



GYMTECH
MUSIC-TV

INSTALLATION

GYMTECH MUSIC-TV

CONTENT

EQUIPMENT	2
WHAT YOU NEED	3
GYMTECH MUSIC-TV PLAYER.....	3
TV-SCREENS.....	4
PROJECTOR	4
PROJECTOR SCREEN.....	4
AUDIO SYSTEM.....	5
INTERNET	5
SYSTEM OVERVIEW.....	6
AV GUIDE.....	6
PREPARATIONS	7
INTRODUCING FIVE PREPARATIONAL STEPS.....	8
STEP 1: PLACEMENT OF PLAYER	8
STEP 2: PLACEMENT OF SCREEN.....	8
WALL CHOICE	8
SCREEN AND AMBIENT LIGHT.....	8
STEP 3: PLACEMENT OF PROJECTOR.....	8
INSTALLATION HEIGHT.....	8
STEP 4: POWER AND INTERNET	9
STEP 5: CHECK YOUR CABLES	9
CABLING & INSTALLATION	10
READY TO INSTALL?.....	11
1: MOUNTING THE PLAYER	11
2: MOUNTING THE PROJECTOR	12
3: FINAL ADJUSTMENTS.....	13
VIDEO DISTRIBUTION.....	13
ADDITIONAL RECOMMENDATIONS.....	15

EQUIPMENT

WHAT YOU NEED

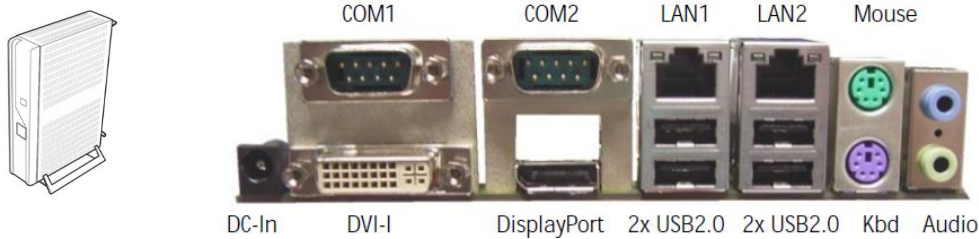
For the Gymtech Music-TV setup, you need the following hardware:

- Gymtech Music-TV Player
- TV-screens and/or Projector + Projector screen
- Audio system
- Internet connection

In order to get a better understanding of the functionality of the items listed above, a brief introduction is provided below.

GYMTECH MUSIC-TV PLAYER

The system comes with this player:



Fujitsu introduces this player which comes in a metal case (19x25x5.2 centimeter / 7.5x9.5x2 inch) with a 1 TB 24/7 hard disk drive (HDD). The Player comes pre-loaded with Windows 7 embedded and the fully configured Studio Fitness Music-TV software. The Player is pre-loaded with all content (i.e. no streaming) and whenever new content is available, the player will automatically download and store it locally on the hard drive.

A constant internet connection is therefore a necessity.

The player is set to search for updates at night. Besides traffic generated by downloading new content, the system will not use much internet bandwidth.

Gymtech Music-TV player	
Relevant I/O Ports	4 x USB
	1 x Mic-in, 1 x Line-out
	2 x internet (RJ-45)
	1 x DVI-I
	1 x Display Port
Power Supply	65W/20V

TV-SCREENS

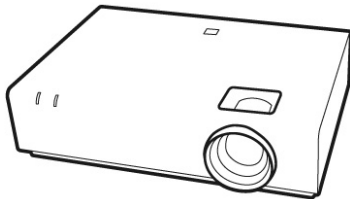
The TV-screens are the output device, which shows the content from the player. Basically you can connect any TV-screen to the player, however we recommend that you only buy TV-screens of good quality. The better quality of the TV-screen, the better quality of the images shown on the screen.

The TV-screen must not have a “sleep”-function that you cannot disable and the TV-screen has to be digital. You can connect any number of TV-screens to the player, this will simply require a device that splits the signal from the player to the number of TV-screens.

We recommend that you buy large TV-screens, the bigger, the better.

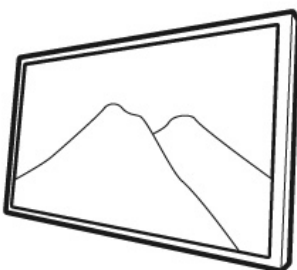
PROJECTOR

The projector is the output device used to take the display from the player and project it onto a projector screen. The projector is connected to the player via DVI-I, HDMI or VGA. You control the projector manually with the included remote controller. Contact your hardware-provider for more information.



