MIDI Show Control

Cognito can respond to other consoles or show control devices using the MIDI Show Control (MSC) protocol. The connection is made using a standard 5-Pin DIN.

The MSC format is as follows:
```
F0 7F <device_ID> 02 <command_format> <command> <data> F7
```

Note:

- All sysex commands start with `F0 7F`
- Cognito is <device_ID> 1
- `<command_format>` is typically 01
- Supported `<command>` 's are shown below
- No more than one command can be transmitted in a Sysex (System Exclusive command).
- The total number of bytes in a Show Control message should not exceed 24.
- Sysex's must always be closed with an F7H as soon as all currently prepared information has been transmitted.

Cue number and Playlist are expressed as ASCII numbers 0-9 (encoded as 30H-39H) with the ASCII decimal point character (2EH) used to delineate subsections. Cognito does not use point cues, regardless of what the cue label is. Cue numbers are always whole number (indexed from 1 at the top of the Playlist). Cognito uses a 'best-match' method to determine the Playlist name based on the label. For example, a Playlist named "01-Main" would be referenced by MSC as Playlist 1 or 31H.

Example:

On Device 1 a GO on Cue 45 in Playlist 68 would be represented by the hex data:
```
F0 7F 01 02 01 01 34 35 00 36 38 F7
```
The MSC commands supported by Cognito include:

01 GO

Starts a transition or fade to a cue. Transition time is determined by the cue in the Cognito. If no Cue Number is specified, the next cue in numerical sequence GOes. If a Cue Number is specified, that cue GOes. Transitions "run" until complete. If the Controller wishes to define the transition time, TIMED_GO (see below) should be sent. Playlist is optional

```
01 GO
<Cue Number> optional; required if Playlist is sent
00 delimiter
<Playlist> optional; Cognito uses closest match on Playlist
name (if omitted, Cognito will use the first Playlist)
```

Note:

If a GOTO Cue 0 is sent, Cognito will release the Playlist.

02 STOP

Halts currently running transition(s) on the active Playlist.
```
02 STOP
<Cue number> optional; required if Playlist is sent
00 delimiter
<Playlist> optional; Cognito uses closest match on Playlist
name (if omitted, Cognito will use the first Playlist)
```

03 RESUME

Causes STOPped transition(s) to continue running. If no Cue Number is specified, the current Playlist will continue if Halted.
```
03 RESUME
<Cue number> optional; required if Playlist is sent
00 delimiter
<Playlist> optional; Cognito uses closest match on Playlist
name (if omitted, Cognito will use the fist Playlist)
```

04 TIMED_GO

Starts a timed transition or fade to a cue. If no Cue Number is specified, the next cue in numerical sequence GOes. If a Cue Number is specified, that cue GOes. Transitions "run" until complete. Time is Standard Time Specification with subframes (type {ff}), providing anything from "instant" to 24 hour transitions.
```
04 TIMED_GO
hr mn sc fr ff Standard Time Specification
<Cue number> optional; required if Playlist is sent
00 delimiter
<Playlist> optional; Cognito uses closest match on Playlist
name (if omitted, Cognito will use the fist Playlist)
```

0A RESET

Is equivalent to releasing all Playlists.
```
0A RESET
```