Overview

Topics

Anthem is an open-ended, integrated environment that uses standard notation as a creative tool as well as a way of communicating musical ideas. Anthem has many features and several ways of approaching the production of music.   Once these features are learned, they can be combined in different ways to provide for a wide range of options that you can select for your particular needs and style .

Introduction

With full notation, integrated sequencer and patch librarian, the composer has in one package the tools he needs for professional work.
 Anthem has two types of sequencers--separate but integrated ways of producing music.   Anthem "Scores" have 1024 ticks per quarter note, complete access to underlying MIDI data, the ability to time shift   below the limit of normal notation,   and the ability to integrate recorded sequences. The Anthem "Opus" allows the production of more traditional sequences combined with the ability to archive sequences as heirarchally organized play lists.

Anthem was constructed with the belief that optimal performance demands more than one way of visualizing and storing MIDI information.

Sequencer

Anthem sequencer records and plays at 1 millisecond resolution independent of tempo.

This means that you don't need to lower the tempo to improve accuracy. Like every other part of Anthem, the sequencer is open-ended allowing an unlimited number of tracks at near maximum MIDI resolution.

Copy and Paste

The integrated capability of Anthem allows transfers of information between the object oriented environment of notation and the linear track environment of the sequencer with COPY and PASTE operations.   The way you Change the drum snare to another synthesizer with different bank, program and note assignment, for example, depends on which music system you select. Under the MIDI Manager just select the name of the new drum sound and PASTE it in.   Under OMS, just select a new patch name with a pop-up menu.

Faders

Anthem lets you create slider windows for setting up MIDI instruments, even providing real-time control for instant feedback.   Setup information including program numbers, bank select, note assignments, effects assignments, pan and volume setting, to name a few, can all be stored in a score or sequence, ready to configure your system for each score or sequence you create.

Integrated Environment

Anthem creates an environment for managing MIDI information.   Separate Patch Librarians and Instrument files store information about all your MIDI equipment and how they can be used in an endless number of setups. Again, Anthem lets you use simple COPY and PASTE operations to transfer complex and lengthy information.   In Anthem there is always a direct link between notation and MIDI information.   Each symbol in the score has MIDI information attached that can be edited naturally and easily.   Select any group of notes (they don't have to be sequential) and, with a press of a command key, open a window to edit velocity curves or do time shifting to create a special groove.

QuickTime Musical Instruments

If you are using OMS 2.x, you can play scores and sequences using QuickTime's Musical Instruments.   This allows Anthem to be used as a complete compositional tool without the need for connecting to any other equipment besides your Macintosh.

General MIDI

Anthem also fully supports the new General MIDI standard for added ease in assigning voices to MIDI information.

Tool Palettes

nthem features several full palettes of tools for creating a wide range of musically active symbols. In the note palette you can build your own tool by applying multiple tools to a special tool window.   A Record Palette lets you record and monitor the status of playbacks.   A Track Palette lets you edit tracks. Create text and lyrics in Anthem's built in word processor or paste them directly into the score from the word processor of your choice.

Many Ways to Enter Notes

Enter notes by clicking into the score,   by playing notes into an insert point from your MIDI   keyboard or by pasting them in   from recorded material in Anthem's sequencer.   Import standard MIDI files into the sequencer and paste tracks into the score.

Quantization

Unlike other programs which use crude quantization to haphazardly slice up notes,   Anthem uses a sophisticated search routine to find the best way to represent a note as notation.   A score expression dialog lets you pick the expression that best represents the kind of music you are creating. Anthem never throws information away.   If you played four 64th notes, Anthem will notate them. You don't have to worry about notes going away.

Score Layout Features

Anthem offers instant editing of a large variety of score layout features.   Add standard, piano, and percussion staves with one command.   The number of staves is unlimited.   Of course, like every object in Anthem, you can cut and paste.   Create keys, time signature and clefs with pop-up menus.   Anthem supports treble, alto, tenor, bass and percussion staves. Percussion staves may be single line or five line.   Spacing between staves is done by dragging

and printer margins are modified in an augmented Page Setup dialog. Treble and bass clefs may be inserted in the middle of the measure with a tool.

 A status pane to the left of the score continuously monitors the key and clef of the visible part of the infinite horizontal scroll so you don't have to scroll to the left to find out what the key or clef of a visible measure is.   Click on this pane to pop up menus that modify selected measures.

 If a General MIDI device is being used, Anthem supports this by allowing instrument voices of the score to be defined using a pop-up menu of General MIDI voices.

Selected measures can be cut, copied and pasted.   A command opens a dialog for detailed modification of a measure including multiple-ending repeats and special kinds of time signatures including cut   and compound time.   Anthem will automatically display partitions in compound time if desired.

Notes are automatically aligned in Anthem so that individual staves in a system can have their own keys and even time signatures and still maintain vertical alignment .   This is true even if, because of changing time signatures, measures are not of equal length in each staff.

