

Introduction to MidiWriter*Pro*

MidiWriter*Pro* is an application that lets you compose polyphonic music on your Series 60 mobile phone. It supports General MIDI (GM) and uses the sounds built into the mobile phone for playback of instrument and percussion sounds. MidiWriter*Pro* can open most format 0 and 1 MIDI files, and save in either MIDI format 0 or 1. You can also merge MIDI files, and convert .RNG files to MIDI.

These instructions assume that you are familiar with both MIDI and operating the Series 60 range of mobile phones. Most of the menus and dialogs in MidiWriter*Pro* are consistent with the applications built into the phone.

MidiWriter*Pro* supports multiple instrument tracks and a drum track. Each track is assigned a MIDI channel number from 1 to 9 or 11 to 16. Each MIDI channel number can be assigned any 1 of 128 instruments, such as piano, violin, church organ, glockenspiel etc. You can assign the same MIDI channel number to more than one track, but all tracks with that channel number will play with the same instrument.

MIDI channel 10 is reserved for percussion/drum track.

This manual describes v1.06F of MidiWriter*Pro*.

Please contact support@zenobyte.com for updates and support regarding MidiWriter*Pro*

If you open a MIDI file in the MidiWriter*Pro* which was created with another application (for example Cubase), and then save it from MidiWriter*Pro*, it is possible some MIDI data (for MIDI functionality not support by MidiWriter*Pro*) in the file will be lost. Please make a copy of any existing MIDI files before opening them in MidiWriter*Pro*.

This manual and the MidiWriter*Pro* software are © Copyright 2004 Zenobyte (C.I.) Limited. No part of the manual or software may be reproduced without the express written permission of Zenobyte (C.I.) Limited

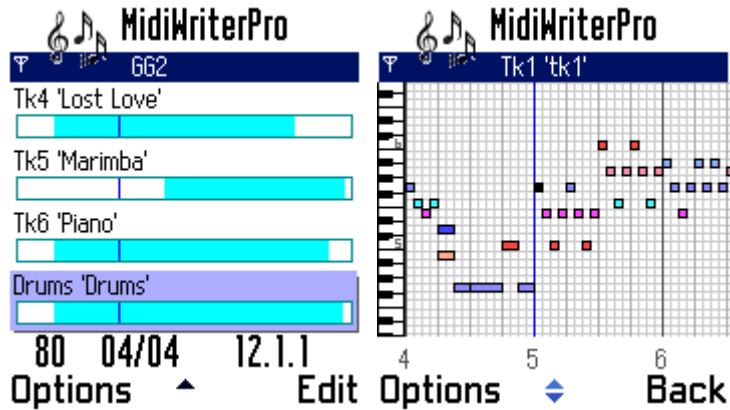
Zenobyte (C.I.) Limited makes no warranty or representation that the operation of its software will be error-free, and Zenobyte (C.I.) Limited is under no obligation to provide any services, by way of maintenance, update, or otherwise. The software and any documentation are provided "as is" without express or implied warranty including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. In no event will Zenobyte (C.I.) Limited or any other contributor be liable for direct, incidental or consequential damages, even if Zenobyte (C.I.) Limited has been advised of the possibility of such damages

Zenobyte (C.I.) Limited
Century House, Victoria Street, Alderney, Channel Islands

Web: www.zenobyte.com

MidiWriterPro views

There are two main views in *MidiWriterPro*, the 'Track' and 'Key edit' views. These are described later in this manual.



There are also two 'list views' for showing tempo changes and MIDI control events. These views allow you to delete and change the parameters of the tempo and MIDI events.



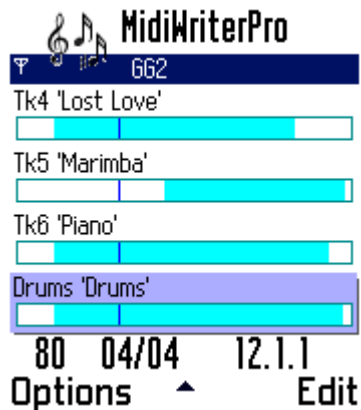
The bar and beat numbers are shown on the left with the event type on the right. In the current version of *MidiWriterPro*, the times of the events are displayed to the nearest beat, but are stored with the exact times originally set.

The data for the event is shown below the bar number and event type. To change the event data press the OK button or use the "Options: Change" menu (not all event types can be edited).

Events can be deleted using the 'C' key or "Options: Delete". Press 'Cancel' to abort any changes, or "Options: Done" to accept changes and return to the previous view. You can jump to specific points in the song using the "Options: Jump" menu.

Track view

This view shows all the tracks in the MIDI file. The cyan coloured bars represent the range of the track from the first note on to the last note off in that track. The outer rectangle represents the entire song duration. Muted tracks will be drawn in gray.



You can scroll through the tracks using the cursor up/down keys. If you have more than 4 tracks, the screen will scroll to show the other tracks.

