

DLNA Controller

Software Solution for DLNA Compatible Device Control



Main Features

- Network control based on UPnP (Universal Plug and Play)
- All communications over wired / wireless networks
- Touch panel, mobile device or controller IP port connection
- Allows to create IP media systems based on standard devices
- Cue System is a DLNA controller
- Control from all types of user interfaces incl. buttons
- Single button control - e.g. start playlist

Description

Universal Plug and Play (UPnP) is a set of networking protocols that permits networked devices to seamlessly discover each other's presence on the network and establish functional network services for data sharing, communications, and entertainment. UPnP defines the type of device (server, renderer, controller) and the mechanisms for accessing media over a network.

What is "universal" about UPnP technology

- No device drivers
- Common protocols are used instead.
- UPnP networking is media independent.
- UPnP devices can be implemented using any programming language, and on any operating system.
- The UPnP architecture does not specify or constrain the design of an API for applications; OS vendors may create APIs that suit their customers' needs.

The Digital Living Network Alliance (DLNA) is a collaborative organization that is responsible for defining interoperability guidelines to enable sharing of digital media between multimedia devices. DLNA uses Universal Plug and Play (UPnP) for media management, discovery and control. Cue System uses UPnP technology for control of many DLNA compatible AV devices - TVs, AV receivers, media players, etc.

DLNA device types

- Server - stores content, typically NAS (Network-Attached Storage)
- Renderer - renders content, typically TV, AV receiver, small box players, ...
- Controller - controls servers and renderers

DLNA Controller functions

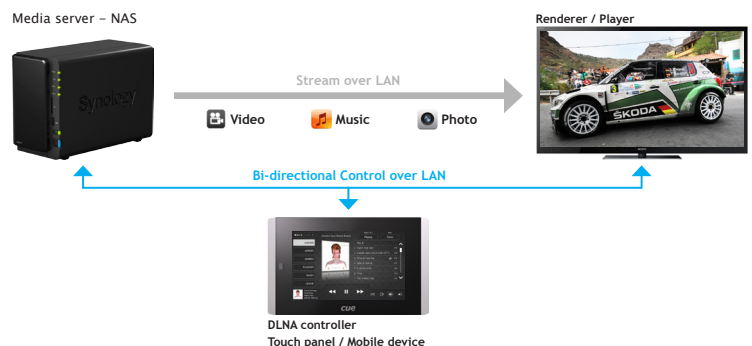
- Discovery UPnP devices
- Find content on a server
- Match content to renderers
- Transport functions

DLNA Basic Configuration

This schematic diagram describes basic DLNA configuration consisting of Media Server (NAS with UPnP functionality), renderers (AV receiver and TV) and DLNA Controller (touch panel, mobile device). Media content (video, music, photos) is stored on Media Server.

Basically, the DLNA Controller provides automatic discovery of all devices. List of All DLNA compatible devices on the network is stored in the controller.

The user can browse content of the servers and match selected content (video, music, photos) to appropriate renderer. Then the user can control specific renderer. It is possible to control transport functions (play, stop, pause, etc.), volume, etc.



DLNA Multi-zone Configuration

This application diagram describes how to create multi-zone media system based on NAS and different types of renderers like TVs, network speakers, etc.

Every controller can match different content to every renderer. Finally various content can be used in different home zones. Independent renderer / player control from any controller is possible.

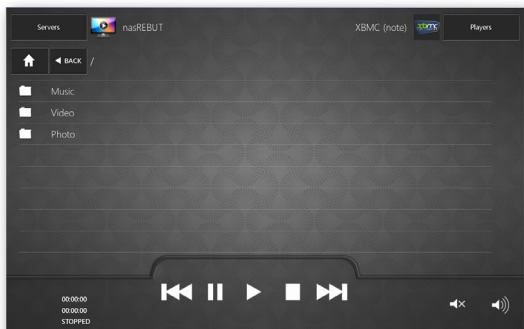


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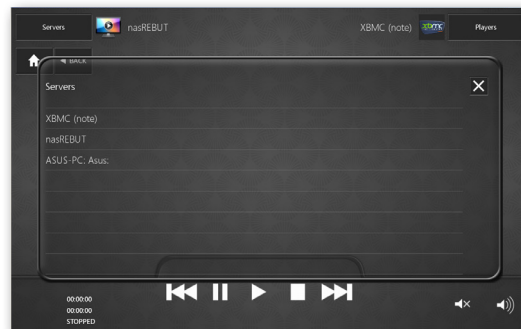
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cue

Controller User Interface



After selecting server, his content is displayed in browser. Then you can list throw all content of the server. If you want change server or player, click Servers or Players button. List of available servers or players is displayed. Then you can select new one.



List of server content is created by the server itself. Usually, information from media files are read by server and content is generated and sorted by Album, Author, Year, Genre, etc. You are browsing server throw folders to media file. When you click media file, it starts play on selected player. Informations about played media file and player status are read from player and displayed in left bottom corner. You can use also transport buttons, mute and volume buttons.

Specifications

Controller compatible hardware

- Any CUE's touch panel
- Any Apple iOS mobile device with CUE's runtime
- Any Android mobile device with CUE's runtime
- Any Microsoft Windows device with CUE's runtime
- Any CUE's controller

User interface resolution

- From 800 x 480 pixels
- Native 1280 x 800 pixels

Controller software parts for Cue Visual Composer

- User interface - MulticolorUPnPControlPoint graphic collection
- UPnP driver
- UPnP_Base applet

Order Information

Product code CS0481

Free download from [cuestore](http://cuestore.com).

Any hardware has to be ordered separately.