E³ System
Desktop Visual Electrophysiology System
**E³ with LCD Monitor System**

Our advanced high brightness and fast response monitors are custom engineered to enable very effective clinical diagnostic testing.

**E³ consoles** are paired with performance LCD monitors and integrated patient chin rest.

**32-Bit Amplifier**
Unprecedented 1 nano Volt resolution and illuminated receptacles guide lead insertion and electrode contact quality.

**Fixation Cameras**
Diagnosys offers a selection of high performance fixation monitoring cameras that integrate with Espion™ software.

**Pattern Stimulator**
Fully compliant ISCEV standard PERG and pVEP are delivered using the miniature OLED monitor which
**E³ with ColorDome System**

The world’s leading Ganzfeld stimulator, ColorDome™ has a trillion-to-1 luminance range and flash durations from nanoseconds to hours.

**E³ with ColorDome features:**
- Most compact Desktop system
- Integrated monitoring camera
- Regular and Operating Room arms

**Performance Leader**
Unmatched repeatability;
ERG responses from 15 different systems¹

**ColorBurst™**
Handheld Ganzfeld stimulator option; enables optimal Pediatric and Operating Room ERG testing

**ColorDome Modules**
Optional modules further expand system value:
- Pupillometry
- Dark adaptation
- Scotopic threshold

E³ System
Desktop visual electrophysiology system

E³ Features

3rd Generation advanced performance
• All visual electrophysiology tests possible
• Industry leading 32-bit amplifiers: <1 Nano-Volt resolution
• ColorDome™ has a trillion-to-1 luminance range
• Unprecedented ERG repeatability

Modular, full features, easy to use
• 5 powerful stimulators you can mix & match
• Most cost effective, compact system on the market
• Set up system and initiate testing in hours
• Unique, electrode testing amplifier speeds patient set-up
• Most widely used system world-wide

Choose from the broadest range of stimulators in the industry:

<table>
<thead>
<tr>
<th>Stimulator</th>
<th>ColorDome</th>
<th>ColorBurst</th>
<th>Performance LCD</th>
<th>19” CRT</th>
<th>Envoy Mini Pattern Stimulator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary use</td>
<td>Ganzfeld full-field ERG and EOG</td>
<td>Pediatric, OR, handheld Ganzfeld</td>
<td>Multi-focal ERG</td>
<td>Pattern ERG, VEP</td>
<td>Pattern ERG, VEP</td>
</tr>
<tr>
<td>Applications</td>
<td>Full range of retina functional test: clinical diagnostics, clinical trials, genetic research, Neuro-ophthalmology, R&amp;D, advanced diagnostics</td>
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</tr>
<tr>
<td>Configuration options</td>
<td>Tabletop, Operating Room, floor stand</td>
<td>With or without stand</td>
<td>With or without chin rest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protocols</td>
<td>ISCEV full-field ERG (6 tests)</td>
<td>ISCEV full-field ERG (6 tests)</td>
<td>ISCEV multi-focal ERG (mfERG)</td>
<td>ISCEV PERG</td>
<td>ISCEV PERG</td>
</tr>
<tr>
<td>Dark-adapted 30 ERG</td>
<td>Dark-adapted 30 ERG</td>
<td>Pattern VEP*</td>
<td>ISCEV mfERG</td>
<td>Multi-focal ERG</td>
<td></td>
</tr>
<tr>
<td>Long duration flash</td>
<td>Long duration flash</td>
<td>Uniform field PERG</td>
<td>ISCEV VEP</td>
<td>ISCEV Pattern VEP</td>
<td></td>
</tr>
<tr>
<td>Flash Visual Evoked Potential (VEP)</td>
<td>Flash VEP</td>
<td>Multi-focal PhNR (mfPhNR)</td>
<td>ISCEV Pattern VEP</td>
<td>Uniform field PERG</td>
<td></td>
</tr>
<tr>
<td>Uniform field PERG</td>
<td>Uniform field PERG</td>
<td>mVEP</td>
<td>Sweep VEP**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photopic negative response (PhNR)</td>
<td>PhNR</td>
<td>Uniform field PERG</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Scotopic threshold response</td>
<td>Scotopic threshold response</td>
<td>mfPhNR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double flash ERG</td>
<td>Double flash ERG</td>
<td></td>
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<tr>
<td>EOG</td>
<td></td>
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<tr>
<td>Pupillometry</td>
<td>Multi-focal VEP**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast scotopic threshold</td>
<td>Sweep VEP**</td>
<td></td>
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</tr>
</tbody>
</table>

