, improper and inadequately designed. Therefore most of skin experts face the visibility issues and feel uneasy to diagnose, while examining the various typical skin ailments.

Why VISION TECH make Woods Lamp?

Vision Tech Electronics has brought excellent solution of the above discrepancies by optimizing State of The Art Technology in Woods Lamp, exhibiting the excellent Parameters, i.e: Geometrical, Optical, Electrical along with UV system & Ray Optics. Before going in to technical details, we need to know certain back ground along with associated diagnostic back ground associated diagnostic applications and images.



What is Woods Lamp?

In 1903, The tool, invented by American physicist Robert W. Wood, so popularly known as "Woods Lamp".

Physics and working principle of Woods Lamp:

Tube/Lamp, which comprises woods filter (made up of Barium Silicate & 9% Nickel oxide) allows to radiates Ultra Violet Light (UVA) lower wave length, range between, 320nm to 400nm (with peak at 365nm) & exposed on desirable area/skin to be diagnosed. Photons, hitting the skin are either reflected, scattered, transmitted or absorbed. As per surface conditions / Anatomical features, higher wave length (400nm-700nm) in visible range is re-emitted by exposed area. This phenomenon is known as Fluorescence.

What can be diagnosed by Woods Lamp?

ABNORMAL PIGMENTATION:

-Vitiligo/Leucoderma/Safed daag

is a chronic autoimmune disorder that causes white patches of skin due to loss of melanin

-Melasma is grey-brown discolored patches of skin area on face

-Tuberous sclerosis

is rare genetic disease seen in infants, characterized by hypo-pigmented skin and difficult to perceive through naked eye, but easily visible under woods lamp in the form of leaf shaped white spot.

-Lentigo Maligna:

is melanocytic neoplasm (unusual skin growth), having larger flat or slightly slightly raised brown patches on sun exposed facial area, middle to old aged are more pron to happen.

-Freckles:

are small red to brown spots, usually on facial area to middle to old aged caucasian and asian habitant due to overexposure of sun)



VITILIGO
(BRIGHT BLUISH WHITE)



MELASMA
(GREY BROWN)



**TUBEROUS
SCLEROSIS**
(NORMAL WHITE)



LENTIGO MALIGNA
(BLACK)



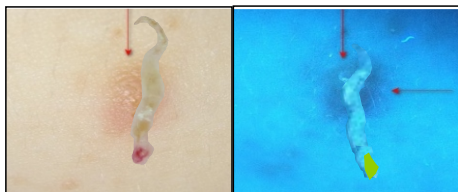
FRECKLES
(BROWN-BLACK)

PARASITE INFECTION:**-SCABIES:**

is contagious, intense itchy skin, parasitic infestation caused by *Sarcoptes scabiei* var *hominis* and due to eggs laid by tiny Mites under microscopic burrows.

-PEDICULOSIS CORPORIS:

is infectious skin condition by head lice bites, cause small, red, pin point holes in the skin, further hives are formed and due to intense scratching, skin is broken, results in bacterial infection.



SCABIES
(GREENISH TIP)



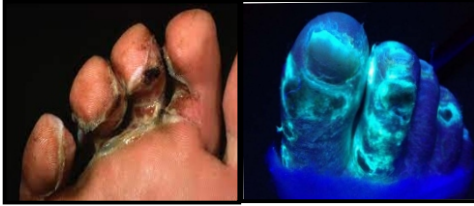
HEAD LICE
(BLUISH-GREENISH)

BACTERIAL INFECTION:**-Pseudomonas:**

is type of bacterial infection due to contaminated water & surfaces. It presents with dusky red to bluish green skin discoloration and purulent discharge with typical fruity or mouse like.

-Erythrasma/corynebacterium:

is caused by Corynebacterium and seen in skin fold, groin and intertriginous sites. Patients having Diabetic, obese and poor hygiene conditions are more prone and infection is seen in form of reddening and browning scaly patches.



**PSEUDOMONAS
(BRIGHT GREEN)**



**ERYTHRASMA
(CORAL-RED)**

-ACNE VULGARIS(BACTERIAL ACNE)

When hard lumps deep inside skin, due to trapped propioni bacterium along with sebum & hair follicles leading to painful infection & ultimately appears on the skin as red bumps.

