

bitcontrol® LISA

bitcontrol® Multicontent Multimedia Player (M² Player)

The new bitcontrol® Multicontent Multimedia Player (M² Player) is used to play back multimedia content and information like weather, news, traffic information, advertising, etc. according to a playlist on display systems like infotainment systems in vehicles of MTA.

The playlist generates change-over points, either cyclically or event-driven based on timetable or vehicle information. These change-over points automate the switch between passenger information, connection information, special announcements and infotainment.

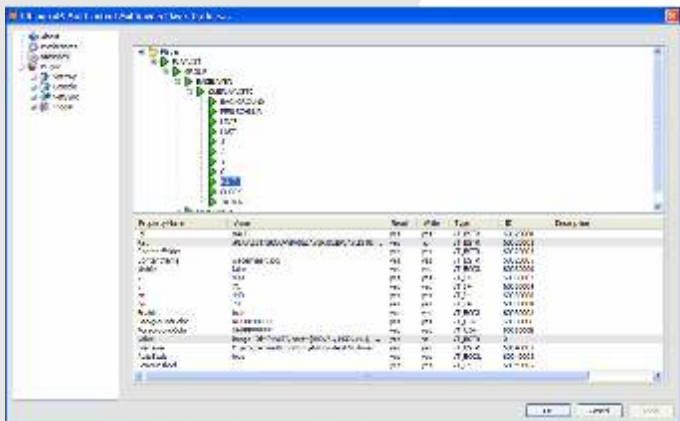
The new bitcontrol® M² Player is ideal for multimedia purposes with graphical runtime support. It is characterized by a particular stability during playback of playlist elements like text, image, video or animations.



Scaling, decoding, interlace and display of the playlist elements can be done by hardware or software. Optimum is a combination of both that is detected and set by the player automatically. This allows a higher performance and quality of multimedia element playback.

Rapid switches between parallel running playlists inside a playlist file will be realized by monitoring the playlist. It becomes visible by immediate update of the playlist element display after it was changed.

Compared with the previous version of the bitcontrol® M² Player, the structure of the playlist elements has been improved and the playlist elements own more attributes. This is beneficial for the realization of special design effects: For example, single playlist elements can be placed in any order on the screen. So it is possible to show easily videos with subtitles, advertising pictures or flash animation as well as video in video.



A reason for this is the complete self control of playlist elements by the player software.

Please turn over!

The features of the bitcontrol® M² Player provide the possibility to use more functions of the bitcontrol® CMS (Content Management Systems) to create interesting and diversified playlists for passenger TV.

The bitcontrol® PLD (Playlist Designer) software can be used to design the passenger information layout.

The bitcontrol® M² Player supports a large number of formats and content for passenger information and infotainment. It contains all standard and optional hardware interfaces that are relevant for MTA vehicles.

Supported formats / content

Passenger information

- Line data (stations, target, number)
- Network map (stations, stop station, depot, route point, connections, disabled-friendly stations)
- Time table data (circles, courses, tours)
- Communication to board computer of different producers
- Clock
- Images (referred to texts)
- Dynamic passenger information

Infotainment

- Video (MPEG-1/2/4, H.263/264, AVC, WMV, FVL, HDTV)
- TV-Suite (DVB-T/S, RTSP-live, RTSP-VOD), DVD, CD
- Images (PNG, BMP, JPG, TGA, GIF), text, ticker and animation
- HTML with JavaScript for browser (IE and Firefox)
- Mixed Playlist and event handling

Available / optional properties/interfaces

- IBIS, IBIS-2, IBISplus, IBIS-IP
- WLAN and ethernet
- Door contact / Stop
- LTE / UMTS/ GPRS / GSM
- Update via USB stick
- DAB / DMB
- DVB
- ITCS / RBL

Characteristics of bitcontrol® M² Player

bitcontrol® M² Player has the following special features:

- Automatic spot synchronisation across intelligent displays with own CPU,
- No black change-over between spots
- All elements can be arbitrarily placed in layers
- Validity and duration of the spots are defined in attributes inside the playlist, ensuring correct playback of spot.
- Spot playback dependent on direction of traffic, route, region, location and other attributes
- Self monitoring of the player by integrated tools and logging possibilities
- Display different multimedia elements in arbitrary size and position at the same time
- Multimedia element adjustment in layer inclusive half transparency, e.g. transparent ticker over video
- External controlling of all multimedia elements via scripting is possible
- Transparent playlist element handling by self control of the player software
- Complete support of the alpha channel also for video and animation
- Any resolution and video frequency are usable by automatically generated video frequencies

Supported operating systems

- WinXP and WinXP embedded (with DirectX 9*)
- Win 7 (with DirectX 11)
- Win 8 and Win8 embedded (with DirectX 11)

* If DirectX 9 is used not all bitcontrol® M² Player features will be supported!

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