



Installation guide

# *ONDEMAND VIRTUAL SYSTEM*

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# Index

GENERAL INFORMATION AND ADVICE .....	2
INSTALLATION ASSISTANCE .....	2
WHAT'S IN THE BOX .....	3
WHAT'S NOT IN THE BOX .....	3
WARRANTY AND REPLACEMENTS .....	3
INSTALLATION.....	4
OUTLETS AND CONDUIT .....	4
NETWORK / ETHERNET ACCESS .....	5
PLACEMENT OF THE WEXER OnDemand KIOSK .....	6
VIDEO DISPLAY EQUIPMENT.....	7
PROJECTOR BASED INSTALLATION.....	7
CABLING.....	8
Power/high voltage cables.....	8
Network wiring .....	8
Video wiring .....	8
Audio.....	8
AUTOMATION (RS-232) .....	9
Primary device (projector/TV) .....	9
Secondary device (projection screen, DMX-controller, etc.).....	9
Additional information.....	9
APPENDIXES AND DIAGRAMS.....	10
Wexer OnDemand player measurements .....	10
Wall bracket information and mounting guide.....	11

## GENERAL INFORMATION AND ADVICE

Congratulations on purchasing your Wexer OnDemand System!

Please make sure to study the information in this guide carefully, as it will cover some of the most common questions you may have regarding the installation.

Should you require assistance, please do not hesitate to raise a support request with us, using the form found here: [ticket.wexer.com](https://ticket.wexer.com)

We strongly recommend that you hire a qualified General Contractor, Low-Voltage or AV Technician, or qualified installation technician, (or sometimes all three) to assist you in getting your system installed and running. We also recommend purchasing commercial quality Audio-Visual components and peripherals, and very high-quality audio and video cabling to use on all aspects of your installation. Whenever possible, you should avoid the usage of adapters and/or converters as these are generally found to introduce more issues than they resolve.

Please remember that we only manufacture and support the Wexer OnDemand System, and thus support for other peripheral equipment made by third parties (such as TVs, projectors, projection screens, etc.) will be very limited.

## INSTALLATION ASSISTANCE

We recommend that you source your own qualified technician to help with the installation of the Wexer unit. Wexer does not offer on-site services, but 24/7 support staff are standing by to offer installation advice or answer any questions you might have. Please contact us by filling out a support request on [ticket.wexer.com](https://ticket.wexer.com).

Please keep in mind that your specific facility may require additional work, usually performed by a General Contractor (GC) or Certified Electrician, and that Wexer Support may not be able to provide advice on specialized integrations such as a custom A/V or control solutions in your facility. But even if we can't help you directly, we will do our best we can to help you get your system up and running - just reach out anytime if you need us!

## WHAT'S IN THE BOX

Your Wexer system will ship to you in two (2) boxes, one (1) large and one (1) small.

### Large Box - Kiosk and Accessories

- Wexer OnDemand kiosk - 21.5"
- Wexer power supply unit - 2 pieces, power brick and cord (EU, US, AUS, etc.)
- Wexer automation adapters - 4 pieces, color coded blue, red, white and green
- Wexer documentation (this installation manual)
- Wexer male/male adapter - used for some automation scenarios

### Small Box - Wall Mount

- Heavy duty Wexer OnDemand wall mount - 2 pieces
- Set of screws with washers - 8 pieces

## WHAT'S NOT IN THE BOX

Wexer **does not** supply any of the following hardware/components, and you will need to source this yourself or through your General Contractor or A/V-partner:

- Display/video hardware, such as: TV's, projectors, projection screens, video wiring etc.)
- Audio hardware, such as: speakers, mixers, amplifiers, audio wiring, etc.)
- Auxiliary cabling, such as: Audio cables, video cables, network cables, extension power cables
- Fastening components other than for securing the OnDemand player to the wall-mount

## WARRANTY AND REPLACEMENTS

You will find detailed information about warranties for your Wexer Hardware purchase in the separate license agreement.

To open a request for a replacement part, please raise a ticket here: [ticket.wexer.com](https://ticket.wexer.com)

Please note that a Wexer Support Agent will always attempt to fix the issue remotely before issuing a replacement part.

