Unofficial Nord Lead A1 File Structure Documentation

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Nord Lead A1 Program File Structure

This mapping corresponds to the Nord Lead A1 program file (file extension nlas).

offset	bits	description
0x0000	cccccccc	ascii C - 0x43, 4-byte Clavia ID
0x0001	cccccccc	ascii B - 0x42
0x0002	cccccccc	ascii I - 0x49
0x0003	cccccccc	ascii N - 0x4E
0x0004	ffffffff	(f) file format
0x0005	--------	0
0x0006	--------	0
0x0007	--------	0
0x0008	cccccccc	ascii n - 0x6E, 4-byte NLA1 Program file ID
0x0009	cccccccc	ascii l - 0x6c,
0x000A	cccccccc	ascii a - 0x61,
0x000B	cccccccc	ascii s - 0x73,
0x000C	------bb	(b) bank (0 = A, 1 = B . . .)
0x000D	--------	0
0x000E	--llllll	(l) location lsb (0 = 01:1, 1 = 01:2 . . .)
0x000F	--------	0
0x0010	cccccccc	(c) program category
0x0011	--------	
0x0012	--------	
0x0013	--------	
0x0014	iiiiiiii	(i) file version (16-bit)
0x0015	iiiiiiii	
0x0016	--------	
0x0017	--------	
0x0018	cccccccc	CRC1 (32-bit)
0x0019	cccccccc	
0x001A	cccccccc	
0x001B	cccccccc	
0x001C	--------	
0x001D	--------	
0x001E	--------	
0x001F	--------	
0x0020	--------	
0x0021	--------	
0x0022	--------	
0x0023	--------	
0x0024	--------	
0x0025	--------	
0x0026	--------	
0x0027	--------	
0x0028	--------	
0x0029	--------	
0x002A	--------	
0x002B	--------	
0x002C	--------	
0x002D	--------	

offset	bits	description
0x002E	--------	
0x002F	--------	
0x0030	--------	
0x0031	--------	
0x0032	--------	
0x0033	--------	
0x0034	--------	
0x0035	--------	
0x0036	--------	
0x0037	--------	
0x0038	--------	
0x0039	--------	
0x003A	--------	
0x003B	--------	
0x003C	--------	
0x003D	--------	
0x003E	--------	
0x003F	--------	
0x0040	--------	
0x0041	--------	
0x0042	--------	
0x0043	--------	
0x0044	--------	
0x0045	--------	
0x0046	--------	
0x0047	--------	
0x0048	--------	
0x0049	--------	
0x004A	--------	
0x004B	--------	
0x004C	--------	
0x004D	--------	
0x004E	--------	
0x004F	--------	
0x0050	--------	
0x0051	--------	
0x0052	--------	
0x0053	--------	
0x0054	--------	
0x0055	--------	
0x0056	--------	
0x0057	--------	
0x0058	--------	
0x0059	--------	
0x005A	--------	
0x005B	--------	
0x005C	--------	
0x005D	--------	
0x005E	--------	
0x005F	--------	
0x0060	--------	
0x0061	--------	
0x0062	--------	
0x0063	--------	
0x0064	--------	
0x0065	--------	
0x0066	--------	
0x0067	--------	
0x0068	--------	

offset	bits	description
0x0069	--------	
0x006A	--------	
0x006B	--------	
0x006C	--------	
0x006D	--------	
0x006E	--------	
0x006F	--------	
0x0070	--------	
0x0071	--------	
0x0072	--------	
0x0073	--------	
0x0074	--------	
0x0075	--------	
0x0076	--------	
0x0077	--------	
0x0078	--------	
0x0079	--------	
0x007A	--------	
0x007B	--------	
0x007C	--------	
0x007D	--------	
0x007E	--------	
0x007F	--------	
0x0080	--------	
0x0081	--------	
0x0082	--------	
0x0083	--------	
0x0084	--------	
0x0085	------o-	(o) reverb on
0x0086	--------	
0x0087	--------	
0x0088	--------	
0x0089	--------	
0x008A	--------	
0x008B	--------	
0x008C	--------	

NLA1 Reverb On

Offset in file: 0x85 (b2)

```
0 = off, 1 = on
```

NLA1 File Version

Offset in file: 0x14 and 0x15

See: Nord Lead A1 - Update History

```
Nord Lead A1 - OS Update
v1.02 (2014-03-10)
v1.12 (2014-04-02)
v1.14 (2014-04-04)
v1.20 (2014-04-25)
v1.24 (2014-04-28)
v1.30 (2014-05-12)
v1.32 (2014-05-22)
v1.34 (2015-10-07)

16-bit integer value in Little Endian format
current supported version are 6 and 7
```

NLA1 File Format

Offset in file: 0x04

```
0 = header type 0 - legacy format no CRC (Byte 0x18 to 0x2B are missing)
1 = header type 1 - new format with additional bytes 0x18 to 0x2B (20 bytes).

All files exported with Nord Sound Manager v7.40 (2018-12-18) or later are in type 1.
```

NLA1 Program Category

Offset in file: 0x10

```
  0 = Acoustic
  1 = Bass
  2 = Wind
  4 = Fantasy
  5 = FX
  6 = Lead
  7 = Organ
  8 = Pad
  10 = Pluck
  11 = String
  12 = Synth
  13 = Vocal
  14 = User
  17 = None
  21 = Grand
  22 = Upright
  23 = EPiano1
  24 = EPiano2
  27 = Clavinet
  28 = Harpsi
  30 = Arpeggio
  255 = Undefined
```