Supplying Solutions.
VIVA Innovation.

1999  Mini Twist 13W
2002  Pin Based Ballasted Socket
2002  Line Voltage Socket
2004  Pin Based integrated CFL
2005  Low Profile Spiral Lamps
2005  Low Profile Pin Base integrated CFS
2006  Integrated Circline Systems
2007  Two Wire Dimming Solutions
Energy Star
Line-Voltage Socket Design History

In the event we don’t know or can’t remember, the LVS GU24 design and evolution history can be viewed at:

http://www.lrc.rpi.edu/programs/lightingTransformation/lineVoltage/index.asp


The majority of permanently installed lighting fixtures for newly built homes and ones to be remodeled must be high efficiency.

Fixtures with screw based sockets will not be considered as high efficiency fixtures. All high efficiency fixtures 13W or higher must use electronic ballasts.

For more information: www.energy.ca.gov/title24/
The Line Voltage Socket

- New additional Designs Currently Available
- Capable of mounting in all categories of Lighting
- Versatile positioning with enhanced light output
- Engineered to support decorative components
- Standard wiring procedures to conform with UL
- Economic solution for inventory & manufacturing
- Convenient ballast replacement
- Meeting all Certification and Agency requirements
- Anticipate ANSI acceptance spring of 2006
The Concept

Pin Base GU24 Integrated Socket Ballast

- The Pin Base systems are widely accepted
- 1 million Socket Ballast systems applied in 2005
- 2006 is anticipating doubling the 2005 systems
- Designers are requesting new lamp configurations
- New Pin Base products are being designed
- Existing products redesigned to accept Pin Base
- Manufacturers support the use of Pin Base (GU24)
- GU24 is becoming a basic component in the industry
GU24 (LVS) Socket Ballast Solutions for all applications

Available Wattage range from 10 to 42

- Low Profile
- Medium Profile
- Standard Profile
- High Profile (not shown)
- Traditional
Supplying Solutions.

Lamp Solutions for all GU24 Socket Ballast applications

Available Wattage range from 10 to 42 watts
Super compact as compared to current lamps
All Kelvin Ranges available

<table>
<thead>
<tr>
<th>Wattage</th>
<th>Length</th>
<th>Diameter</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>44mm</td>
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<td>13</td>
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<td>32</td>
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<tr>
<td>42</td>
<td>93mm</td>
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</table>
New Lamps for Integrated Socket Ballast

- Design applications demanded new configurations of CFL lamps
- Lamps that maintained all the required specifications
- Lamps that complemented the integrated Socket Ballast Systems

13 watt MOL 86mm
Diameter 75mm

18 watt MOL 55mm
Diameter 75mm

26 watt MOL 95mm
Diameter 75mm

- New lamps are now available for GU24 Socket Ballast
- Wattage range from 10 to 100 watts
- Various diameters available from 50mm to 80mm
- More compact when compared to similar incandescent wattage
GU24 Pin Base Integrated Lamp and Ballast

Integrate the Lamp and Ballast to provide an economical solution for the consumer when purchasing replacement components.

Utilize Universal Pin Base Connection to accept all One Piece integrated lamp and Ballast wattages. 13 watt thru 55 watt

Create a simple solution that provides the consumer easy selection of replacement or wattage upgrades.

Provides easy installation of replacements.

Energy Star Version 4.0 Compliant.
GU24 (LVS) Integrated Lamp & Ballast Solutions

Available in 13 thru 42 watts in all Kelvin Levels
Currently listed on Energy Star Platforms.

13 watt
Diameter  MOL
55mm     82mm
75mm     50mm

18 watt
Diameter  MOL
55mm     90mm
75mm     55mm

26 watt
Diameter  MOL
75mm     95mm
GU 24 Line Voltage Socket (LVS) Circ line

Energy Star 4.0 Requires ballast be replaced without the cutting of wires.

GU24 (LVS) ballast systems that address this requirement.

GU24 Line Voltage Socket

Circ line Ballast with Terminal Block

GU24 Circ line Ballast

Ballast For T6- 40 watt - 70 watt

T9- 22 watts to 70 watts.

www.vivalighting.com
VIVA Dome Spiral Concept (VDSC)
VIVA Dome Spiral System (VDSS)

Full Spiral Lamps for applications were more decorative lamps are desirable and Circline is objectionable

Wattage range from 26 32 42 55 70 85 100
GU24 (LVS) Pin Base has Emerged for all applications

All Solutions are Energy Star Listed

Circline Solutions

Integrated Lamp & Ballast Solutions

Integrated Socket & Ballast Solutions
The Dimming Solution

Currently Available:

• Remote 55 and 70 Circline full range dimming.
• On board (4 wire) 55 and 70 full range dimming.

Development Currently in Testing:

• Two wire 55 and 70 watt Circline dimming pending Test Completion
• Target availability late fall 2006
• Lower wattages undergoing redesign and testing
Industry Associates...

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• Contact us! 1-888-898-8184 or @

• viva.solutions@lvcoxmail.com