

AKURATE DS

DIGITAL MUSIC PLAYER _____



SYSTEM INSTALLATION AND SETUP MANUAL

INSTALLATION AND SETUP

COPYRIGHT AND ACKNOWLEDGEMENTS

Copyright © 2007 Linn Products Ltd. First edition November 2007.

Linn Products Limited, Glasgow Road, Waterfoot, Eaglesham, Glasgow, G76 OEQ, Scotland, United Kingdom

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

The content of this manual is furnished for information use only, is subject to change without notice, and should not be construed as a commitment by Linn Products Limited. Linn Products Limited assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual.

Trade marks used in this publication: **Linn** and the **Linn logo** are registered trade marks of Linn Products Limited. **Akurate** and **Klimax** are trade marks of Linn Products Limited.

Linn Products Limited disclaims any proprietary interest in trade marks and trade names other than its own.

INSTALLATION AND SETUP

CONTENTS

1	OVERVIEW	1
2	SET UP OF THE NAS	3
3	TWONKYMEDIA	8
4	EAC INSTALLATION	12
5	RIPPING CDs	19
6	THE WIRELESS CONTROL POINT, AND INSTALLING THE LINN GUI AND CONFIG APPLICATION	22
7	AKURATE DS INSTALLATION	23
8	THE LINN CONFIG APPLICATION	26
9	FINAL STEPS	29
10	TECHNICAL SPECIFICATION	30

INSTALLATION AND SETUP

1 OVERVIEW

The Akurate DS operates within a standard Ethernet network. There are six components involved in the network.



INSTALLATION AND SETUP

1 OVERVIEW (continued...)

The first two components provide network infrastructure.

1. Ethernet switch

This device is the connection point for all other components on the network allowing all components to communicate with each other.

2. **WAP**

Plugs into the switch thereby allowing wireless components to communicate with wired ones.

A PC/laptop is required for system installation.

3. PC/laptop

The PC or laptop is a standard computer that is used during setup and configuration of the Akurate DS system. The same, or another computer, may be used after setup to add new music to the NAS. In order for the computer to communicate with the Akurate DS system, it must be connected to the switch.

The final three devices interact together to provide the Akurate DS music experience. They are:

4. **NAS**

Securely stores music on a hard drive array. Additionally, the NAS runs three important pieces of software:

a. Media Server

Indexes and allows retrieval of the music from the NAS.

b. DHCP Server

Responsible for allocating IP addresses to all devices on the network.

c. Network Sharing Protocols

Allows computers to place new music on the NAS.

5. Wireless control point

Allows the user to browse, select, and control the playback of music. It requests information about the location of the music from the Media Server and then passes this information to the Akurate DS.

6. Akurate DS

Follows instructions from the wireless control point to retrieve music from the NAS, and then transforms the digitally stored music into high quality analogue audio. The Akurate DS plays WAV, FLAC or MP3 files.

This describes a default network architecture for the Akurate DS. Many other network configurations are possible, depending on specific requirements.

INSTALLATION AND SETUP

2 SET UP OF THE NAS

To make installation easier, here we describe in detail the steps needed to setup an Infrant ReadyNAS NV+. For other NAS devices consult the documentation from your NAS vendor. The instructions below assume that the NAS has been supplied with hard drives pre-installed. The RAID configuration for the Infrant ReadyNAS NV+ is best set at X-RAID. For other manufacturers' devices RAID 5 should be chosen to allow easy future expansion of storage.

- 1. On the installation PC/laptop disable all firewalls and the proxy server.
- 2. Follow the Getting Started Guide supplied with the ReadyNAS, up to and including installing the RAIDar software. Once installed and running, RAIDar will scan the network for the Ready NAS. If the screen below appears, check all connections, ensure all firewalls and the proxy server are disabled, then press 'Rescan'.

RAIDar	
elect a NAS device to setup	
RAIDar Help	<u> </u>
About RAIDar	
RAIDar acts as a discovery tool for the NAS devices on your (device(s) listed. If no NAS device is detected, check the foll	network. Simply plug in your NAS onto the network and start RAIDar. You should see the NAS lowing and click Rescan to try again.
1 Make sure the NAS device is nowered up and is conn	ected to your network
 Make sure your client PC running RAIDar is on the sa 	ame subnet as the NAS device.
3. If you are running RAIDar on Windows XP before SI	P2, disable the Internet connection firewall.
RAIDar Buttons	
Once you see the device listing, highlight a device entry and cli	ick on the desired command button at the bottom. The meaning of the buttons are as follows:
Once you see the device issuing, ingringht a device entry and ch	

When the screen below appears, select the appropriate NAS (if more than one is available), then press 'Setup'.

	M00 0 11			TO A MARCO	11110-1		0	0	. [-	0	7	T	[100	1 1.6
1	MAC Address A	Model	Host Name	P Address	Voi Disk:	1	2	3	4	5	6	1	Imp	ran	UPS	Into
-	00:0D:A2:01:42:39	ReadyNAS NV+ [X-RA	. nas002	10.15.10.0		•		0	0		_			•	0	3.01c1-p6

You will be asked for a user name and password. Enter the default user name and password as shown in the ReadyNAS installation guide. After you login, select 'Next' from the bottom-right corner.



2 SET UP OF THE NAS (continued...)

3. The 'Clock' screen

Select the appropriate timezone and time for your location. If the 'Synchronize clock...' checkbox is selected, deselect it. Press 'Apply', then 'Next'.



4. The 'Alerts' screen

Enter one or more service email contacts. If there are any problems with the NAS, email notification will automatically be sent from the NAS. This allows the problem to be diagnosed and corrective action taken before the user is aware that a problem exists. Press 'Apply', then 'Next'.

5. The 'Ethernet' screen

Select the IP address assignment appropriate for the network the Akurate DS system is being installed into. Press 'Apply', then 'Next'.

6. The 'Global Network Settings' screen

Select a hostname for the NAS, e.g. 'nas001'. This name should be unique to the network. This name will be used to refer to the NAS from other devices on the network, for example the ripping software (please refer to the *EAC Installation* section for details). Leave other settings unchanged. Press 'Apply', then 'Next'.

7. The 'Admin Password' screen

Complete the required information. Press 'Apply', then 'Next'.

8. The 'Security Mode' screen

Nothing on this screen needs changed. Press 'Next'.

INSTALLATION AND SETUP

2 SET UP OF THE NAS (continued...)

9. The 'Standard File Protocols' screen

Select the NFS checkbox. Leave other settings unchanged. Press 'Apply', then 'Next'.



10. The 'Streaming Services' screen

Nothing on this screen needs changes. Press 'Next'.

11. The 'Share List' screen

Click on the CIFS icon on the line beginning 'media'. This will take you to 'Share Options'...



INSTALLATION AND SETUP

2 SET UP OF THE NAS (continued...)

12. The 'Share Options' screen

Set the default access to 'Read/Write'. Repeat this on the NFS, HTTP/S and Rsync tabs. Leave the AFP and FTP/S tabs set to 'Disabled'.