## INSTALLATION

Now that you've purchased a Wexer OnDemand System, purchased your Audio-Visual components, and hired an installation technician to do the work, you will need to decide where the major components of the system will be located in your facility. Each part of the system has requirements, such as a power outlet, a network or Ethernet jack, or cabling conduits installed by your General Contractor to allow for cabling to be discreetly hidden. You should keep these requirements of each component in mind when you select each location, and your electrician or general contractor may need to adjust your chosen locations based on things like facility composition, budget, and local building requirements or codes.

The following sections will provide general advice on these requirements to assist you in choosing locations in your facility.

## OUTLETS AND CONDUIT

Every component of the system will require a working power outlet, preferably as close to the component location as possible to reduce the need for electrical extension cords and exposed cabling.

These are the typical components you will need to consider for available power outlets:

- The Wexer OnDemand Kiosk requires a single standard power outlet. The included power supply cable is 6 feet/2 meters long.
- A Projector or TV Screen requires a single standard power outlet.
- An LED video wall (2x2 or 3x3) usually requires a power outlet for each screen (4 or 9) plus a control unit if the screens do not 'daisy chain' together for a total of 5 or 10 outlets.
- A Motorized Projection Screen requires a single standard power outlet.
- A Relay/AV control box (optional) usually requires a single standard power outlet.
- The Audio System may require several power outlets depending on the composition. You may need a power outlet for each speaker as well as other audio components in the audio rack. If you are using a sound bar with a TV, this will require a standard outlet as well.

Cabling conduits are 'tubes' or 'paths' for cabling to be run discreetly in your walls and ceiling. A conduit is usually installed within your walls and ceiling at the time of construction. If you are planning for no cabling to be visible and you do not have a drywall/drop ceiling type of space, then you will need to have your general contractor install conduits. Since these conduits can be required to simultaneously run video, audio, network, and automation cabling, we recommend using a conduit diameter of 2 inches/5 cm. This is considered to be a medium to large sized conduit but it's necessary to accommodate for the larger plugs on video cables in particular.

## NETWORK / ETHERNET ACCESS

A hard-wired, “always-on” Internet connection, is **MANDATORY** to ensure that the Wexer OnDemand unit operates as intended.

### *THE WEXER OnDemand UNIT DOES NOT SUPPORT WI-FI!*

You can connect your Wexer device to the internet using a Cat 5e or Cat 6 ethernet cable run between the Wexer device to the internet source in your facility. This could be a modem, a communications rack, or a dedicated network room. Whomever is responsible for managing your IT/Network connectivity in your facility should be consulted about this requirement and this should be done **BEFORE** your installation begins.

You will **NOT** be able to setup the Wexer device without a working Internet connection.

As early as possible in the install process, the internet connection should be inserted into LAN1 or LAN2 on the back of the Wexer device. If the cable is connected to a working internet on the other end, you should see the connection and traffic indication LED’s light up and flashing on the Wexer device LAN1 or LAN2 port.

It is **very important** to remember that:

- Each facility must provide working internet access to the Wexer device during installation and permanently during the lifespan of the system.
- We recommend a bandwidth of 10 Mbps (Megabits per second) to be available.
- Depending on your network/internet configuration, you may need your local IT team to open network traffic ports, configure firewalls, or ‘white-list’ certain traffic for the Wexer system to function properly. You can find detailed information about our network requirements here:



Wexer Advanced Network Settings

- The Wexer system will continue to function through periodic drops in Internet availability without interruption to service.
- When a Wexer system reports as offline, you will receive an e-mail notifying you of this and suggesting steps to resolve. If the Wexer device has no Internet access for 14 consecutive days, the system will lock itself down and become unusable until the Internet access is restored.
- If your Internet access is suddenly unavailable, we typically will not be able to assist you beyond determining that you have the correct cable in the correct place. To resolve, you will need to speak with your local IT team or Internet Service Provider to resolve issues with your internet access in your facility.

