



Double Black Imaging is pleased to offer you surgical displays which will enhance both new and existing surgical environments. These displays have been engineered to accept a wide variety of video signals, enabling your facility to easily work with legacy equipment, the latest in source technology, and everything in between.

These displays have been designed for one purpose and one purpose only: to provide physicians with a crystal clear picture during delicate procedures. The images provided are both smooth and artifact-free. This group of displays will handle multiple signal inputs and offer features such as touch screen technology in a variety of screen sizes.

The flexibility, quality and reliability of these displays will make them a welcome addition to your surgical space. These displays will mount securely to booms and yokes, as they are built to withstand the daily rigors of use in the OR. They perform well when needed, even after being moved around, bumped, adjusted and cleaned repeatedly.





# **About Double Black Imaging and our Image Systems Display Division**

We are proud to be the largest U.S. based medical display supplier and calibration software developer of displays used in diagnostic imaging. Our surgical solutions take advantage of our expertise in displays used in healthcare settings.

Our team has a renowned history of providing the industry's finest customer service, continually acknowledged by thousands of healthcare and I.T. professionals who put their trust in us every day.

We are dedicated to developing innovative imaging solutions that greatly improve image quality and usability. Making imaging more efficient and reducing healthcare costs are the cornerstones of what DBI stands for.



**Display Solutions** 

| Specifications          | C19SF   | C24SF  | C27SF  |
|-------------------------|---|--|--|
| Panel Type              | 19" TFT LCD   | 24" TFT LCD  | 27" LED  |
| Aspect Ratio            | 5:4   | 16:10  | 16:9   |
| Resolution              | 1280x1024   | 1920x1200 (WUXGA)  | 1920x1080  |
| Brightness              | 500 cd/m <sup>2</sup>   | 400 cd/m <sup>2</sup>  | 650 cd/m <sup>2</sup>  |
| Contrast Ratio          | 800:1 Typical   | 1500:1 Typical   | 1000:1 Typical   |
| Display Colors          | 16.7 Million  |  |  |
| Response Time           | 25ms  | 10 ms  | 14 ms  |
| Pixel Pitch             | 0.294(W)mm x 0.294(H)mm   | 0.27(W)mm x 0.27(H)mm  | 0.3114(W)mm x 0.3114(H)mm  |
| Viewing Angle           | R/L 170, U/D 170  | R/L 178,   | , U/D 178  |
| Backlight               | LED   |  |  |
| Dimensions (mm) WxHxD   | 423 x 351.5 x 76.5mm  | 575.4 x 392 x 82 mm  | 648 x 397 x 72 mm  |
| Dimensions (inch) WxHxD | 16.65 x 13.84 x 3.0"  | 22.66 x 15.43 x 3.23"  | 25.51 x 15.63 x 2.83"  |
| Weight (kg)             | 5.8 kg  | 7.5 kg   | 8.2 kg   |
| Weight (lbs)            | 12.79 lbs   | 16.53 lbs  | 18.08 lbs  |
| VESA Mounting           | 100 x 100   | mm, M4   | 100 x 100mm, 100 x 200mm   |
| Power Supply            | AC/DC Adaptor (AC 100-240V, DC 12V 7A)  | AC/DC Adaptor (AC<br>100-240V, DC 24V 5A)  | AC/DC Adaptor (AC<br>100-240V, DC 24V 6.25A)   |
| IP Rating               | IPX1 Liquid Resistant Housing   | IP33 Overall, IP44 Front Only  |  |
| Input Signal            | 1 x DVI-D<br>1 x VGA (D-sub)<br>1 x SD/HD/3G-SDI (BNC)<br>1 x C-Video (BNC)<br>2 x S-Video (Y/C) (BNC)<br>1 x Component<br>(RGBS,YPbPr) (5 x BNC) | 1 x DVI-D 1 1 x DVI-D 2 (fiber optional) 1 x VGA (D-sub) 1 x SD/HD/3G-SDI (BNC) 1 x C-Video (BNC) 1 x S-Video (Y/C) (2 x BNC) 1 x Component (RGBS,YPbPr) (5 x BNC) | 1 x DVI-D 1 1 x DVI-D 2 (optical fiber optional) 1 x VGA (D-sub) 1 x SD/HD/3G-SDI (BNC) 1 x C-Video (BNC) 2 x S-Video (Y/C) (BNC) 1 x Component (RGBS,YPbPr) (5 x BNC) |
| Output Signal           | 1 x DVI-D<br>1 x SD/HD/3G-SDI (BNC)   | 1 x DVI-D<br>1 x SD/HD/3G-SDI (BNC)  | 1 x DVI-D<br>1 x SD/HD/3G-SDI (BNC)  |
| GPIO Port               | Swap, PIP/PBP1/PBP2/Select, Record Indicator  |  |  |
| Certifications          | ANSI/AAMI ES60601-1,<br>CAN/CSA-C22.2 No. 60601-1,<br>IEC60601-1, IEC60601-1-2:,<br>FCC Part 15   | UL60601-1/CAN/CSA C22.2<br>No.601.1, EN60601-1, CE,<br>FCC Part 15   | ANSI/AAMI ES60601-1,<br>CAN/CSA-C22.2 No. 60601-1,<br>IEC60601-1, IEC60601-1-2:,<br>FCC Part 15  |

### Features Include:



- Specifically designed for displaying surgical images
- Compact size
- Longer life, cool temperature LED backlight
- Manufactured with medical-grade quality and reliability
- Calibrated for surgical color and gray scale reproduction Surgeon confidence is
- Extensive video connections allows for device compatibility
- Fast, near-zero latency for instantaneous image display
- Calibrated for clinical color and gray scale reproduction
- strengthened with clear visualization

## Hassle-Free Services & Support

Overcome technical challenges with our team of experienced engineers and technicians. Whether it's a simple answer or on-site troubleshooting, we can help any time, every time. Accurate and consistent presentation of images is a critical requirement for radiology displays.



