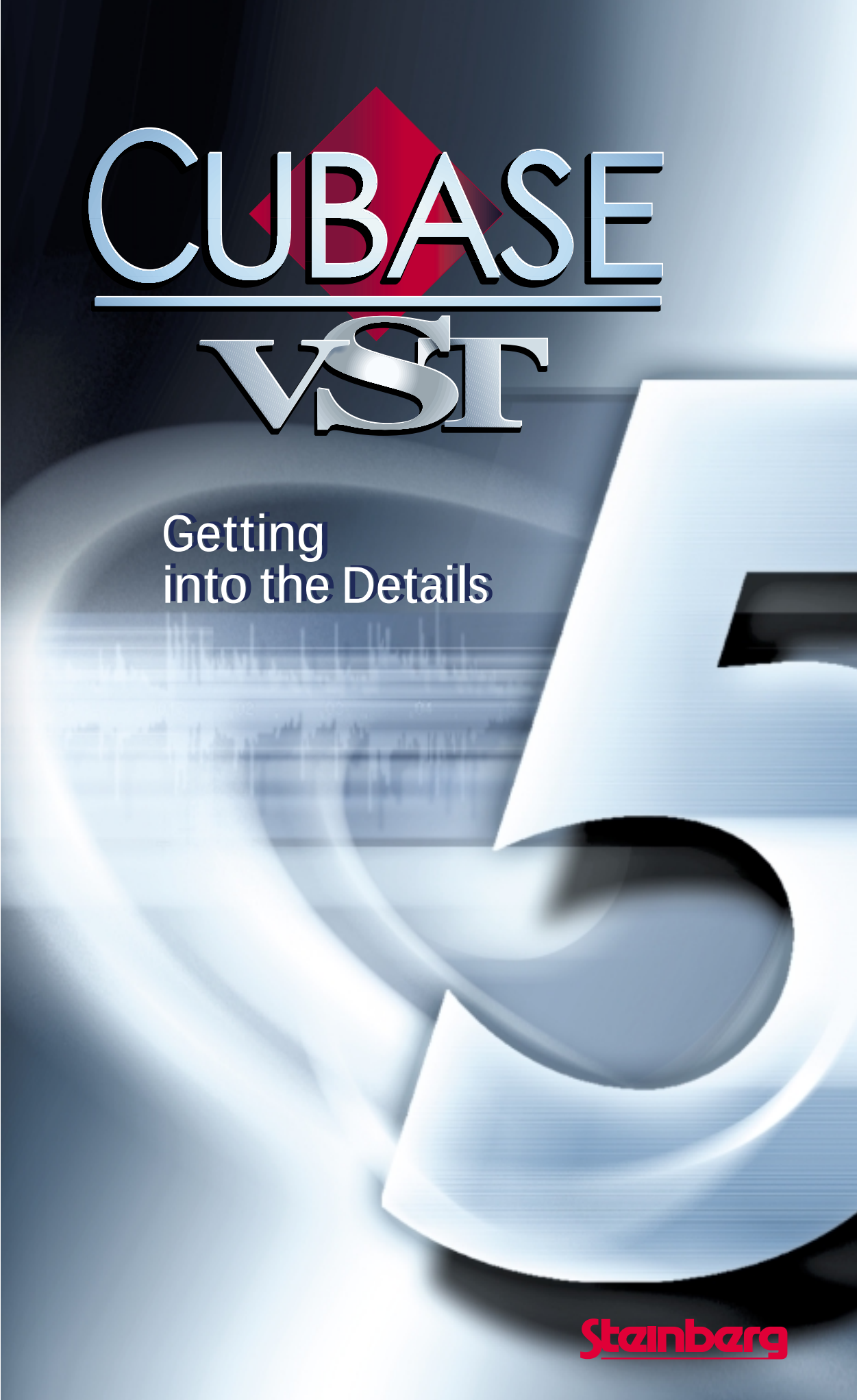
CUBASE
VST
Getting
into the Details
5
Steinberg

Operation Manual by Ernst Nathorst-Böös, Ludvig Carlson, Anders Nordmark, Roger Wiklander
Quality Control: Cristina Bachmann, Heike Horntrich, Sabine Pfeifer, Claudia Schomburg

The information in this document is subject to change without notice and does not represent a commitment on the part of Steinberg Soft- und Hardware GmbH. The software described by this document is subject to a License Agreement and may not be copied to other media except as specifically allowed in the License Agreement. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without prior written permission by Steinberg Soft- und Hardware GmbH.

All product and company names are ™ or ® trademarks of their respective owners. Windows, Windows 95, Windows 98 and Windows 2000 are trademarks of Microsoft Inc.