Select the Advanced Options tab. Make the following settings: Share folder owner: media Share folder group: nogroup Share folder rights: Read/write Share group rights: Read/write Share folder everyone rights: Read/write Uncheck 'Set ownership and permission for existing files...' Check 'Grant rename and delete privileges to non-owner of files.'

This completes the initial setup of the NAS.

INSTALLATION AND SETUP

3 TwonkyMedia

Installing TwonkyMedia Server

To complete the installation of the Infrant ReadyNAS, TwonkyMedia Server software has to be installed onto it. This is a UPnP media server and allows access to all material stored on the NAS.

TwonkyMedia will present the music files to the user in such a way that they will be ordered by Artist, Album, Artist/Album, Genre etc... It gives various options for searching through the music, as explained below.



Downloading TwonkyMedia

TwonkyMedia for a PC or NAS other than an Infrant ReadyNAS, can be downloaded from the TwonkyVision website. If you are using an Infrant ReadyNAS, follow the steps below.

- 1. Enter the following link on your browser to access the installation guide: http://www.twonkyvision.com/Support/HowTo/ReadyNAS-Install.zip
- 2. Enter the following link on your browser to access the TwonkyMedia software: http://www.twonkyvision.com/Download/4.4/ TwonkyMedia_4.4.0.bin
- 3. Follow the instructions in the installation guide. Please note that the firmware version shown in step 3 of the installation instructions may not show the correct information.

Suggested TwonkyMedia Setup

There are various options for setting up TwonkyMedia which will effect how the information is displayed to the user. This can be customised for each individual customer as required.

- 4. Log onto the NAS. Select 'Advanced Control'. From the menu on the left select 'Services' then 'Streaming Services'.
- 5. Ensure the 'TwonkyMedia' service checkbox is enabled.
- 6. Follow the http link to connect to the TwonkyMedia server and purchase a license from the online shop.

INSTALLATION AND SETUP

3 TwonkyMedia (continued...)

7. Select 'First Steps' from the menu on the left-hand side.



Here the name of the server can be set. This is necessary for installations where more than one NAS is available. If you change any of the settings, press the 'Restart server' button before continuing.

8. Select 'Sharing' from the left of the page.

Tavon	Version 4.4 Beta S
sic Setup First steps Sharing Clients/Security	Save Changes Cancel Rescan content directories
Internet Radio Wanced Setup External applications Naming Music tree Picture tree Video tree Miscellaneous	Content Locations:
pport Troubleshooting FAQ wonkyVision GmbH 33,2007). rights reserved	Rescan in minutes: 60 This option specifies the rescan behavior of the server. If set to 0, automatic rescans are disabled. A positive value specifies the period between rescans of content directories in minutes1 enables the server to watch content directories automatically for new content without the need for rescans.

The settings for 'Content Locations' is important as they will be used when setting up EAC (the recommended disc ripping software). Use the browse button to set the path to correspond to the directory into which EAC will rip CDs - typically, this will be '/Media/Music'. Set the drop-down menu to 'Music-only'.

Set 'Rescan in minutes' to '60'.

INSTALLATION AND SETUP

3 TwonkyMedia (continued...)

9. Select 'Naming' from the left of the page.

Tick 'Standardize titles' at the top of the page.

River	lan
- M.M.M.	TwonkyMedia Configuration: Nam
June	Version 4.4 Beta 5
Basic Setup First steps Sharing	Save Changes Cancel Restart server
Chents/Security Internet Radio Advanced Setup External applications	Standardize titles:
Naming Music tree Picture tree Video tree Miscellaneous	Folder prefix string: Folder prefix string to be prefixed to all folder names in folder navigation to help you differentiate folders from content items at the client device.
Support Troubleshooting FAQ TwonkyVision GmbH	All Tracks: Total Tracks Name for 'All Tracks' folder (server default used if left empty).
(2003,2007). All rights reserved	Playlists: Playlists Name of the playlists node in the navigation tree, leave empty if this node shall not be included in the navigation tree.
	Last played: - Last played - Name of the auto generated playlist 'last played', leave empty if this playlist should not be added to the navigation tree.

Tavo	MEDIA Version 4.4 Beta 5	TwonkyMedia Configuration: Namin
Basic Setup First steps Sharing Gients/Security Internet Radio Advanced Setup External applications	All Pictures: Name for 'All Pictures' folder (server default used if left empty). All Videos:	
Naming Music tree Picture tree Video tree Miscellaneous Support Troubleshooting	Name for 'All Videos' folder [server default used if left empty]. Music: Name for Music root folder, leave empty to suppress this folder.	
FAQ TwonkyVision GmbH (2003,2007). All rights reserved	Pictures: Name for Pictures root folder, leave empty to suppress this folder. Videos: Name for Video root folder, leave empty to suppress this folder.	
	- ALL -: Title of the - ALL - entry in the nodes of the navigation tree.	

Remove the 'Video', 'Pictures' and '-ALL-' directories.

INSTALLATION AND SETUP

3 TwonkyMedia (continued...)

10. Select 'Music Tree' from the left of the page.

	MEDIA		Tw	onkyMedi	a Con	figuration: Music tree
					i	
	Save Changes Cance			Restart se	rver	
er unity Adm		Name	Type	AB	c	
ietup	Music node 1:	Artist	Artist	*	3 💌	Add level
pplications -	Music node 2:	Album	Album		3 💌	Add level
1	Music node 3:	Folder	Folder		- 18	Add level
#	Music node 4:	ArtistiAlbum	Artist		3 💌	
auous			Album	×	3 +	Add level
- Collinso	Music node 5:	YearlArtist	Vear			
SOURCE .		No. 1997 (March	Artist			
OntH			Album			Add level
ed	Music node 6:					Add level
		Add node				
	An individual music navigation addition an alpha sub-grouping	ree with up to 10 nodes may be sp may be introduced by specifying th	ecified by this option to number of chara	n. For each noi cters per group	de the nar	me to be presented in the navigation free and the node type have to b
	Navigation Tree Setup:	Advanced default navigation	T			
	There is the choice of selecting	different pre-configured navigation	trees or defining a	customized tr	e studu	re. For small content

Apply the settings shown in the above screen image. Press 'Save Changes' then 'Restart server'.

INSTALLATION AND SETUP

4 EAC INSTALLATION

Linn recommends the use of EAC (Exact Audio Copy) for converting CDs to FLAC and ripping them to the NAS. This software is available free of charge from the Internet.

EAC should be installed on the PC/laptop that the customer will use for ripping CDs.

