

APPLICATION NOTE

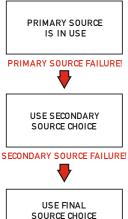


## **Delta, DPA Series**

### Choosing Sources for Input Processing and Failover Configuration

#### What is Failover?

From firmware version 1.30 onwards, your amplifier supports comprehensive source failover to secondary or even tertiary sources should the primary source fail. Using this system assumes you have more than one source format available (so, for example, an AES stream, plus an analogue backup, or a Dante stream plus analogue backup.)



(IF SELECTED)

In fact, your amplifier is capable of setting up a three tier system, so even in the case of a secondary source failure, it can default back to an analogue source. Analogue is always the lowest priority failover source.

A source failure is defined differently for AES inputs and for Dante inputs. For AES sources it is indicated by a loss of signal (so either a failure of the upstream device) or disconnection. For Dante sources it is indicated by loss of signal, disconnection and additionally by a loss of subscription.

As analogue sources cannot be verified for signal integrity, if analogue is chosen as the primary source, the failover system will not be offered.

The failover system can also be programmed to restore the source, should secondary or primary

sources return, with a hold time to prevent erratic behaviour in the case of intermittent faults.

The Network and AES LEDs on the front panel also indicate if the primary source has failed: If the Network Audio or AES LEDs are flashing, then they are selected for primary operation but selection has moved to secondary or final source(s).

Failover selections are stored as part of a "Routing" memory" and also are therefore included in storage of an "Everything" memory. For more information on how to store and recall settings, please see page **Error! Bookmark not defined.** 



#### Source Selection and Failover

To choose sources, from the home screen, press MENU, choose the CONFIGURATION Sub-Menu and press ENTER.



Use the encoder or BACK and NEXT keys to find the Input Source Selection option and press ENTER.

## **Delta, DPA Series**

### Choosing Sources for Input Processing and Failover Configuration

The screen will now show the current choice for the first input processing channel (A):



Use the encoder or BACK and NEXT keys to scroll through the eight choices for this input. These will be:

Four analogue sources:

Analo9ue A Analo9ue B (Analo9ue C) Analo9ue D And four digital sources, depending on the AES selection: AES A AES B (Dante C)

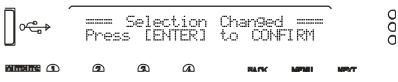
(Dante D)

The choices shown above would be shown if AES has been selected on XLR C. Analogue C is shown in brackets to indicate that this selection will result in no audio, either because the input is currently unavailable (due to input selection choices in the case of Analogue C) or because the input does not exist (due to the network audio card not being fitted in the case of the Dante C and Dante D).

Press ENTER when the required input source is shown. If the source chosen is analogue then no failover operation can be used on that channel, and the next processing channel will be selected and so on, running through input channels A-D.

Configuration of the inputs using analogue only is therefore the same as previous versions of firmware.

Finally, if anything has been changed, the confirmation screen will show:

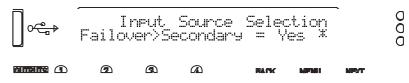


Press ENTER to confirm the changes and exit to the home screens.

## **Delta, DPA Series**

#### Choosing Sources for Input Processing and Failover Configuration

If a digital selection has been made for a primary source on any channel, then pressing NEXT after this selection will ask if Failover is to be used:



Use the encoder or BACK and NEXT to select Yes if you wish this input to use the Failover system and automatically switch to your secondary input source, should the primary fail. Press ENTER.

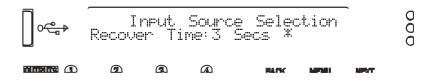
The secondary source must now be chosen:



Use the encoder or BACK and NEXT keys to scroll through the eight choices for this input. Selecting an analogue source as the secondary will finish the selection process for this input and move onto the primary choice for the next input. If a digital source is chosen for the secondary, then a final step will determine if the tertiary (final) failover source, which can only be analogue is to be used:

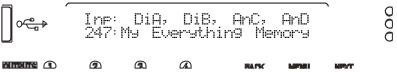


Only the four analogue sources will be offered, and any in brackets {Analog D} will highlight that this choice will result in no audio, for the reasons as explained on page **Error! Bookmark not defined.**. Press ENTER to either move to the next input setup or the final step, which is the recovery time for the failback system. This will only be shown if a channel has failover enabled.



Use the encoder or BACK and NEXT keys to select the time for the system to hold before reselecting the higher order source. It is possible to prevent the higher order source taking over again by selecting "Never" from the list. Press ENTER to confirm the changes and exit to the home screens.

Selecting the IN A-D Bank on the front panel will show the current sources in use for each processing channel and this will update if a failback source is used with the accompanying digital source LED flashing:



Page 3

# Delta, DPA Series

Choosing Sources for Input Processing and Failover Configuration

Page 4

Configuring Failover in AudioCore : Amped Edition

Failover is only supported from version 9.31 onwards. It is accessed from either the Device > Modify menu or a right click on the device background and choosing Modify from the menu and then selecting the Source Selection tab:

Modify DPA 100				X
Format Channel	Ganging Source	ce Selection	Input & Output Lab	els
Input A	Dante C 👻			
		AES A	•	
			Analogue A	•
Input B	Dante D 👻	AES B	-	
		ALS D	Analogue B	-
Input C	Analogue C 👻			
		No Failover	No Failover	_
Input D	Analogue D 👻		No Fallover	
		No Failover	·	
			No Failover	-
AES	AES XLR C	Fail	lover Recovery Tim	ne
AES	Analog XLR D		5 Secs.	•
Diaital Out 9	Course Pre-lev	ut processing		
Digital Out Source Pre Input processing				
OK Cancel				

Select the primary source for each input to the DSP – remember that choosing an analogue source will disable further failover choices. You can also choose to manual disable failover even with a digital source selected (if you do not have any backup sources available).

The Failover Recovery Time dropdown also has a "Never" selection so that even if the Primary source is restored, it will not be automatically reselected. To manually reset (or reselect) the Primary source, press the "Reset Failover" button on the toolbar which is only activated when there has been a Secondary or Tertiary source auto-selected due to a failure.