

## Public View 23" Wide Screen LCD with Integrated WDR Camera and 4-ch Mux



### Features

- Compact attractive look for high visibility retail applications
- Built-in high resolution WDR color camera with 4-9mm VF AI lens concealed in front bezel
- Built-in 4-channel real-time Mux (60 fps)
- Wireless remote control (included)
- Four external cameras inputs
- Full screen 16:9 or 4:3 aspect ratio display
- High resolution TFT-LCD display
- Multi-screen display (Quad, POP screen, Full screen)
- Motion detection & storage function
- Built-in Light Sensor for sleep mode
- Image capture & replay function (60 still images)
- Screen freeze capability
- Alarm input & output – NC or NO
- Video loss & motion detection alarm
- VCR inputs and outputs
- Key lock / menu password function
- Time-and-date stamp
- Three video outputs (monitor, spot, record)
- Six Language Selections

### Ordering Guide

**M231WBM-WDR** 23" LCD PVM with 4-channel mux and integrated HR WDR color camera

### General Operation

The M231WBM is a high brightness and contrast TFT LCD monitor with high-resolution Wide Dynamic Range (WDR) color CCD camera with integrated auto-iris vari-focal lens. The monitor also features a built-in 4-channel multiplexing processor allowing simultaneous display of up to four cameras in various display modes. A Picture-on-Picture (POP) mode is supported for live video or motion detected video and the POP window may be positioned on the right or left of the main monitor window.

The monitor includes programmable Video Motion Detection (VMD) capability for each of the internal and external camera inputs. The internal VMD capability allows the monitor view to switch to the camera where motion occurs. The VMD sensitivity, capture time and dwell time may be individually programmed for each camera. The monitor contains on-board field memory capable of storing up to 60 images. The images are automatically saved as a function of the video motion detection. Images may be played back and viewed on the monitor, or sent to a recording device using the VCR output connection.

The monitor offers a clean aesthetic appearance with unobtrusive front panel controls. The monitor and camera programming is accomplished using the front panel controls or the supplied IR Remote Control. A built-in selectable Light Sensor permits the monitor to enter a "sleep" mode when ambient lighting is lowered, thus providing extended LCD backlight life.

The integrated multiplexer offers single-channel recording capability for all video inputs accessed from the record VCR connection. The monitor provides a Monitor Out video signal which is the same video as displayed in the main screen window or may be selected as motion detected camera video. A spot monitor output is also provided that may be programmed for one of the four cameras, the Quad signal, or the sequence video output.

A loop through video output connector is provided for each camera input for connection to multi-channel digital video recorders or other equipment.

A six-language on-screen menu is provided for ease of programming, and includes camera titling, camera and monitor contrast, brightness and sharpness settings. A motion adjust function is selectable to help discriminate image artifacts when objects are moving quickly in the camera's field of view. Individual multiplexer programming options are supported including camera priority record settings.

The monitor features a 100mm VESA mount connection point for use with various LCD mounts (see accessories). The internal camera's field of view, focus and iris may be easily adjusted by removing the camera assembly from the rear of the monitor.

The main monitor area will display a full-screen image of the manually selected or motion detected alarmed camera or the Quad image. Depending on the selection for the main display, the sub POP display image will be the four live video camera inputs or a single camera with a series of motion-detected video. In the case of the motion-detected video, the POP window will begin the series of saved images filling the four image areas from top to bottom. After the capture time has expired, the current motion camera video signal will be frozen on-screen and the next motion detected field of video will be displayed in the next window moving downward. This sequence will continue from top to bottom, returning to the top and repeat until the motion stops. The period between the saved images is programmed as the Capture Time in the Motion Alarm menu setting.

<u>Main Display</u>	<u>SUB Display</u>
Full Display	4 Cameras Live Video
4CH QUAD Display	Motion Detected Saved Video

## Specifications

### Models

M231WBM-WDR

Wide screen (16x9) 23" LCD Public View Monitor with built-in multiplexer, and integrated high resolution wide-dynamic-range color camera

### Monitor

Display Source Video

1 CH Built-in Camera Video + 4 CH External Camera (CH 4 : Internal or external camera selection)

LCD Panel

23.01 inches (584.40mm) TFT LCD Panel

Active Display Area

501.12 mm (H) x 300.67mm (V)

Pixel Format

1280 (H) x 768 (V), RGB vertical stripe

Pixel Pitch

0.3915mm x 0.3915mm

Display Format

Panel Actual Video

Wide Full Screen Format

1280 x 768

720 x 480

Normal Full Screen Format

1024 x 768

720 x 480

Wide Quadrant Screen

640 x 384(each)