EAC Installation

1. Go to the EAC website: http://www.exactaudiocopy.de/en/index.php/resources/download/

D. Friendler	- A first day also have seen if we had		R G R Con
R http://www.evadaudoco	bi gejeuluger tudi jezonosti govujeng		2 1 1 K 100
Lift Vevi Favorites Tools ref	•		
Deveniend + Event Audio Copy			Q • [] • M • [] flat • []
			Home Stemap Cortac
			EXACT AUDIO COPY
verview	Download		
Features Basis Technology Bound Editor	Download the latest version of EAC	A1898	Anna Google
Tips & Tricks		CENTER SPACE	Exact and a copy Get Exact autor copy Search for Exact autor copy
Awards Contact About me		NMath ^{IN} .NET IBraries for financial, engineering, and scientific applications	Guard Year Software
esources		Linear algebra Mumerical methods Statistics Mandom numbers	Resilient Software Protection Acts Pracy & Tamper Prevention
Older Versions for Download		Free 14-Coy Trial Mensions millenaux N332 Source	MpJ Converter Softwar
Main Legal Limbations Thanks	Exact Audio Copy V0.99 prebeta 1 (includ	ing CDRDAO and Flac packages) last changed on 29.06.07	Download free official to or from 25 other formation
Registration Links Commercial SDM		Highspeed-Download @ digitalwond de	
upport		Highspeed-Download @ digtaworld de ownload	Els. Windows Erses Free 2 Min Registry scan File PC Errors Instantly!
PAD Forum	If you encounter any	problems on downloading, please cl	ick here
Documentation	To download additional languages, or to help to tr	anslate EAC into your own Language, please have a look tent.	Hug Tracking Seminar Learn key principles of bu

2. Select the link for English download.

3. Select 'Exact Audio Copy V0.99 Prebeta 3, Windows installer'. The download will begin. Once the download is complete, double-click the downloaded .exe file to start the installation process. Follow the on screen instructions. At the end of the install, run EAC.



4 EAC INSTALLATION (continued...)

4. The EAC setup wizard screen will appear. Select 'Cancel' to prevent the setup wizard running.



EAC Configuration

 Copy the files contained within the 'Profile' directory on the disc supplied with the Akurate DS, onto the PC/laptop. Using Windows Explorer, copy the files into Program Files\Exact Audio Copy\ Profiles.

Exact Audio Copy EAC Edit Action Database Too	ls Help						- D ×
JTEON DVD-ROM LTD163 Adapte	r: 1 ID: 0 💽			Year Genre			
++ ++ ++ IL II == ++	i ≜ 🕤 %jö treeb		Various Artists	freedb		*	
Title	Track Start	Length	Gap Size	Compr. Size	Read CRC	Test CRC	CRC Pre-Empha
	C:\Program Files\Ex	act Audio Copy	y\Profiles				
	File Edit View Fav	orites Tools	Help				4
	G Back + 🕤 -	🌮 🔎 Searc	th 🜔 Folders 🛛 😭 🕻	2 × 19 🗉	·		
	Address C:\Program	Files\Exact Audio	Copy\Profiles				🗾 🄁 G
- 7							
	Linn_EAC.cfg						
o audio CD in drive							
	1 objects					15.6 KB	Ny Computer

INSTALLATION AND SETUP

4 EAC INSTALLATION (continued...)

6. From the 'EAC' menu, select 'Profiles - Load Profile' and browse to Program Files\Exact Audio Copy\Profiles.

😔 Exact Audio Copy							
EAC Edit Action Database	Tools He	lp					
EAC Options	F9	0 .	CD Title				
Drive Options	F10		CD Artist				
Compression Options	F11	e 💿 👘 freedb	I				
WAV Editor Ontions	Alt+O		· · · · · · · · · · · · · · · · · · ·				
		Track Start	Length				
Configuration Wizard		Land Durfile					
Pronies		Load Profile Shift F1					
Exit	Alt+F4						
No.							

7. Select 'Linn_EAC099.cfg' for version 0.99 of EAC. Additional configurations are provided for newer versions of EAC, if available.

Exact Audio Copy EAC Edit Action Database	Fools Help				
LITEON DVD-ROM LTD163 Ada	pter:1 ID:0	CD Title CD Artist	Various Artists	Year Gienre freedb	
Title Load Optio	Track Si	art Length	Gap Size	Compr. Size	Read CRC Test CRC
Recer Recer Deskte My Docum	ook in: C Profiles		I G 🕈 🖻		
My Netw Pisce	ork File name:	Linn_EAC.cfg EAC Profiles (*.cfg)	Save New Driet	Open Cancel	

4 EAC INSTALLATION (continued...)

8. Select the 'EAC Options' menu.

🐵 Exact Audio Copy							
EAC Edit Action Database	Tools H	Help					
EAC Options	F9	0		-	CD T	itle 🚺	
Drive Options Compression Options freedb / Database Options	F10 F11 F12		•	n freedb	CD Artist		
Configuration Wizard Profiles	MILTQ	•	Track	Start		Length	
Exit	Alt+F4						

9. Select the 'Directories' tab. Click the 'Use this directory' radio button and enter the details of the NAS. This should take the following form:

\\hostname.domain_name\media\music\flac

Where,

Hostname - defaulted to NAS001

Domain Name – automatically generated by any DNS which would have to be on the same network as the NAS

If there is no DNS you may have to map the NAS as a web page within Windows Explorer. When this is complete the directory will have the form:

\\192.168.1.3\media\music\flac

The IP address will be that of the NAS. This is shown on the front panel of the NAS by pressing and releasing the standby switch.

Using the setup wizard lets EAC determine the best setup for the PC/laptop's drive.

E	EAC options	?×
L	Extraction General Tools Normalize Filename Catalog Directories Write Interface	
- Cu	Standard directory for extraction C Ask every time (default showing last used directory)	
NUMBER	Use this directory	
HI D		
4		
	OK Car	

4 EAC INSTALLATION (continued...)

- 10. Disable any proxy server on the network.
- 11. Select 'Drive Options' from the 'EAC' menu. Insert an audio CD into the appropriate ROM drive.



12. Click 'Detect Read Features'.

The test will start.

ptions for drive LITEON DVD-ROM LTD163	? ×
Extraction Method Drive Offset / Speed Gap Detection	
Copyra prodec	
Secure modes	
Secure mode with following drive features (recommended)	
Drive has 'Accurate Stream' feature	
Drive caches audio data	
Drive is capable of retrieving C2 error information	
C Paranoid mode (not recommended)	
🗖 Disable CD-ROM drive cache	
Synchronized modes	
C Fast mode	
Burst modes	
O Burst mode	
Detect Read Features Examine C2	Feature
[OK Cancel
•	

www.linn.co.uk

4 EAC INSTALLATION (continued...)

13. When complete you will then be asked to apply the results.

Nnalyzing Image: Sector Se	ve Uffse	et / Speed Gap Detec	tion		
Detecting CD-ROM drive features nmended) Caching : No Accurate Stream : Testing C2 Error Info : ormation Please wait 1 Calculation could take some minutes ! ormation Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Examine C2 Feature			X		
Caching : No Accurate Stream : Testing C2 Error Info : ormation Please wait ! Calculation could take some minutes ! Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Examine C2 Feature	drive featur	es	mmended)		
Accurate Stream : Testing C2 Error Info : ormation Please wait ! Calculation could take some minutes ! Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Examine C2 Feature		No			
C2 Error Info : Please wait ! Calculation could take some minutes ! Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply Cancel Examine C2 Feature		Testing			
Please wait ! Calculation could take some minutes ! Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply Cancel Examine C2 Feature					
Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply Cancel Examine C2 Feature	lculation co	ould take some minutes	i		
Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply Cancel Examine C2 Feature	e load while	e detecting features !			
Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply Cancel					
extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply Cancel Examine C2 Feature	ate Stream'	feature is useful for aud	io		
Apply Cancel Examine C2 Feature	ing' feature .ed and inst	will make exact extracti ecure !	ion		
Apply Cancel Examine C2 Feature			_		
	App	oly Cancel		amine U2 Feature	
					11
				OK	Cancel

