



Delta Media Server

Delta Media Server Front Panel

User Guide



Delta Media Server Front Panel : User Guide

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Delta Media Server Front Panel: Overview

In Delta Media Servers (Infinity, Nucleus, Proton, Nano) the front panel display and interaction is controlled by the **DeltaMonitor** application.

On Delta 1.5 servers the functionality is limited. Delta 2 added a significant amount of additional functionality. Delta 2.4 saw more software changes to allow for NICs to be modified in all servers (including Nano) without having to enter Service Mode, and with further options for NIC modification throughout. From DeltaMonitor v. 3.0.30 a Konami code was added to lock the front panel controls, and from v.3.0.31, the DeltaGUI connection was added, and warning of licence expiry.

Terminology

Embedded Server – This refers to the Operating system on the server. The embedded servers include: **Nano, Nano4K and Duo II pre-2016**, and **Nano1, Nano2, Nano3, Nano4K in the 2016** server range. (For further information see the [Service Mode Section](#) ¹⁹.)

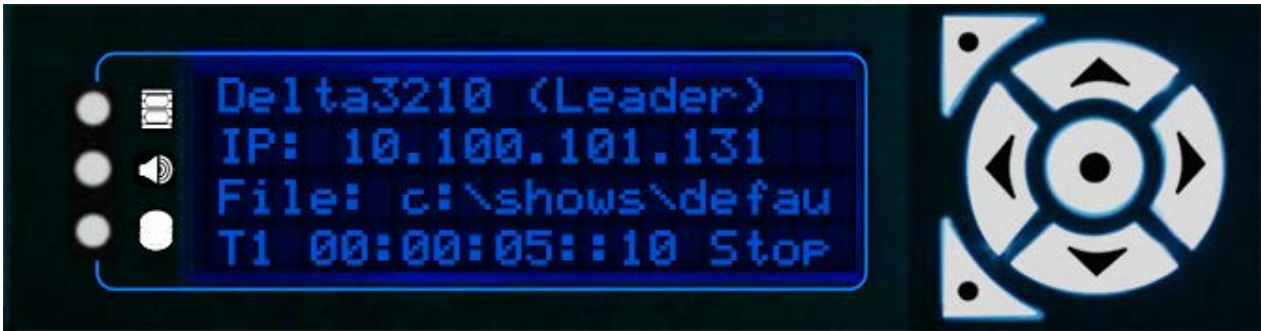
Pico servers

Pico servers do not share the same front panel controls, and have a single LED indicator on the left:



- Green The Pico is on and Delta is running.
- Amber The server is on and Delta is not running.
- /
● Flashing green and amber Server identification state – the IP has been called externally with a GPIO_ID command (works only when Delta is running). after 15 seconds reverts to green. The [DeltaFinder](#) utility operates this mode.

Panel Features



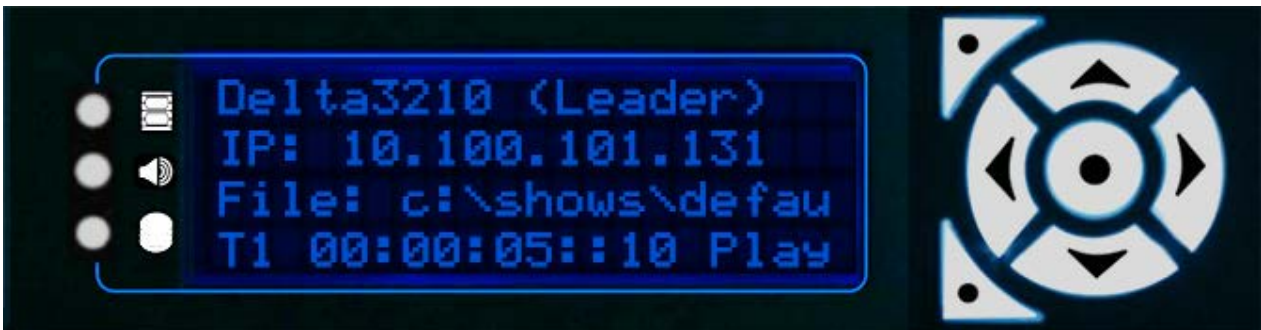
LED lights

These provide a quick view of graphics, audio and disk status of the server. Note: they will only be 'on' whilst a show is running. Whilst there is no show running, the LEDs will reflect the backlight colour.









Panel text information

Information is presented as a set of pages providing status information and control of the server. When you switch on the server, it will show basic status information including the server name, Leader/Follower, IP address and details of any show that is running.