**DBI Service Desk** Comprehensive

Extended Warranty & Technical Support Advanced Replacement Program



www.doubleblackimaging.com/servicedesk



**Display Solutions** 

| Specifications          | C32SF   | C46SFT  | C55SF 4K  |  |
|-------------------------|---|---|---|--|
| Panel Type              | 32" TFT LCD (IPS)   | 46" TFT LCD   | 55" TFT LCD   |  |
| Aspect Ratio            | 16:9  | 16:9  | 16:9  |  |
| Resolution              | 1920x1080   | 1920x1080   | 3840x2160   |  |
| Brightness              | 450 cd/m <sup>2</sup>   | 650 cd/m <sup>2</sup>   | 500 cd/m <sup>2</sup>   |  |
| Contrast Ratio          | 1300:1 Typical  | 4000:1 Typical  | 1450:1 Typical  |  |
| Display Colors          | 16.7 Million  | 16.7 Million  | 1.07 Billion  |  |
| Response Time           | 22 ms   | 8 ms  | 5 ms  |  |
| Pixel Pitch             | 0.27(W)mm x 0.27(H)mm   | 0.53(W)mm x 0.53(H)mm   | 0.315(W)mm x 0.315(H)mm   |  |
| Viewing Angle           | R/L 178, U/D 178  |   |   |  |
| Backlight               |   | LED   |   |  |
| Dimensions (mm) WxHxD   | 770 x 471.5 x 80.5 mm   | 781.5 x 442 x 68.0 mm   | 1284.4 x 752.2 x 84.5 mm  |  |
| Dimensions (inch) WxHxD | 30.31x 18.56 x 3.17"  | 46.38 x 26.26 x 3.70"   | 50.57 x 29.61 x 3.33"   |  |
| Weight (kg)             | 12.8 kg   | 34 kg   | 40.8 kg   |  |
| Weight (lbs)            | 28.2 lbs  | 74.96 lbs   | 90 lbs  |  |
| VESA Mounting           | 100x100mm, 200x100mm,<br>200x200mm, 300x200mm,<br>400x200mm, 12-M4 Holes  | 100x100mm, 200x100mm,<br>300x100mm, M4<br>600x400mm, M8   | 600x400mm   |  |
| Power Supply            | AC/DC Adaptor (AC 100-240V, DC 24V 6.25A)   | Internal SMPS, Universal<br>100-240V AC, single phase   | SMPS (AC 100-240V, DC 24V, 11A)   |  |
| Enclosure Rating        |   | IPX1 Liquid Resistant   |   |  |
| Input Signal            | 2 x DVI-D<br>2 x SD/HD/3-G-SDI (BNC)<br>2 x SOG<br>1 x VGA (D-sub)<br>1 x C-Video (BNC)<br>1x S-Video (DIN)<br>1 x Component (RGBS,<br>YPbPr) (5 x BNC) | 1 x DVI-D<br>1 x VGA (D-sub)<br>1 x SD/HD/3G-SDI (BNC)<br>1 x LINE-in (stereo R/L)                  | 2 x DVI-D (Dual link)<br>2 x DVI-D (Single link)<br>4 x BNC (3G-SDI)<br>2 x Display Port (Version:<br>1.1/1.2MST) |  |
| Output Signal           | 2 x DVI-D<br>2 x SD/HD/3G-SDI (BNC)<br>2 x SOG<br>1 x C-Video (BNC)<br>1 x S-Video (DIN)<br>1 x Component (RGBS,<br>YPbPR) (5 x BNC)                    | 1 x DVI-D<br>1 x SD/HD/3G-SDI (BNC)<br>1 x LINE-out (stereo L/R)<br>1 x Speaker out (stereo<br>R/L) | 2 x 5V/2A DC  |  |
| External Control        | RS232C  | RS232C  | RS232C, Ethernet  |  |
| GPIO Port               | Swap, PIP/PBP1/PBP2<br>Select, Record Indicator   | Swap, PIP/PBP1/PBP2/PBP3/<br>Select, Record indicator   | Swap, Single/PIP/PBP1/<br>PBP2/Quad   |  |
| Hand Remote             | Yes   | Yes   | Yes   |  |
| Touchscreen             | No  | 10 Point Projected<br>Capacitive Multi-Touch  | No  |  |
| Certifications          | UL60601-1/CAN/CSA C22.2 No. 601.1, EN-60601-1, CE, FCC Part 15  | ANSI/AAMI ES60601-1, CAN/CSA-C22.2 No. 60601-1, IEC60601-1, IEC60601-1-2:, FCC Part 15              |   |  |
| 923 33 63 32 6          | Display live predical vides   |   | T. Hitaga, Jackson and Jackson  |  |

### Features Include:

- Display live medical video signals at peak resoultion
- Compatible with analog or digital video sources
- multi-touch screen
- Display live medical video content in hybrid operating
- 10 point projected capacitive Ultra-high resolution (3840 x 2160 pixels)
  - Image mirror, rotate, pan, zoom, freeze, picture-in-picture

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