Notes: 1) *Non-ISCEV standard protocol; 2) **currently in development at Diagnosys
### System specifications

**E³ Console**
- Advanced real-time acquisition system with integrated power isolation
- Direct pattern generator
- Isolated auxiliary line outlets to meet medical leakage current standards
- All-digital filtering
- Hardened, machined aluminum case

**Amplifier**
- Full DC 2-channel, fully differential, 32-bit amplifiers have 1 nano Volt resolution, which provide the highest resolution in the industry; ultra low noise
- 5 Volt input range, ensures amplifier will not over-range
- Common mode rejection: >100 dB

**Stimulators**
Refer to individual stimulator brochures

**Computer**
Desktop all-in-one computer or Tablet computer; Runs on Windows® 7 through 10

**Espion Software**
- Automatic rejection
- Peak/trough detect & measure
- SQL relational database
- Multiple operator modes

**Cameras**
Included with ColorDome and LCD monitor

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>E³ Console (WxDxH):</th>
<th>Computer (typ, 22” all-in-one):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17 x 13 x 3.4 inches (432 x 330 x 86 mm)</td>
<td>21 x 14 x 2.5 inches (533 x 356 x 64 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weight</th>
<th>E³ Console:</th>
<th>Computer (typ, 22” all-in-one):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27 lbs (12.2 kg)</td>
<td>14 lbs (6.4 kg)</td>
</tr>
</tbody>
</table>

### E³ system configurations

**Model number:** D315  
**Configuration:** select 1 option per field below

Note: all systems come with an E³ console, 32-bit amplifier with stand, computer, Espion software and starter accessory kit.

#### E³ system configurations

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CDXSL</td>
<td>ColorDome with Xenon (includes regular cable) with power supply, desktop stand and chin rest</td>
</tr>
<tr>
<td>1</td>
<td>CDXRL</td>
<td>ColorDome with Xenon &amp; desktop OR stand (includes long cable), with power supply, and chin rest</td>
</tr>
<tr>
<td>2</td>
<td>CDNLS</td>
<td>ColorDome with NO Xenon (includes regular cable) with power supply, desktop stand and chin rest</td>
</tr>
<tr>
<td>2</td>
<td>CDNRL</td>
<td>ColorDome with NO Xenon &amp; desktop OR stand (includes long cable), with power supply, and chin rest</td>
</tr>
<tr>
<td></td>
<td>CDXFL</td>
<td>ColorDome with Xenon &amp; Floor Stand (includes long cable)</td>
</tr>
<tr>
<td></td>
<td>CDFNL</td>
<td>ColorDome with NO Xenon &amp; Floor Stand (includes long cable)</td>
</tr>
<tr>
<td></td>
<td>NNNN</td>
<td>No ColorDome</td>
</tr>
</tbody>
</table>

#### Optional accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D343</td>
<td>Dark adaptation module (w/ColorDome)</td>
</tr>
<tr>
<td>D196</td>
<td>Scotopic threshold module (w/ColorDome)</td>
</tr>
<tr>
<td>D355</td>
<td>Pupillometry module (w/ColorDome)</td>
</tr>
<tr>
<td>D354</td>
<td>19&quot; CRT</td>
</tr>
</tbody>
</table>

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Espion™ software provides detailed test reports that are concise and easy to interpret (ISCEV standard mfERG tests using the E³ system with an LCD monitor shown).

The industry leader.
Decades of experience, thousands of installations.

- Most experienced customer support team in the industry
- Hundreds of peer-reviewed papers published using our systems
- Extensive world-wide network of leading experts operating Diagnosys systems

Ordering information:

Model #: D315

System options:
- Normative data (ERG and/or mfERG)
- DICOM print module
- Dark adaptation module (w/Red Profile)
- Scotopic threshold module (w/Red Profile)
- Pupillometry module (w/Red Profile)
- 19” CRT high performance stimulator for ISCEV PERG and VEP