Cursor left/right move along the track one quarter beat at a time - the movement speeds up the longer you hold the key. Shift cursor left/right moves on bar at a time.

At the bottom of the view are displayed the current tempo, time signature and bar/beat/quarter beat indicators. The tempo value will change to red if the tempo changes at the current cursor position.

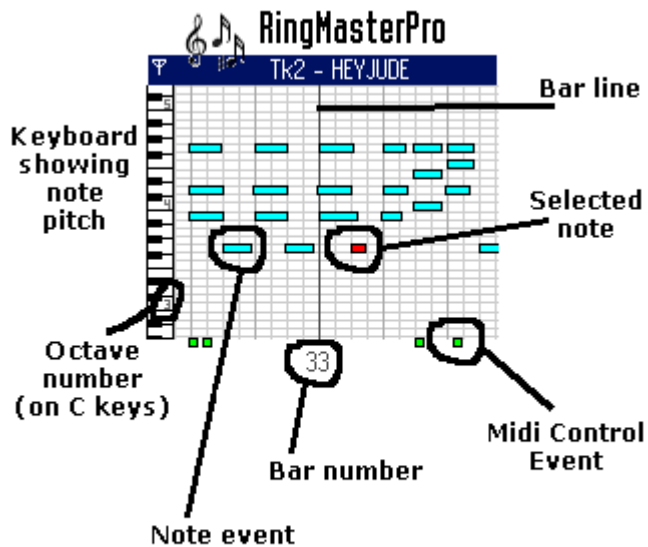
This view will be displayed when you first run *MidiWriterPro* and is used to configure and navigate around the tracks.

The 'Edit' button will take you to the 'Key edit' (piano roll) view for the selected track.

To return to the main track view from other views, press the 'Back' button.

Key edit (piano roll) view

The key edit view consists of a grid representing time and pitch. The horizontal represents time, and the vertical represents note number/pitch. The cyan blocks represent MIDI note events - the length of the block is the duration of the note. The vertical position of the note is the pitch of the note.



Screenshot of key edit view with a MIDI file loaded

The spacing of the vertical lines are dependent on the Quantize setting in the settings dialog.

The keyboard along the left side of the view is for identifying which musical note the events are. The small number indicates the octave, and is on every 'C' key. Middle C is identified by octave 5. You can change the number used to represent middle-C in the *MidiWriterPro* settings – valid values are 3, 4 or 5.

The red block is the currently selected note (the cursor position). The colour of the cursor note will depend on the colour you set for the cursor in the Settings dialog.

The green "MIDI control events" along the bottom of the grid are indicating channel volume changes, MIDI control changes, voice changes etc. These will be selected as you move the cursor past them. A green block indicates that there is one or more MIDI control event at that time slot. You can view and edit/delete control events using the "Events" list view.

The dark vertical line indicates the start/end of a bar. Each bar is split up into a number of smaller time slots indicating beats and quarter beats. The grid spacing can be set in the Settings dialog.

This view shows one track of the song at a time, to view the other tracks press "Previous track" or "Next track" hotkey (these are '2' and '3' by default). For details of re-configuring hotkeys see the "Keyboard assignment" section.

You can scroll up/down the octaves using the cursor up/down key. If you hold shift while using cursor up/down, the view will change by an octave.

Cursor left/right moves the cursor along the notes in the song. Holding down shift moves one bar at a time.

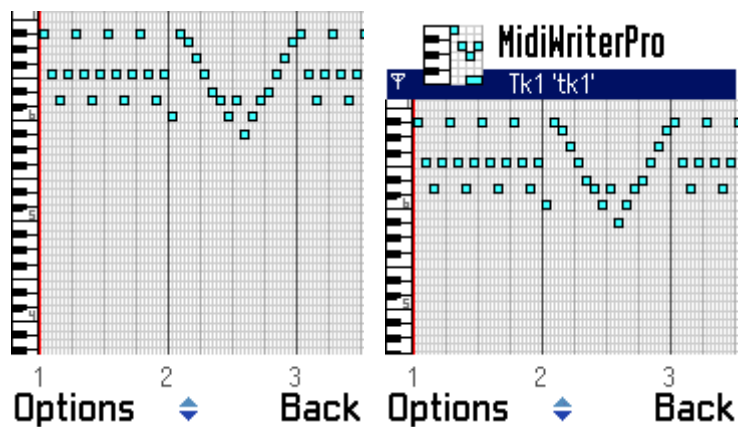
This view has 3 zoom levels, accessed by using the 'Zoom in' and 'Zoom out' menu options.

In this view, you can add, delete, move and change duration of notes. To do this, use the 0-9 and *# keys on the mobile phone. The keys are described in the key presses and shortcuts section later.

Full screen mode

To gain extra screen space, you can use the “View: Full screen” menu option. This will remove the status pane at the top of the view. This setting is remembered independently for each view.

This is most useful in the Key edit view as it allows a larger range of notes to be viewed.