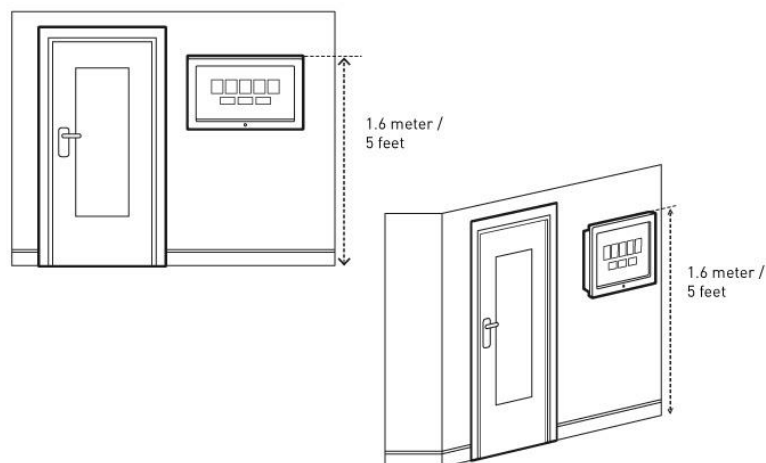
## PLACEMENT OF THE WEXER ONDEMAND KIOSK

One of the first things you will need to decide is where the Wexer OnDemand Kiosk will be mounted. This is ultimately your decision and is usually very dependent on your specific facility and how you intend to use the system.

Wherever you decide to place the kiosk, you should choose a placement that supports:

- A working Power outlet within 2 meters (5-6 feet).
- Access to or a clear cabling path to a hardwired Network/Ethernet port (The Wexer device does not use Wi-Fi).
- Enough wall space to accommodate the wall mount footprint and larger display on top of it.
- For installations within the United States, construction may require ADA (American Disabilities Act) compliance. If so, please mount the device accordingly: 1.22 meters/4 feet from floor to the top of the player.
- Typically, drywall mounting is preferred. We do not recommend mounting the kiosk on glass or mirrored walls, or inside any type of enclosure that may cause the unit to overheat.

If you have a dedicated room for your Wexer System, you should consider mounting the Wexer device outside the room so that members can interact with it from outside the workout space. Experience shows that the unit attracts more attention when mounted in this way and can lead to higher usage/engagement.



You can also opt for a simplified installation, with the kiosk mounted extremely close to, or right below, your television. A simple 'stacked' installation done in this fashion can be much easier/cheaper for technicians to handle.

Please note! The kiosk is intended to be wall mounted. The back of the kiosk has 75x75 VESA screw holes which can accommodate a wide variety of other mounts, however, due to the weight of the kiosk, we only recommend using other mounts that are rated to support a 15kg/30lb load. Wall mounts of this capability will be rare or expensive and damage to the Wexer system for using unapproved mounts is not covered by warranty.

# VIDEO DISPLAY EQUIPMENT

An important decision to make when you decide to install a Wexer system is what sort of display to pair it with. The two most common choices are a large screen TV (70" and above) or a projector and screen combo. If budget allows, some facilities choose a video-wall (a multi-screen setup using a 2x2 or 3x3 grid of screens).

For this section, we are going to explore those two choices and provide advice for each one:

## PROJECTOR BASED INSTALLATION

- Always choose a brand-name projector, with a brightness listed at 4,000 lumens in normal mode. A quality projector should cost at least \$1000 USD / €900 EUR.
- Ensure the projector has a vacant video port and an RS-232 port if you wish to automate the projector. A 12V trigger port can also be useful depending on what type of motorized screen you choose.
- We **do not** recommend using desktop/tabletop projectors, "mini-projectors" or generally any projector that costs under \$500. Please note that every projector has different size display areas and different mounting distance requirements, so please ensure your room can accommodate the mounting instructions found in the projector user manual.
- Projection screens can be static (non-moving, bare wall, projector paint, manual pull-down) or motorized. Please ensure the motorized screen you choose is of good quality, come with a good warranty, and can accept an RJ45 or DB9 automation adapter plug. We cannot interface directly with screens requiring IR or alternative input methods, so please consult with your AV partner if you wish to do so.
- A separate audio system is required as the speaker in a projector is very poor and will not be loud enough.

Projector-Based Pros: Larger screen, more immersive experience

Projector-Based Cons: Harder to install, requires maintenance over time, requires new bulbs regularly, needs a separate audio system

## TV BASED INSTALLATION

- We recommend 70" or larger.
- We recommend commercial grade digital signage displays as these are made for 24/7 operation. It is an option to use consumer grade TV's that meet the minimum requirements, but we do not recommend it as these panels are not rated to run for several hours each day and it can cause damage to the TV which would not be covered by warranty.
- The TV must have a vacant HDMI port and a separate audio output such as 3.5mm or RCA. We cannot interface with optical audio ports. It is not beneficial to purchase a smart TV and it is not necessary to purchase a 4K/UHD TV.
- Sound bars: If a TV is chosen as the display device, we recommend using a sound bar as TV speakers are not sufficient for the volume level usually required.
- Wall mount: We recommend choosing a quality TV wall mount that will allow you to swing your TV away from the wall to allow for easy access and maintenance inspections.