This condition is known as Acne Vulgaris (Bacterial Acne).



**ACNE VULGARIS (BACTERIAL)
(CORAL-RED)**

-BLACK HEADS / WHITE HEADS (BACTERIAL)

In case of Black heads, in large opening pores, bacteria (propioni bacterium) are trapped along with sebum, dead skin and hair follicle, this leads to chemical reaction in which melanin is oxidized and appears black at openings.

In case of white heads, in closed pores, bacteria (propioni bacterium) are trapped along with sebum, dead skin and hair follicle and pores are covered with thin layer of skin, appears white at pore opening portions.

When above both conditions are diagnosed by woods lamp, due to presence of bacteria, they look coral red -orange color.



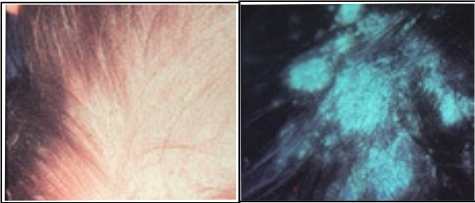
**Black Heads / White Heads (Bacterial)
(CORAL-RED-ORANGE)**

FUNGAL INFECTION:**-TINEA CAPITIS:**

is type of fungal/ring worm infection on scalp, damages outer root of hair follicle results in itchy, scaly, bald patches.

-PITYRIASIS / TINEA VERSICOLOR:

is type of fungal/ring worm infection of with flaky dis-coloured patches appears on chest and back



TINEA CAPITIS
(BLUE GREENISH)



PITYRIASIS/TINEA VERSICOLOR
(PALE YELLOW TO WHITE)

-DANDRUFF/MALASSEZIA:

Major culprit of dandruff is fungus called Malassezia. Mostly this fungus exists on scalp of adults. It feeds on the oil of the scalp. There is formation of oleic acid, which results in break down of skin in to small pieces of flakes near by the hair, forehead or shoulder.

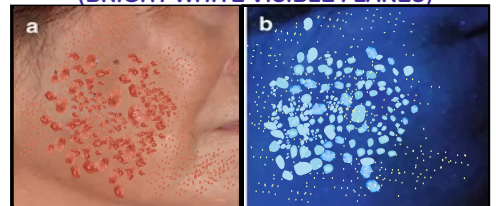


DANDRUFF / MALASSEZIA
(BRIGHT WHITE VISIBLE FLAKES)

-ACNE (FUNGAL):

Fungal Acne is skin condition, that occurs when hair follicles get infected with fungus called Malassezia.

This condition also is known as Malassezia folliculitis. These type of acne are itchy but not painful.



ACNE (FUNGAL)

(BRIGHT BLUISH-YELLOW)

-BLACK HEAD / WHITE HEADS (FUNGAL):

This is similar condition as discussed earlier Black/ White heads, but only difference is that, in this case source of infection is fungus (Malassezia).

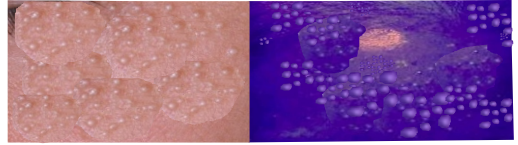
When above both conditions are diagnosed by woods lamp, due to presence of fungus, they may look Bright Greenish Blue/Yellow.

NOTE: We might have noticed that with the help of Woods Lamp we can detect and differentiate very easily, whether Acne/Black head/White head skin condition is due to Bacterial infection or Fungal infection or even sometimes combined infections. Otherwise non identifiable condition may lead to wrong treatment and and worsen the results.

DIAGNOSTIC CONTRIBUTION OF WOODS LAMP IN OTHER COMMON SKIN DISEASES AND HEALTH RELATED WELL KNOWN DISORDERS:

-MILIA (MILK SPOTS):

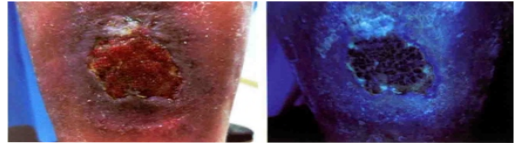
Trapped dead skin cells that form cysts below the epidermis surface of the skin. The tiny white bumps usually appears on facial parts.