These buttons are used to navigate through the pages of information and amend settings where available. The buttons light up for a short while when in use.

- 
top left
used to move forward into a sub-menu or apply a change according to the menu that you are in
- 
bottom left
navigates back to the previous page
- 
left / right
moves between pages; can move the on-screen cursor where appropriate

-  up / down navigation up/down the page that is in view
- 
-  centre equivalent to 'Enter'

Lock the front panel controls ('Konami' code)

When Delta is running on a server, the front panel controls can be locked from interaction with DeltaMonitor.

From DeltaMonitor v. 3.0.30, a locking code has been introduced. Use this button sequence to disable and re-enable the controls:



[top left], [bottom left], [top left], [bottom left], [centre]

Now, when any button is pressed 'Locked' will be displayed. Re-enter the same code to unlock.

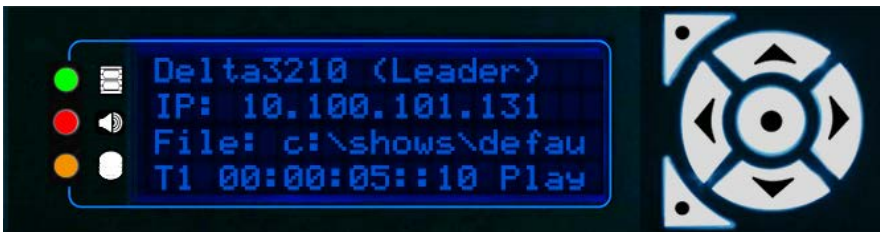
Please note: From 2020 7thSense deprecated the terms master and slave for the dependencies between devices. We now refer throughout to 'Leader' and 'Follower' in our products.

To maintain functionality, both terminologies continue to work internally, but our documentation no longer uses the former terms. Users of pre-2020 products will need to observe the equivalence and continue to use the previous legacy terms.

LED Status Information

The LEDs light up when a show is playing. Colour indicates the status of graphics, audio and playback disks.

- **Green** OK – performing correctly
- **Amber** Warning – not running smoothly, e.g. audio time drifting
- **Red** Error – e.g. dropping frames; needs resolving



Graphics Status

Indicates whether the server is able to playback at the specified rate. Corresponds with the yellow line on the debug graph.



Audio Status

Indicates whether audio playback is at the correct rate. Corresponds with the cyan line on the debug graph.



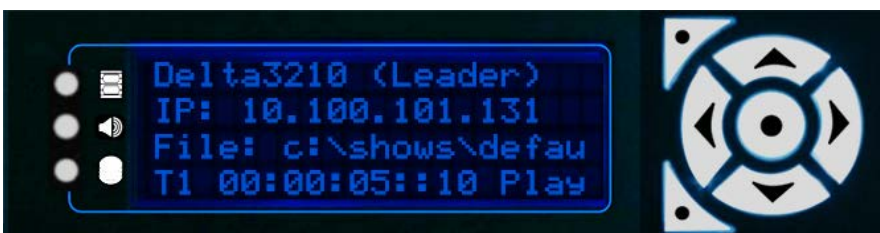
Disk Status

Indicates whether the server disks are able to playback all movies currently in scope on the timeline.

Display Text Colours

Blue

The standard colour of all text on a Delta Leader Server.



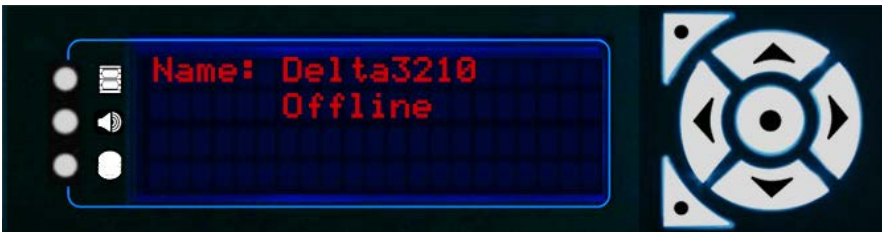
Cyan

The standard colour of all text on a Delta Follower Server



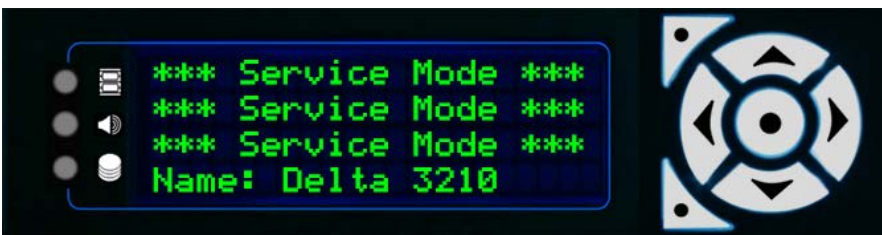
Red

Indicates the Delta Server application has stopped running. It can also indicate lack of Genlock or AMD grouping if the Delta monitor application has been configured to monitor these states.



