


THE NEXT GENERATION OF PROFESSIONAL UHD BROADCAST MONITORS





HDQLINE Represents the latest generation of Broadcast UHD capable Monitors, based on a custom developed video and audio processing platform in combination with the most precise LCD panel technology available today. Heart of the platform is a powerful high-precision video processing engine – 4 times more powerful than earlier versions – controlled by a fast embedded processor and cleverly designed software.

# PROFESSIONAL POWER

In designing these monitors, the priority was to satisfy the full performance and capabilities required by broadcast and film professionals. These include:

**FEATURING VIDEO PROCESSING ENGINE UP TO 4096x2160 PIXELS**

No compromises in core features like accurate color reproduction, signal support and picture quality
Exceptional 4K capabilities to easily manage complex High Dynamic Range (HDR) workflows
Future proof platform design which allows adaptation to emerging technologies and upcoming standards
Fast and easy setup and operation, even in challenging life TV applications

The HDQLINE series of multi-standard monitors are ideally suited for challenging high-end applications – wherever the brilliance and sharpness of ultra-high resolution images together with state of the art usability and future proofness are required.

# Available Models




| | |
|---|---|
| HDQLINE HDP Series: | HD Monitors |
| HDQLINE HRDP Series: | HD Reference Monitors |
| HDQLINE QDP Series: | UHD/4K Monitors |
| HDQLINE QRDP Series: | UHD/4K Reference Monitors |



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# Main Features

**Performance**

- 24/7 operation, optimized for long life, low noise

**System Integration**

- Wide range of control protocols (TSL, Ember+, VTS-LSB, RCP – 1806), GPI/O, NTP

**Widgets**

- IMD/UMD, Tally, Timecode, Clock, Marker, Border, Audio Bars, Wave-form, Vectorscope, CIE Chart



**I/O Flexibility**

- Input :4x 3G SDI SFP, 2x BNC SDI, 2x HDMI, DP
- Output: 1x 3G BNC SDI
- Multiformat Quad Split included

Optional

- Input: 2 x 12G SDI via QIO 12G

**Fast Setup and Control**

- Local and Remote keyboards
- Display Control Suite manage-ment software (DCS+)
- Automatic color calibration
- Presets
- OSD

**Panel Performance**

- Wide viewing angle
- IPS technology

**Precise Color Reproduction**

- 3D LUT, Uniformity Correction
- Wide color gamut

**HDR Features**

- HDR EOTF: HLG, PQ, SLog-3
- False Color



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# OVERVIEW MODELS

| Size | HD / 2K | UHD / 4K | UHD / 4K Reference Monitor |
|---|---|---|---|
| 17" - 18" | HDP 185-B<br>HDL 185-B (slim) | QDP 173-C | |
| 21" | HDP 215-A | | |
| 24" | HDP 238 HBR-A | QDP 240-D | HRDP 240-B |
| 27" | | QDP 270 HC-A | |
| 32" | | QDP 320 HC-A<br>QDP 320 HBR-A | QRDP 310-A<br>QRDP 310-B |
| 42" | | QDP 430-C | |
| 49" | HDP 490-A | QDP 490-C | |
| 55" | HDP 550-A | QDP 550-C | |
| 65" | | QDP 650-C | |



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# Reference Monitors

| Model | HRDP 240-B | QRDP 310-A | QRDP 310-B |
|---|---|---|---|
| Type | HDTV LCD | UHDTV LCD | UHDTV LCD |
| Screen Size | 24“ | 31“ | 31“ |
| Native Resolution | 1920x1200 | 4096x2160 | 4096x2160 |
| Aspect Ratio | 16:10 | 17:9 | 17:9 |
| Active Screen Size | 518.4 mm (H) x 324.0 mm (V) | 697.9mm (H) x 368.1 mm (V) | 697.9 mm (H) x 368.1 mm (V) |
| Brigtness max. | 400 cd | 350 cd | 525 cd |
| Contrast Ratio | 1800:1 | 1500:1 | 1500:1 |
| Viewing Angle | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° |
| Colors | 1.06 B | 1.06 B | 1.06 B |
| Color Gamut | Wide Gamut | Wide Gamut | Wide Gamut |