14. Click 'Apply'. This will close the current window and take you back to the 'Extraction Method' tab. Select 'OK' from this tab to exit 'Drive Options'. Now, the current configuration will have the correct drive features and be pointing to the desired NAS.

xact Audin Enny -	Sibelius, Jean /	Symphony No.6	and No.7	21
			1	L.
Extraction Method Driv	/e Offset / Spe	ed Gap Detection		
Analyzing	_		×	
Detecting CD-ROM d	rive features		nmended)	
Caching :	No			
Accurate Stream :	Yes			
C2 Error Info :	Yes		ormation	
Do not produce Information : Whereas the 'Accura extraction, the 'Cachi even more complicate	e load while detect te Stream' feature ng' feature will mak ad and insecure !	ing features ! is useful for audio ke exact extraction		
	Apply	ОК	Examine C2 Feature	
			OK	Cancel
	sact Audio Conv bions for drive LITEC Extraction Method Driv Analyzing Detecting CD-ROM d Caching : Accurate Stream : C2 Error Info : Please wait I Cal Do not produce Information : Whereas the 'Accura extraction, the 'Caching even more complicate	Analyzing Detecting CD-ROM drive features Caching : No Accurate Stream : Yes C2 Error Info : Yes Please wait ! Calculation could take Do not produce load while detect Information : Whereas the 'Accurate Stream' feature extraction, the 'Caching' feature will male even more complicated and insecure ! Apply	sact Audio Conv. Sibelius. Jean / Symphony No.6. httons for drive LITEON DVD-ROMLITD153 Extraction Method Drive Offset / Speed Gap Detection Analyzing Detecting CD-ROM drive features Caching : No Accurate Stream : Yes C2 Error Info : Yes Please wait ! Calculation could take some minutes ! Do not produce load while detecting features ! Information : Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Apply OK	sact Audin Crov. Sibelius. Jean / Symphony No.5 and No.7 straction Method Drive Offset / Speed Gap Detection Analyzing Immended Immended Immended Caching: No Immended Immended Caching: No Immended Immended Caching: No Immended Immended Caching: No Immended Immended Caching: Yes Immended Immended Do not produce load while detecting features ! Information Immended Immended Whereas the 'Accurate Stream' feature is useful for audio extraction, the 'Caching' feature will make exact extraction even more complicated and insecure ! Examine C2 Feature Apply OK OK

4 EAC INSTALLATION (continued...)

15. Save this new configuration.

VD-ROM	LTD163 Adapter: 1 ID: 0		- CC) Title	Symphony No.6	and No.7	Year	2006			
			~ CI) Artist	Sibelius, Jean		Genre	Orchestral	-		
	선 선 한 한번 🔫		freedb		Various Artist	\$	freedb	Classical	•		
Title		Track	Start	Length	Gap	Size	Compr. Size	Read CRC	Test CRC	CRC	Pre-Em
🞜 En	Saga, Op.9	01	0:00:00.00	0:20:01.06	Unknown	202.05 MB	46.91 MB	500 C	200 C	100	N
Syl	mphony No.6 in D minor,	02	0:20:01.06	0:09:53.48	Unknown	99.86 MB	23.18 MB				P
🞜 Syr	mphony No.6 in D minor,	03	0:29:54.54	0:06:23.32	Unknown	64.50 MB	14.97 MB				P
Syl	mphony No.6 in D minor,	04	0:36:18.11	0:04:00.56	Unknown	40.50 MB	9.40 MB				N
1 Sy	mphony No.6 in D minor,	05	0:40:18.67	0:11:12.18	Unknown	113.08 MB	26.25 MB				P
I SVI	mphony No.7 in C. Op.105:	06	0:51:31.10	0:21:54.03	Unknown	221.05 MB	51.32 MB				N
and and											
11											

5 RIPPING CDs

Ripping CDs onto the NAS

- 1. Disable any proxy server on the network.
- 2. Insert the CD into the PC/laptop's drive. Start EAC. The screen will show the disc's contents.

😨 Exact A	udio Copy - Carol Kidd / A Pl	ace In I	My Heart							
EAC Edit	Action Database Tools Help									
LITEON DV	/D-ROM LTD163 Adapter: 1 ID: 0		- CC) Title	A Place In My He	eart	Year			
) Artist	Carol Kidd		Genre		-	
► 11	a H4 44 M4 🔫	•	freedb		Various Artiste		freedb			
							neede			
JAU CAL	Title	Track	Start	Length	Gap	Size	Compr. Size	Read CRC	Test CRC	CRC P
	Little Girl Blue	01	0:00:00.00	0:04:27.22	Unknown	44.96 MB	10.44 MB			
	Pennies From Heaven	02	0:04:27.22	0:03:36.63	Unknown	36.47 MB	8.47 MB			
-	The Charm Of You	03	0:08:04.10	0:02:50.52	Unknown	28.71 MB	6.66 MB			
	I've Got You Under My Skin	04	0:10:54.62	0:02:31.58	Unknown	25.53 MB	5.92 MB			
	Put Your Dreams Away	05	0:13:26.45	0:03:27.57	Unknown	34.95 MB	8.11 MB			
-	The Very Thought Of You	06	0:16:54.27	0:04:27.00	Unknown	44.91 MB	10.42 MB			
	The Sunny Side Of The Street	07	0:21:21.27	0:03:35.30	Unknown	36.23 MB	8.41 MB			
Stat	🚅 If You Are But A Dream	08	0:24:56.57	0:03:37.28	Unknown	36.56 MB	8.49 MB			
	🕫 I'll Never Smile Again	09	0:28:34.10	0:04:07.22	Unknown	41.60 MB	9.65 MB			
	🕫 I Get A Kick Out Of You	10	0:32:41.32	0:04:44.68	Unknown	47.92 MB	11.12 MB			
20 1031	🗱 I Get Along Without You Ver	11	0:37:26.25	0:04:25.57	Unknown	44.70 MB	10.38 MB			
7.7	Bewitched, Bothered And B	12	0:41:52.07	0:04:31.58	Unknown	45.71 MB	10.61 MB			
	1									
Audio CD in	drive 12 Tracks	0:46:2	3.65 h:m:s.f	468.32 N	4B / 108.74 MB	-			.oad Save	New Del

3. To start the process of ripping the CD, select 'Action', 'Copy Selected Tracks', 'Compressed'. Alternatively, the key shortcut is Shift + F5.