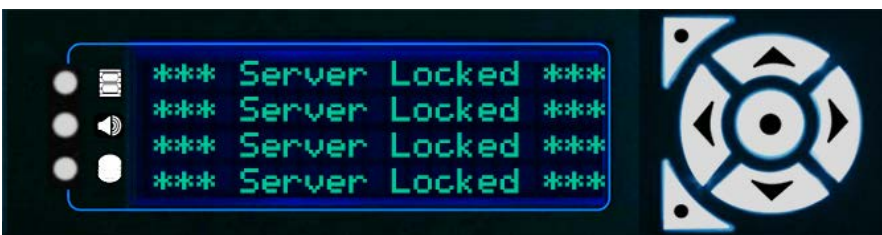
Green

Indication that the server is in Service Mode. This mode is only available on Embedded Delta Servers.



Dark Green

With Windows 10 LTSC, Unified Write Filter (UWF) replaces Service Mode, and is available on all servers using this operating system. When UWF is enabled, the server shows that it is locked:



Note that if the server is a Follower, the colour for this state will be cyan (as shown above). UWF is explained more in the Delta User Guide from version 2.6.

Others

Other colours are used for Alert mode. This mode flashes the display on certain actions and is intended to aid programming and debug.

You will see this warning flashing every 30 seconds, if the server Delta licence is expiring within the next 30 days:



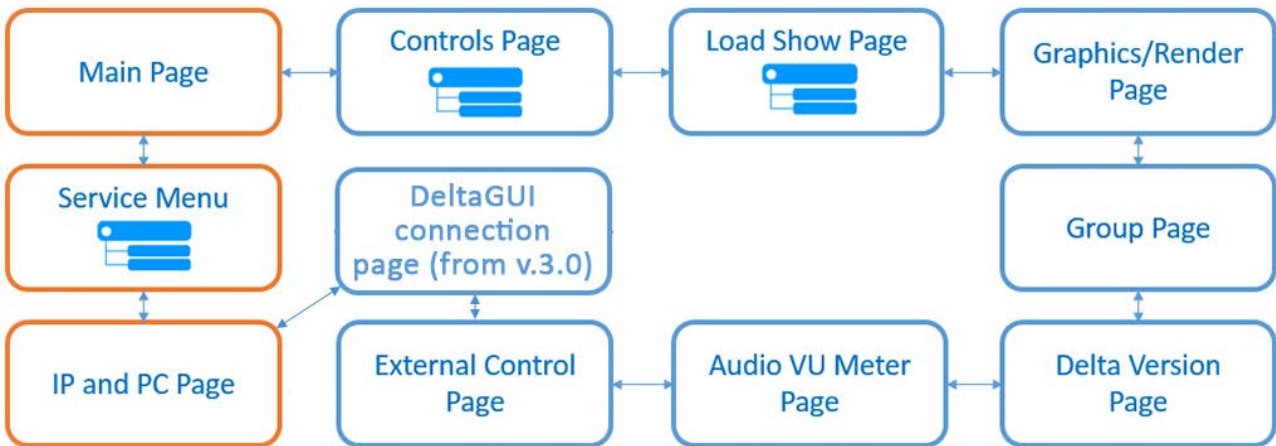
The DeltaServer licence has an output bandwidth element. If this is exceeded, there will be a warning displayed in the output, and in DeltaGUI. The server display will show every 30 seconds for 3 seconds:



Menu Structure

The menu structure is navigated using the left and right control keys. The Right Arrow button takes you clockwise around the pages, the Left Arrow takes you anticlockwise.

For example, press the **Right Arrow** button twice to go to the **Load Show** page, or the **Left Arrow** once to go to the **Service Menu**.



