



MUSICAM USA[®]

Corporate Computer Systems, Inc. d/b/a MUSICAM USA

*CDQ*Prima Technical
Reference Manual

MUSICAM USA

CDQ Prima Technical Reference Manual for
Software Revisions 34 and 6.34

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Introduction to the *CDQPrima* Technical Reference Manual

The *CDQPrima* Technical Reference Manual is a companion document to the *CDQPrima* Users Guide. The Users Guide contains all information required to set up and use the *CDQPrima* for most basic applications, and should be reviewed before using the *CDQPrima* for the first time. This document is designed for the advanced user who wants to make the most out of the *CDQPrima*'s more advanced features.



Your *CDQPrima* contains a vast array of features, many of which are not available in competing models. This manual contains a summary of *CDQPrima* features that are current through the date of this manual. The *CDQPrima* Series is designed to grow as technology improves, and MUSICAM USA may, from time to time, issue software or hardware upgrades to increase performance and provide additional features. If you believe a new feature would be helpful in your application, we encourage you to contact us with your ideas. One key feature of the *CDQPrima* is that it can easily be field upgraded, and we may be able to easily make your idea a reality.

Noting the software version as your *cdqPrima* boots can identify software and hardware versions. For example, hardware revision 6 running software revision 34 will be indicated by "6.34" appearing on the display during system boot. Although we will do our best to contact you when new software releases are available, please feel free to check with us directly or on our Web page at www.musicamusa.com for the current software version number.

Please do not let the size of this manual scare you. The **CDQPrima** is a very powerful codec, and has many advanced features not found in any other codec. If you will not be using any of the **CDQPrima**'s powerful advanced features, you may not need to read any of this manual. If using these advanced features, you will need to read only those sections that reference the features you elect to use. In addition, this document contains detailed discussions on audio compression, line formats, digital transmission and other topics that may not be of interest to even the advanced user. You should think of this document as an encyclopedia. You do not have to read from cover to cover, but only those sections you need, and only when you need to.

The basic features and functions of the **CDQPrima** have all been described in the **CDQPrima Users Guide**, and that document should be consulted for setting-up, configuring and using the basic **CDQPrima** functions. Configuration and set-up topics discussed in the **CDQPrima Users Guide** include:

- Command entry using the front panel keypad and display, remote control commands and the Windows Remote Control program
- Digital Interface Module, including Terminal Adapter setup, configuration storage and recall
- Encoder/Decoder configuration using Quick Configurations, including configuration table maintenance
- Manual encoder and decoder configuration
- Terminal Adapter dialing, including speed dial directory maintenance
- Remote control port configuration
- Headphones, displays, beeper and fan controls

Information and discussions of the following advanced topics can be found in this document, the **CDQPrima Technical Reference Manual**, and are in no particular order:

- Chapter 1 — Digital transmission networks including Switched-56, ISDN and dedicated links.
- Chapter 2 — Compression algorithms, line formats, bit and sample rate selections and performance considerations.
- Chapter 3 — Advanced configuration for dual-algorithm, decoder independent, independent mono and broadcast applications.

- Chapter 4 — Advanced encoder and decoder configurations and features, including Digital audio I/O and timing, calibration, peak detection, quiet detection, status bits, error concealment, sine detection and simulated switches.
- Chapter 5 — Remote control, including, Windows Remote Control program, RS232/RS485 considerations and far end remote control.
- Chapter 6 — Ancillary data, including SMPTE time code, RS232, relay closures, optical inputs, extended control links and data port configurations.
- Chapter 7 — Prima Logic Language, including error and out-of-frame detection, silence and audio detection, timers, optical inputs and relay outputs, event definition, status and link events, action definition, virtual actions, event-to-action logic and several useful examples.
- Chapter 8 — Psychoacoustic parameter adjustment.
- Chapter 9 — Prima security, including passwords, port and command lockout, on line help for terminal and Windows remote control users, factory defaults and User Profiles, option installation and software maintenance and upgrading.
- Chapter 10 — Troubleshooting and error messages, including Loopback testing.
- Appendices — Cable diagrams, rear panel pin-outs, factory defaults, optical input and relay output pin-outs, full menu tree, ISDN ordering and provisioning, specifications and warrantee information.

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