© Steinberg Soft- und Hardware GmbH, 2000.
All rights reserved.

Table of Contents

10 Setting up an Advanced Audio System

11 Introduction
11 General Precautions
12 A few words on Word Clock and Sample Rates
14 What Devices can be used? – Example Hook-ups
20 About the Busing System
20 Selecting Inputs for Mono, Stereo and Multi Recordings
22 Routing Channels and Effects to Audio Outputs
23 Application Examples

25 Recording in High Resolution and Using TrueTape™

26 About this Chapter
26 Selecting Recording Resolution
27 The Available Recording Resolutions
28

29 How Cubase VST handles audio and MIDI

30 Why you should read this Chapter
30 Audio Channels vs Tracks
33 Audio Files
34 Audio Segments and Events - Non-Destructive Editing
36 MIDI Inputs
36 MIDI Outputs
37 How Cubase VST records MIDI Channel data
38 Rechannelizing – The MIDI Channel setting for the Track
38 Rechannelizing also works on Thru-put!
39 Turning off Rechannelization – MIDI Channel "Any"

40 Stereo, Multi Channel and Multi Track Recording

41 Stereo audio recording
43 Multi Channel Recording - Channel "Any"
46 Multi Track Recording

52 The Arrangement - More on what you can do with Parts and Tracks

53 Creating Parts
55 Overlapping MIDI Parts
56 Merging Parts
57 About Cut, Copy & Paste
58 Part Operations using the Toolbox
70 Renaming Parts
71 Ghost Parts
72 Using the "Repeat" function
73 Trim Events to Part
73 Cut At Locators
74 Insert At Locators
75 Split At Locators
75 Copy Locator Range
76 Explode By Channel
78 Merge Tracks
80 Merge Audio Segments
80 Merge Overlapping Parts
81 Optimize Arrangement

82 Instruments

83 About Instruments
83 Setting up
87 Selecting Instruments
87 Redirecting Instruments
89 Working with Patch Names

94 More about Play Parameters and the Inspector

95 What are Play Parameters?
96 The Parameters
99 Using the Multi Out feature
103 Using the Randomize feature
105 Using the Dynamic feature

112 Program Changes and MIDI Volume

113 Why you should read this Chapter
113 About Program Change
114 Entering Program Change as a Play Parameter
117 Recording or Entering Program Change in the Editors
118 Which should I choose?
119 About Bank Select
120 About MIDI Volume
120 Entering Volume as a Play Parameter

121 Entering Volume in an Editor
122 Entering Volume in the MIDI Track Mixer
122 About Chase

123 Working with SoundFonts

124 What are SoundFonts?
124 Setting up for SoundFonts in Cubase VST
125 Managing SoundFont Banks in Cubase VST
126 Selecting a Bank and Patch for playback in Cubase VST

127 Programming and Recording Mutes and Solo

128 Pre-programming Mutes
128 Recording Mutes and Solo
130 About editing recorded Mutes

131 Folder Tracks

132 About Folder Tracks
132 Using Folders

138 Groups

139 About Groups
140 How to use Groups - The basic steps
140 Building Groups
143 Using Groups

150 More about Quantizing and Grooves

151 About this chapter
151 Using Groove Control
157 Importing and Managing Grooves
159 Using the Groove Tool
159 Additional Quantizing Types

160 The MIDI Editors - General Information

161 About this Chapter
161 Similarities and differences between Editors
162 Opening an Editor
165 Closing an Editor
166 Editing music during playback
168 How Events are displayed in the Editors
171 Moving around and the Goto pop-up menu
172 Monitoring Events in the Editors
172 Selecting and the To pop-up menu
174 The Do pop-up menu
177 The Info Line
179 Quantize and Snap Values
181 Creating Note Events
183 Editing Notes
188 Deleting Events
189 Creating and Editing Continuous Data

193 Step Recording

194 Introduction
194 Preparations
195 Entering notes and chords
198 Using the Insert button

200 Key Edit

201 About this “Chapter”

202 Drum Edit and Drum Tracks

203 About this Chapter
203 About Drum Tracks and Drum Parts
204 About Drum Maps
207 Loading and Selecting Drum Maps
209 Editing and Creating Drum Maps
212 Saving your Drum Map
213 Removing Drum Maps
213 Editing Drum Parts in the Drum Editor
217 Editing MIDI Parts in Drum Edit
218 Converting between MIDI and Drum Parts

219 List Edit

220 The Columns in the List
226 Creating Events
227 Editing in the List
230 Editing in the Event Display
231 Editing in the “Value 2” Display
232 Hiding Events
233 Using Mask
235 About Quantizing and Functions