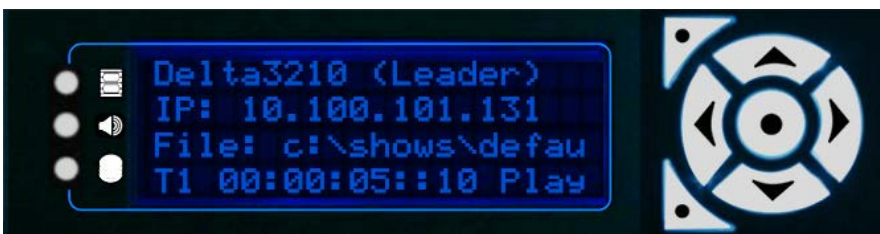
Note: Servers running Delta 1.5 are only capable of showing the pages marked with an orange border



Pages with this icon have sub-menus/pages. Press the **Enter** button to open, and the **Up/Down** buttons to navigate. The **Bottom Left** button is the **Back** button.

Using Delta Front Panel Menus

Main Display

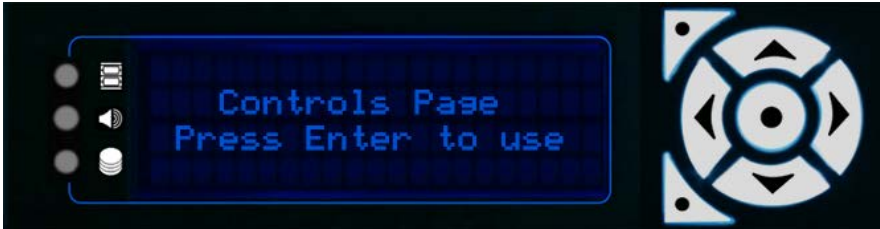


The main display shows the server’s Windows configuration name, its IP address, and the filename of the current show. The last line shows which timeline is running, the position of the playhead and the play status (Play, Stop, Ready).

Press the **Right** or **Left** arrow buttons to navigate to other pages.

Controls

Note: The Controls page is only available to Delta servers configured as a Leader.



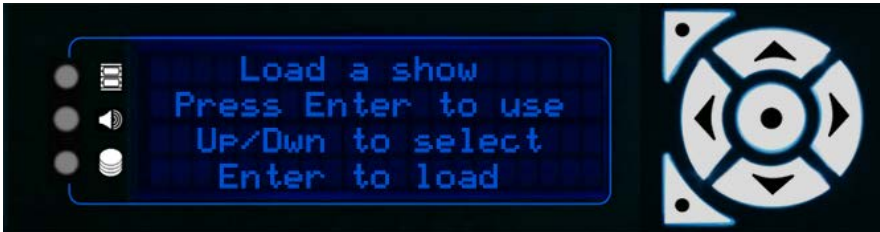
Press the Right Arrow button, then Enter (centre button) to use the controls page:



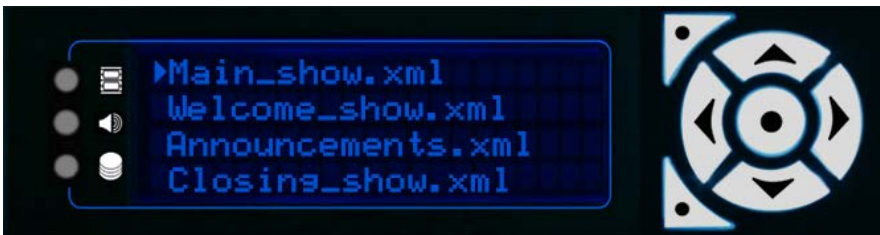
Once in the control page, all buttons have a function:

- | | |
|--------------------|---|
| Bottom Left | Steps back out of the control page into the main pages |
| Top Left | Rewinds current timeline to frame 0 |
| Left | Stop playing (if running) and press to step back one frame at a time |
| Right | Stop playing (if running) and press to step forward one frame at a time |
| Top | Play |
| Bottom | Cue, ready to play |
| Enter | Stop |

Load Show



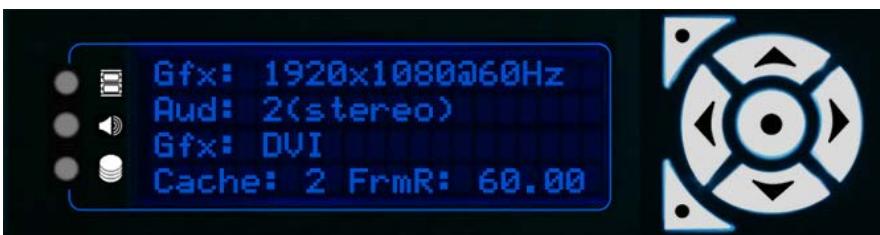
Press Enter (centre button) to list available shows:



The cursor arrow indicates the currently selected show.

Scroll through items with the Up and Down buttons, and select the one you want with Enter. (Bottom Left button goes back to the Load Show page.)