TV-Based Pros: Cheaper and easier to install and maintain

TV-Based Cons: Smaller screen, can be harder to mount over mirrored walls

Want to know if a specific TV or Projector is compatible with the Wexer OnDemand System? Raise a ticket here, [ticket.wexer.com](https://ticket.wexer.com), noting the specific make and model of your proposed equipment, and we will be happy to offer advice.



## CABLING

An often-overlooked quality aspect of any AV installation is the cabling. In this section we will cover the right cabling to connect everything together.

Wexer recommends using only quality A/V cabling. Although cables can seem expensive at times, they are usually far cheaper than hiring a general contractor to replace a malfunctioning cable shortly after installation.

### Power/high voltage cables

The power cable is the only cable included in the shipment. It measures 6 feet/2 meters.

### **WEXER STRONGLY RECOMMENDS USING AN ELECTRICAL SURGE / GROUND FAULT PROJECTION DEVICE.**

Damages to your Wexer unit from faulty power in your facility are not covered by warranty.

### Network wiring

Ethernet cabling is required, long enough to travel from your network room to the LAN1/LAN2 port on the back of the Wexer device. Ethernet cabling should generally not exceed 100 meters / 300 feet without means of strengthening the signal.

### Video wiring

**IMPORTANT NOTE: The Wexer system DOES NOT have an HDMI output.** Our main video output is DVI-D (24 pin).

Please do not pre-run HDMI to HDMI cables in your facility.

Wexer recommends using quality DVI-D to HDMI cables, with no adapters or converters used on this line. DVI-D to HDMI cables are not typically available in stores but can easily be sourced through AV technicians or Amazon worldwide.

Video cable length: Generally video cables should not exceed 18 meters/50 feet in length without suffering signal degradation over distance. If your video cable needs to exceed this length, you will need to introduce a high-quality video-booster device, such as HDBaseT, that will make the signal stronger over distance. Quality video boosters will always cost at least 100 USD/75 EUR, and often require an additional POWER OUTLET.

The Wexer system also has a VGA video output, but we strongly recommend using only the DVI-D output for Video.

### Audio

The Wexer system outputs audio via the LINE OUT jack on the back of the Wexer. This is a 3.5mm mini-jack connection, the same as many headphones. **The DVI-D output does not support audio.**

We recommend purchasing quality audio cables that has the standard 3.5mm mini-jack plug on the Wexer end and 3.5mm or RCA/Phono (Red/White) on the other end, depending what is supported by the studio audio system.

Remember: some TV's will not accept a separate audio channel, only has an optical audio connection (TOSLINK) available or will want you to use a specific HDMI port on the back which is only matched to the manual audio input port. If you cannot connect the Wexer kiosk to your television or get your television to export Wexer audio, you may need to purchase a sound bar that has 3.5mm input.

## AUTOMATION (RS-232)

The Wexer OnDemand System is capable of controlling RS-232 enabled devices. Typically, this means automatically turning a Projector ON/OFF, and automatically raising/lowering a projection screen, whenever a virtual class is played or ended.

INSTALLATION: If you are looking to introduce automation into your facility, please note that the installation will be more complex with an additional 1-3 cables needed. You should also be aware that Wexer will need to know **WELL IN ADVANCE OF YOUR INSTALLATION** which devices will need to be automated, and the make/model/series of all equipment being automated. Automation will not work on your system without prior coordination with Wexer.

To get in touch with Wexer regarding preparing the unit for automation, please raise a ticket here: [ticket.wexer.com](https://ticket.wexer.com) and we will ensure to put you in touch with a specialist.

The Wexer unit comes bundled with automation adapters specifically manufactured to accommodate easy installation. Please ensure that the cabling of the devices needing automation is done as described below.

