



Delta Media Server

DeltaMonitor

User Guide



DeltaMonitor : User Guide

Trademark Information

The 7thsense logo, and various hardware and software product names are trademarks of 7thSense Design Ltd. Product or company names that may be mentioned in 7thSense publications are tradenames or trademarks of their respective owners, and such trademarks may also be registered in their respective countries. Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Copyright Information

All Rights Reserved. This document is copyrighted © by 7thSense Design Ltd and shall not be reproduced or copied without express written authorisation from 7thSense Design Ltd.

The information in this document is subject to change without notice. 7thSense Design Ltd assumes no responsibility for errors, and/or omissions contained in this information.

Printed: July 2021

This edition is for software version DeltaMonitor 3.0.34
Document ref.: M173-8

E: info@7thsense.one
W: 7thsense.one

7thSense Design Ltd
2 The Courtyard, Shoreham Road
Upper Beeding
Steyning
West Sussex
BN44 3TN
UK

T: +44 (0) 1903 812299

7thSense Design LLC, Michigan
332 E Lincoln Ave
Suite 100
Royal Oak, MI 48067
USA

T: +1 248 599 2717

7thSense Design LLC, Orlando
4207 Vineland Rd
Suite M1
Orlando, FL 32811
USA

T: +1 407 505 5200

DeltaMonitor: Overview	4
DeltaMonitor Dialog	4
Service Mode	5
Edit: Preferences	5
Service Menu	7
Registry Tools	7
DeltaMonitor Web	8
External Control Commands	11
Help	14
Document Information	14
Index	16

DeltaMonitor: Overview

DeltaMonitor is a single utility used to manage the Delta server front panel, network connections and graphic settings for a Delta Media Server system.

The Utility has two separate interfaces, a dialog window local to the server itself and via the Stack web interface, accessed via a web browser.



The **Dialog interface** is accessed from the notification icon in the system tray on the windows task bar: to open, right click this icon and select 'Show' from the menu.

Some functionality is only available in the dialog window: these capabilities are primarily for engineering tasks and are not intended for most users. The dialog window is designed to give some basic information and functionality, although the majority of DeltaMonitor's capabilities are accessed from the web interface.

The Stack **web interface** can be accessed via two methods:

- Right click on the DeltaMonitor icon in the Windows notification tray, and select 'Launch Web Interface' from the menu.
- Click the 'Launch DeltaMonitor Web' link on the DeltaMonitor dialog window.

The Stack web interface has more status information and functionality. It is designed for users with a varied technical knowledge. The display page should be where users set up first set up their systems, once set up, the display settings should not need to be changed again unless their display setup changes.

DeltaMonitor Dialog

The DeltaMonitor dialog provides some status information on the Delta server.



Front Panel

Indicates whether the LED front panel on the front of all Delta servers is connected successfully or not.

Control of Delta (via Ethernet) (older versions of DeltaMonitor only)

Indicated whether the LED front panel has a connection to the DeltaServer software and is able to control Delta. This is required for transport control.

Launch DeltaMonitor web

Provides a link to [DeltaMonitor Web](#) .

Minimize DeltaMonitor

Minimizes DeltaMonitor to the notification tray in the taskbar, this is the default state for the system.

Close DeltaMonitor

Kills the application and will also stop driving the server's front panel.

Note: Click the windows close (X) Button will minimize rather than kill the application, as this is the default state.

For Delta server front panel controls, see the [Delta Server Front Panel User Guide](#).

Service Mode

This main menu item appears only, and first, on Nano servers with Windows embedded.

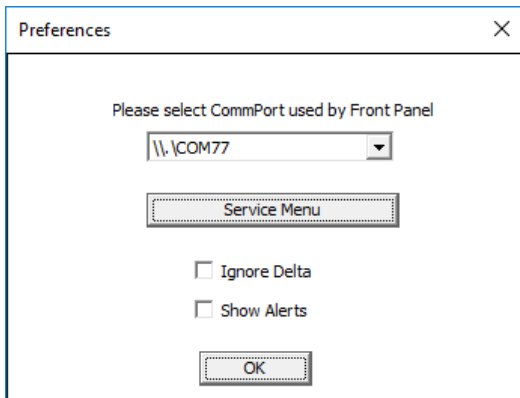
DeltaMonitor > Service Mode > Enable/Disable

This feature is only for embedded systems to allow them to be put into 'Service Mode'. Service Mode allows the user to make changes to the systems configuration or setup.