MILIA (MILK SPOTS)
(BRIGHT YELLOW)

-SKIN ULCER:

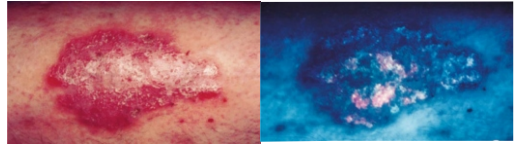
is result of injury, leading to serious open wound with poor circulation and pressure, left untreated for long time, there is bloody puss filled discharge with foul odor may bring out so many complications.



SKIN ULCER

-PSORIASIS:

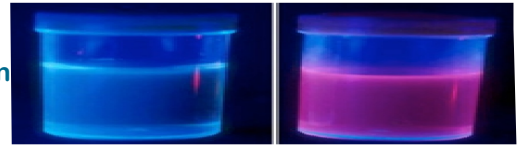
is Autoimmune chronic disorder, that causes plaque of red skin, rashes with silver coloured protruded scaly patches. Some times it becomes so painful and interferes day to day life.



PSORIASIS
(RED WITH AUTO FLUORESCENCE)

-PORPHYRIA:

represents a deficiency of a specific enzymes needed for the Heme, is essential for the transportation of oxygen to cells in the body. Can be detected in Urine, Blood or Stool.



NORMAL URINE

Urine from patient
with Porphyria

-CORNEAL ABRASION:

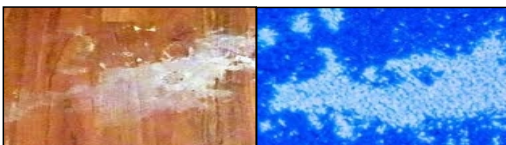
Scatched eye or Corneal Scratch due to eye injury



CORNEAL ABRASION

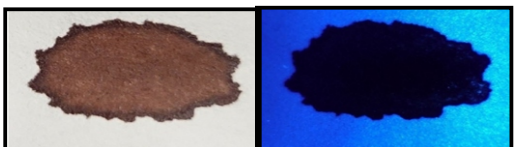
WOODS LAMP IN PATHOLOGICAL / FORENSIC APPLICATIONS:

-URINE STAIN:

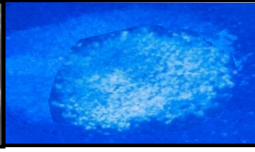
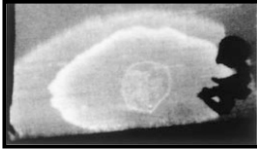


(GLOWING WHITE)

-BLOOD STAIN:



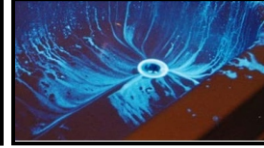
(BLACK)

-SEMEN STAIN:

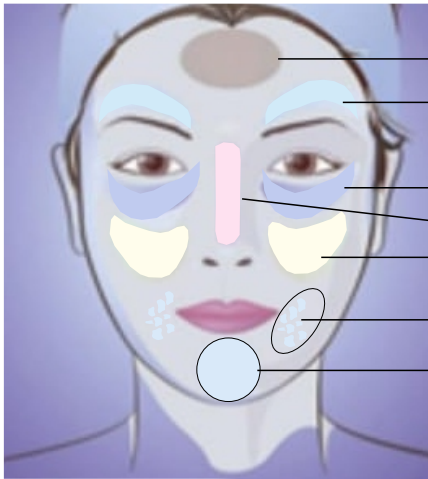
(BRIGHT WHITE)

-VAGINAL DISCHARGE STAIN:









(WHITE GLOW)

-SALIVA STAIN:

(WHITE FLUORESCENCE)

GENERAL ANALYSIS OF SKIN TO DETECT TYPE OF SKIN WITH WOODS LAMP:

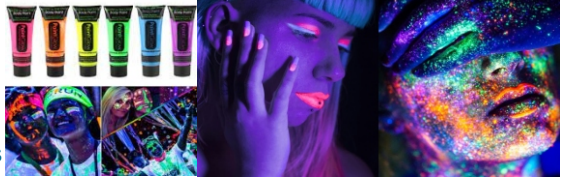
- Hyperpigmentation
- Normal Healthy Skin
- Dehydrated/dry Skin
- oily area
- Dead Skin Cells
- Thick Corneum Layer

	FLUORESCENCE	SKIN CONDITION
	Blue - White	Normal Healthy Skin
	Light Violet	Dehydrated / dry Skin
	White Spots	Horny layer of dead skin cells
	White	Thick Corneum Layer
	Brown	Hyperpigmentation
	White Spots	Horny layer of dead skin cells
	Yellow orange	Oily area
	Light Pink(Some Times)	Oily area

OTHER MISCELLANEOUS USES OF WOODS LAMP:

COSMETIC INDUSTRIES:

- To check Various shades used in makeup and relevant applications, SPF value of sun screen ointments or lotions, examine cosmetic allergies



BANKS/FINANCIAL INSTITUTIONS :

- To detect fake papers, Counterfeit currency



LAW ENFORCEMENT:

- To detect authenticity of documents, signature or in cases of forgery, such as: Property / Legal documents, Adhaar card, Pass Port, Driving Licence legal Certificates etc.



BOTANY:

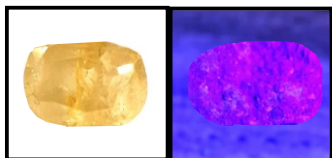


GEMOLOGY / MINEROLOGY:

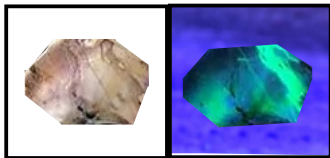


DIAMOND/OPAL

RUBY CRYSTAL



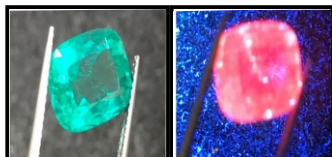
TOPAZ/PUKHRAJ
(JUPITER)
(Coral Red Fluorescence)



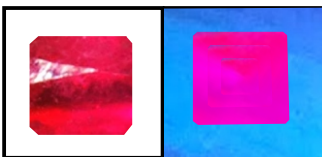
TIFFANY MINERAL
(Wisdom & Psychic energy)
(Greenish Fluorescence)



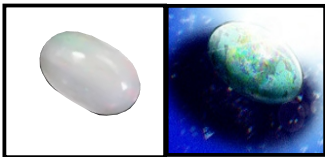
BLUE SAPPHIRE/NEELAM
(SATURN/SHANI)
(Coral Red Fluorescence)



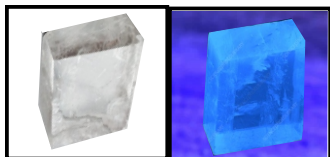
EMERALD/PANNA
(BHUDH/MERCURY)
(Red-Orange Fluorescence)



RUBY/MANIKYA
(SUN/LEO)
(Strong Coral Red Fluorescence)



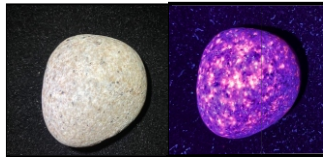
OPAL
(VENUS/SHUKRA)
(Sea Green Fluorescence)



CALCITE
(ENHANCES INTELLECT)
(Blue Fluorescence)



REAL DIAMOND
(CONFIDENCE, PROSPERITY)
(Strong Blue Fluorescence)



SODALITE
(GOOD LUCK, FORTUNE)
(Orange Fluorescence)

OTHER MISCELLANEOUS USES:

- To check Authenticity of drugs and medicines, Pharmacology, Zoology, Species Entomology (Branch to study of various insects), Toxicology (Study of poisons), Molecular Biology, Enzymology (study of enzymes), Study of various Bacteria, Fungus, Parasites, Veterinary doctors confirm type of infections to pets, Dentistry, Night clubs use to check re-entry stamps, Archeology, Rock Hunting, Dyes, Printography, Flexography, Photography, Art Galleries, Refrigerators and Air Conditioning system, Detection of minute cracks & leakages in boilers, Pipes, Cylinders, Insect Trapping, Antiques, Art, Sculptures, Curing Resins-Hardeners, Identifying the certain fruits whether rippen/rotten and many more.....