Setting left and right markers

In the Key edit view you can set left and right markers. The markers can be used to cut/copy notes to the clipboard. The notes in the clipboard can then be pasted into other tracks, or into other parts of the same track. You can also jump to the left/right markers, or delete the marked notes using the 'C' key.

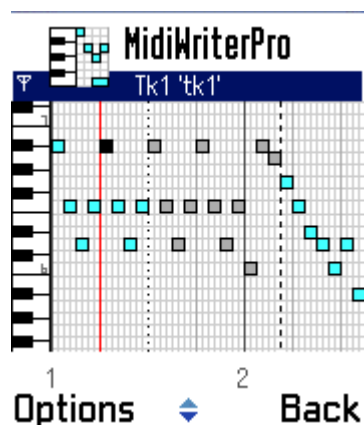
The notes between the left and right markers are drawn in gray.

If you position the cursor on one of the marked notes and use the move note up/down key presses, all the marked notes will be moved at the same time.

To move all the marked notes left/right, use the cut/paste option. (If this worked as for up/down, as you moved left/right some of the notes would move out of the marked range and stop moving. If the marked range moved to compensate, then other notes would enter the marked range and begin to move as well! Therefore you need to use cut/paste to move a range left/right).

Use "Edit: Clear markers" to clear the markers.

Use "Edit: Paste" to paste the clipboard at the cursor position: this mixes the notes at the cursor position. Use "Edit: Insert" to insert the clipboard, this will move the notes at the cursor position on in time to allow for the notes on the clipboard to be inserted.



Adjusting note velocities

To adjust note velocities use the "Song: Note velocity" menu, or for drum sounds, "Song: Drum velocity".

The "Drum velocity" option is only available for the drum track.

Selecting this option presents a dialog which the following information can be entered:

- Change velocity of
- Start at bar
- Number of bars to change
- Velocity at start
- Velocity at end

When setting drum velocity, the "Change velocity of" allows you to select which drum sound to change. For normal tracks, this allows you to select "Current track only" or "All tracks". "All tracks" does not affect the velocity of the drum track.

"Start at bar" and "Number of bars" determines the range over which the velocity of notes are changed. To change the entire song you can enter a high number into "Number of bars" if you are not sure of the bar count in the song.

"Velocity at start" and "Velocity at end" can be set to the same value to make the velocity constant over the range being changed. To make the velocity change over the range enter different numbers, for example to increase the velocity over 2 bars enter for example:

Start=1, Number bars=2, Velocity at start=32, Velocity at end=96

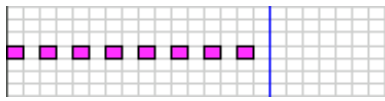
Quantizing

The basic quantize note value is set in the preferences dialog, and can be set to a value of 1 (whole note), 2, 4, 8, 16, 32 or 64 (1/64 note).

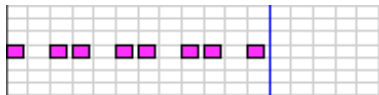
The type of quantizing can be set to 'tuplet' (denoted by T), normal or 'dotted' (denoted by a '.').

- When quantizing, only notes are affected, not other events

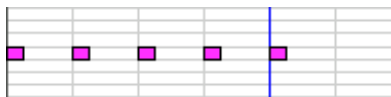
Quantizing will move notes to the closest quantize value without changing the length of the notes. For example:



Starting with an 1/8 note pattern,



Quantizing using 8T moves each 2nd note giving a shuffle beat



Quantizing using 4 moves each 2nd note to qtr note positions. This will mean you now have two notes on each beat

To quantize the selected track, use the "Track: Quantize" menu option. Set the quantize level in the Settings dialog.

Opening files

Use the "File: Open" menu to open MIDI files (format 0 and 1 supported only) or .RNG files. This will display a file browser view as shown here.



Use the 'Up' button to navigate up a level, and press the cursor button to navigate into the selected folder. To open a file, select the file to be opened and press the cursor button.

The current path is displayed at the top of the view.

Press the 'C' key to delete a file or folder. A folder can only be deleted if it is empty.

Press cursor left and right to change to a memory card, or to display the contents of the ROM (there are some MIDI files built into the phones ROM which can be opened in *MidiWriterPro*).

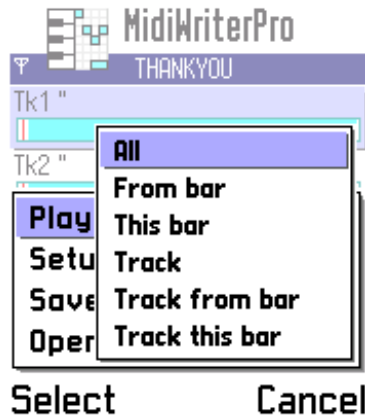
Press 'Exit' to return to *MidiWriterPro* without opening a file.

The file open dialog shows the \nokia\sounds\digital\ folder by default, which is where digital sound files are stored on most UK Series 60 phones. You can change this folder in the Settings dialog if your Series 60 phone uses a different location for storing music files.