### Primary device (projector/TV)

- Use the **BLUE ADAPTER** and plug it into **COM-1** on the Wexer device.
- If the target device has a *male RS-232/PC control port*, plug in the **white adapter** into the RS-232 port on the target device.
- If the target device has a *female RS-232/PC control port*, plug in the **green adapter** into the RS-232 port on the target device.
- If necessary, use the *male/male DB9 adapter* to facilitate a connection on the target device.
- For cabling, use a straight, regular Ethernet cable between the adapters.

### Secondary device (projection screen, DMX-controller, etc.)

- Use the **RED ADAPTER** and plug it into **COM-2 or COM-3** on the Wexer terminal.
- Use the whichever adapter was left over from cabling the primary device.
- If necessary, use the *male/male DB9 adapter* to facilitate a connection to the target device.
- For cabling, use a straight, regular Ethernet cable between the adapters.
- If necessary, use a *crossed Ethernet cable* to facilitate the connection as this will reverse the Rx and Tx to the target device.

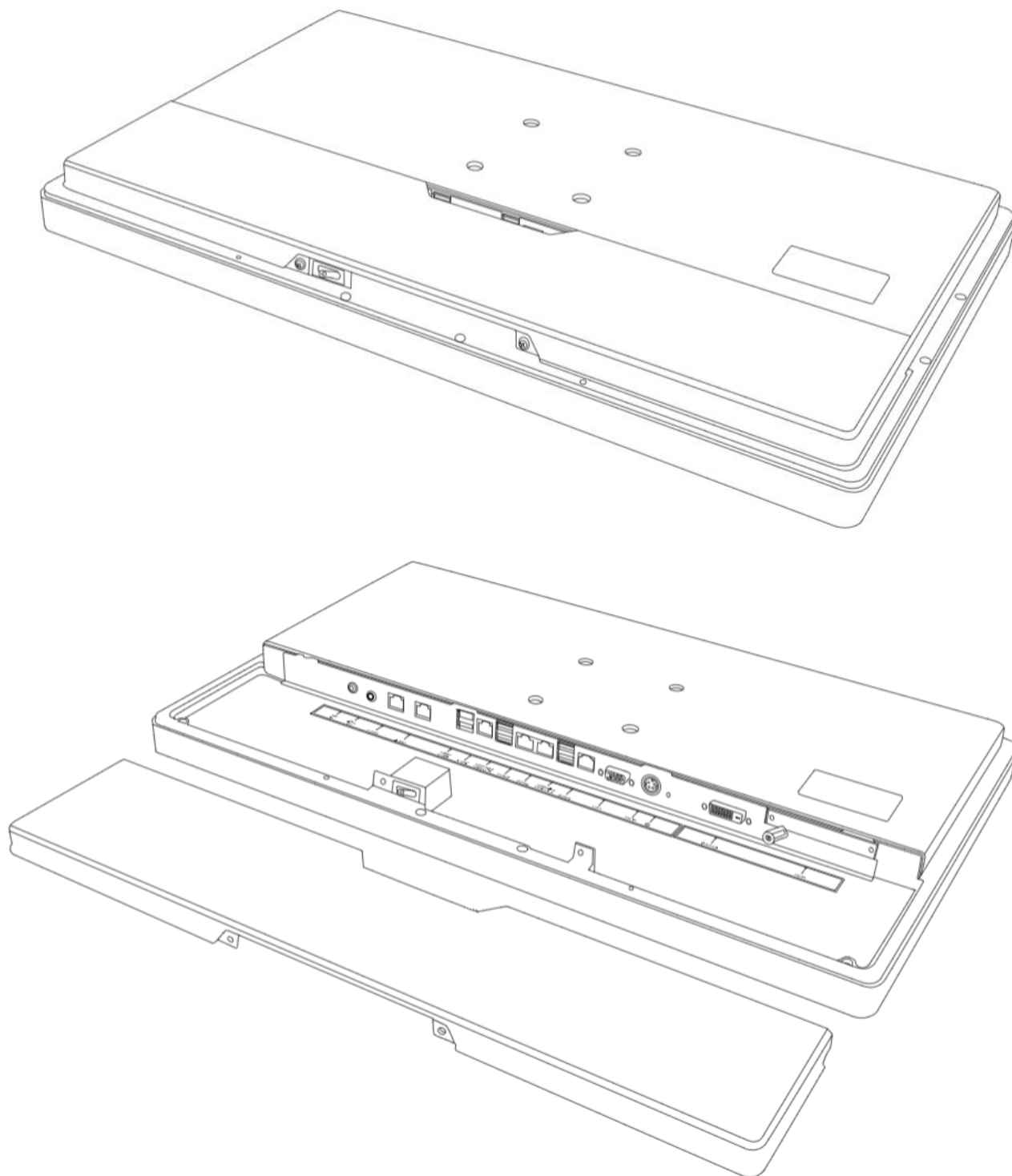
### Additional information

- Both the **BLUE ADAPTER** and the **RED ADAPTER** are pinned to allow for low-voltage operation using the **brown/white + brown pair** in an Ethernet cable. Make sure to inform Wexer technical staff which COM-port should allow for low-voltage operation.
- If necessary, Rx and Tx can be swapped by re-arranging the **Orange/White** and **Green/White** wires in the Ethernet cable running between the Wexer terminal and the target device.
- If necessary, the usage of classic DB9 > RJ45 adapters is possible. The pinout for the female RJ45 plug on the **BLUE ADAPTER** and the **RED ADAPTER** is as follows:
  - Rx = Pin 1 (Orange/White)
  - Tx = Pin 3 (Green/White)
  - GND = Pin 8 (Brown)

## APPENDIXES AND DIAGRAMS

### Wexer OnDemand player measurements

The Wexer 21,5" model measures: 536 x 48 x 328 mm (21.1" x 1.9" x 12.9")