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# HD/2K Monitors (HDP Series)

| Model | HDP 215-A | HDP 240-A | High Brightness HDR Monitor HDP 238 HBR-A | HDP 490-A | HDP 550-A |
|---|---|---|---|---|---|
| Type | HDTV LCD | HDTV LCD | HDTV LCD | HDTV LCD | HDTV LCD |
| Screen Size | 21.5″ | 24″ | 23.8″ | 49″ | 55″ |
| Native Resolution | 1920x1080 | 1920x1200 | 1920x1080 | 1920x1080 | 1920x1080 |
| Aspect Ratio | 16:9 | 16:10 | 16:9 | 16:9 | 16:9 |
| Active Screen Size | 475.2 mm(H) x 257.30 mm (V) | 518.4 mm (H) x 324.0 mm (V) | 527 mm (H) x 296.5 mm (V) | 1073.7 mm (H) x 604.0 mm (V) | 1209.6 mm (H) x 680.4 mm (V) |
| Brigtness max. | 250 cd | 300 cd | 1600 cd | 700 cd | 700 cd |
| Contrast Ratio | 1000:1 | 1000:1 | 1000:1 | 1300:1 | 1300:1 |
| Viewing Angle | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° |
| Colors | 16.7 M | 16.7 M | 16.7 M Wide Gamut | 1.06 B | 1.06 B |



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# UHD/4K Monitors (QDP Series)

| Model | QDP 240-D | QDP 270 HC-A | QDP 320-C | High Brightness HDR Monitor **QDP 320 HBR-A** | QDP 320 HC-A |
|---|---|---|---|---|---|
| **Type** | UHDTV LCD | UHDTV LCD | UHDTV LCD | UHDTV LCD | UHDTV LCD |
| **Screen Size** | 23.8″ | 27″ | 31.5″ | 31.5″ | 31.5″ |
| **Native Resolution** | 3840x2160 | 3840x2160 | 3840x2160 | 3840x2160 | 3840x2160 |
| **Aspect Ratio** | 16:9 | 16:9 | 16:9 | 16:9 | 16:9 |
| **Active Screen Size** | 527 mm (H) x 296.5 mm (V) | 596.7mm (H) x 335.7 mm (V) | 697.3 mm (H) x 392.2 mm (V) | 697.3 mm (H) x 392.2 mm (V) | 697.3 mm (H) x 392.2 mm (V) |
| **Brigtness max.** | 540 cd | 400 cd | 450 cd | 1000 cd | 400 cd |
| **Contrast Ratio** | 1200:1 | 2000:1 | 1300:1 | 1800:1 | 2000:1 |
| **Viewing Angle** | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° |
| **Colors** | 1.06 B | 1.06 B | 1.06 B | 1.06 B | 1.06 B |
| **Color Gamut** | Wide Gamut | Wide Gamut | Wide Gamut | Wide Gamut | Wide Gamut |



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# Large Screen UHD/4K Monitors (QDP Series)

| Model | QDP 430-C | QDP 490-C | QDP 550-C | QDP 650-C |
|---|---|---|---|---|
| Type | UHDTV LCD | UHDTV LCD | UHDTV LCD | UHDTV LCD |
| Screen Size | 43“ | 49“ | 55“ | 65“ |
| Native Resolution | 3840x2160 | 3840x2160 | 3840x2160 | 3840x2160 |
| Aspect Ratio | 16:9 | 16:9 | 16:9 | 16:9 |
| Active Screen Size | 941.2 mm (H) x 529.4 mm (V) | 1073.8 mm (H) x 604.0 mm (V) | 1209.6 mm (H) x 680.4 mm (V) | 1428.4 mm (H) x 803.5 mm (V) |
| Brigtness max. | 700 cd | 700 cd | 700 cd | 500 cd |
| Contrast Ratio | 1100:1 | 1100:1 | 1100:1 | 1100:1 |
| Viewing Angle | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° |
| Colors | 1.06 B | 1.06 B | 1.06 B | 1.06 B |



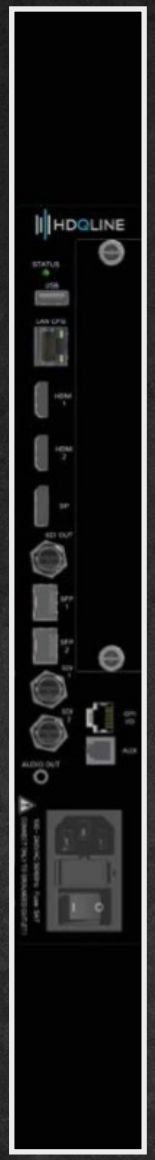
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# Rack Mount Monitors

| Model | HDP 185-B | HDL 185-B (low profile) | QDP 173-C |
|---|---|---|---|
| Type | HDTV LCD | HDTV LCD | UHDTV LCD |
| Screen Size | 18.5“ | 18.5“ | 17.3“ |
| Native Resolution | 1920x1080 | 1920x1080 | 3840x2160 |
| Aspect Ratio | 16:9 | 16:9 | 16:9 |
| Active Screen Size | 408.9 mm (H) x 230.1 mm (V) | 408.9 mm (H) x 230.1 mm (V) | 382.1 mm (H) x 214.9 mm (V) |
| Brigtness max. | 500 cd | 500 cd | 400 cd |
| Contrast Ratio | 1000:1 | 1000:1 | 1200:1 |
| Viewing Angle | H-178°/V-178° | H-178°/V-178° | H-178°/V-178° |
| Colors | 16.7 M | 16.7 M | 16.7 M |
| Outline Dimensions (mm) | 442 x 263 x 137 | 442 x 263 x 90 | 414 x 359 x 125 |