You can of course set any folder you like: but by storing them in the phones standard folder your music will show up in the other music applications on the phone.

Playing music

To play back the current song or track, press the cursor button or use the "Options: Play" menu



The following options are available:

- All – plays all tracks from the beginning
- From bar – plays all tracks from a specific bar
- This bar – plays all tracks, current bar only
- Track – plays the selected track from the beginning
- Track from bar – plays selected track from a specific bar
- Track this bar – plays selected track, current bar only

To stop playback, press the cursor button and select "Stop"

Note that there maybe a slight pause between selecting "Play" and playback starting. This is because the music has to be saved as MIDI so the phones operating system can play it.

Song properties

To change the properties of the entire song, use the "Song: Properties" dialog. This defaults to the values shown in the screen shot below:



The tempo is the speed of the song in beats per minute. This defaults to 120. You can change the tempo at any point in the song using the "Modify: Change tempo" menu. The tempo indicator in the Tracks view changes to red on the beat where the tempo changes.

Edit tempo changes use the "View: Tempos" menu. This will list all tempo changes, which you can then delete or change the tempo of. Note that this list does not show the tempo set in the song properties dialog, only the tempo changes in the song.

The 'Key signature' defaults to C major and 'Time signature' to 4:4 timing.

If you change the key signature, you will then be prompted as to whether you want to transpose the notes in the song. If you select 'Yes', all notes in the song will be changed to match the change in the key signature.

You can also transpose a song using semi-tones using the Transpose menu.

Setting up tracks

When you first start *MidiWriterPro*, or after using the "File: New" menu, *MidiWriterPro* creates two empty tracks and a drum track.



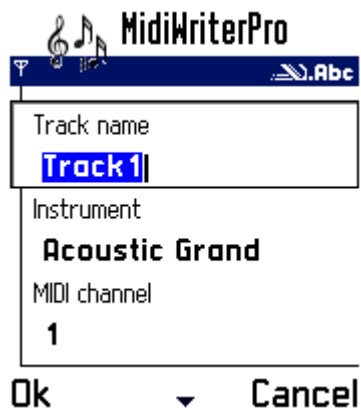
120 04/04 1.1.1
Options ▼ Edit

By default, track 1 is assigned to MIDI channel 1, and track 2 to MIDI channel 2.

The first thing you need to do is assign instruments to the tracks. To do this use the "Song: Track setup" menu. You will see the following screen, showing that Track 1 is MIDI channel 1, 'Acoustic Grand (Piano)', and Track 2 is MIDI channel 2, also 'Acoustic Grand'.



To change the settings for a particular track, select the track using the cursor up/down keys and press the OK/Select button. This will then display the following screen allowing you to alter the track settings.

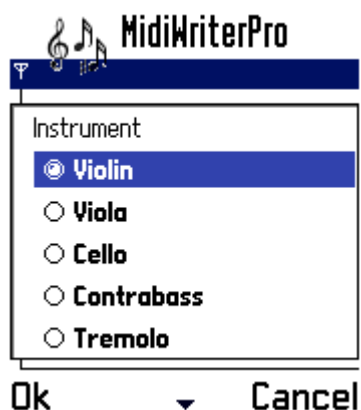


From the above screen you can set the track name, the instrument, the MIDI channel number, the channel volume and copyright information. The black arrow at the bottom is the scroll bar and indicates that there are more settings off the bottom of the screen – use the cursor keys to navigate to these.

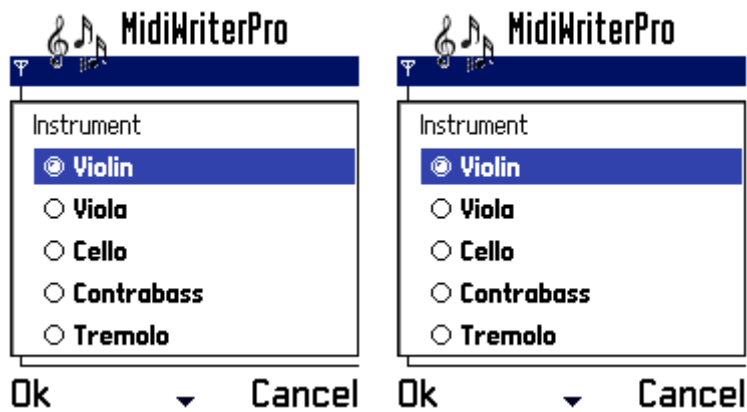
The channel volume can be set from 0 (off) to 127 (loudest). The default value is 127.

The Channel number can be set from 1 to 16 (with the exception of 10 which is reserved for percussion).

To change the instrument, select the line and then use cursor left/right to scroll through the 128 instruments available. To find an instrument quickly, you can also press the OK/Select button to display the following screen:



From the above screen you can select the instrument category from one of 16 available categories. Each category has 8 instruments. You can use the OK/Select button on either of the above two lines to display lists as shown.