Graphics/Render



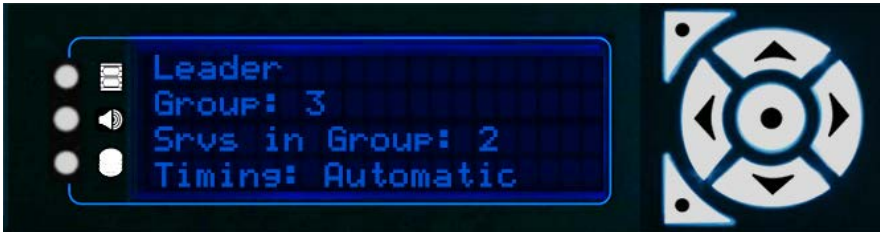
Gfx Current desktop resolution and refresh

Aud Available Audio

Gfx Available graphics output i.e. DVI, SDI

Cache Current disk cache level

Group



This page indicates whether the server is a Leader or Follower, the server group it is in, how many servers are in this group, and the current timing mode.

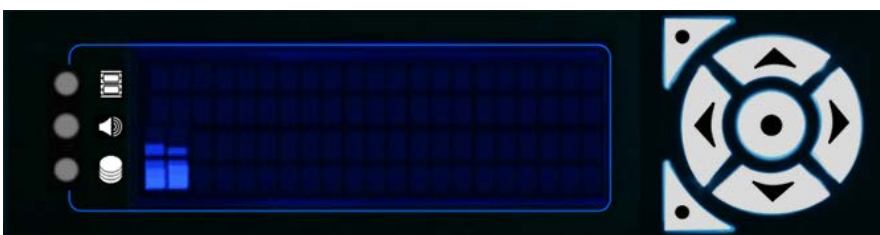
Delta Version



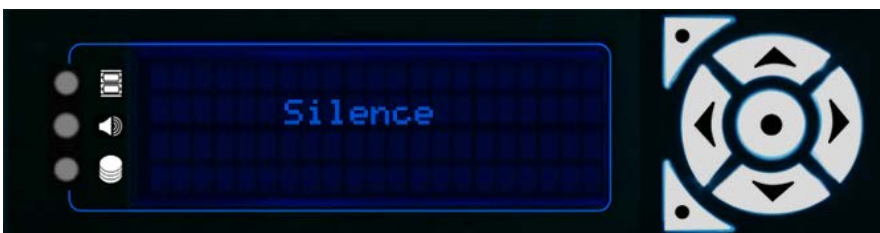
Shows the current DeltaServer application version installed on the server.

Audio VU Meter

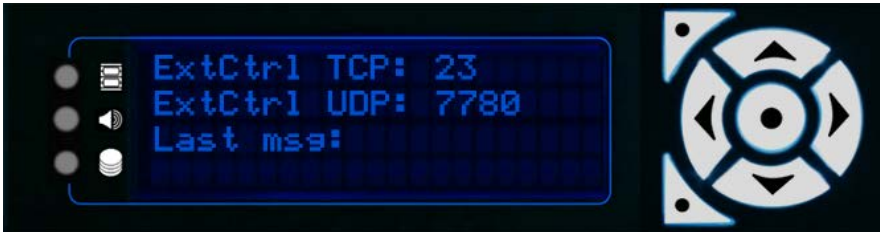
This page shows the audio playing on the current timeline. If audio is current playing, a VU meter shows, with a vertical line for each channel of audio:



If no audio is currently in scope the display will read 'Silence'.



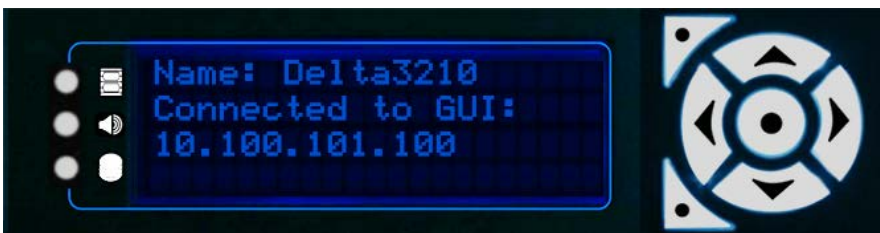
External Control



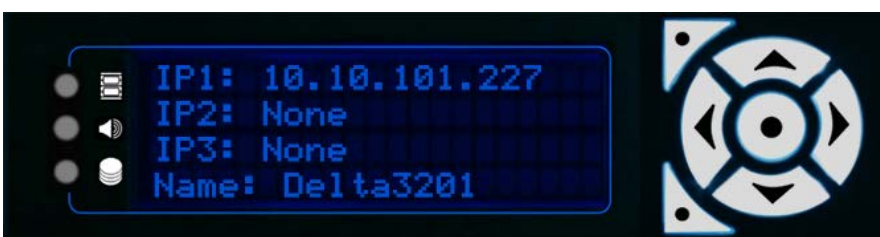
Lists the current TCP and UDP ports for external control, and the last external control message received.

