



# AVCAD & MotorIO AADB Software User manual



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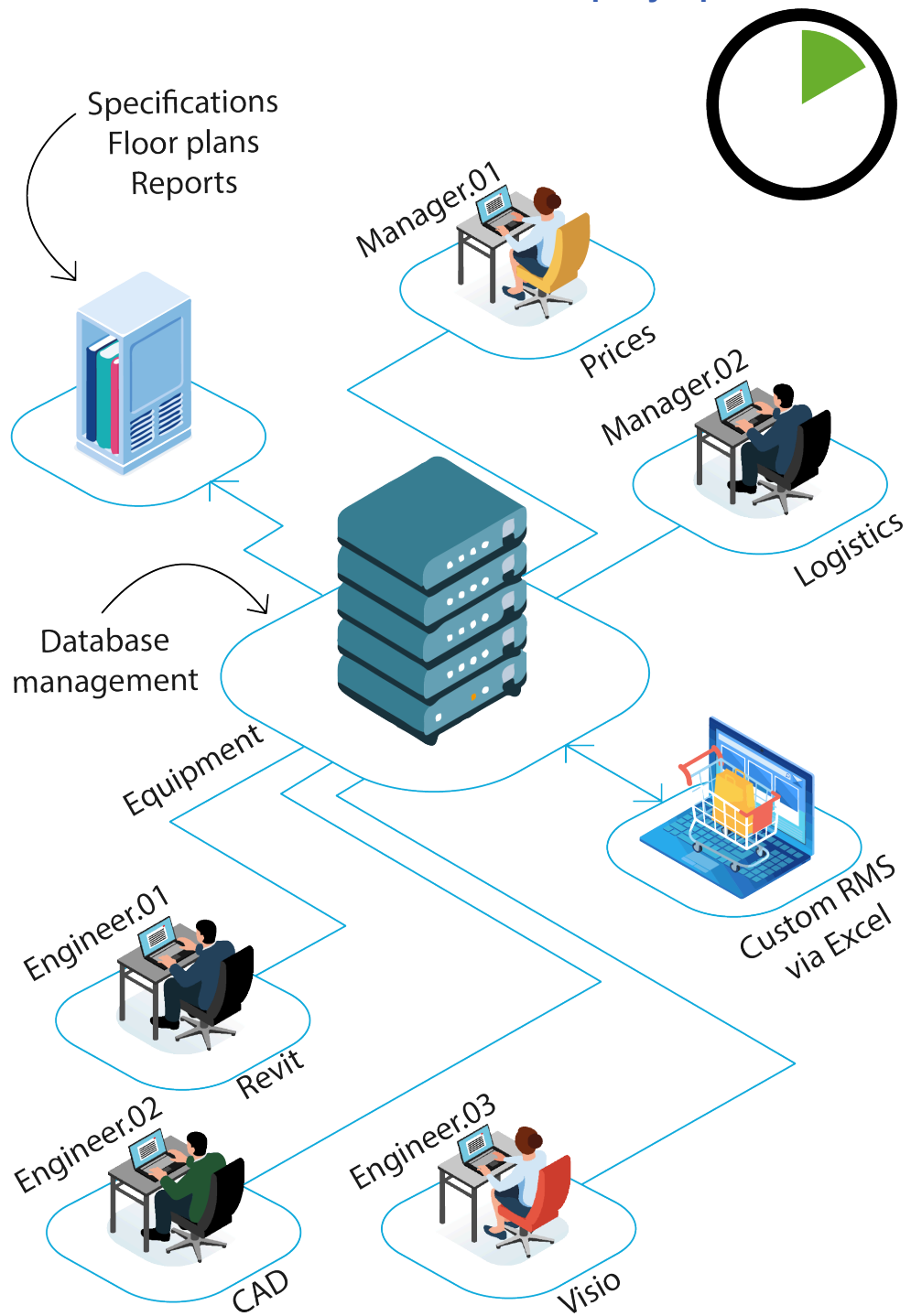
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## 1. Ideal workflow to have the best company's performance



### **1.1. Visio->CAD->Revit translation**

AVCAD supports the translation between Visio->CAD, Visio->Revit and CAD->Revit.  
See [this video](#) to understand how it works.

## 2. AVCAD for CAD



AVCAD helps engineers and designers create Interconnection Block Schematics with engineering information. Rack Layouts, Cable and Equipment's Lists, and even more.

AVCAD supports custom parameters such as prices, weight, heat, install time, and many more

AVCAD's purpose is the creation of accurate, detailed, and well-readable schemes along with all kinds of reports using simple and intuitive tools.

### 1) Block Schematic tools:

Pre-created Equipment Library containing most commonly brands used in AV-IT industry (Crestron, Extron, BSS, Biamp, AJA, BlackMagic, etc.)

Drag and drop the selected devices to the desired location on a drawing.

Default layers for every kind of scheme circuit. Just choose from Audio, Video, Control, Power, etc.

Fast filter changing for distinguishing the types of interconnection.

Fast replace of the devices on the drawing

Drawing Patch and Termination Panels.

Tools for Cable Drawing and Labelling.

### 2) Rack Layout Tools:

Creating Rack Furniture

Placing the equipment to Rack Layout. All devices have their real dimensions.

### 3) Report Tools:

Cable List

Equipment List

Power Consumption List

IP Tables.

### 4) User Databases.

AVCAD Base Manager helps you to create your own equipment library using a standalone application.

Easy distribution of your databases via Dropbox, Google Drive, and shared disks. No SQL servers are needed.

## 2.1. AutoCAD Installation - aadbsoftware.com

You can download a version for

- **AutoCAD** [download link](#)

After the installation is complete, please, open the AutoCAD

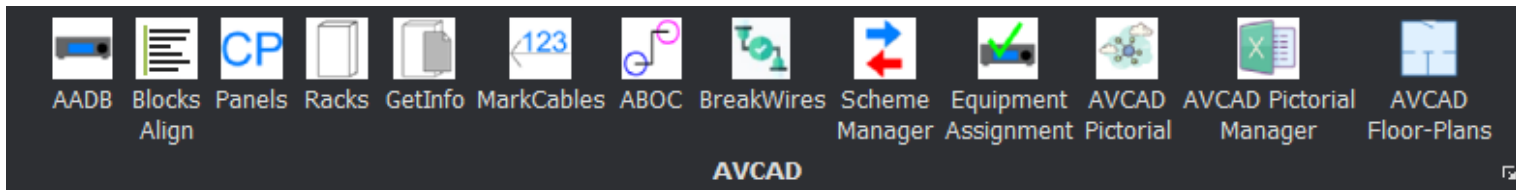
You can find all the plugins in the Addins ribbon tab.

## 2.2. AutoCAD Installation - Autodesk Appstore

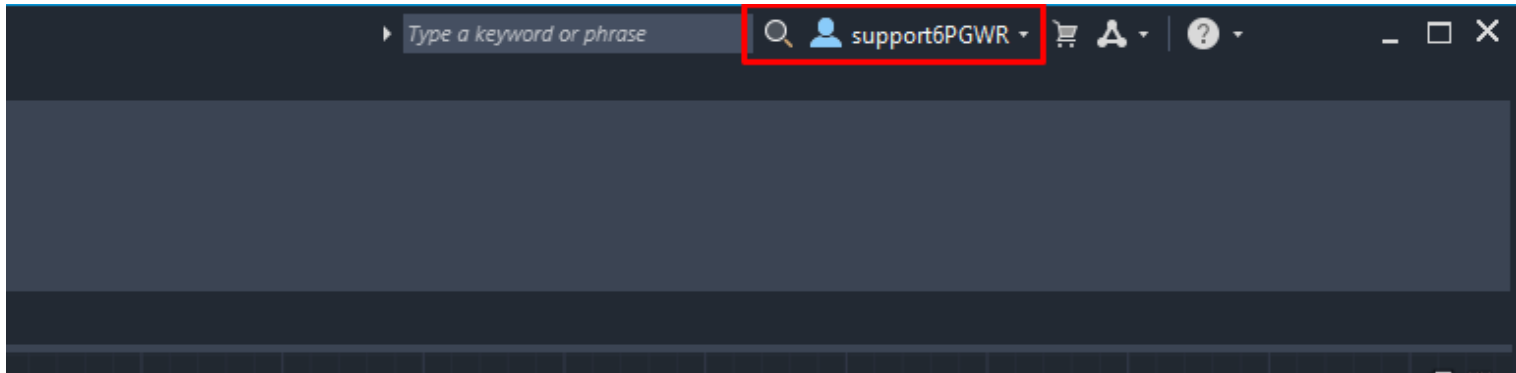
After the payment here:

[Autodesk Appstore](#)

you will be able to download the MSI file. After the installation, you will see the ribbon icons



Do not forget to login into your Autodesk Account, which you used to buy the software.



## 2.3. BricsCAD Installation

You can download a version for

- **BricsCAD** [\*download link\*](#)

After you download and install the needed version, you will have a new folder in C:\AADB. BCAD stands for BricsCAD and ZCAD stands for ZWCAD, GCAD stands for GStarCAD

To activate the software with a serial number, just run AVCAD License Manager and follow its instructions.

To have the software loaded, you must do the next steps:

- Open CAD Software.
- Type **\_upload** command
- Select **LSP**-file (the filename depends on CAD software, for example, AVCAD\_BricsCAD.lsp)
- Reload the CAD, and you have to get a new ribbon panel with our software.

## 2.4. ZWCAD Installation

You can download a version for

- **ZWCAD** [download link](#)

After you download and install the needed version, you will have a new folder in C:\AADB. BCAD stands for BricsCAD and ZCAD stands for ZWCAD, GCAD stands for GStarCAD

To activate the software with a serial number, just run AVCAD License Manager and follow its instructions.

To have the software loaded, you must do the next steps:

- Open CAD Software.
- Type **\_upload** command
- Select **LSP**-file (the filename depends on CAD software, for example, AVCAD\_ZWCAD.lsp)
- Reload the CAD, and you have to get a new ribbon panel with our software.

## 2.5. GStarCAD Installation

You can download a version for

- **GStarCAD** [download link](#)

After you download and install the needed version, you will have a new folder in C:\AADB. BCAD stands for BricsCAD and ZCAD stands for ZWCAD, GCAD stands for GStarCAD

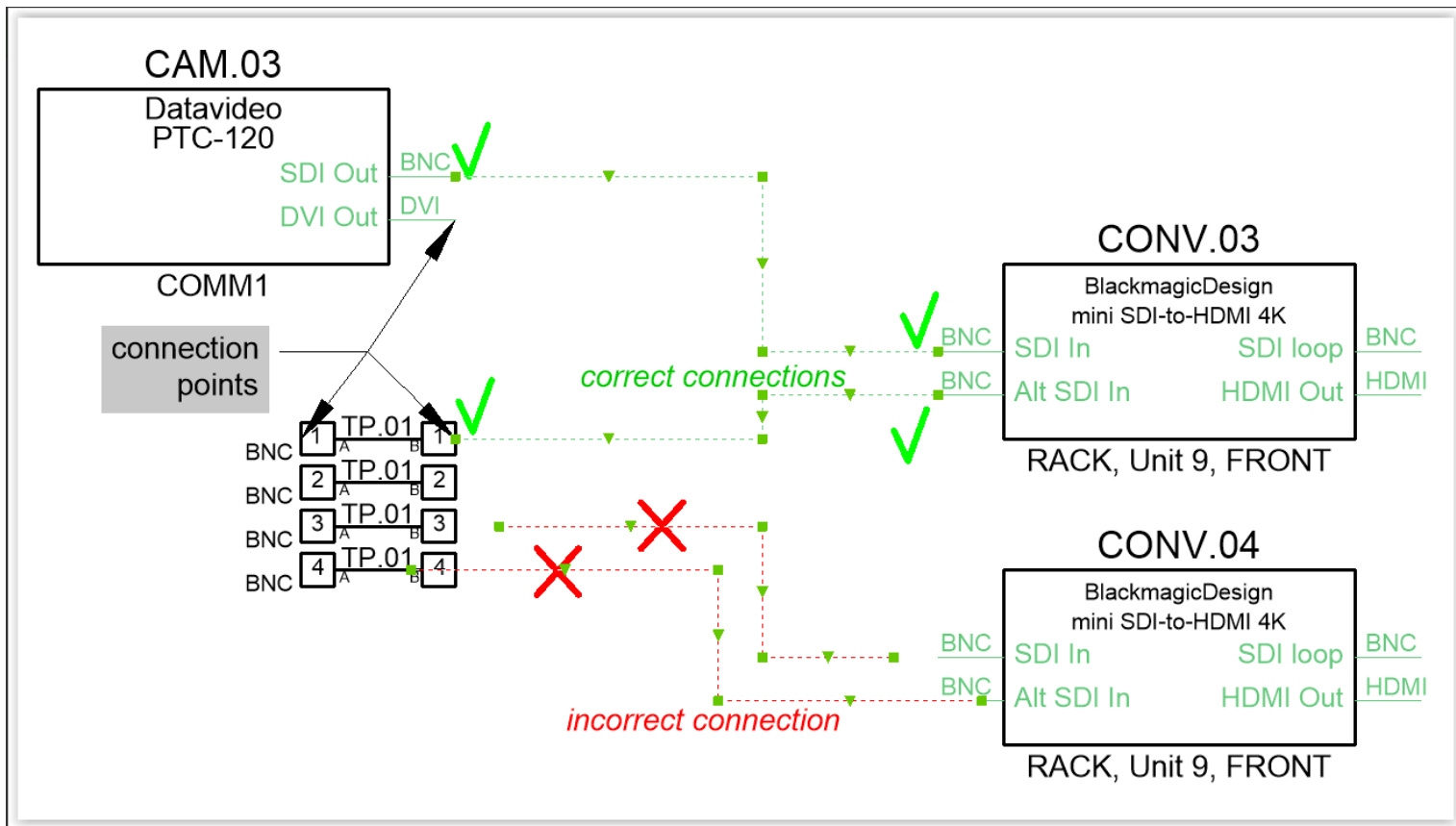
To activate the software with a serial number, just run AVCAD License Manager and follow its instructions.

To have the software loaded, you must do the next steps:

- Open CAD Software.
- Type **\_upload** command
- Select **LSP**-file (the filename depends on CAD software, for example, AVCAD\_GStarCAD.lsp)
- Reload the CAD, and you have to get a new ribbon panel with our software.

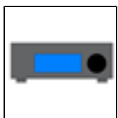
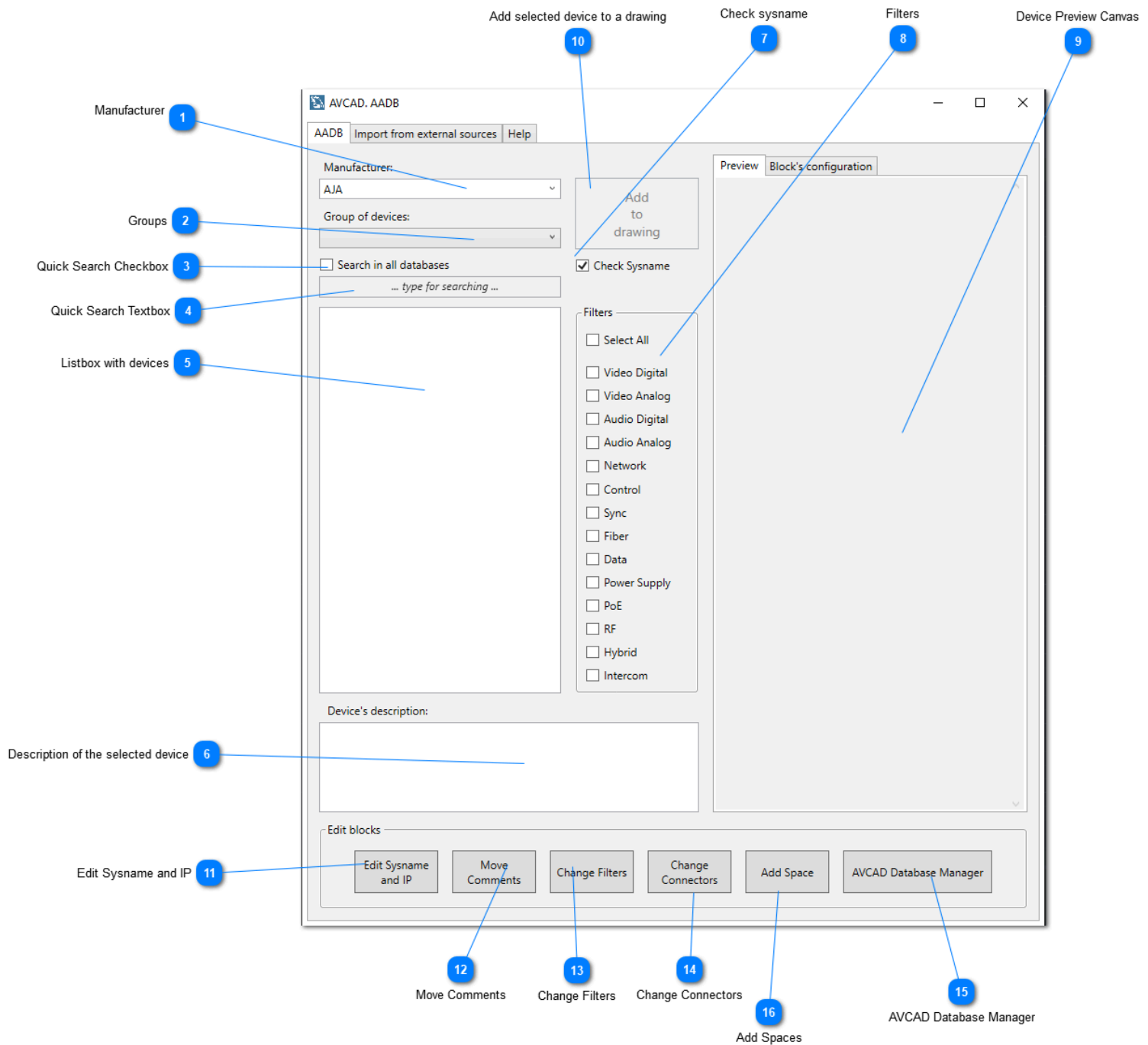


## 2.6. Correct connections



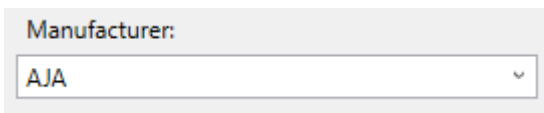
## 2.7. AADB

### AADB



- **Command name Macro: AADB**

## 1 Manufacturer

A dropdown menu with the label "Manufacturer:" and the text "AJA" selected. A small downward arrow is visible on the right side of the dropdown box.

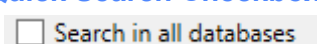
You can select any manufacturers here. They are created with the AVCAD Database Manager. It supports hints, so you can just start to type, and you will see some hints.

## 2 Groups

A dropdown menu with the label "Group of devices:" and an empty selection box. A small downward arrow is visible on the right side of the dropdown box.

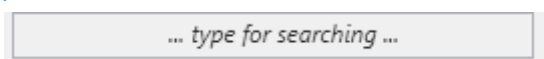
Groups mean the families of devices. For example amplifiers. They are created with the AVCAD Database Manager.

## 3 Quick Search Checkbox

A checkbox followed by the text "Search in all databases". The checkbox is currently unchecked.

If enabled, the search will be in all the manufacturers (databases). If not enabled - only in the selected manufacturers

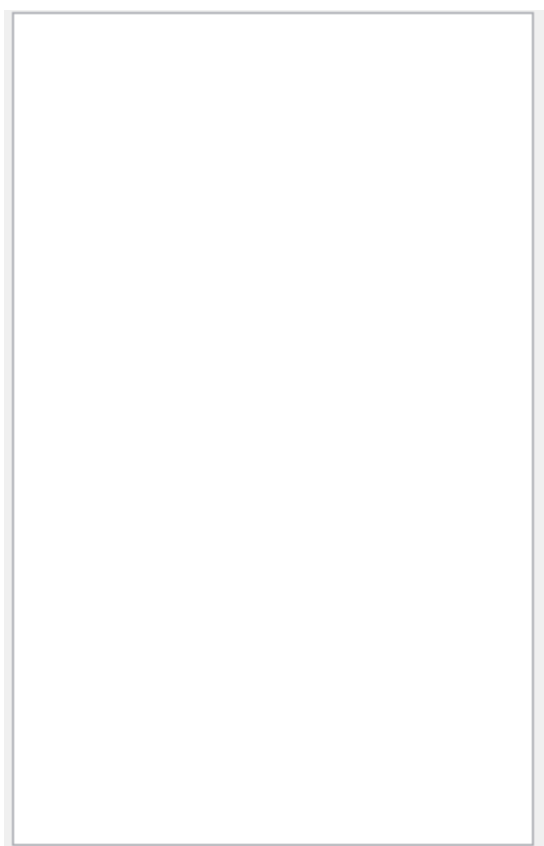
## 4 Quick Search Textbox

A text input field with the placeholder text "... type for searching ...".

Here you can write the model you need. It will search with condition that depends on Quick Search Checkbox.

[Youtube](#)

## 5 Listbox with devices

A large, empty rectangular listbox with a thin border, intended for displaying search results.

Here can be devices in the selected group or founded using QuickSearch Textbox.

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## Description of the selected device

Device's description:

Description of the selected device

7

## Check sysname

☒ Check Sysname

If checked, it will check the sysnames on a drawing to avoid the duplicate system names

8

## Filters

Filters

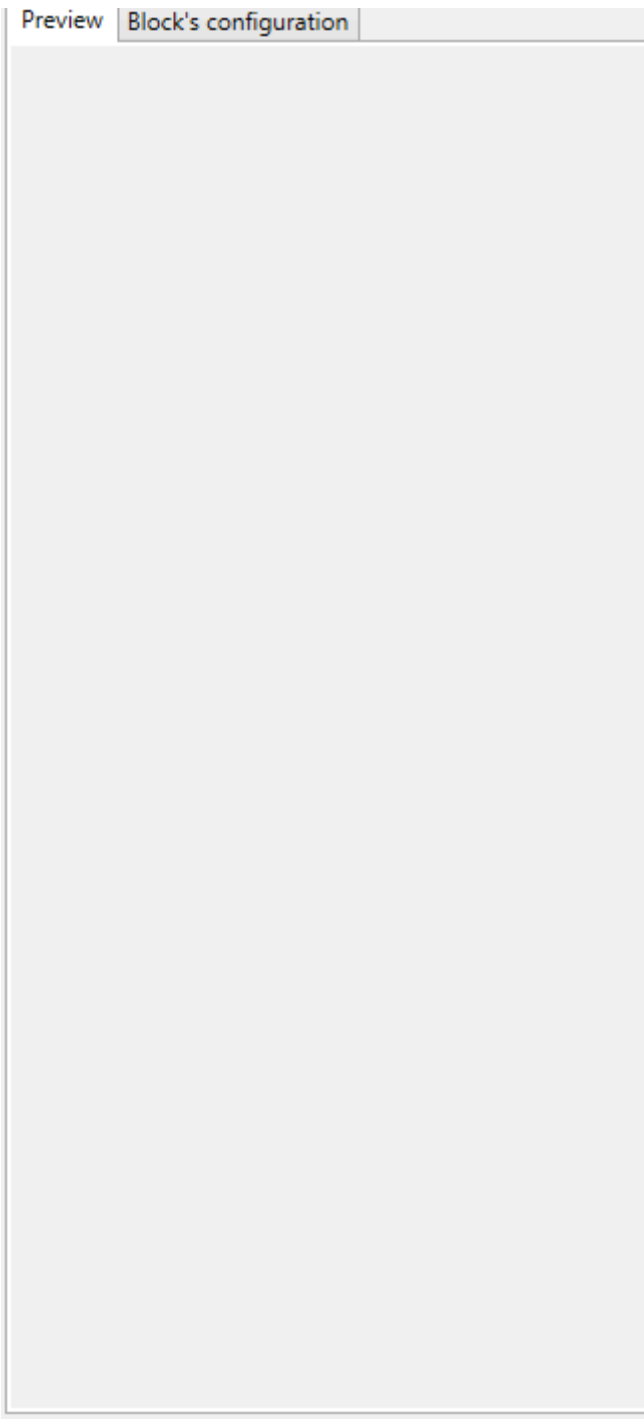
- ☐ Select All
- ☐ Video Digital
- ☐ Video Analog
- ☐ Audio Digital
- ☐ Audio Analog
- ☐ Network
- ☐ Control
- ☐ Sync
- ☐ Fiber
- ☐ Data
- ☐ Power Supply
- ☐ PoE
- ☐ RF
- ☐ Hybrid
- ☐ Intercom

Here you can select what you need to insert into the drawing. You can have any configuration of the filters ( Digital Video, Analog Audio, etc.).

- If nothing is selected, the full device with all the connectors will be inserted into the drawing.
- When you select the filters, you will see the changed view in a Device Preview Canvas.

9

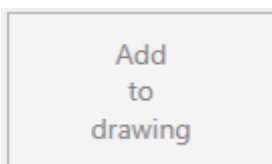
## Device Preview Canvas



Here you can see what you will insert into the drawing. That is the preview of the selected devices. Its configuration depends on selected filters.

10

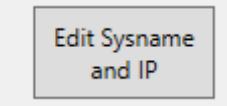
## Add selected device to a drawing



After clicking on the button, you will be prompted to select Sysname, Start Number, and Quantity of the devices. Default values are 1

- [Youtube - Insert just one device](#)
- [Youtube - Insert multiple devices](#)

11

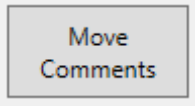
**Edit Sysname and IP**

 A rectangular button with a light gray background and a thin black border. The text "Edit Sysname and IP" is centered in a black, sans-serif font.
 

Edit Sysname  
and IP

This function is designed for quick and easy renaming of block attributes such as system name Sysname, and IP address. Having an iterator allows you to quickly change the attributes of different blocks. In this case, the values from block to block will change depending on the specified number in the iterator.

[See here how it works](#)

12

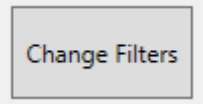
**Move Comments**

 A rectangular button with a light gray background and a thin black border. The text "Move Comments" is centered in a black, sans-serif font.
 

Move  
Comments

Here you can change the view of selected blocks on the drawing.

[See here how it works](#)

13

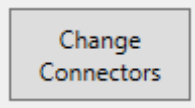
**Change Filters**

 A rectangular button with a light gray background and a thin black border. The text "Change Filters" is centered in a black, sans-serif font.
 

Change Filters

Using this functionality, you can create one more version of the device with the same parameters but with only needed filters.

[See here how it works](#)

14

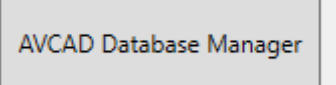
**Change Connectors**

 A rectangular button with a light gray background and a thin black border. The text "Change Connectors" is centered in a black, sans-serif font.
 

Change  
Connectors

Using this functionality, you can create one more version of the device with the same parameters but with only needed connectors.

[See here how it works](#)

15

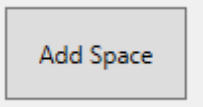
**AVCAD Database Manager**

 A rectangular button with a light gray background and a thin black border. The text "AVCAD Database Manager" is centered in a black, sans-serif font.
 

AVCAD Database Manager

This button will call the AVCAD Database Manager. If it is installed and will propose you download it if it is not.

[See here how it works](#)

16

**Add Spaces**

 A rectangular button with a light gray background and a thin black border. The text "Add Space" is centered in a black, sans-serif font.
 

Add Space

It is one more way to customize your block. See [here](#) for the details.

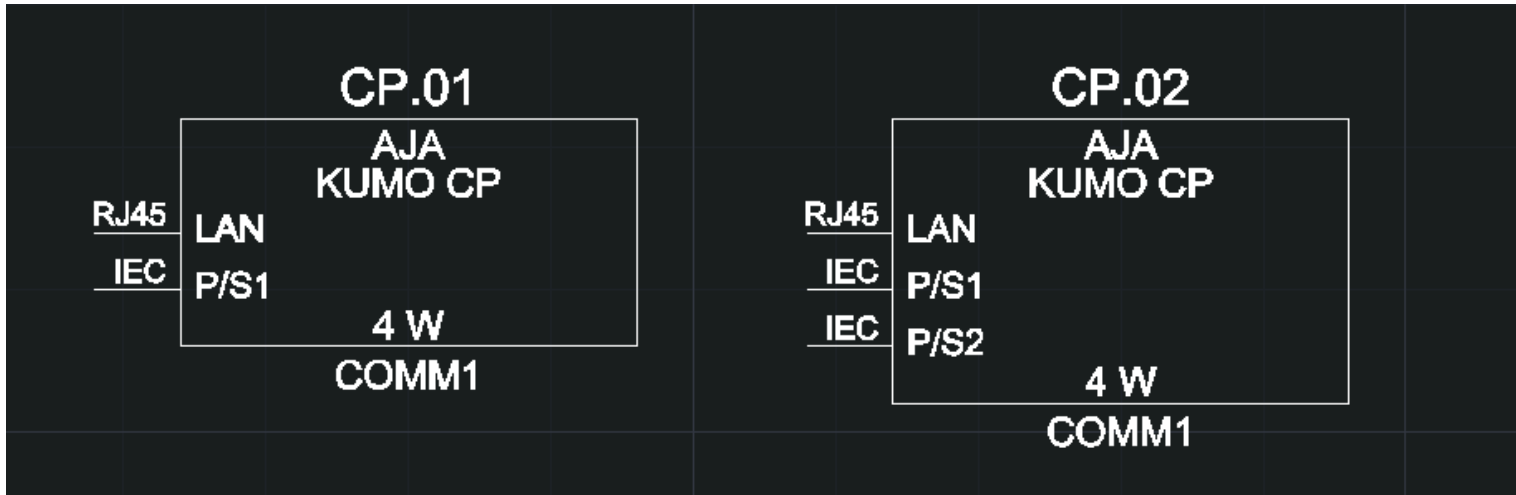
## 2.7.1. Hard and Soft Options

One of the ways to add extra information to a device is **Hard** and **Soft options**.

**Hard** and **Soft options** allow the user to add to block such information as expansion cards, redundant power supply, software licenses, and so on.

The major difference between **Hard** and **Soft options** is **Hard options** have connectors, and **Soft options** do not have them and store them at a block just as text attributes.

*Example of use: device without any Hard options (left) and device with Hard option as a redundant power supply (right)*



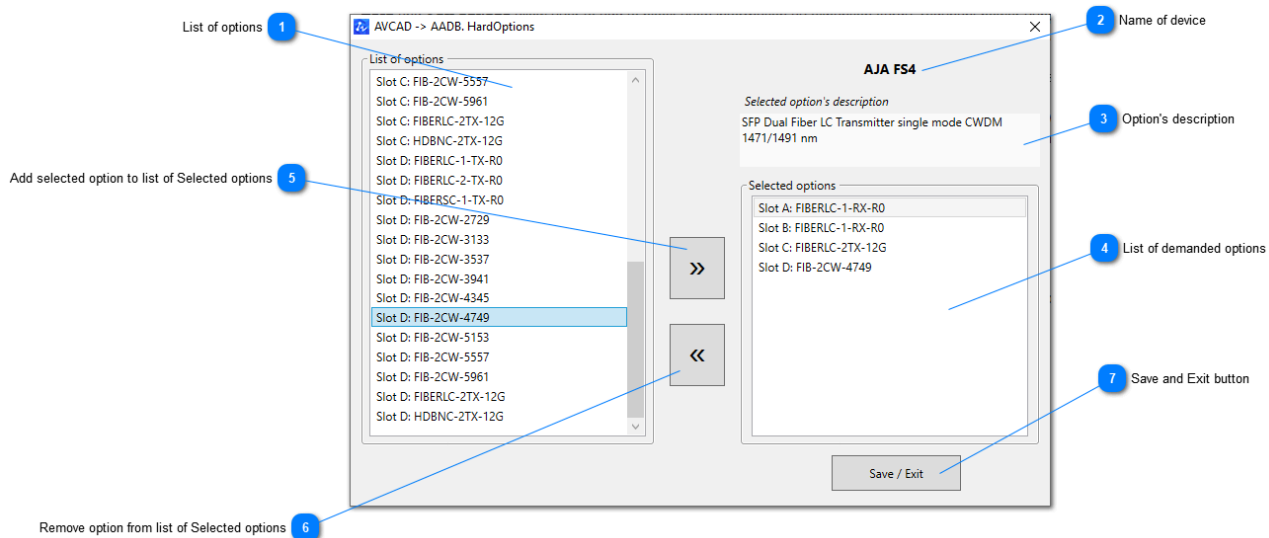
**Hard** and **Soft options** are stored in a database and are associated with a specific device. After you create and save the device in the [AVCAD Database Manager](#), you will be able to add **Hard** and **Soft options** to it.

**Hard options** are very useful when you want to add to a device, for example, an SFP module or redundant power supply.

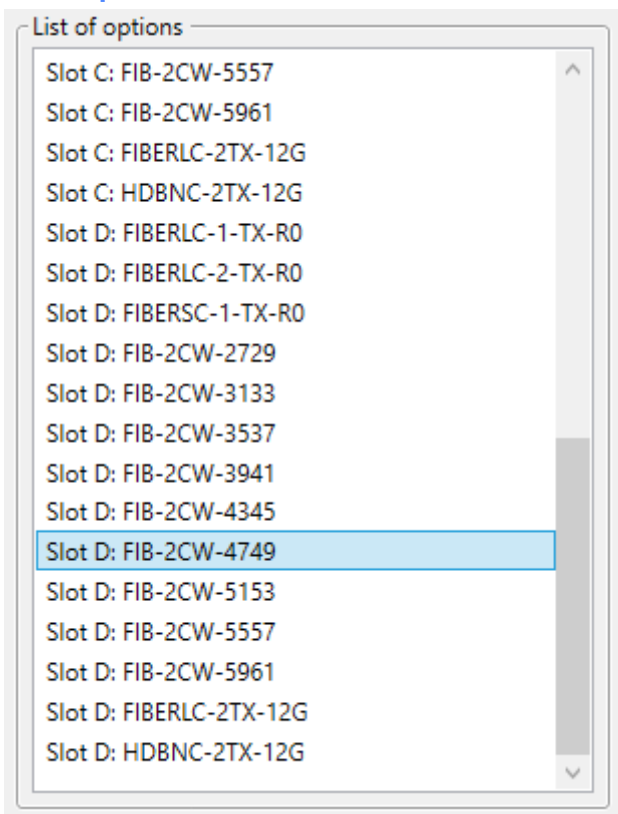
**Soft options** are very useful if you want to add to a device, for example, software licenses or even a lens to a projector.

1. Add **Hard** or **Soft options** to a device using [AVCAD Database Manager](#). Sync the database with **AADB**.
2. Add the device to a drawing.
3. If the device contains Hard Options an interface will appear.
4. Add demanded Hard options and click Save and Exit button. If you don't want to add any Hard option to the device just click Save and Exit button when the Selected options field is empty.
5. If the device contains Soft options an interface will appear.
6. Add demanded Soft options and click Save and Exit button. If you don't want to add any Soft option to the device just click Save and Exit button when the Selected options field is empty.

You can see all added **Hard** and **Soft options** at [Equipment List of Scheme Manager](#).



## 1 List of options



A list of options existed for the device in the database and was created in AVCAD Database Manager

## 2 Name of device

**AJA FS4**

Name of the device

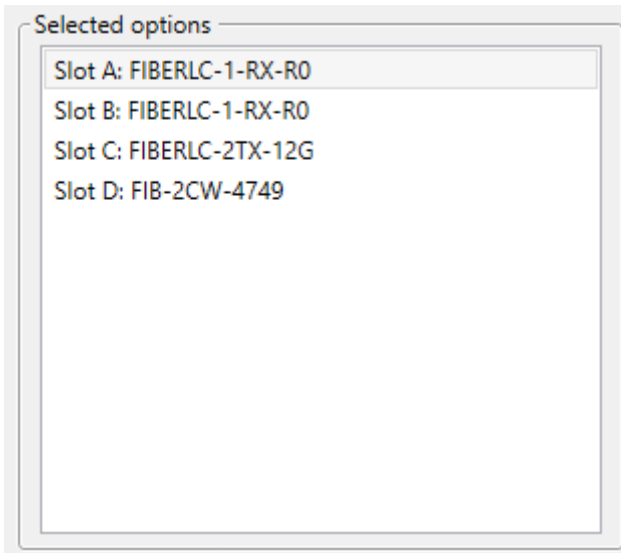
## 3 Option's description

*Selected option's description*  
SFP Dual Fiber LC Transmitter single mode CWDM  
1471/1491 nm

Preview of option's description



4

**List of demanded options**

Selected options

- Slot A: FIBERLC-1-RX-R0
- Slot B: FIBERLC-1-RX-R0
- Slot C: FIBERLC-2TX-12G
- Slot D: FIB-2CW-4749

List of selected options

5

**Add selected option to list of Selected options**

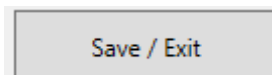
Use this button to add the option to the device

6

**Remove option from list of Selected options**

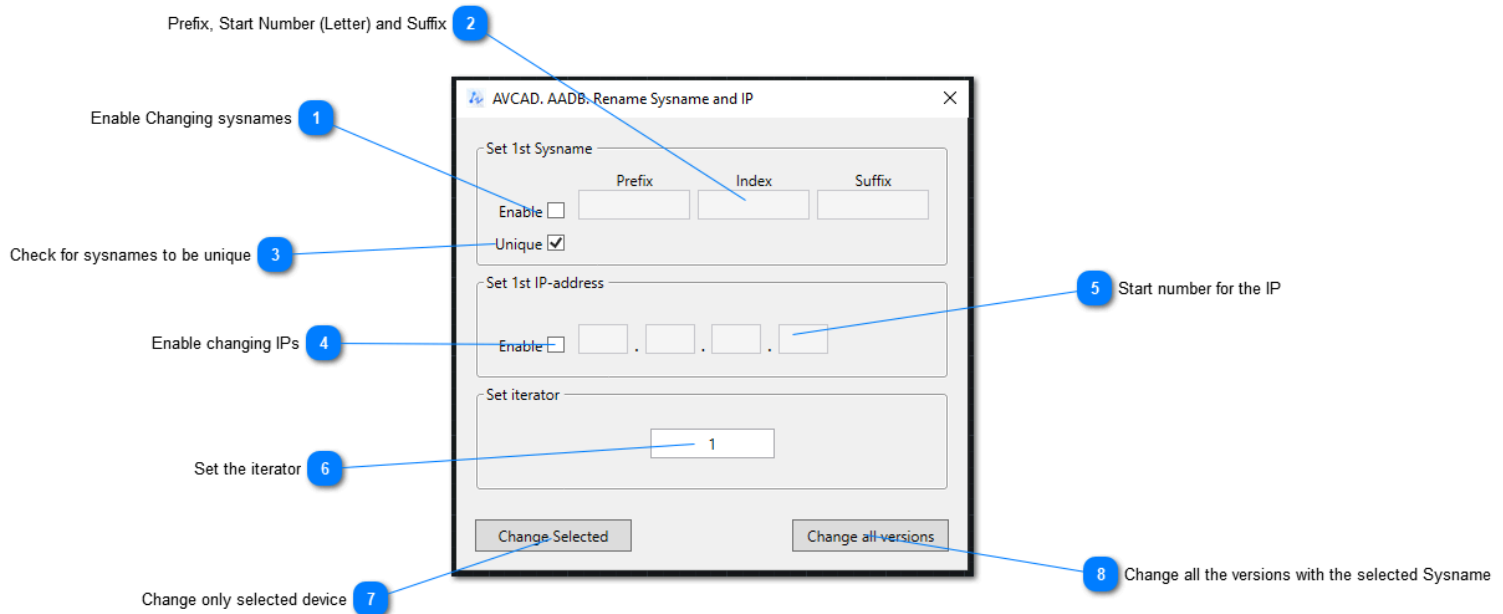
Use this button to remove the selected option from the List of selected options for this device.

7

**Save and Exit button**

Click the button to save selected options and close the interface.

## 2.7.2. Edit Sysnames and IPs



- Please, see this link to understand how it works. [Youtube](#)

### 1 Enable Changing sysnames

Enable ☐

If you select this you will change System Names

### 2 Prefix, Start Number (Letter) and Suffix

Prefix	Index	Suffix
<input type="text"/>	<input type="text"/>	<input type="text"/>

Prefix, Start Number, and Suffix for the start sysname. The start number will be iterated with the value of the iterator.

You can also use English characters as Start Number. A-Z are supported

### 3 Check for sysnames to be unique

Unique ☒

If checked it will check if the system name is unique and if it already exists on the drawing.

### 4 Enable changing IPs

Enable ☐

If you select this you will change IPs

### 5 Start number for the IP

<input type="text"/>	.	<input type="text"/>	.	<input type="text"/>	.	<input type="text"/>
----------------------	---	----------------------	---	----------------------	---	----------------------

Just 4 fields to set the first IP address. It will be iterated with the value of the iterator

6

#### Set the iterator

1

Set the value of iterator to iterate Sysnames and IPs

7

#### Change only selected device

Change Selected

You will change the properties only for the selected device.

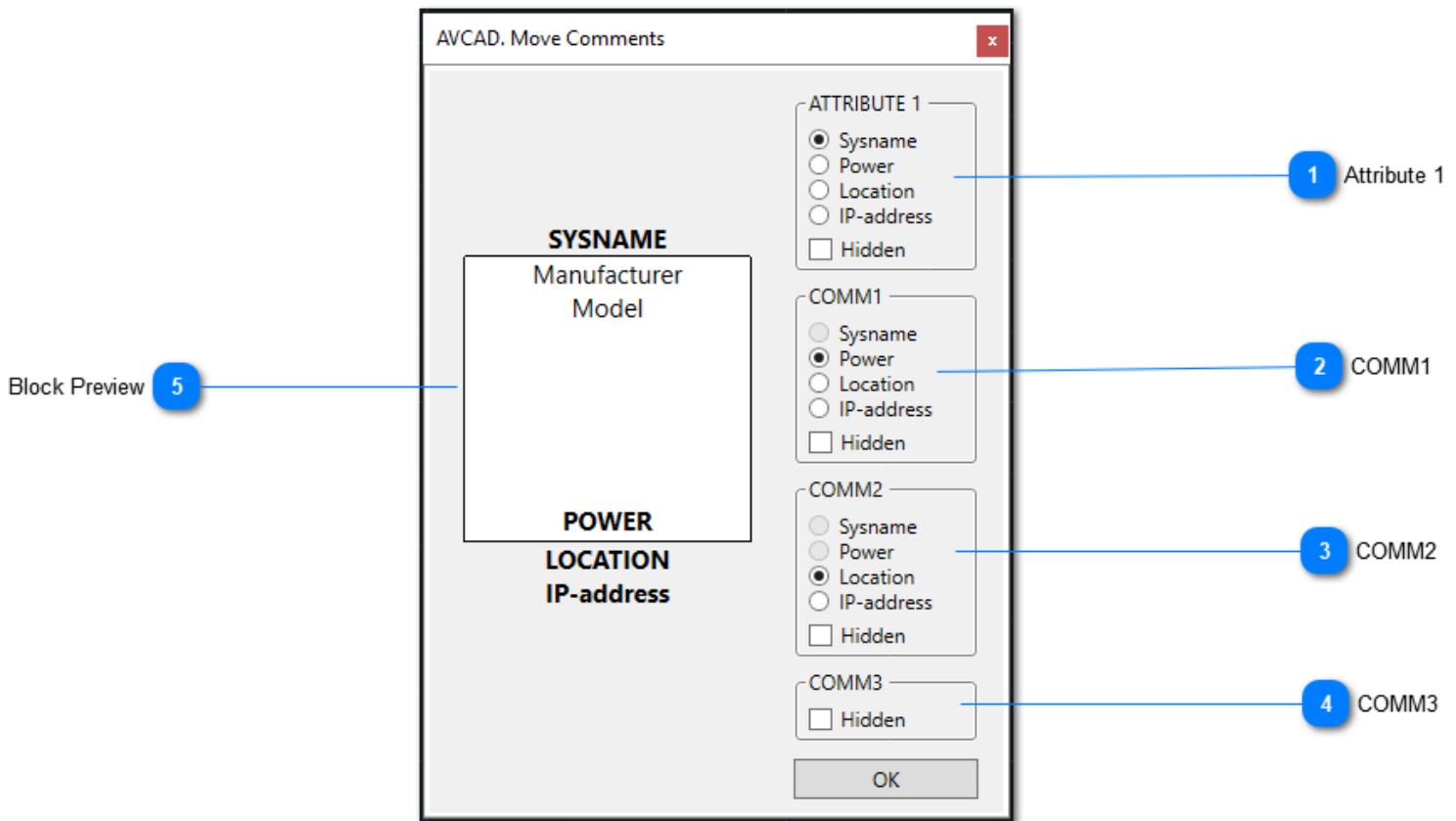
8

#### Change all the versions with the selected Sysname

Change all versions

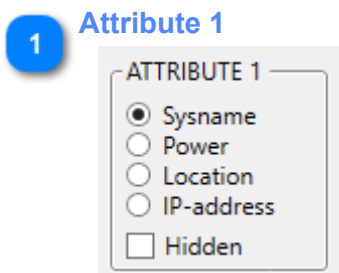
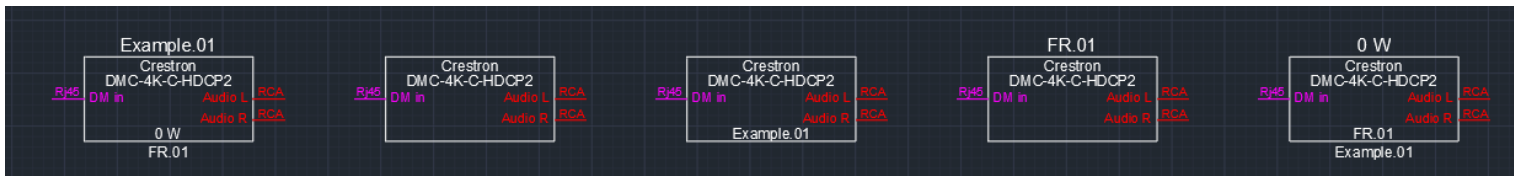
You will change the properties of ALL versions of devices with this SYSNAME.

### 2.7.3. Move Comments



- This functionality allows you to change the order and hide/unhide some of the attributes/comments.
- Please, see this link to understand how it works. [Youtube](#)

#### Examples



The first attribute. The highest one. On this drawing that is SYSNAME

2 **COMM1**

COMM1

☐ Sysname

☒ Power

☐ Location

☐ IP-address

☐ Hidden

The first comment. On this drawing that is POWER

3 **COMM2**

COMM2

☐ Sysname

☐ Power

☒ Location

☐ IP-address

☐ Hidden

The second comment. On this drawing that is LOCATION

4 **COMM3**

COMM3

☐ Hidden

The third comment. On this drawing that is IP-address

5 **Block Preview**

**SYSNAME**

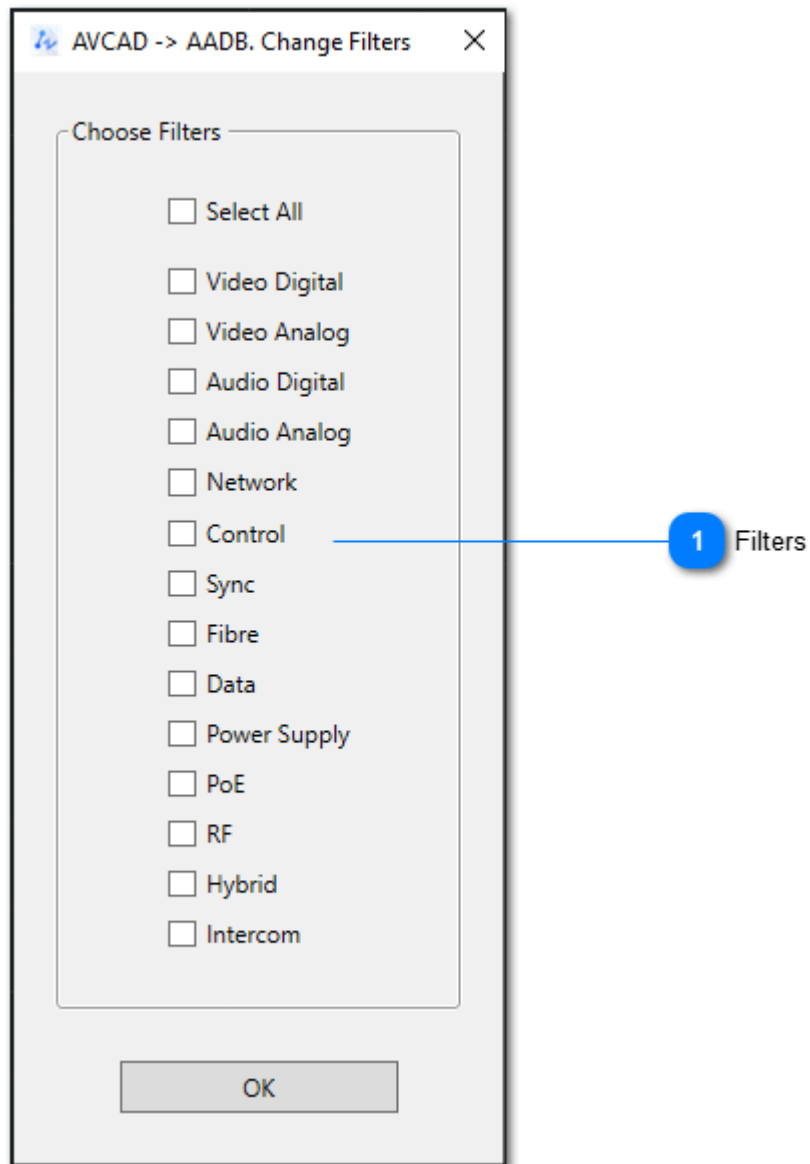
Manufacturer  
Model

**POWER**

**LOCATION**  
**IP-address**

Preview of the block composition

## 2.7.4. Change Filters



- Using this functionality you can create one more version of the device with the same parameters but with only needed filters.
- You can call this command from CAD's command line with the macro: "CHANGEFILTERS"
- Please, see this link to understand how it works. [Youtube](#)

1

## Filters

Choose Filters

- ☐ Select All
- ☐ Video Digital
- ☐ Video Analog
- ☐ Audio Digital
- ☐ Audio Analog
- ☐ Network
- ☐ Control
- ☐ Sync
- ☐ Fibre
- ☐ Data
- ☐ Power Supply
- ☐ PoE
- ☐ RF
- ☐ Hybrid
- ☐ Intercom

- Select needed filters in any configuration and click OK
- If nothing is selected the full device with all the connectors will be inserted into the drawing

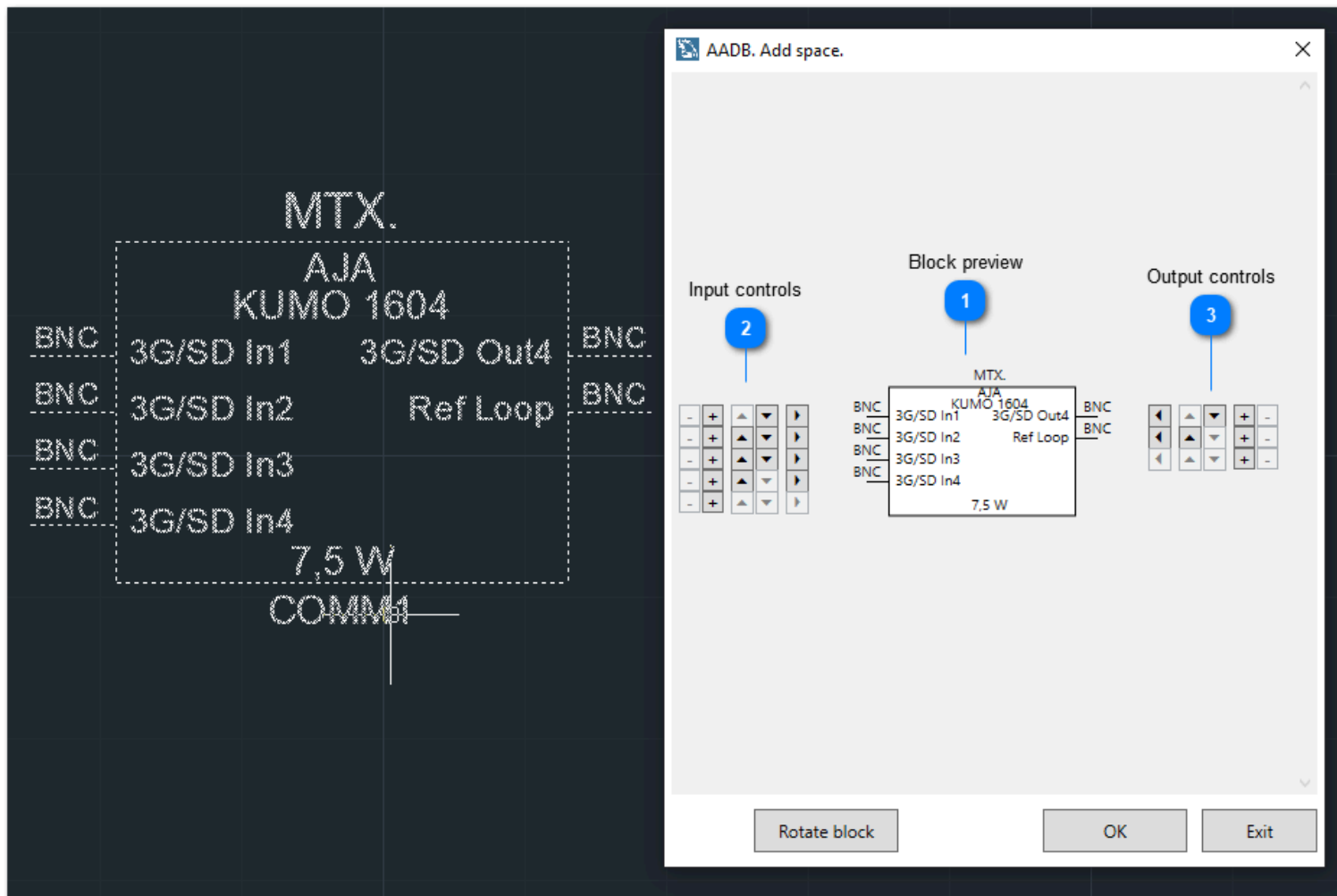
### 2.7.5. Change Connectors

- Using this functionality you can create one more version of the device with the same parameters but with only needed connectors.
- You can call this command from CAD's command line with the macro: "CHANGECONNECTORS"
- Please, see this link to understand how it works. [Youtube](#)

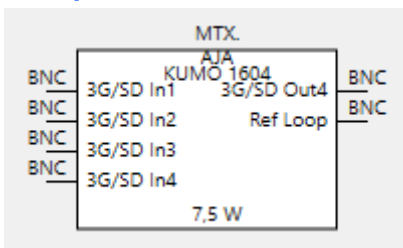


### 2.7.6. Add Spaces

This functionality helps you to customize your block. See [here](#) to understand how it works.

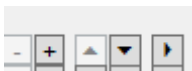


#### 1 Block preview



This preview shows which block you will have after you click on the OK button.

#### 2 Input controls



Controls for the input side.

