# MON170CL
# 17-inch Color LCD
# Flat Panel Display Monitor

**BOSCH Security Systems**

- Provides 500 TV lines of resolution
- Y/C (S-video), composite video and audio inputs
- Analog VGA input
- Space saving, compact design
- 50% less power consumption than conventional CRT monitors
- PAL and NTSC formats
- Universal power source
- On-screen display (OSD) for setup and adjustment

The MON170CL is a high resolution, high performance liquid crystal display (LCD) video display monitor.

Available in an ergonomic, aesthetically pleasing design, this state-of-the-art monitor includes a 43 cm (17 in.) color thin film transistor (TFT) active matrix 1280 x 1024 pixel LCD panel. Designed for the CCTV security marketplace, the MON170CL Monitor includes inputs for composite video, audio, and Y/C.

Additionally, this model includes an analog VGA input to accommodate the increasing use of PCs and digital video devices in security applications.

Adjustment of standard monitor display parameters is made user-friendly via on-screen menus (available in several languages), and front panel controls.

Using long-life fluorescent backlights, the brightness level is maintained over time, because the LCD monitor design avoids the brightness degradation experienced with aging CRT-type monitors. It also provides a sharp display, free of the annoying flicker prevalent in CRT monitors, allowing longer use of your

LCD monitor with little or no eyestrain. The versatile design allows it to automatically accept NTSC and PAL signal formats, and power supply voltages from 100 to 240 VAC.

Its compact styling, including an LCD panel depth of 48 mm (1.9 in.), makes the MON170CL the color monitor of choice for large screen, space limited applications. With its wide range viewing angle, 140° in the horizontal and 130° in the vertical direction, the unit can be properly viewed in a variety of positions.

### Certifications and Approvals

| | |
|---|---|
| Electromagnetic Compatibility (EMC) | Complies with FCC Part 15, ICES-003, and CE regulations |
| Product Safety | Complies with CE regulations, UL, CSA, EN, and IEC Standards |

**Security you can rely on.**

**BOSCH**

## Technical Specifications
### Electrical

| | |
|---|---|
| **Rated Voltage** | 120/230 VAC, 50/60 Hz |
| **Voltage Range** | 100 to 240 |
| **Power at Rated Voltage** | 36 W |
| **Sync Format** | PAL/NTSC |
| **LCD Panel** | TFT LCD |
| Screen Size (H x V) | 338.0 x 270.3 mm (13.3 x 10.6 in.) |
| Viewable Picture Area | 43 cm (17 in.), measured diagonally |
| Pixel Pitch (H x V) | 0.264 x 0.264 mm |
| Resolution | 1280 x 1024 pixels 500 TV lines, typical |
| Aspect Ratio | 4:3 (composite video); 5:4 (VGA) |
| Display Colors | 8 bits interface; 16 million colors |
| Response Time | 16 ms |
| Backlight | Four (4) cold cathode fluorescent tubes, rated life 50,000 hours, at 50% brightness |

### Optical Characteristics

| | |
|---|---|
| Luminance | 300 cd/m$^2$ |
| Contrast Ratio | 450:1 |
| Viewing Angle | 140° horizontal, 130° vertical |

### Video Input

| | |
|---|---|
| Composite Video (CVBS) | 1.0 Vp-p (0.5-1.5 Vrms) |
| Y/C (S-video) | 0.7 Vp-p (Y-signal), 0.3 Vp-p (C-signal), 75 Ohm termination |

### VGA Input

| | | |
|---|---|---|
| Analog RGB | 0.7 Vp-p (0.5-1 Vrms) | |
| **VGA Timing Modes** | Fh: 30K-80 KHz | |
| | Fv: 60-75 Hz | |
| | 640 x 480 | 60/72/75 Hz |
| | 800 x 600 | 60/72/75 Hz |
| | 1024 x 768 | 60/70/75 Hz |
| | 1280 x 1024 | 60/75 Hz |
| **Audio Input** | 1.0 V line level | |
| **Audio Output** | Speaker: Two (2), 1 W | |

### Controls

| | |
|---|---|
| **Front Panel** | Push-buttons |
| I (Input) | Selects CVBS, S-Video, VGA input |
| M (Menu) | Selects on-screen display (OSD) |
| - | Adjustment decrease |
| + | Adjustment increase |
| Power | On/Off |
| **On-Screen Display** | |
| Video Mode | Contrast, Brightness, Tint (NTSC only), Color, Input, OSD Setup, Language, Reset |
| VGA Mode | Contrast, Brightness, Image, Setup, Image Position, Color Temperature, Input, OSD Setup, Language, Reset |

### Indicators

| | |
|---|---|
| LED | Power On (green) |
| On-Screen | "Attention No Signal" |

### Connectors

| | |
|---|---|
| Composite Video In | One (1) RCA jack, BNC adapter included |
| Audio In | One (1) 1/8-in. 3-cond. mini phone jack |
| Y/C (S-video) | One (1) Mini-DIN, 4-pin (in only) |
| VGA | One (1) 15-pin D-sub |
| Power Input | 5.5 mm DC input jack |
| Power Adapter (Included) | Input: 100-240 VAC, 50/60 Hz, Output: 12 VDC, 4.2 A |

### Mechanical

| | |
|---|---|
| **Cabinet** | Material: ABS94V0 plastic Finish: Charcoal |
| **Dimensions** | |
| LCD Panel with Base (W x D x H) | 372 x 170 x 386 mm (14.6 x 6.7 x 15.2 in.) |
| LCD Panel Only (W x D x H) | 372 x 48 x 320 mm (14.6 x 1.9 x 12.6 in.) |
| Weight | LCD Panel with Base: 3.8 kg (8.4 lb) LCD Panel Only: 2.9 kg (6.4 lb) |

### Environmental

| | |
|---|---|
| Temperature | Operating: 0°C to +40°C (+32°F to +104°F) Storage: -20°C to +60°C (-4°F to +140°F) |
| Humidity | 95%, noncondensing at +40°C (+104°F) |

**BOSCH**