Ripping will begin.

Exact Au	udio Copy - Carol Kidd / A Place In M	ly Heart									
LITEON DA	Copy Selected Tracks	Þ	Unco	mpressed F5	My He	art	Year	[
	Test & Copy Selected Tracks	<u>,</u>	Com	pressed Shif	t+F5		Genre	-	-		
▶ 11	Copy Range Test Calastad Tracks				Marian Asta		6	Line			
	Convigence & Consta CUE Chart	^{ro}			Vanous Arusts		needb	Jazz	-		
Con LURU	Cotolog Selected Tracks	1	t	Length	Gap	Size	Compr. Size	Read CRC	Test CRC	CRC	Pre-Emph
S	Copy Selected Tracks Index-Reced		0.00	0:04:27.22	Unknown	44.96 MB	10.44 MB				No
	Copy Selected matts index-based		7.22	0:03:36.63	Unknown	36.47 MB	8.47 MB				No
	Detect Gaps	F4 14	4.10	0:02:50.52	Unknown	28.71 MB	6.66 MB				No
C LINE	Test Gaps On Silence	F3	1.62	0:02:31.58	Unknown	25.53 MB	5.92 MB				No
	Create CUE Sheet	> e	5.45	0:03:27.57	Unknown	34.95 MB	8.11 MB				No
	Leave Out Ganc	1	1.27	0:04:27.00	Unknown	44.91 MB	10.42 MB				No
ING	 A (poend Gene To Previous Track (default)) 	1	1.27	0:03:35.30	Unknown	36.23 MB	8.41 MB				No
2	Append Gaps To Previous Track (deract)	1	5.57	0:03:37.28	Unknown	36.56 MB	8.49 MB				No
	Appendicaps to treat that	0.20.34	ŧ.10	0:04:07.22	Unknown	41.60 MB	9.65 MB				No
1000	🕫 I Get A Kick Out Of You 10	0:32:41	1.32	0:04:44.68	Unknown	47.92 MB	11.12 MB				No
	🞜 I Get Along Without You Ver 11	0:37:26	5.25	0:04:25.57	Unknown	44.70 MB	10.38 MB				No
7.7	Bewitched, Bothered And B 12	0:41:52	2.07	0:04:31.58	Unknown	45.71 MB	10.61 MB				No
dia cito in d	1 12 Tracks 0146/23	.65 h:m:s	.,f	468.32 MB /	108.74 MB				oad Save	New	Delete

5 RIPPING CDs (continued...)

4. On completion, the following will be displayed and the disc will be ejected. Select 'OK'.

UN DVD-HUM L	TD163 Adapte	r: 1 ID: 0	CD CD	litle	A Place In My H	eart	Year				
tracting Audio D)ata		_ 🗆 ×	list	Carol Kidd		Genre		-		
Copy Track	12				Various Artists		freedb	Jazz	-		
Filename :	12 · Bewitch	ned, Bothered And Be	wildered.wav	Length	Gap	Size	Compr. Size	Read CRC	Test CRC	CRC	Pre-Er
Track Progress				D:04:27.22	Unknown	44.96 MB	10.44 MB				1
			1 1 1 20	0:03:36.63	Unknown	36.47 MB	8.47 MB				1
			4:31.76	0:02:50.52	Unknown	28.71 MB	6.66 MB				
Track	100.0 %	lime	0:00:34	D:02:31.58	Unknown	25.53 MB	5.92 MB				
Speed	7.8× I	Est. Remaining	0:00:00	D:03:27.57	Unknown	34.95 MB	8.11 MB				
				0:04:27.00	Unknown	44.91 MB	10.42 MB				
Total Progress				0:03:35.30	Unknown	36.23 MB	8.41 MB				
				0:03:37.28	Unknown	36.56 MB	8.49 MB				
				D:04:07.22	Unknown	41.60 MB	9.65 MB				
Total	100.0 %	Time	0:06:53	0:04:44.68	Unknown	47.92 MB	11.12 MB				
Speed	6.7×	Est. Remaining	0:00:00	0:04:25.57	Unknown	44.70 MB	10.38 MB				
Copy OK Compress Trac	k By External P	rogram									
Power Down a	iter extraction fi	nished OK									
				-							
1.1.1											

5. Select 'OK' again. The CD will now be copied onto the NAS. No further actions are required. After a short time the new content will be available to select and listen to.

	•	CD Title	A Place In My He	art	Year				
	-	CD Artist	Carol Kidd		Genre				
Status and Error Messages			× Various Artists		freedb	Jazz	-		
C Track status and errors			Gap	Size	Compr. Size	Read CRC	Test CRC	CRC	Pre-Empha
Track 9 Peak level 85.4 % Track qualty 100.0 % Copy 0K Track analy 100.0 % Copy 0K Track ti2 Track qualty 100.0 % Copy 0K Track ti2 Peak level 91.0 % Track ti2 Peak level 91.0 % Copy 0K No errors occured End of status report Review Tracks		× OK	Uninown Uninown Uninown Uninown Uninown Uninown Uninown Uninown Uninown Uninown	44.9.66 MB 36.47 MB 25.53 MB 34.95 MB 26.53 MB 36.25 MB 44.91 MB 36.23 MB 36.56 MB 41.60 MB 41.60 MB 41.60 MB 41.70 MB 44.70 MB	10.44 MB 8.47 MB 5.92 MB 8.11 MB 10.42 MB 8.49 MB 9.65 MB 10.38 MB 10.38 MB 10.38 MB				No No No No No No No No

INSTALLATION AND SETUP

5 RIPPING CDs (continued...)

Ripping a large collection of CDs

If the customer has a large collection of CDs that need to be ripped to the NAS, using the above method may be too time consuming. An alternative method is to use a ripping service, details of which can be found on the Akurate DS product information page on Linfo.

INSTALLATION AND SETUP

6 THE WIRELESS CONTROL POINT, AND INSTALLING THE LINN GUI AND CONFIG APPLICATION

You may need to fully charge the battery on the control device before continuing with this procedure (see the information supplied with the control device), this may take an hour or longer.

- 1. Update the control device with .NET 2.0, available at www.microsoft.com/net.
- 2. Copy the Linn GUI installer to the wireless control point.
- 3. Copy the Linn Config installer onto the installation PC/laptop.*
- 4. Run both the installers. Do not launch the Linn GUI or Linn Config at this time.
- 5. On the wireless control point, disable the 'Auto Right Click' behaviour. This can be done by locating the notification area at the bottom-right of the Windows screen, and clicking the Touchkit: USB Controller icon
 - Select the Setting tab
 - Press the Option button
 - Deselect 'Enable Auto Right Click'.
- 6. You must give the installation PC/laptop's firewall permissions for the Linn Config and Linn GUI to access the network.