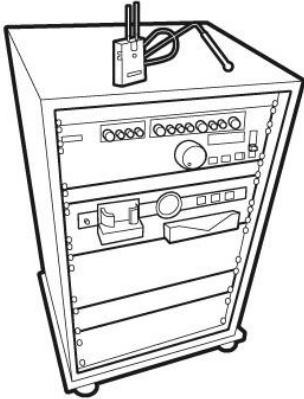
PROJECTOR SCREEN

The screen is used for displaying the projected image. It is typically a projector-screen with a frame, as seen in the picture below. Contact your hardware-provider for more information.



AUDIO SYSTEM

The audio system is used to play the sound of the music videos. The audio system is connected to the player via an audio cable. Most use a pre-installed audio system.



INTERNET

The Gymtech Music-TV player need continuous access to the internet as changes and updates are provided online. Without internet access, operating stability cannot be guaranteed, new content cannot be downloaded and support cannot be provided.

In other words, the Gymtech Music-TV platform requires a cabled internet connection.

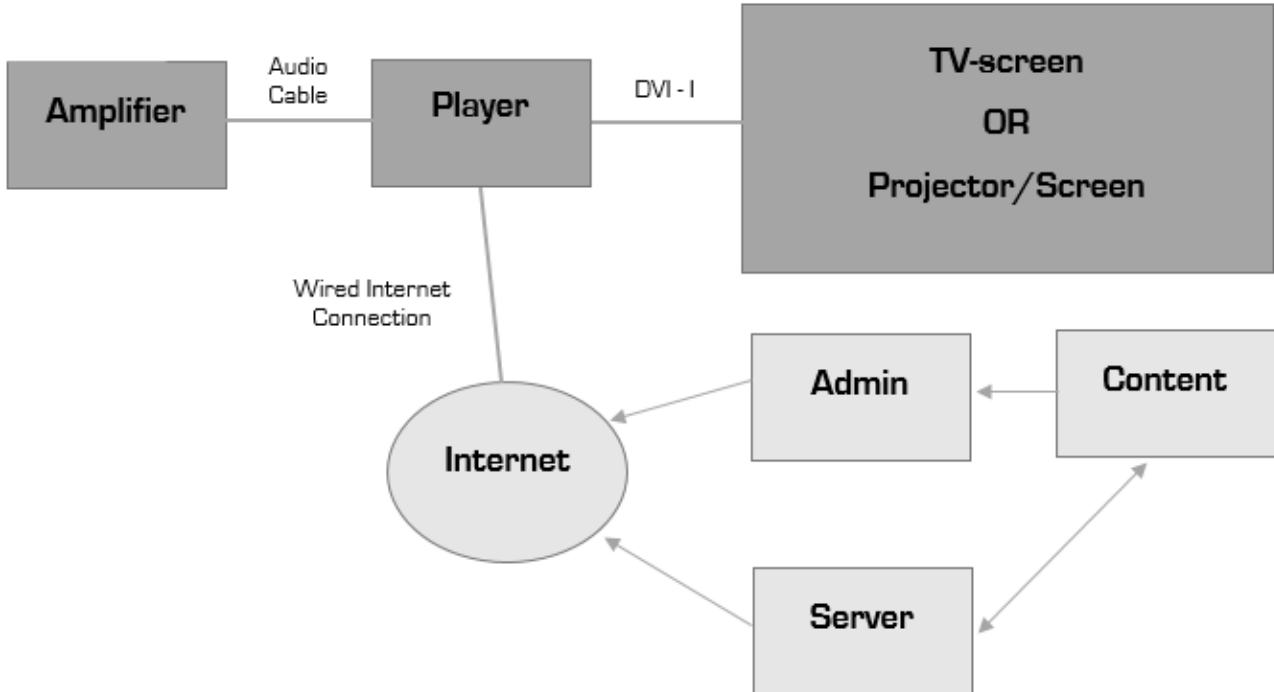
In daily operation, the internet download speed is recommended to be at least 2 Megabits per second. Port 80 or Port 21 are used, these are standard ports for HTML and FTP.