GUI Connection

From DeltaMonitor 3.0, if an instance of DeltaGUI is connected to this server, this additional page shows its IP:



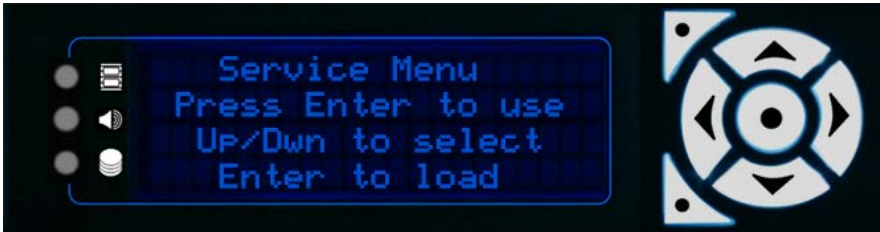
IP and PC Name



This page shows a list of the current server network IP addresses (first, second and third adapters) and the server's Windows configuration name.

The 's' or 'd' at the end of each line indicates whether the network address is static or dynamic.

Service Menu

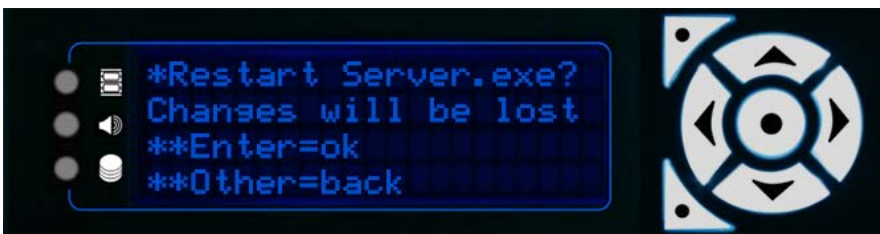


The Service Menu provides configuration functionality for the server. Once in the Service Menu, you will be presented with a list of all the functions available on that Delta server. Move the cursor through the options with the Up and Down buttons and select the required item using Enter.

Restart Delta



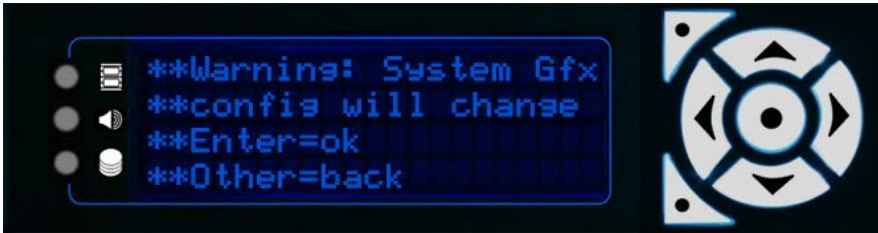
Select restart Delta. Press Enter to restart the Delta server. Confirm twice before the system will restart.



Reset EDIDs



Select Reset EDID. Press Enter to delete all forced EDID graphics configurations from the server. Confirm twice before any EDIDs are reset.



Manage Network



The Manage Network menu includes: Set DNS; Set Gateway; and Auto IP/DNS/Gateway.

Note from Delta vs 2.4 and DeltaMonitor 3.0

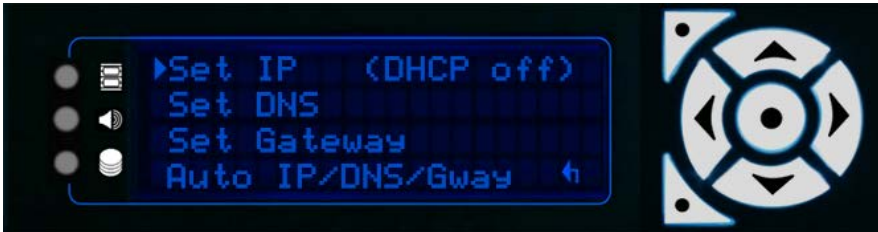
Embedded servers no longer need to be in Service Mode to set NIC values. They do, however, still require Service Mode for other tasks such as upgrading the software.