If the owner uses the Windows Firewall, follow the instructions from the following link to add Linn Config and Linn GUI.

http://www.microsoft.com/windowsxp/using/networking/security/ winfirewall.mspx If they use a different firewall, consult the vendor's manual for instructions.

Note:

If you update the Akurate DS system with new Linn Config or Linn GUI software, you must add the new software to the firewall permissions.

- 7. To configure you Akurate DS system, follow the instructions in *The Linn Config Application* section.
 - * You may wish to install the Linn Config on the PC/laptop the customer will use to rip CDs. This would mean the customer will be able to make changes to their system's setup (e.g. add a new source), and run the diagnostic tools, should their be a problem.

7 AKURATE DS INSTALLATION

This section describes how to connect the Akurate DS into a Linn hi-fi system.

Unpacking

The Akurate DS is supplied with the following:

- handset
- 2 x AAA batteries for the handset
- 1 pair of black interconnect cables
- RS232 lead
- mains lead
- CD-ROM (contains system software, installation manual and owner's manual)
- warranty pack

We recommend that the owner retains all packaging in case they need to transport the Akurate DS at a later date.

Positioning

The Akurate DS can be positioned almost anywhere, but please consider the following points:

- The unit should be placed on a flat, stable and rigid surface.
- Do not position the unit where sunlight can shine (whether directly, diffused or reflected) on its display, as the infra-red (IR) radiation in sunlight will be picked up by the unit's IR remote sensor and this can adversely affect its operation. Similarly, some electrical devices such as plasma TVs, fluorescent lights and energy saving lamps can emit IR which can likewise affect the operation.
- For best performance do not stack the unit with other products. Ideally, position the unit on a shelf by itself or, if proximity to other products is unavoidable, positioning side-by-side is preferable to stacking.
- The unit should not be situated above, or otherwise directly adjacent to sources of heat such as radiators, power amplifiers etc. Nor should it be enclosed in a cabinet with such devices.
- The unit itself produces very little heat; however it is advisable to allow a little space to the sides, rear and above the unit (ideally 10 cm / 4") for air circulation which will allow any heat to dissipate.

7 AKURATE DS INSTALLATION (continued...)

Back panel



1. OFF, ON

Mains power switch

2. POWER

Mains power inlet

3. EARTH GROUND

For connecting the unit to an earthing terminal if no mains earth is available

4. ETHERNET

For connecting the unit to the network switch

5. FALLBACK

Used when reprogramming the unit

6. RS232 1 - 4

Port 1 is for connecting to a Linn Akurate Kontrol, port 2 for a Linn Akurate CD. Ports 3 and 4 are currently not in use

7. BALANCED RIGHT/LEFT

For connection to a Linn Kisto or other pre-amplifier

8. ANALOGUE AUDIO OUTPUT

For connection to a Linn Akurate Kontrol or other pre-amplifier

INSTALLATION AND SETUP

7 AKURATE DS INSTALLATION (continued...)

Connecting to the mains supply

The Akurate DS contains an automatic internal mains voltage switch. This switch operates on all worldwide mains voltages from 100 V to 240 V. The unit can be connected to any worldwide mains voltage with no adjustment.

This unit must be earthed. Use the earthed moulded mains lead supplied, or if no mains earth is available, ensure the product's EARTH GROUND connector is connected to an earthing terminal.



RS232 connection on the Akurate Kontrol

For communication to take place between the components in an Akurate DS system, the RS232 Setup settings must be correctly configured on the Akurate Kontrol.

The correct RS232 Setup settings are.

Baud Rate: **9600** Parity: **Even** Data Bits: **7** Stop Bits: **1** RS232 Events: **Enabled**

To access the setup menus:

Using the handset -

• Press AMP, then SETUP on the handset.

Using the front panel -

• Hold **SELECT** on the front panel until MAIN MENU / SPEAKER SETUP is shown on the display.

To navigate through the menus and options:

• Use the ▲ / ▼ keys on the handset or front panel.

To make a selection:

• Press on the handset, or **SELECT** on the front panel.

To exit the setup menus:

• Press **SETUP** on the handset, or select **EXIT** from the MAIN MENU (if changes have been made you will be prompted to save or not save the changes).

8 THE LINN CONFIG APPLICATION

The Linn Config application is used to configure the settings on the Akurate DS and Akurate Kontrol.

- 1. Switch on the Akurate Kontrol and wait until the standby symbol is shown on the display.
- 2. Switch on the Akurate DS.
- 3. Launch the Linn Config if you have not already done so.

Room					
1	Device Type	Product ID	MAC Address	IP Address	
Lounge	Akurate DS	11184658	40000020012	172.20.4.223	

4. Highlight the Akurate DS and wait until the Linn Config connects to the unit. The 'Version' tab contains information on the Akurate DS for use by Linn Service personnel.

	Device Type	Product ID	MAC Address	IP Address	
unge	Akurate DS	11184658	40000020012	172.20.4.223	
				_	
ersion Auto Configure	Advanced Config	gure Diagnostics			
ersion Auto Configure oftware Version: 1.0- LF File: /bin roduct Id: 111 IAC Address: 400 ⁹ Address: 172	Advanced Config 0.35 //binaries/Ds12_rm 84658 000020012 .20.4.223	uure Diagnostics p_m.elf			
ersion Auto Configure oftware Version: 1.0- LF File: /bin roduct Id: 111 IAC Address: 400 2 Address: 172 Board Type	Advanced Config 0.35 //binaries/Ds12_rm 84658 000020012 .20.4.223	pure Diagnostics p_m.elf			
ersion Auto Configure oftware Version: 1.0- LF File: /bin toduct Id: /bin tAC Address: 400 ⁹ Address: 172 Board Type PCAS678P1R1	Advanced Config 0.35 //binaries/Ds12_rm 84658 000020012 .20.4.223 84 55 55 55	pure Diagnostics			
ertion Auto Configure oftware Version: 1.0- LF File: /bin roduct Id: 1111 AC Address: 400 ⁹ Address: 172 Board Type PCAS679P1R1 PCAS679P1R1	Advanced Conlig 0.35 // binaries/Ds12_rm 84658 000020012 .20.4.223 Br 55 7e	pure Diagnostics p.r.elf			
ersion Auto Configure oftware Version: 1.0- LE File: /bin roduct ld: 1111 IAC Address: 400 'Address: 1722 Board Type PCASS79P1R1 PCASS79P1R1	Advanced Conlig 0.35 // binaries/Ds12_rm 84658 000020012 .20.4.223 8 8 7e 7e	pure Diagnostics p_rr.elf pard ID 000002720c8c14 00000022e964414			
etrsion Auto Configure oftware Version: 1.0. LF File: /bin oftware Version: 1.0. LF File: /bin oftware Version: 1.0. LF File: /bin Variation: 1.0. PAddress: 400 PAddress: 1.72 Board Type PCAS679P1R1 PCAS679P1R1 PCAS679P1R1	Advanced Conlig 0.35 // binaries/Ds12_rm 84658 000020012 .20.4.223 Br 55 7e	p_rr.elf p_rr.elf 000002720c8c14 0000002ee964414			
ersion Auto Configure oftware Version: 1.0- LF File: /bin toduct ld: 1111 AC Address: 400 9 Address: 172 Board Type PCAS679P1R1 PCAS679P1R1	Advanced Conlig 0.35 1/.binaries/Ds12_rm 84658 000020012 .20.4.223 8 8 7 6 7 6	yure Diagnostics p.,			
ersion Auto Configure oftware Version: 1.0- LF File: /bin toduct Id: 1111 IAC Address: 4000 Address: 122 Board Type PCAS679P1R1 PCAS679P1R1	Advanced Conlig 0.35 // binaries/Ds12_rm 84658 000020012 .20.4.223 Br 55 7e	ure Diagnostics p_nelf			
ersion Auto Configure oftware Version: 1.0- LE File: Abin toduct Id: 1111 IAC Address: 400 ? Address: 172 Board Type PCAS579P1R1 PCAS579P1R1	Advanced Config 0.35 // binaries/Ds12_rm 84658 000020012 .20.4.223 Br 7c	ure Diagnostics p_rr.elf pand ID 2000002720c8c14 20000022e954414			
ersion Auto Configure oftware Version: 1.0- LF File: /bin toduct ld: 1111 ALC Address: 400 9 Address: 172 Board Type PCAS673P1R1 PCAS673P1R1	Advanced Config 0.35 //binaries/Ds12_m 84658 000020012 .20.4.223 8 8 5 5 7 2	yure Diagnostics p_ff.elf 2000002220-86-14 00000022ae964414			