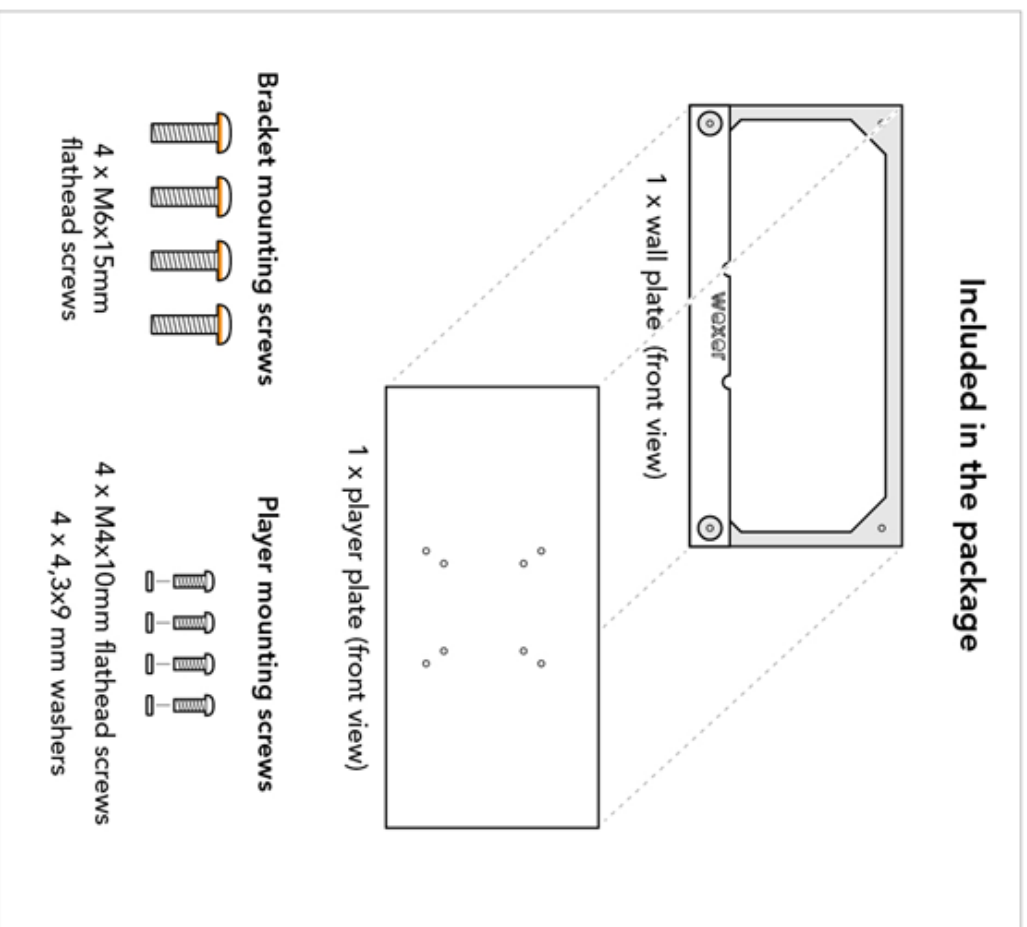


#### Wall bracket information and mounting guide

The Wexer player mounts on a VESA 75x75 bracket and included in each standard shipment is a custom-made Wexer bracket made specifically for easy installation and a good-looking result. The Wexer bracket measures **415 x 180 x 50 mm** (16.3" x 7.1" x 2"). More information can be acquired by contacting your Wexer sales representative.