If the network security is tightened, you need to open up communications for the addresses below:

Servers		
European Data Server FTP access required 188.138.1.190 www.nfoo-eu.com	Image Server Denmark FTP and HTML access required Web12.gigahost.dk www.nfoo.eu	Data Server 1, Denmark FTP access required 87.104.148.167
Data Server 2, Denmark FTP access required 78.143.64.134	Admin Homepage FTP and HTML access required 85.25.43.42 http://nfoo-server.com	Admin Homepage HTML access required 80.70.5.32 www.nfoo-server1.dk

SYSTEM OVERVIEW

To illustrate how the above-mentioned items are connected, a technical drawing of the general principles of the Gymtech Music-TV system is included below:



AV GUIDE

To help you select the right hardware, we have outlined a few details and suggestions below:

	TV	Projector	Projector Screen
Minimum screen size	Any size, but we recommend large screens from 40" and up	NA	3m (horizontal width) 1.78m (vertical width) or 135" (the bigger the better)
Minimum screen resolution	1280 x 720	1280 x 720	NA
Minimum ANSI lumens	NA	3000 lumen	NA
Display ratio	16:9	16:9	16:9
Source inputs	1 x VGA/HDMI + 1 audio output	1 x DVI-I, HDMI, VGA	NA
Mounting	Wall	Ceiling	Wall
No ambient light	NA	3000 lumens	Low Gain



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PREPARATIONS

INTRODUCING FIVE PREPARATIONAL STEPS

Knowing what hardware you need and having chosen the perfect setup for your gym/gyms, it is time to start planning the installation. Below, we have listed five steps that will help you be fully prepared for the installation. In the case that you already have TV-screens or a projector and projector screen installed, only steps 1, 4, and 5 are relevant but we do recommend going through all steps.

STEP 1: PLACEMENT OF PLAYER

Our recommendation: close/next to the audio system (allows staff to reboot the system if need be, power will typically already be accessible and it is easy to connect the audio cable). Make sure to hide the installation in order to protect it from irrelevant people tampering with it.

STEP 2: PLACEMENT OF SCREEN

Some considerations regarding placement of screens are listed below.

WALL CHOICE

We recommend placing the TV-screens and/or projector-screens on the walls from which most of your members can see them. It can be close to your cardio-equipment but also in the area with weights.

SCREEN AND AMBIENT LIGHT

We recommend placing the TV-screens and/or projector-screens in places with as little direct light as possible. However with TV-screens it is not as crucial as with projector-screens. If you chose projector-screens and know you have a lot of ambient light in the area where you want to place it, select the right projector.

STEP 3: PLACEMENT OF PROJECTOR

INSTALLATION HEIGHT

The projector screen is recommended to be placed so that the bottom of the projector is in line with the top of the projector-screen. Alternatively, and if the projector is placed higher, the projector can correct keystone distortion by +/- 20% for perfect installation adjustment to the screen. In other words, it is possible to get a high quality image even when placing the projector

slightly higher. Information on how to do this can typically be found in the projector user manual or ask your preferred technician.

STEP 4: POWER AND INTERNET

Prior to installation it is of key importance to establish power for the following:

- Gymtech Music-TV Player
- TV-screens and/or projector

Make sure to establish power sockets as close to the above items as possible. Besides power, a cabled internet connection should be established as close to the player as possible.

STEP 5: CHECK YOUR CABLES

You need the following cables to install the Gymtech Music-TV player:

- **DVI-I, VGA cable or HDMI cable¹ (Video cable)**
- **Audio cable**
- **Power cable**
- **Internet cable**

The video cable is to be connected between player and TV-screens/projector (NOTE: use the correct adapter/cable). The audio cable is to be connected between player and audio system (see System Overview above). When you have determined where to place the player, as well as the screens and/or the projector and projector screen, it is time to determine the length of the cables.

¹ We will provide either a DVI-I to VGA or a DVI-I to HDMI adapter, just let us know which one you need



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CABLING & INSTALLATION

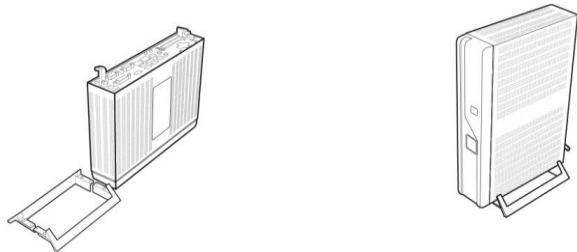
READY TO INSTALL?

A well-executed installation is crucial to get the most out of your Gymtech Music-TV. With that, our recommendation is always to go through all preparations listed above and to have professional people perform the installation.