- 1) Remove existing connector
- 2) Add a new connector
- 3) Move down
- 4) Move up
- 5) Move the the output side

3

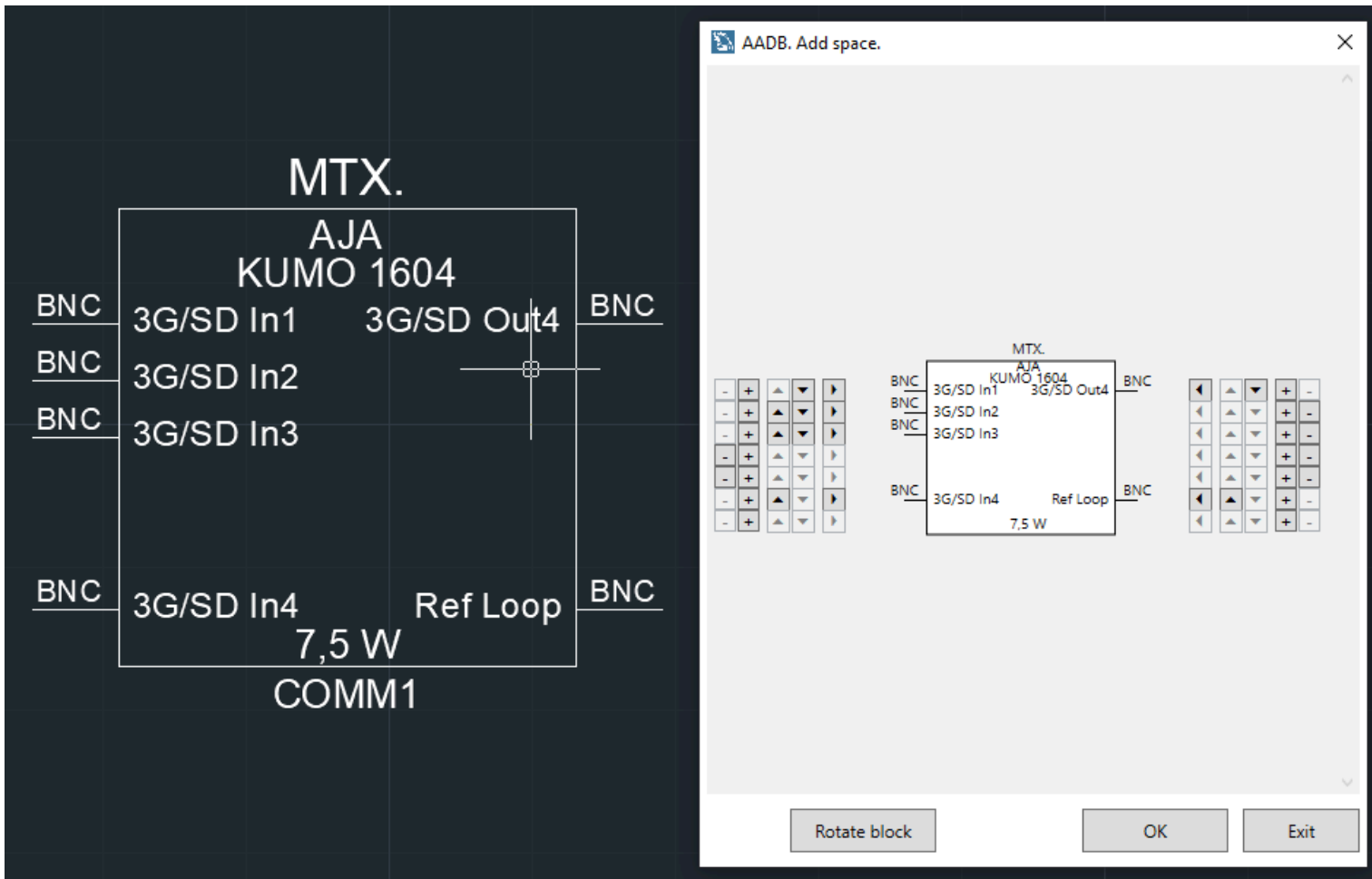
## Output controls



Controls for the output side.

- 1) Remove existing connector
- 2) Add a new connector
- 3) Move down
- 4) Move up
- 5) Move the the input side

Just as an example below is the result:

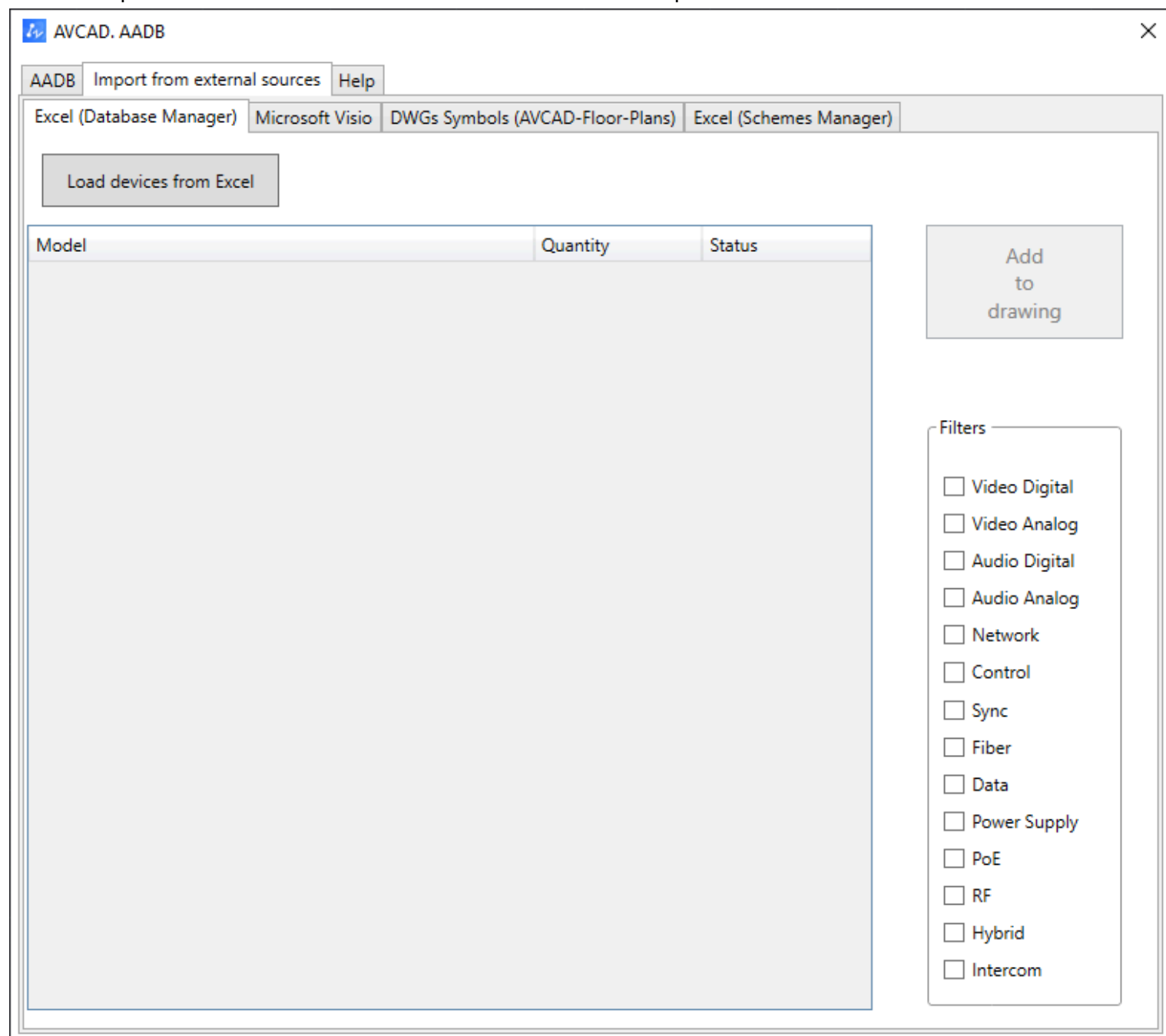


### 2.7.7. AVCAD Database Manager

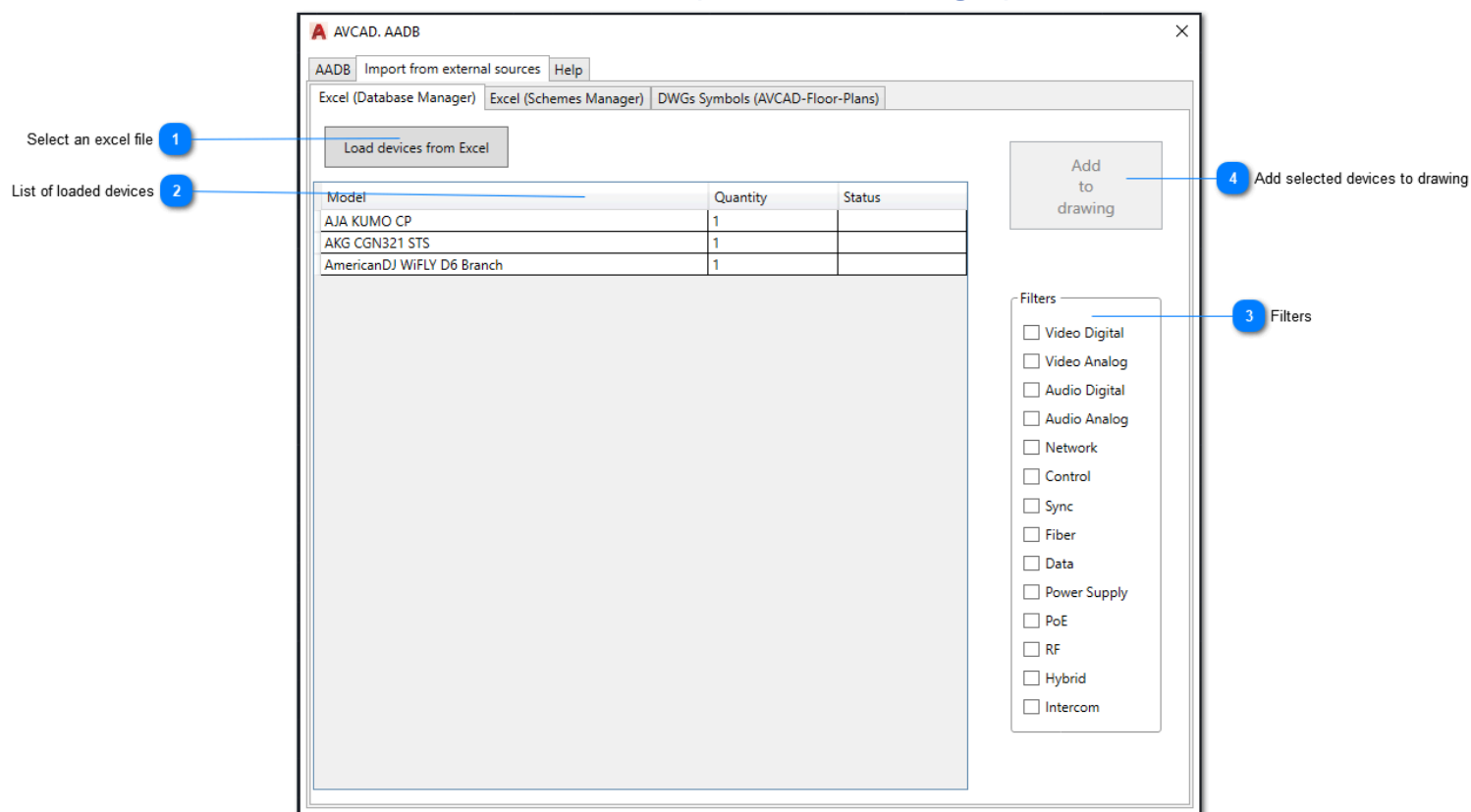
- This button will call the AVCAD Database Manager if it is installed and will propose you download it if it is not.
- Please, see this link to understand how it works. [Youtube](#)
- For the full documentation please refer here: [AVCAD Database Manager](#)

## 2.7.8. Import from external sources

You can import information from several different sources. See chapters.



## 2.7.8.1. Excel (Database Manager)



Model	Quantity	Status
AJA KUMO CP	1	More than in Excel
AKG CGN321 STS	3	Less than in Excel
AmericanDJ WiFLY D6 Branch	1	OK
APPLE APPLE TV	2	

- Using this functionality you can get the device's info from an excel sheet and put it on the drawing.
- You have to use excel sheet from [here](#)
- You can modify excel sheets and add some information
- Please, see this link to understand how it works. [Youtube](#)

### 1 Select an excel file

Load devices from Excel

Here you can select the needed excel file

### 2 List of loaded devices

Model	Quantity	Status
AJA KUMO CP	1	
AKG CGN321 STS	1	
AmericanDJ WiFLY D6 Branch	1	

Just a list of loaded devices

3

### Filters

Filters

☐ Video Digital  
☐ Video Analog  
☐ Audio Digital  
☐ Audio Analog  
☐ Network  
☐ Control  
☐ Sync  
☐ Fiber  
☐ Data  
☐ Power Supply  
☐ PoE  
☐ RF  
☐ Hybrid  
☐ Intercom

You can select any combination of filters. If you select nothing - all connectors will be on the drawings.

4

### Add selected devices to drawing

Add to drawing

You can select needed devices and you will add them one by one.

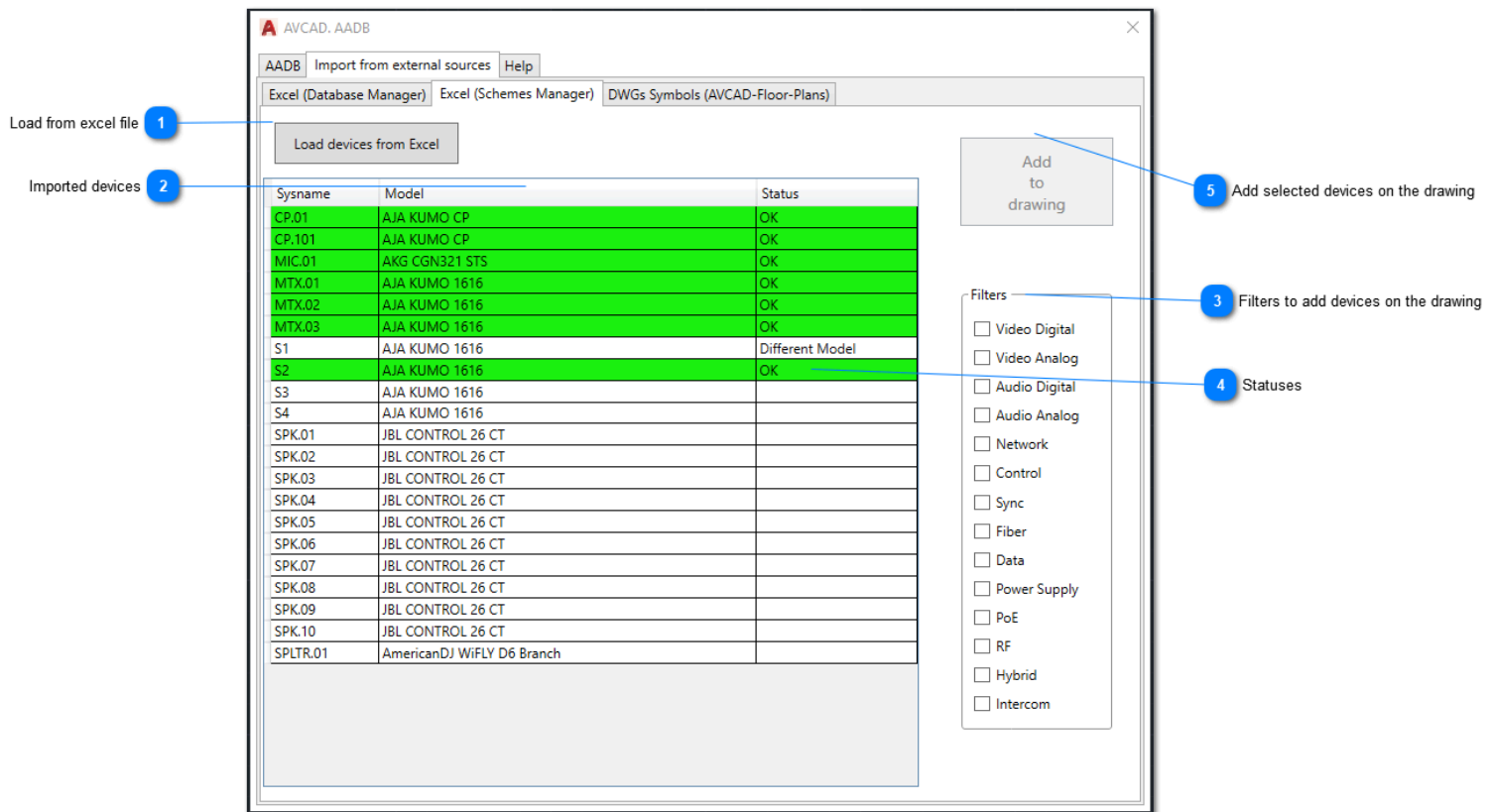
1

### Status column

Status
More than in Excel
Less than in Excel
OK

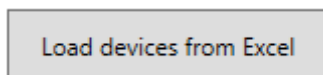
You can see the next statuses of the devices after you add them to the drawing.

## 2.7.8.2. Excel (Scheme Manager)



- Using this functionality you can get the device's info from an excel sheet and put it on the drawing.
- You have to use excel sheet from [here](#)
- You can modify excel sheets and add some information
- Please, see this link to understand how it works. [Youtube](#)

### 1 Load from excel file



Select file from Schemes Manager to load all the devices

### 2 Imported devices

Sysname	Model	Status
CP.01	AJA KUMO CP	OK
CP.101	AJA KUMO CP	OK
MIC.01	AKG CGN321 STS	OK
MTX.01	AJA KUMO 1616	OK
MTX.02	AJA KUMO 1616	OK
MTX.03	AJA KUMO 1616	OK
S1	AJA KUMO 1616	Different Model
S2	AJA KUMO 1616	OK

3

### Filters to add devices on the drawing

Filters

☐ Video Digital  
☐ Video Analog  
☐ Audio Digital  
☐ Audio Analog  
☐ Network  
☐ Control  
☐ Sync  
☐ Fiber  
☐ Data  
☐ Power Supply  
☐ PoE  
☐ RF  
☐ Hybrid  
☐ Intercom

You can select any combination of filters. If you select nothing - all connectors will be on the drawings.

4

### Statuses

Different Model
OK

OK means that everything is OK

The different model means that there is devices with the same SYSNAME but the model is different

Not in Database means that you do not have this device in your database.

5

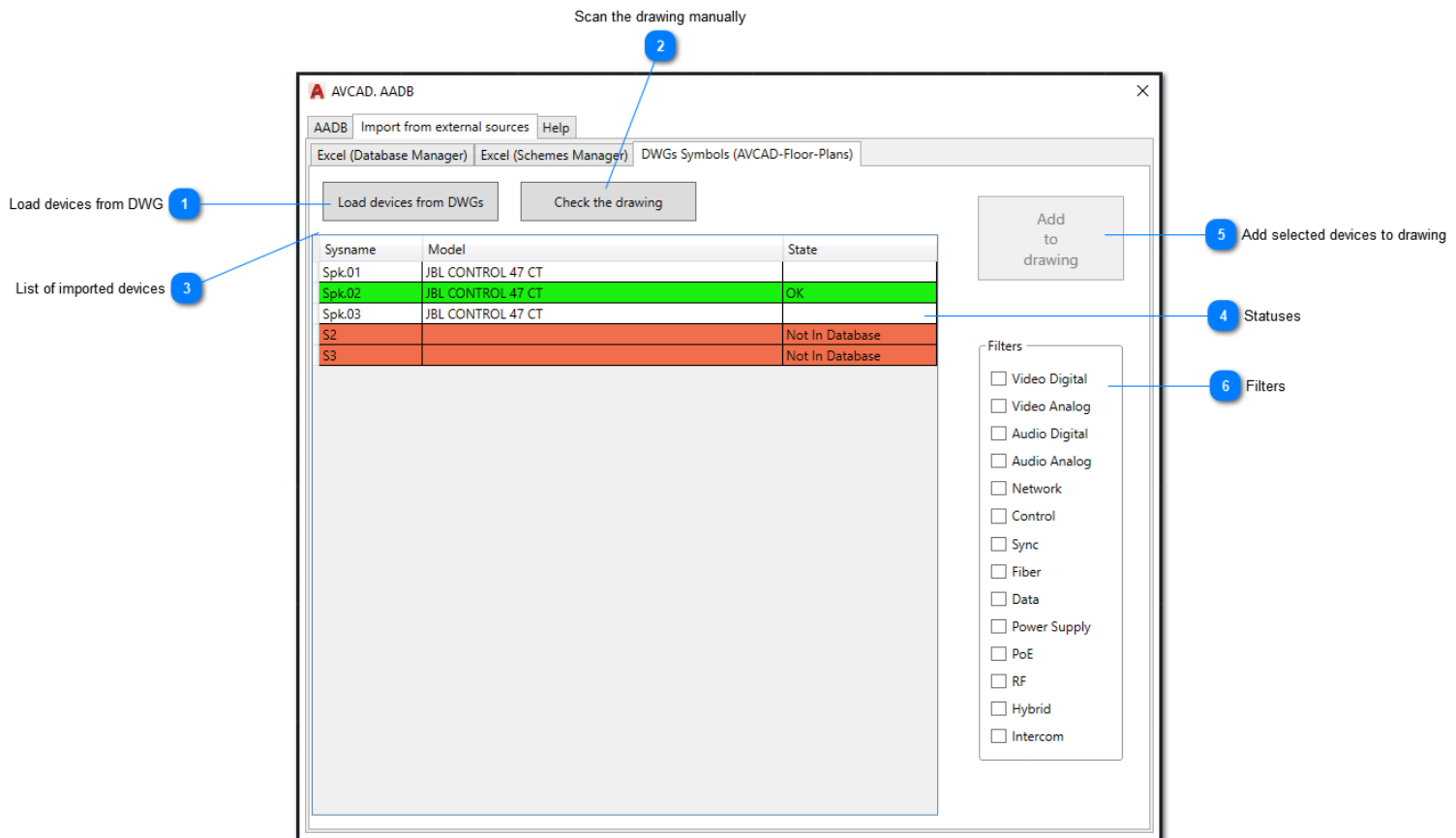
### Add selected devices on the drawing

Add  
to  
drawing

You can select multiple devices to insert into the drawing

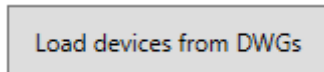


### 2.7.8.3. DWGs Symbols (AVCAD-Floor-Plans)



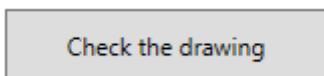
- Please, see this link to understand how it works. [Youtube](#)
- You can import DWG blocks that were created with [AVCAD-Floor-Plans](#)

#### 1 Load devices from DWG



Load AVCAD symbols from the selected DWG

#### 2 Scan the drawing manually



If you want manually check the statuses of imported blocks

#### 3 List of imported devices

Sysname	Model	State
Spk.01	JBL CONTROL 47 CT	
Spk.02	JBL CONTROL 47 CT	OK
Spk.03	JBL CONTROL 47 CT	
S2		Not In Database
S3		Not In Database

List of imported devices that can be inserted on the drawing

4

## Statuses

State
OK
Not In Database
Not In Database

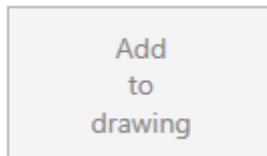
OK means that everything is OK

Different model means that there is a devices with the same SYSNAME but the model is different

Not in Database means that you do not have this device in your database.

5

## Add selected devices to drawing



Add selected devices to the drawing.

6

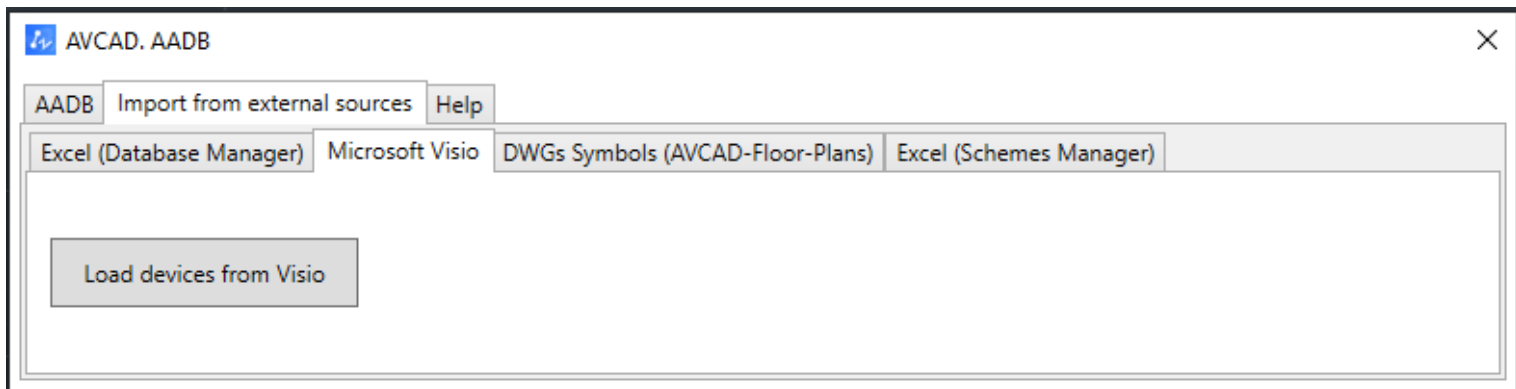
## Filters

Filters

- ☐ Video Digital
- ☐ Video Analog
- ☐ Audio Digital
- ☐ Audio Analog
- ☐ Network
- ☐ Control
- ☐ Sync
- ☐ Fiber
- ☐ Data
- ☐ Power Supply
- ☐ PoE
- ☐ RF
- ☐ Hybrid
- ☐ Intercom

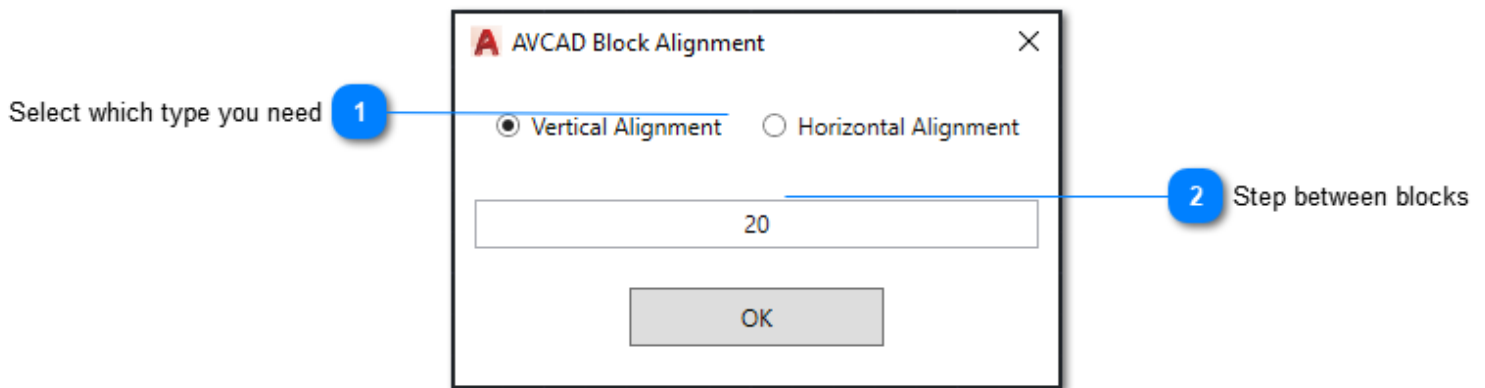
You can select any combinations of filters. If you select nothing - all connectors will be on the drawings.

## 2.7.8.4. Visio



Here you may download the excel file from [AVCAD V \(AVCAD for Visio\)](#). AVCAD will recreate the schematics from AVCAD V (AVCAD for Visio) in the current model space.

## 2.8. Blocks Align



- Align AVCAD blocks vertically and horizontally using the needed step
- Command name Macro: AVCADBlocksAlign

- Ribbon panel icon: 
- Please, see this link to understand how it works. [Youtube](#)

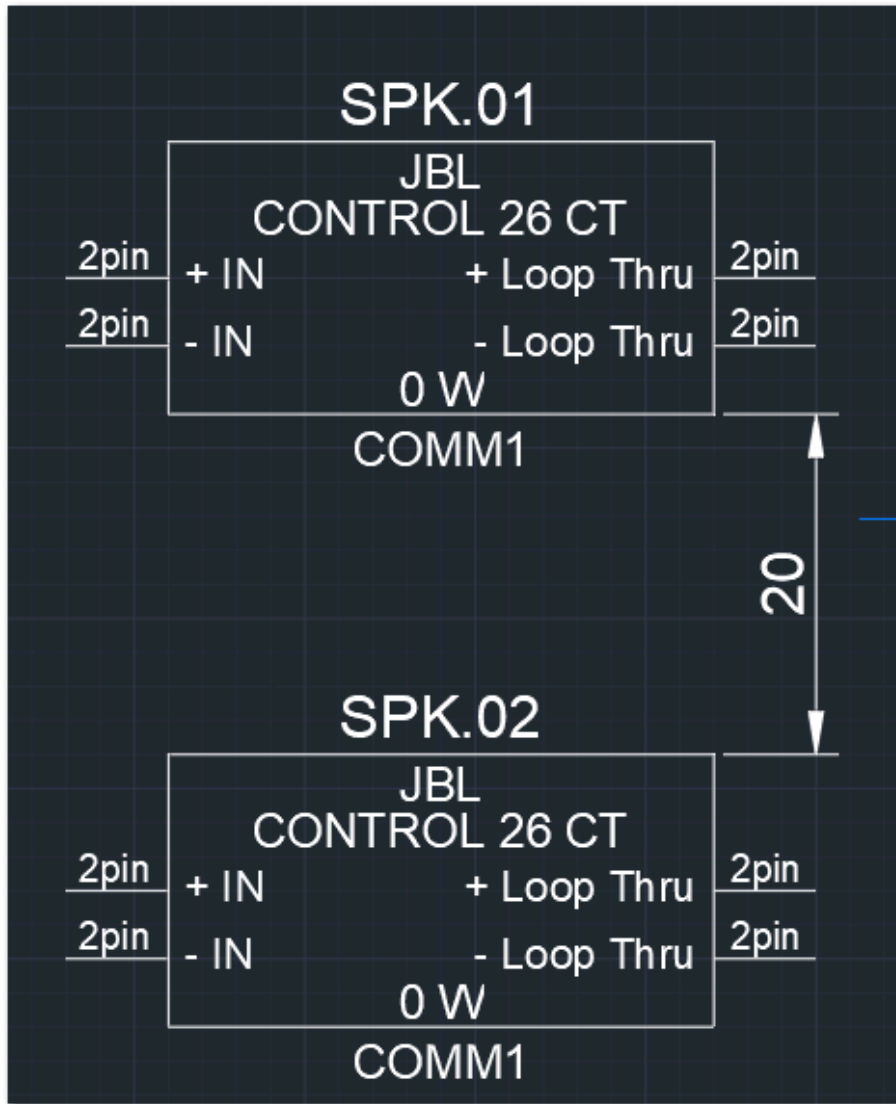
### **1** Select which type you need

☒ Vertical Alignment   ☐ Horizontal Alignment

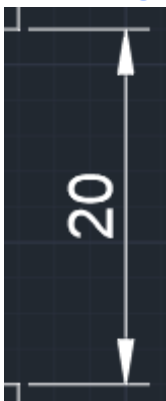
You have to select the type of the alignment

### **2** Step between blocks

The step will be saved and next time you will have the last value here.

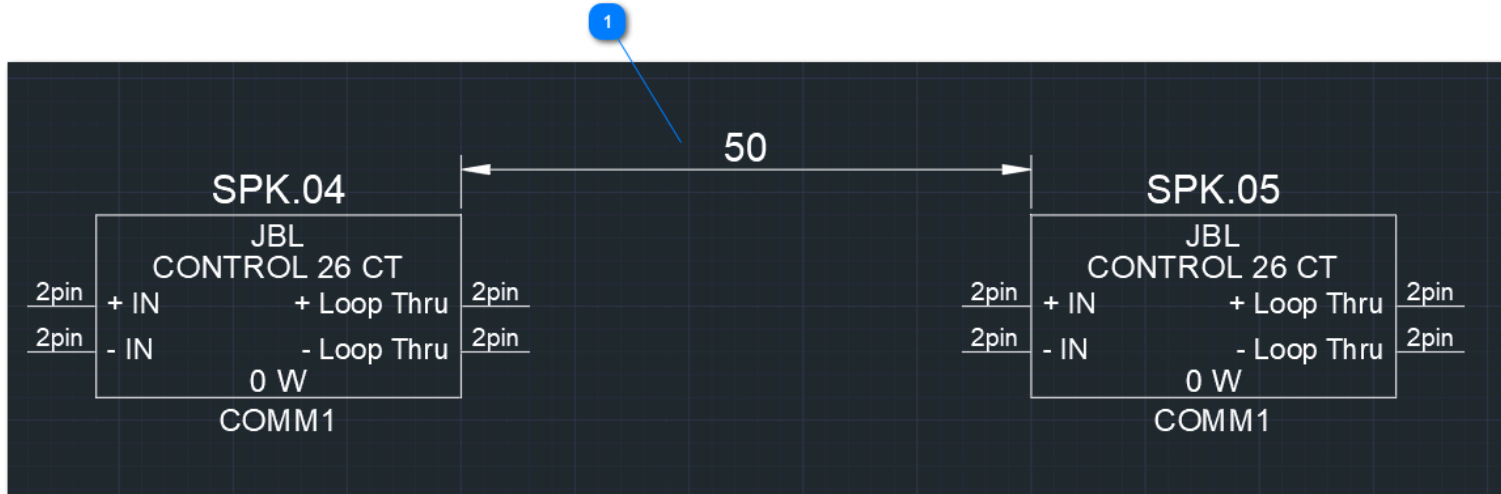


1 Vertical Alignment with the step 20

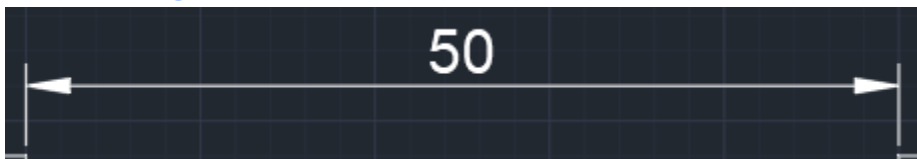


Vertical alignment with step 20

Horizontal alignment with step 50



1 Horizontal alignment with step 50



Horizontal alignment with step 50

## 2.9. Panels

### Patch Panels

The image shows a 'Create panel.' dialog box with three tabs: 'Patch panel', 'Termination panel', and 'Settings'. The 'Patch panel' tab is active. It contains two main sections: 'Set Properties' and 'Set dimensions'. The 'Set Properties' section includes fields for 'Sysname', 'Start Number', 'Connector's Type', 'Quantity', and 'Direction'. The 'Set dimensions' section includes fields for 'Depth', 'Width', and 'Height', along with unit selection radio buttons. Below these sections is a 'Create' button. At the bottom of the dialog is an 'Edit panels' section with three buttons: 'Rotate panel', 'Hide/Unhide Sysname', and 'Move Sysname'. Numbered callouts (1-10) point to various elements: 1 points to the 'Sysname' field; 2 points to the 'Check Sysname' checkbox; 3 points to the 'Start Number' field; 4 points to the 'Connector's Type' field; 5 points to the 'Quantity' field; 6 points to the 'Direction' buttons (A and B); 7 points to the 'Set dimensions' section; 8 points to the 'Rotate panel' button; 9 points to the 'Hide/Unhide Sysname' button; and 10 points to the 'Move Sysname' button.

1 Patch Panel name

2 Check if this sysname exists

3 Start number of panel

4 Connector type

5 Quantity

6 Direction

7 Panel dimensions

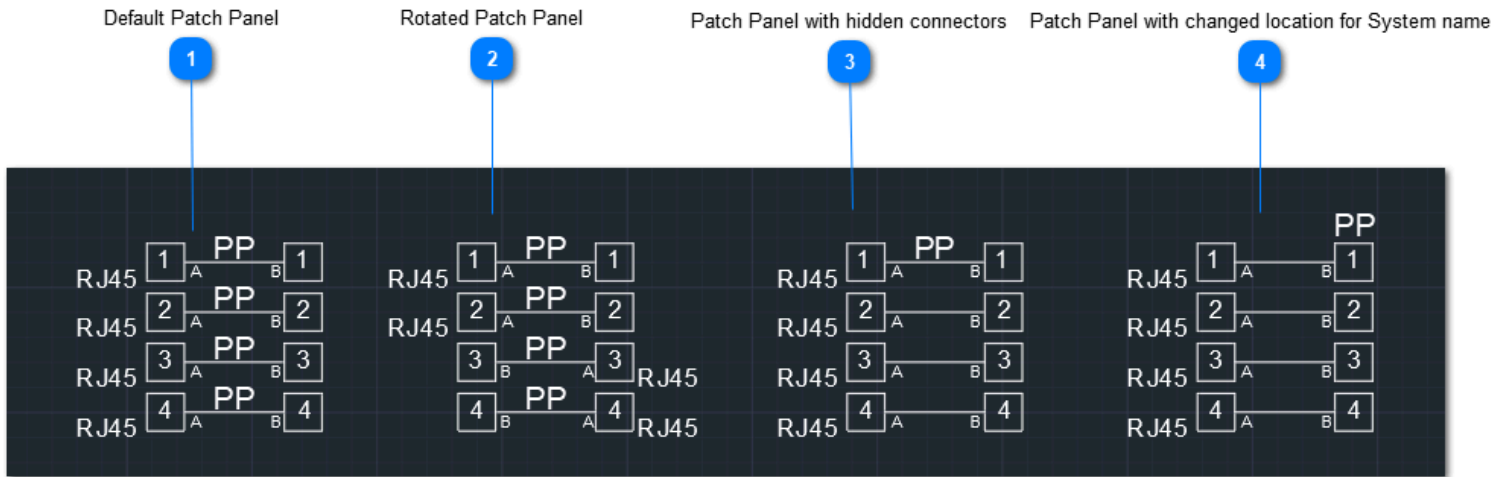
8 Rotate panel

9 Hide/Unhide Sysname

10 Move Sysname



- **Command name Macro:** CREATEPANEL



## 1 Patch Panel name

Sysname:

Required field - Enter the system name for the Patch Panel

## 2 Check if this sysname exists

☒ Check Sysname

If enabled you will see the Message Box with information

## 3 Start number of panel

Start Number:

Start number to create all the panel's connectors starting from this number

## 4 Connector type

Connector's Type:

Type of the connector, for example, RJ45, BNC, etc

## 5 Quantity

Quantity:

Quantity of the connectors

## 6 Direction

Direction:

For different types of panels, you can type what you need. The most common is U-D (up-down), A-B, R-F (rear-front).



## 7 Panel dimensions

Set dimensions

Depth:  ☒ mm ☐ inches

Width: ☒ 19" ☐ 10"

Height:   Unit(s)

Just some dimensions of the panel that will be used to insert it into the rack elevation

## 8 Rotate panel

You can rotate the side of the connector for the selected connectors

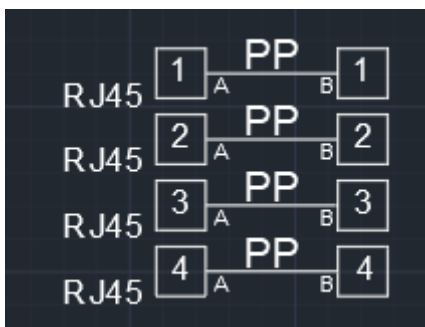
## 9 Hide/Unhide Sysname

You can hide the system name for the selected connectors

## 10 Move Sysname

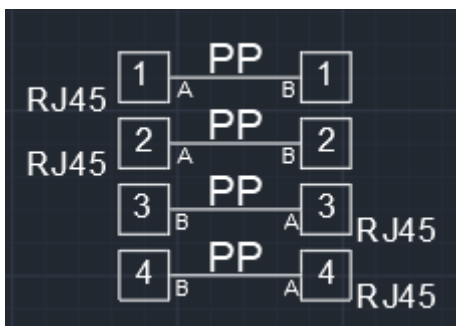
You can change the location of the system name for the selected connectors

## 1 Default Patch Panel



That is the default view of the panel when you insert it.

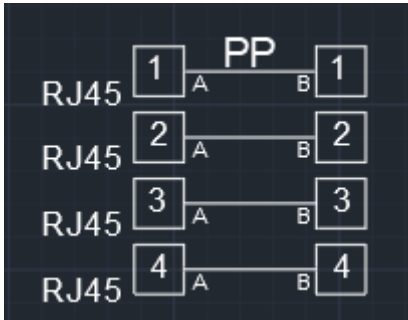
## 2 Rotated Patch Panel



Connectors 3 and 4 were rotated

3

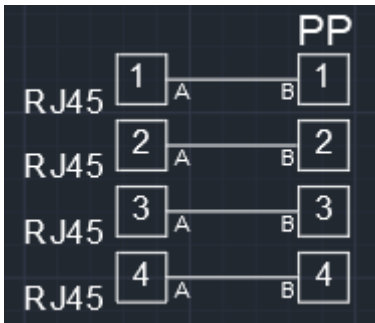
## Patch Panel with hidden connectors



Sysnames for the connectors 2,3,4 were hidden

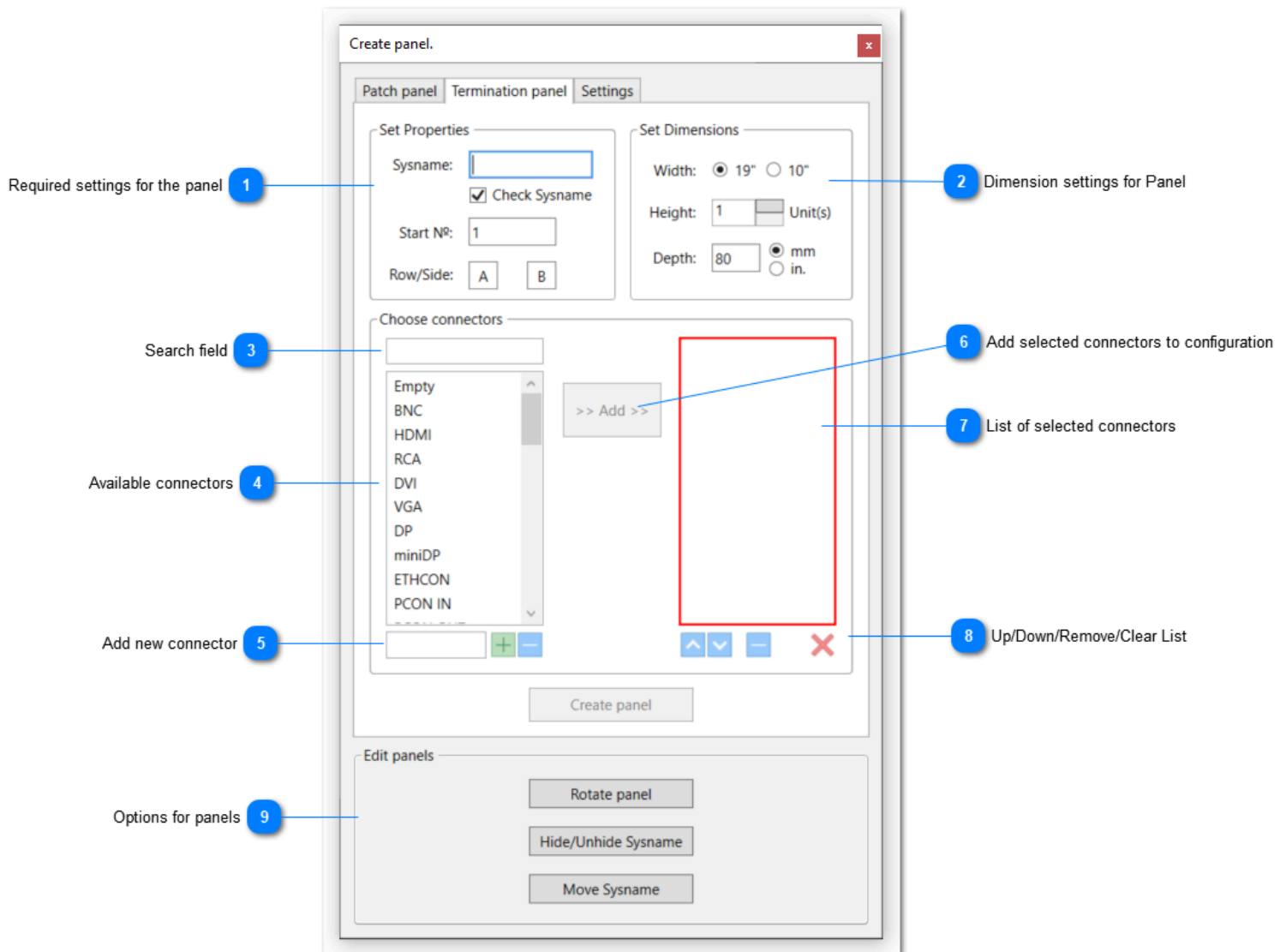
4

## Patch Panel with changed location for System name



Sysname for the connectors 1 was moved  
 Sysnames for the connectors 2,3,4 were hidden

## 2.9.1. Termination panel



### 1 Required settings for the panel

**Set Properties**

Sysname:

☒ Check Sysname

Start Nº:

Row/Side:

The same settings that are for [Patch Panels](#)

2 Dimension settings for Panel

Set Dimensions

Width: ☒ 19" ☐ 10"

Height:   Unit(s)

Depth:  ☒ mm ☐ in.

Panel's dimensions to insert it to rack elevation

3 Search field

Start typing and AVCAD will search for the connector

4 Available connectors

Empty

BNC

HDMI

RCA

DVI

VGA

DP

miniDP

ETHCON

PCON IN

List of available connectors.

5 Add new connector

If you do not have needed connectors just type it here and AVCAD will keep them for you

6 Add selected connectors to configuration

>> Add >>

Add selected connector from available to the list of selected ones

7 List of selected connectors



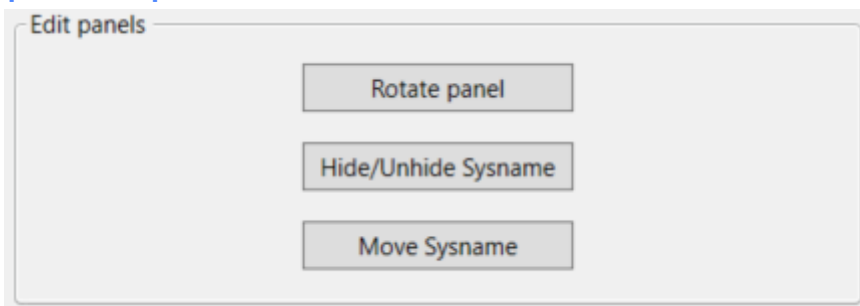
Termination Panel will be created with these connectors

8 Up/Down/Remove/Clear List



Options to control the list of the selected connectors

9 Options for panels



Please, refer to the same panel here: [Patch Panels](#)

## 2.9.2. Single Poles

Create panel. ✕

Patch panel Termination panel Settings

Set Properties

Sysname:

☒ Check Sysname

Start Nº:

Row/Side:

Set Dimensions

Width: ☒ 19" ☐ 10"

Height:

Depth:  ☒ mm ☐ in.

Choose connectors

BNC  
HDMI  
RCA  
DVI  
VGA  
DP  
miniDP  
ETHCON  
PCON IN

Edit panels

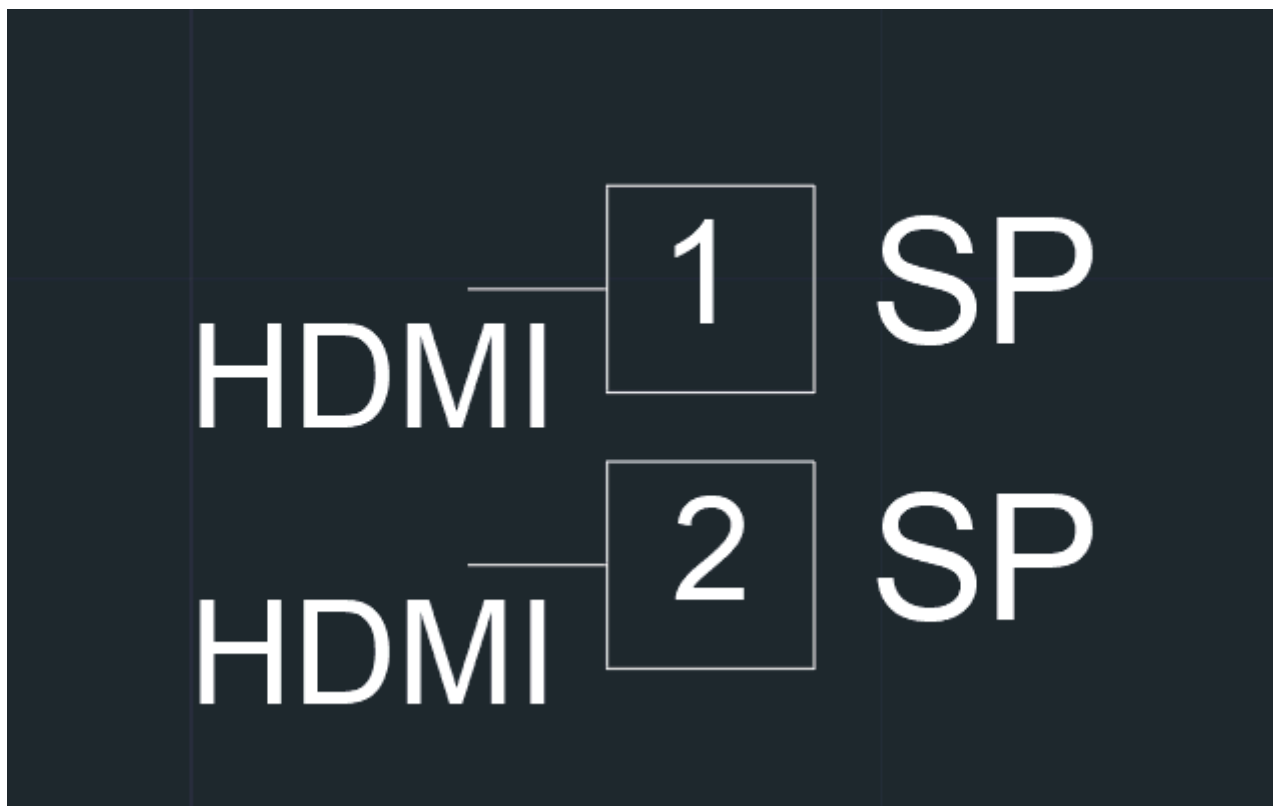
1 Single Pole connector

1

## Single Pole connector

Single Pole

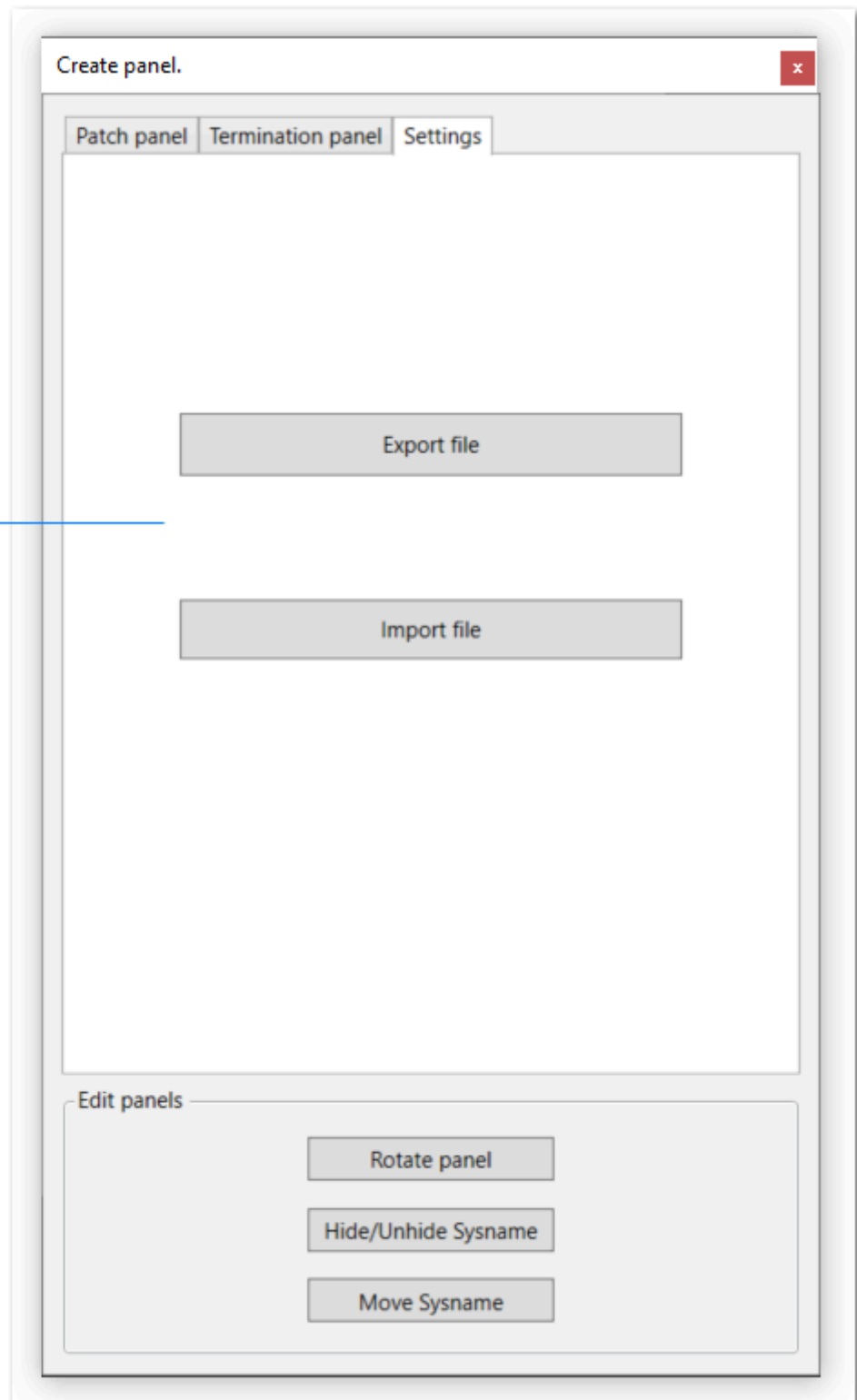
That is the type of panel with only one connector. That is useful when you want to terminate the connection. Watch [here](#) to understand how it works.



### 2.9.3. Settings

Export/Import

1





1

## Export/Import

Export file

Import file

We strongly recommend you export your connectors after you create them. This way you can share the same connectors with your colleagues.

You can also have lists for Neutrik, Canare, etc, and switch between them.

## 2.10. Racks

### Draw Rack

AVCAD -> Draw racks and modular chassis

Draw rack | Rack Elevations | Draw Modular Chassis | Help

Set properties

Rackname 1 Rack's sysname

2 Check if unique ☒ Check unique Rack's sysname

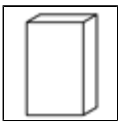
Quantity of units 3 Quantity of units

Depth of Rack  4 Depth of rack ☒ mm / ☐ inches

Width of rack 5 Width of Rack ☒ 19-Inches ☐ 10-Inches

Draw views of rack

Draw views 6



- **Command-name Macro: DRAWRACK**

1 **Rackname**

Rack's sysname

Unique sysname. We do not recommend using some special symbols here.

2 **Check if unique**

☒ Check unique Rack's sysname

If checked it will see for this Sysname and View

3 **Quantity of units**

Quantity of units

Quantity of units. Unit is 44 mm.

4 **Depth of rack**

Depth of Rack  ☒ mm / ☐ inches

The depth of the rack can be in mm or inches. Inside we keep it in mm

5

**Width of rack**Width of Rack ☒ 19-Inches ☐ 10-Inches

Two kinds of racks.

6

**Draw views**

Draw views of rack

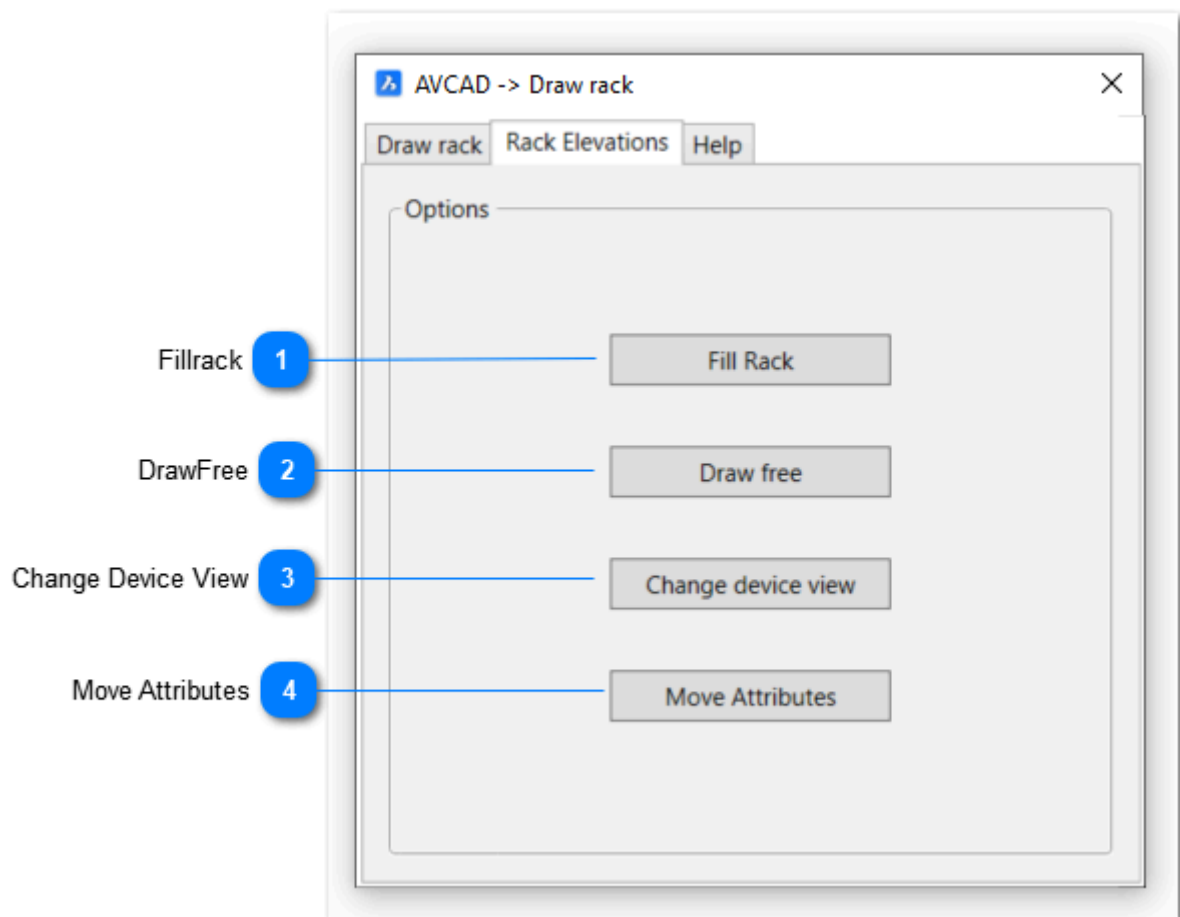
Front

Side

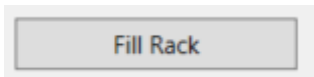
Rear

Select what you need to draw and place it on a drawing.

