This fixed-focus lens is designed for use with Panasonic’s applicable projectors. This lens is an ultra-short focal length lens which uses a mirror.

**Specifications**

- **F value:** 2.0
- **Focal distance (f):** 5.3 mm
- **Throw ratio:**
  - WUXGA: 0.380:1 for PT-RZ120/RZ970/RZ870/RZ870B/RZ660/DZ870/DZ780 (16:10 aspect ratio)
  - WXGA: 0.399:1 for PT-RW930/RW730/RW620/DW830/DW750 (16:10 aspect ratio)
  - XGA: 0.394:1 for PT-RX110/DX110/DX820 (4:3 aspect ratio)
- **Dimensions (W × H × D):** 132 × 102 × 311 mm (5-3/16 × 4-1/32 × 12-1/4 inches)
- **Weight:** Approx 1.3 kg (3.1 lbs)
- **Applicable projector:**
  - [Group A]: PT-DZ870K/DZ870LK/DZ870W/DZ870LW/DW830K/DW830LK/DW830W/DW830LW/
    DX100K/DX100LK/DX100W/DX100LW
  - [Group B]: PT-RZ120B/RZ120W/RZ120LB/RZ120LW/RZ970W/RZ970LB/RZ970LK/
    RW830B/RW830W/RW830LB/RW830LW/RZ780W/RZ780LB/RZ780LW/RZ780W/RZ780LB/
    RZ780LW/RX110B/RX110W/RX110LB/RX110LW/
    RW620B/RW620W/RW620LB/RW620LW
  - [Group C]: PT-DZ780/DZ780L/DW750/DW750L/DX820/DX820L

**Dimensions**

Illustration shows the lens attached to an applicable projector.

Note: This illustration is not drawn to scale.
For information on the projection distance, refer to the specifications for the projector to which the lens will be mounted.
DLP is a trademark of Texas Instruments. Weights and dimensions shown are approximate. Specifications subject to change without notice.
### Projection Distance Calculation Table

**Screen aspect ratio 16:10**

<table>
<thead>
<tr>
<th>Screen aspect ratio</th>
<th>Projection distance calculation formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:10</td>
<td>L₁ (m) = 0.3205 x Diagonal image size + 0.0047</td>
</tr>
</tbody>
</table>

**Calculation formula for distance from top of set to bottom edge of screen**

- **RZ120/RZ970/RZ870/RZ770/RZ660/DZ870**:  
  \[ A₁ (m) = 0.1977 \times \text{Diagonal image size} - 0.0721 \]
- **DZ780**:  
  \[ A₁ (m) = 0.1977 \times \text{Diagonal image size} - 0.0671 \]
Projection Distance Calculation Table

**Screen aspect ratio 16:10**

Projection distance calculation formula

\[ L1 (m) = 0.3365 \times \text{Diagonal image size} + 0.0047 \]

Calculation formula for distance from top of set to bottom edge of screen

\[ \text{RW930/RW730/RW620/DW830} \]

\[ A1 (m) = 0.2597 \times \text{Diagonal image size} - 0.0740 \]

\[ \text{DW750} \]

\[ A1 (m) = 0.2597 \times \text{Diagonal image size} - 0.0690 \]

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**Fixed-Focus Lens**

**PT-RW930/RW730/RW620/DW830/DW750**

16 : 10 (WXGA ; 1280 × 800)

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<table>
<thead>
<tr>
<th>Throw ratio</th>
<th>Diagonal image size (Inches)</th>
<th>Diagonal image size (m)</th>
<th>Height (SH)</th>
<th>Width (SW)</th>
<th>Projection distance (From mirror reflective surface to screen) (L1)</th>
<th>From tip of lens to screen (L2)</th>
<th>From front of set to screen (L3)</th>
<th>From rear of set to screen (L4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.399:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RW930</td>
<td>100</td>
<td>0.86</td>
<td>0.69</td>
<td>0.16</td>
<td>0.18</td>
<td>0.22</td>
<td>0.59</td>
<td>0.79</td>
</tr>
<tr>
<td>RW730</td>
<td>120</td>
<td>0.90</td>
<td>0.88</td>
<td>0.33</td>
<td>0.35</td>
<td>0.39</td>
<td>0.72</td>
<td>0.92</td>
</tr>
<tr>
<td>RW620</td>
<td>150</td>
<td>1.29</td>
<td>1.12</td>
<td>0.58</td>
<td>0.61</td>
<td>0.64</td>
<td>0.92</td>
<td>1.12</td>
</tr>
<tr>
<td>DW830</td>
<td>200</td>
<td>1.71</td>
<td>1.55</td>
<td>1.01</td>
<td>1.04</td>
<td>1.07</td>
<td>1.25</td>
<td>1.45</td>
</tr>
<tr>
<td>DW750</td>
<td>250</td>
<td>2.17</td>
<td>1.98</td>
<td>1.44</td>
<td>1.46</td>
<td>1.50</td>
<td>1.58</td>
<td>1.78</td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>2.67</td>
<td>2.40</td>
<td>1.86</td>
<td>1.89</td>
<td>1.92</td>
<td>1.91</td>
<td>2.11</td>
</tr>
<tr>
<td></td>
<td>350</td>
<td>3.17</td>
<td>2.83</td>
<td>2.29</td>
<td>2.32</td>
<td>2.35</td>
<td>2.24</td>
<td>2.44</td>
</tr>
</tbody>
</table>