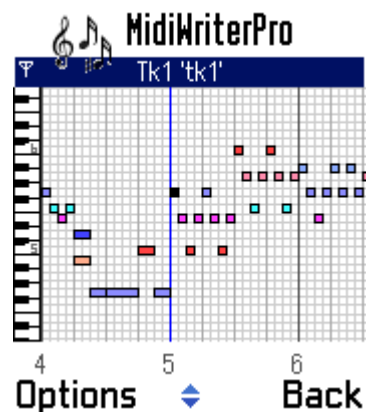


If you wish, you can enter some copyright text into the track setup dialog as shown here. **Important! Copyright text cannot be changed once you have saved and re-opened the song.** You can use the *MidiWriterPro* Settings dialog to enter default copyright text: this is then entered into every new song and track you create in *MidiWriterPro*.



Once you have set up the instruments for the tracks, you are ready to start creating music!

Creating music



Music is created and edited in the key edit (piano roll) view.

From the main track view, press 'Edit' button to change to the key edit view.

If you press the OK/Select button, a context sensitive menu pops up with the following options:

- Play
- Insert note
- Insert rest (*notation view only*)
- Add note
- Edit events

'Insert note' will insert a new note after the currently selected item, and insert rest inserts a rest. In the key edit view, 'Add note' will add a note, which is useful if you do not want all the following notes to move on in time.

A further 'Make chord' option is available if there is currently only one note at the position of the selected note, and this will add two notes to make a chord, a quick way of adding two further notes.

Any MIDI events (such as volume changes or instrument changes) are shown as green blocks at the bottom of the key edit view. Use the "Edit events" menu to edit MIDI events. The event list view will appear with the cursor at the event nearest to the cursor position.

To delete the selected note or rest use the 'C' key. This removes the note. To remove notes completely press shift-C. All following notes will be moved back in time to compensate for the duration of the item being removed.

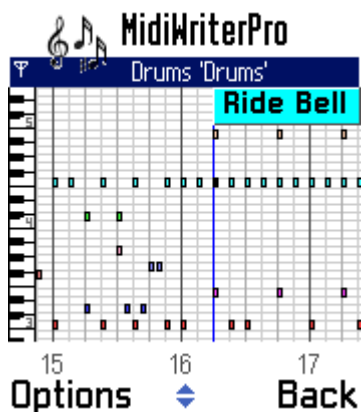
The instrument and volume of a given track is set in the set up dialog (see previous section, Setting up tracks). You can also change the volume, instrument or tempo of a track at any point in the track using the "Modify: Voice change", "Volume change" or "Tempo change" menu.

Drum tracks, re-mapping and deleting drums

All drum sounds are stored within one track, the 'Drum' track. This appears as the last track in the main Tracks view and can only be edited in the key edit/piano roll view.

In the percussion track each note produces a different drum sound, for example, middle-C produces a 'Hi bongo' sound. In the current version of *MidiWriterPro*, drum editing is done in the key edit view. A later version of *MidiWriterPro* will include a dedicated drum editing view.

Because of the small screen size of the phone, it is not possible to list the drum sounds at the left of the screen. To make it easier to find the drum sounds, whenever you move a note up/down the grid (ie changing it's note number and hence the drum sound), the drum sound will appear at the top right of the screen as shown here:



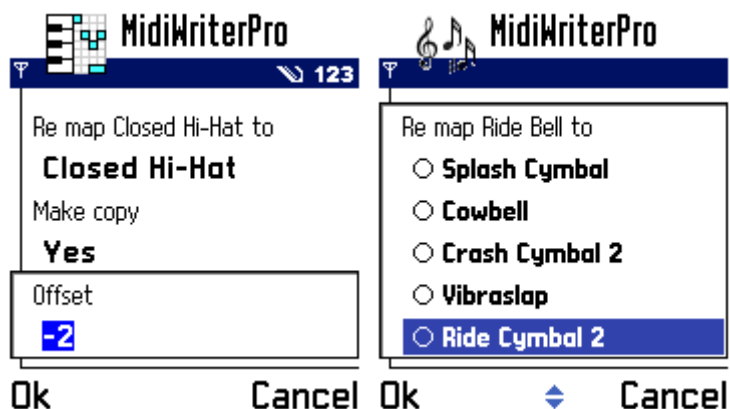
If you leave the cursor on a note for 1.5 seconds, the drum sound for that note will also appear. This is useful if you wish to identify what drum sound a particular note is.