## 2.10.1. Rack Elevations

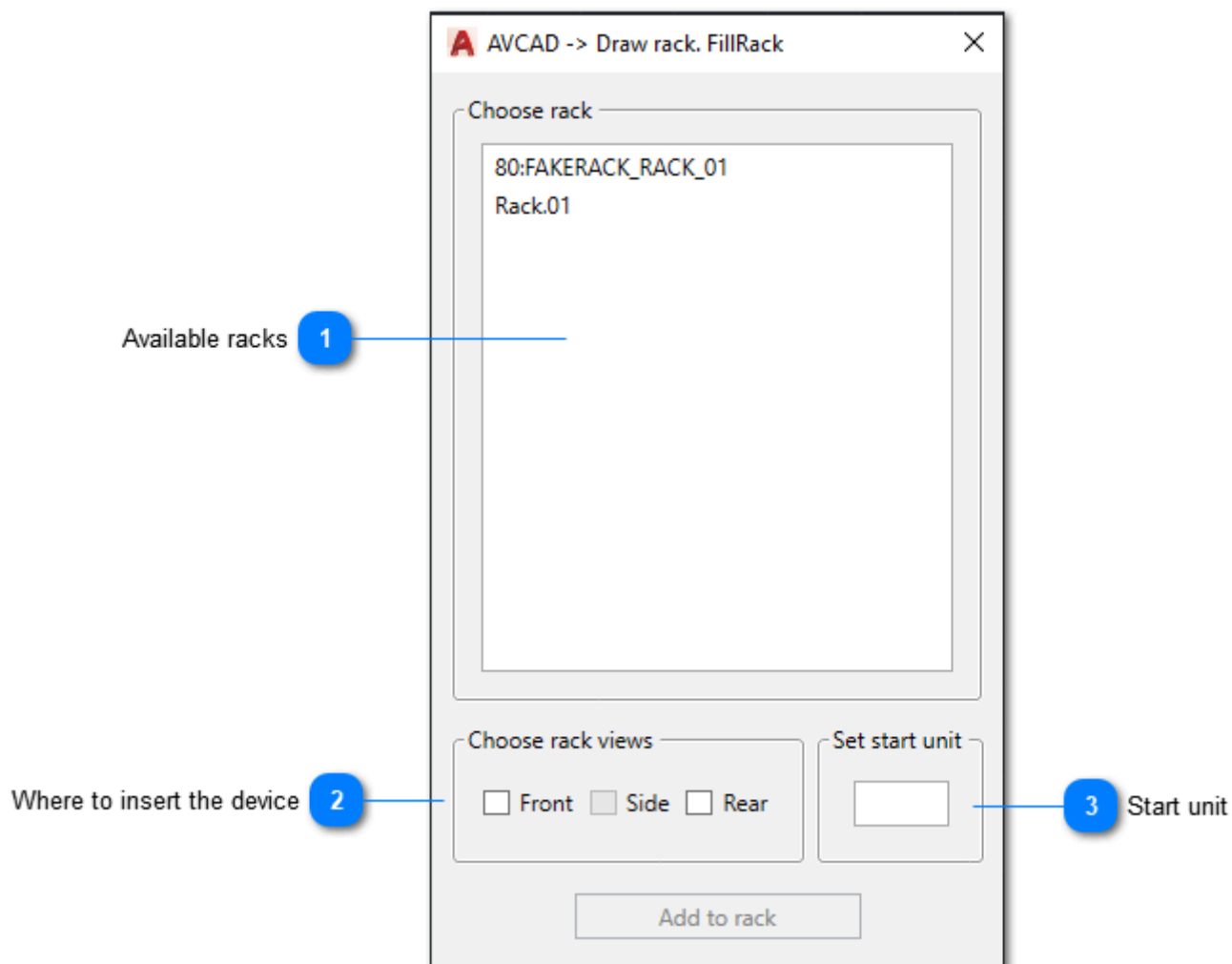


## 1 Fillrack



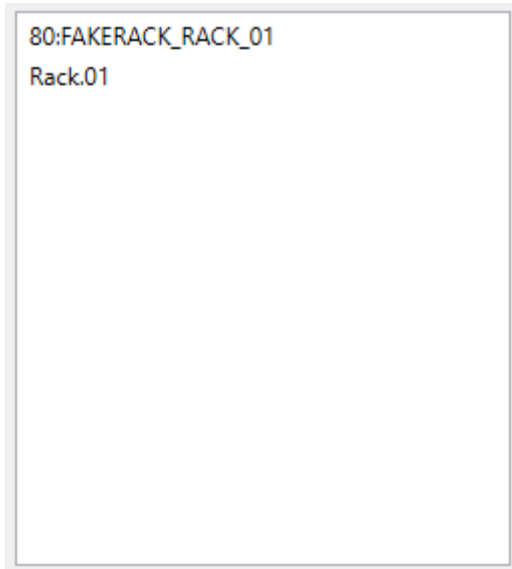
- Command line macro "Fillrack"

1. Click on the Fillrack button or call the command line macro.
2. Select devices or panels you want to insert into the rack
3. Fill in information on the next window:



4. Work is done.

## 1 Available racks



Select needed rack elevation

2

### Where to insert the device

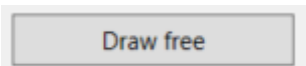
Choose where to insert. You have to choose front or rear, after that you may choose Side

3

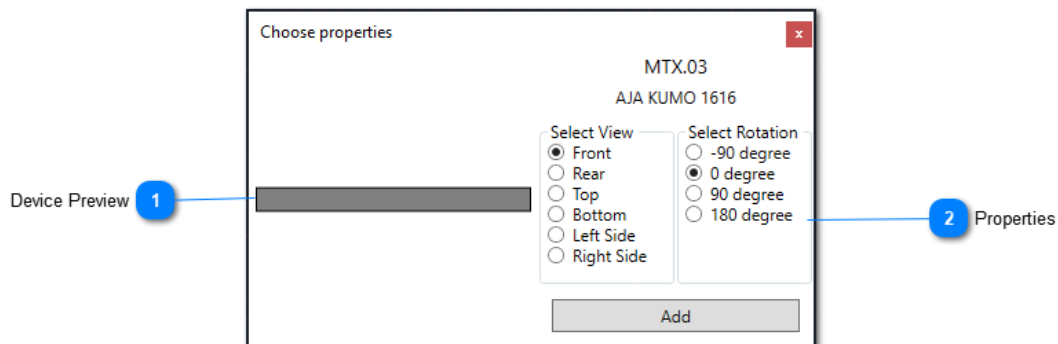
### Start unit

Start unit. This software draws up from the start unit

## 2 DrawFree



- Another way to insert the device into the rack. Works only with devices
1. Command-line macro - DrawFree
  2. Click on the DrawFree button or call the command line macro.
  3. Select one device you want to insert
  4. Fill next window:

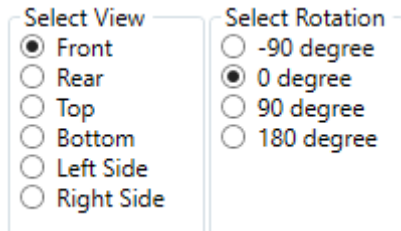


## 1 Device Preview



Device preview. It depends on the properties below.

## 2 Properties

A simplified version of the "Choose properties" dialog box. It contains two sections: "Select View" with radio buttons for Front (selected), Rear, Top, Bottom, Left Side, and Right Side; and "Select Rotation" with radio buttons for -90 degree, 0 degree (selected), 90 degree, and 180 degree.

You can choose the point of view and the angle.

5. You will have the device on your mouse pointer. Using the snap settings, you can easily insert the device into the rack. In this case, we placed into the 23rd unit.



3

### Change Device View

Change device view

That is completely the same as DrawFree but **it does not change the LOCATION attribute of the block.** It is comfortable to use this function when you want to draw several views (for example top, side, front) and do not want to change location to "OUT OF RACK"

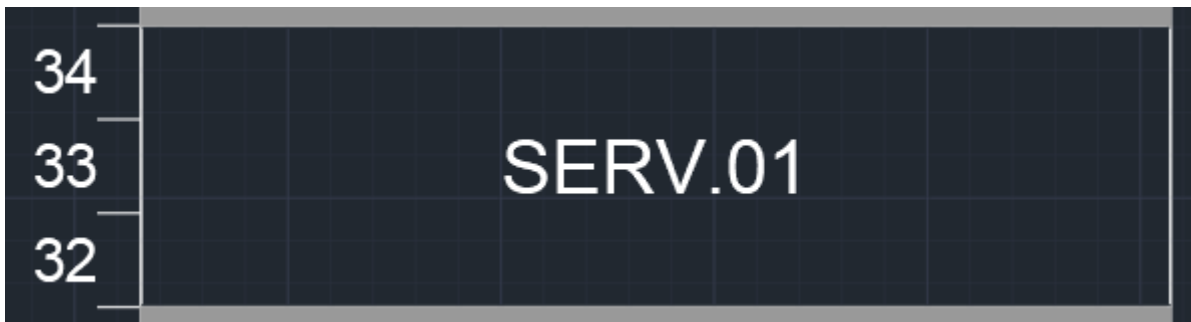
4

### Move Attributes

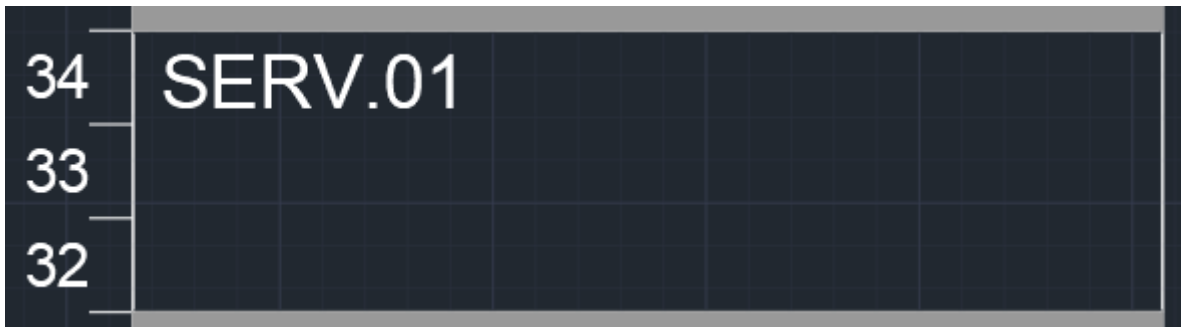
Move Attributes

This functionality can be used to change the location of the attributes in the device in Rack

1. Click on button
2. Click on the attribute in Rack

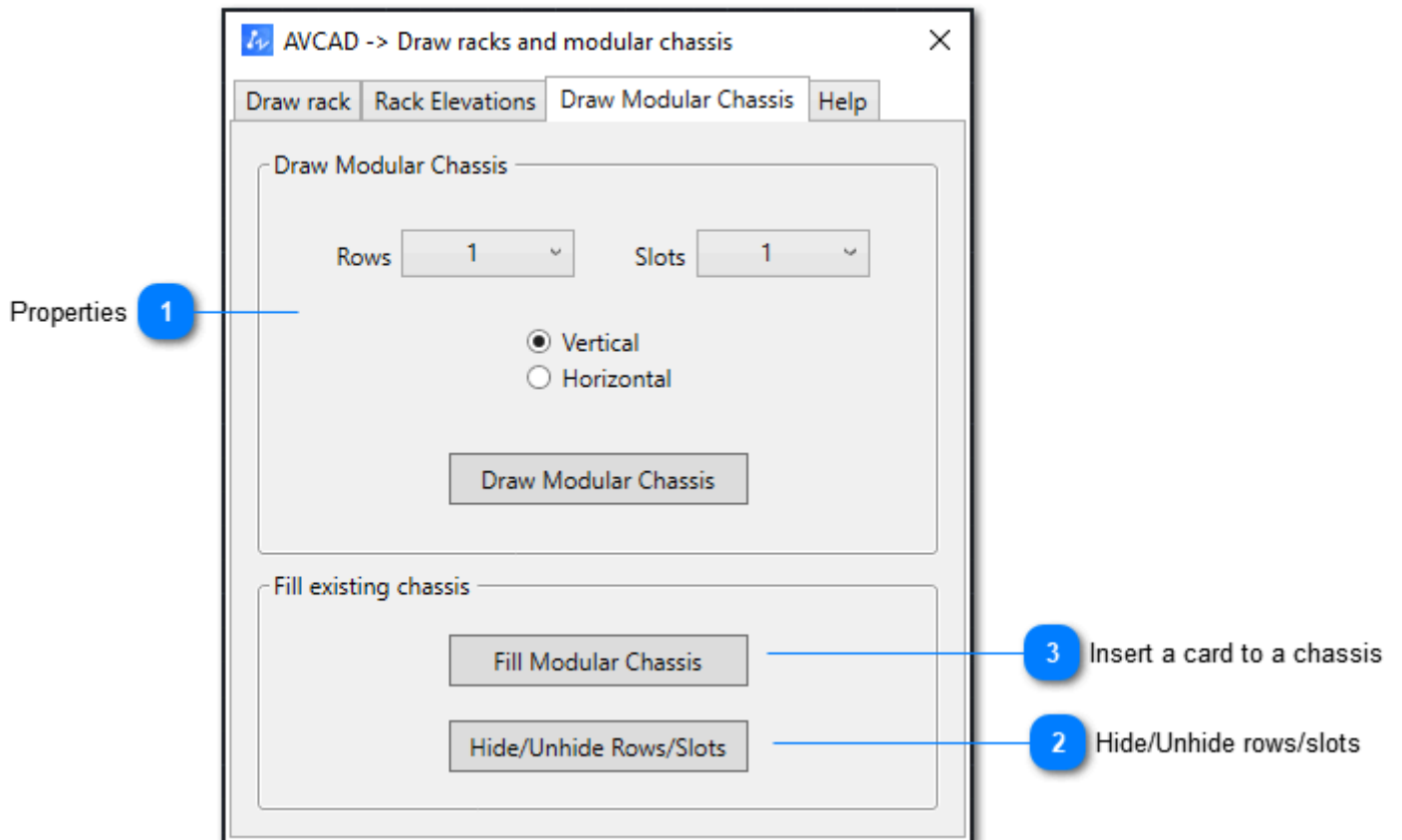


3. Place it where you want





## 2.10.2. Draw Modular Chassis



This functionality will help you to create modular chassis and insert cards into it.  
See [here](#) to understand how it works

1 Properties

Rows  Slots

☒ Vertical  
☐ Horizontal

Select the number of rows and slots in every row.  
For example, if you select Rows 3, Slots 8, Vertical, you will see this:

FR.	
1	
2	1 2 3 4 5 6 7 8
3	1 2 3 4 5 6 7 8
	1 2 3 4 5 6 7 8

If you select Rows 3, Slots 8, Horizontal, you will see this:

FR.01	
1	2 3
	1 1 1
	2 2 2
	3 3 3
	4 4 4
	5 5 5
	6 6 6
	7 7 7
	8 8 8

2

Hide/Unhide rows/slots

Hide/Unhide Rows/Slots

Click on the needed chassis and click enter:

FR.01				FR.01			
1	2	3					
1	1	1	1				
	2	2	2				
	3	3	3				
	4	4	4				
	5	5	5				
	6	6	6				
	7	7	7				
	8	8	8				

3

### Insert a card to a chassis

Fill Modular Chassis

After clicking on the button


1. Select the card you want to insert into the chassis
2. The card must have the parameter "Slot". You can make it via [AVCAD Database Manager](#)
3. Check that parameter is just a digit. 1, 2, etc. This means how many slots this card has.

Device's Description

Main Info Parameters

Price, IN, USD	<input type="text"/>
Price, OUT, USD	<input type="text"/>
Price, IN, Euro	<input type="text"/>
Price, OUT, Euro	<input type="text"/>
Weight	<input type="text"/>
Heat	<input type="text"/>
Is Active	<input type="text"/>
Updated by	<input type="text"/>
On Stock	<input type="text"/>
Slot	<input type="text" value="1"/>

4.


AVCAD -> Draw rack. FillFrame

Choose frame

FR.

Set Row

1

Set start Slot

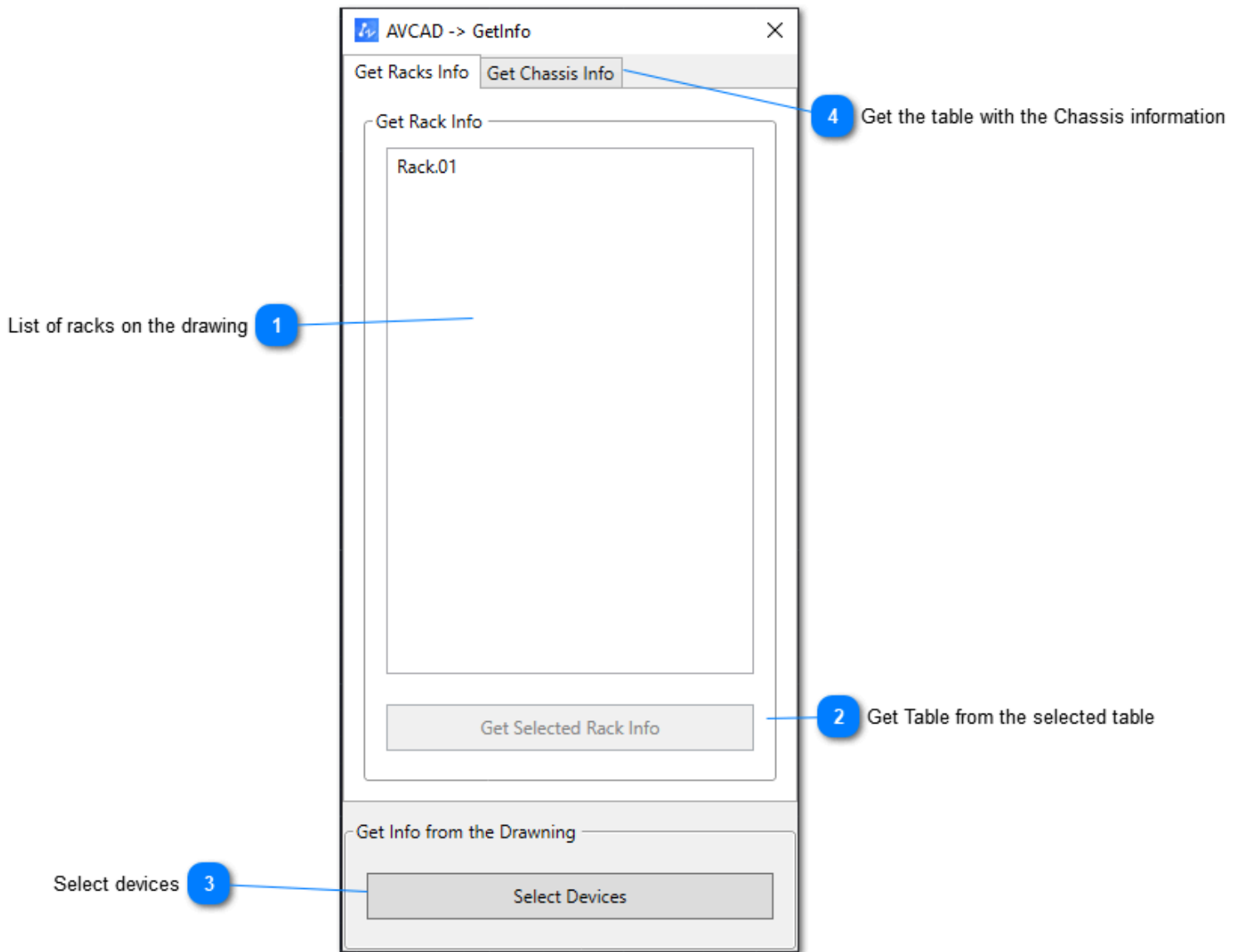
1

Add to frame

- 5.
- Select the chassis, row and slot and click on add to frame.
6. The result:

FR.			
1	CARD.01	2	CARD.02
	CARD.03		CARD.04
	CARD.05		CARD.06
	CARD.07		CARD.08
			CARD.09

## 2.11. GetInfo



• **Command name Macro:** GETINFO

• **Ribbon icon:** 

## 1 List of racks on the drawing

Get Rack Info

Rack.01

List of racks that exist on the drawing

## 2 Get Table from the selected table

Get Selected Rack Info

Get a standard table for the selected rack.

Select needed rack.

Click on "Get selected Rack info"

Place the table on the drawing.

Result:

Rack.01			
Rack.01, Unit 14, REAR	PP.01	Patch Panel	1
Rack.01, Unit 13, REAR	TP.01	Termination Panel	1
Rack.01, Unit 12, REAR	PP.02	Patch Panel	1
Rack.01, Unit 11, FRONT	S3	AJA KUMO 1616	1
Rack.01, Unit 11, FRONT	S4	AJA KUMO 1616	1
Rack.01, Unit 10, FRONT	S2	AJA KUMO 1616	1
Rack.01, Unit 10, FRONT	S1	AJA KUMO 1616	1
Rack.01, Unit 10, FRONT	MTX.03	AJA KUMO 1616	1

All the devices go from up to down like in rack.

3

## Select devices

Select Devices

This functionality allows you to create a custom table for the created elements including [assignments](#) and [options](#)

1. Click on the "Select Devices button"
2. Select needed devices/panels

This interface will be shown:

Export column headers

Place the table

Export Sum

Column headers

Type	Sysname	Description	Model	Location	IP	Power	Quantity
Rack	80:FAKERACK_RACK_01	Rack, Height is 44 units, Depth is 32"	Rack, Height is 44 units, Depth is 32"	80:FAKERACK_RACK_01, Unit 15,		20 W	1
Device	MTX.01	1616 Compact 3G/HD/SD-SDI Router	AJA KUMO 1616	AAAA		20 W	1
Device	MTX.02	1616 Compact 3G/HD/SD-SDI Router	AJA KUMO 1616	Rack.01, Unit 10, FRONT		20 W	1
Device	MTX.03	1616 Compact 3G/HD/SD-SDI Router	AJA KUMO 1616	COMM1		0 W	1
Device	SPK.01	In-ceiling loudspeaker	JBL CONTROL 26 CT	COMM1		0 W	1
Device	SPK.02	In-ceiling loudspeaker	JBL CONTROL 26 CT	COMM1		0 W	1
Device	SPK.03	In-ceiling loudspeaker	JBL CONTROL 26 CT	COMM1		0 W	1
Device	SPK.04	In-ceiling loudspeaker	JBL CONTROL 26 CT	COMM1		0 W	1
Termination P	TP.01	N,N,N1,N1,N1,N2,N2,N2	Termination Panel, Width is 483, Depth is 80	Rack.01, Unit 13, REAR			1
Patch Panel	PP.01	Patch Panel, Size is 48, Depth is 80, Connectors: BNC	Patch Panel, Size is 48, Depth is 80, Connector	Rack.01, Unit 14, REAR			1

1

### Export Sum

☐ Export Sum

If checked it will make the sum for the similar models

2

### Export column headers

☒ Export Column Headers

If checked it will create a table with column headers.

3

### Place the table

Place the table

After you click all the information, the columns order will be saved and you can place the table on the drawing.

Here are some examples of a result:



Sysname	Description	Model	Quantity
80:FAKERACK_RACK_01	Rack, Height is 44 units, Depth is 32"	Rack, Height is 44 units, Depth is 32"	1
MTX.01	1616 Compact 3G/HD/SD-SDI Router	AJA KUMO 1616	1
MTX.02	1616 Compact 3G/HD/SD-SDI Router	AJA KUMO 1616	1
MTX.03	1616 Compact 3G/HD/SD-SDI Router	AJA KUMO 1616	1
SPK.01	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.02	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.03	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.04	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.05	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.06	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.07	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.08	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.09	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
SPK.10	In-ceiling loudspeaker	JBL CONTROL 26 CT	1
TP.01	N,N,N1,N1,N1,N1,N2,N2	Termination Panel, Width is 483, Depth is 80	1
PP.01	Patch Panel, Size is 48, Depth is 80, Connectors: BNC	Patch Panel, Size is 48, Depth is 80, Connectors: BNC	1

Description	Model	Quantity
In-ceiling loudspeaker	JBL CONTROL 26 CT	10

4

## Column headers

<input type="checkbox"/> Type	<input checked="" type="checkbox"/> Sysname	<input checked="" type="checkbox"/> Description	<input checked="" type="checkbox"/> Model	<input type="checkbox"/> Location	<input type="checkbox"/> IP	<input type="checkbox"/> Power	<input checked="" type="checkbox"/> Quantity
-------------------------------	---	---	---	-----------------------------------	-----------------------------	--------------------------------	--

Here you can reorder columns as needed and check/uncheck column headers to get the exact table you want.

4

## Get the table with the Chassis information

Get Chassis Info

See [here](#)

### 2.11.1. Get chassis information

AVCAD -> GetInfo

Get Racks Info Get Chassis Info

Get Modular Chassis Info

FR.  
FR.01

Get Selected Modular Chassis Info

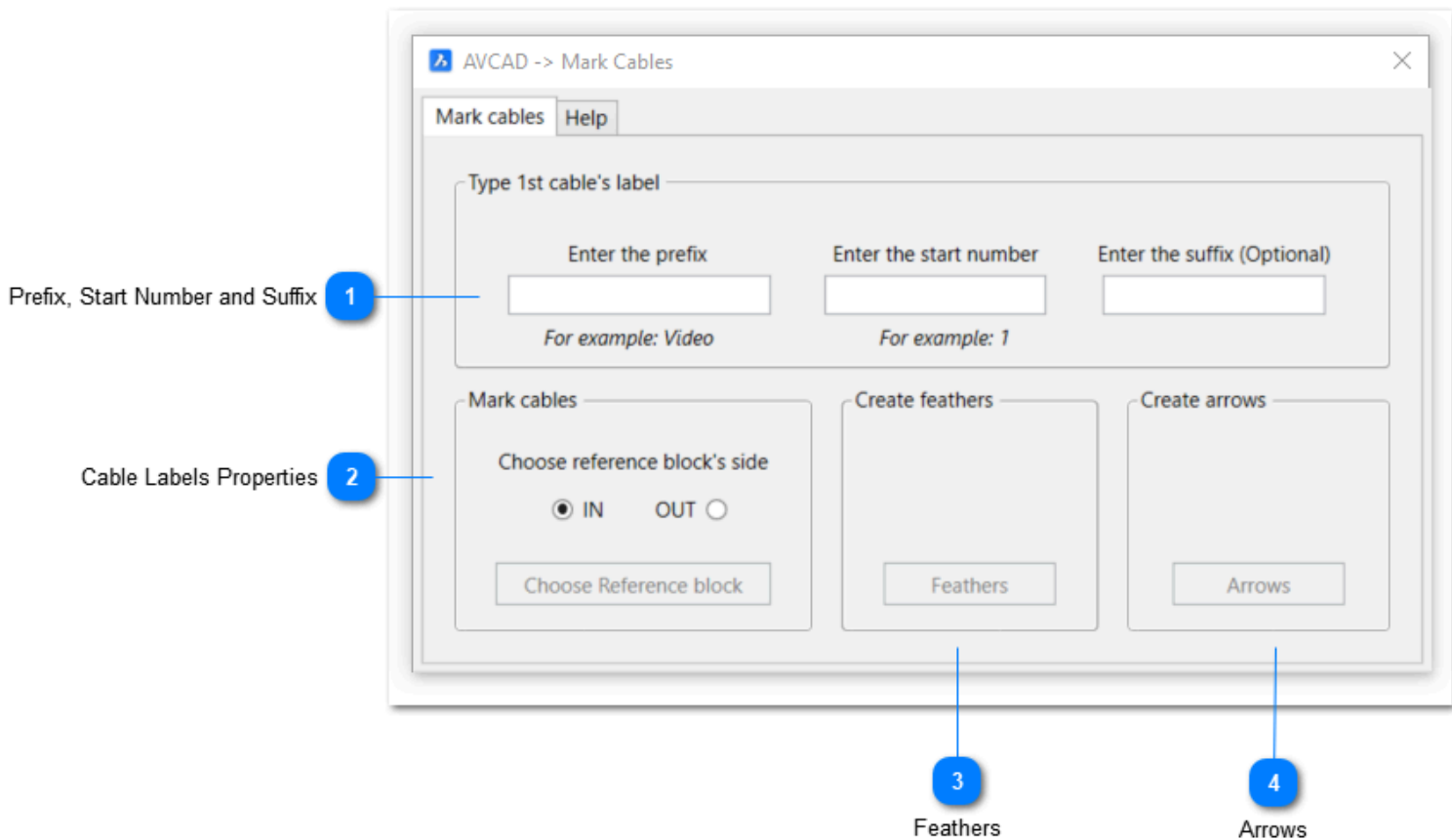
Get Info from the Drawing

Select Devices

Here you may select the chassis and get the table like this:

		FR.		
FR., Row 01, Slots 01-02	CARD.01	Crestron DMC-4K-HDO	1	
FR., Row 01, Slots 03-04	CARD.03	Crestron DMC-4K-HDO	1	
FR., Row 01, Slots 05-06	CARD.05	Crestron DMC-4K-HDO	1	
FR., Row 01, Slots 07-08	CARD.07	Crestron DMC-4K-HDO	1	
FR., Row 02, Slots 01-02	CARD.02	Crestron DMC-4K-HDO	1	
FR., Row 02, Slots 03-04	CARD.04	Crestron DMC-4K-HDO	1	
FR., Row 02, Slots 05-06	CARD.06	Crestron DMC-4K-HDO	1	
FR., Row 02, Slot 07	CARD.08	Crestron DMC-S2	1	
FR., Row 02, Slot 08	CARD.09	Crestron DMC-S2	1	

## 2.12. MarkCables



- Command name Macro: MARKCABLES

- Ribbon Icon: 

- All cables should be drawn with polylines.
- After the AutoCAD upgrade you may have an issue that after you create labels they are not created. To fix it you have to copy and paste your existing elements on the drawing to a drawing that has been created with the new AutoCAD version

- Please, see this link to understand how it works. [Youtube](#)

- See also correct [connections](#)

### 1 Prefix, Start Number and Suffix

This image is a close-up of the 'Type 1st cable's label' section of the 'Mark Cables' dialog. It shows three input fields with the following labels and examples below them:

- Enter the prefix:** Example: Video
- Enter the start number:** Example: 1
- Enter the suffix (Optional):**

Prefix, Start Number and Suffix for the first cable labels/arrow/feather

## Cable Labels Properties

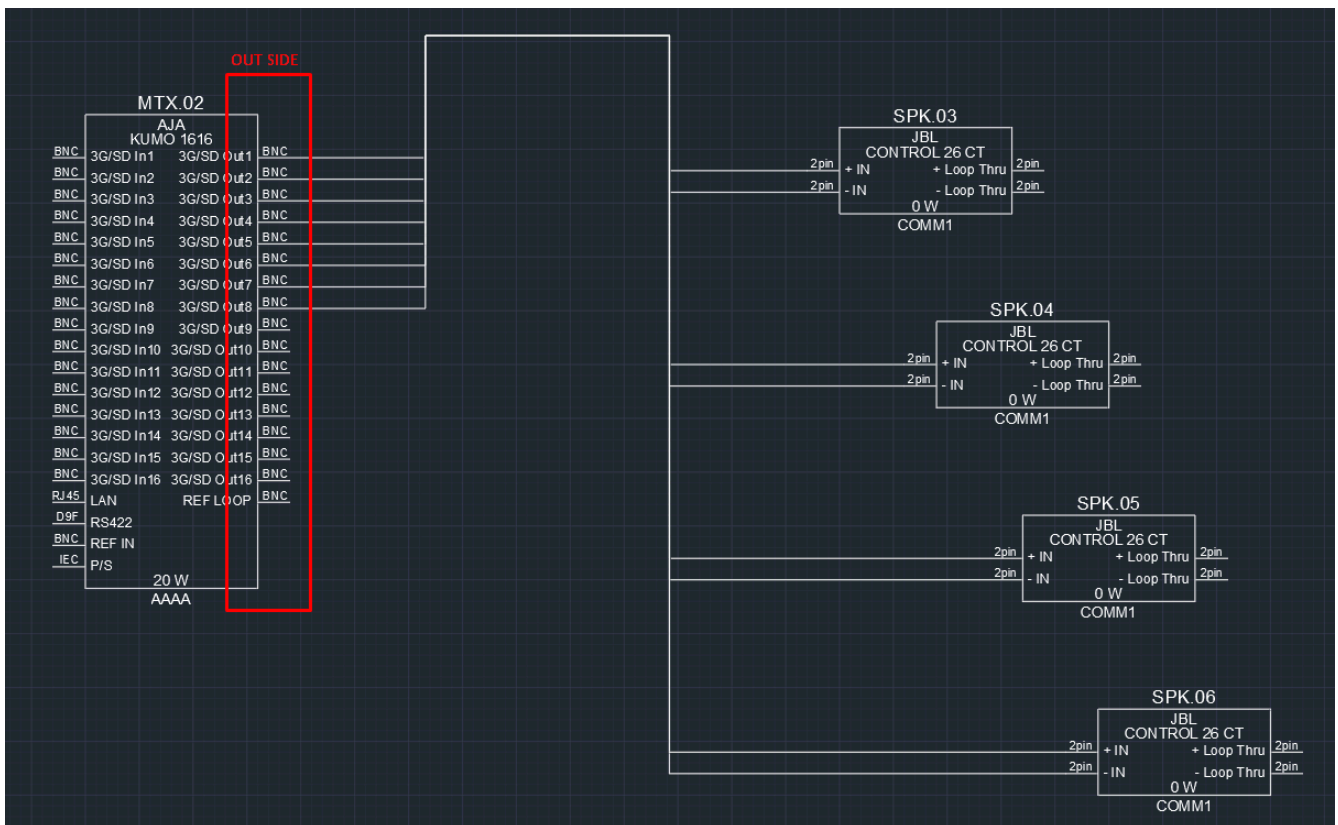
Mark cables

Choose reference block's side

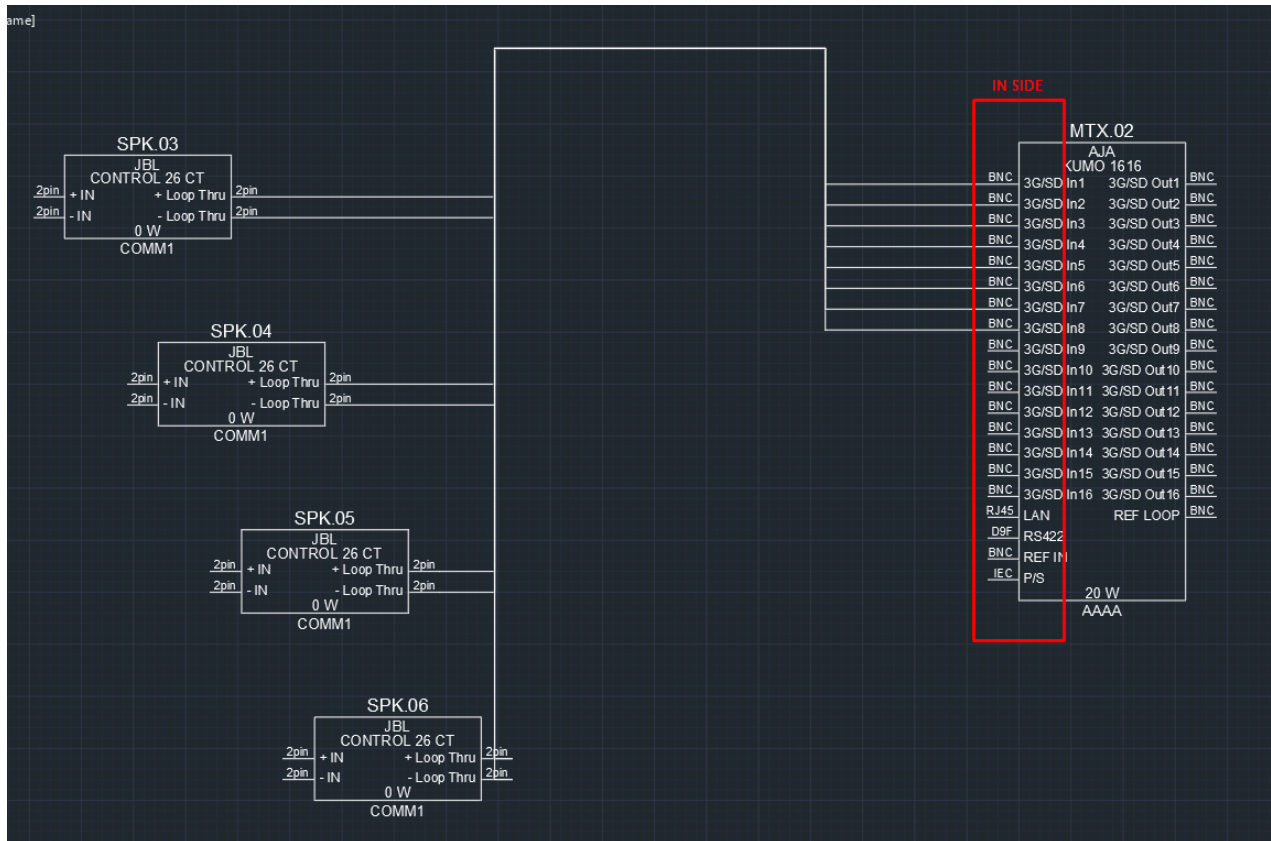
☒ IN    ☐ OUT

Choose Reference block

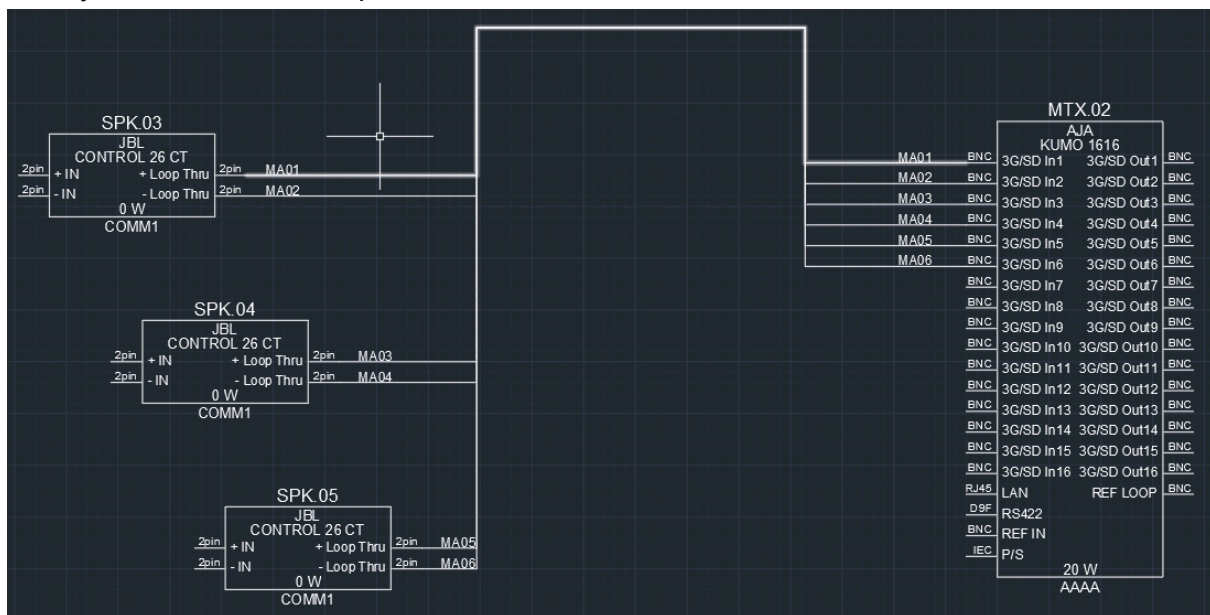
- The process of creating cable labels:
- Fill prefix, start number, and suffix
- Choose reference block's side
- The idea of reference blocks is next:
- You have to choose OUT and select the reference block when cables are connected to the devices' output side.



- You have to choose IN and select the reference block when cables are connected to the devices' input side.

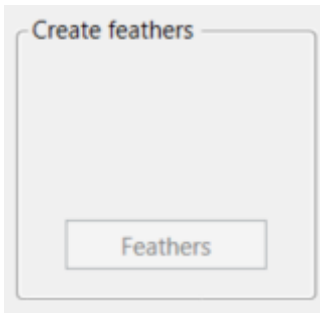


3. Click enter
4. After selecting the reference block select all the cables (should be polylines) and click Enter. Here you can see an example of a result

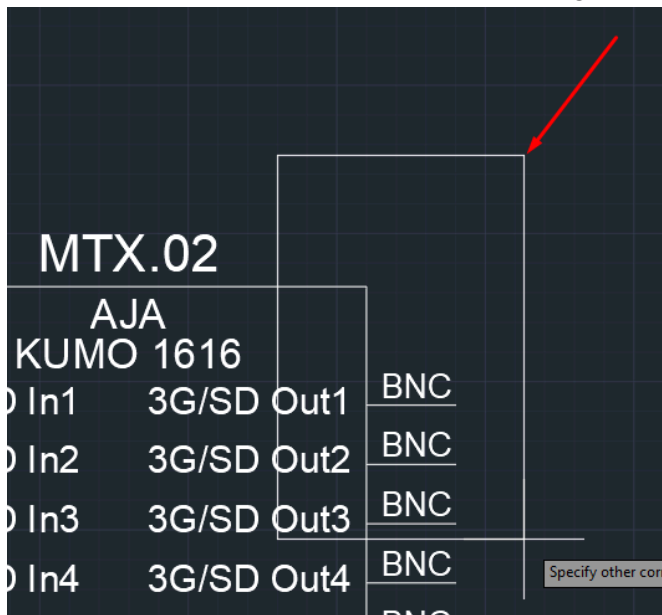


You can find all the meta-information about this cable labels here: [Schemes Manager](#)

### 3 Feathers



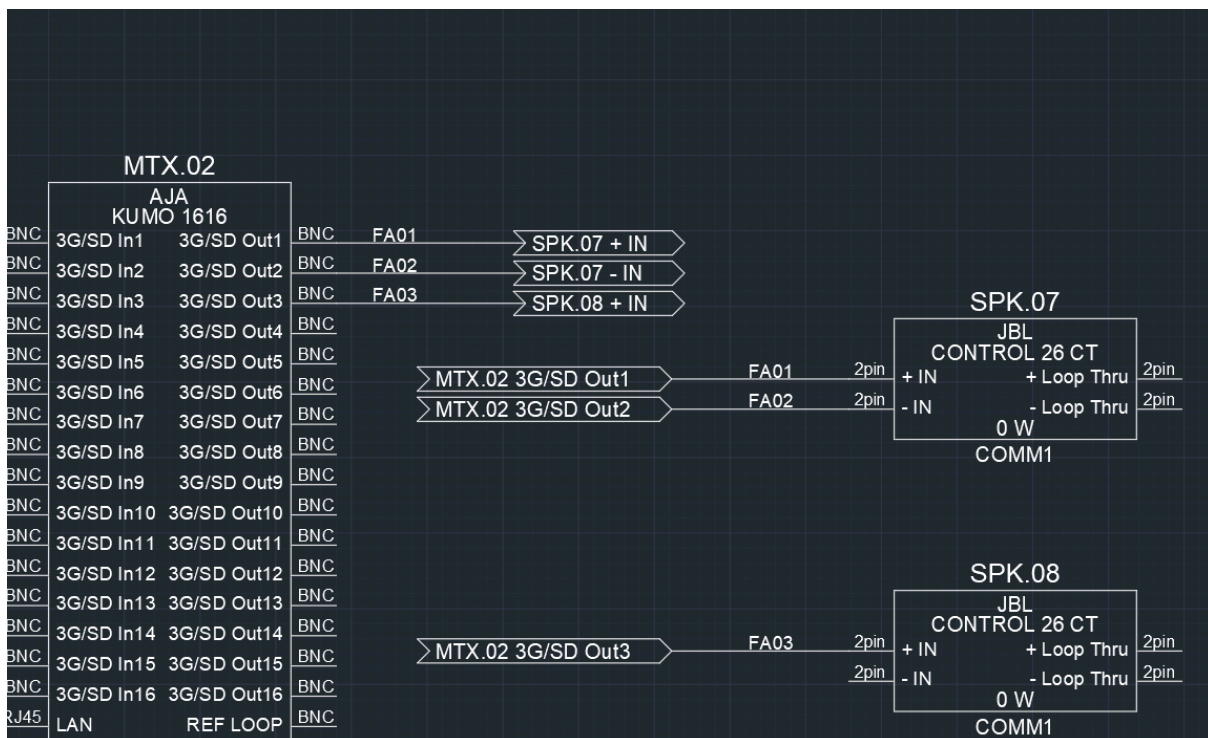
1. The process of creating feathers:
2. Fill prefix, start number, and suffix (if needed)
3. Select OUTPUTS connectors with rectangle and click Enter:



Here we select Out1, Out2, Out3 connectors with the rectangle

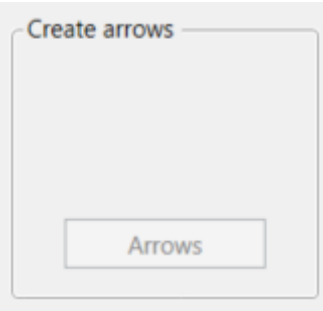
4. Do the same with INPUTS connectors

You will have the result:

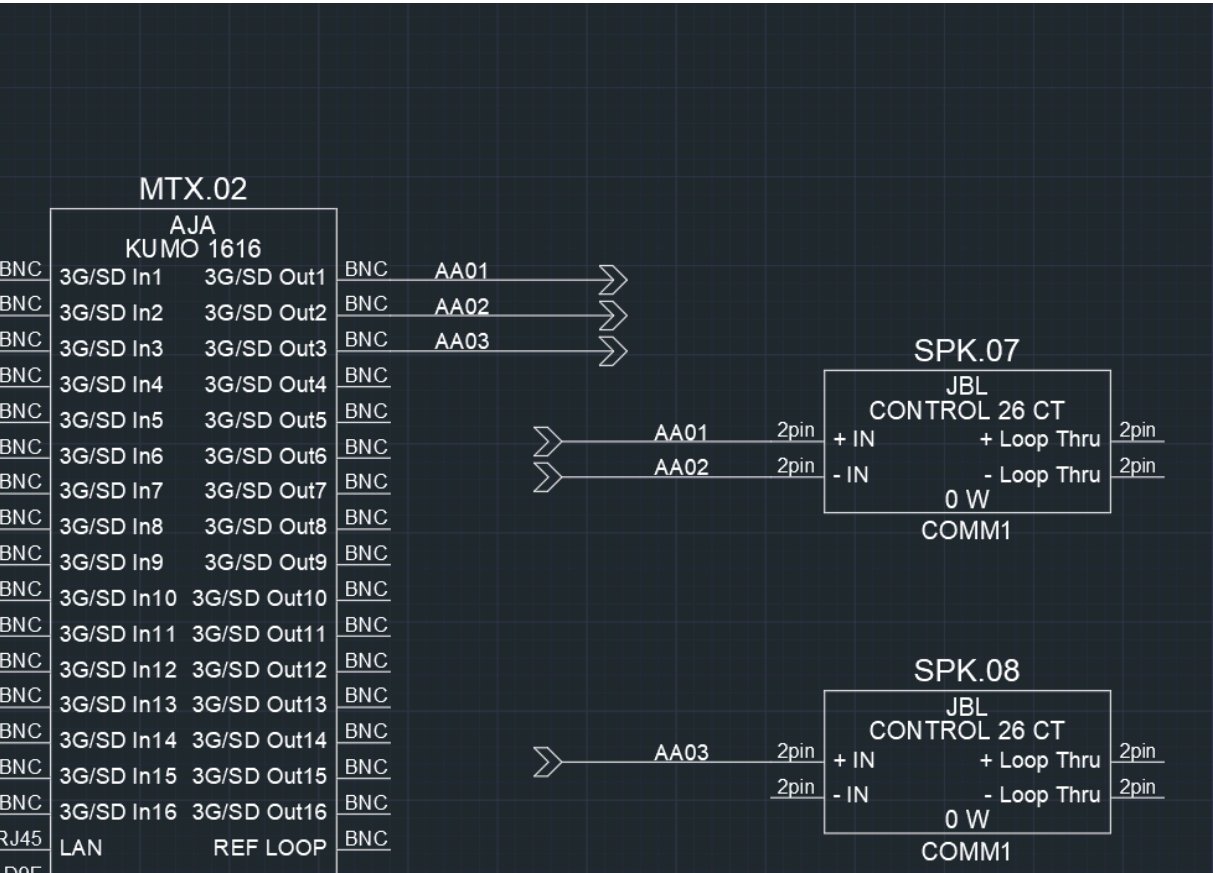


You can find all the meta-information about this cable labels here: [Schemes Manager](#)

4 Arrows

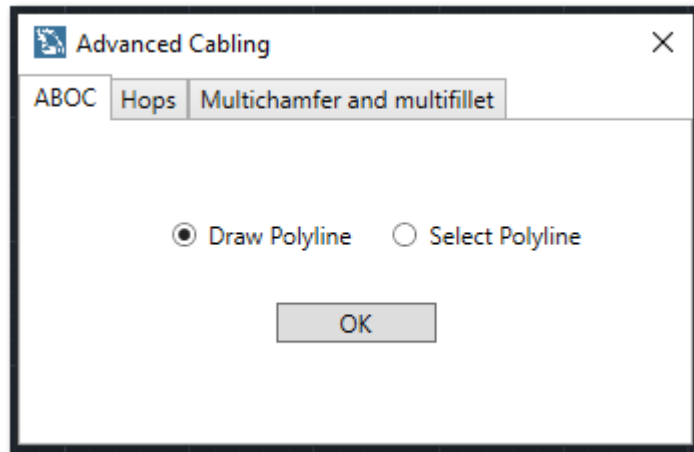


Please, do the same steps as in Feathers.  
You will have next result:



You can find all the meta-information about this cable labels here: [Schemes Manager](#)

## 2.13. ABOC



- **Command name Macro:** ABOC

- **Ribbon Icon:** 

- Please, see this link to understand how it works. [Youtube](#)

- See also correct [connections](#)

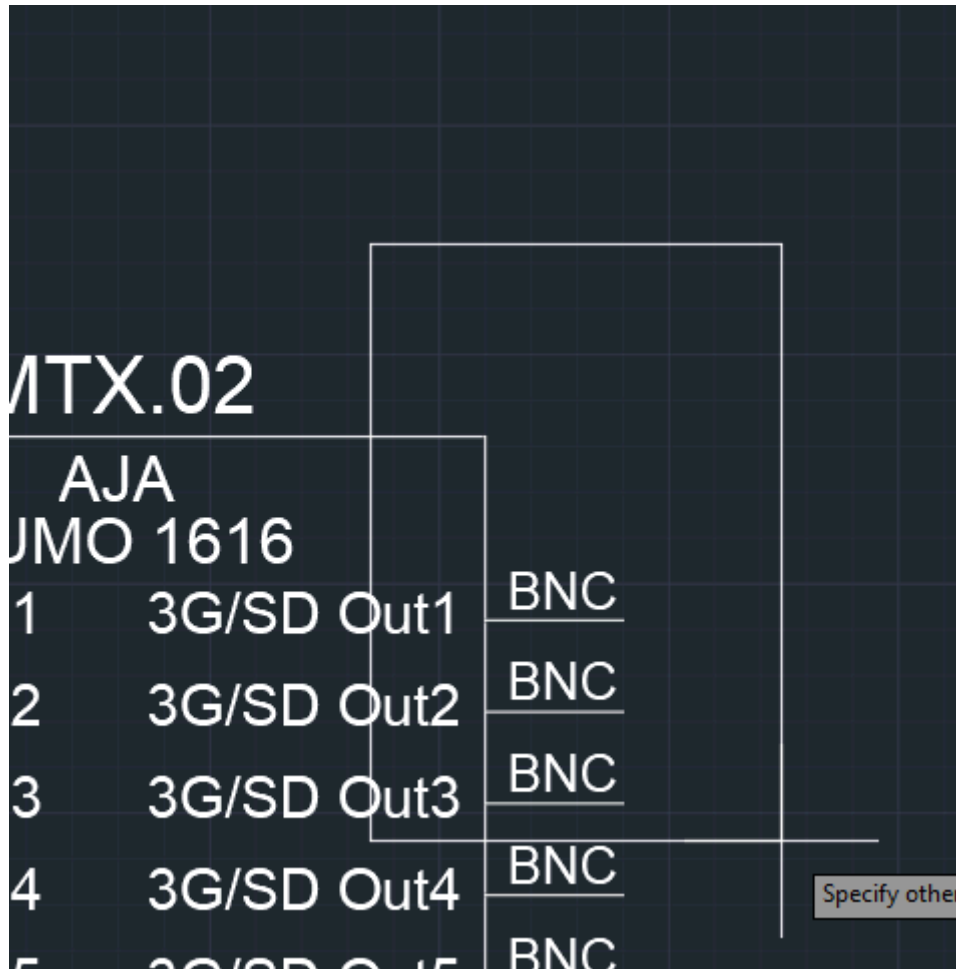


## 1 Draw a new polyline or a select existing one

☒ Draw Polyline   ☐ Select Polyline

Choose whether you want to draw a new polyline as the main or select the existing one.  
The process:

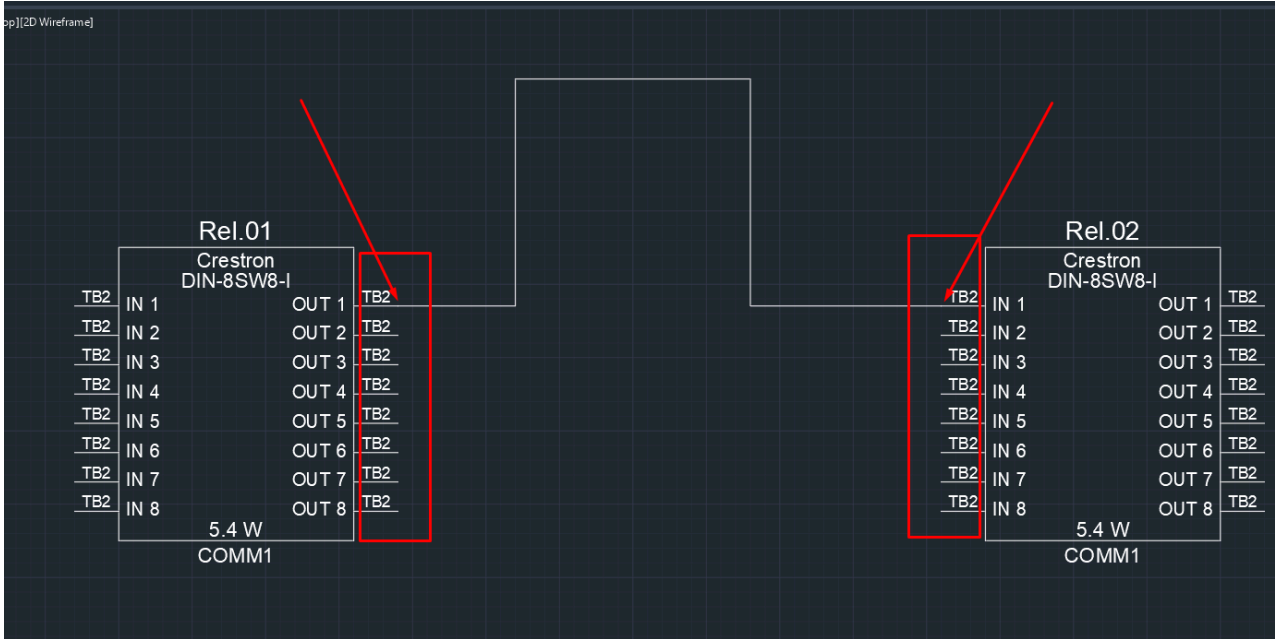
1. Choose between Draw and Select
2. Select connectors for the first side using a rectangle



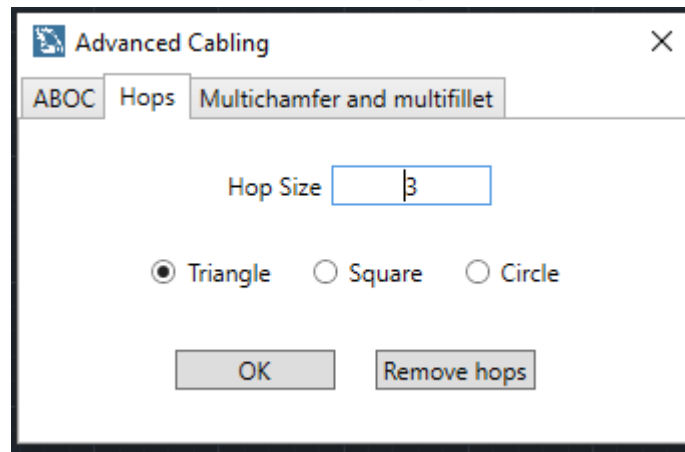
Here we selected Out1, Out2 and Out3

3. Do the same for another side
4. Draw polyline or select existing one
5. Work is done.

**Note:** Please, when you select the main polyline, select also the connectors of it.



### 2.13.1. Hops

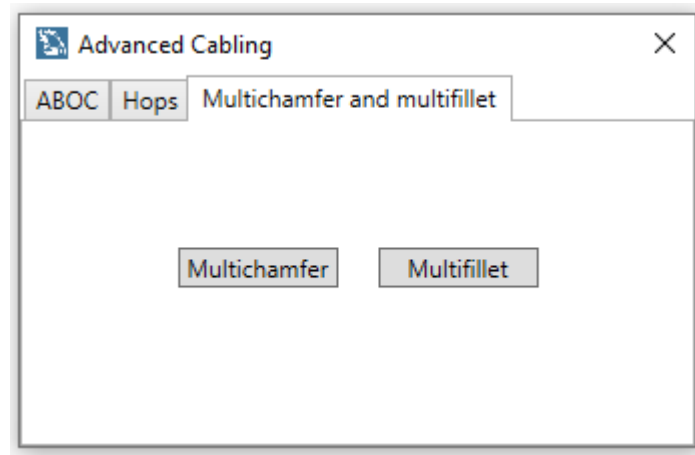


Using this functionality you may create "hops" when polylines hop over another polyline.