236 Score Edit

237 About this Chapter
238 Overview
239 Getting the Score displayed correctly
243 Editing several Tracks
244 Manipulating Notes
247 Chord Symbols
248 Adding Text
249 Moving and Duplicating Chords And Text
249 Deleting Text and Chord Symbols
249 Title, Comment and Copyright
250 Printing

251 The Controller Editor

252 What can I do with the Controller Editor?
253 Opening the Controller Editor
254 Selecting which Event Types should be displayed
261 Customizing the Display
262 Creating and Editing Continuous data
269 Various Functions on the Do menu
269 Closing the Editor

270 Logical Edit

271 Why Should I Use Logical Edit?
271 Opening Logical Edit
272 Working with Presets
274 Managing and Creating Presets
276 Selecting Easy or Expert Mode
276 Initializing the Settings
276 How Logical Edit Operates
277 About Setting Values
278 Setting up Filters
281 Applying a Filter
282 Setting Up for Processing
287 Processing Functions
288 Expert Mode

292 Filtering and Mapping MIDI Data

293 Introduction
293 Recording Filters
295 Thru Filters
296 Mapping Controller Messages
297 The MIDI Input Transformer
300 Remapping MIDI Inputs and Outputs

301 The MIDI Track Mixer

302 About this chapter
302 The MIDI Track Mixer layout
303 The Controls
308 Automating the MIDI Track Mixer
315 Customizing the MIDI Track Mixer
318 What is GM/GS/XG?

319 The Audio Pool

320 Introduction
320 Overview of the Window
321 Displaying Segments
322 The Headings and Columns
324 Customizing the View
326 Finding Out how a Segment is used in the Song
327 File Operations
330 Handling “Missing Files”
331 Creating Wave Images and Keeping them up to date
332 Segment Operations
334 Deleting Unused Portions of Audio Files (Erase Unused)
336 Importing Audio Files into the Audio Pool
337 Exporting Files and Segments
337 Dragging Segments into Other Windows
340 Preparing File Archives and “Masters”
341 Saving and Loading the Audio Pool

342 The Audio Editor

343 Introduction
343 Opening the Audio editor
343 About Events, Lanes and Segments
348 About Zero Crossings
350 Customizing the View
354 Recording in the Audio editor
355 Importing and Dragging Audio into the Editor
357 Auditioning and Scrubbing
358 Editing on the Info Line
359 Changing Start and End Insets
363 Working with Q-Points
365 Moving Audio Events
366 Duplicating and Repeating Events
369 Using Cut, Copy and Paste
370 Muting Events
371 Splitting Events

372 Deleting Events
373 Adding and Editing Match Points
376 Quantizing Audio Events
379 Match Quantizing Audio
382 Fitting Audio Events to the Loop
384 Working with Grouped Events
386 Creating Crossfades, Fade Ins and Fade Outs
390 Using Cycled Recording for assembling a “perfect” take
392 Changing the Volume and Panning of an Event
395 Making an Event Play another Segment
395 Exporting Events into Files

396 Audio Functions

397 Introduction
398 Applying the Processing
399 The Functions

406 The Wave editor

407 What is the Wave Editor?
407 Precautions
408 Opening Wave Editor Windows
409 Adjusting the View
412 Playing Back
413 Selecting
414 Working with Segments
415 Turning the Selection into a File
416 Cutting and Pasting Audio
416 Applying Processing Functions

417 Using an External Wave Editor

418 Why use an external Wave Editor?
418 Precautions
419 Setting which Wave Editor to use
420 Editing in the selected Wave Editor

422 Mixing Audio and using Effects

423 Introduction
423 About Routing and Signal Paths
429 Volume
430 Panning
431 EQ
434 VST Dynamics
441 Effects
455 Using Dither
458 Copying settings between Channels
459 Saving Mixer Settings
461 Loading Mixer Settings
462 Group Channels
467 ReWire Channels
467 VST Instrument Channels
468 VST Mixer Views
471 Changing the Meter Characteristics
471 Reset Switch
472 Volume and Pan Automation – Dynamic Events or VST Channel Mixer
473 Automating the VST Channel Mixer

480 Installing and using external effect plug-ins

481 About this chapter
482 VST-native Plug-ins
484 DirectX Plug-ins

487 Remote Controlling VST Objects

488 About this Chapter
488 Setting Up
489 Writing Automation using Remote Controls

490 VST Instruments

491 Introduction
491 About the included VST Instruments
492 Activating and Using Instruments in Cubase VST
495 Automating a VST Instrument

496 ReWire

497 Introduction
498 Launching and Quitting
499 Activating ReWire Channels
500 Using the Transport and Tempo Controls
501 How the ReWire Channels are handled in Cubase VST
501 Considerations and Limitations