Drum notes are normally of fixed length, but you can change the length as with normal tracks using * and #. This can affect the quality of the sound on Series 60 phones, for example, some cymbal sounds may sound better if you lengthen the note (using #)

Re-mapping drum sounds

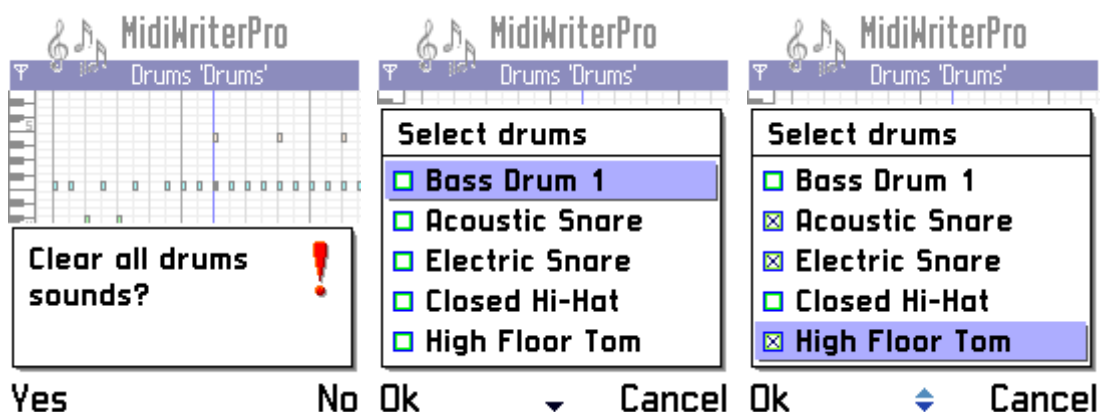
If you wish to change all the notes for a particular drum sound to another sound, select any one of the notes for the drum sound to be re-mapped and use the 'Track: Re-map drum' menu option. This option only appears when you have a note selected in the drum track.

You can also *copy* a drum sound by setting "Make copy" to 'Yes'. Optionally the copied notes can be offset by a number of 1/32th notes, determined by the value of 'Offset'. The value of Offset can be -ve or +ve.



Deleting drum sounds

To clear the entire drum track, use the "Track: Clear" menu. You will be prompted to clear all drum sounds. If you select **No**, you can then select which drum sounds to clear.



To select the drum sounds to clear, press the select button (press the phones cursor/joystick button) to mark the drum sound with an 'x'. Press again to clear the 'x'. Press **Ok** once you have selected all the sounds to be cleared.

Transposing tracks or song

You can transpose (change the key) of the song using the "Song: Properties" menu. Change the key signature to the required key and press OK, and then press Yes to "Adjust notes to new key?"

You can also change the key of a song in semi tones using "Track: Transpose"



In this dialog you can set:

- Transpose "Current track" or "All tracks"
- Semi tones (0 to 24)
- Direction ('Up' or 'down')

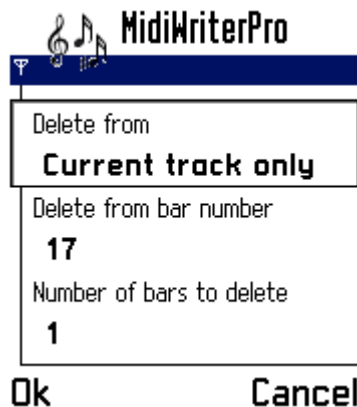
If "Transpose" is set to "All tracks", a further option is available, "Adjust key signature". This will change the key signature set in the Song properties dialog to match the transpose.

In the current version of *MidiWriterPro*, all tracks have the same key signature.

Deleting bars

The copy and delete bar options are only available in key edit view.

To **delete** one or more bars use the "Track: Delete bar(s)" menu.

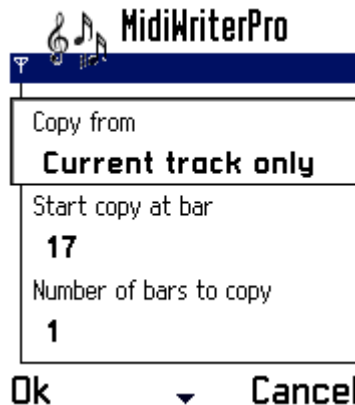


Enter the following information and press "Ok"

- Delete from 'Current track only' or 'All tracks'
- Delete from bar number
- Number of bars to delete

Copying and repeating bars

To **copy and repeat** one or more bars, use "Track: Copy bar(s)" menu. You can copy one or more bars, and insert them at any point into the same or different track of the same type (you cannot copy to/from percussion to normal tracks). You can also specify a number of times to repeat the bars being copied.



Enter the following information and press "Ok"

- Copy from 'Current track only' or 'All tracks'
- Start copy at bar
- Number of bars to copy
- Insert copied bars at bar
- Times to repeat copied bars
- Insert into track

The "Insert into track" option is not available in the following situations:

- When 'All tracks' is selected
- When only one track exists
- When copying from the drum tracks

It is not possible to copy from normal to the drum track

Muting tracks

Muting tracks is useful if you only want to play back specific tracks to hear how they sound together.

Use the "Song: Track mute" menu option.



To select the tracks to mute, press the select button (press the phones cursor/joystick button) to mark the track with an 'x'. Press again to clear the 'x'. Press **Ok** once you have selected all the tracks to be muted.

Muted tracks appear in grey in the 'Tracks' view and will not play when playing all tracks. You can still play a muted track using the 'Play: Track' menu.