INSTALLATION AND SETUP

8 THE LINN CONFIG APPLICATION (continued...)

5. Select the 'Auto Configure' tab. Select the configuration appropriate for the Akurate DS system, and press 'Run'.

Concernance (Concernance)	racion ripplicación			1	
Room	Device Type	Product ID	MAC Address	IP Address	<u>*</u>
Lounge	Akurate DS	11184658	40000020012	172.20.4.223	
Version Auto L	Configure Advanced Config	gure Diagnostics			
Standard Config	uration 1 · Default (Akurate I	OS on its own)			
Standard Config	uration 2 · Akurate Kontrol + uration 3 · Akurate Kontrol +	Akurate DS on input 11 Akurate DS on input 21	Analog I J Analog 2)		
Standard Config	uration 4 · Akurate Kontrol +	Akurate DS on input 1,	Akurate CD on input 2		
Standard Config	uration 5 · Akurate Kontrol +	Akurate DS on input 2,	Akurate CD on input 1		
					Run
1					

6. Wait until the configuration has completed, then close the Automatic Configuration notice and select the 'Advanced Configure' tab.

ersion Auto Configure A transford Configure A transford Configuration 1 - D tendrad Configuration 3 - Al tendrad Configuration 5 - Al	Advanced Configu	III34658	40000020012 Automatic Configura Auto Config Complete	172 20.4 223		
rsion Auto Configure A andard Configuration 1 - D andard Configuration 3 - Al andard Configuration 5 - Al andard Configuration 5 - Al	Advanced Configu Fefor 1 (Avate Do Kurate Kontol + Kurate Kontol +	ure Diagnostics Since Sources	Automatic Configura Auto Config Complete	tion X		
sion Auto Configure A Indard Configuration 1 - Di ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Tefault (Akurate Kontrol + A Kurate Kontrol + Akurate Kontrol +	ure Diagnostics Since Alexandro Son input 1 (Akuzałe DS on input 1 (Automatic Configura Auto Config Complete	stion X		
sion Auto Configure A ndard Configuration 1 - D ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Infort (Akurate Control + Kurate Kontrol + Kurate Kontrol +	ute Diagnostics Diagnostics Son input 1 (4 Sron it own) Akurałe D Son input 2 (4	Automatic Configura Auto Config Complete	ntion X		
sion Auto Configure A ndard Configuration 3 - Al ndard Configuration 3 - Al ndard Configuration 5 - Al	Advanced Configu Iefault (Akurate Kontrol + A Kurate Kontrol + A Kurate Kontrol + A	ure Diagnostics Since Sources Sources Sources Sources Sources 1 So	Automatic Configura Auto Config Complete	Nion X		
sion Auto Configure A Index Configuration 1 - Di ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Infort (/ Akurate Kontrol +) Akurate Kontrol +)	ure Diagnostics	Automatic Configura Auto Config Complete	stion X		
sion Auto Configure A ndard Configuration 1 - Di ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Config iefault (Akurate D ikurate Kontrol + A kurate Kontrol + A	ure Diagnostics Son its own Son its own Akurate DS on input 1 (Akurate DS on input 2 (A	Automatic Configura Auto Config Complete	ation X		
sion Auto Configure A ndard Configuration 3 - Al ndard Configuration 3 - Al ndard Configuration 5 - Al	Advanced Config refault (Akurate D kurate Kontrol + A kurate Kontrol + A	ure Diagnostics Somite.com Akurate DS on input 1 (Akurate DS on input 2 (A	Automatic Configura Auto Config Complete	ation X		
sion Auto Configure A ndard Configuration 1 - D ndard Configuration 3 - Al ndard Configuration 3 - Al ndard Configuration 5 - Al	Advanced Config lefault (Akurate D kurate Kontrol + A kurate Kontrol + A	ure Diagnostics Sion its cown) Akurate DS on input 1 (Akurate DS on input 2 (A	Automatic Configura Auto Config Complete	etion X		
sion Auto Configure A ndard Configuration 1 - A ndard Configuration 2 - Al ndard Configuration 3 - Al ndard Configuration 5 - Al	Advanced Configu lefault (Akurate D kurate Kontrol + A kurate Kontrol + A	ure Diagnostics Sion its own) Akurate DS on input 1 (Akurate DS on input 2 (A	Automatic Configura Auto Config Complete	ation X		
sion Auto Configure A ndard Configuration 1 = D ndard Configuration 3 - Al ndard Configuration 3 - Al ndard Configuration 5 - Al	Advanced Configu Jefault (Akurate D kurate Kontrol + A kurate Kontrol + A	ure Diagnostics Son its cown) Akurate DS on input 1 (4 Akurate DS on input 2 (4	Automatic Configura Auto Config Complete	ation X		
sion Auto Configure A ndard Configuration 2 - Al ndard Configuration 2 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Jefault (Akurate D kurate Kontrol + A kurate Kontrol + A	ure Diagnostics Sion its own) Akurate DS on input 1 (A Akurate DS on input 2 (A	Automatic Configura Auto Config Complete Anto Config Complete	ation X		
sion Auto Configure A ndard Configuration 1 - D ndard Configuration 2 - Al ndard Configuration 3 - Al ndard Configuration 4 - Al	Advanced Configu efault (Akurate D kurate Kontrol + A kurate Kontrol + A	ure Diagnostics Son its own) Akurate DS on input 1 (A Akurate DS on input 2 (A	Automatic Configura Auto Config Complete	ation X		
sion Auto Configure A ndard Configuration 1 - D ndard Configuration 2 - Al ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Iefault (Akurate D Ikurate Kontrol + A Ikurate Kontrol + A	ure Diagnostics Vision (Son its own) Akurate DS on input 1 (A	Automatic Configura Auto Config Complete	etion X		
sion Auto Configure A ndard Configuration 1 - D ndard Configuration 2 - Al ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Pefault (Akurate D kurate Kontrol + A kurate Kontrol + A kurate Kontrol + A	ure Diagnostics S on its own) Akurate DS on input 1 (A Akurate DS on input 2 (A	Automatic Configura Auto Config Complete	ted Successfully		
sion Auto Configure A ndard Configuration 1 - D ndard Configuration 2 - Al ndard Configuration 3 - Al ndard Configuration 4 - Al ndard Configuration 5 - Al	Advanced Configu Jefault (Akurate D kurate Kontrol + / kurate Kontrol + / kurate Kontrol + /	ure Diagnostics S on its own) Akurate DS on input 1 (A Akurate DS on input 2 (A	Auto Config Complete	ted Successfully		
sion Auto Configure A ndard Configuration 1 • D ndard Configuration 2 • Al ndard Configuration 3 • Al ndard Configuration 4 • Al ndard Configuration 5 • Al	Advanced Configue Advanced Configue Advante Kontrol + A Advante Kontrol + A Advante Kontrol + A	ure Diagnostics S on its own) Akurate DS on input 1 (A Akurate DS on input 2 (A	Auto Config Complete	ted Successfully		
	kurate Kontrol + /	Akurate DS on input 1,4 Akurate DS on input 2,4	Akurate CD on input 2 Akurate CD on input 1		Rur	in
	_					-