You may choose the size and type of hope. We suggest you to remove hops only with the "Remove hops" button here.

See [here](#) to understand how it works.

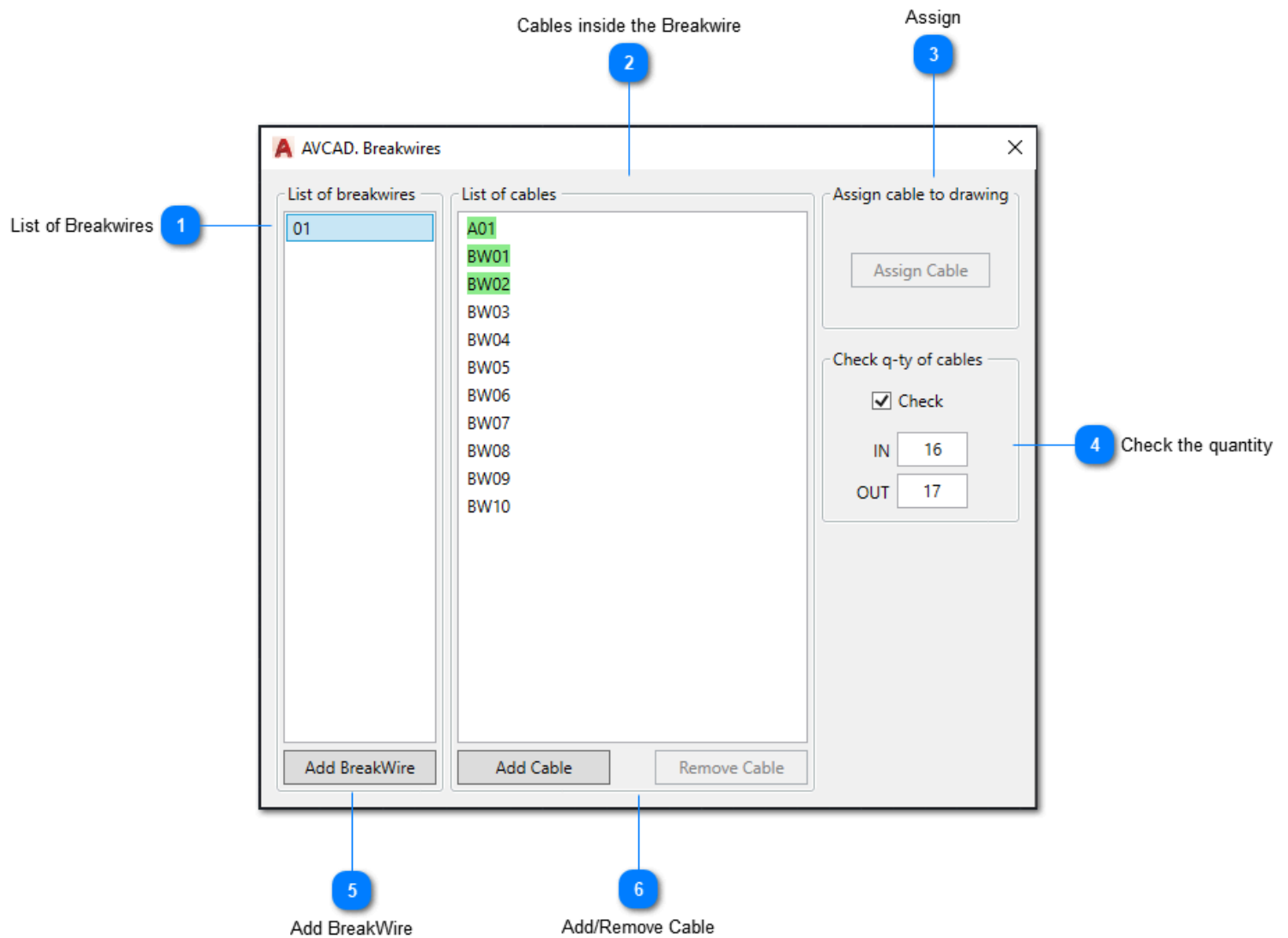
### 2.13.2. Multichamfer and multifillet



Using this functionality you may create multichamfer and multifillet.

See [here](#) to understand how it works.

## 2.14. BreakWires



- **Command name Macro:** BreakWires

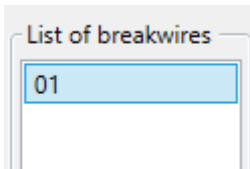
- **Ribbon Icon**



- Please, see this link to understand how it works. [Youtube](#)

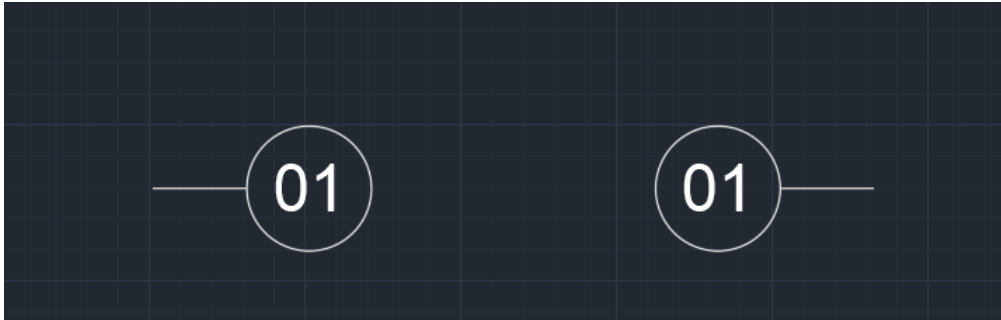
1

## List of Breakwires



List of added BreakWires.

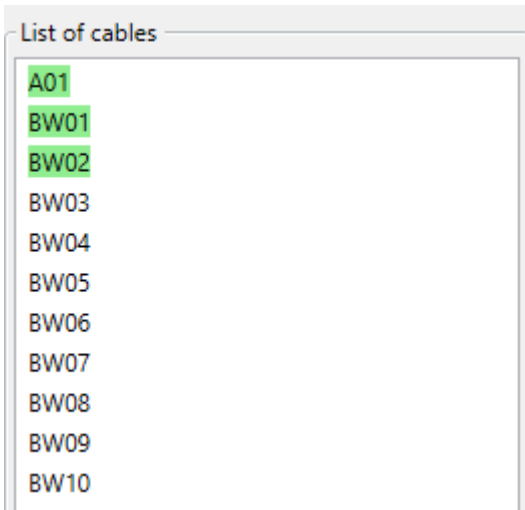
BreakWire is a Many-to-One and One-To-Many connection to send the cables from one list to another. They look like this:



You can connect cables to them. [ABOC](#) is supported.

2

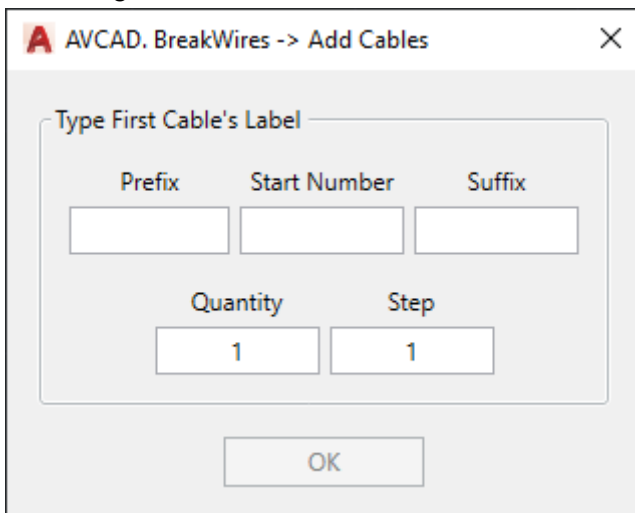
## Cables inside the Breakwire



List of cables

- A01
- BW01
- BW02
- BW03
- BW04
- BW05
- BW06
- BW07
- BW08
- BW09
- BW10

List of cables that are inside the BreakWire.  
To create the list, click on Add Cable Button:  
You will get this form:



AVCAD. BreakWires -> Add Cables

Type First Cable's Label

Prefix	Start Number	Suffix
<input type="text"/>	<input type="text"/>	<input type="text"/>

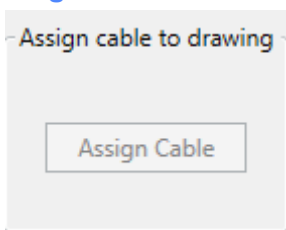
Quantity	Step
<input type="text" value="1"/>	<input type="text" value="1"/>

OK

Create some information here. It will be held in the BreakWire.

3

## Assign

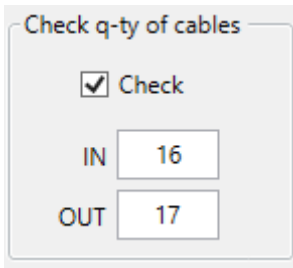


Assign cable to drawing

Assign Cable

Assign selected cable to two cables (from sides of BreakWires). If you have both cables assigned it will be highlighted with green color.

#### 4 Check the quantity



Check q-ty of cables

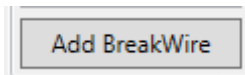
☒ Check

IN 16

OUT 17

If checked, it will check for the number of polylines on both sides of BreakWires

#### 5 Add BreakWire



Add BreakWire

Add BreakWire to the drawing

#### 6 Add/Remove Cable



Add Cable Remove Cable

Add or remove the cable from the list of cables in selected BreakWire.



## 2.15. Schemes Manager

### Equipment List

The screenshot shows the 'Schemes Manager' window with the 'Equipment List' tab selected. The window contains a table of equipment data and a 'Manage Equipment List' panel. Numbered callouts point to specific features:

- 1** Search and filter: Points to the 'Choose filter' section.
- 2** Filters: Points to the filter headers (Type, Number, Sysname, Manufacturer, Model, Description, Quantity, Power, Location, IP).
- 3** Devices Datagrid: Points to the main table of equipment data.
- 4** Scan again: Points to the 'Scan again' button in the 'Manage Equipment List' panel.
- 5** Export to excel: Points to the 'Export to Excel' button in the 'Manage Equipment List' panel.
- 6** Checkboxes: Points to the 'View Sum' and 'Autofocus' checkboxes in the 'Manage Equipment List' panel.
- 7** Context menu: Points to the context menu that appears when right-clicking on a row in the datagrid.

Type	Number	Sysname	Manufacturer	Model	Description	Quantity	Power	Location	IP
Device	0001.0	MTX.01	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	80-FAKERACK_RACK_01, Unit 15, FRONT	
Device	0002.0	MTX.02	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	AAAA	
Device	0003.0	MTX.03	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	Rack.01, Unit 10, FRONT	
Device	0004.0	S1	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	Rack.01, Unit 10, FRONT	
Device	0005.0	S2	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	Rack.01, Unit 10, FRONT	
Device	0006.0	S3	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	Rack.01, Unit 11, FRONT	
Device	0007.0	S4	AJA	KUMO 1616	1616 Compact 3G/HQ/SD-SDI Router	1	20 W	Rack.01, Unit 11, FRONT	
Device	0008.0	SPK.01	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Device	0009.0	SPK.02	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Device	0010.0	SPK.03	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Device	0011.0	SPK.04	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Device	0012.0	SPK.05	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Device	0013.0	SPK.09	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Device	0014.0	SPK.10	JBL	CONTROL 26 CT	In-ceiling loudspeaker	1	0 W	COMM1	
Panel Connector	0015.0			N		2			
Panel Connector	0016.0			N1		4			
Panel Connector	0017.0			N2		3			
Patch Panel	0018.0	PP.01		Patch Panel, Size is 48, D		1		Rack.01, Unit 14, REAR	
Patch Panel	0019.0	PP.02		Patch Panel, Size is 24, D		1		Rack.01, Unit 12, REAR	
Rack	0020.0	80-FAKERACK_RACK_01		Rack, Height is 26 units, I		1			
Termination Panel	0022.0	TP.01		Term Panel with connect		1		Rack.01, Unit 13, REAR	
Cables	0023.0			HDMI, 2m		17			
Cable Connectors	0024.0			RJ45		34			

- Command name Macro: SCHEMEMANAGER



- Ribbon icon:

- The central hub for all the information on the drawing. A tool for editing and reports.

#### 1 Search and filter

The 'Choose filter' section contains a text input field with the placeholder text 'Enter location...' and a 'Clear filters' button.

You can search through your drawing using filters and textbox for the location.

#### 2 Filters

The filter headers are 'Type', 'Number', and 'Sysname', each with a dropdown arrow icon.

You can filter your list with one or several filters.

3

### Devices Datagrid

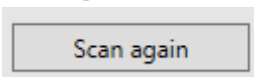
Device	0001.0	MTX.01	AJA
Device	0002.0	MTX.02	AJA
Device	0003.0	MTX.03	AJA
Device	0004.0	S1	AJA
Device	0005.0	S2	AJA
Device	0006.0	S3	AJA
Device	0007.0	S4	AJA
Device	0008.0	SPK.01	JBL
Device	0009.0	SPK.02	JBL
Device	0010.0	SPK.03	JBL

We strongly recommend changing all the fields only here because it will check all the versions of the blocks and cable labels etc.

Sysname, Location, IP are write-enabled

4

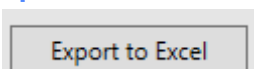
### Scan again



If you change something on the drawing when Schemes Manager is opened - click on this button to get new information.

5

### Export to excel



Export a full list (as it is filtered) as excel

6

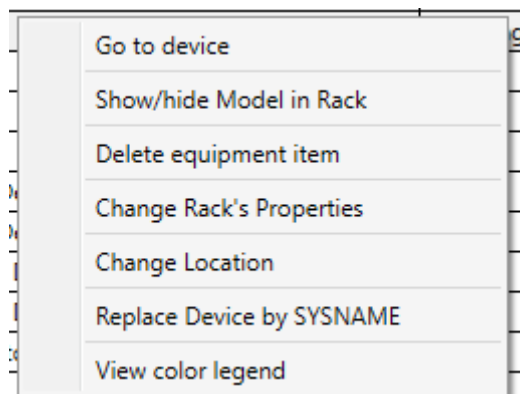
### CheckBoxes

☐ View Sum  
☐ Autofocus

View Sum will change the table and will show you the sum of similar models

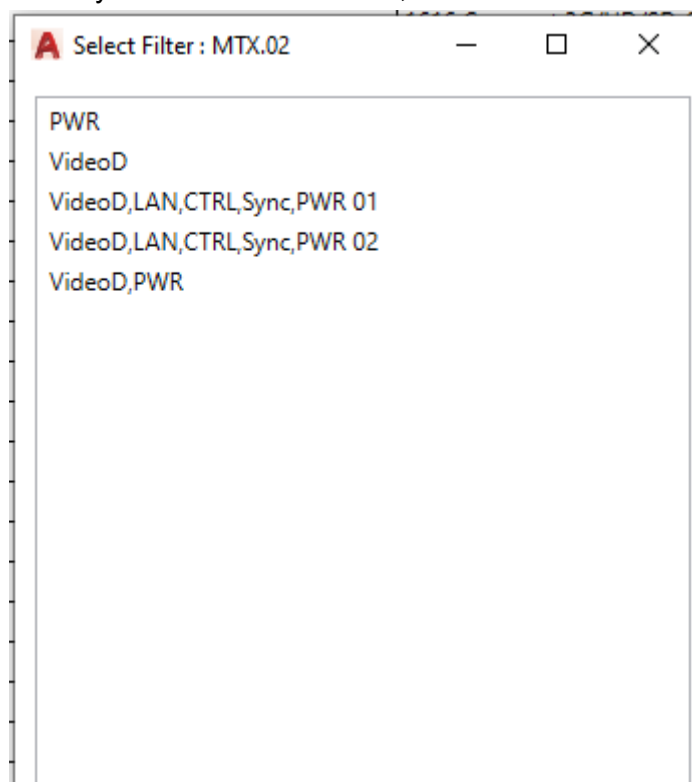
If checked, Autofocus will highlight all the versions of the selected device in the list

7 Context menu.



1. Go to device

This functionality shows you the window with all the filters that exist in the drawing for the selected device. When you click on the version, it will be shown and highlighted.



2. Show/Hide Model in Rack

This functionality adds Model information to the Rack Layout.

12									
11				MTX.02					
				AJA KUMO 1616					
10				MTX.03					
9									

Here you can see the model on unit 11 and do not see the model on unit 10.

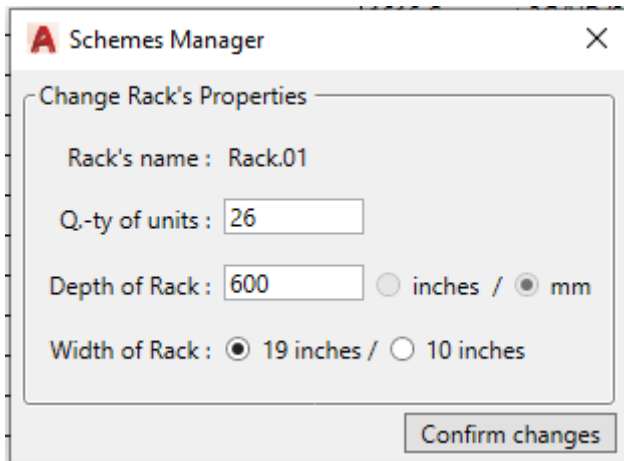
You can use it with [Move Attributes](#)

3. Delete Equipment item

Delete all the versions of the selected devices

#### 4. Change Rack's properties

**Works only for racks.** It will redraw the rack on the same position  
Just fill the form and click on Confirm Changes.

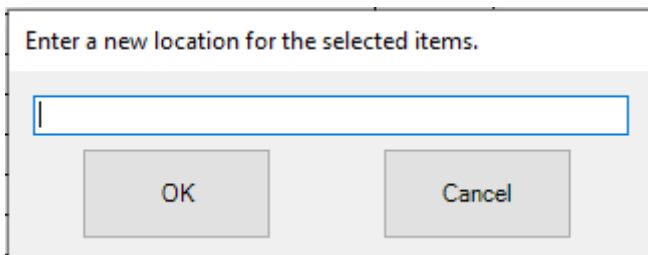


The screenshot shows a dialog box titled "Schemes Manager" with a close button (X) in the top right corner. Inside the dialog, there is a section titled "Change Rack's Properties". This section contains four input fields: "Rack's name" with the value "Rack.01", "Q.-ty of units" with the value "26", "Depth of Rack" with the value "600" and radio buttons for "inches" and "mm" (with "mm" selected), and "Width of Rack" with radio buttons for "19 inches" and "10 inches" (with "19 inches" selected). At the bottom right of the dialog is a button labeled "Confirm changes".

[Youtube](#)

#### 5. Change Location

This functionality helps you to change the location for multiple selected items  
Just select items, choose Change Location and fill the form



The screenshot shows a dialog box with the title "Enter a new location for the selected items." Below the title is a single-line text input field. At the bottom of the dialog are two buttons: "OK" and "Cancel".

#### 6. Replace device with SYSNAME

It will change the model and redraw all the versions for the selected blocks  
Select the devices, call the command and follow the [AADB](#) functionality  
[Youtube](#)

#### 7. Color Legend

We have several color codes. Please, see here what they mean.

## 2.15.1. Cable List

Manage Options

Filters and datagrid

Context Menu

### 1 Manage Options

Manage Cable List

Quick Scan Full Scan Find incorrect Export to Excel ☒ Autofocus Clear filters

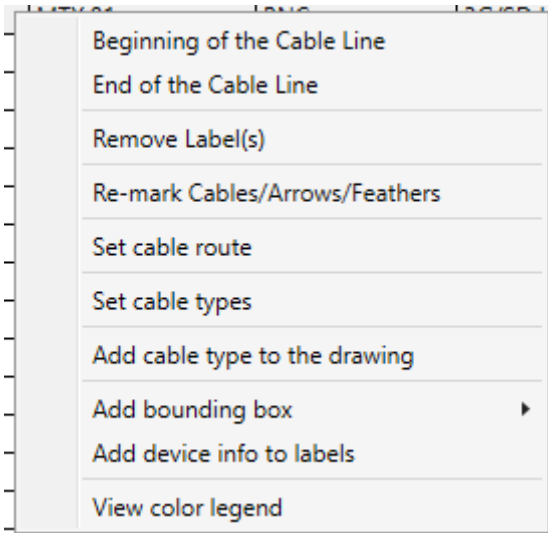
Quick Scan is the update the Datagrid after you made some actions when Schemes Manager is opened  
 Full Scan does the QuickScan tries to fix errors and write new meta information  
 Find Incorrect highlights cables where Cable Label and meta information differ  
 Export to Excel - exports filtered list to excel  
 If checked, Autofocus will highlight all the versions of the selected cable in the list

### 2 Filters and datagrid

Cable Num	Sysname	Connector	Port	Location	Model
A01	MTX.03	BNC	3G/SD In1	Rack.01, Unit 10, FRONT	AJA KUMO 1616
A02	MTX.03	BNC	3G/SD In2	Rack.01, Unit 10, FRONT	AJA KUMO 1616
A03	MTX.03	BNC	3G/SD In3	Rack.01, Unit 10, FRONT	AJA KUMO 1616
BW01	MTX.01	BNC	3G/SD Out1	80:FAKERACK_RACK_01, Un	AJA KUMO 1616
BW02	MTX.01	BNC	3G/SD Out2	80:FAKERACK_RACK_01, Un	AJA KUMO 1616
F01	PP.02	RJ45	1B	Rack.01, Unit 12, REAR	Panel

Datagrid with all the cables and information. Please, change all the information only here,

## Context Menu



### 1. Beginning of the Cable Line

Go to the beginning of the cable. It is comfortable to work with Arrows and Feathers.

### 2. End of the Cable Line

Go to the end of the cable. It is comfortable to work with Arrows and Feathers.

### 3. Remove Label(s)

Remove selected cable labels/arrows/feathers

### 4. Re-mark Cables/Arrows/Feathers

You can remark the cables using this functionality

[Youtube](#)

### 5. Set cable route

You can add information about cable routes to calculate the lengths of cables. Cable routes are loaded with DWG with [AVCAD-Floor-Plans](#) information

### 6. Set cable types

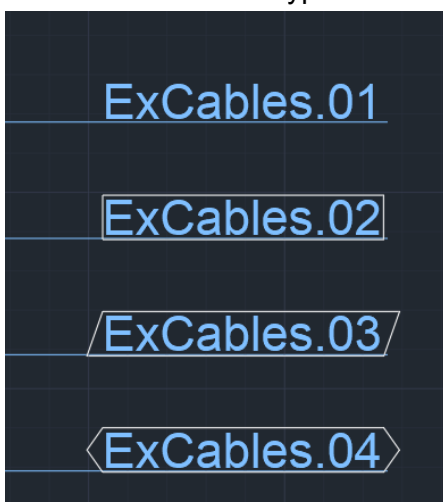
You can add any cable type to selected cables

### 7. Add cable type to the drawing

Place the text near the cable line

### 8. Add bounding box

You can add several types of bounding boxes. You can use it with Cables/Arrows/Feathers.



[Youtube](#)

### 9. Add device info to labels

Shows the opposite device system name

Out1	BNC	M01			
Out2	BNC	M02			
Out3	BNC	M03			
Out4	BNC	M04	MTX.01		
Out5	BNC	M05	MTX.01		
Out6	BNC	M06			
Out7	BNC	M07	MTX.01		
Out8	BNC	M08			

#### 10. View color legend

Just color codes of errors.

## 2.15.2. Assignments

Schemes Manager

Equipment List | Cable List | **Assignments** | Notes | Floor Plans | Conduits | Symbols | Project Attributes | Parameters

Manage Assignments

Scan again ☒ Autofocus

Family	Description	Quantity	ID
Cables	HDMI, 2m	1	(1816536867456)
Cable Connectors	RJ45	2	(1816536867456)
Cables	HDMI, 2m	1	(1816536867472)
Cable Connectors	RJ45	2	(1816536867472)
Cables	HDMI, 2m	1	(1816536867488)
Cable Connectors	RJ45	2	(1816536867488)
Cables	HDMI, 2m	1	(1816536867504)
Cable Connectors	RJ45	2	(1816536867504)
Cables	HDMI, 2m	1	(1816536867520)
Cable Connectors	RJ45	2	(1816536867520)
Cables	HDMI, 2m	1	(1816536867536)
Cable Connectors	RJ45	2	(1816536867536)
Cables	HDMI, 2m	1	(1816536867552)
Cable Connectors	RJ45	2	(1816536867552)
Cables	HDMI, 2m	1	(1816536867568)
Cable Connectors	RJ45	2	(1816536867568)
Cables	HDMI, 2m	1	(1816536867584)
Cable Connectors	RJ45	2	(1816536867584)
Cables	HDMI, 2m	1	(1816536867600)
Cable Connectors	RJ45	2	(1816536867600)
Cables	HDMI, 2m	1	(1816536867616)
Cable Connectors	RJ45	2	(1816536867616)
Cables	HDMI, 2m	1	(1816536867632)
Cable Connectors	RJ45	2	(1816536867632)
Cables	HDMI, 2m	1	(1816536867648)
Cable Connectors	RJ45	2	(1816536867648)
Cables	HDMI, 2m	1	(1816536867664)
Cable Connectors	RJ45	2	(1816536867664)
Cables	HDMI, 2m	1	(1816536867680)
Cable Connectors	RJ45	2	(1816536867680)

Add text to the drawing  
Delete Assignment

These are the items that were created with [Equipment Assignment](#)

When you click on it it will be highlighted on the drawing.

Using the context menu you can add text to the drawing and delete the assignments.

The Sum of the assignments will be exported in the [Equipment List excel](#)



### 2.15.3. Notes

Schemes Manager

Equipment ListCable ListAssignmentsNotesFloor PlansConduitsSymbolsProject AttributesParameters

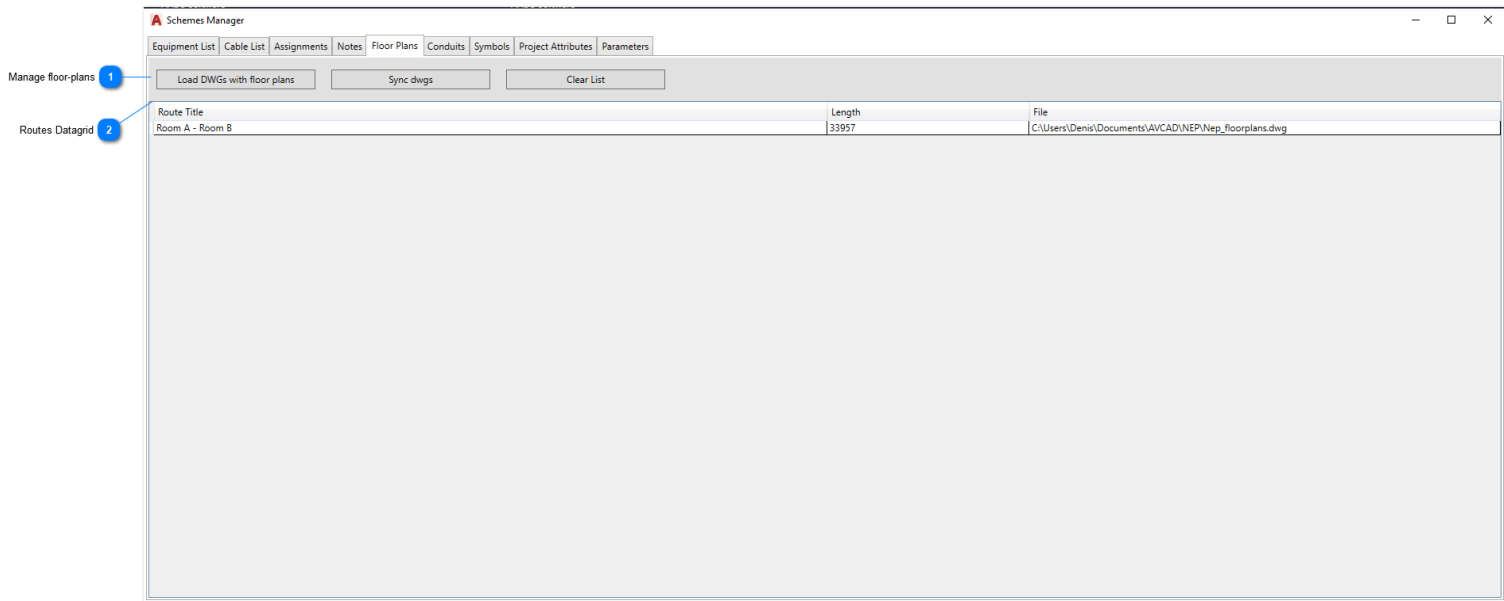
Sysname	Manufacturer	Model	Note
MTXL01	AJA	KUMO 1616	Some notes that will be exported in excel
MTXL02	AJA	KUMO 1616	
MTXL03	AJA	KUMO 1616	
S1	AJA	KUMO 1616	
S2	AJA	KUMO 1616	
S3	AJA	KUMO 1616	
S4	AJA	KUMO 1616	
SPK01	JBL	CONTROL 26 CT	
SPK02	JBL	CONTROL 26 CT	
SPK03	JBL	CONTROL 26 CT	
SPK04	JBL	CONTROL 26 CT	
SPK05	JBL	CONTROL 26 CT	
SPK06	JBL	CONTROL 26 CT	
SPK07	JBL	CONTROL 26 CT	
SPK08	JBL	CONTROL 26 CT	
SPK09	JBL	CONTROL 26 CT	
SPK10	JBL	CONTROL 26 CT	
PP01		Patch Panel, Size is 48, Depth is 80, Connectors: BNC	
PP02		Patch Panel, Size is 24, Depth is 80, Connectors: RJ45	
80FAKERACK_RACK_01		Rack, Height is 44 units, Depth is 32"	
Rack01		Rack, Height is 26 units, Depth is 600	
TP01		Term Panel with connectors:N,N,N1,N1,N1,N2,N2,N2, depth is	

Add note to the drawing

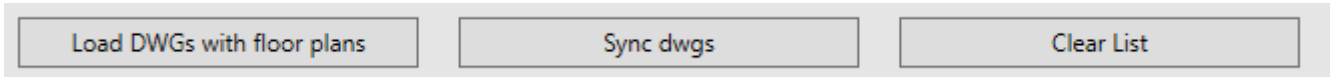
This functionality is for adding some notes to some devices. You will have the functionality to add these notes to the drawing.

These notes will be exported with the [Equipment List excel](#).

## 2.15.4. Floor Plans



### 1 Manage floor-plans



**Load DWGs with floor plans** - select DWGs and it will show you the information from them. This button loads data for three tabs of Schemes Manager:

[Floor plans](#)

[Conduits](#)

[Symbols](#)

This information is added to DWG using this plugin: [AVCAD-Floor-Plans](#)

These DWGs are saved in AVCAD so after loading Schemes Manager they will be there again. Please, check that correct DWGs are loaded.

**Sync DWGs** - if you changed something in floor plans DWG please save them and click on this button. You will have the information updated.

**Clear List** - clear list of DWGs

See these videos about floorplans (Youtube):

1. [Routes](#)

2. [Symbols](#)

3. [Conduits](#)

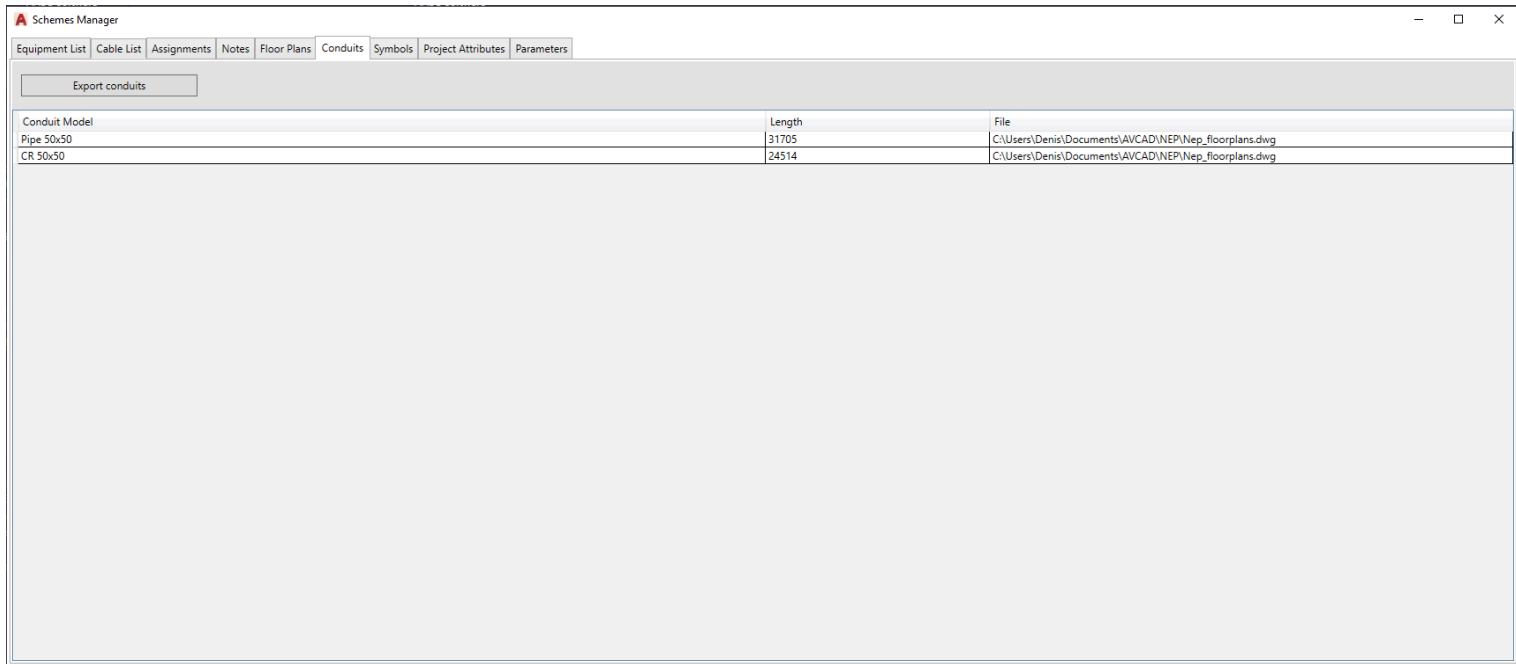
### 2 Routes Datagrid

Route Title
Room A - Room B

List of routes. You can assign them to cables here:

[Cable List](#)

## 2.15.5. Conduits



Conduit Model	Length	File
Pipe 50x50	31705	C:\Users\Denis\Documents\AVCAD\NEP\Nep_floorplans.dwg
CR 50x50	24514	C:\Users\Denis\Documents\AVCAD\NEP\Nep_floorplans.dwg

This information is added to DWG using this plugin: [AVCAD-Floor-Plans](#)

These DWGs are saved in AVCAD, so after loading Schemes Manager, they will be there again. Please, check that correct DWGs are loaded.

You can export the list of Conduits in files.

See these videos about floorplans (Youtube):

1. [Conduits](#)

### 2.15.6. Symbols

Attention **1**

Normal 2

## 1

AJA KUMO 1616	Rack01, Unit 10, FRONT	S2	JBL CONTROL 47 CT
AJA KUMO 1616	Rack01, Unit 11, FRONT	S3	JBL CONTROL 26 CT

If you see this color, it means that you have different models for one system name on floorplans and schematics drawings.

## 2

	SPK.01	JBL CONTROL 26 CT
	SPK.02	JBL CONTROL 26 CT
	SPK.03	JBL CONTROL 26 CT

Devices found and have the same model.

This information is added to DWG using this plugin: [AVCAD-Floor-Plans](#)

These DWGs are saved in AVCAD, so after loading Schemes Manager, they will be there again. Please, check that correct DWGs are loaded.

Here you see a list of devices on your schematic drawings and if they are found on the floor plans you see the file where they were found.

See these videos about floorplans (Youtube):

- ## 1. Symbols

## 2.15.7. Project Attributes

**Schemes Manager**

Equipment List | Cable List | Assignments | Notes | Floor Plans | Conduits | Symbols | **Project Attributes** | Parameters

**Save as Excel** You can change Project Attributes here. The project attributes are used for a specific device. Example: Serial Number, VLAN, Subnet Mask

Sysname	Manufacturer	Model
MTX.01	AJA	KUMO 1616
MTX.02	AJA	KUMO 1616
MTX.03	AJA	KUMO 1616
S1	AJA	KUMO 1616
S2	AJA	KUMO 1616
S3	AJA	KUMO 1616
S4	AJA	KUMO 1616
SPK.01	JBL	CONTROL 26 CT
SPK.02	JBL	CONTROL 26 CT
SPK.03	JBL	CONTROL 26 CT
SPK.04	JBL	CONTROL 26 CT
SPK.05	JBL	CONTROL 26 CT
SPK.06	JBL	CONTROL 26 CT
SPK.07	JBL	CONTROL 26 CT
SPK.08	JBL	CONTROL 26 CT
SPK.09	JBL	CONTROL 26 CT
SPK.10	JBL	CONTROL 26 CT
PP.01		Patch Panel, Size is 48, Depth is 80, Connectors: BNC
PP.02		Patch Panel, Size is 24, Depth is 80, Connectors: RJ45
80FAKERACK_RACK_01		Rack, Height is 44 units, Depth is 32"
Rack.01		Rack, Height is 26 units, Depth is 600
TP.01		Term Panel with connectors:N,N1,N1,N1,N1,N2,N2,N2,, depth is 80

**MTX.01**

Serial Number: A

Subnet Mask: 255.255.255.0

VLAN: 192.168.0.1

Password: dhjnytyjub

Test: 1

**Save** **Show Parameters**

You can add any Project Attribute that belongs to the unique device with a unique System Name (For example, for MTX.01).

For example, Serial Number, Password, VLAN, etc.

**You have to add Project Attributes ONLY for a saved drawing.** We suggest you click on the Save Drawing button and then work with attributes.

Another way it can be placed in the %TEMP% folder.

Please, see these two videos to understand how to work with attributes:

1. [Project Attributes](#)
2. [Project Attributes as tables on the drawing](#)

## 2.15.8. Parameters

**Schemes Manager**

Equipment List | Cable List | Assignments | Notes | Floor Plans | Conduits | Symbols | Project Attributes | **Parameters**

Parameters here are READ-ONLY. You can change them using AVCAD Database Manager. The parameters are used for all devices of a specific model. Example: Price, Heat, Weight

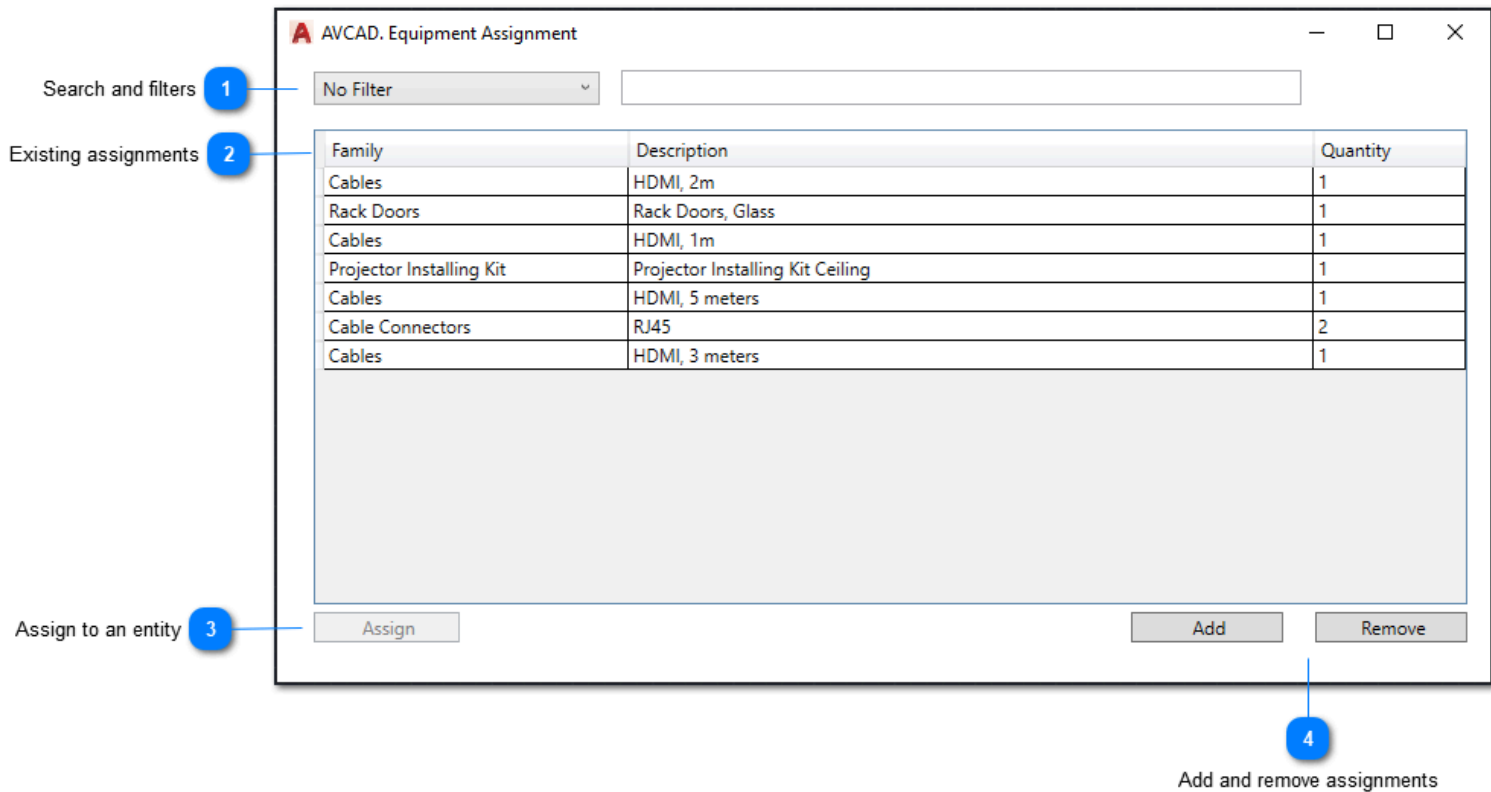
Sysname	Manufacturer	Model
MTX.01	AJA	KUMO 1616
MTX.02	AJA	KUMO 1616
MTX.03	AJA	KUMO 1616
S1	AJA	KUMO 1616
S2	AJA	KUMO 1616
S3	AJA	KUMO 1616
S4	AJA	KUMO 1616
SPK.01	JBL	CONTROL 26 CT
SPK.02	JBL	CONTROL 26 CT
SPK.03	JBL	CONTROL 26 CT
SPK.04	JBL	CONTROL 26 CT
SPK.05	JBL	CONTROL 26 CT
SPK.06	JBL	CONTROL 26 CT
SPK.07	JBL	CONTROL 26 CT
SPK.08	JBL	CONTROL 26 CT
SPK.09	JBL	CONTROL 26 CT
SPK.10	JBL	CONTROL 26 CT

### AJA KUMO 1616

Price, IN, USD	120
Price, OUT, USD	170
Weight	2
Heat	
Price, In, Euro	
Price, out, Euro	

That is just information about Parameters. The parameter is an attribute that belongs to a model. You can add any parameter using [AVCAD Database Manager](#)

## 2.16. Equipment Assignment



- **Command name Macro:** EQUIPMENTASSIGNMENT



- **Equipment assignment is any information you want to add and calculate on your drawing.**

### 1 Search and filters

No Filter

Here you can search and filter "Family" and "Description".

### 2 Existing assignments

Family	Description	Quantity
Cables	HDMI, 2m	1
Rack Doors	Rack Doors, Glass	1
Cables	HDMI, 1m	1
Projector Installing Kit	Projector Installing Kit Ceiling	1
Cables	HDMI, 5 meters	1
Cable Connectors	RJ45	2
Cables	HDMI, 3 meters	1

List of existing assignments

3

### Assign to an entity

A rectangular button with the text "Assign" in a light gray font.

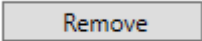
Here you can assign any assignments to any entity.

1. Select assignment
2. Click on the assign button
3. Select entities

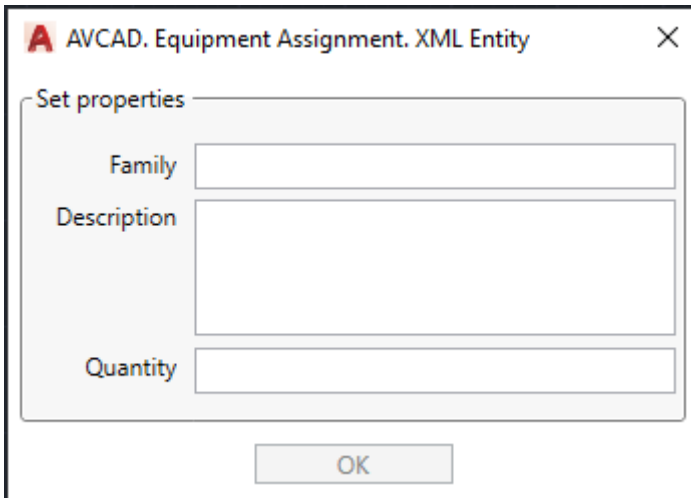
All the information will be [here](#) and [here](#)

4

### Add and remove assignments

A rectangular button with the text "Add" in a light gray font.A rectangular button with the text "Remove" in a light gray font.

You can add any information. Just click on the "Add" button and fill the form:

A dialog box titled "AVCAD. Equipment Assignment. XML Entity" with a close button (X) in the top right corner. The dialog contains a section titled "Set properties" with three input fields: "Family" (a single-line text box), "Description" (a multi-line text area), and "Quantity" (a single-line text box). An "OK" button is located at the bottom center of the dialog.

AVCAD. Equipment Assignment. XML Entity

Set properties

Family

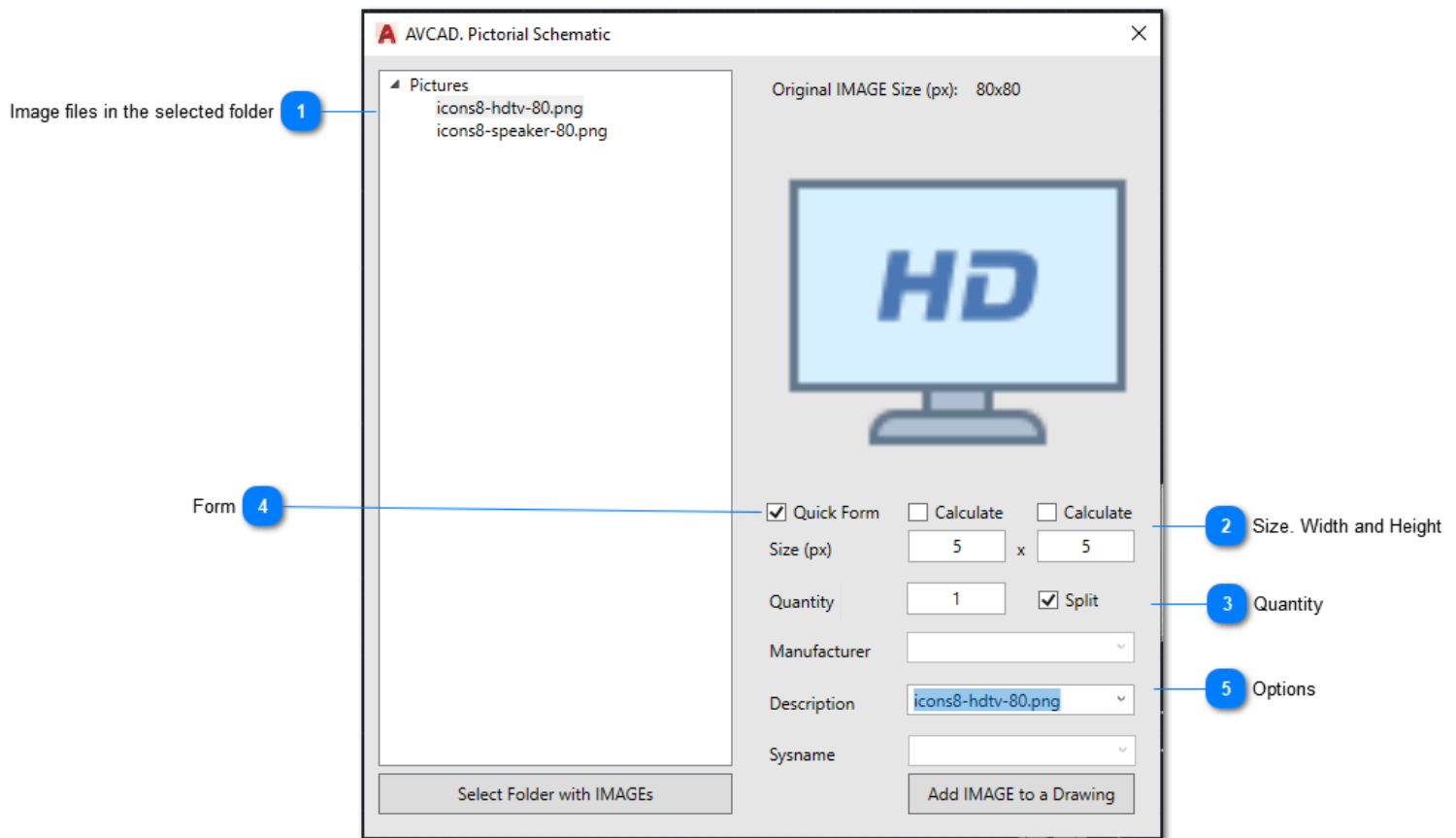
Description

Quantity

OK



## 2.17. AVCAD Pictorial



- **Command name Macro:** AVCAD-Pictorial

- **Ribbon Icon:** 

- Please, see this link to understand how it works. [Youtube](#)
- [How to add an image to block](#)
- [How to add an image to a rack elevation](#)

### 1 Image files in the selected folder

▲ Pictures  
 icons8-hdtv-80.png  
 icons8-speaker-80.png

List of images in the selected folder. It contains 5 levels of folders. You can always change the folder.

### 2 Size. Width and Height

☐ Calculate    ☐ Calculate  
 5 x 5

Size of the inserted image in pixels. Calculate checkbox will set the value of the textbox below proportional with value of another textbox

### 3 Quantity

 ☒ Split

If checked "Split" then it will draw items separately. See the difference below.



### 1 Quantity

AJA KUMO CP(3)

You can see the quantity when Split is set to False

### 4 Form

☒ Quick Form

Quick Form - only description needed to insert the image. That is for rack elevations and just images to make your drawings live

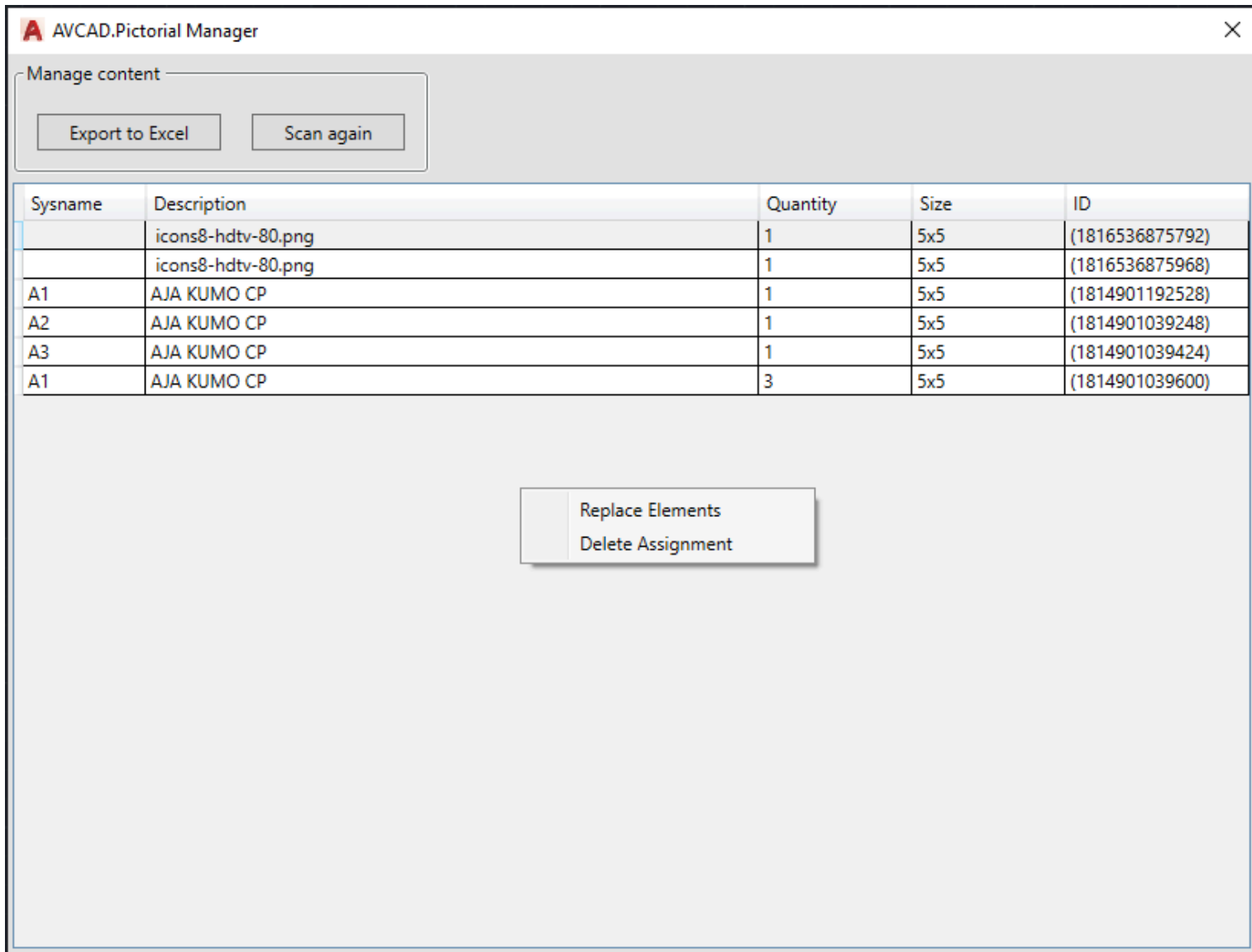
Full-Form - you will need to set the Manufacturer, Model and Sysname. You can think of it as Concept Drawings.