Edit: Preferences

DeltaMonitor > Edit > Preferences

The preferences menu provides controls for some of the configurable settings within DeltaMonitor.



Front Panel Com Port Selection

Allows the user to select the Com Port which Delta Monitor will attempt to communicate to the LED front panel via. The drop down list is populated with all active comports, and Delta Monitor will always default to Com Port 77.

Ignore Delta

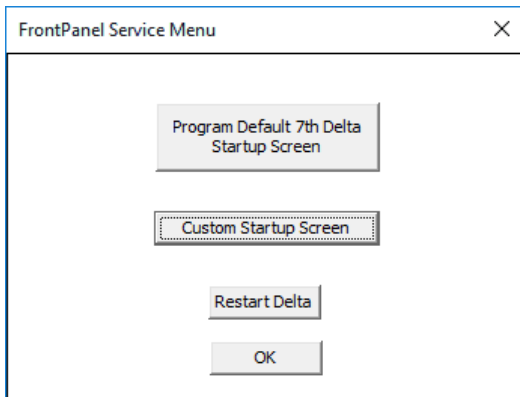
DeltaMonitor communicates between the DeltaServer software and the Media Server front panel. If you have rolled back to an older version of DeltaServer from a time when Media Servers did not have a matrix orbital front panel, the front panel will not be able to communicate with DeltaServer. DeltaMonitor, not knowing that DeltaServer is running, will fall into a red 'alert' display. This option stops DeltaMonitor listening to the DeltaServer software on this server, and prevents the apparent error state from showing. A default message is displayed instead.

Show Alerts

Users can select this option to allow visual indications of incoming external controls. When external controls are received the front panel will change to a different block colour dependent on which control was received.

No alert:	Black
Play:	Green
Stop:	Red
Rewind:	Cyan
Forward:	Cyan
Cue Alert:	Orange
External Control Alert:	Purple
Marker Alert:	Light Cyan

Service Menu



Program Default 7thDelta Start up Screen

allows the user to program the Matrix Orbital with the default 7thSense start up screen.

Program Server Serial Number

functionality for 7thSense engineers only, allows the server serial number to be recorded. This functionality is password protected.

Restart Delta

kills and restarts DeltaServer application.

Registry Tools

Some legacy Delta systems may have been running a Delta version in 32-bit. To ensure all Delta settings are not lost when transitioning between Delta versions, DeltaMonitor provides the facility to copy the registries between 64- and 32-bit.

This functionality should only be carried out by a 7thSense engineer or under the instruction of one. For this reason the functionality is password protected.



DeltaMonitor Web

Any networked DeltaMonitor can be addressed remotely by browser at:

`http://[serverIP]/api/deltamonitor/`

Or from the server itself, you can 'Launch Web Interface' as localhost from the system tray icon, or right-click the icon to 'Show' and 'Launch DeltaMonitor Web' from the DeltaMonitor window:



Note the build number on the top right, since not all controls are available in earlier versions.

There are three tabs. **Summary** is the same as in [Delta Web Service \(Stack\) > DeltaMonitor > Summary](#):

The screenshot shows the Delta Monitor application interface. At the top, there are three tabs: 'Summary', 'AMD Display', and 'Server Control'. The 'Summary' tab is selected. The version 'Delta Monitor 3.0 Build 34 Beta' is displayed in the top right corner.

The main content area is titled 'Delta Front Panel'. It features a large blue grid displaying the text '7thSense Delta' and 'IP: 10.100.101.227', 'File: c:\shows\intel.xml', and 'T100:01:33:10 Stop'. To the right of the grid is a control panel with buttons for 'Top Left', 'Bottom Left', 'Up', 'Down', 'Left', 'Enter', and 'Right'. Below the grid is a 'Toggle live display' switch.

