

# ColorDome

## Advanced Performance Ganzfeld Dome



**"Any color, any intensity, any duration"**

### Features

#### Advanced flash capabilities

- ColorDome™ has a *trillion-to-1* luminance range
- Flash duration from nanoseconds to hours
- Any color background from RGB and amber LEDs

#### Easy to use, ultimate performance

- Self-calibrating
- Full electronic color control
- Flash or flicker stimuli in any color & duration
- Multiple desktop and cart mount options

### Applications

- Disease diagnostics and monitoring
- Research and development
- Drug discovery and screening
- Clinical trials
- Neuro-ophthalmology

### Specifications

#### LED flash

Any color flash: from RGB & amber LEDs; UV LED also available

Red (627 nm), Amber (590 nm), Green (530 nm), Blue (448 nm)

LED sets produce 9 order-of-magnitude luminance range

Flash duration from nanoseconds to hours

Proprietary CIE compensation yields ultra-stable luminance & color output

Maximum white flash >60 cd·s/m<sup>2</sup> (6x ISCEV standard maximum flash)

On/off flashes of any duration, waveforms including sine & exponential, arbitrary wavetable

Calibrated in photopic and scotopic units as well as Trolands

User defined color and luminance stimuli

Auto calibration

#### Xenon flash

Xenon flash calibrated from 0.001 cd·s/m<sup>2</sup> to 2,000 cd·s/m<sup>2</sup>

Triple tube for wide range and linearity

Auto calibration monitors each flash & adjusts flash duration in real-time

Integral filter holder for adding customer filters if required

Max white flash 2,000 cd·s/m<sup>2</sup>

Calibrated in photopic and scotopic units as well as Trolands

Capable of double flashes including "double bright flash" protocol

#### Overall flash

Flash luminance range from 10<sup>-8</sup> to 2,000 cd·s/m<sup>2</sup>

Anywhere within this range, luminance can be changed with no less than 1% resolution



ColorDome shown mounted on optional Slider table stand

#### Industry leading protocols

- All ISCEV full-field tests
- C-wave
- Dark-adapted 30.0 ERG
- Dark-adapted long wavelength
- Direct current ERG
- Double flash ERG
- Early receptor potential
- Electro-oculography (EOG)
- Flash VEP
- Light-adapted luminance-response series
- Photopic On-Off
- Photopic negative response
- Saturated a-wave series
- Scotopic threshold response
- S-cone ERG
- Dark adapted Red Flash

#### With upgrade modules:

- Pupillometry
- Dark Adaptometry
- DiagnosysFST®

Not all products are available in every country and their use may be limited by local regulations. Contact your local Diagnosis representative for more information.



ColorDome shown mounted on optional power lift cart

## Background illumination

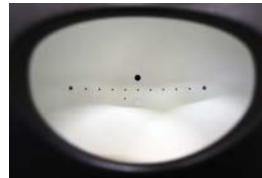
|   |
|---|
| Any color background (from RGB and amber LEDs)              |
| 6 order-of-magnitude luminance range                        |
| Calibrated luminance output in cd/m <sup>2</sup>            |
| Calibrated in photopic and scotopic units                   |
| Colors can be created using CIE coordinates or color picker |

## EOG test

|   |
|---|
| 9 red EOG LEDs spanning 60° as well as the standard 30°                 |
| Adjustable intensity and cycle time                                     |
| Can be cycled in square wave mode or sinusoidal mode                    |
| Configurable to have audible beep at the start of every cycle and sweep |
| Backgrounds up to 500 cd/m <sup>2</sup> white for non-dilated pupils    |

## Other features

|  |
|--|
| Infrared camera with IR LEDs built in; USB interface & video monitor output                            |
| Built in progressive audible buzzer to warn patients to get ready for next flash                       |
| User programmable arbitrary LED waveforms with 1ms resolution give full control of luminance and color |
| Optional dark adaptometry and FST modules  |
| Auto calibration of LED and xenon output   |



Inside the dome: infrared camera, standard EOG 30° as well as 9 red intermediate EOG LEDs

## Physical characteristics

|                    |   |
|--------------------|---|
| Dimensions (HxWxD) | 10.2 x 14.2 x 12.2 inches<br>(260 x 360 x 310 mm) |
| Weight             | 10 lbs (4.5kg) without stand                      |

## ColorDome ordering information

### ColorDome configuration

Model number: D125

Configuration: select 1 option per field below

|             |    |                         |
|-------------|----|-------------------------|
| <b>D125</b> | -  |                         |
|             | XR | Xenon, regular cable    |
|             | XS | Xenon, short cable      |
|             | NR | No Xenon, regular cable |
|             | NS | No Xenon, short cable   |



ColorDome shown mounted on optional table-top Operating Room stand (note: must be bolted to table for safety)



## Optional accessories

| Model | Description                     |
|-------|---------------------------------|
| D343  | Dark adaptometry module         |
| D355  | Pupillometry module             |
| D196  | FST module                      |
| D164  | Desktop stand                   |
| D191  | Normative database              |
| D147  | ColorDome recalibration service |
| D221  | ColorDome with UV LEDs          |

## Available on the following systems:

- Diagnosys *E<sup>3</sup>* desktop systems
- Diagnosys *Profile* cart-based systems
- Diagnosys *LabCradle* based systems

www.diagnosysllc.com

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