### 5 Options

Manufacturer	<input type="text"/>
Description	<input type="text" value="icons8-hdtv-80.png"/>
Sysname	<input type="text"/>

Options you have to fill in to insert the image.

## 2.18. AVCAD Pictorial Manager



That is a manager of images that were inserted into the drawing.

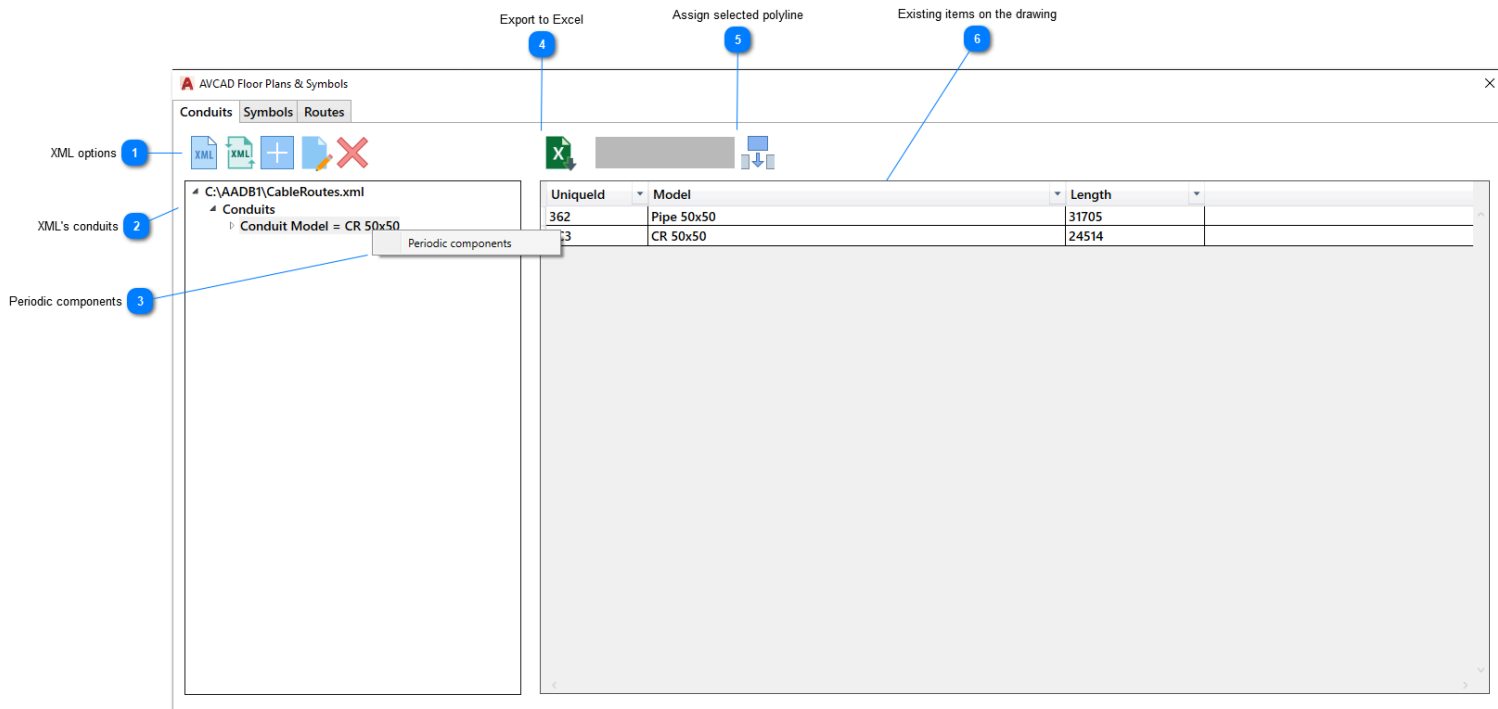
- **Command name Macro: AVCAD-Pictorial-Manager**

- **Ribbon Icon** 

- **Please, see this link to understand how it works. [Youtube](#)**

## 2.19. AVCAD Floor-Plans

### Conduits



- Command name Macro: AVCAD-Floor-Plans

- Ribbon Icon

- This plugin is for creating Routes, Conduits and Symbols
- With the first startup, it will ask you for the location with XMLs
- Please, see this video to understand how it works: [Youtube](#)
- You can check the information here: [Schemes Manager](#)

#### 1 XML options



**Add new XML.** It makes sense to keep different types of conduits in different XMLs. For example trays, pipes, etc.

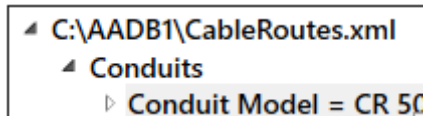
**Edit XML**

**Add Item** - adds a new item to the XML

**Edit Item**

**Delete Item** - deletes an item from XML

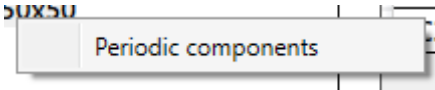
#### 2 XML's conduits



All the information inside XML

3

### Periodic components



You can add additional information. For example, for 1000 mm of the tray, you will need 1000 mm of the cap for that tray.

Model	Period	Quantity
<div> <div>Periodic Component</div> <div> Model  <input type="text"/> </div> <div> Period  <input type="text"/> </div> <div> Quantity  <input type="text"/> </div> <div>OK</div> </div>		

Add

4

### Export to Excel



Export all the items on Datagrid to excel.  
First, it will ask you about all the XMLs to get periodic components information.  
Second, it asks for the excel save location.

5

### Assign selected polyline



Assign selected item to polyline

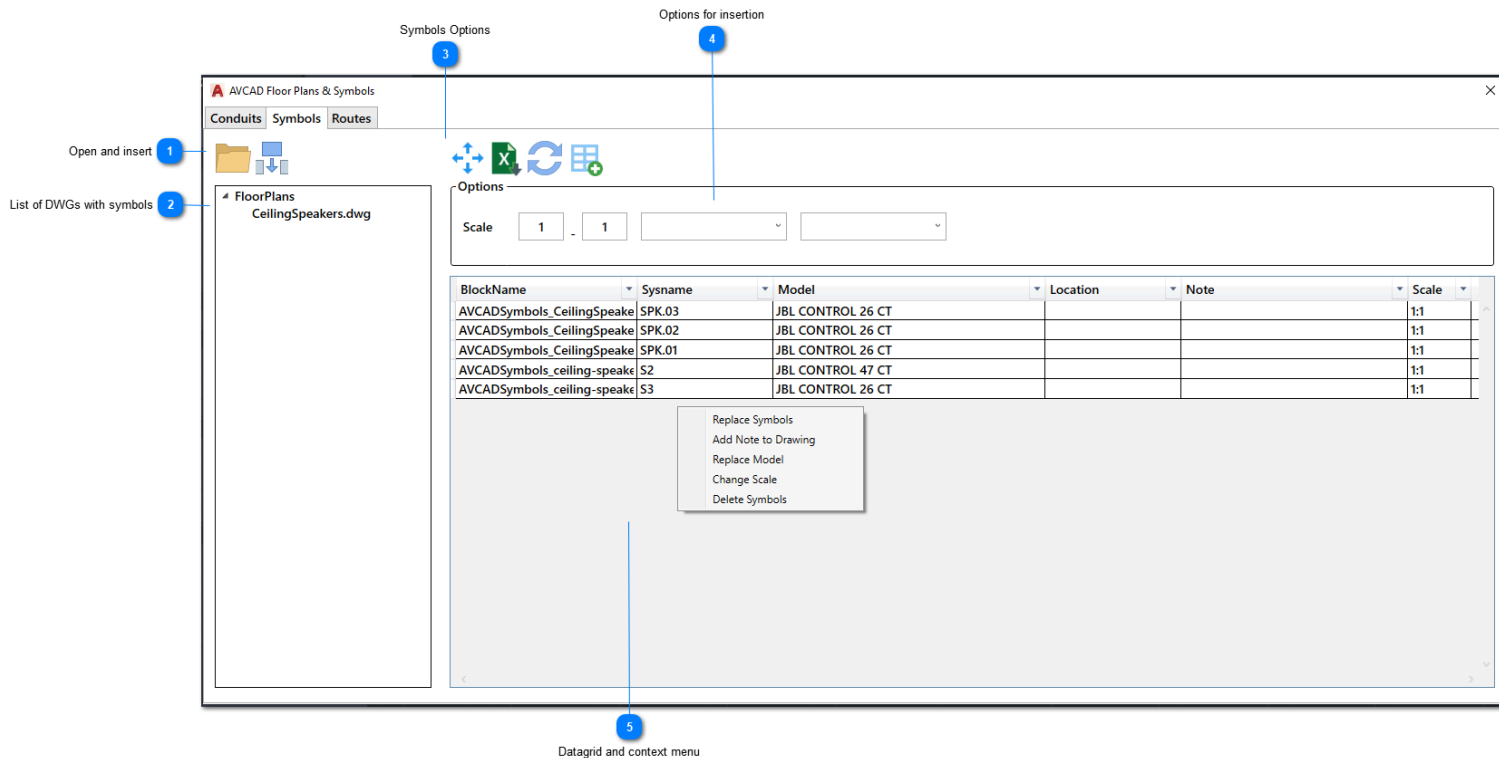
6

## Existing items on the drawing

Model
Pipe 50x50
CR 50x50

Datagrid with all the conduits on this drawing.

## 2.19.1. Symbols



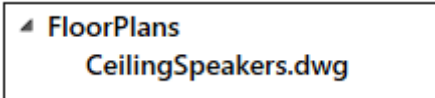
- With the first startup, it will ask you for the folder with symbols
- Please, see this video to understand how it works: [Youtube](#)
- You can check the information here: [Schemes Manager](#)

### 1 Open and insert



Change Folder  
Insert symbol on the drawing

### 2 List of DWGs with symbols



List of DWGs inside the selected folder

### 3 Symbols Options



1. Move Attributes of inserted blocks
2. Export Datagrid to excel file
3. Refresh Datagrid if you make some changes
4. Place table to the drawing from selected items

4

## Options for insertion

Scale

1

-

1



You can change the properties of symbols that will be inserted. You can change properties with the context menu of the Datagrid

5

## Datagrid and context menu

BlockName	Sysname	Model
AVCADSymbols_CeilingSpeake	SPK.03	JBL CONTROL 26
AVCADSymbols_CeilingSpeake	SPK.02	JBL CONTROL 26
AVCADSymbols_CeilingSpeake	SPK.01	JBL CONTROL 26
AVCADSymbols_ceiling-speake	S2	JBL CONTROL 47
AVCADSymbols_ceiling-speake	S3	JBL CONTROL 26

Replace Symbols  
 Add Note to Drawing  
 Replace Model  
 Change Scale  
 Delete Symbols

1. Change symbols to another block type
2. Add a note to Drawing - it will add the note from the Datagrid to the drawing
3. Replace Model - change the model for the selected items
4. Change Scale - change scale if needed
5. Delete Symbols



## 2.19.2. Routes

AVCAD Floor Plans & Symbols

Conduits

Symbols

Routes

Create Route

Route Title	Length
Room A - Room B	33957

- Please, see this video to understand how it works: [Youtube](#)
- You can check the information here: [Schemes Manager](#)
- This software helps you to create cable routes to calculate cable lengths in Schemes Manager.

## 2.20. Troubleshooting

Contact [support@aadbsoftware.com](mailto:support@aadbsoftware.com)

### 3. AVCAD V - AVCAD for Microsoft Visio

AVCAD helps engineers and designers create Interconnection Block Schematics with engineering information. Rack Layouts, Cable and Equipment's Lists and even more.

AVCAD supports custom parameters such as **prices, weight, heat, install time and many more**

AVCAD's purpose is the creation of accurate, detailed and well-readable schemes along with all kinds of reports using simple and intuitive tools.

#### 1) Block Schematic tools:

Pre-created Equipment Library containing most commonly brands used in AV-IT industry (Crestron, Extron, BSS, Biamp, AJA, BlackMagic, etc.)

Drag and drop the selected devices to the desired location on a drawing.

Default layers for every kind of scheme circuit. Just choose from Audio, Video, Control, Power, etc.

Fast filter changing for distinguishing the types of interconnection.

Fast replace of the devices on the drawing

Drawing Patch and Termination Panels.

Tools for Cable Drawing and Labelling.

#### 2) Rack Layout Tools:

Creating Rack Furniture

Placing the equipment to Rack Layout. All devices have their real dimensions.

#### 3) Report Tools:

Cable List

Equipment List

Power Consumption List

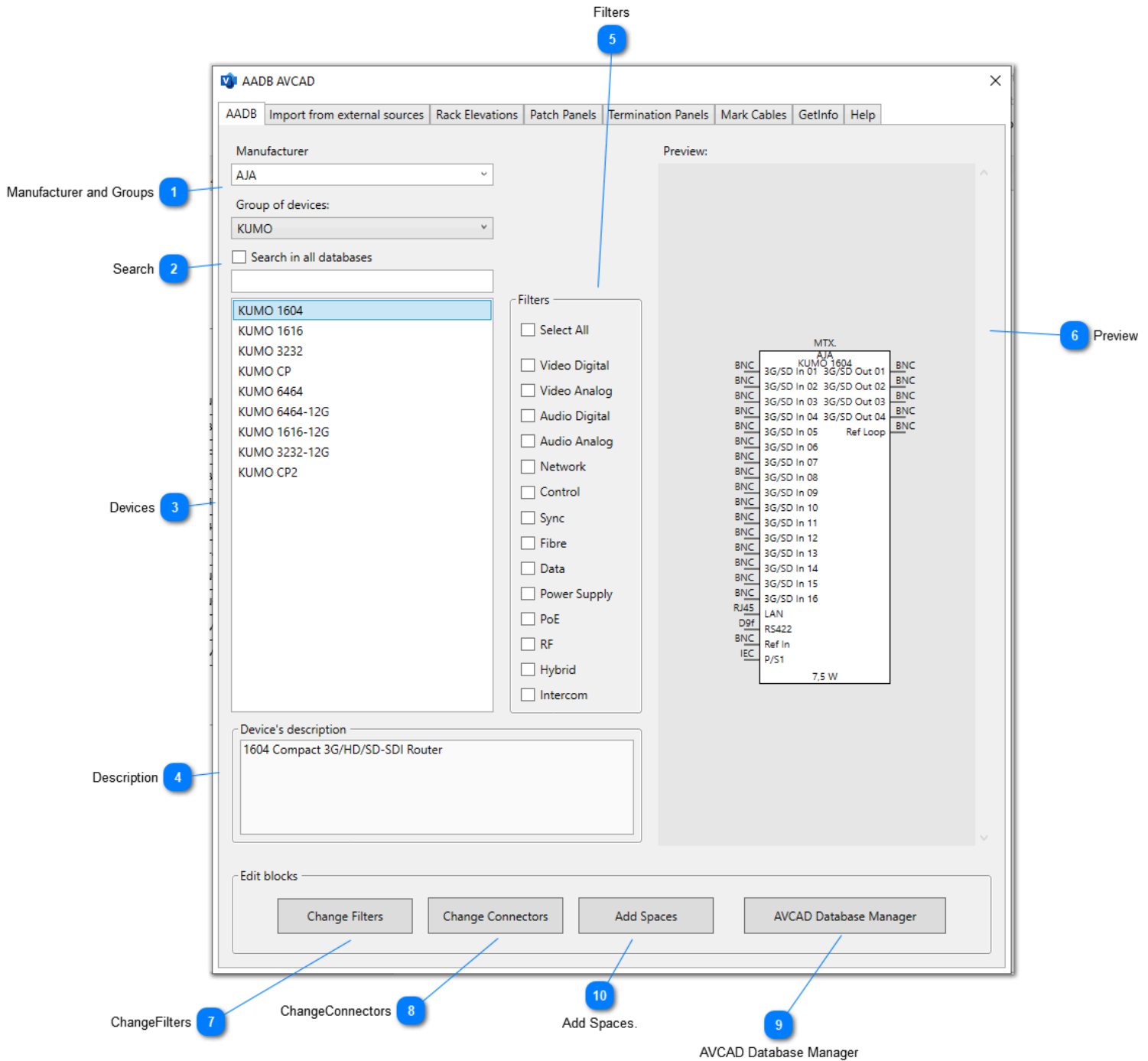
IP Tables.

#### 4) User Databases.

AVCAD Base Manager helps you to create your equipment library using a standalone application.

Easy distribution of your databases via Dropbox, Google Drive, and shared disks. No SQL servers are needed.

### 3.1. AADB



- See this video to understand how it works. [Youtube](#)

#### 1 Manufacturer and Groups

Manufacturer

AJA

Group of devices:

KUMO

You can select the Manufacturer and the Group of devices. Manufacturer Combobox supports prompting so you can faster find the database you need.

## 2 Search

☐ Search in all databases

Here you can write the model you need. It will search with condition that depends on Quick Search Checkbox.

[Youtube](#)

## 3 Devices

KUMO 1604

KUMO 1616

KUMO 3232

KUMO CP

KUMO 6464

KUMO 6464-12G

KUMO 1616-12G

KUMO 3232-12G

KUMO CP2

List of devices in groups or in the search result

## 4 Description

Device's description

1604 Compact 3G/HD/SD-SDI Router

Device Description

Filters

- ☐ Select All
- ☐ Video Digital
- ☐ Video Analog
- ☐ Audio Digital
- ☐ Audio Analog
- ☐ Network
- ☐ Control
- ☐ Sync
- ☐ Fibre
- ☐ Data
- ☐ Power Supply
- ☐ PoE
- ☐ RF
- ☐ Hybrid
- ☐ Intercom

Filters to use for creating the device. When selected nothing - creates a full device

6

## Preview

Preview:

	MTX.	
	AJA	
	KUMMO 1604	
BNC	3G/SD In 01	3G/SD Out 01 BNC
BNC	3G/SD In 02	3G/SD Out 02 BNC
BNC	3G/SD In 03	3G/SD Out 03 BNC
BNC	3G/SD In 04	3G/SD Out 04 BNC
BNC	3G/SD In 05	Ref Loop BNC
BNC	3G/SD In 06	
BNC	3G/SD In 07	
BNC	3G/SD In 08	
BNC	3G/SD In 09	
BNC	3G/SD In 10	
BNC	3G/SD In 11	
BNC	3G/SD In 12	
BNC	3G/SD In 13	
BNC	3G/SD In 14	
BNC	3G/SD In 15	
BNC	3G/SD In 16	
RJ45	LAN	
D9f	RS422	
BNC	Ref In	
IEC	P/S1	
	7,5 W	

Preview of the device with filters

7

## ChangeFilters

Change Filters

Changing filters for the selected device. See [here](#)

8

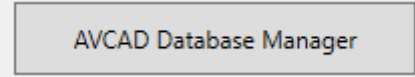
## ChangeConnectors

Change Connectors

Changing connectors for the selected device. See [here](#)

9

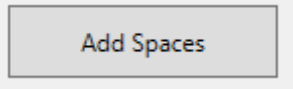
### AVCAD Database Manager

A rectangular button with a light gray background and a thin black border. The text "AVCAD Database Manager" is centered in a dark gray font.

Opens [AVCAD Database Manager](#) (or suggest you download if you do not have it installed)

10

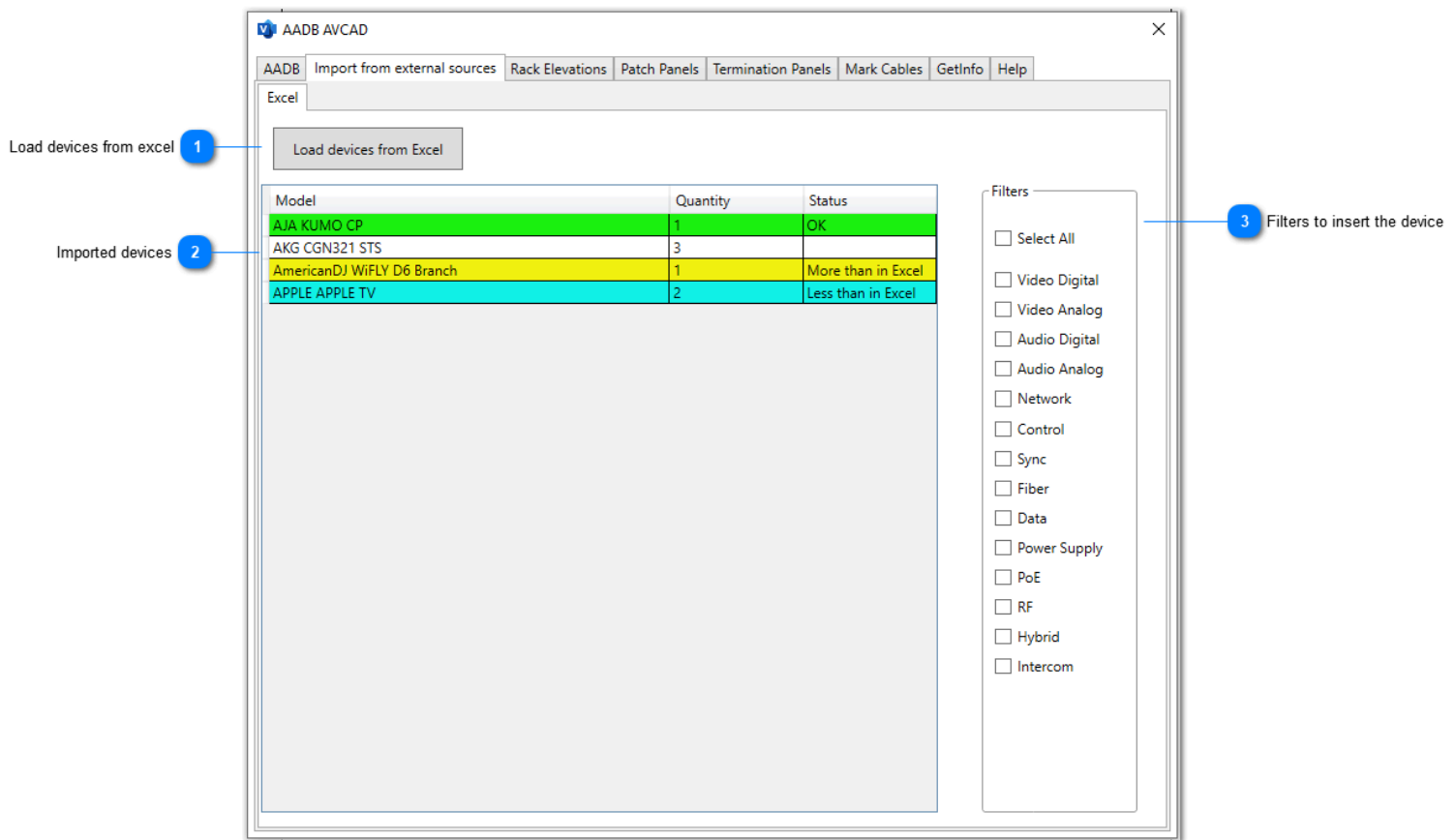
### Add Spaces.

A rectangular button with a light gray background and a thin black border. The text "Add Spaces" is centered in a dark gray font.

It is one more way to customize your block. See [here](#) for the details.



### 3.1.1. Import from External Sources



See this video to understand how it works: [Youtube](#)

#### 1 Load devices from excel

Load devices from Excel

Load from excel. You can get this excel from here: [AVCAD Database Manager](#)

#### 2 Imported devices

Model	Quantity	Status
AJA KUMO CP	1	OK
AKG CGN321 STS	3	
AmericanDJ WiFLY D6 Branch	1	More than in Excel
APPLE APPLE TV	2	Less than in Excel

Just imported devices and statuses.

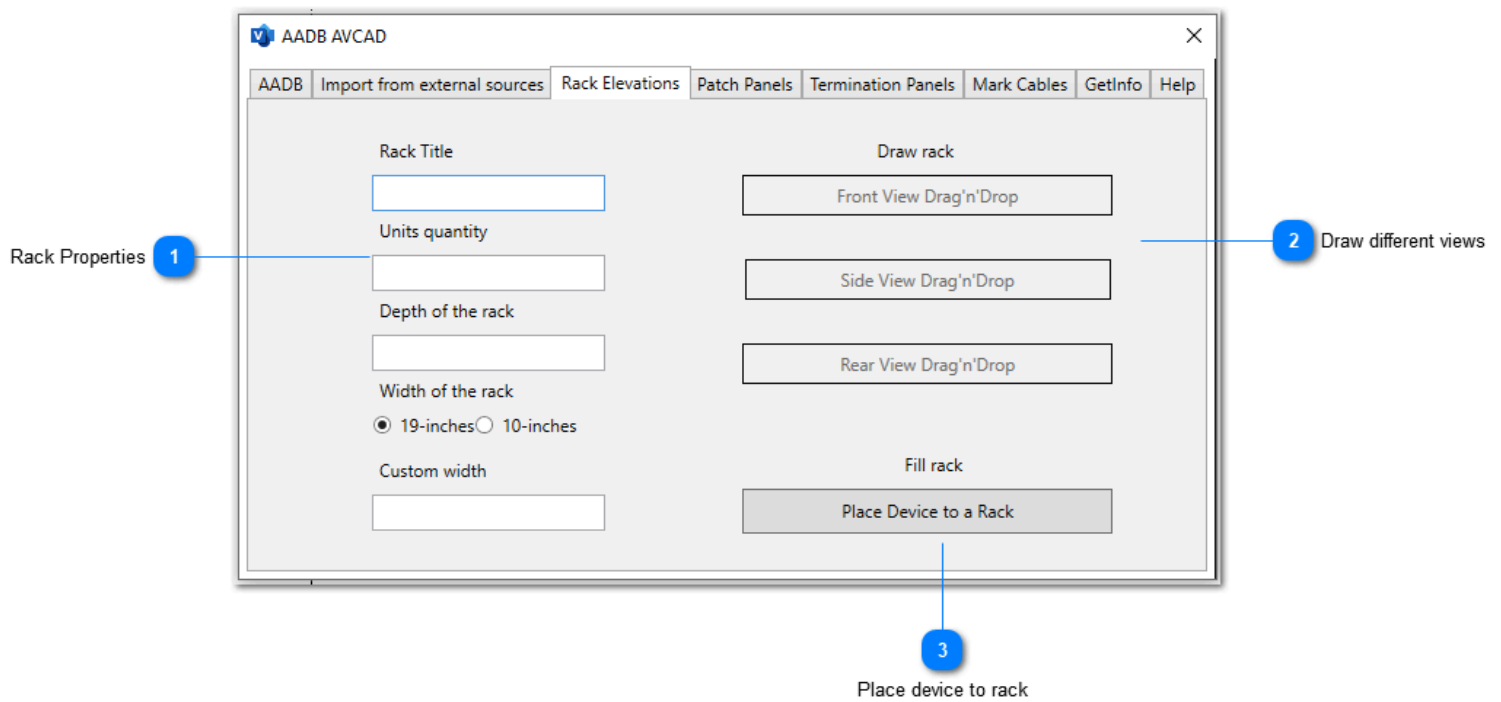
### Filters to insert the device

#### Filters

- ☐ Select All
- ☐ Video Digital
- ☐ Video Analog
- ☐ Audio Digital
- ☐ Audio Analog
- ☐ Network
- ☐ Control
- ☐ Sync
- ☐ Fiber
- ☐ Data
- ☐ Power Supply
- ☐ PoE
- ☐ RF
- ☐ Hybrid
- ☐ Intercom

Filters to insert the device on the drawing.

### 3.1.2. Rack elevations



See this video to understand how it works. [Youtube](#)

#### 1 Rack Properties

Rack Title

Units quantity

Depth of the rack

Width of the rack

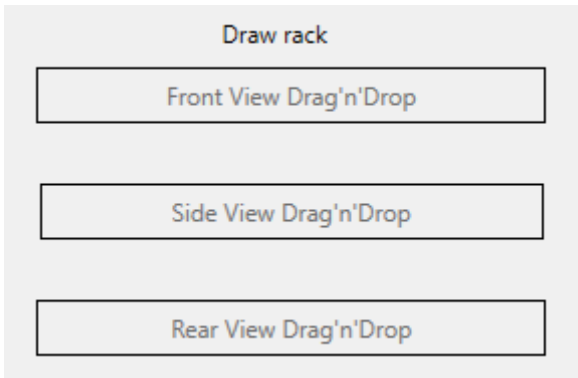
☒ 19-inches ☐ 10-inches

Custom width

Required fields for Rack Elevation

## Draw different views

2



Draw rack

Front View Drag'n'Drop

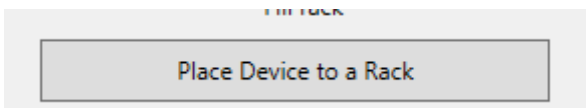
Side View Drag'n'Drop

Rear View Drag'n'Drop

Create the view you need. Labels are inactive until you fill all the required fields

3

## Place device to rack



Place Device to a Rack

See this video to understand how it works. [Youtube](#).

Place the selected device on the rack. Preselect the device before running this command.  
Fill the form below and it will insert the device into the rack.



Racks

Rack.01

Enter the unit to insert

☐ Front ☐ Side ☐ Rear

OK

### 3.1.3. Patch Panels

Required fields for Patch Panels 1

Dimensions 2

Set Properties

Sysname:

Connector's Type:

Quantity:

Set dimensions

Depth:

Width: ☒ 19" ☐ 10"

Height:

Draw Panel Drag'n'Drop

See here to understand how it works. [Youtube](#).

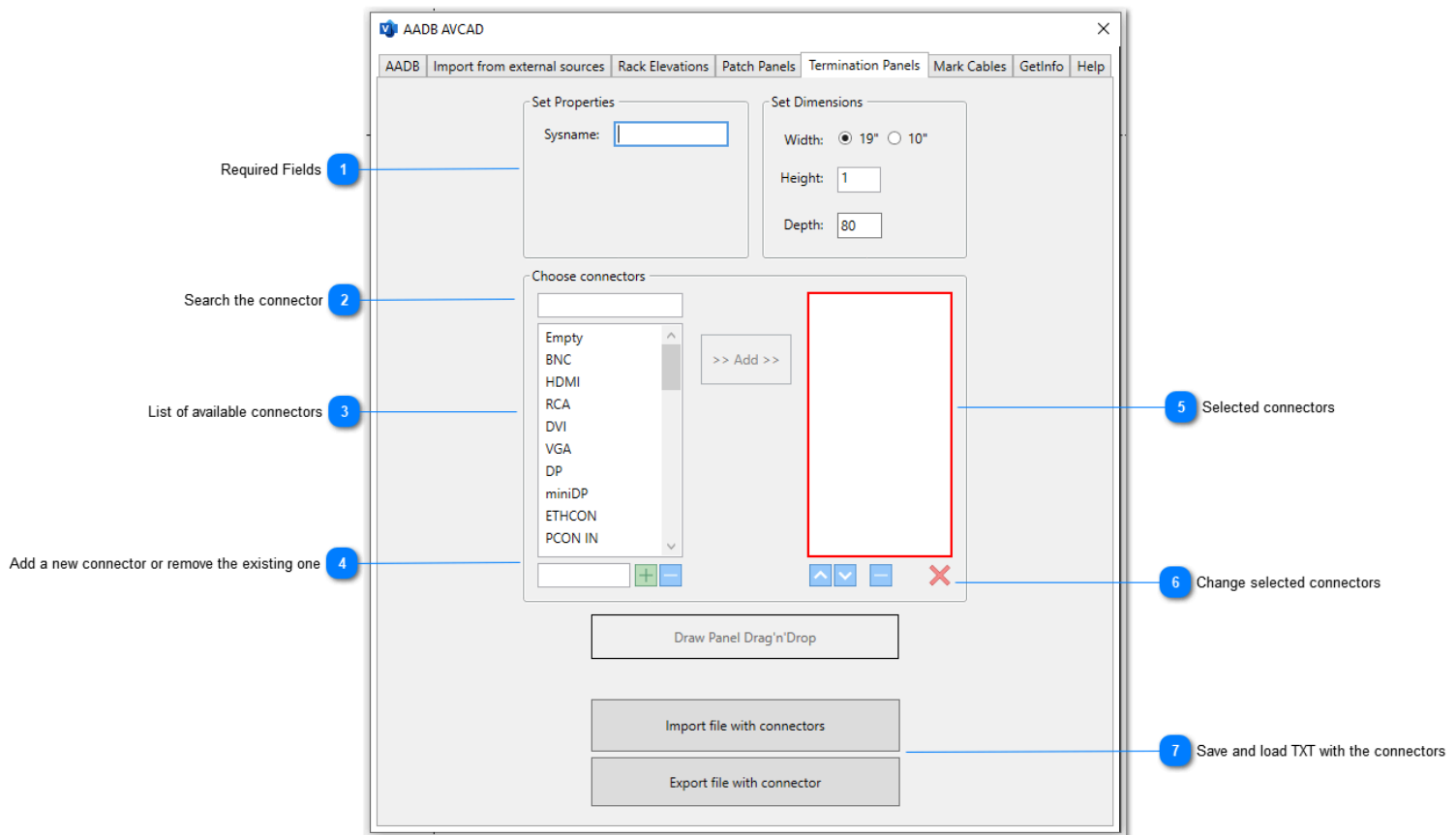
#### 1 Required fields for Patch Panels

You have to fill the form to be able to draw the Patch Panels

#### 2 Dimensions

Some dimensions to draw the Panel you need.

### 3.1.4. Termination Panels



See here to understand how it works. [Youtube](#).

#### 1 Required Fields

This image shows a close-up of the 'Set Properties' and 'Set Dimensions' sections of the Termination Panels window. The 'Set Properties' section has a 'Sysname:' label followed by a text input field. The 'Set Dimensions' section has three controls: 'Width' with radio buttons for 19" (selected) and 10"; 'Height' with a text input field containing '1'; and 'Depth' with a text input field containing '80'.

Required fields to create the Termination panel

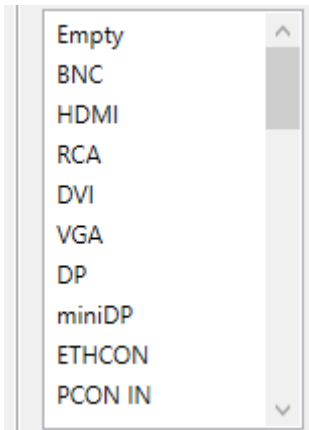
#### 2 Search the connector

This image shows a close-up of the 'Choose connectors' section of the Termination Panels window. It features a search input field and a list of available connectors: Empty, BNC, HDMI, RCA, DVI, VGA, DP, miniDP, ETHCON, and PCON IN.

Search for the connector in the list

3

### List of available connectors



List of available connectors

4

### Add a new connector or remove the existing one



If you do not have the needed connector - just add it!

5

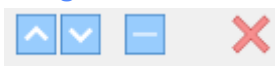
### Selected connectors



A list of the selected connectors

6

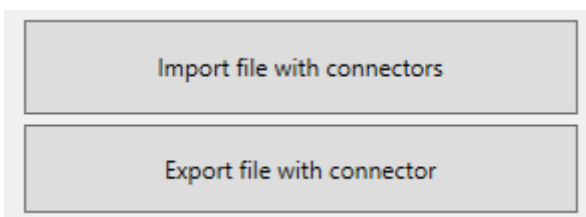
### Change selected connectors



Change order of connectors, remove the connector or clear the list

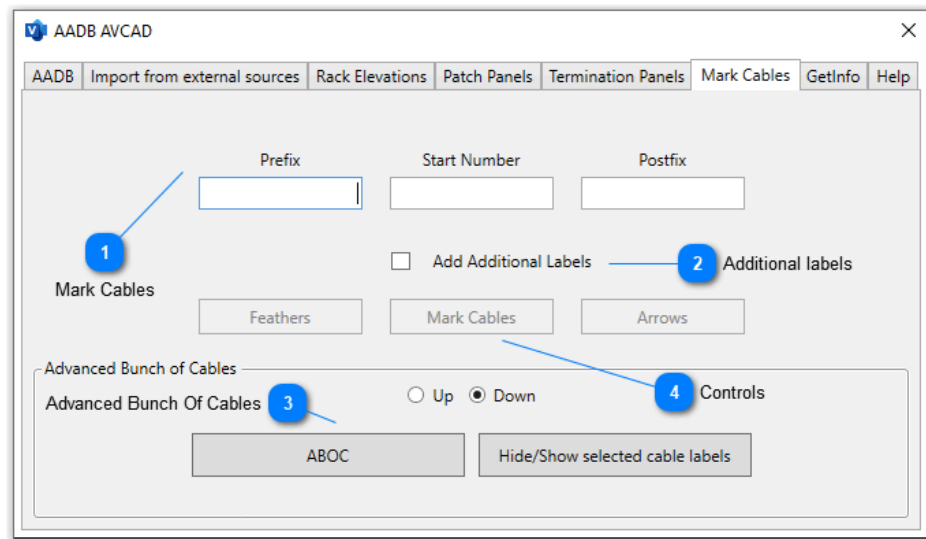
7

### Save and load TXT with the connectors



You can (and we suggest it) save your connectors as a TXT file for the backup. You can also share your lists (f.e Neutrik) with your colleagues.

### 3.1.5. Mark Cables



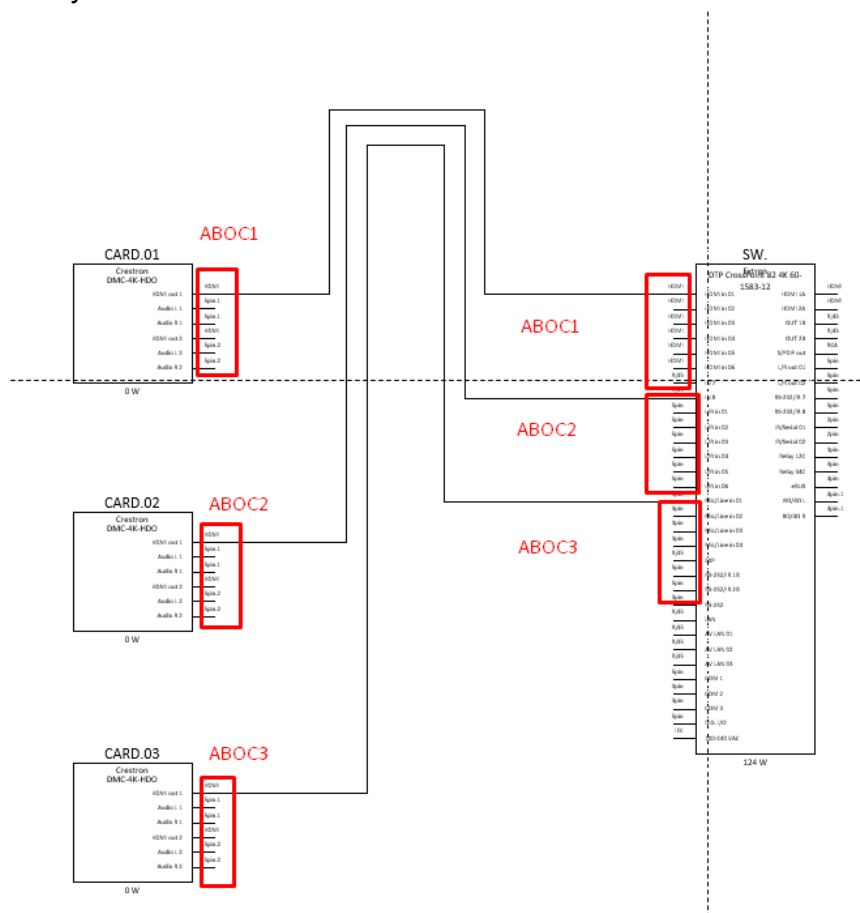
#### 1 Mark Cables

Prefix Start Number Postfix

See here to understand how it works. [Youtube](#).

Please, check that every block has its own reference connectivity line. Here is an example of the correct connection.

Every CARD has its own reference line.





2

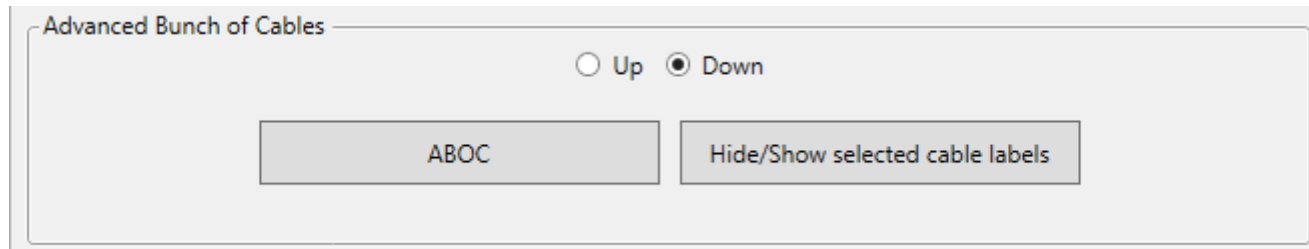
### Additional labels

☐ Add Additional Labels

You may want to add some additional labels on both ends of the cables. They will be exported to CAD/Revit as cable labels.

3

### Advanced Bunch Of Cables



Advanced Bunch of Cables

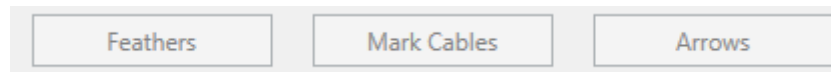
☐ Up ☒ Down

ABOC Hide/Show selected cable labels

It may help you to draw the connectivity line faster and easier. It connects panels and devices. See here to understand how it works. [Youtube](#).

4

### Controls



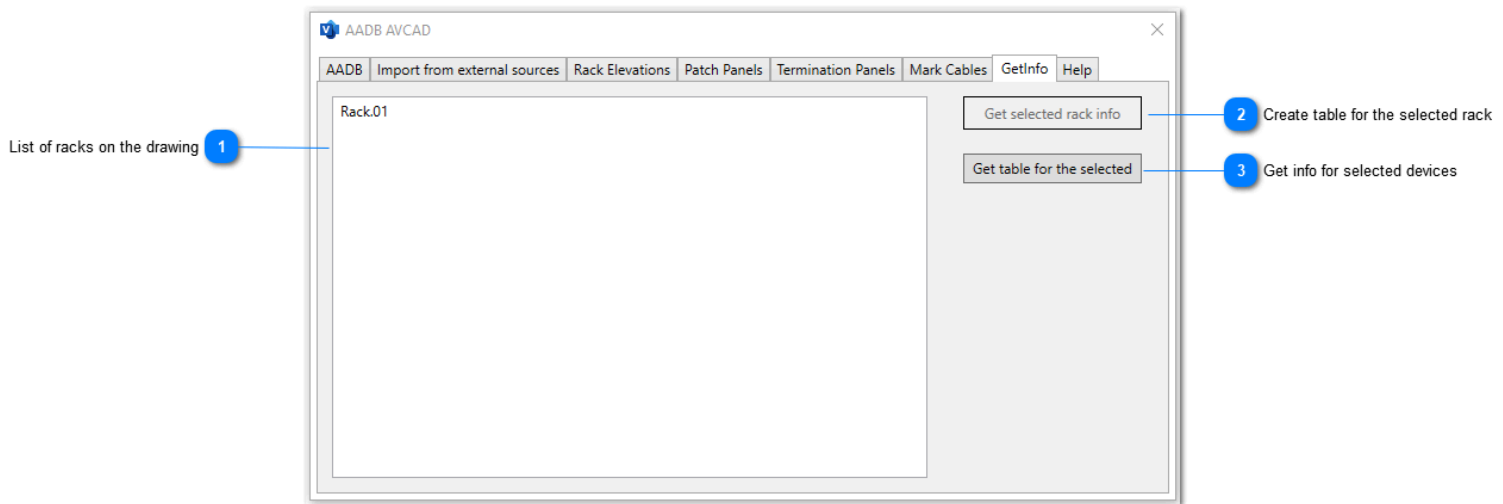
Feathers Mark Cables Arrows

Feathers - a possibility to create feathers. See [here](#) to understand how it works

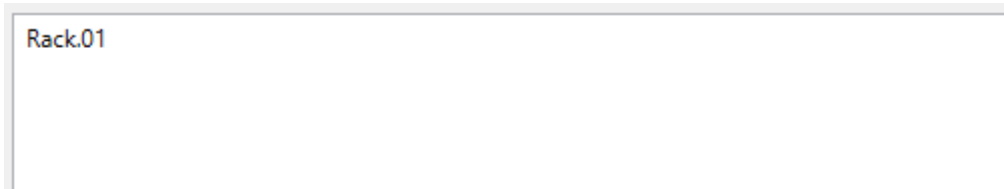
Arrows - a possibility to create arrows. See [here](#) to understand how it works

Mark Cables - a possibility to create cable labels. See [here](#) to understand how it works.

### 3.1.6. GetInfo

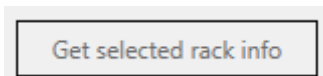


#### 1 List of racks on the drawing



Here you can select the rack you need and add the table to a drawing.

#### 2 Create table for the selected rack



See here to understand how it works. [Youtube](#).

## Get info for selected devices

Get table for the selected

See this video to understand how it works. [Youtube](#).

You need to have pre-selected devices. Fill the form below, you can check/uncheck columns, change the orders, export sum and so on.

**AVCAD V. Get Info as a Table**

**Manage Table View**

☐ Export Sum    ☒ Export Column Headers

Draw Table

Drag'n'drop the table

<input checked="" type="checkbox"/> Type	<input checked="" type="checkbox"/> Sysname	<input checked="" type="checkbox"/> Model	<input checked="" type="checkbox"/> Description	<input checked="" type="checkbox"/> Location	<input checked="" type="checkbox"/> IP	<input checked="" type="checkbox"/> Power	<input checked="" type="checkbox"/> Quantity
Device	IO.	io® 4K	Harness Thunderbolt™ 2power in 4K, HD and SD			28	1
Rack	Rack.01	Front	Rack, width 483, 20 units, depth 600				1
Device	MTX.	KUMO 1604	1604 Compact 3G/HD/SD-SDI Router	Rack.01, Unit 10, Front		7.5	1
Patch Panel	PP.01	Width 483, Depth 80, Height 44	Size is 12, connectors type BNC	Rack.01, Unit 02, Front			1
Termination P	TP.01	Width 483, Depth 80, Height 44	Connectors: BNC, BNC, BNC	Rack.01, Unit 03, Front			1
Device	MTX.01	KUMO 1604	1604 Compact 3G/HD/SD-SDI Router			7.5	1
Device	CP.	KUMO CP	AJA KUMO Remote Control Panel			4	1
Device	SPLTR.	WIFLY D6 Branch	Wireless DMX Splitter/Amplifier			120	1
Device	SPLTR.1	WIFLY D6 Branch	Wireless DMX Splitter/Amplifier			120	1
Device	ATV.01	APPLE TV	APPLE TV			2.4	1
Device	MTX.03	KUMO 6464	6464 Compact 3G/HD/SD-SDI Router			35	1
Device	MTX.04	KUMO 6464	6464 Compact 3G/HD/SD-SDI Router			35	1

### 3.1.7. ChangeFilters

You can add another version of the selected device to the drawing. For example, just power supply or digital video from the full device.

See here to understand how it works: [Youtube](#)

### 3.1.8. ChangeConnectors

You can add another version of the selected device with only needed connectors. For example, just the first digital video input from the full device.

See here to understand how it works: [Youtube](#)

### 3.1.9. Hard and Soft Options

One of the ways to add extra information to a device is **Hard** and **Soft options**.

**Hard** and **Soft options** allow the user to add to block such information as expansion cards, redundant power supply, software licenses and so on.

The major difference between Hard and Soft options is Hard options have connectors, and Soft options do not have them and store them at a block just as text attributes.

See here to understand how it works: [Youtube](#)

*Example of use: device without any Hard options (left) and device with Hard option as a redundant power supply (right)*



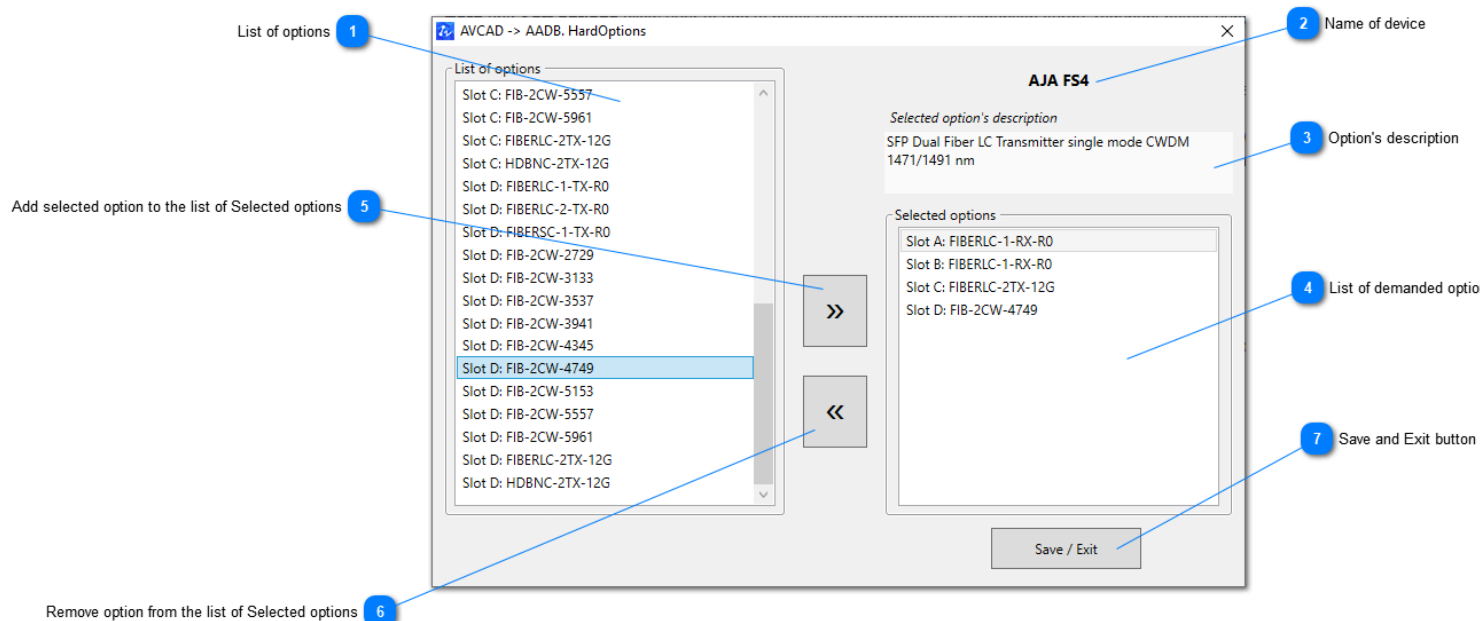
**Hard** and **Soft options** are stores in a database and are associated with a specific device. After you create and save the device in the [AVCAD Database manager](#), you will be able to add **Hard** and **Soft options** to it.

**Hard options** are very useful when you want to add to a device, for example, an SFP module or redundant power supply.

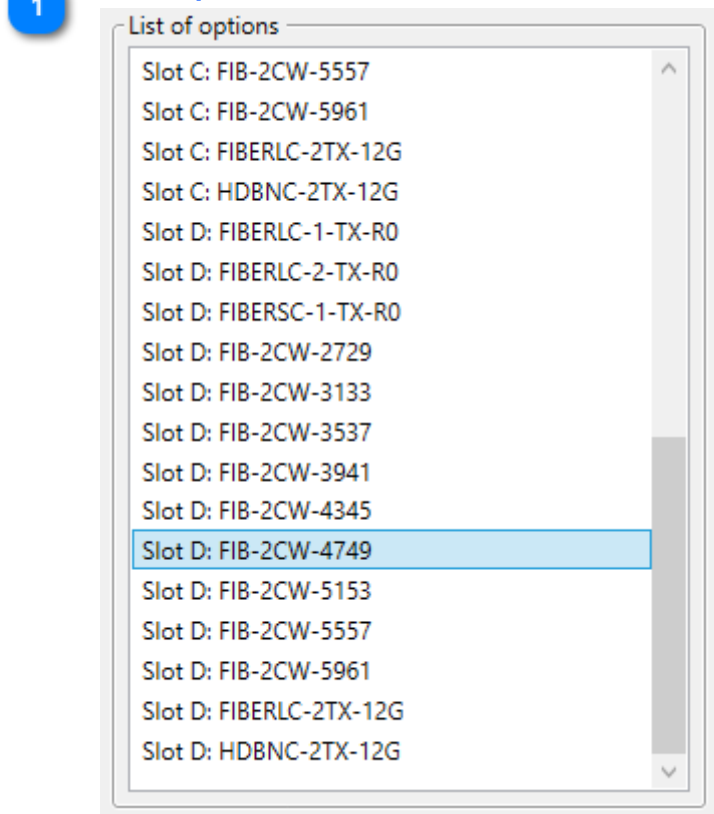
**Soft options** are very useful if you want to add to a device, for example, software licenses or even a lens to the projector.

1. Add **Hard** or **Soft options** to a device using [AVCAD Database Manager](#). Sync the database with **AADB**.
2. Add the device to a drawing.
3. If the device contains **Hard Options** an interface will appear.
4. Add demanded **Hard options** and click **Save and Exit** button. If you don't want to add any **Hard option** to the device just click **Save and Exit** button when the **Selected options** field is empty.
5. If the device contains **Soft options** an interface will appear.
6. Add demanded **Soft options** and click **Save and Exit** button. If you don't want to add any **Soft option** to the device just click **Save and Exit** button when the **Selected options** field is empty.

You can see all added **Hard** and **Soft options** at the [Equipment List of Scheme Manager](#).



## 1 List of options



A list of options existed for the device in the database and was created in Base Manager.

## 2 Name of device



Name of the device

3

**Option's description***Selected option's description*SFP Dual Fiber LC Transmitter single mode CWDM  
1471/1491 nm

Preview of option's description

4

**List of demanded options***Selected options*

Slot A: FIBERLC-1-RX-R0

Slot B: FIBERLC-1-RX-R0

Slot C: FIBERLC-2TX-12G

Slot D: FIB-2CW-4749

List of selected options

5

**Add selected option to the list of Selected options**

&gt;&gt;

Use this button to add an option to the device

6

**Remove option from the list of Selected options**

&lt;&lt;

Use this button to remove the selected option from the list of selected options for this device.

7

**Save and Exit button**

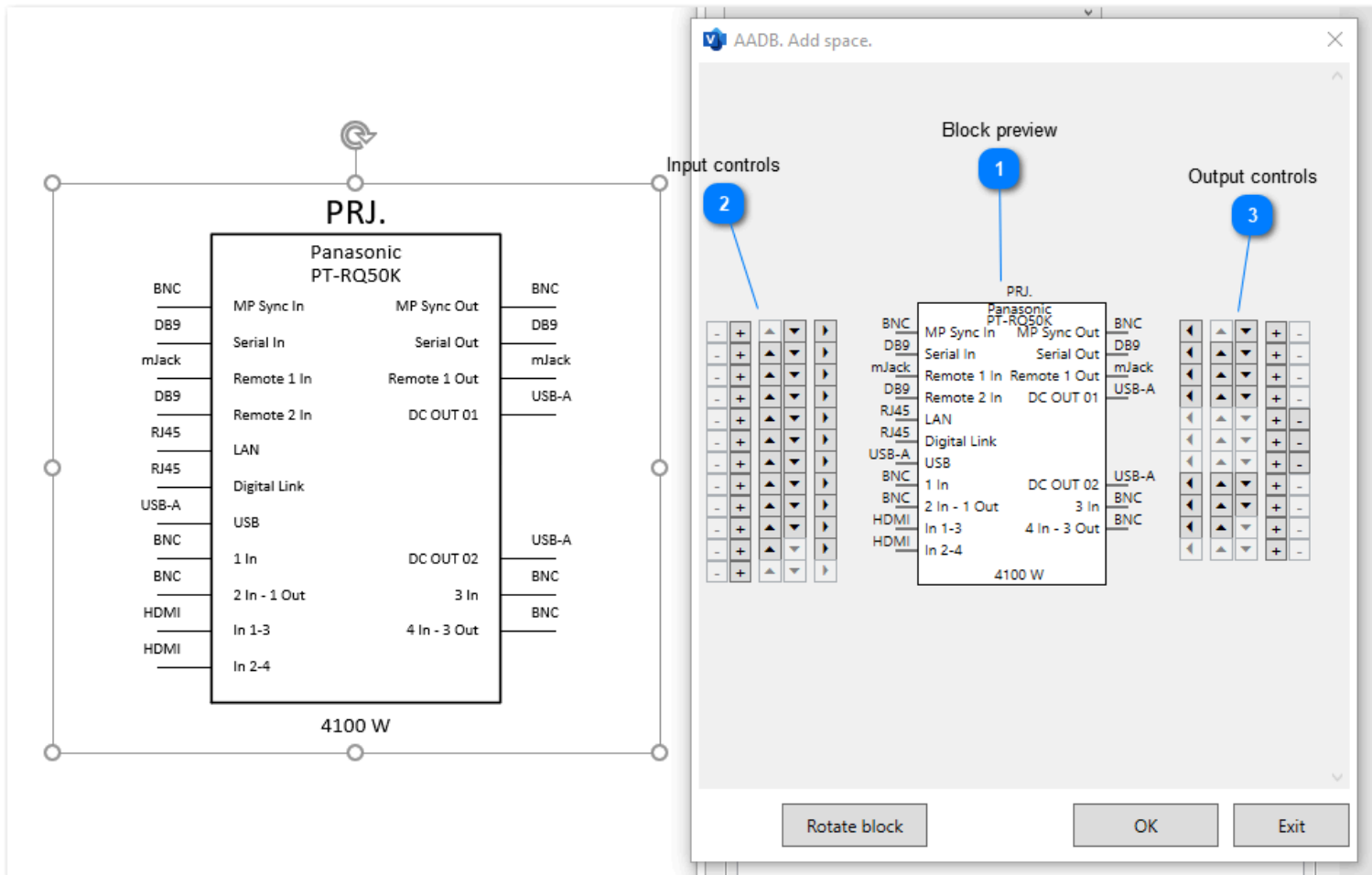
Save / Exit

Click the button to save selected options and close the interface.