INSTALLATION AND SETUP

8 THE LINN CONFIG APPLICATION (continued...)

7. On this screen you are able to customise aspects of the configuration, for example you may want to change the Room Name, Device Name or Display Brightness. You are also able to add additional source products that you wish to select from the Linn GUI. If you change items in the 'Advanced Configuration' tab, press 'Reboot'.

🛃 Linn Configur	ation Application				_ 🗆 ×
Room	Device Type	Product ID	MAC Address	IP Address	
Lounge	Akurate DS	11184658	40000020012	172.20.4.223	
					*
Version Auto Co	onfigure Advanced Config	gure Diagnostics	Luman		
Handset Com	mande Accepted		No		
Volume Limit	indras Accopica		100		
Quiet Level			1		
					Reboot
					Restore Defaults
Device					
1					
Online C	onnected				1.0-0.41 .:

8. For systems with an Akurate Kontrol. From the top window, select Akurate Kontrol. On the 'Advanced Configuration' tab you will see the current configuration settings for the unit. You are able to change the settings, if required.

oom	Device Type	Product ID	MAC Address	IP Address	
ounge	Akurate DS	11184658	40000020012	172.20.4.223	
unge	Akurate Kontrol	Unknown	N/A	N/A	
internation of the second	or inguice the second second	[blagnoonoo]			
Device Room Name	e e e e e e e e e e e e e e e e e e e		Lounge		
Device Room Name Handset Cor	mmands Accepted		Lounge No		
Device Room Name Handset Cor Volume Limit	emmands Accepted		Lounge No 100		
Device Room Name Handset Cor Volume Limit Quiet Level	emmands Accepted		Lounge No 100 1		
Device Room Name Handset Cor Volume Limit Quiet Level	mmands Accepted		Lounge No 100 1		
Device Room Name Handset Cor Volume Limit Quiet Level	mmands Accepted		Lounge No 100 1		Reboot
Device Room Name Handset Co Volume Limit Quiet Level	nmands Accepted		Lounge No 100 1		Reboot
Device Room Name Handset Cor Volume Limit Quiet Level	mmands Accepted	I sublicence I	Lounge No 100 1		Reboot
Device Room Name Handset Cou Volume Limit Quiet Level	emmands Accepted	Level recent	Lounge No 100 1		Rebort
Device Room Name Handset Cor Volume Limit Quiet Level	e mmands Accepted t		Lounge No 100 1		Rebot. Restore
Device Room Name Handset Cor Volume Limit Quiet Level	mmands Accepted		Lounge No 100 1		Reboot Restore Defaults
Device Room Name Handset Cou Volume Limil Quiet Level	emmands Accepted		Lounge No 100 1		Reboot Pestore Defaults
Device Room Name Handset Co Volume Limit Quiet Level	mmands Accepted		Lounge No 100 1		Rebot Restore Defaults
Device Room Name Handset Co Volume Limit Quiet Level	mmands Accepted		Lounge No 100 1		Rebort Restore Defaults
Device Room Name Handset Col Volume Limit Quiet Level	mmands Accepted		Lounge No 100 1		Reboot. Restore Defaults
Device Room Name Handset Cor Volume Limit Quiet Level evice	mmands Accepted		Lounge No 100 1		Rebot. Restore Defaults

INSTALLATION AND SETUP

9 FINAL STEPS

This section describes the final steps involved in getting the Akurate DS system up and running.

Final steps

- 1. Turn on the NAS.
- 2. Turn on the Ethernet switch and the Wireless Access Point.
- 3. Wait for the NAS to finish booting.
- 4. Turn on the Akurate Kontrol and wait for the standby symbol to appear on the front panel.
- 5. Turn on the Akurate DS and the rest of the hi-fi system.
- 6. Turn on the wireless control point and start the Linn GUI.
- 7. Follow the instructions in the *Operation* chapter of the Akurate DS owner's manual.

INSTALLATION AND SETUP

10 TECHNICAL SPECIFICATION

Date of introduction	November 2007
Туре	Digital music player
Size	(H) 80 mm x (W) 381 mm x (D) 360 mm (H) 3.1 inches x (W) 15 inches x (D) 14.2 inches
Weight	4.2 kg 9.2 lb
Supported file types	WAV, FLAC, MP3
Audio sample rates	44.1 k, 48 k, 88.2 k, 96 k, 176.4 k, 192 k
Word depths	16 – 24 bits
Analogue audio outputs	Stereo RCA phono sockets, stereo XLR balanced audio outputs
Ethernet interface	100Base-T RJ45
Control protocol	Compatible with UPnP [™] media servers, UPnP [™] AV 1.0 control points
Local control	Front panel 6 button interface RS232 x 4 Luminous remote control handset 128 x 32 front panel display
Power supply	Switching power supply with auto-ranging (AC 100 – 120 V @ 50 – 60 Hz) (AC 220 – 240 V @ 50 – 60 Hz)
Power consumption	13 W

Copyright © 2007 Linn Products Limited PACK 1380