Application settings

Using the "Settings" menu, you can change how various functions in *MidiWriterPro* work.

The settings are split into 4 categories:

- General settings
- Piano roll / key edit settings

- Key assignment

General settings

Digital folder

This determines what folder (NB: not what drive) your music is saved in. This defaults to `\nokia\sounds\digital\`. You may need to change this on non-English phones, or if your Series 60 phone stores digital sounds in a different location.

Scroll when playing

If set to 'Yes', the screen will scroll when playing. The highlight will show the note as close to the note being played back as possible. The accuracy may vary from phone to phone.

Load previous song

This determines whether *MidiWriterPro* automatically loads the previous song when you re-start the application.

Default copyright

The text entered here will be automatically inserted into every new song you create using *MidiWriterPro*.

Key edit settings

Quantize

This determines the quantize level, ie the duration of new notes inserted and the point at which notes will be moved to when quantizing. The value can be from 1 (whole note) to 64 (1/64th note) with 'Triplet', 'Normal' and 'Dotted' options

Snap

This determines the snap point when moving and changing duration of notes in key edit view. Values are as for 'Quantize'

Middle C position

This sets the octave number used for middle C. Valid values are 3, 4 or 5.

Note event colour and Midi event colour

This set the colours used for note and MIDI events in the piano roll view. Make sure the colours you use are different from the cursor colour set in the General settings!

If you select 'Pitch colours' for the note event colour, each note is drawn in a colour which represents the note (C, C#, D etc). In this setting, the selected note is always drawn in black, and not the colour set for the cursor. 'Velocity colours' will draw each note in a colour representing the velocity of that note.

Key assignment

This lets you change what the 0 - 9, * and # keys do. To change a particular function, select the function and then press the key you want to assign that function to. You can only assign functions to the phones 12 keypad keys.

MidiWriter*Pro* key presses and shortcuts

At any time you can press and hold the Shift key to change the action of the phones left/right soft-keys. The action of the keys reverts to normal when you let go of Shift.

During playback of songs in any view, you can press * and # to change the volume of the playback. This does not affect the volume stored in the MIDI file.

NB: Some of the key presses below can be changed using the Settings dialog. If you change the keys for decrease/increase note lengths, it will also affect the keys that change the playback volume.

In 'Track' view

- Cursor left/right moves in beats
- Shift-cursor left/right jumps a bar at a time

In "Key edit" view

- Cursor up/down scrolls the view
- Cursor left/right moves along the track
- * - Reduces the duration of the selected note
- # - Increases the duration of the selected note
- 0 - Zooms in
- 1 - Moves the current note up
- 4 - Moves the current note down
- 5 - Moves the note left
- 6 - Moves the note right
- 7 - Inserts a new note (moves following notes on)
- 8 - Adds a note (doesn't affect following notes)
- 2 - selects previous track
- 3 - selects next track
- C - Deletes selected note (doesn't affect following notes)
- OK - Displays a context sensitive menu

When used with the shift key, the key presses are:

- Cursor up/down scrolls by one octave
- Cursor left/right moves by one bar
- * - As above but moves following notes back
- # - As above but moves following notes on
- 0 - Zooms out
- 1 - Moves all notes at the same start time up
- 4 - Moves all notes at the same start time down
- 5 - As above but moves following notes back

- 6 - As above but moves following notes on
- C - Deletes selected note and moves following notes back

MidiWriter*Pro* menu functions

The menu options vary slightly depending on which view you are in, and which track is selected

File	
Open	Opens MIDI & .RNG files
Save	Saves the file as MIDI format 0 or 1 (1 is the default)
New	Clears the current song
Merge	Merges in another MIDI or .RNG file
Find all	Scans the entire phone for all MIDI files
Jump to	
Bar	Jumps to a specified bar in the current track
Start	Jumps to the start of the track
End	Jumps to the end of the track
Left marker	Jumps to the left marker (if one is set)
Right marker	Jumps to the right marker (if one is set)
Edit	
Undo	Undoes the last operation
Set L marker	Sets left marker at cursor position
Set R marker	Sets right marker at cursor position
Song	
Properties	Configures time/key signature and tempo
Track setup	Configures channels and instruments for the tracks
Track mute	Mutes/de-mutes tracks
Quantize	Quantizes the notes/events (see Quantizing section)
Track	
Setup	Configures channel and instrument for selected track
New	Adds a new track
Clear	Clears the current track
Delete	Deletes the current track (drum track cannot be deleted)
Duplicate	Clones the current track (not available for drum track)
Transpose	Transposes the current or all tracks

View	
Events	Changes to MIDI events list view
Tempos	Changes to tempo changes list view
Modify	
Voice change	Inserts a voice change at the current cursor point
Volume change	Inserts a volume change
Tempo change	Inserts a tempo change

In the Key edit view, some variations are as follows:

Track	
Copy bar(s)	Copies one or more bars
Delete bar(s)	Deletes one or more bars
Re-map drum	Re-maps a drum (when note is selected in drum track)
Modify	
Add note	Adds another note
Insert note	Inserts a note
Make chord	Adds notes to the selected note to make a chord*
Edit	
Copy*	Copies the notes between left/right marker to clipboard
Cut*	Cuts the notes
Paste*	Pastes the clipboard to the current cursor position
Insert*	Inserts the clipboard at the cursor position

Note: Items marked * are context sensitive and only appear when they can be used. If a particular menu option does not appear, then it normally means it cannot be used for the track or view you have selected

A full undo feature will be available in a later release. Currently only Quantize, Clear/Delete/New track can be undone.