640 x 384(each)

Normal Quadrant Screen

512 x 384(each)

512 x 384(each)

Color Depths

8 Bit / 16.7M Colors

Contrast Ratio

400 : 1 (Typical)

Brightness

450 cd/m<sup>2</sup> (Typical)

Viewing Angles (L/R/U/D)

85 / 85 / 85 / 85 (Typical)

Light Source / Lifetime

12CCFL / 50,000Hrs (Minimum)

Response Time

25 ms (Typical)

### Video (Integrated Camera)

Video Mode

NTSC

Camera Video Input Level

1.0Vp-p @ 75 ohm

CCD Image Sensor

1/3" Sony Super HAD CCD

Resolution

480 TVL

Sensitivity

0.004Lux (F2.0, 50 IRE)

S/N Ratio

50dB

Auto Iris

Yes

Auto White Balance

Yes

Electronic Shutter

1/60 ~ 1/100,000 sec

VF Lens

4 - 9mm (F2.0 ~ 2.8)

### Video (External Input)

Video Mode

NTSC

Camera Video Input Level

1.0Vp-p @ 75 ohm

Camera Video Input Connector

BNC x 4

Camera Video Output Connector

BNC x 4

VCR Input Level

1.0Vp-p @75 ohm

VCR Input Connector

BNC x 1

Monitor / Record / Spot Video Output Level

BNC x 1 / BNC x 1 / BNC x 1

Monitor / Record / Spot Video Output Connector

7 Pin Terminal Block

Alarm Input / Output connector

One input with individual polarity selection

Alarm input

One N.O. and N.C. contact with shared common

Alarm output

### General

Power Supply

DC 24 V

Power Consumption

105 Watts

Operating Temperature

32°F - 104°F (0°C ~ 40°C)

Case Material

Metal

Dimensions (WxHxD)

22.5" x 16.6" x 3.7"  
(572.0mm x 422.0mm x 95.0mm)

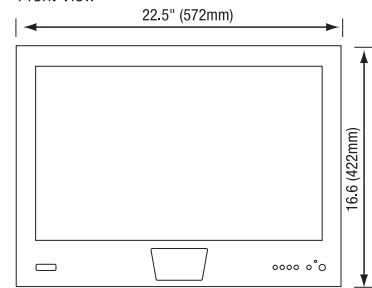
Weight

19.2 lbs (8.7 kg)

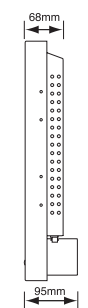
Accessories

DC Adapter, Power Cord, Manual, Remote Control  
Extension Cable for Power (option)

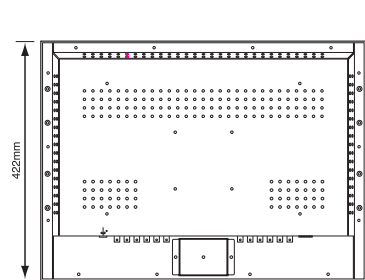
Front View



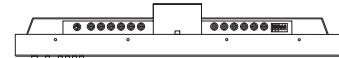
Side View



Rear View

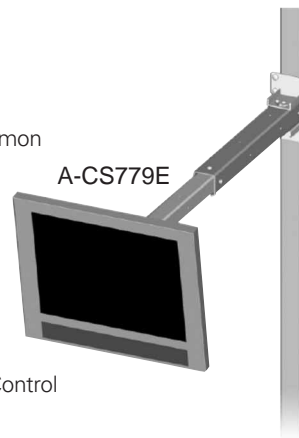
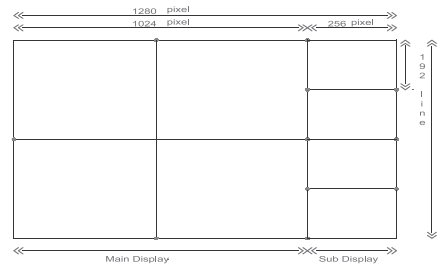


Bottom View



### Display Configuration

The following diagram illustrates the wide-screen format (16:9) full-screen (1280x768) display window, the wide quadrant (640x384 each), the normal (4:3) full-screen (1024x768), normal quad screen (512x384 each) and the POP sub screen area (256x768) with 256x192 pixels for each stacked image quadrant.



A-CSW775E (white)  
A-CSB775E (black)



A-CSW780 A-CSB780



A-CS777

Specifications subject to change without notice.

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