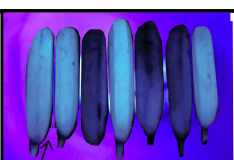
IMPLANTED TOOTH



IMPLANTED TOOTH
(Under woods lamp)



RIPPEN BANANA



UN RIPPEN BANANA

RIPPEN BANANA
(Fluorescence Glow)

TECHNICAL DESCRIPTION OF WOODS LAMP:

AESTHETIC/GENERAL FEATURES:

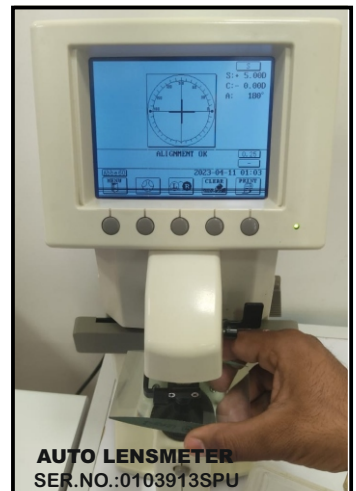
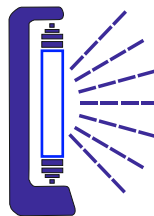
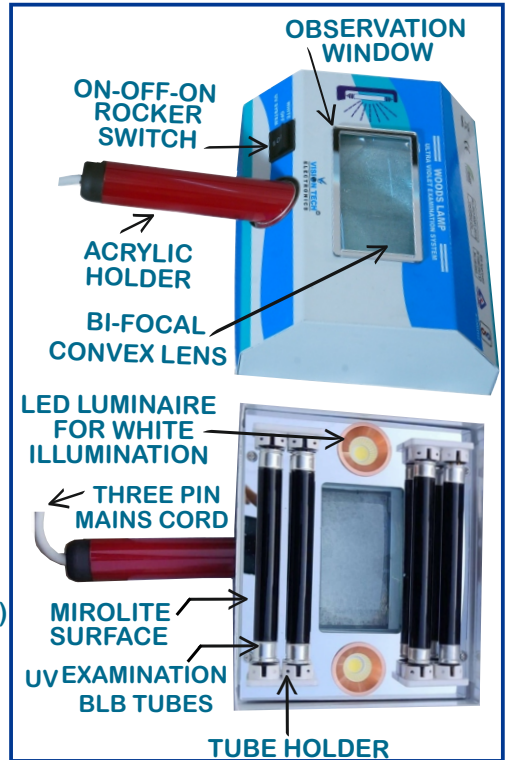
- Body: Metallic Powder Coated+Acrylic
- Weight: 990 gm
- Main Body Dim.:190mmx160mmx68mm
- Holder Dim.(LxD):125mmx27mm
- Observation Window:90mmx45mm
- Aesthetic Graphics
- Perfect Balanced Geometrical Dimension
- Ideal for Skin Experts/Dermatologists
Cosmetologist/Beautician/Gemologists
Forensic/Bankers....

OPTICAL PARAMETERS:

- Observation Window:90mmx45mm
- Field of view:200mmx160mm
- 4xOriginal Philips UV, BLB Tube for very prominent UV Examination system
- Well focused, 2xLED Luminaries system for white illumination (Brand:Bridge Lux) imitates operation theater light such as good visibility without shadowing effect.
- CCT:6000K, CRI>70
- Complete Mirolite surface beneath the tubes to avoid any type of Light/UV system depreciation/Absorption
- **Optically grounded bi-focal convex lens:**
Magnifying Power:5 Dioptr
Focal Length:20cm
Magnification factor:2.25X

ELECTRICAL PARAMETERS:

- Mains supply voltage: 230Vac, 50Hz
- SPD>6KV
- Rocker switch, Type: ON- 0 -ON
- Length of 3-Pin mains cord: 7.5 Ft
- 4x4W Original Philips UV, BLB Tubes
- 2x3W Led Luminaries system
- Premium quality of Industrial Electronic Ballasts have been used, which ensures longevity of UV Tubes
- Premium quality & BIS approved control gears for Led Luminaries have been used



CALIBRATION OF LENS

HOW DO YOU PREPARE YOURSELF FOR WOODS LAMP EXAMINATION:

- Before examination, your skin should be clean but not recently washed. Don't apply makeup, deodorant, creams or any applicators to your skin before the test. Because the ingredients in some of these products can lead mis-identification of the skin to be diagnosed. Hence results may be affected.