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# MAIN BOARD



## Processing Engine

The heart of all HDQLINE monitors is the custom designed QIO processing engine. It provides a maxium of I/O flexibility and allows adaption to upcoming requirements and future standards.

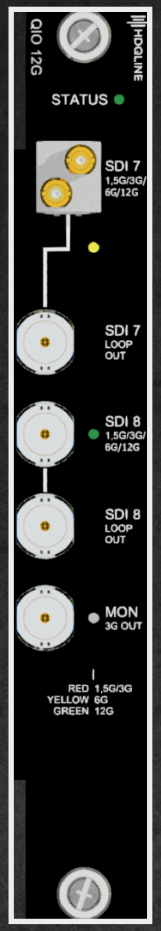
## Complete list of interfaces

- 4x SDI Input (SD, 1.5G, 3G) ⇒ 2x SFP slots, modules optionally available
- 2x SDI Input (SD, 1.5G, 3G) ⇒ 2x BNC
- 2x HDMI Input ⇒ 1x HDMI 2.0, 1x HDMI 1.3
- 1x Display Port Input ⇒ DP 1.1a
- 1x Audio Output ⇒ Stereo Phone Jack
- 1x LAN ⇒ 1GigE RJ45, control and management
- 1x AUX ⇒ RJ10, external keyboard, light control
- 1x GPIO ⇒ RJ45
- 1x USB ⇒ USB 2.0, Firmware Update, Presets
- Option Slot ⇒ 1x optional I/O module (e.g. QIO 12G)



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# OPTIONS



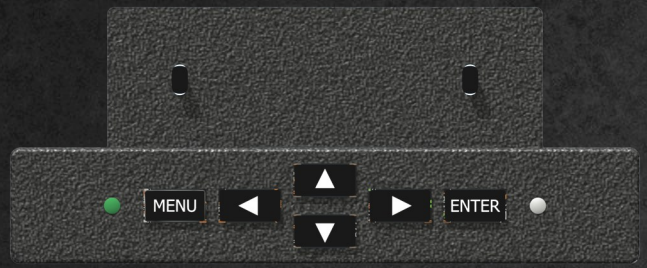

## QIO Dual 12G Input Module

This module adds 2x 12G SDI single link UHD/4K inputs to the HDQLINE monitor platform. To widen the application area one input supports SFP modules allowing fiber or copper connection.

### Complete list of interfaces

- 1x 12G SDI Input A (1.5G – 12G) ⇒ 1x BNC
- Loop Out A ⇒ 1x BNC
- 1x 12G SDI Input B (1.5G – 12G) ⇒ 1x SFP (coax/fiber) not included
- Loop Out B ⇒ 1x BNC
- 1x 3G SDI Output (monitors a single UHD quadrant) ⇒ 1x BNC

# OPTIONS




## External Under Monitor Keyboard

The **Q-UM-KBD** optional under monitor keyboard can be mounted to any HDQLINE monitor for front side OSD menu operation.



## External Rack Mount Keyboard

The **Q-AUX-KBD** optional rack mount keyboard can be mounted 19" racks to control any HDQLINE monitor.

## SFP Modules

- SFP module dual 3G SDI RX coax (HD-BNC) **SFP-3G-SDI-DR**
- SFP module dual 3G SDI RX fiber (LC) **SFP-3G-SDI-DR-OPT**
- SFP module dual 12G SDI RX coax (HD-BNC) **SFP-12G-SDI-COAX**
- SFP module dual 12G SDI RX fiber (LC) **SFP-12G-SDI-OPT**
- SFP module dual SMPTE ST 2110 to SDI gateway 10G BASE-SR multimode fiber (LC) **SFP-VOIP-DR-OPT**

## Others

- 19" rack mount kit for 17" and 18" monitors **RACKMOUNT-17/ RACKMOUNT-18**
- VESA 400/200 adaptor **ADAPTOR-VESA-400**
- Reference light for calibrated ambient/wall lighting behind monitors (on request)
- Calibrated control/direction room lamps (on request)

sonovts
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