Instrument categories and sounds

The following categories of instruments are available when setting up tracks (other than the drum track). Note that the sounds are built into the phone, the quality of the sound is not due to *MidiWriterPro*.

Instrument categories:

1. Piano
2. Chromatic Percussn
3. Organ
4. Guitar
5. Bass
6. Strings
7. Ensemble
8. Brass
9. Reed
10. Pipe
11. Synth Lead
12. Synth Pad
13. Synth FX
14. Ethnic
15. Percussive
16. Effects

Each category is further split into 8 instruments, as detailed on the next page.

The categories are further split into instruments as follows:

Piano category: Acoustic Grand Bright Acoustic Electric Grand Honky-tonk Electric 1 Electric 2 Harpsichord Clavi	Percussion: Celesta Glockenspiel Music Box Vibraphone Marimba Xylophone Tubular Bells Dulcimer	Organ: Drawbar Percussive Rock Church Reed Accordion Harmonica Tango Accordion	Guitar: Acoustic (nylon) Acoustic (steel) Electric (jazz) Electric (clean) Electric (muted) Overdriven Distortion Harmonics
Bass: Acoustic Electric (finger) Electric (pick) Fretless Slap 1 Slap 2 Synth 1 Synth 2	Strings: Violin Viola Cello Contrabass Tremolo Pizzicato Orchestral Harp Timpani	Ensemble: String 1 String 2 SynthStrings 1 SynthStrings 2 Choir Aahs Voice Oohs Synth Voice Orchestra Hit	Brass: Trumpet Trombone Tuba Muted Trumpet French Horn Brass Section SynthBrass 1 SynthBrass 2
Reed: Soprano Sax Alto Sax Tenor Sax Baritone Sax Oboe English Horn Bassoon Clarinet	Pipe: Piccolo Flute Recorder Pan Flute Blown Bottle Shakuhachi Whistle Ocarina	Lead: Square Sawtooth Calliope Chiff Charang Voice Fifths Bass+lead	Pad: New age Warm Polysynth Choir Bowed Metallic Halo Sweep
Fx: Rain Soundtrack Crystal Atmosphere Brightness Goblins Echoes Sci-fi	Ethnic: Sitar Banjo Shamisen Koto Kalimba Bag pipe Fiddle Shanai	Percussive: Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal	Effects: Guitar Fret Breath Seashore Bird Tweet Telephone Helicopter Applause Gunshot

Drum sounds

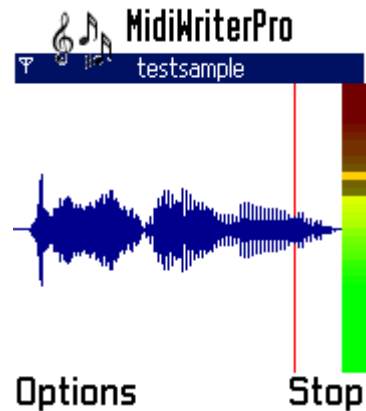
The following 47 GM drum sounds can be used in the drum track.

Acoustic Bass Drum	Bass Drum 1	Side Stick	Acoustic Snare
Hand Clap	Electric Snare	Low Floor Tom	Closed Hi-Hat
High Floor Tom	Pedal Hi-Hat	Low Tom	Open Hi-Hat
Low-Mid Tom	Hi-Mid Tom	Crash Cymbal 1	High Tom
Ride Cymbal 1	Chinese Cymbal	Ride Bell	Tambourine
Splash Cymbal	Cowbell	Crash Cymbal 2	Vibraslap
Ride Cymbal 2	Hi Bongo	Low Bongo	Mute Hi Conga
Open Hi Conga	Low Conga	High Timbale	Low Timbale
High Agogo	Low Agogo	Cabasa	Maracas
Short Whistle	Long Whistle	Short Guiro	Long Guiro
Claves	Hi Wood Block	Low Wood Block	Mute Cuica
Open Cuica	Mute Triangle	Open Triangle	

Additional features

Please visit www.midiwriter.com for information on plug-ins available to add additional features to *MidiWriterPro*

There is currently one additional plug-in available for Nokia 3650, 7650 and n-gage phones which adds a Sample editing view to *MidiWriterPro*. This allows you to edit sound samples.



Information on using these additional features is provided when you download the plug-in.

The sample editing add-on integrates seamlessly with *MidiWriterPro* and becomes part of the same application.