On the following pages is a detailed drawn explanation of how to mount the Wexer device on a wall using the wall bracket.

## Included in the package



## You'll need the following:

Pozidriv 2 screwdriver/bit head



4 mm (5/32") Allen key, long arm



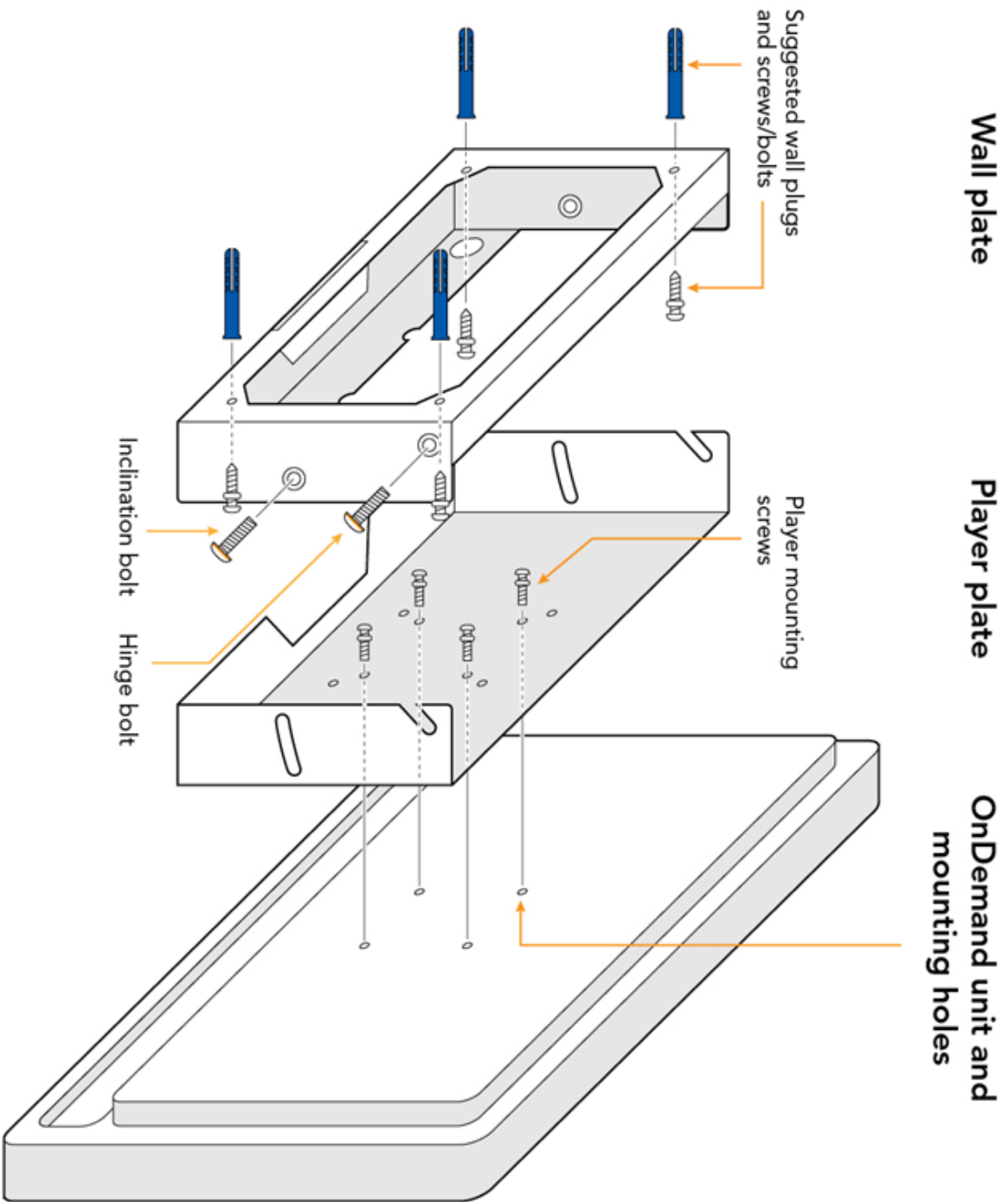
Recommended screws/bolts for mounting wall plate: head diameter (B) between 9-15 mm (0,35-0,59") and a thread diameter (A) of at least 5 mm (0,19").