Below the front panel, the 'Server Serial Number' is shown as '2901'. A table of system parameters follows:

Current Show File : c:\shows\intel.xml	Timing : Automatic
Group : 63 (Leader)	Audio : 8 (7.1) (8 Channels)
Delta Server App IP Address : 10.100.101.227	Delta Licenced : Yes
Mode : Stop	Service Mode : No

The bottom section is titled 'Delta Ethernet Configuration' and contains the following settings:

- Host Name : Delta2901
- Adapter 1: 10.100.101.227 (Static)
- Adapter 2: 127.0.0.1 (Static)
- Adapter 3: (Static)
- External Control TCP Port : 23
- External Control UDP Receive Port : 7780
- External Control UDP Transmit Port : 7781

Server Control is the same as in [Delta Web Service](#) (Stack) > *DeltaMonitor* > *Control*:

The screenshot shows the Delta Monitor interface with the 'Server Control' tab selected. The top navigation bar includes 'Summary', 'AMD Display', and 'Server Control'. The version 'Delta Monitor 3.0 Build 30 Beta' is displayed in the top right. The 'Server Configuration' section contains several settings: 'Default Graphics Profile' (Default.xml), 'Check Graphics Profile' (Off), 'On Boot Time Delay' (5 Seconds), 'Polling Interval' (1 Minutes), 'Poll Genlock' (disabled), 'Use Customer Server Name' (disabled), 'Customer Server Name' (input field), 'Front Panel Default Page' (Main), and 'Front Panel Backlight' (disabled). A 'Save Settings' button is located at the bottom right. The 'Server Control' section features a warning message and four large blue buttons: 'Kill Delta Application', 'Kill and Restart Delta Application', 'Restart Server', and 'Shutdown Server'.

The **Display** tab shows any installed GPUs, e.g. AMD / NVIDIA, and is the same as in [Delta Web Service](#) (Stack) > *DeltaMonitor* > *Display*:

The screenshot shows the Delta Monitor interface with the 'AMD Display' tab selected. The top navigation bar includes 'Summary', 'AMD Display', and 'Server Control'. The version 'Delta Monitor 3.0 Build 30 Beta' is displayed in the top right. The 'Display Profile' section contains a 'Current Profile' dropdown set to 'default*', a 'Load Profile' button, and a 'Save Profile' button. Below this is a text box showing 'AMD Driver Version: 15.301-160403a-301263E-Retail'. A blue button labeled 'Advanced System Details' is present. At the bottom, there are two greyed-out sections: 'EDID Management' and 'AMD Display Grouping'.

External Control Commands

These commands can be used as calls on any networked server directly to DeltaMonitor, producing the returns and/or actions as shown below.

Status

`http://[serverIP]/api/deltamonitor/server/status`

Returns:

```
{
  "data" : {
    "status" : {
      "isembedded" : "no",
      "servicemode" : "no"
    }
  }
}
```

GPU Temperature

`http://[serverIP]/api/deltamonitor/server/gputemp`

Returns a JSON object containing a list of the gpus in the server and their temperatures:

```
{ "GPUS": [{"GPU_Id" : 0, "Temperature": 50}, {"GPU_Id" : 1,
"Temperature": 49}]}
```

Server Restart

`http:// [serverIP]/api/deltamonitor/server/restart`

Restarts the server. Returns:

```
"restart"
```

Server Shutdown

`http://[serverIP]/api/deltamonitor/server/shutdown`

Shuts down the server. Returns:

```
"shutdown"
```

Server Status

[http://\[serverIP\]/api/deltamonitor/delta/status](http://[serverIP]/api/deltamonitor/delta/status)

Returns JSON data about Delta Server:

```
"data" : {
  "audio" : "2 (Stereo) ASIO",
  "audionumchannels" : 2,
  "cache" : 0,
  "chaseltc_t11" : 0,
  "currentshow" : "default.xml",
  "deltaip" : "10.100.101.85",
  "dvisdi" : "Gfx: DVI",
  "externalcontroltcp" : 23,
  "externalcontroludprx" : 7780,
  "externalcontroludptx" : 7781,
  "graphicsheight" : 1080,
  "graphicsrefresh" : 60,
  "graphicswidth" : 1920,
  "group" : 1,
  "is32bit" : false,
  "isembedded" : false,
  "isstereo" : 0,
  "lastexternalcontrolmsg" : "fullstatusjson",
  "licenced" : 0,
  "leader" : 1,
  "mode_t11" : "Stop",
  "rendermode" : "Flat",
  "serverinfo" : "DESKTOP-S1892E3 (Leader)",
  "serversingroup" : 1,
  "timelineframerate" : 30,
  "timing" : "Automatic",
  "version" : "2.5 Build 36 Release "
}
```

