The miniDSP nanoAVR DL integrates the world-renowned Dirac Live® room correction algorithm into a palm-sized HDMI audio processor. The processor is inserted into the HDMI signal path and operates on eight channels of linear PCM audio, while passing the video signal through untouched.

The user-friendly Dirac Live Calibration Tool Multichannel for miniDSP guides the user through the steps needed to perform a set of multi-point measurements on a system of up to 7.1 channels. The user can make arbitrary adjustments to the target response curve, individually or in groups, as well as set the frequency range of correction. Up to four generated filter sets can be stored in the nanoAVR DL for recall via infrared remote control.

Dirac Live® employs a proprietary mixed-phase filtering scheme – filters that both match a desired magnitude response as well as generate a customized impulse response. The audible results from deploying Dirac Live® are remarkable: improved imaging and soundstage; greater clarity of vocals and dialog; smoother and more impactful bass; heightened realism.

Simply put: a unique home theater experience!

**Features**
- Dirac Live® room correction up to 7.1 configuration
- 2-way HDMI switch

**Hardware**
- ADI SHARC ADSP21479
- 32-bit floating-point processing
- Dual HDMI 1.4 input
  - Audio and video switching
  - 3D support
  - HDCP support
- Single HDMI 1.4 output
- Front panel preset selector
- IR control with learning feature

**Software Control**
- Real time live control over USB 2.0 or Ethernet, mobile device
- Windows compatible
- Firmware upgradeable

**Power**
- Single external 5 VDC supply
- Low power consumption

**Applications**
- Home theater room tuning
- 7.1 Room correction
- Commercial AV

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**SYSTEM DIAGRAM**

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**nanoAVR**

- RJ45
- USB 2.0
- LED/IR
- HDMI Input 1
- HDMI Input 2
- MCU
- Analog Devices SHARC ADSP21479
- FLASH
- HDMI Processor
- +5 VDC
- External power supply
- HDMI output
## HARDWARE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>Digital Signal Processor</td>
<td>32-bit floating-point Analog Devices SHARC ADSP214749 / 266MHz</td>
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</table>
| Control                     | A computer is only required for the initial configuration via USB or Ethernet:  
                               - Driverless USB 2.0 control interface for Windows and Mac OS X  
                               - Ethernet control (RJ45 / 100Mbps) with ZeroConf support (Auto-IP/DHCP) |
| HDMI Inputs                 | 2 x HDMI 1.4a selectable from software, front panel or IR remote                                                                         |
| HDMI Outputs                | 1 x HDMI 1.4a output                                                                                                                        |
| Audio sample rate / Resolution | Input/output resolution: 24-bit (32-bit internal)  
                               Maximum input sample rate: 192 kHz  
                               DSP internal processing path: 48 kHz                                              |
| Video support               | Video pass-through of selected source (i.e. no video processing)  
                               36-bit / 3D support / HDCP embedded keys                                               |
| Dirac Live Room Correction for miniDSP | Plug&Play configuration from Dirac Live Calibration Tool for miniDSP  
                               * Impulse response correction  
                               * Frequency response correction  
                               * Freely edit target curve, unlimited break points  
                               * Automatic target functionality  
                               * Shows average measurements  
                               * Chair and sofa measurements for up to 9 measurements |
| Storage/Presets             | Up to 4 filter configuration filters stored on unit                                                                                       |
| Infrared remote             | Infrared remote receiver on front panel with “learning remote” capabilities  
                               Recall of preset, source selection, master mute and Dirac Live bypass                |
| Firmware                    | Firmware is user-upgradeable for future proofing                                                                                        |
| Power supply                | 5 VDC single supply @ 600 mA, 2.1 mm center-positive                                                                                    |
| Dimensions (H x W x D)      | 31 x 161 x 110 mm                                                                                                                          |

## MECHANICAL SPECIFICATIONS

- **Dimensions (H x W x D):** 31,00 mm x 161,00 mm