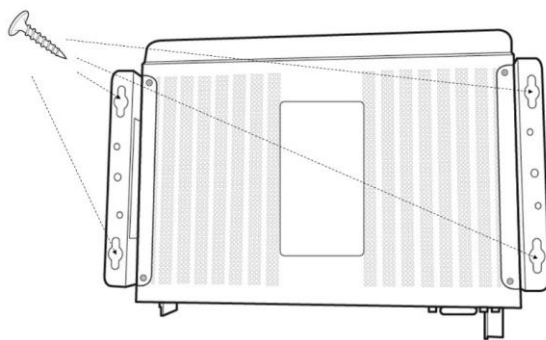
Below, we go through the cabling for the player and the projector. We also provide quick tips for the actual installation.

1: MOUNTING THE PLAYER

The player can be placed horizontally or vertically. It can also be mounted on the wall using the wall bracket included in the package.

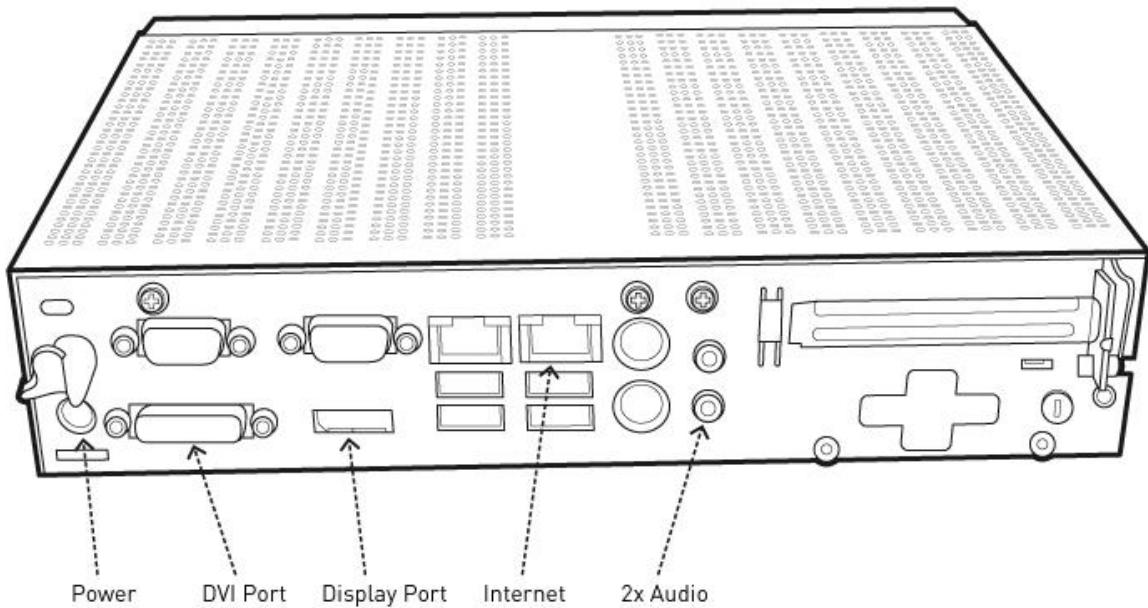


Doing so, simply requires mounting the bracket on the wall with four screws as shown below:



Most do, however, decide to place the player on top of the stereo or somewhere next to it; doing so means no further installation than connecting the cables. Do note, however, that the player is not meant to be moved around. Be careful when placing the player on top of amplifiers and other electronics with strong EM fields. We recommend using the rubberized feet provided with the product, mounted on the player whether horizontally or vertically.

You need to place the following cables: power cable, video cable (Use DVIH to VGA/HDMI adapter if needed), audio cable, and internet cable (see below).

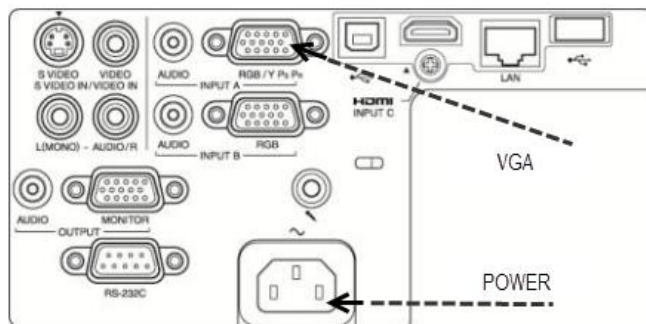


2: MOUNTING THE PROJECTOR

Depending on the choice of projector and the ceiling height in your gym, the choice of ceiling mounting will vary. Ask your preferred technician about the best choice for your gym/gyms.