502 The Input/Output Bus System

503 Introduction
503 What you can do with the Bus system
504 Activating Inputs

505 Recording from an Input
507 Activating and routing Output Buses
509 Routing Audio Channels to Buses
510 Sends and Effects

513 Importing and Exporting Audio

514 Importing audio files into the Arrangement
516 Mixing down to an audio file
520 Including your MIDI music in the mixdown

521 Working with ReCycle files

522 About ReCycle
522 Using ReCycle files in VST
523 About Tempo Changes and the last Segment(s)
524 Importing into “Any” Tracks - Polyphonic playback
525 Editing Tips and Tricks

526 Working with Mixman TRK files

527 Background Information
528 Importing a Mixman TRK File

530 Making the Most of the Event/ Segment Relationship

531 What is an Event really?
531 What is a Segment really?
531 Copying Audio Events

534 Optimizing Audio Performance

535 Introduction
535 Audio System Settings
542 About the ASIO Control Panel dialogs
543 Methods of Optimizing Performance
544 Maintaining the Hard Disk

545 The Master Track

546 What is the Master Track?
547 Opening the Graphic Editor
548 The Window Sections
549 About the Tempo Display
549 About Time Signature Events
550 About Rulers and Positions
551 Switching between Meter and Time based Display
552 Moving around and setting Song Position
552 About Hitpoints
553 About the Toolbox
553 Activate Master!
554 Recording Tempo Changes
556 Selecting
558 Editing on the Info Line
559 Redrawing the Tempo Curve
560 Drawing new Events
561 Moving Events Using the Mouse
561 Duplicating Events
561 Adding a Tempo Change at the Song Position
561 Cut, Copy and Paste
562 Deleting Events
562 Repeating Events
562 Creating Accelerandi and Ritardandi
563 Reducing the number of Tempo Events
563 Smoothing Tempo Event values
564 Numerical processing of Tempo Events
566 The Master Track List Editor
569 Moving Master Track data between Arrangements

570 Hitpoints

571 What can I do with Hitpoints?
571 What are Hitpoints?
572 About this Chapter
573 Setting Out Hitpoints
575 Editing Hitpoints
577 Playing back Hitpoints via MIDI
578 Linking Hitpoints
581 Working with Tempo Matching
584 Working with Straighten Up
588 Tempo Mapping “freely recorded” Music using Time Locked Tracks

591 Matching Audio and Tempo

592 Introduction
592 Opening the Audio/Tempo Match Editor
593 Adding and Editing Match Points in the Editor

596 Making the Playback Tempo follow the Audio
601 Making the Audio Follow the Tempo
605 Creating a Groove template
605 Using Snip at M-points

608 Time Locked Tracks

609 What are Time Locked Tracks?
609 Time Locking a Track
609 Changing the Tempo
610 Turning Time Lock On and Off
610 Editing Time Locked Tracks
610 Creating Multiple Tempi
610 Things To Note

611 Synchronization

612 Introduction
612 The two types of Sync Signals
612 Cubase VST – Master Or Slave?
613 Synchronization and audio playback - Introduction
613 If your Audio Hardware supports the ASIO Positioning Protocol
616 If your Audio Hardware doesn't support the ASIO Positioning Protocol
619 The Synchronization Dialog Box
620 Internal Sync - No External Synchronization used
621 Synchronizing Cubase VST to MIDI Time Code (MTC) or Time Code via ASIO Positioning Protocol
623 Synchronizing Cubase VST to MIDI Machine Control (MMC)
624 About Frame Rates
625 Synchronizing Cubase VST to another MIDI Device via MIDI Clock
627 Synchronizing other Equipment to Cubase VST
628 Transmitting Synchronization Signals while Cubase VST is synchronized to an External Source
629 Song Start
629 Time Display Offset
630 Bar Display
630 MROS Resolution and System Preroll
632 Sync Options

633 Customizing Cubase VST

634 Why Customize?
634 Creating a Custom Startup Song

638 Keyboard Commands, MIDI Remote Control and the Toolbar

639 Defining and Using Key Commands
642 The Toolbar
646 MIDI Remote Control
648 The Default Key Commands

652 Track Views and Window Sets

653 Track Views
655 About Window Sets
656 Creating a Window Set
657 Recalling a Window Set
658 Renaming and Removing Window Sets
659 Application Examples
659 File Handling of Window Sets

660 Index

1

Setting up an Advanced Audio System

Thank You for previewing this eBook

You can read the full version of this eBook in different formats:

- HTML (Free /Available to everyone)
- PDF / TXT (Available to V.I.P. members. Free Standard members can access up to 5 PDF/TXT eBooks per month each month)
- Epub & Mobipocket (Exclusive to V.I.P. members)

To download this full book, simply select the format you desire below