When you enter the Manage Network menu, the display will alternate between IP address and friendly name of the corresponding NIC:



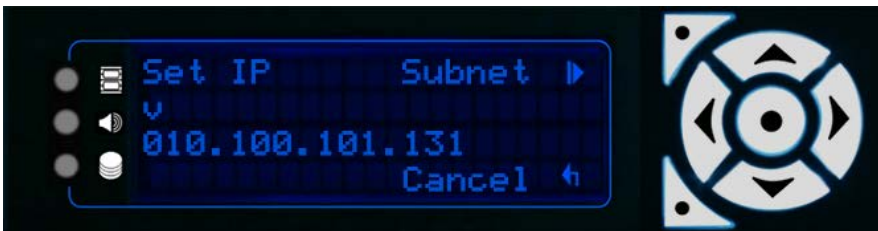
To make changes to the NIC information, press Enter. The Manage Network sub-menu will open.

Set IP

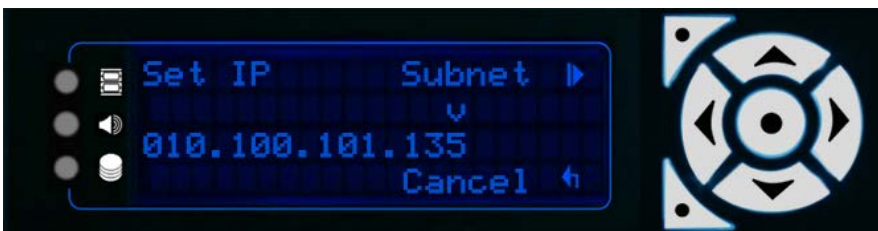


Note: DHCP off means that the server is set to a static IP, which is the recommended setting for Delta servers, to allow them to communicate only over the selected network.

Press Enter to open the Set IP option:



Use the left/right buttons to move the cursor along the numbers, and the up/down keys to change the numbers:



Once you have set the IP, you need to open and check/amend the Subnet. Press the top-left button to enter the Subnet screen.

Note: 255 fixes that part of the address so that the server will only see other devices on that same network. 000 allows the server to see any other device (numbered 000 to 255) on that network.



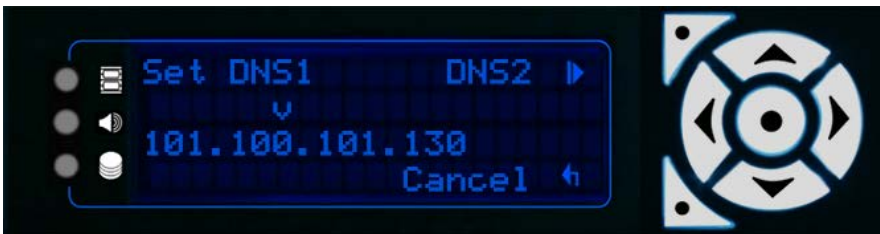
Press the top-left button to Apply any IP and Subnet changes. The system will return to the Manage Network menu.

Set DNS

If your server is using a DNS network, you can set details in this menu:



Select Set DNS and press Enter:



Use the left/right buttons to move the cursor along the numbers, and the up/down keys to change the numbers to a valid DNS. Once set, press the top-left button to check/amend the DNS2 address:



Press the Top Left button to Apply the changes to DNS1 and DNS2 and return to the Manage Network menu.

Set Gateway

Note that this option is only available if there is a static IP address.



Select Set Gateway and press Enter:



Use the left/right buttons to move the cursor along the numbers, and the up/down keys to change the numbers to the required Gateway address. Press the Top Left button to Apply.

Switch DHCP On (Auto IP/DNS/Gateway)

If you want the server to select an IP automatically, you can switch DHCP on by selecting the Auto/IP/DNS/Gway option:



Press Enter to switch to automatic selection.

Note: You may need to use this setting if you want your server to temporarily switch networks to, for example, allow access to the internet. To switch back to a static IP, and switch DHCP off, you should set the IP/DNS/Gateway manually, following the steps above as required.