WHAT CAN YOU EXPECT DURING THE TEST:

- Make the room completely dark. This may involve turning off all the surrounding lights, Closing windows etc
- Plug in Three pin mains cord into three pin socket, switch on the mains switch
- Keep woods lamp away, i.e 10cm to 30cm, in order to get good focus of the skin/ object to be tested through observation window.
- In order to see skin condition / Object under white normal Light, as a prima facie, just toggle the Rocker switch position to upward
- In order to diagnose or identify the skin disorder / Object, toggle the Rocker switch downward, UV tubes will glow and radiation will be exposed. As per skin disease, there will be different skin texture, cellular anatomy or type of infection. There will be fluorescence of particular light in visible range and eventually skin disease could be identified.
- After this kind of diagnosis your skin expert can tell you the results immediately.

ANY SIDE EFFECT OR HARM DURING THE TEST:

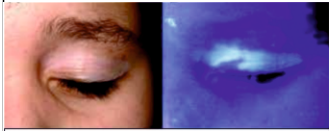
-There is almost not any side effect or harm or pain during test, because there is minimum time of exposure of the radiation in the test procedure and moreover, UV wavelength range and radiation intensity are at very safe level.

DISCLAIMER:

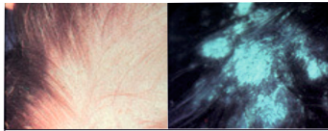
This hand book is designed to provide indicative guidelines and diagnostic ideas. Pictorial presentation or images of various skin conditions/objects may vary with respect to practical real images of fluorescence of device. Medical professionals or other experts in their fields are free to adapt, amend and reuse of either hand book or device.

Manufacturer will not accept any responsibility or liability for any harm or side effect that may arise from the guidelines or use of this device.

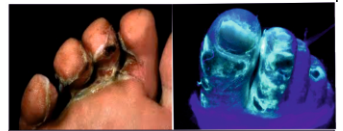
*** SPECIFICATIONS CAN BE CHANGED WITHOUT ANY PRIOR NOTIFICATION DUE TO CONTINUOUS R&D**



Vitaligo (Bright Bluish White)



Tinea Capitis (Blue Greenish)



Pseudomonas (Bright Green)



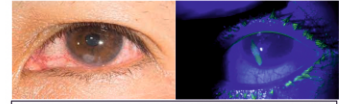
Dandruff / Malassezia (Pale Yellow to White)



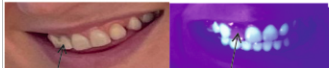
Black Heads/White Heads(Bacterial) (Coral Red Orange)



Milia / Milk Spots (Bright Spots)

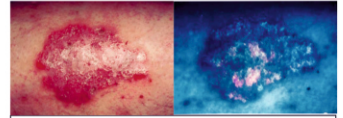


Corneal Abrasion



Implanted Tooth

Implanted Tooth

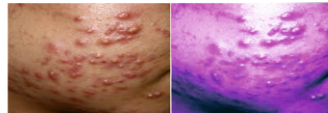


Skin Ulcer (Blackish)



Melasma (Grey-Brown)

Freckles (Brown-Black)



Acne Vulgaris (Bacterial) Coral-Red



Erythrasma (Coral-Red)

DEALERS DETAILS :

Mfg. By:



VISION TECH[®]
ELECTRONICS

C/9, Bansidhar Estate,
Opp. Suprabhat Industrial Estate,
O/s. Dariyapur Gate, Bardolpura
Ahmedabad (Gujarat, India)-380004.

Warranty: one year against any manufacturing defect



E-mail: info@visiontechproducts.com



Web Site: www.visiontechproducts.com



<http://www.youtube.com/@visiontechproducts>