When purchasing your projector and ceiling mounting, make sure installation manuals are included.

The image below illustrates where to place the VGA and power cable on a standard projector:



Having installed the projector, we suggest checking the settings on the projector using the projector remote control:

- Resolution: 1280x720 (*If you select "normal", the image is projected in the same resolution as the input signal*)
- Direct Power → on
- Lamp dimming → off

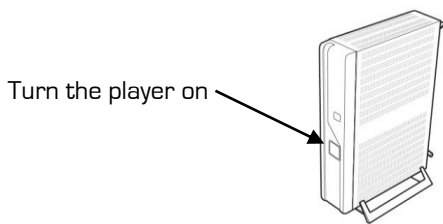
Make sure to adjust the projector in order for the image to fit the screen perfectly (see below). Also, you will very likely need to adjust zoom and focus. More information can be found in the Projector Manual or ask your preferred technician.

3: FINAL ADJUSTMENTS

Having followed the steps above, you are now ready to make the final adjustments. Make sure to turn the player on.

IMPORTANT: do not turn on player before having installed the TV-screen and/or projector and projector-screen properly

If everything is installed correctly, the player will start working immediately.



Also, make sure to test the network connection to the player (log in to your Studio Fitness Music-TV admin account and check the internet information in the top right corner).

Finally, we suggest you test (and potentially adjust) the sound.

VIDEO DISTRIBUTION

The Gymtech Music-TV player comes with two video outputs eg. DVI-I (Main output) and Displayport v1.2 (secondary output).

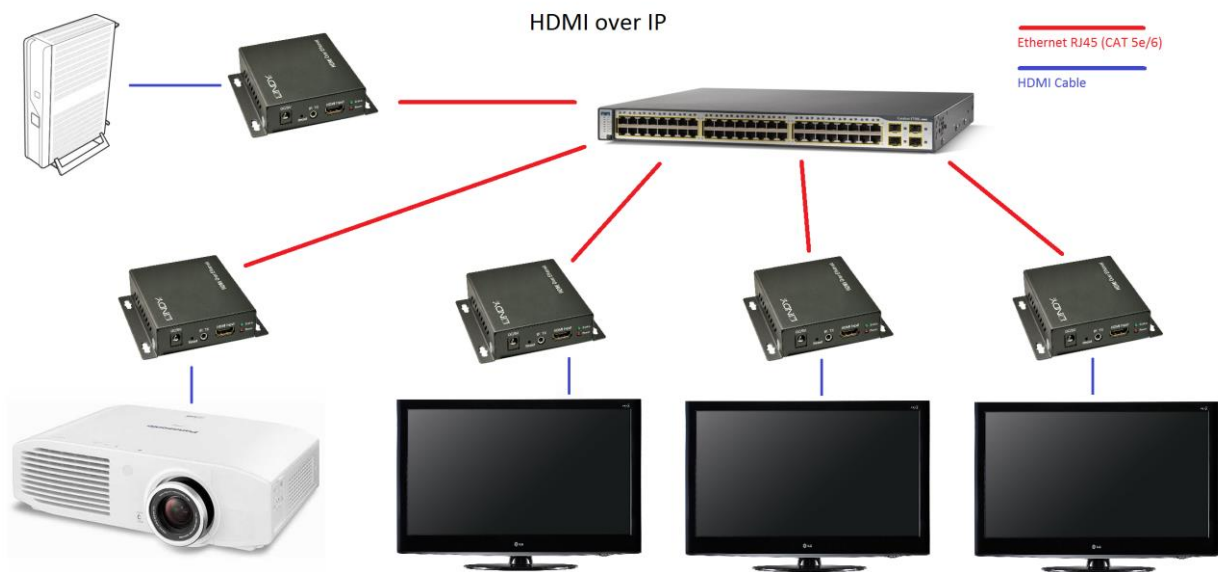
We recommend our customers to use the main output DVI-I due to it being easier to setup as well as delivering both an analog and digital video signal depending on preference and peripheral adapter.

If you wish to use other cable types than DVI-I this output can be converted to all common video cable types on the market, by using an adapter (eg. DVI-I to HDMI).