Kill Delta

[http://\[serverIP\]/api/deltamonitor/delta/killDelta](http://[serverIP]/api/deltamonitor/delta/killDelta)

Closes Delta Server. Returns:

```
"killDeltaApp"
```

Kill Delta and Restart

[http://\[serverIP\]/api/deltamonitor/delta/killandrestart](http://[serverIP]/api/deltamonitor/delta/killandrestart)

Restarts Delta Server. Returns:

```
"killandrestart"
```

DeltaMonitor Version

```
http://[serverIP]/api/deltamonitor/version
```

Returns the current Delta Monitor version:

```
"{"major": "3", "minor": "0", "patch": "Build 28 Nvi-Beta"}"
```

Program Defaults

```
http://[serverIP]/api/deltamonitor/frontpanel/programdefaults
```

Equivalent to clicking the 'program defaults' button in the service menu. Returns JSON:

```
"{Status: "Successful"}"
```

JSON DeltaMonitor Profile

```
http://[serverIP]/api/deltamonitor/helpjson
```

Returns a JSON list of all the available urls and their input details:

```
{
  "data" : {
    "availableurls" : {
      " 0" : [
        {
          "url" : "/frontpanel/left"
        },
        {
          "inputdetails" : "None"
        }
      ],
      " 1" : [
        {
          "url" : "/frontpanel/right"
        },
        {
          "inputdetails" : "None"
        }
      ],
      .....
      "34" : [
        {
          "url" : "httpGetGraphicsProfiles"
```

```

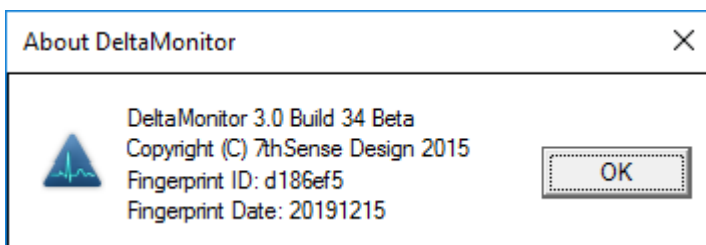
    },
    {
      "inputdetails" : "None"
    }
  ],
  "35" : [
    {
      "url" : "httpGetEdidInfo"
    },
    {
      "inputdetails" : "None"
    }
  ]
}
}
}
}
}

```

Help

Help > About

Displays a dialog window showing the DeltaMonitor version.



From version 3.0 Build 34 (and Delta 2.6.74), a version 'fingerprint' has been added for precise version identification.

Document Information

Date	Document edition	Software version	Revision Details	Author/Editor
September 2012	1	1	New release	Richard Brown
October 2014	2	v1.01 Beta 6	Updated	Matt Jones
September 2015	2.1		Reformatted	Helen Ward
May 2017	3	3.0.25	Edited and updated	Andie Davidson

Date	Document edition	Software version	Revision Details	Author/Editor
May 2018	4	3.0.26	Edited and updated	Andie Davidson
October 2018	5	3.0.26	Clarification of running with versions of DeltaServer predating DeltaMonitor	Andie Davidson
June 2019	6	3.0.30	Addition of DM external control commands	Andie Davidson
December 2019	7	3.0.34	NVIDIA displays. Version fingerprint.	Andie Davidson
July 2020	8	3.0.34	Revised server terminology	Andie Davidson

3

32-bit, 64-bit (registry legacy) 7

A

accessing DeltaMonitor 4

D

DeltaMonitor
 external control commands 11
DeltaMonitor version 14
DeltaMonitor Web 8

F

front panel port selection 5

I

interfaces 4

M

Matrix Orbital startup 7

P

preferences, DeltaMonitor 5

R

registry tools, DeltaMonitor 7

S

server front panel controls 4
server monitor dialog 4
server serial number 7
service menu, DeltaMonitor 7
service mode
 enable 5
show alerts 5

E: info@7thsense.one
W: 7thsense.one

7thSense Design Ltd
2 The Courtyard, Shoreham Road
Upper Beeding
Steyning
West Sussex
BN44 3TN
UK

T: +44 (0) 1903 812299

7thSense LLC, Michigan
332 E Lincoln Ave
Suite 100
Royal Oak, MI 48067
USA

T: +1 248 599 2717

7thSense LLC, Orlando
4207 Vineland Rd
Suite M1
Orlando, FL 32811
USA

T: +1 407 505 5200