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**Projection Distance Calculation Table**

**Screen aspect ratio 16:10**

Projection distance calculation formula

\[ L1 (m) = 0.3365 \times \text{Diagonal image size} + 0.0047 \]

Calculation formula for distance from top of set to bottom edge of screen

\[ \text{RW930/RW730/RW620/DW830} \]

\[ A1 (m) = 0.2597 \times \text{Diagonal image size} - 0.0740 \]

\[ \text{DW750} \]

\[ A1 (m) = 0.2597 \times \text{Diagonal image size} - 0.0690 \]
Fixed-Focus Lens

PT-RX110/DX100/DX820
4:3 (XGA ; 1024 x 768)

**Projection Distance Calculation Table**

<table>
<thead>
<tr>
<th>Screen aspect ratio 4:3</th>
</tr>
</thead>
</table>

**Screen aspect ratio 4:3**

**Projection distance calculation formula**

\[
L1 \ (\text{m}) = 0.3133 \times \text{Diagonal image size} + 0.0047
\]

**Calculation formula for distance from top of set to bottom edge of screen**

- **RX110/DX100**: \( A1 \ (\text{m}) = 0.1881 \times \text{Diagonal image size} - 0.0715 \)
- **DX82**: \( A1 \ (\text{m}) = 0.1881 \times \text{Diagonal image size} - 0.0665 \)

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**Ultra-short focal length lens ET-DLE035**

**Close-up system dimensions**

<table>
<thead>
<tr>
<th>Diagonal image size (Inches)</th>
<th>Height (Sh)</th>
<th>Width (SW)</th>
<th>Projection distance (from mirror reflective surface to screen) (L1)</th>
<th>From tip of lens to screen (L2)</th>
<th>From front of set to screen (L3)</th>
<th>From bottom of set to screen (L4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>2.54</td>
<td>5.0</td>
<td>6.7</td>
<td>2.6</td>
<td>2.7</td>
<td>2.1</td>
</tr>
<tr>
<td>120</td>
<td>3.05</td>
<td>6.0</td>
<td>8.0</td>
<td>3.1</td>
<td>3.2</td>
<td>2.6</td>
</tr>
<tr>
<td>150</td>
<td>3.81</td>
<td>7.5</td>
<td>10.0</td>
<td>3.9</td>
<td>4.0</td>
<td>3.4</td>
</tr>
<tr>
<td>200</td>
<td>5.08</td>
<td>10.0</td>
<td>13.3</td>
<td>5.2</td>
<td>5.3</td>
<td>4.7</td>
</tr>
<tr>
<td>250</td>
<td>6.35</td>
<td>12.5</td>
<td>16.7</td>
<td>6.5</td>
<td>6.6</td>
<td>6.0</td>
</tr>
<tr>
<td>300</td>
<td>7.62</td>
<td>15.0</td>
<td>20.0</td>
<td>7.8</td>
<td>7.9</td>
<td>7.3</td>
</tr>
<tr>
<td>350</td>
<td>8.89</td>
<td>17.5</td>
<td>23.3</td>
<td>9.2</td>
<td>9.2</td>
<td>9.6</td>
</tr>
</tbody>
</table>

**Unit : meters**

**Projection Distance Calculation Table**

<table>
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<tr>
<th>Diagonal image size (Inches)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>DX100</td>
<td>0.12</td>
<td>0.16</td>
<td>0.41</td>
<td>0.41</td>
<td>0.61</td>
<td>0.59</td>
</tr>
<tr>
<td>RX110 DX100 DX820</td>
<td>0.28</td>
<td>0.32</td>
<td>0.50</td>
<td>0.51</td>
<td>0.70</td>
<td>0.68</td>
</tr>
<tr>
<td>RX110 DX100 DX820 RX110 DX110 DX820</td>
<td>0.52</td>
<td>0.55</td>
<td>0.65</td>
<td>0.65</td>
<td>0.85</td>
<td>0.83</td>
</tr>
</tbody>
</table>

**Unit : feet**

L1: Projection distance (from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom of set to top of set
A2: From bottom edge of screen to bottom edge of set