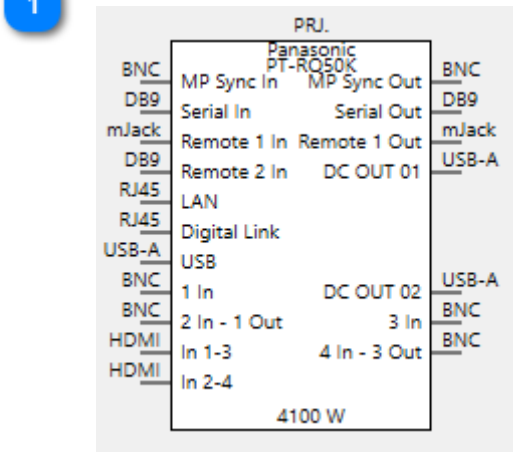


### 3.1.10. Add Spaces

This functionality helps you to customize your block. See [here](#) to understand how it works.



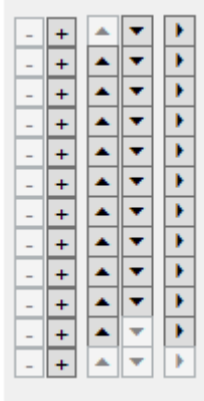
#### 1 Block preview



This preview shows which block you will have after you click on the OK button.

2

## Input controls



Controls for the input side.

- 1) Remove existing connector
- 2) Add a new connector
- 3) Move down
- 4) Move up
- 5) Move the the output side

3

## Output controls



Controls for the output side.

- 1) Remove existing connector
- 2) Add a new connector
- 3) Move down
- 4) Move up
- 5) Move the the input side

## 3.2. Scheme Manager

Type	Sysname	Manufacturer	Model	Description	Quantity	Power	Location	IP
Device	CAM.	AJA	RovoCam	Integrated 4K/HD Camera with HDBaseT	1	8		
Device	CONV.	AJA	T-TAP	Thunderbolt™ powered SDI and HDMI output	1	6,5		
Device	IO.	AJA	Io® Express	Io Express delivers compact, powerful I/O for P	1	22		
Device	MTX.	AJA	KUMO 1616	1616 Compact 3G/HD/SD-SDI Router	1	20		
Patch Panel	PP.01		Width 483, Depth 80, Height 44	Size is 12, connectors type BNC	1			

### Export to CAD/Revit

Export to CAD/Revit

It will save all the entities on the drawing to an Excel file. You may import this file in your AXCAD for CAD or AXCAD for Revit.

You can see it here to understand how it works. [Youtube](#)

### 1 Export Excel

Export Excel

Export Datagrid as Excel-file

You can see it here to understand how it works. [Youtube](#)

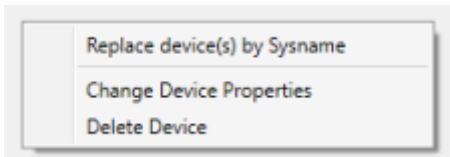
2

## Datagrid with selected

Type	Sysname	Manuf
Device	ATV.01	APPLE
Device	CP.	AJA
Device	IO.	AJA
Device	MTX.	AJA
Device	MTX.01	AJA
Device	MTX.03	AJA
Hard Option		AJA
Device	MTX.04	AJA
Patch Panel	PP.01	
Rack	Rack.01	
Device	CDTB	Americ

All the devices/panels/rack on the drawing

## Context Menu



Context menu:

1. Replace device(s) by Sysname.

You can change the model quickly via this menu entry. Just select the needed device.

It will be inserted with the same filters as in the previous model. Rack layout and cable labels will be removed.

2. Change Device Properties

You can change Sysname, Location and IP

 A screenshot of a "Device Properties" dialog box. It has a title bar with a blue icon and a close button. The dialog contains several text input fields:
 

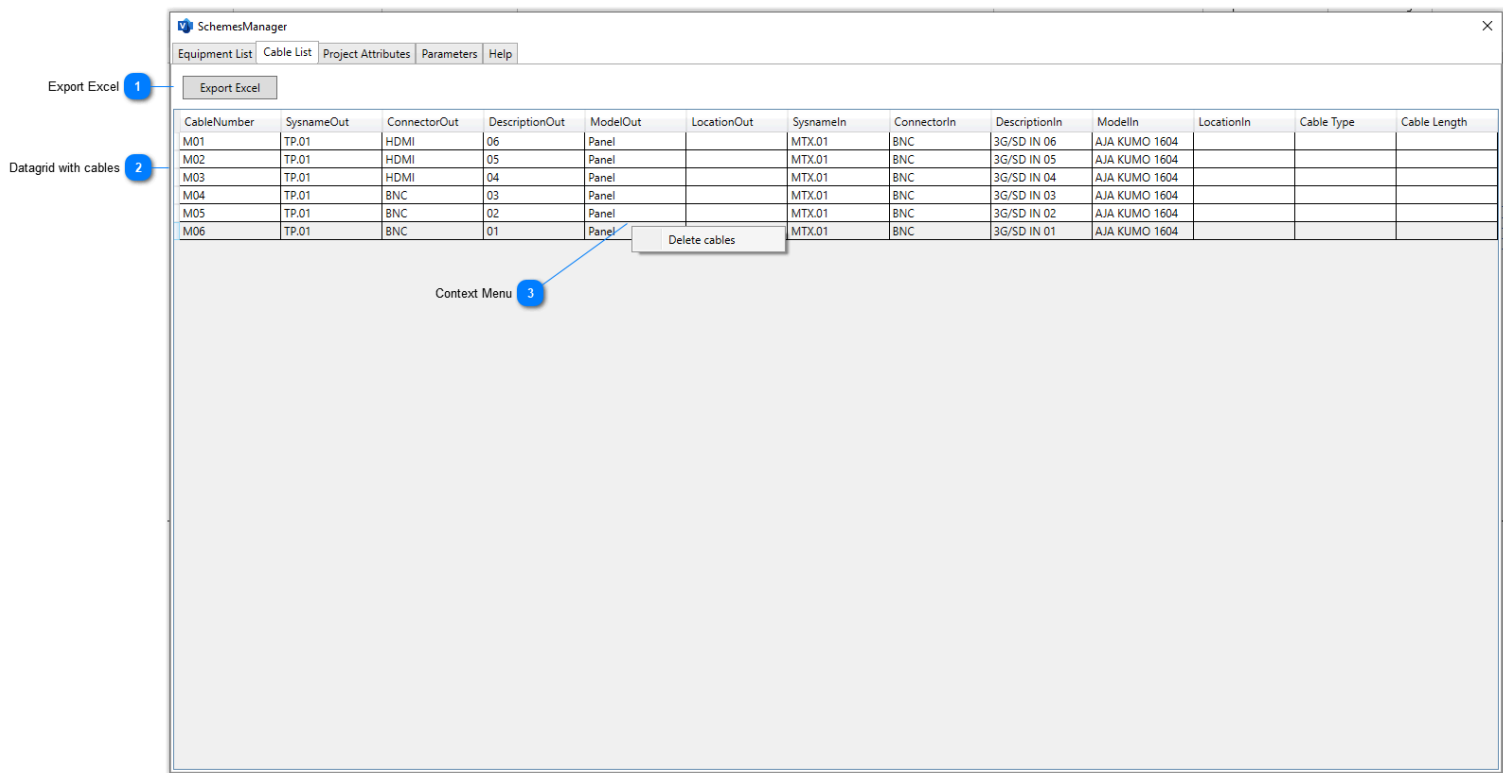
- Sysname: MTX.03
- Manufacturer: AJA
- Model: KUMO 6464
- Description: 6464 Compact 3G/HD/SD-SDI Router
- Power: 35
- Location: (empty)
- IP: (empty)

 At the bottom, there are "OK" and "Cancel" buttons.

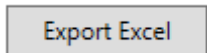
3. Delete Device

Deletes all the versions of the device from drawing.

### 3.2.1. Cable List



#### 1 Export Excel

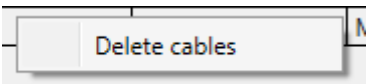


Export to Excel file

#### 2 Datagrid with cables

CableNumber	SysnameC
M01	TP.01
M02	TP.01
M03	TP.01
M04	TP.01
M05	TP.01
M06	TP.01

#### 3 Context Menu



You can delete any cable label using this context menu.

### 3.2.2. Project Attributes

SchemesManager

Equipment List | Cable List | Project Attributes | Parameters | Help

Save as Excel

Note: You can change Project Attributes here. The project attributes are used for a specific device. Example: Serial Number, VLAN, Subnet A

Sysname	Manufacturer	Model
ATV.01	APPLE	APPLE TV
CP.	AJA	KUMO CP
IO.	AJA	Io® 4K
MTX.	AJA	KUMO 1604
MTX.01	AJA	KUMO 1604
MTX.03	AJA	KUMO 6464
MTX.04	AJA	KUMO 6464
PP.01		Width 483, Depth 80, Height 44
Rack.01		
SPLTR.	AmericanDJ	WiFLY D6 Branch
SPLTR.1	AmericanDJ	WiFLY D6 Branch
TP.01		Width 483, Depth 80, Height 44

Draw Table for the selected devices

IO.

Serial Number 231

VLAN 192.168.1.1

Save Show Project Attributes

You can add any Project Attribute that belongs to the unique device with a unique System Name (For example, for MTX.01).

For example, Serial Number, Password, VLAN, etc.

**You have to add Project Attributes ONLY for a saved drawing.** We suggest you click on the Save Drawing button and then work with attributes.

Another way it can be placed in the %TEMP% folder.

Please, see these two videos to understand how to work with attributes:

1. [Project Attributes](#)
2. [Project Attributes as tables on the drawing](#)

### 3.2.3. Parameters

SchemesManager

Equipment List | Cable List | Project Attributes | **Parameters** | Help

Note: Parameters here are READ-ONLY. You can change them using AVCAD Database Manager. The parameters are used for all devices of a specific model. Example: Price, Heat, Weight

Sysname	Manufacturer	Model
ATV.01	APPLE	APPLE TV
CP.	AJA	KUMO CP
IO.	AJA	Io® 4K
MTX.	AJA	KUMO 1604
MTX.01	AJA	KUMO 1604
MTX.03	AJA	KUMO 6464
MTX.04	AJA	KUMO 6464
PP.01		Width 483, Depth 80, Height 44
Rack.01		
SPLTR.	AmericanDJ	WiFLY D6 Branch
SPLTR.1	AmericanDJ	WiFLY D6 Branch
TP.01		Width 483, Depth 80, Height 44

**AJA KUMO CP**

Price, IN, USD	100
Price, OUT, USD	150
Weight	5
Heat	2
Price, In, Euro	200
Price, out, Euro	4

That is just information about Parameters. The parameter is an attribute that belongs to a model. You can add any parameter using [AVCAD Database Manager](#)



## 4. AVCAD RV - AVCAD for Revit

AVCAD helps engineers and designers create Interconnection Block Schematics with engineering information. Rack Layouts, Cable and Equipment's Lists, and even more.

AVCAD supports custom parameters such as **prices, weight, heat, install time and many more**

**Please, always make the Drafting View scale as 1:1**

AVCAD's purpose is the creation of accurate, detailed and well-readable schemes along with all kinds of reports using simple and intuitive tools.

### 1) Block Schematic tools:

Pre-created Equipment Library containing most commonly brands used in AV-IT industry (Crestron, Extron, BSS, Biamp, AJA, BlackMagic, etc.)

Drag and drop the selected devices to the desired location on a drawing.

Default layers for every kind of scheme circuit. Just choose from Audio, Video, Control, Power, etc.

Fast filter changing for distinguishing the types of interconnection.

Fast replace of the devices on the drawing

Drawing Patch and Termination Panels.

Tools for Cable Drawing and Labelling.

### 2) Rack Layout Tools:

Creating Rack Furniture

Placing the equipment to Rack Layout. All devices have their real dimensions.

### 3) Report Tools:

Cable List

Equipment List

Power Consumption List

IP Tables.

### 4) User Databases.

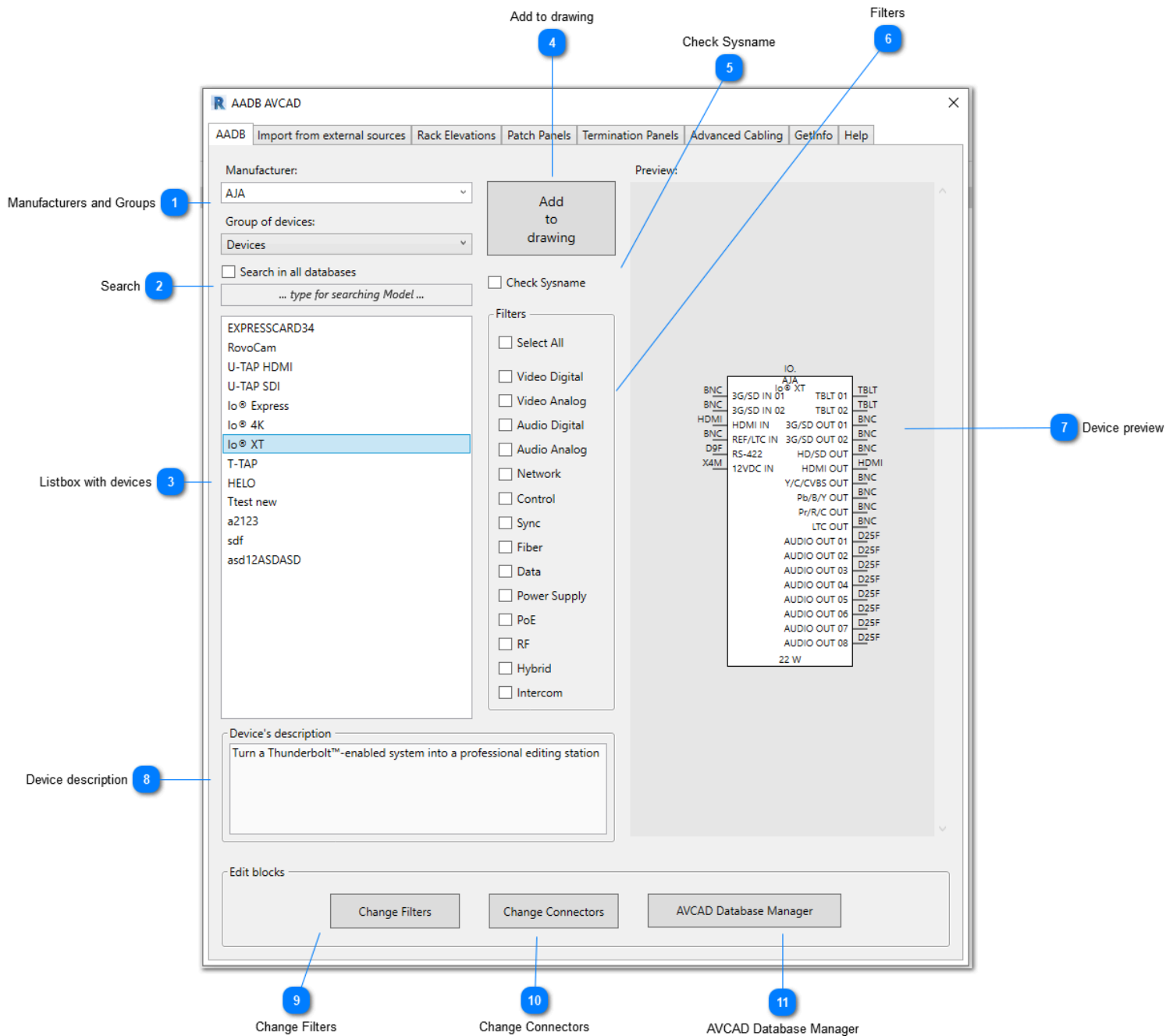
AVCAD Base Manager helps you to create your equipment library using a standalone application.

Easy distribution of your databases via Dropbox, Google Drive, and shared disks. No SQL servers are needed.

## 4.1. Drawfing View Settings

Please, always make the Drafting View scale as 1:1

## 4.2. AADB



See here to understand how it works. [Youtube](#)  
Please, always make the Drafting View scale as 1:1

### 1 Manufacturers and Groups

Manufacturer:  
AJA

Group of devices:  
Devices

Select a Manufacturer and a Group. The manufacturer supports search, so you can just start to type.

2 Search

☐ Search in all databases

... type for searching Model ...

If checked, it searches all the databases. If not, only selected one.

3 Listbox with devices

EXPRESSCARD34

RovoCam

U-TAP HDMI

U-TAP SDI

Io® Express

Io® 4K

Io® XT

T-TAP

HELO

Ttest new

a2123

sdf

asd12ASDASD

Devices of the selected group or the result of the searching

4 Add to drawing

Add  
to  
drawing

Add an element to the Drafting view.

5 Check Sysname

☐ Check Sysname

Check if sysname should be unique

6

## Filters

Filters

☐ Select All
   
  
☐ Video Digital
   
  
☐ Video Analog
   
  
☐ Audio Digital
   
  
☐ Audio Analog
   
  
☐ Network
   
  
☐ Control
   
  
☐ Sync
   
  
☐ Fiber
   
  
☐ Data
   
  
☐ Power Supply
   
  
☐ PoE
   
  
☐ RF
   
  
☐ Hybrid
   
  
☐ Intercom

You can select which filters you want to export. If selected nothing then the full device will be inserted

7

## Device preview

IO.			
	AJA		
	IO XT		
BNC	3G/SD IN 01	TBLT 01	TBLT
BNC	3G/SD IN 02	TBLT 02	TBLT
HDMI	HDMI IN	3G/SD OUT 01	BNC
BNC	REF/LTC IN	3G/SD OUT 02	BNC
D9F	RS-422	HD/SD OUT	BNC
X4M	12VDC IN	HDMI OUT	HDMI
		Y/C/CVBS OUT	BNC
		Pb/B/Y OUT	BNC
		Pr/R/C OUT	BNC
		LTC OUT	BNC
		AUDIO OUT 01	D25F
		AUDIO OUT 02	D25F
		AUDIO OUT 03	D25F
		AUDIO OUT 04	D25F
		AUDIO OUT 05	D25F
		AUDIO OUT 06	D25F

8

### Device description

Device's description

Turn a Thunderbolt™-enabled system into a professional editing station

9

### Change Filters

Change Filters

See [here](#)

10

### Change Connectors

Change Connectors

See [here](#)

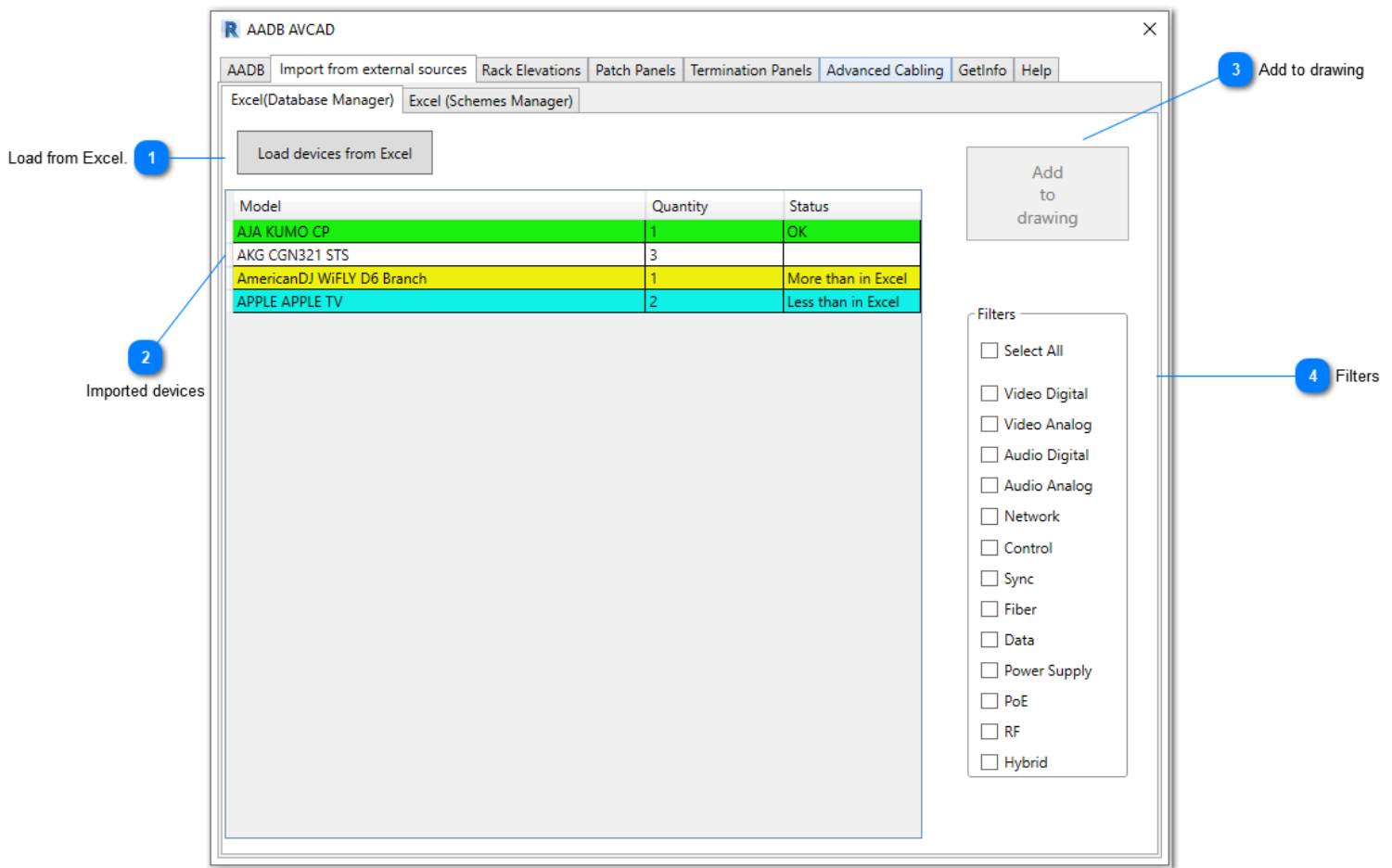
11

### AVCAD Database Manager

AVCAD Database Manager

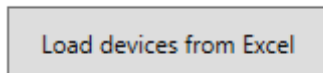
It opens [AVCAD Database Manager](#) if it is installed. If not, then propose to install it.

## 4.2.1. Import from external sources



You can see how it works here. [Youtube](#)

### 1 Load from Excel.



Load from excel. You can get this type of excel from here: [AVCAD Database Manager](#)

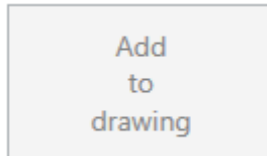
### 2 Imported devices

Model	Quantity	Status
AJA KUMO CP	1	OK
AKG CGN321 STS	3	
AmericanDJ WiFLY D6 Branch	1	More than in Excel
APPLE APPLE TV	2	Less than in Excel

Imported devices and statuses

3

### Add to drawing



It will add the device to a drafting view with filters.

4

### Filters

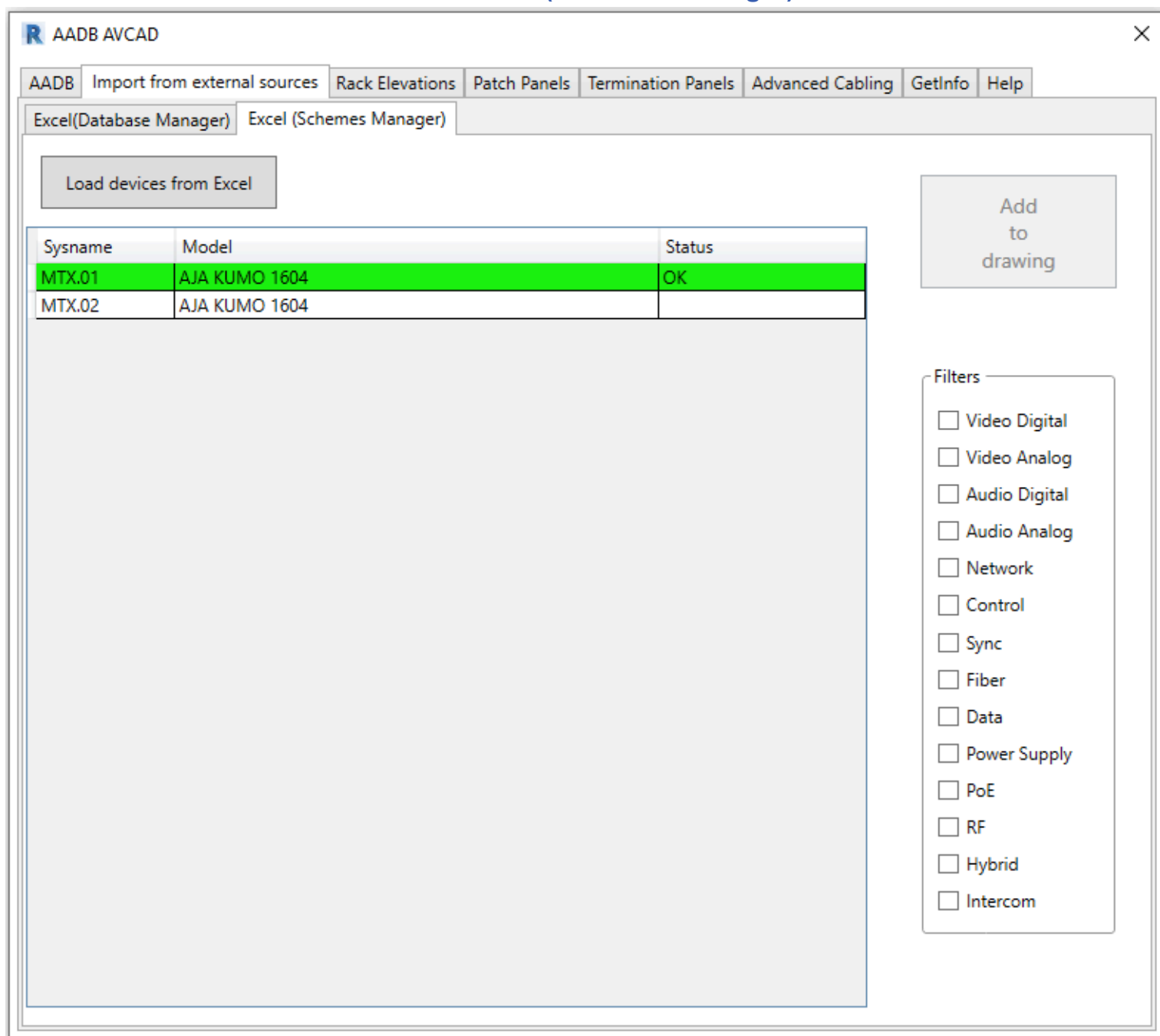
**Filters**

- ☐ Select All
- ☐ Video Digital
- ☐ Video Analog
- ☐ Audio Digital
- ☐ Audio Analog
- ☐ Network
- ☐ Control
- ☐ Sync
- ☐ Fiber
- ☐ Data
- ☐ Power Supply
- ☐ PoE
- ☐ RF
- ☐ Hybrid

If selected nothing, it will insert the full device.

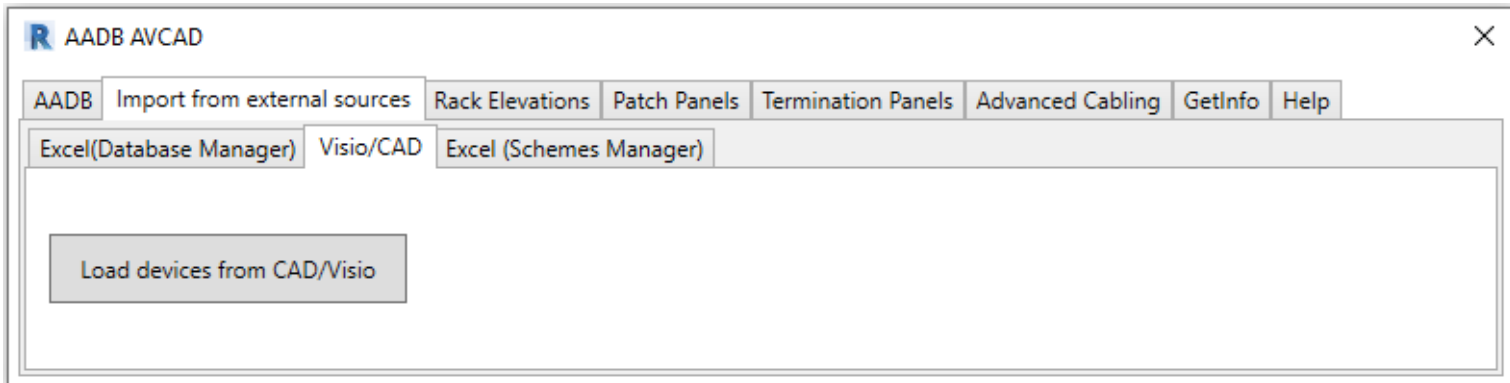


#### 4.2.1.1. Excel(Schemes Manager)



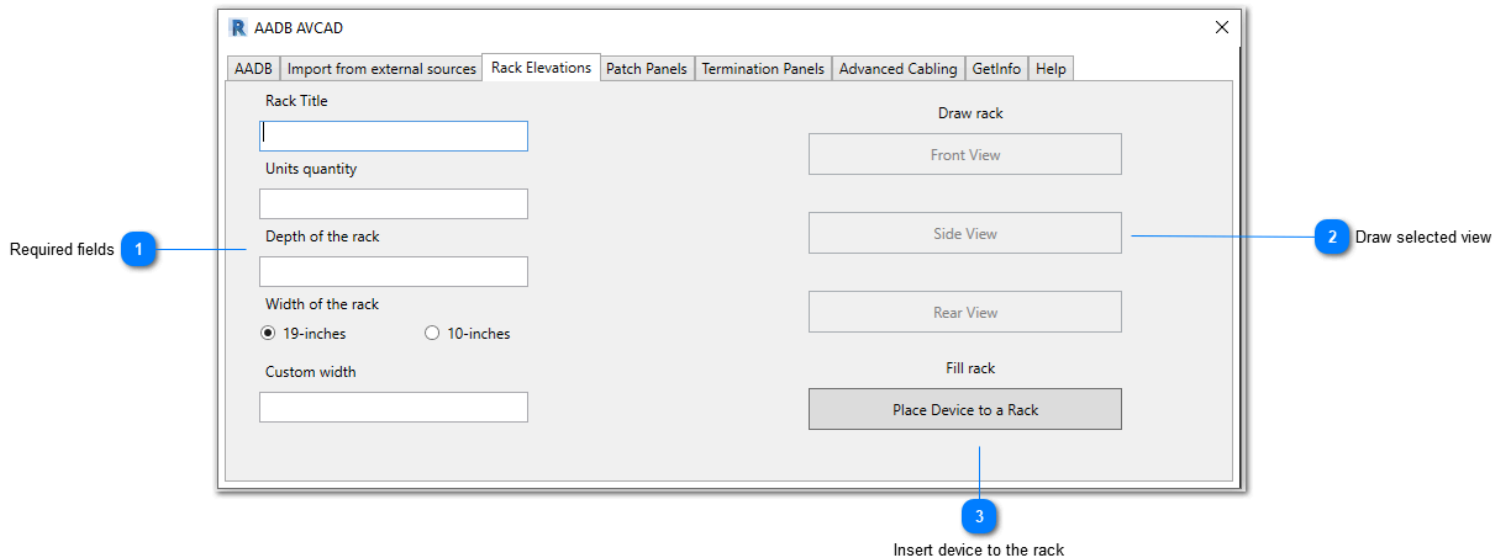
- Using this functionality you can get the device's info from an excel sheet and put it on the drawing.
- You have to use an excel sheet from [here](#).
- You can modify excel sheets and add some information
- Please, see this link to understand how it works. [Youtube](#)

#### 4.2.1.2. Visio/CAD



This will help you to import your drawing including devices, panels, racks, feathers, arrows, cable labels from your AVCAD for CAD or AVCAD for Visio to your Drafting View in Revit.

## 4.2.2. Rack Elevations



See here to understand how it works. [Youtube](#)

### 1 Required fields

Rack Title

Units quantity

Depth of the rack

Width of the rack

☒ 19-inches ☐ 10-inches

Custom width

Required fields to create rack elevations

### 2 Draw selected view

Draw rack

Front View

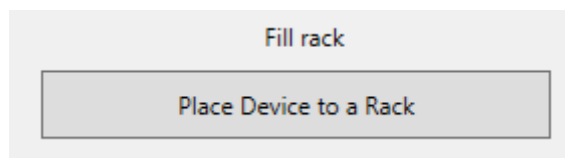
Side View

Rear View

Select the view you want to add to the drawing

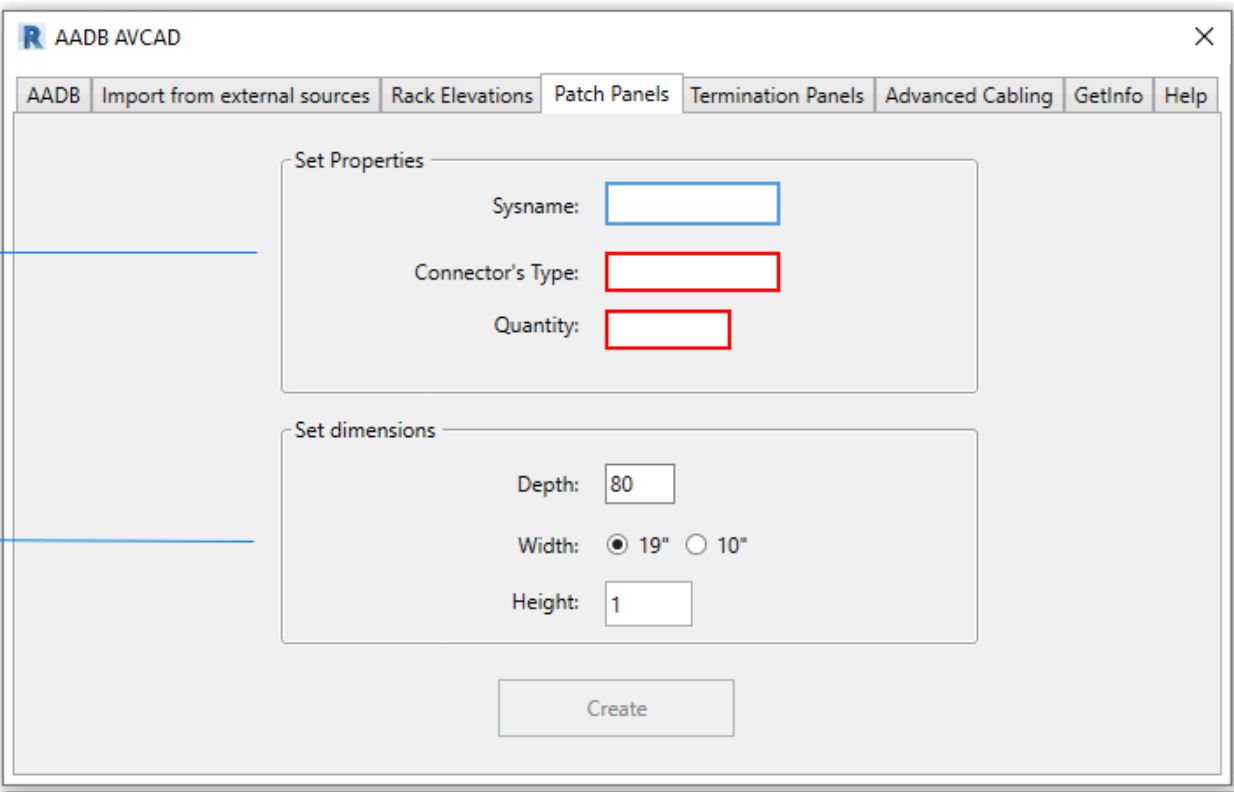
3

### Insert device to the rack



See here to understand how it works. [Youtube](#)

### 4.2.3. Patch Panels



AADB AVCAD

AADB Import from external sources Rack Elevations Patch Panels Termination Panels Advanced Cabling GetInfo Help

Set Properties

Sysname:

Connector's Type:

Quantity:

Set dimensions

Depth:

Width: ☒ 19" ☐ 10"

Height:

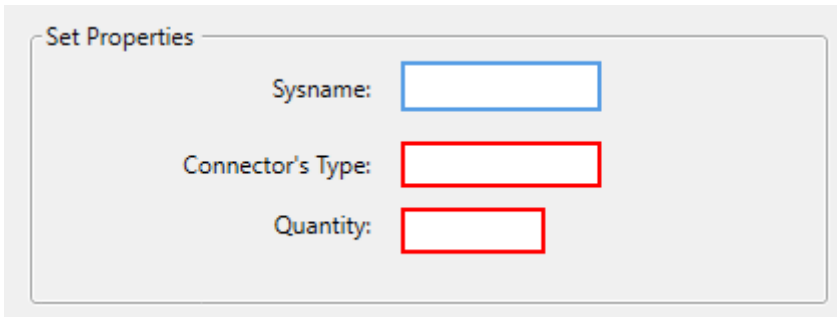
Create

Required fields 1

Dimensions 2

See here to understand how it works. [Youtube](#)

#### 1 Required fields



Set Properties

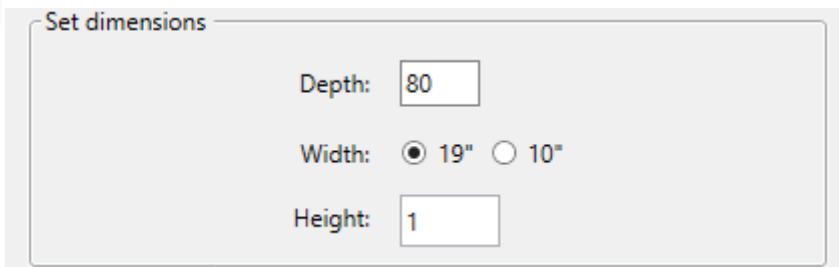
Sysname:

Connector's Type:

Quantity:

Fill the information to create a panel.

#### 2 Dimensions



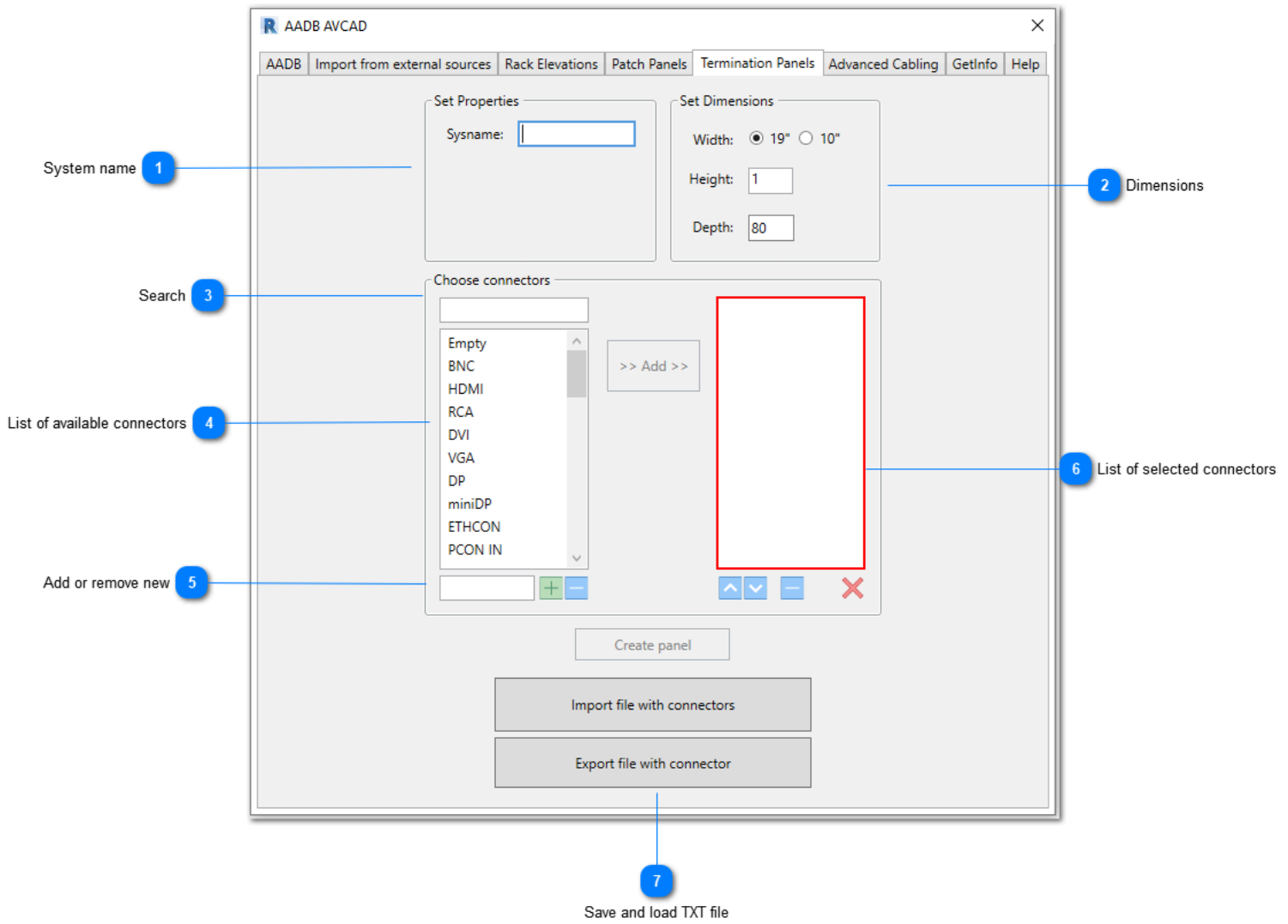
Set dimensions

Depth:

Width: ☒ 19" ☐ 10"

Height:

## 4.2.4. Termination Panels



See here how it works. [Youtube](#)

### 1 System name

This is a close-up of the 'Set Properties' section from the Termination Panels window. It features a label 'Sysname:' followed by a text input field.

## 2 Dimensions

Set Dimensions

Width: ☒ 19" ☐ 10"

Height:

Depth:

## 3 Search

Choose connectors

Search for the connectors

## 4 List of available connectors

- Empty
- BNC
- HDMI
- RCA
- DVI
- VGA
- DP
- miniDP
- ETHCON
- PCON IN

## 5 Add or remove new

If you do not have the connector you need - just add it.

## 6 List of selected connectors

List of selected connectors

7

## Save and load TXT file

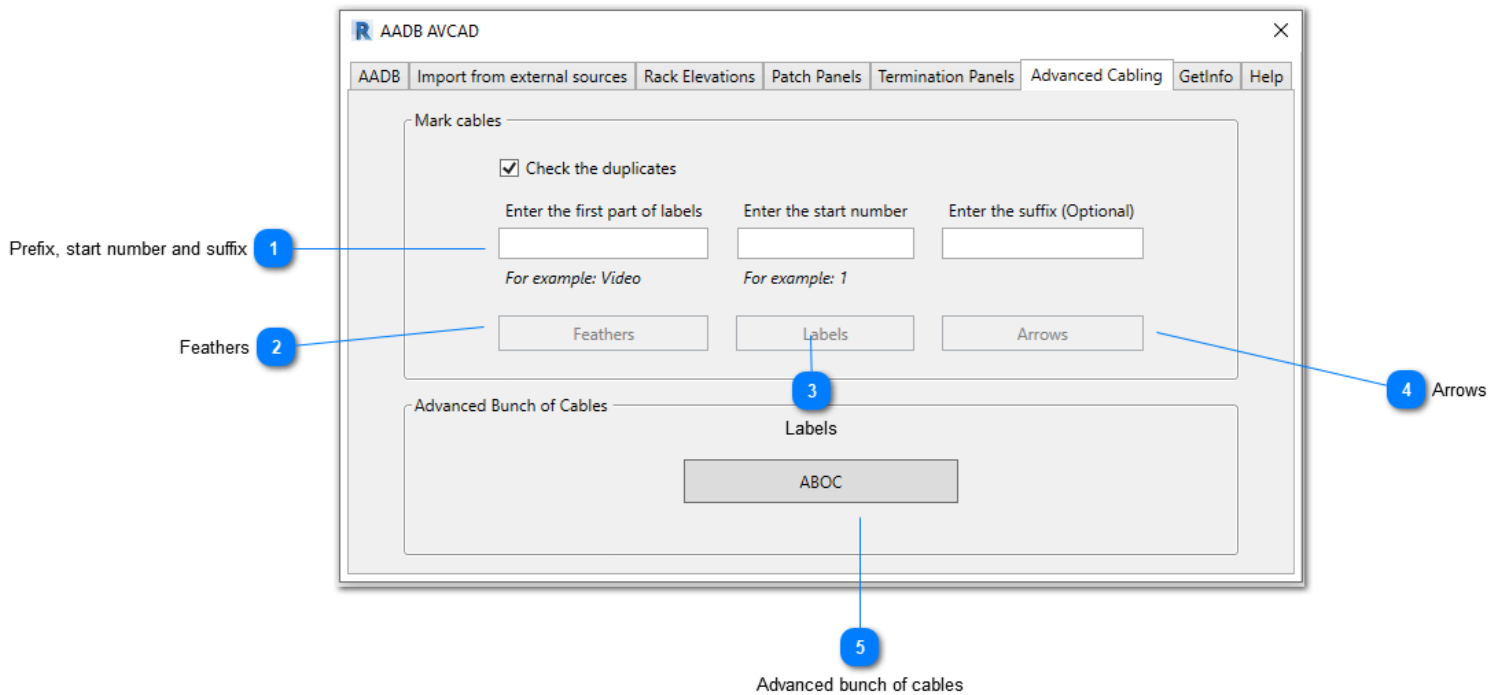
Import file with connectors

Export file with connector

We suggest you save the backups of your connectors to TXT. This way you also can share them with your colleagues.



## 4.2.5. Advanced Cabling



### 1 Prefix, start number and suffix

Enter the first part of labels	Enter the start number	Enter the suffix (Optional)
<input type="text"/>	<input type="text"/>	<input type="text"/>
<i>For example: Video</i>	<i>For example: 1</i>	

Prefix, start number and suffix for the first label/arrow/feather.

### Feathers

2

Please, click Escape button to go to the next instruction while you create the feathers/labels/arrows  
See here to understand how it works. [Youtube](#)

### 3 Labels

Please, click Escape button to go to the next instruction while you create the feathers/labels/arrows  
See here to understand how it works. [Youtube](#)

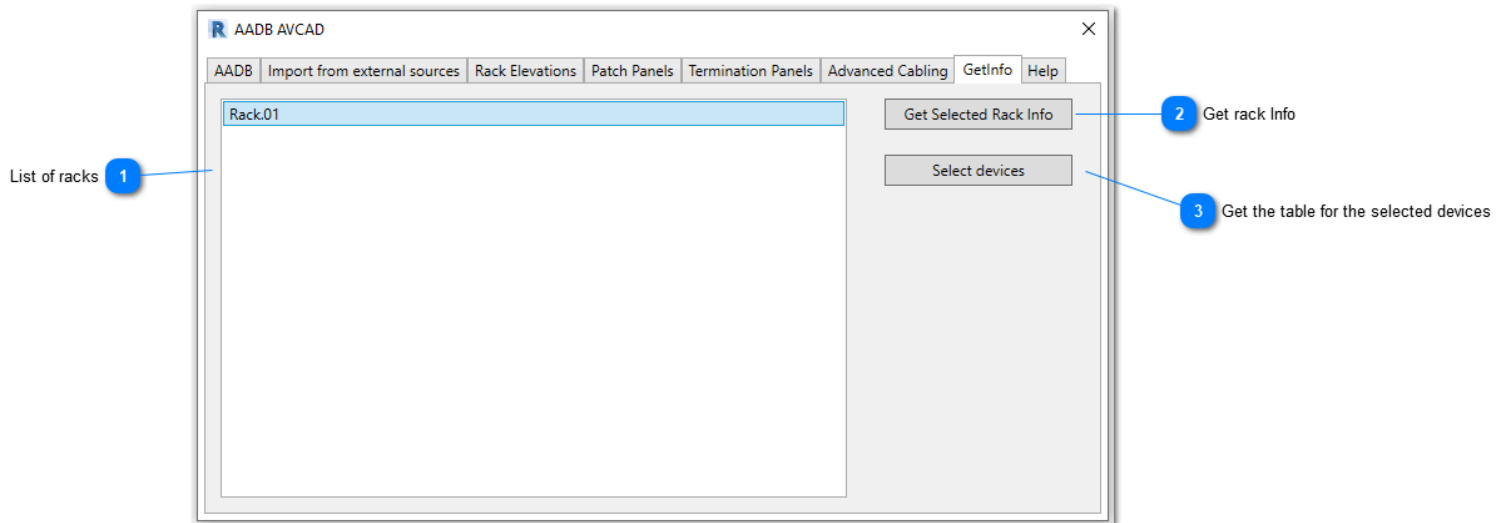
### 4 Arrows

Please, click Escape button to go to the next instruction while you create the feathers/labels/arrows  
See here to understand how it works. [Youtube](#)

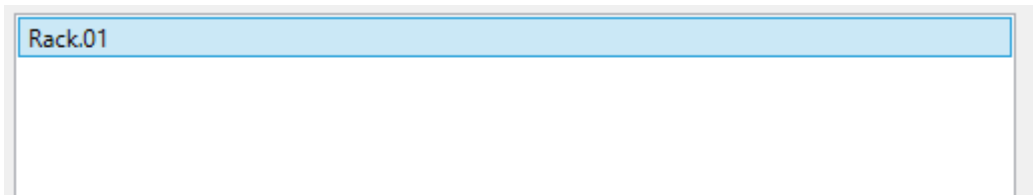
### 5 Advanced bunch of cables

See here to understand how it works. [Youtube](#)

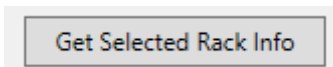
## 4.2.6. Get Info



### 1 List of racks



### 2 Get rack Info



Get the table for the Racks.  
See this video to understand how it works. [Youtube](#)

**Get the table for the selected devices**

Select devices

Select devices, you can hide/unhide columns, export sum reorder columns in this form:

AVCAD RV. Get Info as a Table

Manage Table View

☐ Export Sum

☒ Export Column Headers

Draw Table

Place the table

<input type="checkbox"/> Type	<input type="checkbox"/> Sysname	<input type="checkbox"/> Description	<input checked="" type="checkbox"/> Model	<input type="checkbox"/> Location	<input type="checkbox"/> IP	<input type="checkbox"/> Power	<input checked="" type="checkbox"/> Quantity
Device	CP.02	AJA KUMO Remote Control Panel	KUMO CP			4	1
Device	SPLTR.02	Wireless DMX Splitter/Amplifier	WiFLY D6 Branch			120	1
Device	SPLTR.03	Wireless DMX Splitter/Amplifier	WiFLY D6 Branch			120	1
Device	ATV.0101	APPLE TV	APPLE TV			2.4	1
Device	MTX.01	1604 Compact 3G/HD/SD-SDI Router	KUMO 1604			7.5	1

### 4.2.7. Change Filters

You can add another version of the selected device to the drawing. For example, just power supply or digital video from the full device.

See here to understand how it works: [Youtube](#).

### 4.2.8. Change Connectors

You can add another version of the selected device with only needed connectors. For example, just the first digital video input from the full device.

See here to understand how it works: [Youtube](#).

## 4.2.9. Hard and Soft Options

One of the ways to add extra information to a device is **Hard** and **Soft options**.

**Hard** and **Soft options** allow users to add to block such information as expansion cards, redundant power supply, software licenses and so on.

The major difference between **Hard** and **Soft options** is **Hard options** have connectors, and **Soft options** do not have them and store them at a block just as text attributes.

See here to understand how it works: [Youtube](#)

*Example of use: device without any Hard options (left) and device with Hard option as a redundant power supply (right)*



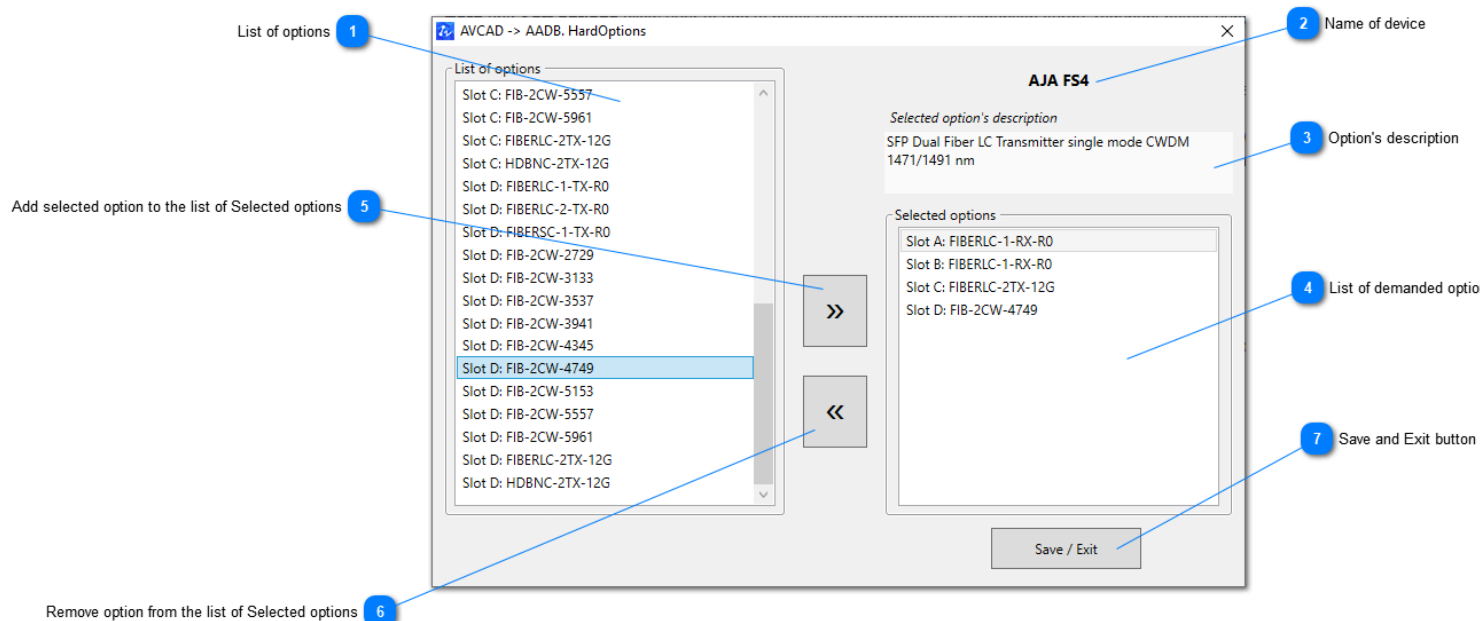
**Hard** and **Soft options** are stores in a database and are associated with a specific device. After you create and save the device in the [AVCAD Database manager](#), you will be able to add **Hard** and **Soft options** to it.