Any number of notes, from different staves if necessary, can be selected and modified as a group or individually.   For example ten quarter notes could be selected and with one key stroke they could all be lowered by one pitch. Likewise, the notes could have their durations changed or they could be cut, copied and pasted into another staff.
   Each note in Anthem is an object that has two kinds of characteristics: its appearance as a score symbol and its value as a real note.   Each characteristic is easily modified in Anthem.   The high resolution of 1024 ticks per quarter note allows the user to create subtle grooves by dragging in a Time Shift window.   Any number of notes can be selected for modification in this way.   Notes can be represented by almost any legal score symbol down to an 128th note.   Tuples such as triplets are completely supported including 5 and 7 tuples.   Pitch and duration are easily modified by dragging the note vertically and horizontally.   The range of legal symbols that can be accessed in this way is controlled by a dialog.

Anthem supports two voices per staff and separate MIDI instruments can be assigned to each by pasting a name from a device.   Anthem automatically adjusts stem direction for two voices.

Each note can be articulated with a large number of symbols including classical annotations such as trills and turns.   Positioning of articulations are

calculated automatically, taking into consideration the position of the note relative to the ledger line.   A note with multiple articulations can be created in the tool window and then used to do multiple insertions of this type.

 Insertions can be done by clicking or using a MIDI keyboard.   Using a MIDI keyboard is especially useful for quickly producing large numbers of chord structures.

Beaming can be done automatically using the built-in standard rules of notation or it can be done by selecting notes, applying a beam and then modifying the results with a beam modifier tool.   Slurs and ties are also supported.
   One of the most useful features of Anthem is its ability to do any modification of the score while playing!   Any selection of notes, measures or staves can be played in a loop while notes are dragged, entered or virtually any modification to the score is made.   You can even save the score while playing.   In addition, clicking and dragging of a note causes MIDI information to be sent to your synthesizer for instant feedback.

A Score in Anthem is a powerful sequencer with a capability to follow repeats, including multiple endings, when playing.

Although copy, cut and paste of notes, measures and staves is full supported,   it is often useful to be able to copy and paste measures across an entire system.   Anthem has a Block Move dialog for inserting blank measures, deleting measures or copying measures into the clipboard.   A common use for this feature is to copy a template section of a system into the clipboard and then pasting multiple copies into the score.   This saves a lot of time if your music has similar sections.
   Pasting into the sequencer becomes especially useful when improvisational material needs to be added or when the higher 1 millisecond resolution of the sequencer is needed instead of the 1024 ticks per quarter note of the score.

Anthem supports printing of full scores or extracted individual parts. Several popular fonts are supported for high-quality laser output   A page preview window is provided to show how music will appear before it is printed.

 A chord editor is provided for construction of chord symbols as a special data type.   Because chord symbols are constructed rather than simply being text, Anthem can play, transpose and switch to different ways of notating chords using a preference dialog.   The chord editor shows a chord as it is being created in standard notation which can provide users with a review of harmony as well as a palette for entering chord symbols into the score.

Anthem provides for full-featured recording and playback in its sequence section.   An unlimited number of tracks can be created as a part of a three-tiered hierarchy.   Tracks can be played at any level of the hierarchy so that compositions can be created in sections and sub-sections and arranged in any order. Each section or sub-section can be played by a single key that is associated with it.

Looping can be controlled at any level and there's even a provision for infinite looping until a key is hit for performance situations. Anthem supports recording and over dubbing with   internal   or externally produced metronome sounds.   Pickup beats can even be automatically counted by a synthesized human voice if desired.

Sequencer track information can be edited by Anthem's Event Editor.   All MIDI events are supported including meta events.   Anthem even has its own CHORD event so that it can record chord symbols in standard MIDI files.

 Anthem has an Instrument file that can control and record the routing of information in different situations.   Using information stored in this file, MIDI information from one keyboard can be split by pitch into as many devices as desired.   Instrument files can store MIDI Thru information as well as instructions on how to split, or double information to different devices.   A single Anthem track can play into as many as 32 devices, automatically sorted by pitch into user-defined zones.   Instrument files can also be used to store information on how to assign score voices to tracks when pasting.

An Anthem Device is used to store all information about synths, effects processors, drum machines etc.   Patch names, program numbers, bank select numbers, cable, drum note assignments, port and channel information are all stored in one file that is available to the score and sequencer   for use in playback.   In addition SysEx data can be stored with patch names so that Anthem becomes a virtual extension to your MIDI system.   Anthem even provides a hex dump of SysEx data for inspection by the more knowledgeable user.

For custom real-time control of MIDI instruments Anthem has slider windows that can be configured for any controller event.   The information can be attached to scores to provide for any degree of control to your MIDI systems without having to think about it every time you open a new score.