Standard solution

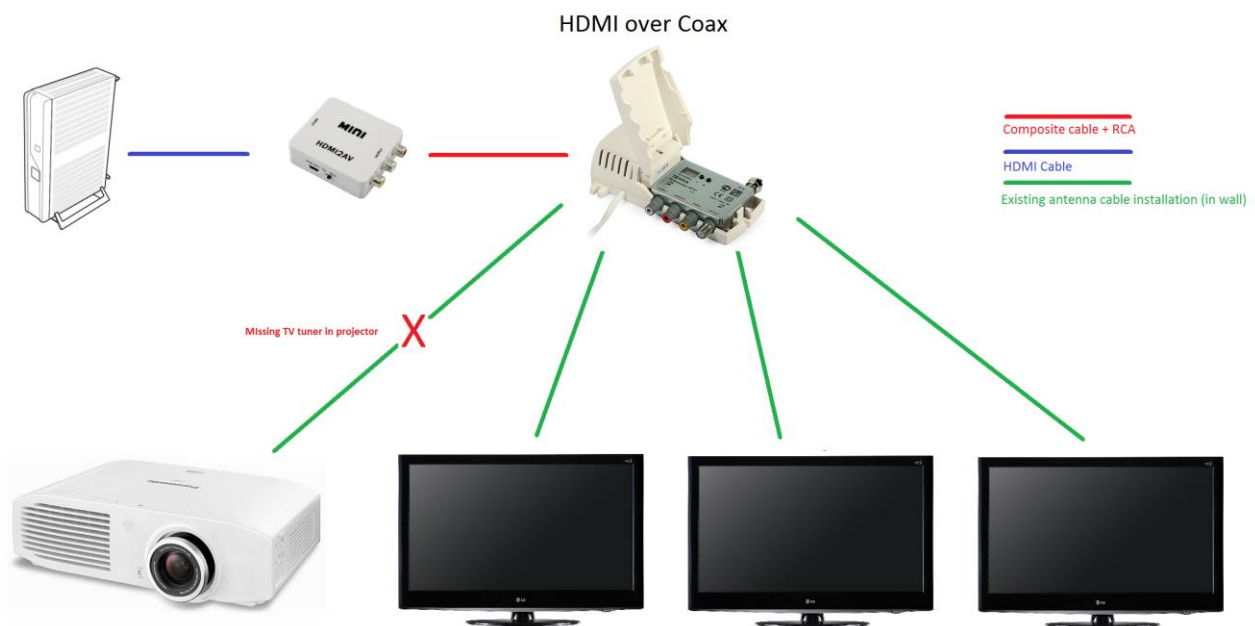
- + Easy to use and understand
- + Signal can be split to multiple screens, using a splitter* (extra peripheral equipment).
- High price per meter for video cables
- Max cable length of 30 meters for HDMI
- HDMI cables are wider due to screening and are therefore harder to bend in sharp corners
- HDMI cables are complex and therefore harder to cut and reassemble.





HDMI over IP

- + Easy to implement or remove screens on the fly
- + Uses ordinary Ethernet networking cables (RJ45 CAT 5e/6)
- + Max cable length up to 100 meters for Ethernet cables
- + Easy to install Ethernet cables
- + Possibility to add multiple transmitting units
- + Future proof
- + Stronger network infrastructure
- Multiple screens require multiple receivers (1 receiver per. screen)
- High price on units



HDMI over Coax

- + Easy to implement or remove screens on the fly
- + Uses ordinary coax cables
- + Max cable length up to 500 meters for coax cables
- + Easy to install coax cables
- Same price range as "HDMI over IP"
- Analog signal can easily be affected by EM fields, thereby losing quality
- Multiple screens require multiple receivers (1 receiver per screen)
- High price per meter for video cables (up to 30% more expensive per meter than Ethernet cable)
- Can require multiple units like splitters, combiners, modulators and amplifiers

* HDMI splitter: Can split a video signal to between 2 and 24 screens depending on unit.



Should you have any further questions regarding distribution of video, then please contact us or your local electrician.

Links:

<http://www.hdtvsupply.com/hdmioverlan.html>

<http://www.startech.com/AV/Extenders/HDMI/>

<http://www.networktechinc.com/extenders-video.html#hdmi>

ADDITIONAL RECOMMENDATIONS

- Do not go cheap on the TV-screens and/or projector: If the room has a lot of daylight go for a projector with more lumens, or even better – go for a TV-screen solution. Make sure the TV-screens are of a high quality
- Make sure the TV-screens do not have a sleep-function that cannot be disabled
- Make sure the picture fits the screen perfectly (correct mounting of projector and screen)
- Make sure the sound is adjusted