**Hard options** are very useful when you want to add to a device, for example, an SFP module or redundant power supply.

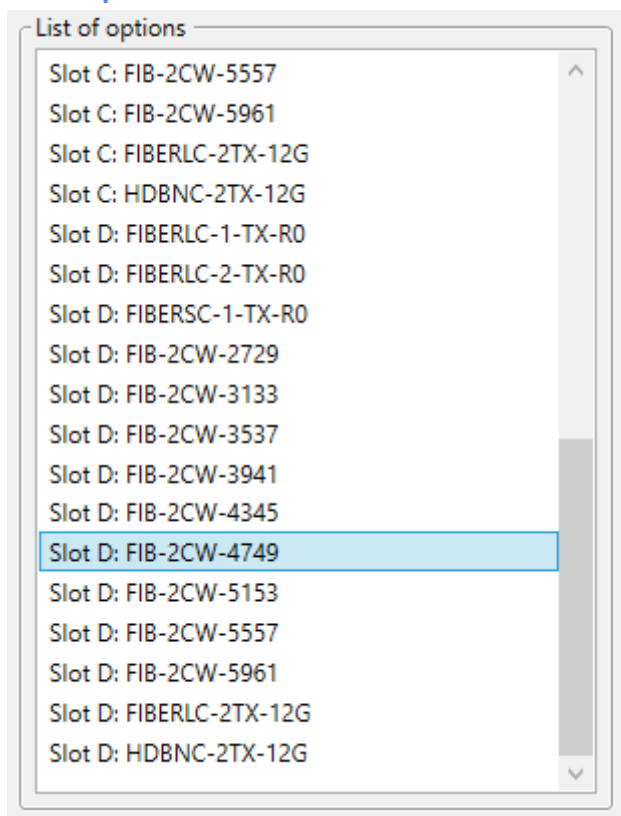
**Soft options** are very useful if you want to add to a device, for example, software licenses or even a lens to a projector.

1. Add **Hard** or **Soft options** to a device using [AVCAD Database Manager](#). Sync the database with **AADB**.
2. Add the device to a drawing.
3. If the device contains **Hard Options** an interface will appear.
4. Add demanded **Hard options** and click **Save and Exit** button. If you don't want to add any **Hard option** to the device, just click **Save and Exit** button when the **Selected options** field is empty.
5. If the device contains **Soft options** an interface will appear.
6. Add demanded **Soft options** and click **Save and Exit** button. If you don't want to add any **Soft option** to the device, just click **Save and Exit** button when the **Selected options** field is empty.

You can see all added **Hard** and **Soft options** at the [Equipment List of Scheme Manager](#).



## 1 List of options



A list of options existed for the device at the database and was created in Base Manager

## 2 Name of device

**AJA FS4**

Name of the device

3

**Option's description***Selected option's description*

SFP Dual Fiber LC Transmitter single mode CWDM  
1471/1491 nm

Preview of option's description

4

**List of demanded options***Selected options*

Slot A: FIBERLC-1-RX-R0

Slot B: FIBERLC-1-RX-R0

Slot C: FIBERLC-2TX-12G

Slot D: FIB-2CW-4749

List of selected options

5

**Add selected option to the list of Selected options**

&gt;&gt;

Use this button to add an option to the device

6

**Remove option from the list of Selected options**

&lt;&lt;

Use this button to remove the selected option from the list of selected options for this device.

7

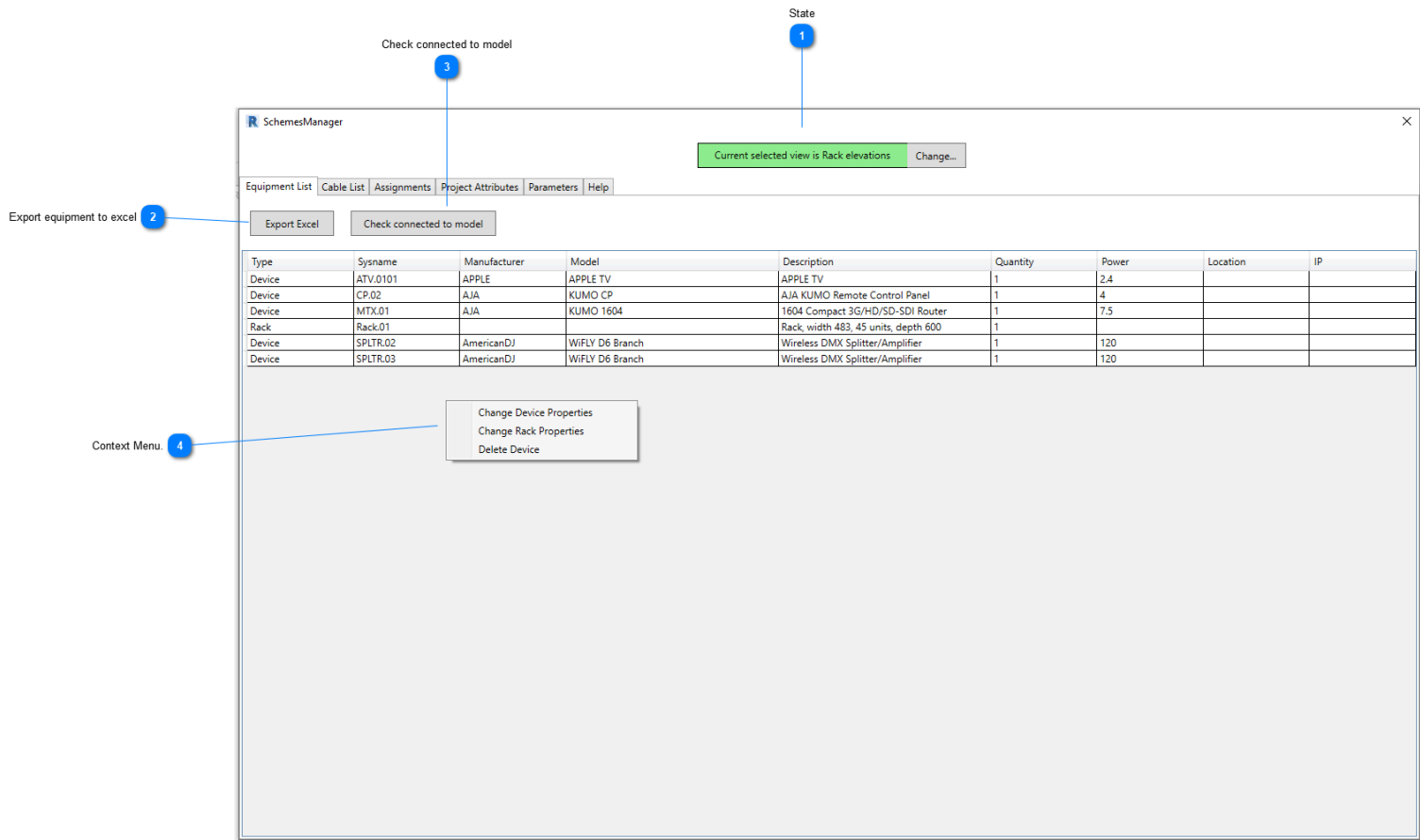
**Save and Exit button**

Save / Exit

Click the button to save selected options and close the interface.



## 4.3. Scheme Manager



### 1 State

Current selected view is Rack elevations Change...

This shows you the state of a drafting view. Schemes Manager can be connected to the other view in your project.

If you see green color, it means that Schemes Manager is connected to the active drafting view.

You can change it if you click on the Change button.

### 2 Export equipment to excel

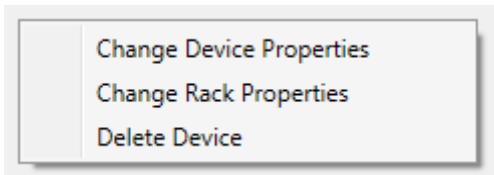
Export Excel

### 3 Check connected to model

Check connected to model

You can check and remove (if needed) the elements that are connected to a different element in Revit Model. For example, you can check the projector on the schematics and on the Revit model.

## Context Menu.



### 1. Active view

Change Device Properties - You can change Sysname, Location and IPs

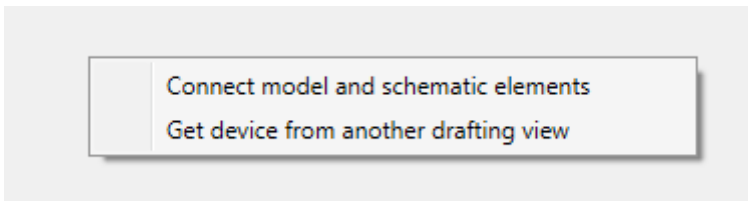
Change Rack Properties - You can change rack properties such as the number of units and width. See here:

[Youtube](#)

Delete device - you can remove all the versions of the device

### 2. Another view

In this case, you will have the different context menu:



Connect model and schematic elements. See here: [Youtube](#).

Get the device from another drafting view. See here: [Youtube](#).

### 4.3.1. Cable List

Export Excel 1

Context Menu 2

CableNumber	SysnameOut	ConnectorOut	DescriptionOut	ModelOut	LocationOut	SysnameIn	ConnectorIn	DescriptionIn	ModelIn	LocationIn	Cable Type	Cable Length
A.01	SWTCH.01	Rj45	DM Out	Crestron DMPS3-4	Rack, Unit 15, Front	DMRC.01	Rj45	DM in	Crestron DM-RMC			
A.02	SWTCH.01	2pin	70/100V out	Crestron DMPS3-4	Rack, Unit 15, Front	CS.01	TB4	Input	Crestron SAROS IC			
A.03	SWTCH.01	HDMI	HDMI Out	Crestron DMPS3-4	Rack, Unit 15, Front	TP.01	HDMI	01	Panel			
A.03.1	TP.01	HDMI	01	Panel		TV.01	HDMI	HDMI IN	Panasonic TH-42LR			
A.05	CONF.01	HDMI	HDMI OUT 02	Cisco SX80	Rack.01, Unit 20, Front	SWTCH.01	HDMI	HDMI In 01	Crestron DMPS3-4	Rack.01, Unit 30, Front		
A.06	TP.01	HDMI	04	Panel		SWTCH.01	HDMI	HDMI In 02	Crestron DMPS3-4	Rack.01, Unit 30, Front		
A.07	CAM.01	HDMI	HDMI OUT	Cisco SpeakerTrack		CONF.01	HDMI	HDMI IN 01	Cisco SX80	Rack.01, Unit 20, Front		
A.08	DMRC.01	HDMI	HDMI out	Crestron DM-RMC		PROJ.01	HDMI	HDMI IN	Panasonic PT-DZ13			
AUD.01	CS.01	TB4	Output	Crestron SAROS IC		CS.02	TB4	Input	Crestron SAROS IC			
AUD.02	CS.02	TB4	Output	Crestron SAROS IC		CS.03	TB4	Input	Crestron SAROS IC			
AUD.03	CS.03	TB4	Output	Crestron SAROS IC		CS.04	TB4	Input	Crestron SAROS IC			
CTRL.01	DMRC.01	5pin	RS-232	Crestron DM-RMC		PROJ.01	Dsub9	Serial IN	Panasonic PT-DZ13			
LAN.01	DMRC.01	Rj45	LAN	Crestron DM-RMC		PROJ.01	RJ45	LAN	Panasonic PT-DZ13			

Mark again cables  
Delete cables

#### 1 Export Excel

Export Excel

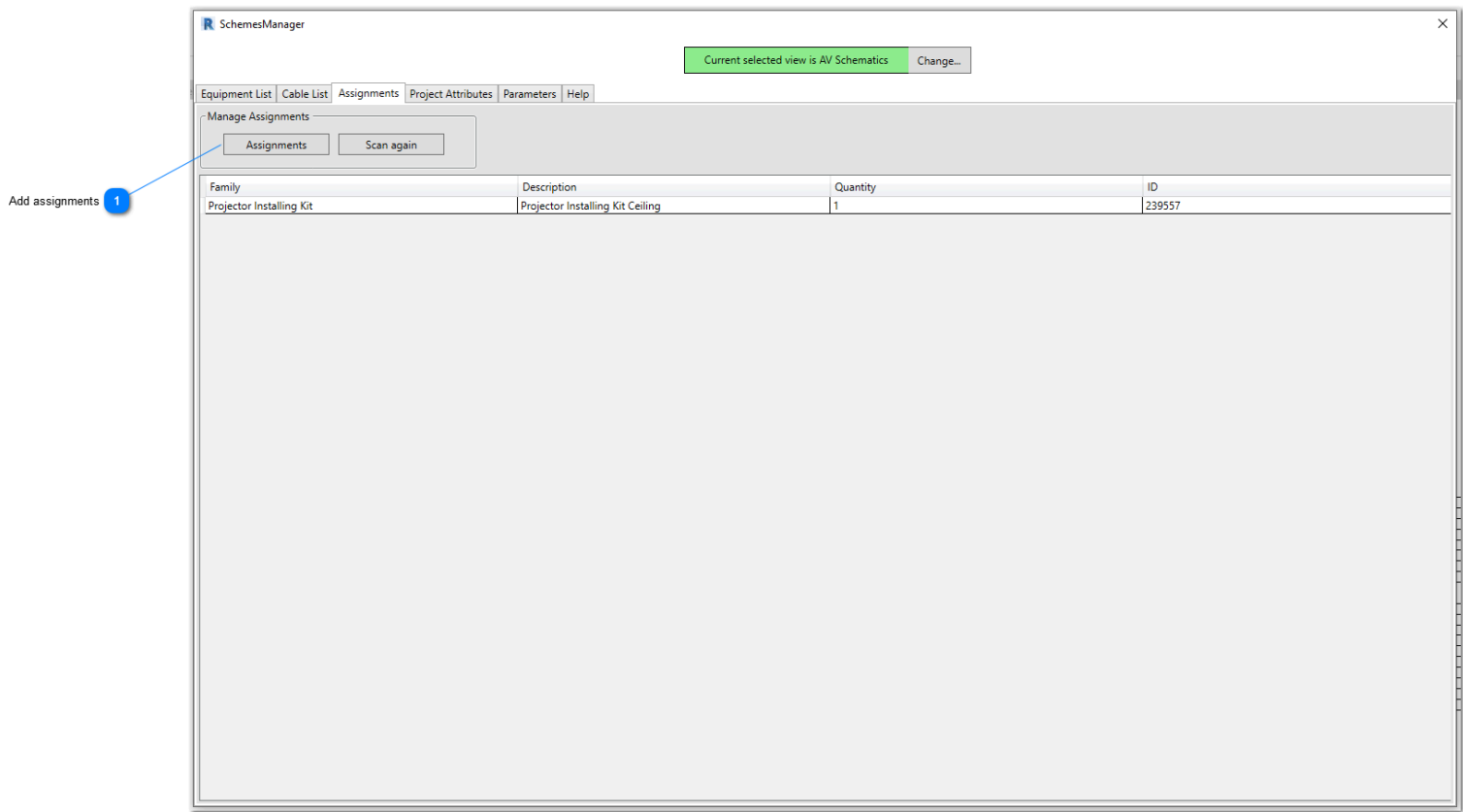
You will be asked to select the drafting views on which you want to have an excel with all the cables.

#### 2 Context Menu

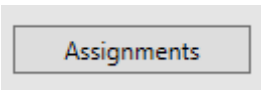
Mark again cables  
Delete cables

You can re-mark cables and Delete cables here.

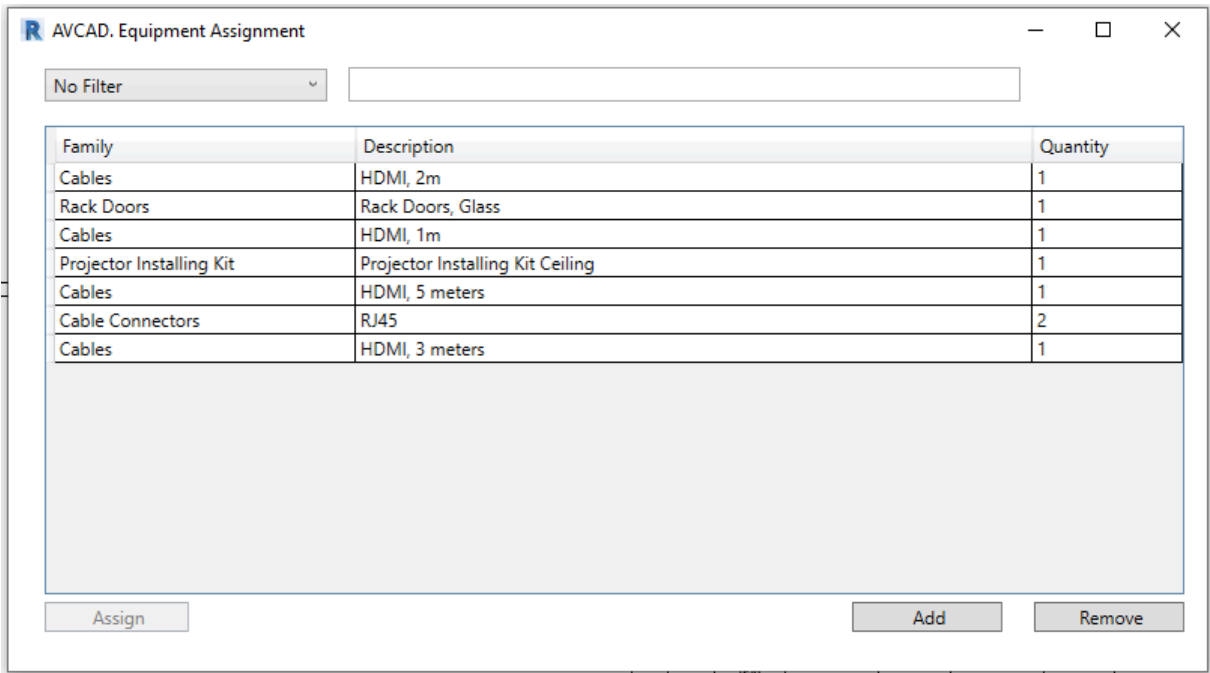
### 4.3.2. Assignments



#### 1 Add assignments



You can add assignments here to any items on a drafting view. See the video here: [Youtube](#).  
You can check how to add assignment here: [Assignments](#)



### 4.3.3. Project Attributes

SchemesManager

Current selected view is AV Schematics Change...

Equipment List Cable List Assignments Project Attributes Parameters Help

Save as Excel You can change Project Attributes here. The project attributes are used for a specific device. Example: Serial Number, VLAN, Subnet Mask

Sysname	Manufacturer	Model
CAM.01	Cisco	SpeakerTrack 60
CP.01	AJA	KUMO CP
DMRC.01	Crestron	DM-RMC-4K-100-C
PROJ.01	Panasonic	PT-DZ13K
SMP.01	AJA	HELO
SWTCH.01	Crestron	DMPS3-4K-250-C-AIRMEDIA
TP.01		Width 483, Depth 80, Height 44
TV.01	Panasonic	TH-42LRU30
CS.01	Crestron	SAROS IC4T-B-T-EACH
CS.02	Crestron	SAROS IC4T-B-T-EACH
CS.03	Crestron	SAROS IC4T-B-T-EACH
CS.04	Crestron	SAROS IC4T-B-T-EACH

CAM.01

Serial Number A

VLAN 123

Subnet Mask 255.255.255.0

Test 1

Save Show Parameters

You can add any Project Attribute that belongs to the unique device with a unique System Name (For example, for MTX.01).

For example - Serial Number, Password, VLAN, etc.

**You have to add Project Attributes ONLY for a saved drawing.** We suggest you click on the Save Drawing button and then work with attributes.

Another way it can be placed in the %TEMP% folder.

Please, see these two videos to understand how to work with attributes:

1. [Project Attributes](#)
2. [Project Attributes as tables on the drawing](#)

## 4.3.4. Parameters

SchemesManager

Current selected view is AV SchematicsChange...

Equipment ListCable ListAssignmentsProject AttributesParametersHelp

Parameters here are READ-ONLY. You can change them using AVCAD Database Manager. The parameters are used for all devices of a specific model.Example: Price, Heat, Weight

Sysname	Manufacturer	Model
CAM.01	Cisco	SpeakerTrack 60
CP.01	AJA	KUMO CP
DMRC.01	Crestron	DM-RMC-4K-100-C
PROJ.01	Panasonic	PT-DZ13K
SMP.01	AJA	HELO
SWTCH.01	Crestron	DMP53-4K-250-C-AIRMEDIA
TP.01		Width 483, Depth 80, Height 44
TV.01	Panasonic	TH-42LRU30
CS.01	Crestron	SAROS IC4T-B-T-EACH
CS.02	Crestron	SAROS IC4T-B-T-EACH
CS.03	Crestron	SAROS IC4T-B-T-EACH
CS.04	Crestron	SAROS IC4T-B-T-EACH

AJA HELO

Price, IN, USD50

Price, OUT, USD100

Weight12

Heat1

Price, In, Euro100

Price, out, Euro2

That is just information about Parameters. The parameter is an attribute that belongs to a model. You can add any parameter using [AVCAD Database Manager](#).

## 5. AVCAD Database Manager

AVCAD Database Manager is a portable and free application, that helps you to create, edit and manage your library of devices for AVCAD.

Please, see this playlist about [AVCAD Database Manager](#).

To install **AVCAD Database Manager**, do the next steps:

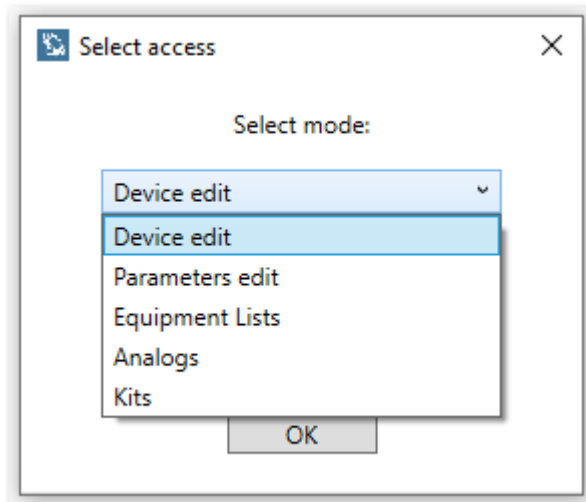
1. Download **AVCAD\_Database\_Manager\_x.x.exe** from Support page <https://www.aadbsoftware.com/support>
2. Run exe file, and follow the instruction.
3. After installation run **AVCAD Database Manager** to start working with the program.

During the very first start choose a folder where databases will be stored. It could be a local disk, shared disk, Dropbox or Google Drive.

**Please, do not use C:\Users\Public\SharedLibrary as a folder for databases. That is an internal folder for AVCAD**

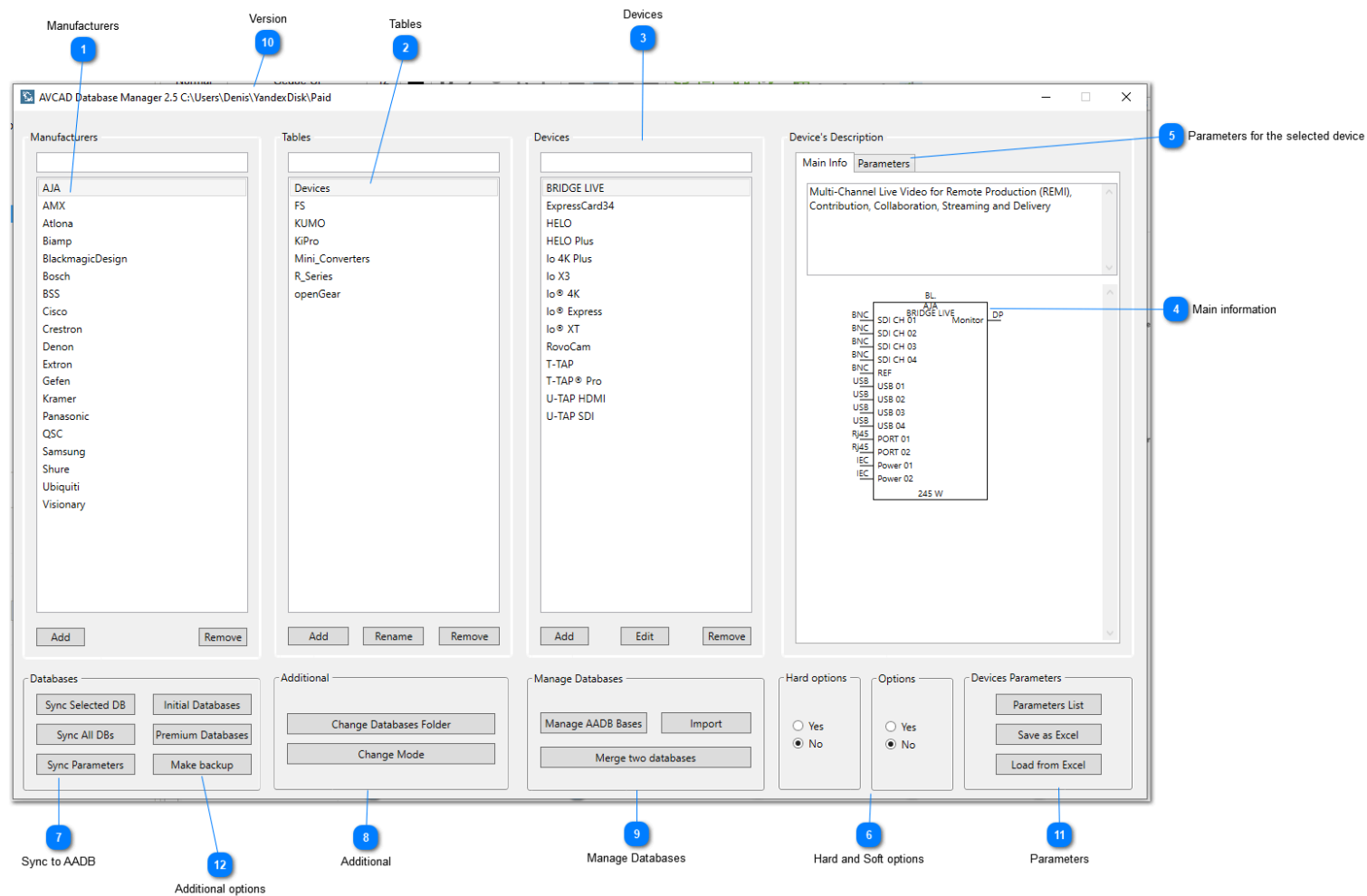
See this playlist to understand all the features of AVCAD Database Manager. [Youtube](#)

Using the pop-up menu choose the demanded mode and click OK:



## 5.1. Device Edit Mode

Choose **Device edit** mode if you want full access to databases (devices and parameters).



- 1 Manufacturers**  
In the **Manufacturer**, the column displays all the current user bases. Use **Add/Remove** buttons to add or remove user bases.
- 2 Tables**  
In the **Tables**, the column displays all the groups of devices of the current base. Use **Add/Remove** buttons to add or remove the tables. Use **Rename** button to rename.
- 3 Devices**  
In the **Devices** column displays all the devices of the group.
- 4 Main information**  
Here you can see a selected device and its description.
- 5 Parameters for the selected device**  
Work with custom [parameters](#).
- 6 Hard and Soft options**  
Display an existence of Hard and Soft options of the selected device



## 7 Sync to AADB

Use the **Sync Selected Database** button to copy to AADB (C:\Users\Public\SharedLibrary - main technical folder for **AVCAD**)

Use the **Sync All DBs** button to copy all bases to AADB.

Use the **Sync Parameters** button to copy

See this video to understand how it works, [Youtube](#).

## 8 Additional

Use the **Change Databases folder** button to change location with databases

Use the **Change Manager's Mode** button to change mode.


## 9 Manage Databases

**Manage AADB Bases**

**Import**

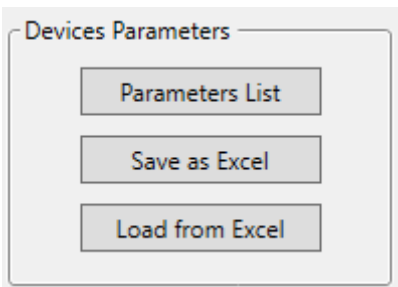
**Merge two databases**

## 10 Version

 **AVCAD Database Manager 2.5** C:\Users\Denis\YandexDi

Version's number and current folder with databases

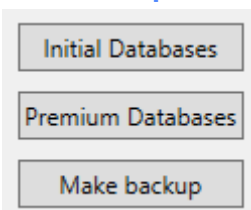
## 11 Parameters



Import/export parameters as excel to connect it with custom RMS.

See here to understand how it works. [Youtube](#).

## 12 Additional options



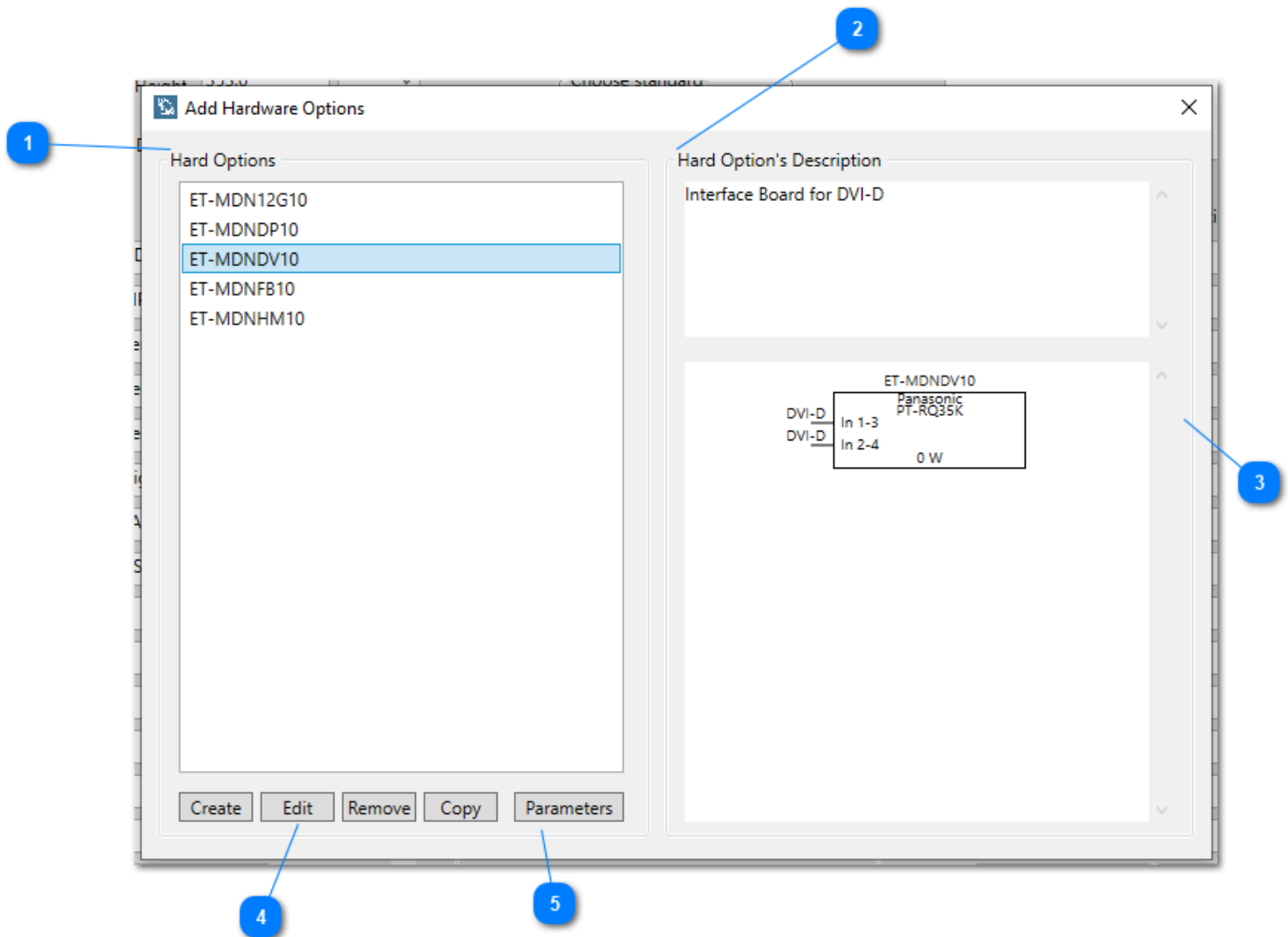
1) Initial Databases - just for the quick copy of some basic databases from our cloud. Free of charge.

2) Premium Databases - a subscription with databases updates. See here.

3) Make backups - Make a databases backup. See here.

### 5.1.1. Add Hard options

1. Click the **Hard options** button to add options with connectors (for example, redundant power supply, expansion card and so on). An interface will appear



1. List of existed Hard options

2. Description of Hard option

3. Hard's option preview

4. [Create new, edit, remove selected hard option or copy hard options from another device.](#)

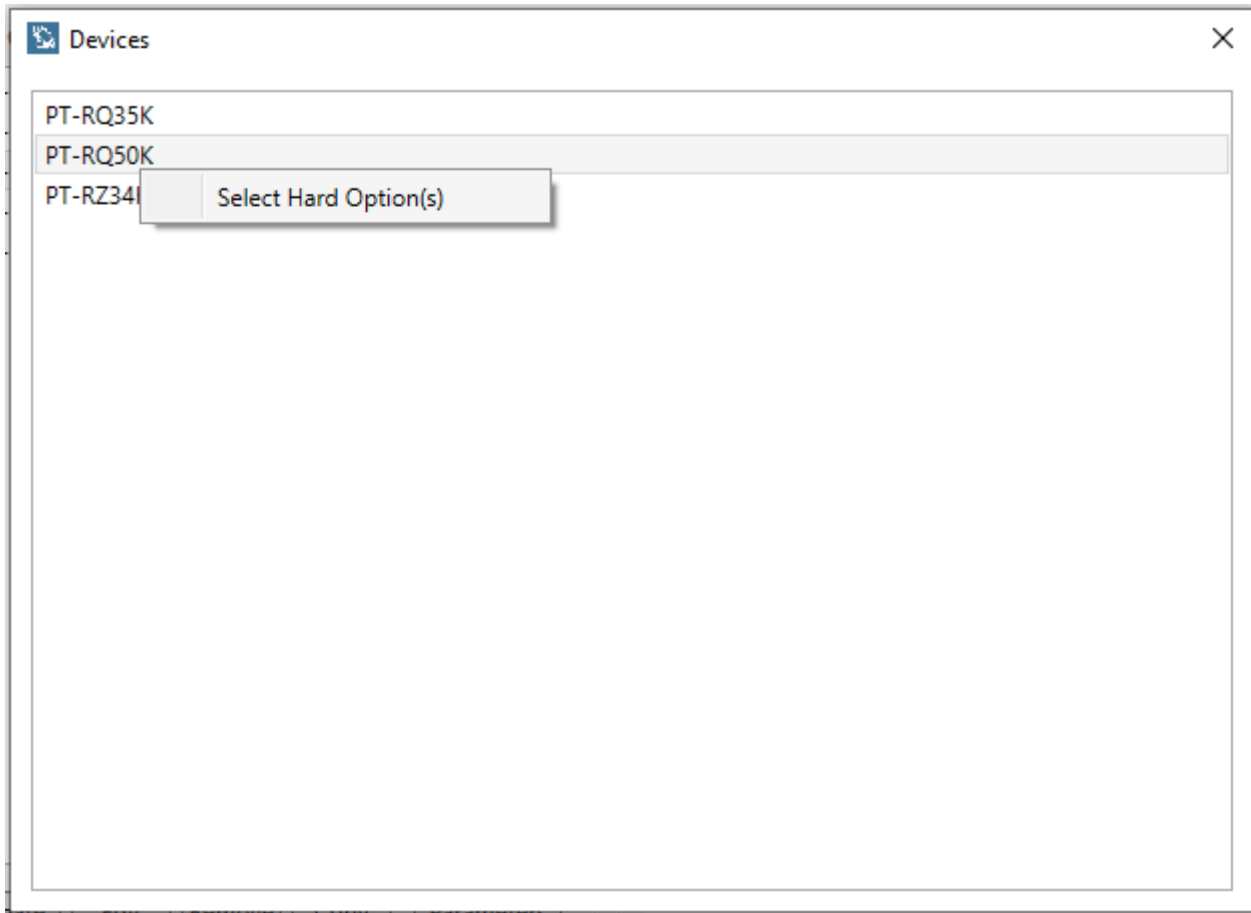
5

Parameters

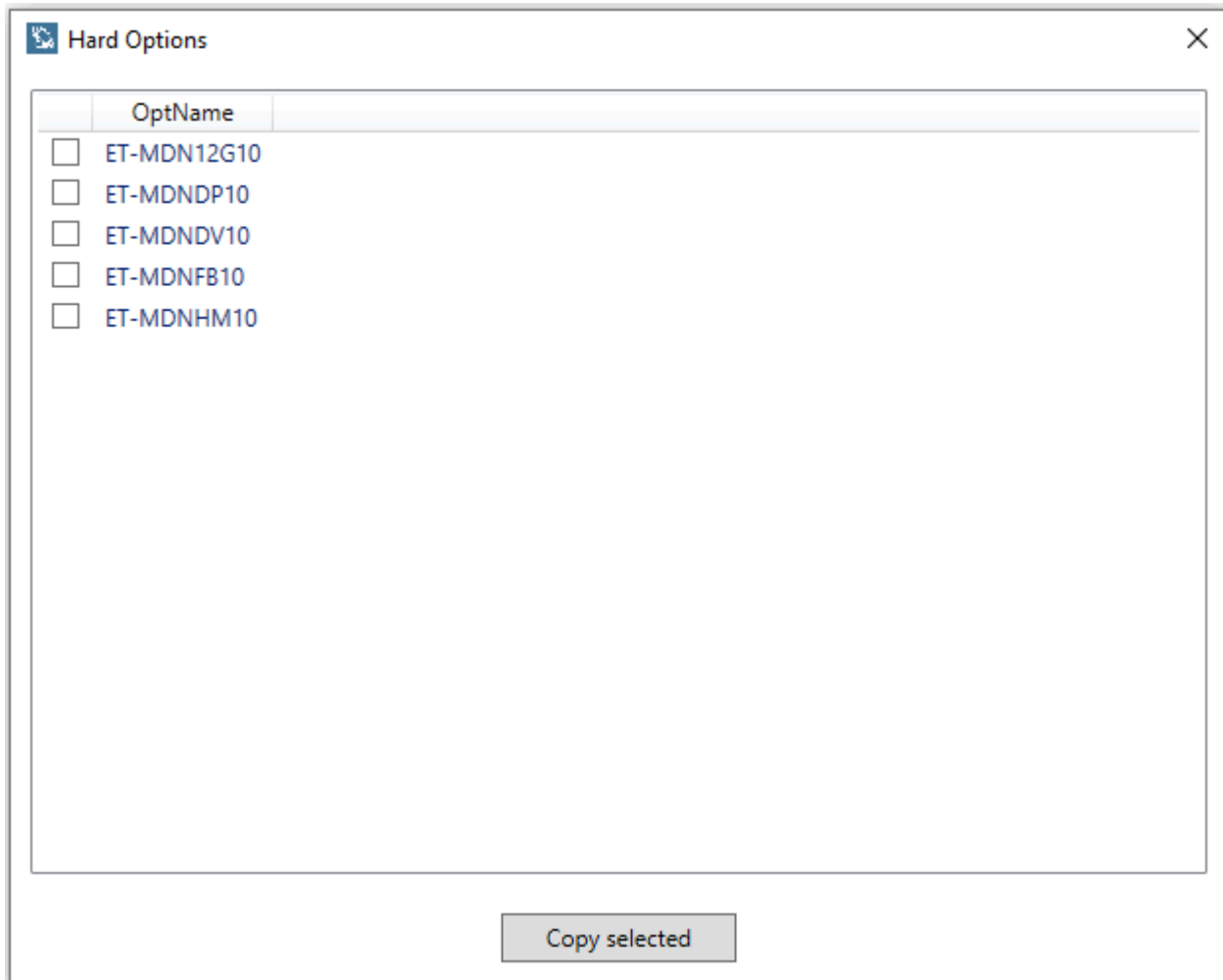
Fill Parsmeteres for selected Hard option

#### 5.1.1.1. Copy option

- After you click on "Copy option" you will have to choose the device from which you want to copy options



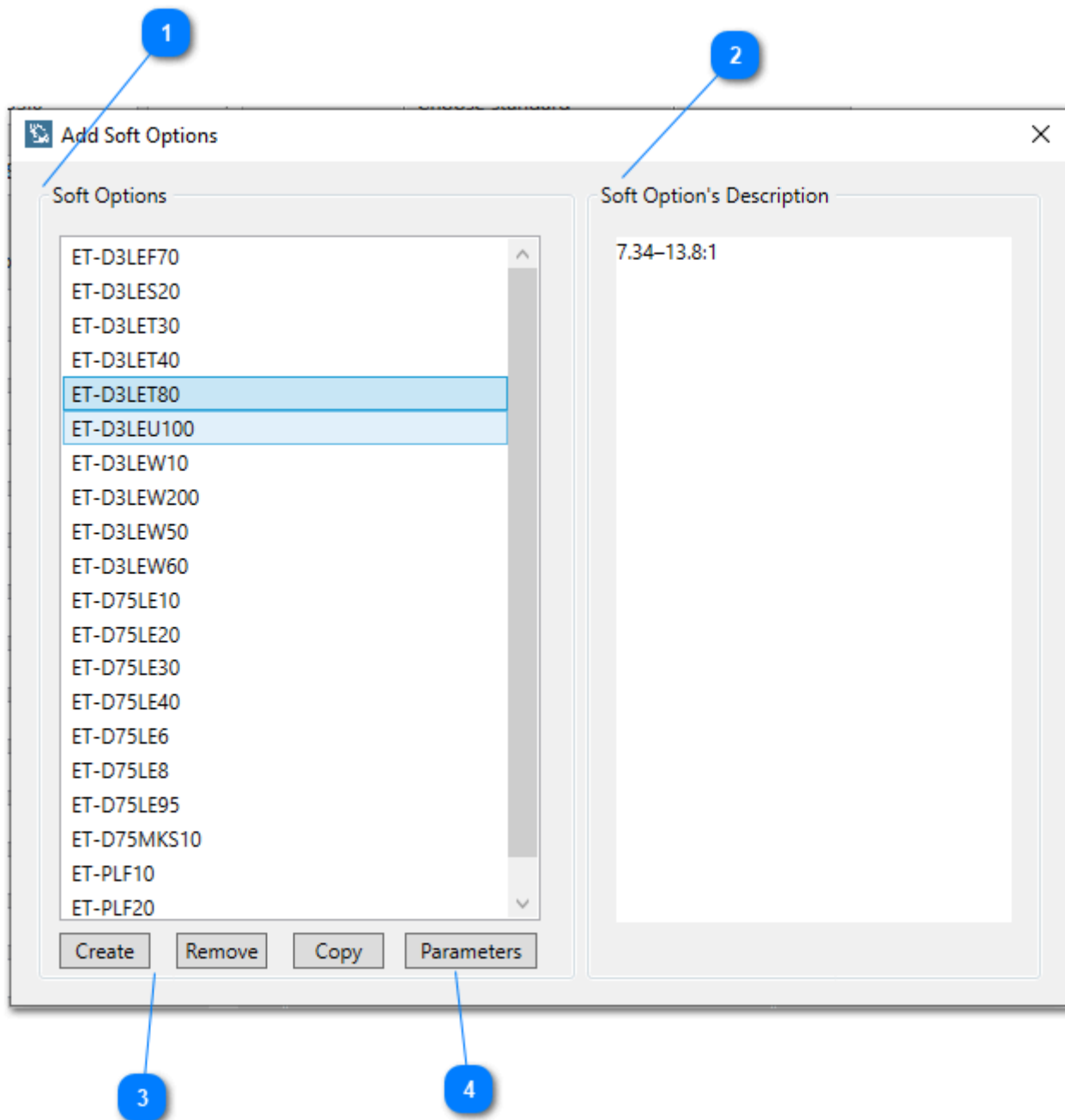
- Right button and "Select Hard Options"



- Select needed and click on Copy Selected. All the selected options have been copied.

### 5.1.2. Add Soft option

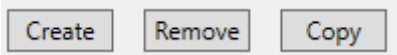
1. Click the **Soft options** button to add options without connectors (for example, license option). An interface will appear.



1 List of **Soft options**

2 Description of selected **Soft option**

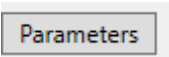
3



Create or remove **Soft option**.

[Or copy the soft options from the different device](#)

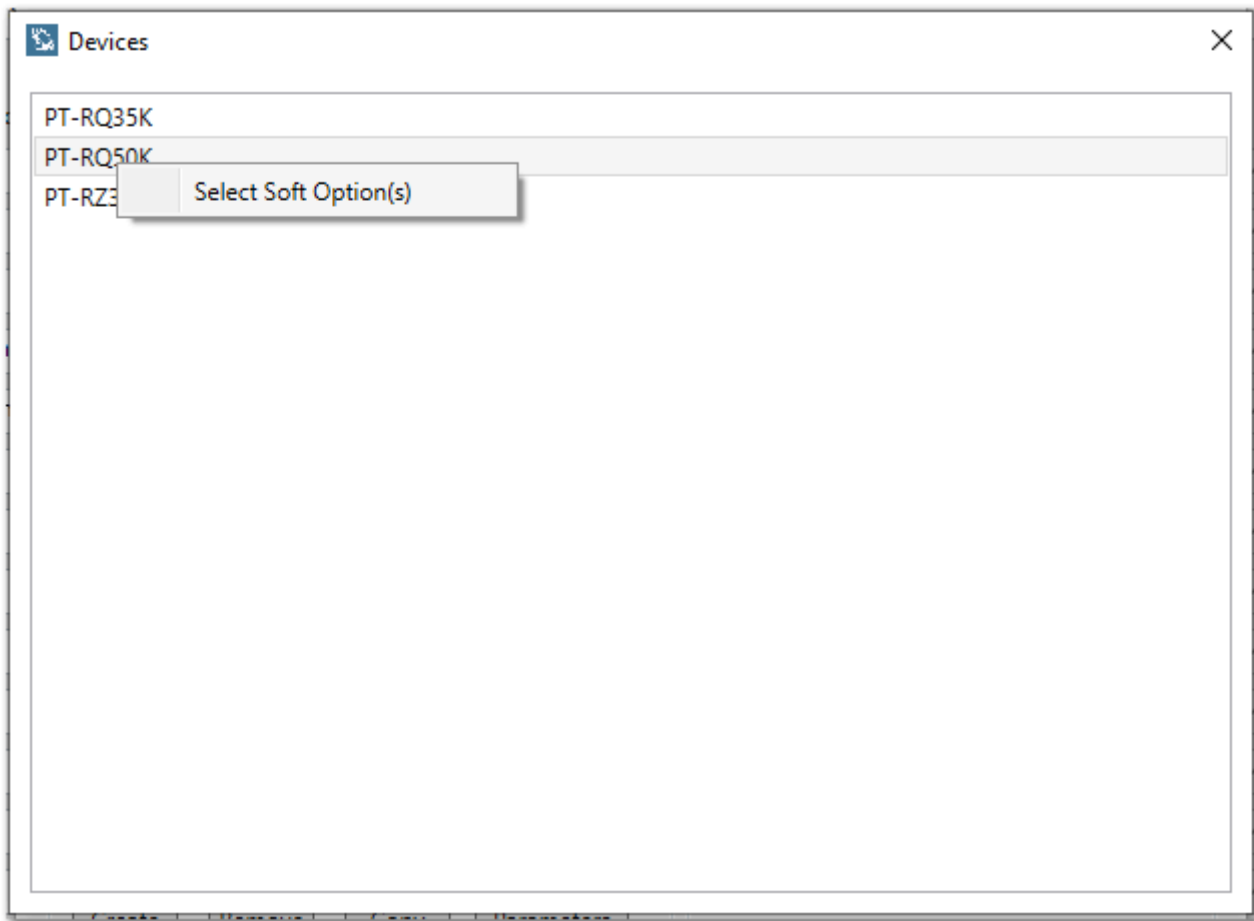
4



Add **Parameters**

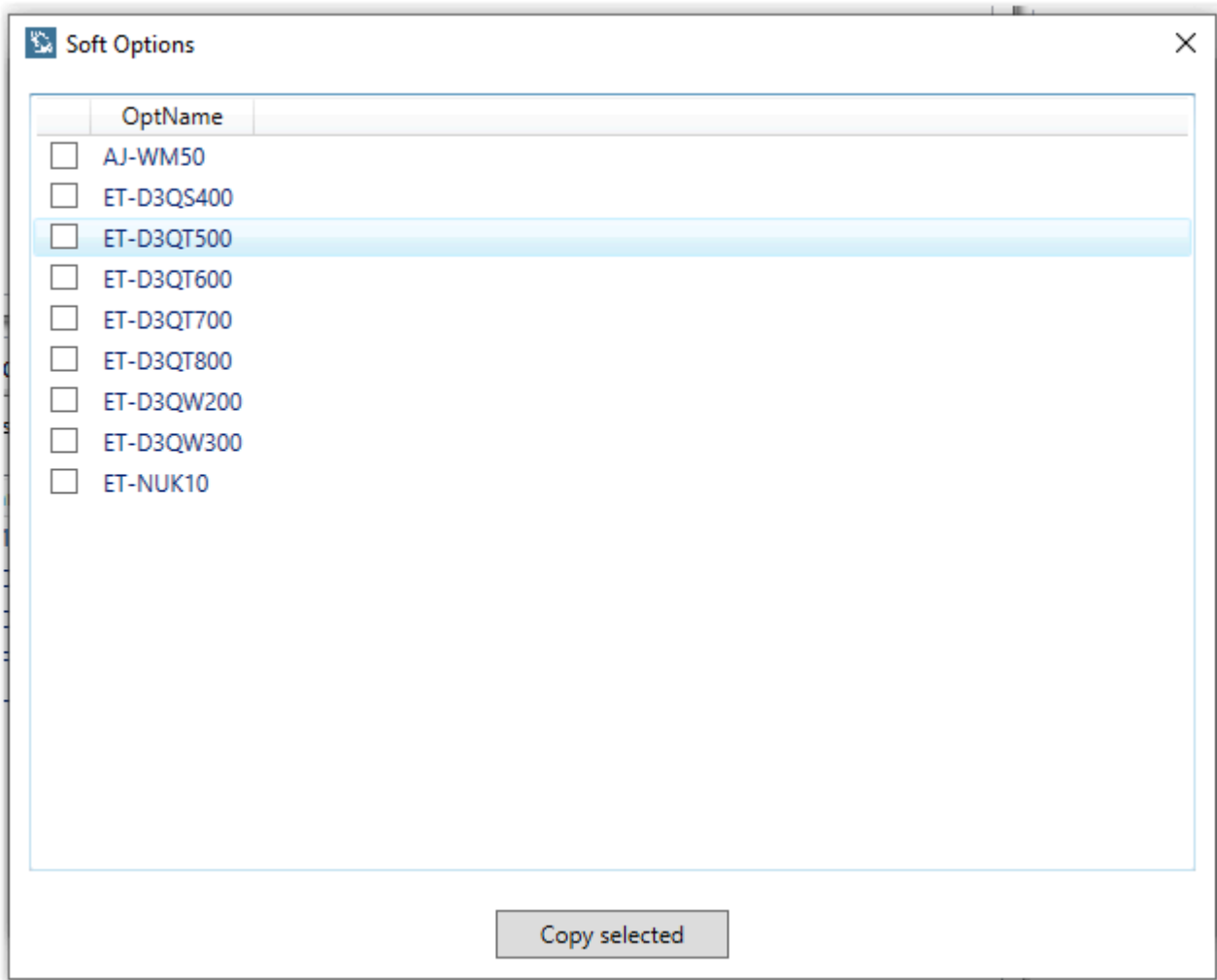
### 5.1.2.1. Copy option

- After you click on "Copy option" you will have to choose the device from which you want to copy options



- Right button and "Select Soft Options"

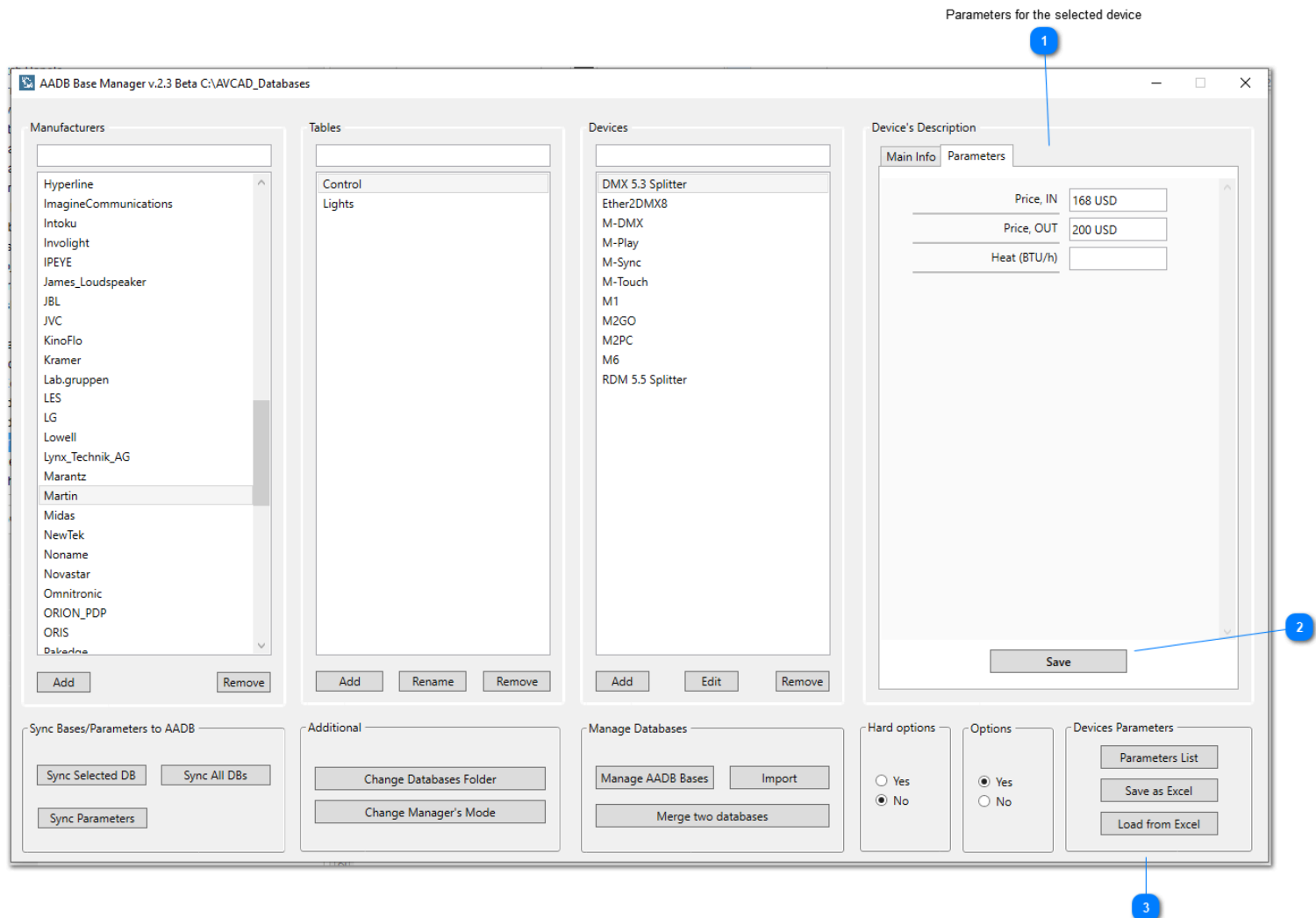




- Select needed and click on Copy Selected. All the selected options have been copied.

### 5.1.3. Parameters

The parameter is additional information that can be linked with the device. For example, price, weight, heat and so on.