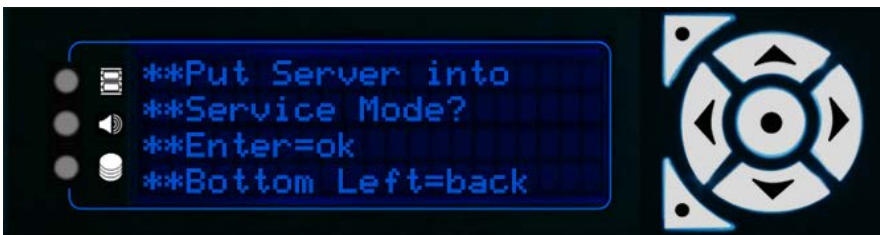
Service Mode

Note: Service Mode is only available/required on Embedded Servers. From Delta Monitor v. 3.0 it is no longer necessary to put the server in Service Mode to change NICs.

This function allows you to cycle in and out of service mode on an Embedded Server.



Selection of Service Mode results in the menu below. The Enter key is used to agree to either put the server into or out of Service Mode. You will be warned twice before the system does the restart.



All Nano, Nano 4k and Duo II servers use a Windows Embedded Operating System. This offers the advantage of file write protection on loss of power.

By default, all embedded servers are shipped out of service mode. When an embedded server is not in service mode its menu is Blue/Cyan as per any normal Delta server.

When not in service mode, the operating system disk is locked. Anything that is saved to the OS disks when not in service mode, will be lost on reboot.

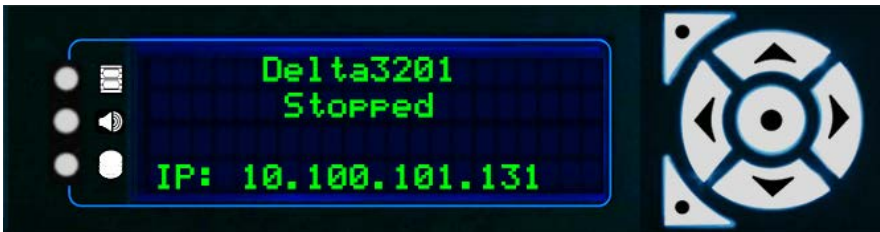
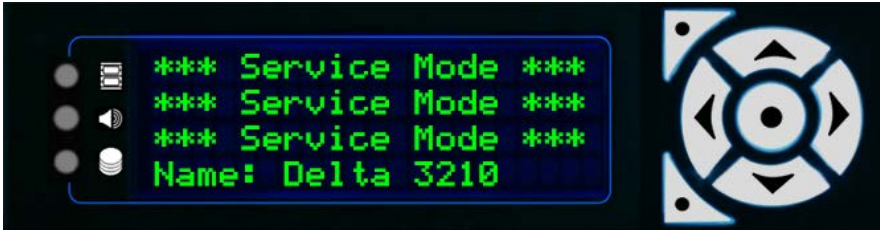
There are some exceptions to this rule which are the following:

- Delta registry settings, including any changes made to preferences within Delta through Delta GUI, will hold after a reboot.
- The Delta/System area is read/write
- All major media locations on the OS disks such as:

- C:\7thSense
- C:\Audio
- C:\Blends
- C:\Colour
- C:\Geometry
- C:\Images
- C:\Meshes
- C:\Sequences
- C:\Shows
- C:\Splines
- C:\Text

When in Service Mode, the server OS disk is completely open and writeable with full Administrator access. If you have a need to install drivers or additional software, you need to be in service mode to do this.

In this mode the Front Panel text is permanently green and rotates flashing the Service Mode text below.



It is not advised to leave the server in service mode during normal operation.

Once you have made any required changes to the server you should always switch back out of Service mode to Normal mode.

Document Information

Date	Document edition	Software version	Revision Details	Author/Editor
January 2013	1		New release	
January 2015	2		Updated	
September 2015	2.1		Reformatted	Helen Ward
August 2016	3	DeltaServer 2.4 DeltaMonitor 3.0	Software update	Helen Ward
May 2017	4	DeltaServer 2.4 DeltaMonitor 3.0	Edited and reissued	Andie Davidson
May 2018	5	DeltaServer 2.6 DeltaMonitor 3.0.25	Display for Windows UWF state added.	Andie Davidson
May 2019	6	DeltaServer 2.6 DeltaMonitor 3.0.30	Front Panel locking code implemented	Andie Davidson

Date	Document edition	Software version	Revision Details	Author/Editor
July 2019	7	DeltaServer 2.6 DeltaMonitor 3.0.31	Licence expiry warning and DeltaGUI connection page added	Andie Davidson
September 2019	8	DeltaServer 2.6 DeltaMonitor 3.0.31	DeltaFinder 2.0 behaviour and Pico LED status	Andie Davidson
July 2020	9	Delt 2.7 DeltaMonitor 3.0.35	Revised terminology of Leader and Follower servers	Andie Davidson

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