Each P2M file consists of the following nine sections in the order listed below:

1. Header

Offset	Size	Name	Data Type	Description
0	8	szHeader	CHAR [8]	File Header "P2M02.00" (ANSI characters)

Total Size = 8 Bytes

2. Roll Data

Offset	Size	Name	Data Type	Description
0	2	fDirDown	BOOL	TRUE = Roll travels downwards FALSE = Roll travels upwards
2	2	uRollNotes	UINT	Number of note columns on pianola roll (for example 65)
4	2	fLowLeft	BOOL	TRUE = Lower notes on the left FALSE = Lower notes on the right
6	2	uRollWidth	UINT	Physical width of pianola roll
8	2	uLeftMargin	UINT	Physical margin between left edge of pianola roll and left-most note holes/slots
10	2	uRightMargin	UINT	Physical margin between right edge of pianola roll and right-most note holes/slots
12	2	uUnits	UINT	Dimension units (for uRollWidth, uLeftMargin and uRightMargin) 0 = millimetres 1 = centimetres 3 = inches
14	4	lLeftEdge	LONG	Coordinates (in pixels) of roll left edge in editor window
18	4	lRightEdge	LONG	Coordinates (in pixels) of roll right edge in editor window (lLeftEdge and lRightEdge also determine position of note guides in editor window)

Total Size = 22 Bytes

3. Music Data

Offset	Size	Name	Data Type	Description
0	2	uInstrument	UINT	Instrument used in playback and exported to MIDI file
2	2	uSurround	UINT	Degree of stereo/surround sound (as percentage: 0% = none, 100% = maximum)
4	2	uLowestNote	UINT	MIDI note number (0 to 127) of lowest note column on pianola roll
6	2	uDefSpeed	UINT	Default speed (in pixels per second)

8	2	uDefVolume	UINT	Default volume
10	2	wTitleLen	WORD	Length of music title
...	...	szTitle	WCHAR []	Music title (Unicode characters). Not zero terminated. Omitted if wTitleLen = 0
...	2	wComposerLen	WORD	Length of Composer(s) Name(s)
...	...	szComposer	WCHAR []	Composer(s) Name(s) (Unicode characters). Not zero terminated. Omitted if wComposerLen = 0
...	2	wMiscLen	WORD	Length of other miscellaneous information
...	...	szMisc	WCHAR []	Other miscellaneous information – for example compilation of tunes (Unicode characters). Not zero terminated. Omitted if wMiscLen = 0

Minimum Total Size = 16 Bytes

4. Image Data

Offset	Size	Name	Data Type	Description
0	2	wImagesTotal	WORD	Number of images referenced by P2M file

The following table is repeated for each image or omitted if wImagesTotal = 0

Offset	Size	Name	Data Type	Description
0	2	wImageNameLen	WORD	Length of image's filename
2	...	szImageFilename	WCHAR []	Image's filename (Unicode characters). Not zero terminated. Omitted if wImageNameLen = 0
...	2	nImageWidth	INT	Width (in pixels) of image
...	2	nImageHeight	INT	Height (in pixels) of image
...	4	lImageXcoord	LONG	X coordinate (in pixels) of image's insertion point in editor window (can be negative)
...	4	lImageYcoord	LONG	Y coordinate (in pixels) of image's insertion point in editor window (can be negative)

Minimum Total Size = 2 + (14 × wImagesTotal) Bytes

5. Colours Data

Offset	Size	Name	Data Type	Description
				Overview window:
0	3	rgbOvBackground	BYTE [3]	Background colour
3	3	rgbOvImageEdge	BYTE [3]	Colour of image edges
6	3	rgbOvDetScrnEdge	BYTE [3]	Colour of editor window edge

				Editor window:
9	3	rgbDtBackground	BYTE [3]	Background colour
12	3	rgbDtNoteStart	BYTE [3]	Colour of note start
15	3	rgbDtNoteStop	BYTE [3]	Colour of note stop
18	3	rgbDtNoteBar	BYTE [3]	Colour of note bar (between start and stop)
21	3	rgbDtRollEdge	BYTE [3]	Colour of roll edge
24	3	rgbDtNoteGuides	BYTE [3]	Colour of note guides
27	3	rgbDtHozGuides	BYTE [3]	Colour of horizontal guides
30	3	rgbDtVolume	BYTE [3]	Colour of volume trace
33	3	rgbDtSpeed	BYTE [3]	Colour of speed trace
36	3	rgbDtSelRect	BYTE [3]	Colour of selection rectangle
39	3	rgbDtSelNoteStart	BYTE [3]	Colour of selected note start
42	3	rgbDtSelNoteEnd	BYTE [3]	Colour of selected note stop

Total Size = 45 Bytes

6. Notes Data

Offset	Size	Name	Data Type	Description
0	2	wNotesTotal	WORD	Number of note starts and stops

The following table is repeated for each note or omitted if wNotesTotal = 0

Offset	Size	Name	Data Type	Description
0	1	bNoteStatus	BYTE	1 = Note Start 0 = Note Stop
1	1	bNoteColm	BYTE	Column of note (0 to 127) in editor window. Not the same as MIDI note value
2	4	lNoteYpos	LONG	Y coordinate of note (in pixels) in editor window (can be negative)

Total Size = 2 + (6 × wNotesTotal) Bytes

7. Volume Data

Offset	Size	Name	Data Type	Description
0	2	wVolumeTotal	WORD	Number of volume change nodes

The following table is repeated for each volume change node or omitted if wVolumeTotal = 0

Offset	Size	Name	Data Type	Description
0	1	bVolume	BYTE	Volume change value (0 to 255)
1	4	lVolumeYpos	LONG	Y coordinate of volume change (in pixels) in editor window (can be negative)

Total Size = 2 + (5 × wVolumeTotal) Bytes

8. Speed Data

Offset	Size	Name	Data Type	Description
0	2	wSpeedTotal	WORD	Number of speed change nodes

The following table is repeated for each speed change node or omitted if wSpeedTotal = 0

Offset	Size	Name	Data Type	Description
0	1	bSpeed	BYTE	Speed change value (0 to 255)
1	4	lSpeedYpos	LONG	Y coordinate of speed change (in pixels) in editor window (can be negative)

Total Size = 2 + (5 × wSpeedTotal) Bytes

9. Tail

Offset	Size	Name	Data Type	Description
0	8	szTail	CHAR [8]	File Tail “P2M02.00” (ANSI characters)

Total Size = 8 Bytes