#### 1 Parameters for the selected device

Parameters

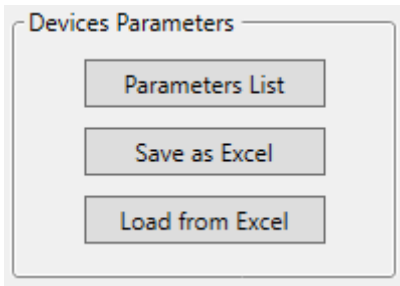
Price, IN	168 USD
Price, OUT	200 USD
Heat (BTU/h)	

List of Parameters with value, linked to a device

#### 2 Save

Click **Save** to store filled Parameters

3



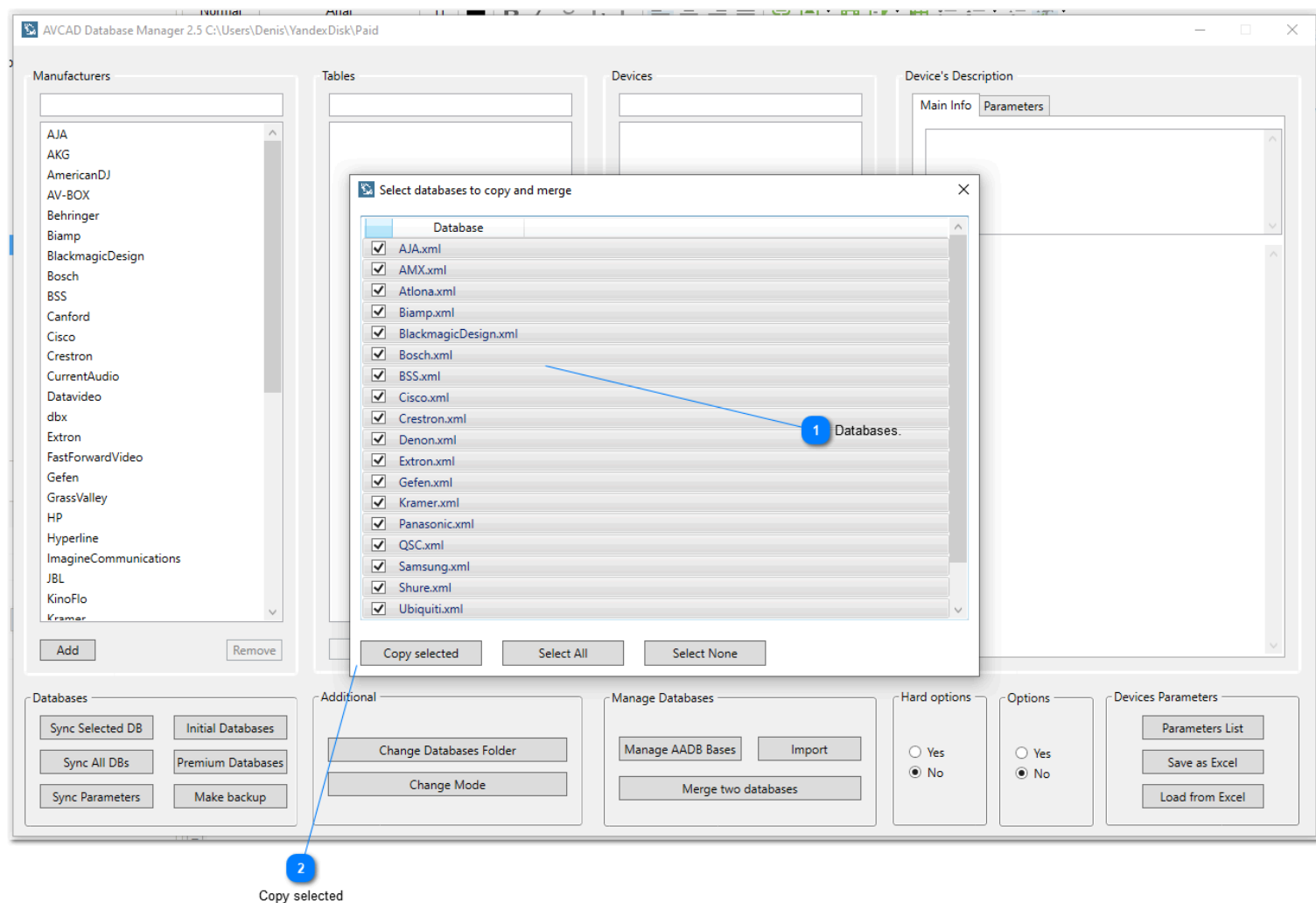
Click **Parameters List** to create/edit/remove **Parameters**.

Click **Save as Excel** to get the list of devices with **Parameters** in excel format. You can edit this list in excel, and after that, use **Load from Excel** to update **Parameters**.

### 5.1.4. Premium Databases

This is the subscription-based service that allows you to make a request for the needed devices/databases and get them from the AVCAD Database Manager software.  
See [here](#) to understand how it works.

#### 1. Select the databases



## 1 Databases.

<input checked="" type="checkbox"/>	AJA.xml
<input checked="" type="checkbox"/>	AMX.xml
<input checked="" type="checkbox"/>	Atlona.xml
<input checked="" type="checkbox"/>	Biamp.xml
<input checked="" type="checkbox"/>	BlackmagicDesign.xml
<input checked="" type="checkbox"/>	Bosch.xml
<input checked="" type="checkbox"/>	BSS.xml
<input checked="" type="checkbox"/>	Cisco.xml
<input checked="" type="checkbox"/>	Crestron.xml
<input checked="" type="checkbox"/>	Denon.xml
<input checked="" type="checkbox"/>	Extron.xml
<input checked="" type="checkbox"/>	Gefen.xml
<input checked="" type="checkbox"/>	Kramer.xml
<input checked="" type="checkbox"/>	Panasonic.xml
<input checked="" type="checkbox"/>	QSC.xml
<input checked="" type="checkbox"/>	Samsung.xml
<input checked="" type="checkbox"/>	Shure.xml
<input checked="" type="checkbox"/>	Ubiquiti.xml

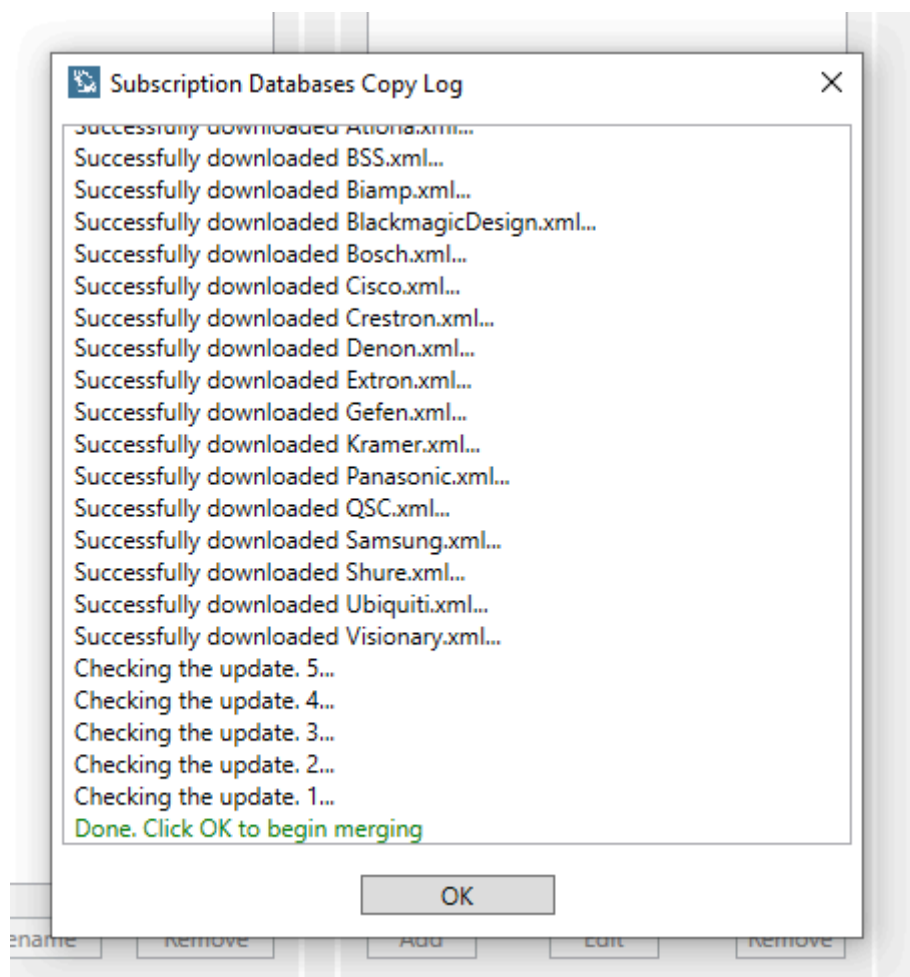
Select needed for you databases.

## 2 Copy selected

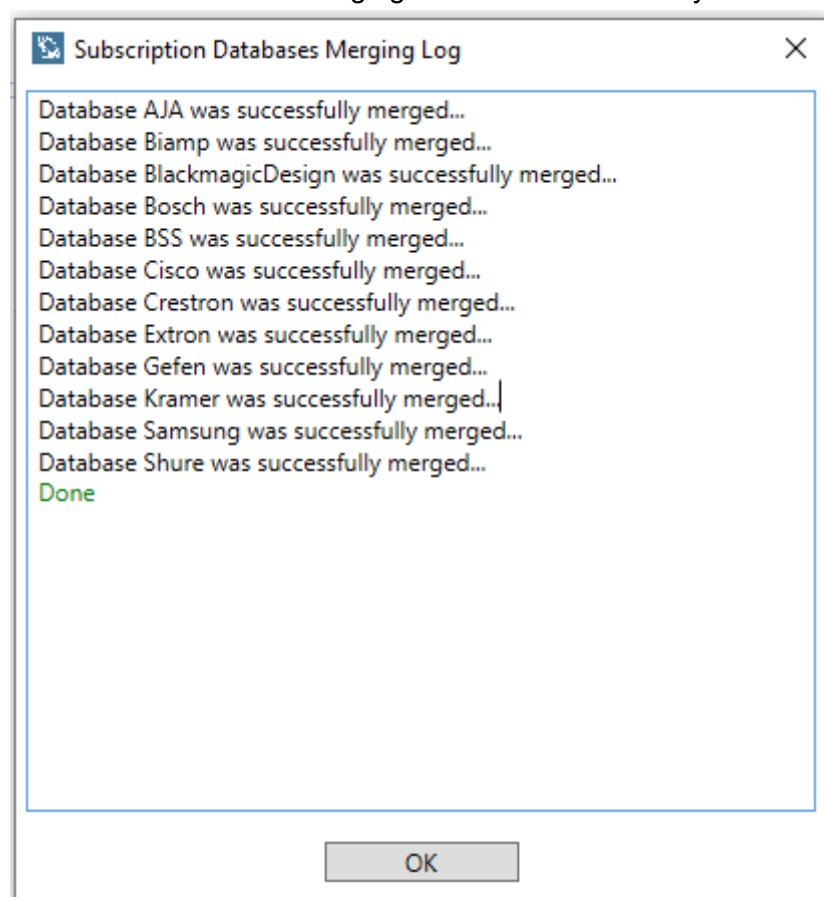
Copy selected
---------------

After the click the software will begin the process of downloading and merging.

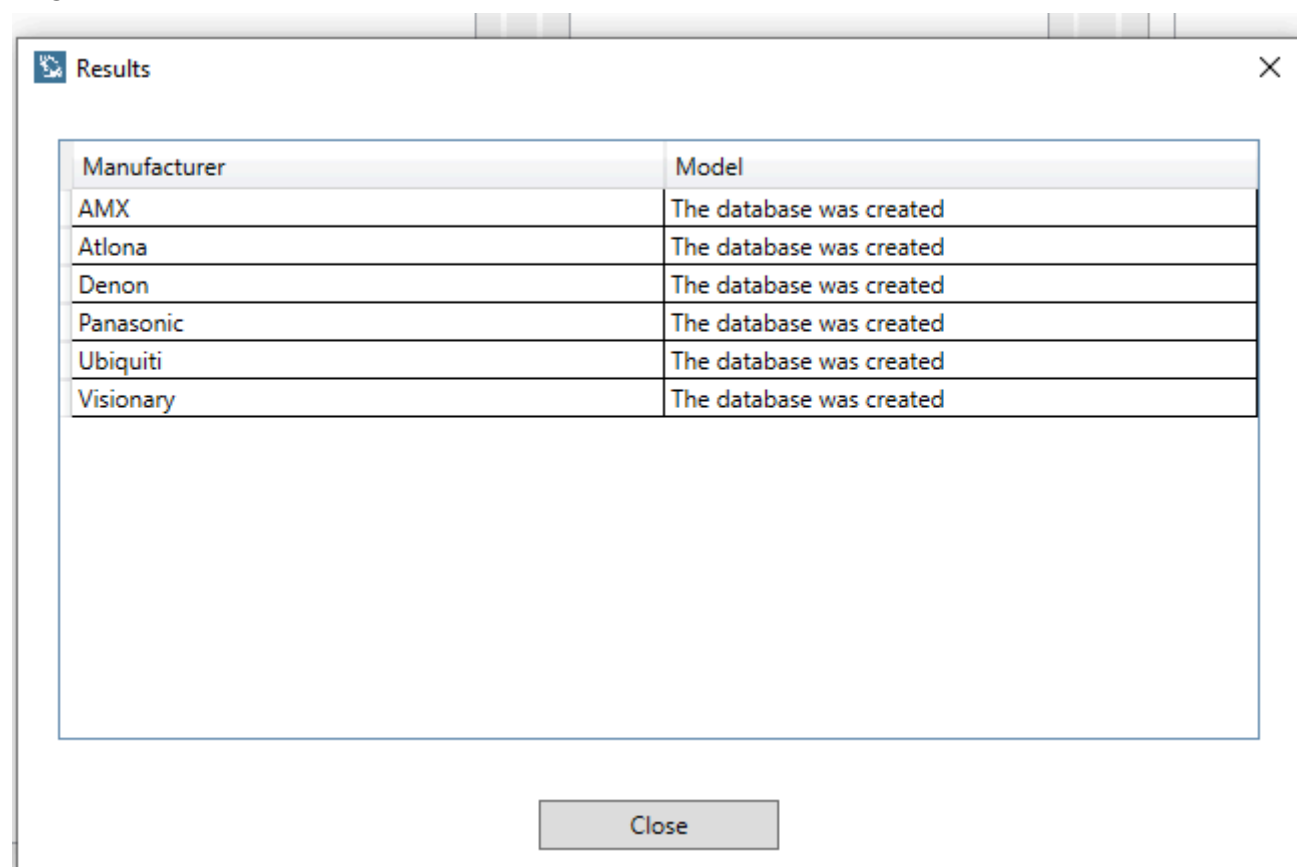
2. Check the status of downloading. Click Ok to begin merging.



3. Wait and check the merging status. After the click you will see the extended information.



#### 4. Check the result



### **5.1.5. Make backup**

This functionality just helps you to copy all the databases that you have to another folder.



## 5.2. Parameters Edit Mode

Using this mode, you can only create and edit Parameters. Editing of devices is unavailable.

AADB Base Manager v.2.3 Beta C:\AVCAD\_Databases

Manufacturers

- AJA
- AKG
- Allen&Heath
- AlliedTelesis
- AmericanDJ
- APC
- ARRI
- ASUS
- ATEN
- AtteroTECH
- ATTERO\_TECH
- Audinate
- AV-BOX
- AVPRO
- Behringer
- Biamp
- BirdDog
- BlackmagicDesign
- Bosch
- BOSE
- BSS
- Canare
- Canford
- Cisco
- ClearCom

Tables

- Devices
- FS
- KUMO
- KiPro
- Mini\_Converters
- R\_Series
- openGear

Devices

- ExpressCard34
- HELO
- Io® 4K
- Io® Express
- Io® XT
- RovoCam
- T-TAP
- U-TAP HDMI
- U-TAP SDI

Device's Description

Parameters Main Info

Price, IN

Price, OUT

Heat (BTU/h)

Save

Sync Parameters

Sync Parameters

Additional

Change Databases Folder

Change Manager's Mode

Devices Parameters

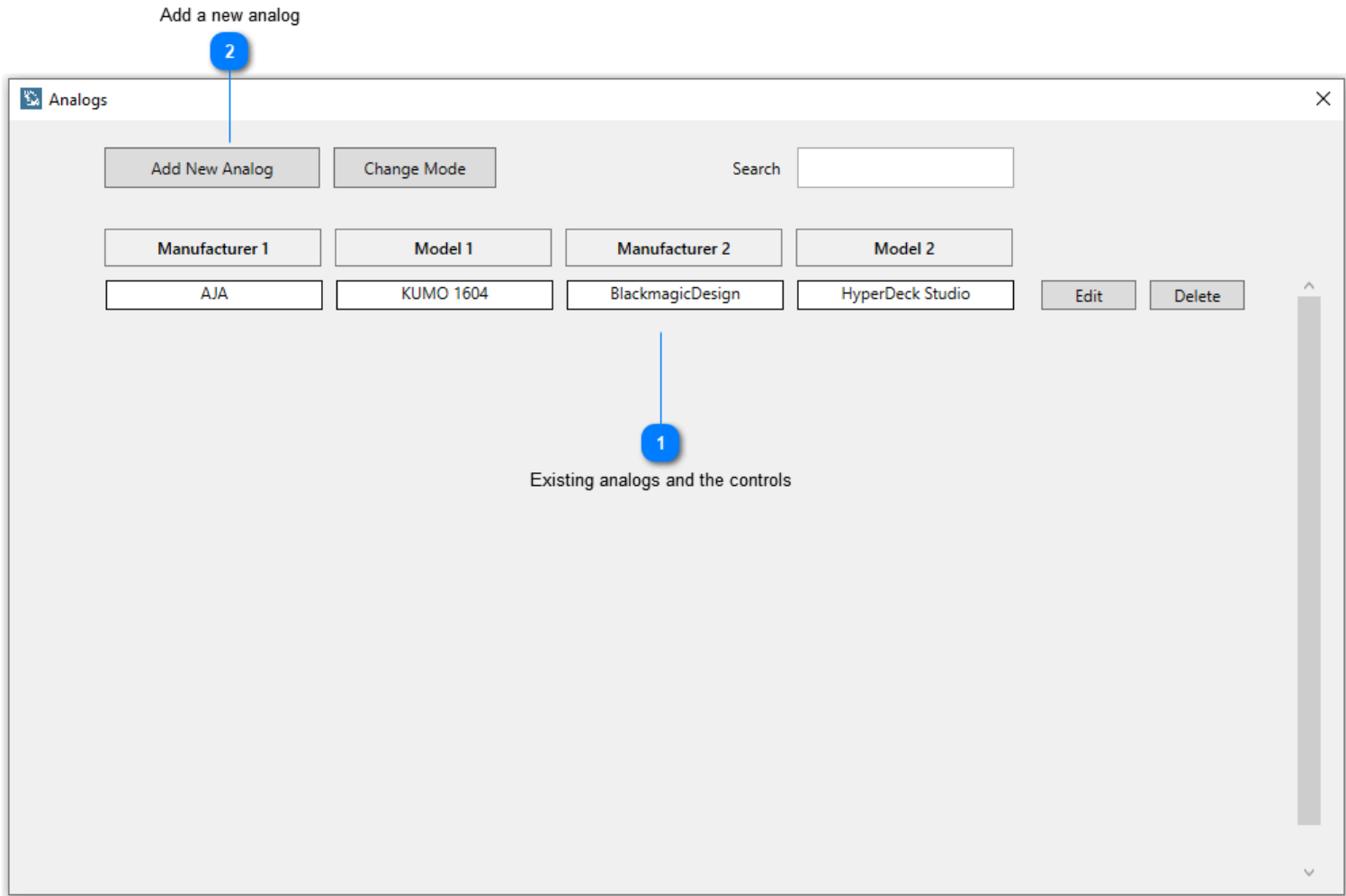
Parameters List

Save as Excel

Load from Excel

### 5.3. Analogs

Here you may create devices that are analogs to other. This is comfortable to use [here](#) and [here](#)



#### 1 Existing analogs and the controls

AJA	KUMO 1604	BlackmagicDesign	HyperDeck Studio	Edit	Delete
-----	-----------	------------------	------------------	------	--------

Just a list of existing analogs. You may edit and remove it.

#### 2 Add a new analog

Add New Analog
----------------

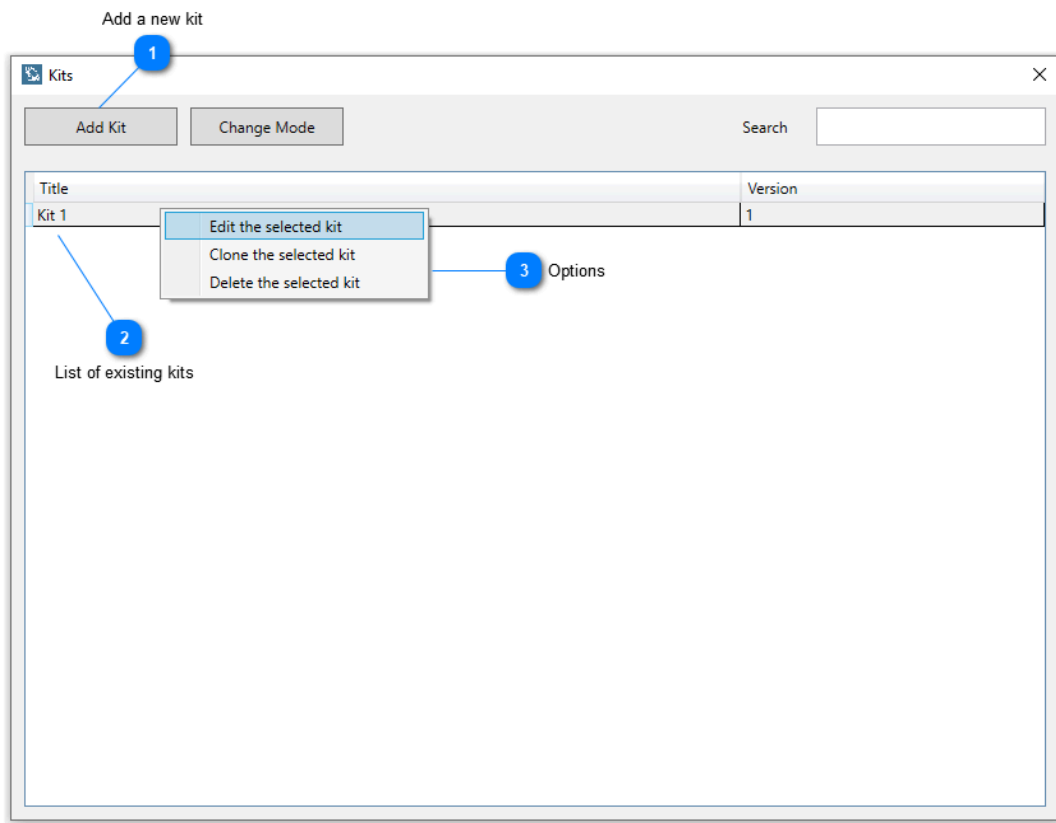
Click to add a new analog.

Add Analog				X
Manufacturer 1	Model 1	Manufacturer 2	Model 2	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Save		Cancel		

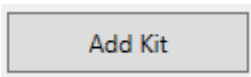
Here you are able to choose the first and second device and after the "save" button is clicked you will have them connected.

## 5.4. Kits

Here you may create kits to combine needed devices together and use them [here](#).  
See this [video](#) to understand how it works



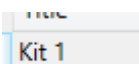
### 1 Add a new kit



Fill the form and get the kit in the list.

A dialog box titled 'Create Kit' with a close button (X) in the top right corner. It contains two input fields. The first field is labeled 'Enter the title' and the second field is labeled 'Enter the version'. At the bottom of the dialog box is a button labeled 'Create kit'.

### 2 List of existing kits



3 Options

Edit the selected kit

Clone the selected kit

Delete the selected kit

Options for the selected kits:

1) Edit the selected kit:

Kit 1-1

Devices 1

Devices

Add device

Manufacturer	Model	Quantity
AJA	T-TAP	1

Change to the analog

Edit the selected kit device

Delete the selected kit device

3

Options

Additional items 2

Additional Items

Add additional item

Description	Quantity
-------------	----------

1 Devices

Devices

Here you may add AVCAD devices to the kit.

2 Additional items

Additional Items

Here you may add any additional information as a text field. For example: Battery for camera, etc.

3 Options

Change to the analog

Edit the selected kit device

Delete the selected kit device

Change to the analog. See [here](#) to understand how to create analogs

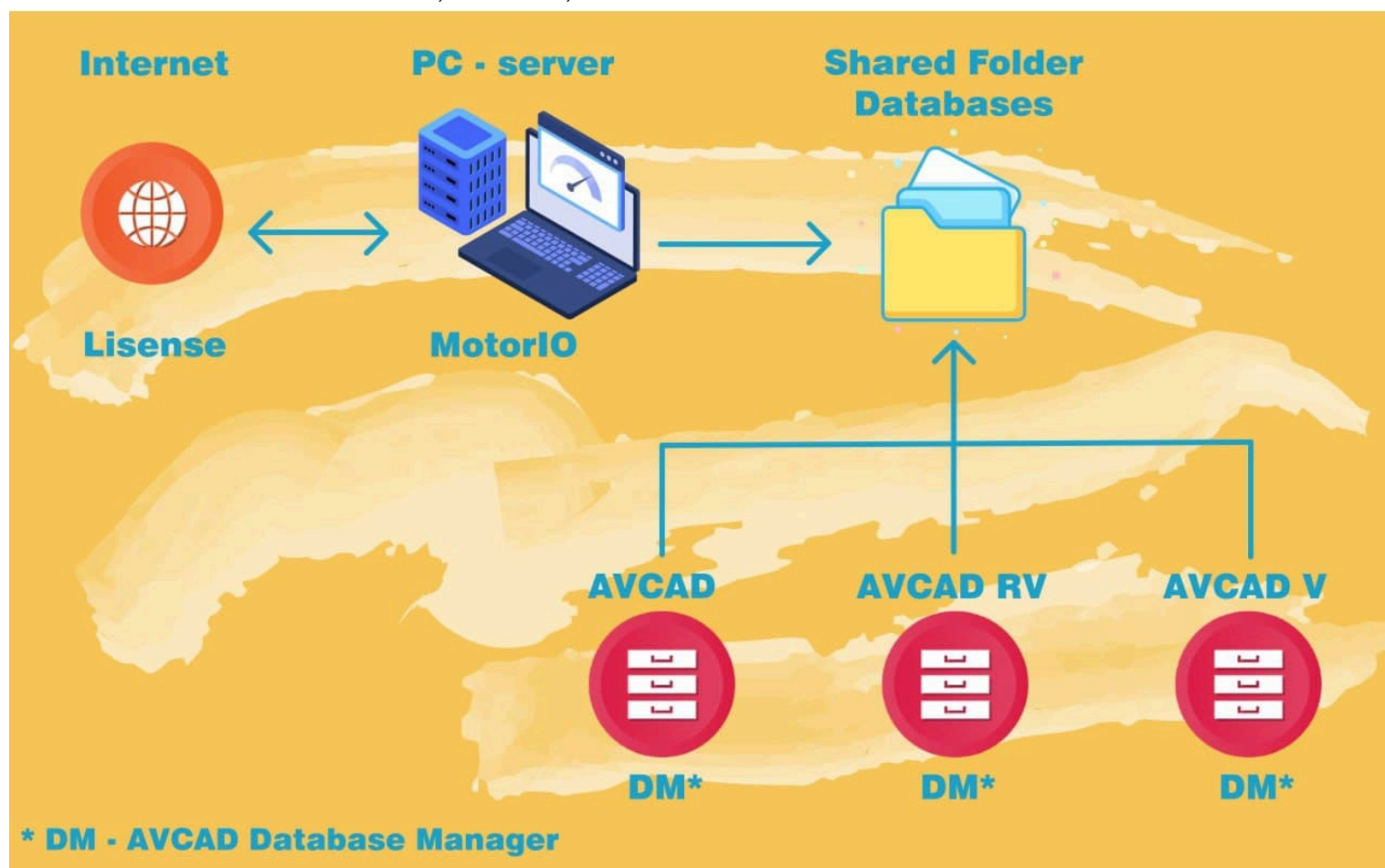
## 6. MotorIO

We have developed software for web-based AV project management and handling the equipment list that can be connected to AVCAD, AVCAD V, AVCAD RV. If you want to check the software - contact us, we will give you access to the site. The software can be installed as an IntraServer in your local network or on the Internet (as you wish) on your VPS.

There are some groups and the administrators should add users to these groups to add the rights to make some actions:

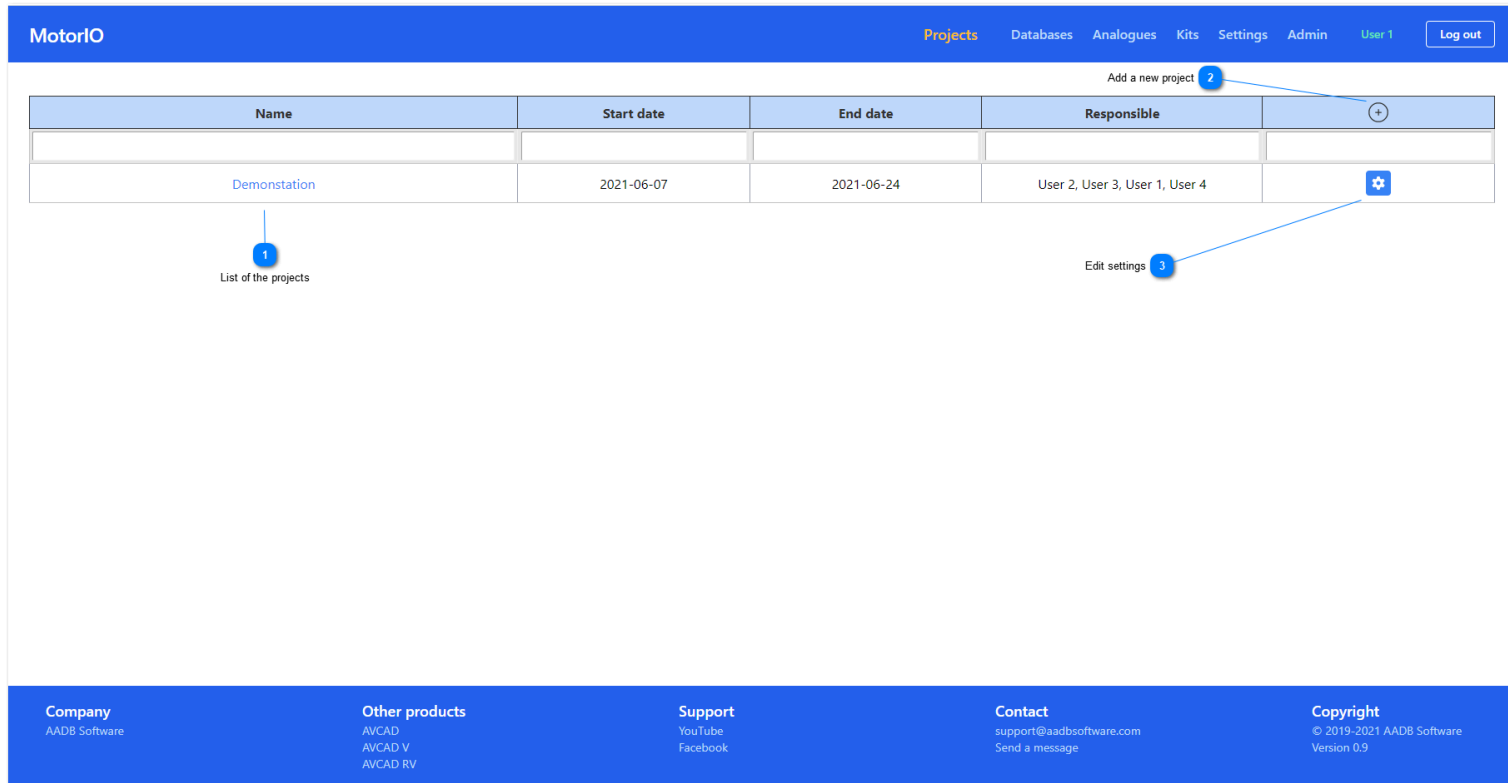
- Can update all tasks
- Can update analogs
- Can update engineering specifications
- Can update kits
- Can update parameters
- Can update project documents
- Can update projects
- Can update specifications
- Can update tasks

The ideal workflow is to use AVCAD, AVCAD V, AVCAD RV and MotorIO like this:



## 6.1. Projects

You may close the project using "Edit settings. You may delete the project permanently using [Admin Page](#).



MotorIO

Projects Databases Analogues Kits Settings Admin User 1 Log out

Add a new project

Name	Start date	End date	Responsible	
Demonstration	2021-06-07	2021-06-24	User 2, User 3, User 1, User 4	

List of the projects

Edit settings

Company  
AADB Software

Other products  
AVCAD  
AVCAD V  
AVCAD RV

Support  
YouTube  
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### 1 List of the projects

Demonstration	2021-06-07	2021-06-24	User 2, User 3, User 1, User 4
---------------	------------	------------	--------------------------------

List of the projects where the current user participates.  
See [here](#) to understand how it works.

### 2 Add a new project



See [here](#).  
This action is available only for the administrators.

### 3 Edit settings



See [here](#).  
This action is available only for the administrators.

## 6.1.1. Add a new project

**MotorIO**

ProjectsDatabasesAnalogue KitsSettingsAdminUser 1Log out

Add a project

Project Title:

Project

Responsible person:

x 1 User

x 4 User

Start date of the project:

2021-06-09

Finish date of the project:

2021-06-26

Workers:

Observers:

Back

Save

**Company**

AADB Software

**Other products**

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AVCAD V  
AVCAD RV

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Here you have to fill these fields. Please, be careful to add all the users correctly. Users that are not presented in workers, observers and responsible won't see the project.

## 6.1.2. Edit the project settings

**MotorIO**

ProjectsDatabasesAnaloguesKitsSettingsAdminUser 1Log out

Edit the project Demonstation

Project Title:

Demonstation

Responsible person:

x 1 User

x 2 User

x 3 User

x 4 User

Start date of the project:

2021-06-07

Finish date of the project:

2021-06-24

Workers:

x 5 User

x 6 User

Observers:

Closed Project: ☐

Back

Save

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Here you may change users/ dates.



## 6.1.3. Subprojects

**MotorIO**

ProjectsDatabasesAnalogue KitsSettingsAdminUser 1Log out

Demonstation

SubprojectsAll TasksMy tasksMotorIO SpecificationsAVCAD SpecificationsDocuments

Title	Start date	End date	Responsible	
Subproject for Demonstration	2021-06-07	2021-06-24	User 2, User 3, User 1, User 4	<div><div></div><div></div></div>

**Company**  
AADB Software

**Other products**  
AVCAD  
AVCAD V  
AVCAD RV

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Just subprojects. We suggest using it for big projects as it can help to control it easier.

## 6.1.4. All Tasks

You may close the task using "Edit settings. You may delete the task permanently using [Admin Page](#).

Task	Start date	End date	Status	Note	
Create an equipment list	2021-06-07	2021-06-10	In Progress	I see you!	[Settings] [Chat] [Status]
Create an equipment list v2	2021-06-08	2021-06-10	Created		[Settings] [Chat] [Status]

### 1 Timeline

Timeline

Timeline for all the tasks and subprojects

### 2 Add a task



Add a new task for this project

### 3 Controls for the tasks



- Edit the task - edit users and description
- Edit the note - a quick chat for understanding the problems and the progress
- Edit the state - you may select from the list or add your statuses in the Admin panel

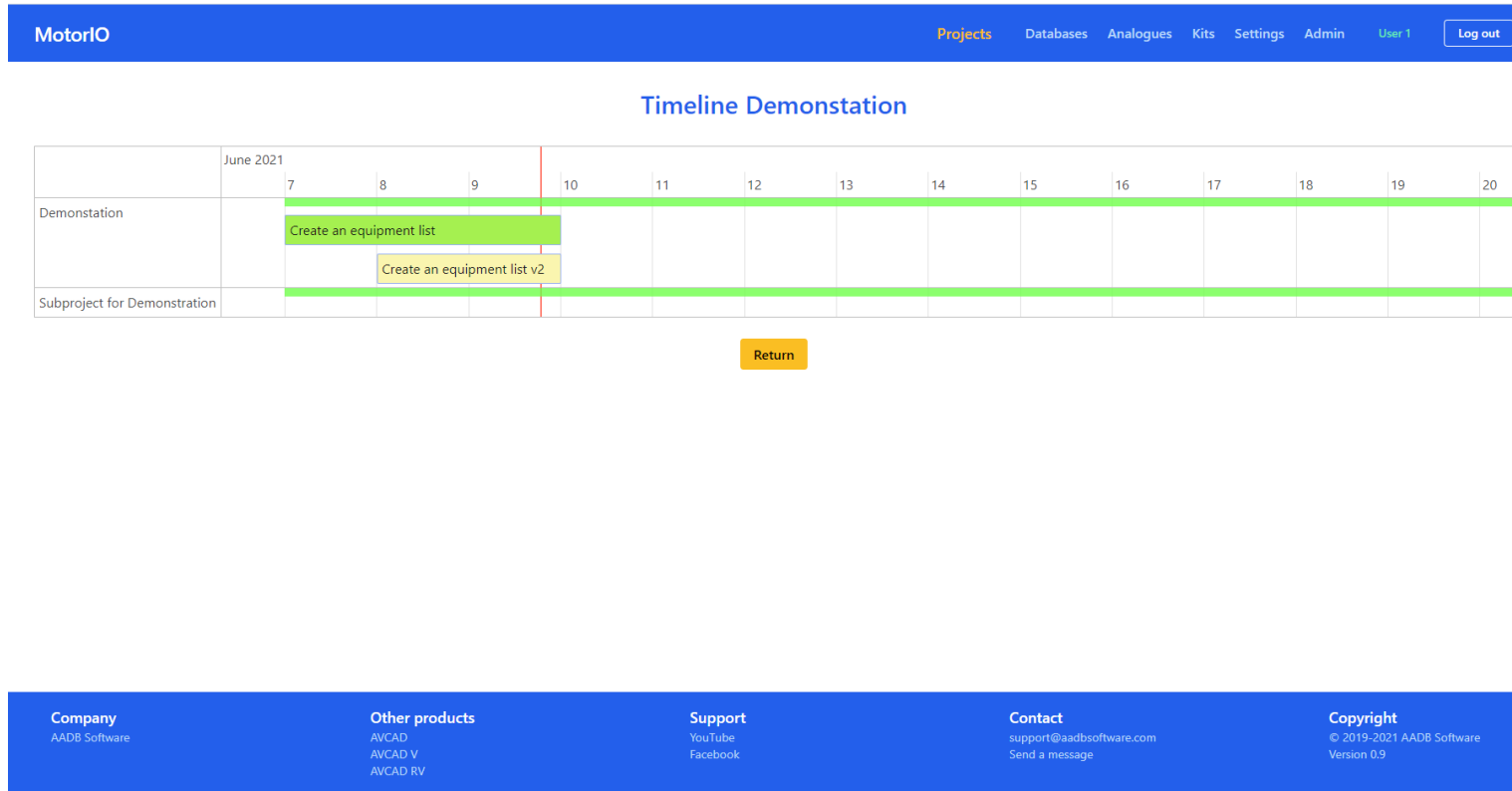
### 4 History

Create an equipment list v2

The page with all the changes for the task

### 6.1.4.1. Timeline

Read-only timeline for the project, subprojects and all the tasks inside.  
You may hover over the task and you will show some information about it.



## 6.1.5. My tasks







MotorIO

ProjectsDatabasesAnaloguesKitsSettingsAdminUser 1Log out

Demonstration

SubprojectsAll TasksMy tasksMotorIO SpecificationsAVCAD SpecificationsDocuments

ResponsibleWorkerObserver

Task	Start date	End date	Status	Note	
Create an equipment list	2021-06-07	2021-06-10	In Progress	I see you!	  
Create an equipment list v2	2021-06-08	2021-06-10	Created		  

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That is the same panel as all task, but this shows only the tasks for the current user and for the current project.

## 6.1.6. MotorIO Specifications

The screenshot shows the MotorIO web application interface. At the top is a blue navigation bar with the 'MotorIO' logo on the left and a menu on the right containing 'Projects', 'Databases', 'Analogues', 'Kits', 'Settings', 'Admin', 'User 1', and a 'Log out' button. Below the navigation bar is a 'Demonstration' section with a row of tabs: 'Subprojects', 'All Tasks', 'My tasks', 'MotorIO Specifications' (which is selected and highlighted in blue), 'AVCAD Specifications', and 'Documents'. Below the tabs, there are two buttons: 'Export many specifications as Excel' and 'Clone a specification'. A table with three columns is displayed: 'Title', 'Responsible', and 'Last updated'. The table contains two rows of data. To the right of the table is a vertical column with a '+' icon at the top and two download icons below it. At the bottom of the page is a blue footer bar with five sections: 'Company' (AADB Software), 'Other products' (AVCAD, AVCAD V, AVCAD RV), 'Support' (YouTube, Facebook), 'Contact' (support@aadbssoftware.com, Send a message), and 'Copyright' (© 2019-2021 AADB Software, Version 0.9). Three numbered callouts are present: '1' points to the 'Equipment list v.1' row in the table; '2' points to the 'Controls' label above the 'Export many specifications as Excel' button; '3' points to the '+' icon in the vertical column on the right.

MotorIO

Projects Databases Analogues Kits Settings Admin User 1 Log out

Demonstration

Subprojects All Tasks My tasks MotorIO Specifications AVCAD Specifications Documents

To open the specification

Controls

Export many specifications as Excel Clone a specification

Title	Responsible	Last updated	
Equipment list v.1	User 3, User 1	2021-06-08	
Equipment list v.2	User 1	2021-06-08	

Add a specification

Company  
AADB Software

Other products  
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AVCAD V  
AVCAD RV

Support  
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### 1 To open the specification

Equipment list v.1

The button to open the specification

### 2 Controls

Export many specifications as Excel

Clone a specification

You may clone a specification from other projects ( for example Template project) and export many specs from one project.

### 3 Add a specification



## 6.1.6.1. Edit the specification

MotorIO
Projects
Databases
Analogues
Kits
Settings
Admin
User 1
Log out

### Equipment list v.2

Add the device row 1

Devices

Manufacturer	Model	Quantity	
Creston	AV3	1	- ⚙️ 📄
Creston	DM-MD32X32	1	- ⚙️ 📄
Creston	DMC-4K-HD-HDCP2	4	- ⚙️ 📄
Select a option	Select a option	1	- ⚙️ 📄

3 Select the device

Kits

Kit	Quantity	
AJA KUMO CP + 3232 v.1	1	- ⚙️
Select a option	1	- ⚙️

2 Device options

4 Add kit row

5 Kit options

6 Compare

7 Specification options

Save Excel Return

Compare Equipment list + v.1

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See [here](#) to understand how it works.

Only one user can work at the same time. Please, be careful.

### 1 Add the device row



## 2 Device options



- Remove selected row
- [Parameters](#)

Crestron AV3. Parameters	
Parameter	Value
Price, IN, USD	100
Price, OUT, USD	150
Price, IN, Euro	
Price, OUT, Euro	
Weight	5
Heat	
Is Active	
Updated by	
On Stock	

- [Analogues](#)

Crestron AV3. Analogues		
Manufacturer	Model	Select
Crestron	CP3	

See [here](#) to understand how it works.

## 3 Select the device

You may select and filter the manufacturer, device and add quantity to the row.

## 4 Add kit row




## 5 Kit options



- Remove the kit row
- Forward to the [kit's page](#)

6

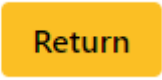
## Compare

A yellow rectangular button with the text "Compare" in black.A yellow rectangular button with the text "Equipment list + v.1" in black.

You may compare this spec with the selected.

7

## Specification options

A yellow rectangular button with the text "Save" in black.A yellow rectangular button with the text "Excel" in black.A yellow rectangular button with the text "Return" in black.

- Save the specification

- Get the excel

You may then import this excel to [CAD](#), [Visio](#) and [Revit](#)

- Return to the project page



## 6.1.7. AVCAD Specifications

You may import data from AVCAD Equipment Lists from Schemes Manager to MotorIO to keep it here.

**MotorIO**

ProjectsDatabasesAnaloguesKitsSettingsAdminUser 1Log out

Demonstation

SubprojectsAll TasksMy tasksMotorIO SpecificationsAVCAD SpecificationsDocuments

Create AVCAD Specification record 1

Title	Responsible	Last updated	
Equipment list from AVCAD v.1	User 1	2021-06-08	

2 Check the details

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### 1 Create AVCAD Specification record



### 2 Check the details

Equipment list from AVCAD v.1

## 6.1.7.1. Import AVCAD Equipment List

**MotorIO**

ProjectsDatabasesAnalogueKitsSettingsAdminUser 1Log out

Engineering specification. Equipment list from AVCAD v.1

Type	Number	Sysname	Manufacturer	Model	Q-ty
Device	0001.0	MTX.01	AJA	KUMO 1616	1
Device	0002.0	MTX.02	AJA	KUMO 1616	1
Device	0003.0	MTX.03	AJA	KUMO 1616	1
Device	0004.0	S1	AJA	KUMO 1616	1
Device	0005.0	S2	AJA	KUMO 1616	1
Device	0006.0	S3	AJA	KUMO 1616	1
Device	0007.0	S4	AJA	KUMO 1616	1
Device	0008.0	SPK.01	JBL	CONTROL 26 CT	1
Device	0009.0	SPK.02	JBL	CONTROL 26 CT	1
Device	0010.0	SPK.03	JBL	CONTROL 26 CT	1
Device	0011.0	SPK.04	JBL	CONTROL 26 CT	1
Device	0012.0	SPK.05	JBL	CONTROL 26 CT	1
Device	0013.0	SPK.06	JBL	CONTROL 26 CT	1
Device	0014.0	SPK.07	JBL	CONTROL 26 CT	1
Device	0015.0	SPK.08	JBL	CONTROL 26 CT	1
Device	0016.0	SPK.09	JBL	CONTROL 26 CT	1
Device	0017.0	SPK.10	JBL	CONTROL 26 CT	1
Panel Connector	0018.0			N	2
Panel Connector	0019.0			N1	4
Panel Connector	0020.0			N2	3

Return

Load from Excel

Choose File

No file chosen

Compare

1  
Import the file

### 1 Import the file

Load from Excel

Choose FileNo file chosen

Select the excel file from AVCAD and click on "Load from Excel". It will be imported to the MotorIO.

### 6.1.8. Documents

You may add documents to the project. There will be created a folder (see [Settings](#)) for the project.

MotorIO

ProjectsDatabasesAnaloguesKitsSettingsAdminUser 1Log out

Demonstation

SubprojectsAll TasksMy tasksMotorIO SpecificationsAVCAD SpecificationsDocuments

Load documents 1

Add documents to the projectChoose FilesNo file chosen

#	Filename	Date Modified
---	----------	---------------

CompanyAADB Software

Other productsAVCADAVCAD VAVCAD RV

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#### 1 Load documents

Add documents to the project

Choose FilesNo file chosen

You may load several files here. Just select them and click on the "Add documents" button. You will see this window with states and messages:

File	State	Message
2021-06-09 01-00-22PM-Equipment list.v2.xlsx	Failed	A file with the same name already exists.
2021-06-09 12-56-47PM-Equipment list.v2.xlsx	Success	Successfully copied the file
2021-06-09 12-55-59PM-Equipment list.v2.xlsx	Success	Successfully copied the file

## 6.2. Databases

Here you have all the databases that are in the Databases folder (see [Settings](#)). We suggest sharing this folder with your database folder for all the AVCAD software.

Here you may only change the parameters. All the devices/parameters have to be added to [AVCAD Database Manager](#).

The screenshot shows the MotorIO Databases interface. At the top, there is a navigation bar with links: Projects, Databases (active), Analogues, Kits, Settings, Admin, User 1, and Log out. Below the navigation bar, there is a table with five columns: Filename, Table, Devices, Parameter, and Value. The 'Filename' column lists various database names like AJA, AKG, AV-BOX, etc. The 'Table' column lists categories like Devices, FS, KUMO, etc. The 'Devices' column lists specific device models like KUMO 1604, KUMO 1616, etc. The 'Parameter' column lists parameters like Price, IN, USD, Weight, etc. The 'Value' column shows the corresponding values. A 'Save Parameters' button is located at the bottom right. Two callouts are present: '1' points to the 'Analogues for this device' link, and '2' points to the 'Parameters' link.

Filename	Table	Devices	Parameter	Value
AJA	Devices	KUMO 1604	Price, IN, USD	100
AKG	FS	KUMO 1616	Price, OUT, USD	150
AV-BOX	KUMO	KUMO 3232	Price, IN, Euro	
Allen&Heath	KiPro	KUMO 6464	Price, OUT, Euro	
AlliedTelesis	Mini_Converters	KUMO CP	Weight	2
AmericanDJ	R_Series		Heat	
Atlona	openGear		Is Active	Yes
BSS			Updated by	Denis Khodyrev
Behringer			On Stock	Yes
Biamp				
BlackmagicDesign				
Bosch				
Canford				
Cisco				
Crestron				
CurrentAudio				
Datavideo				

### 1 Analogs for this device



See [analogues](#)

### 2 Parameters

Updated by	Denis Khodyrev
On Stock	Yes

Save Parameters

You may update the parameters and click on the Save Parameters button. You will see it green - everything is OK.

## 6.3. Analogs

Here you may add analogs for the devices. It will help you to change the devices on [MotorIO specifications](#) faster than before.

Do not forget to click on the Save button.

MotorIO Projects Databases **Analogues** Kits Settings Admin User 1 Log out

### All Analogues

Manufacturer1	Model1	Manufacturer2	Model2	
Creston	AV3	Creston	CP3	<span>+</span>
Select a option	Select a option	Select a option	Select a option	<span>-</span>

**Save**

1 First device

2 Second device

3 Add or remove the row

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**Other products**  
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### 1 First device

Creston	AV3
---------	-----

Select manufacturer and device

### 2 Second device

Creston	CP3
---------	-----

Select manufacturer and device

### 3 Add or remove the row

+

-

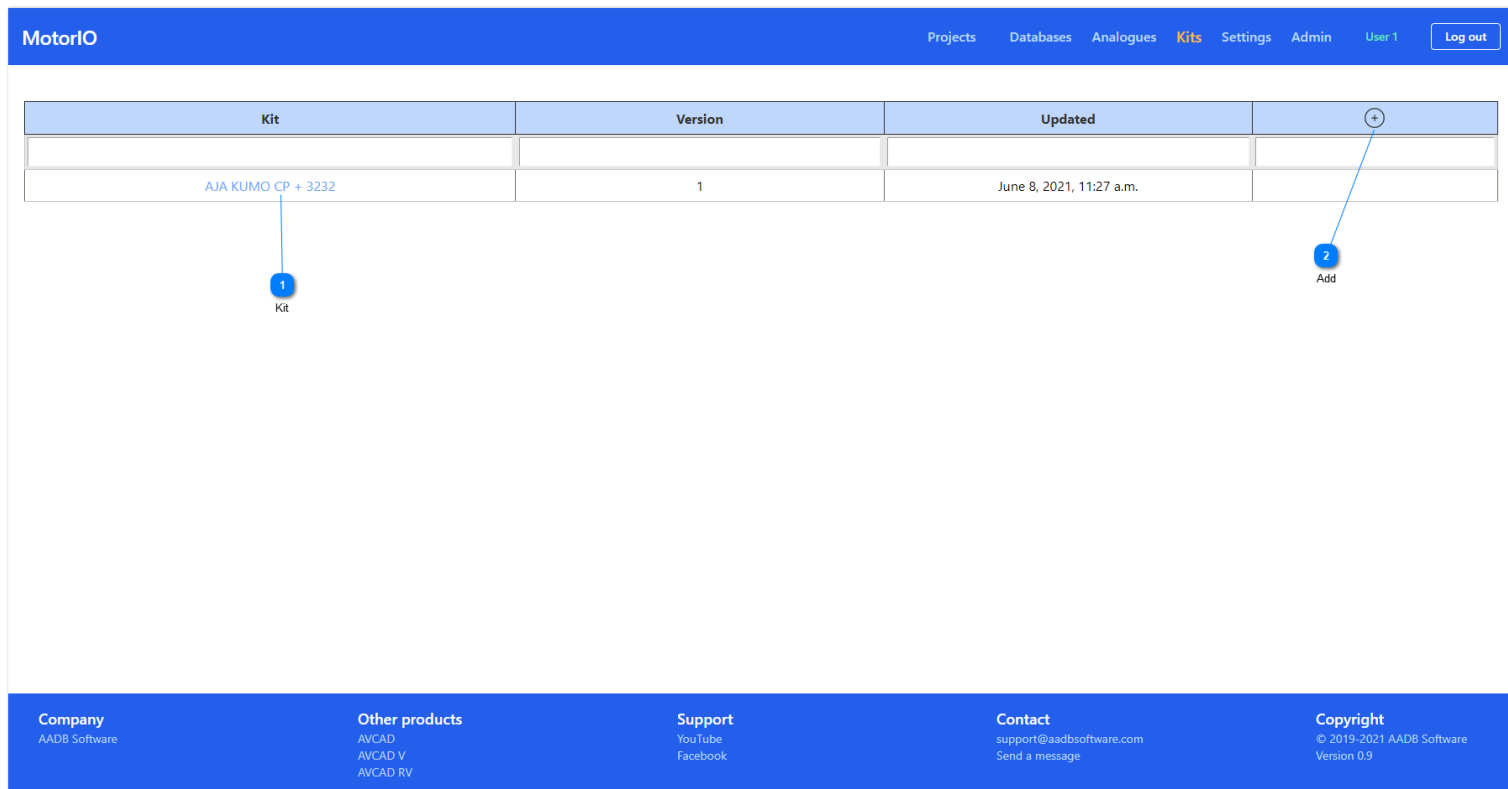
-

Add or remove the row.

## 6.4. Kits

Here you may create kits - entities for keeping multiple elements in one. For example - sets of installation tools; camera, tripod, lens, etc.

We suggest using versions of kits instead of changing existing ones as it will change all the existing equipment lists.



Kit	Version	Updated	
AJA KUMO CP + 3232	1	June 8, 2021, 11:27 a.m.	+

1 Kit

AJA KUMO CP + 3232

Open the kit on a new page.

2 Add



Add a new kit.

### 6.4.1. Add/Edit the kit

Here you may add elements to the kit. Then you will be able to use this kit in specifications. Kit contains two parts - devices and additional. Devices are selected from AVCAD databases, additional is just a free text.

MotorIO Projects Databases Analogues **Kits** Settings Admin User 1 Log out

### AJA KUMO CP + 3232

Devices 1 Devices

Manufacturer	Model	Quantity	+
AJA	KUMO CP	1	- ⚙️ 📄
AJA	KUMO 3232	1	- ⚙️ 📄
Select a option	Select a option	1	- ⚙️ 📄

Additional 3 Additional

Information	Quantity	+
Additional power supply for AJA KUMO CP	1	-
Additional power supply for AJA KUMO 3232	1	-
Information	1	-

Additional Controls 4

Save Return

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#### 1 Devices

## Devices

Here you add the devices from AVCAD databases to the kit.

#### 2 Devices controls

- Add Row
- Remove row
- Parameters
- Analogs

#### 3 Additional

## Additional

Add free text options.

4

Additional Controls



- Add row
- Remove row



## 6.5. Settings

Settings for your MotorIO server.

You may change:

- DATABASE\_FOLDER - that is the shared folder with AVCAD Databases
- BACKUP\_FOLDER - the folder for postgres backups
- DOCUMENT\_FOLDER - the folder with [documents](#)
- TIMEZONE

After changing click on the Save Settings and restart the server.

MotorIO

ProjectsDatabasesAnalogueKitsSettingsAdminUser 1Log out

License Information	Value
Users available	20
End date	2021-12-31
Serial Number	VZUB-4QMY-R2SA-CX15-FUC4-ZUS5-PNTA

Setting	Value
DATABASE_FOLDER	../databases
BACKUP_FOLDER	../backups
DOCUMENT_FOLDER	../documents
TIMEZONE	(GMT+03:00) Moscow, St. Petersburg, Volgograd

Save settings

Company

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## 6.6. Admin

Just a django admin page for adding users and controlling all the elements for MotorIO.  
You may remove here all the closed tasks and projects.

AADB Software. MotorIO admin page

WELCOME, USER. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Features area

ADVANCED\_FILTERS

Advanced Filters

Change

AUTHENTICATION AND AUTHORIZATION

Groups

Add

Change

Users

Add

Change

AVCAD\_DATABASES

AVCAD Kit Free Items

Add

Change

AVCAD Kits

Add

Change

AVCAD Kits Items

Add

Change

AVCAD Kits in Specifications

Add

Change

AVCAD Specification

Add

Change

AVCAD Specification Items

Add

Change

MotorIO Specification

Add

Change

MotorIO Specification Item Analogues

Add

Change

MotorIO Specification Items

Add

Change

PROJECTS

Project Sources

Add

Change

Project Tags

Add

Change

Project Tasks

Add

Change

Project Tasks Statuses

Add

Change

Project Tasks Type

Add

Change

Project themes

Add

Change

Recent actions

My actions

✖ Equipment list from AVCAD v.1 - Demonstation 0021.0 - BNC

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0022.0 - DVI

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0023.0 - Empty

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0024.0 - P1 Patch Panel, Size is 12, Depth is 80, Connectors: BNC

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0025.0 - PP.01 Patch Panel, Size is 48, Depth is 80, Connectors: BNC

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0026.0 - PP.02 Patch Panel, Size is 24, Depth is 80, Connectors: RJ45

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0027.0 - 80 FAKE RACK, RACK\_01 Rack, Height is 44 units, Depth is 32"

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0028.0 - Rack.01 Rack, Height is 26 units, Depth is 600

AVCAD Specification Item

✖ Equipment list from AVCAD v.1 - Demonstation 0029.0 - T1 Term Panel with connectors:BNC,BNC,DVI,DVI\_...

depth is 80

AVCAD Specification Item