Recommend washers with an outer diameter between 15-20 mm (0,59-0,79")



## PLEASE NOTE!

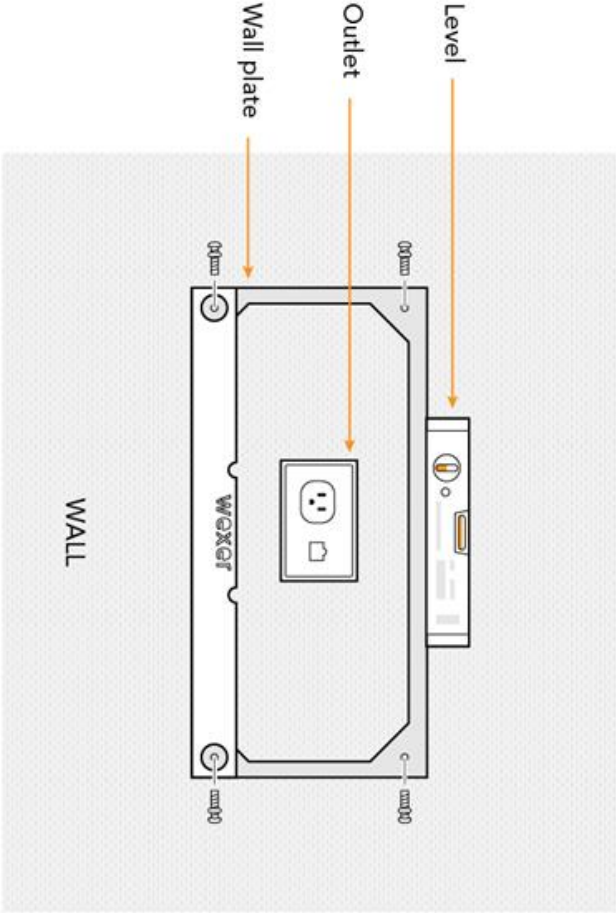
Wall plugs and screws for mounting the wall plate are not included as regional circumstances and rules vary greatly. Please choose a safe and secure mounting method befitting of your particular circumstances.



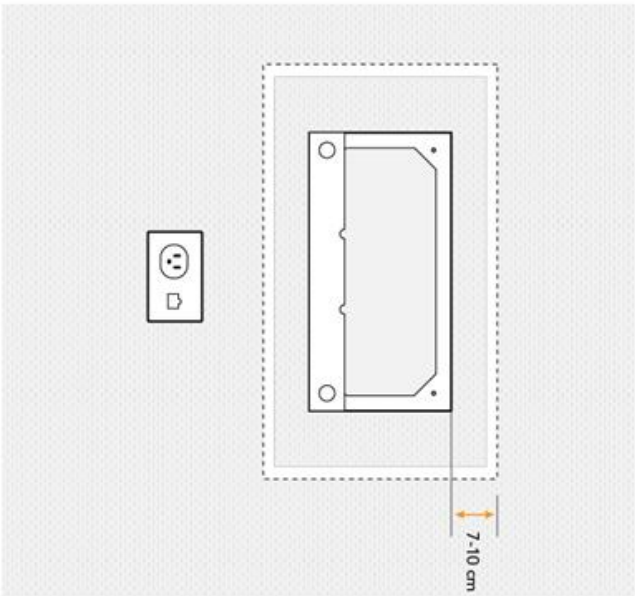
### Mounting the wall plate

We suggest placing the mount so that it covers the power and Ethernet outlet, thereby hiding the cables.

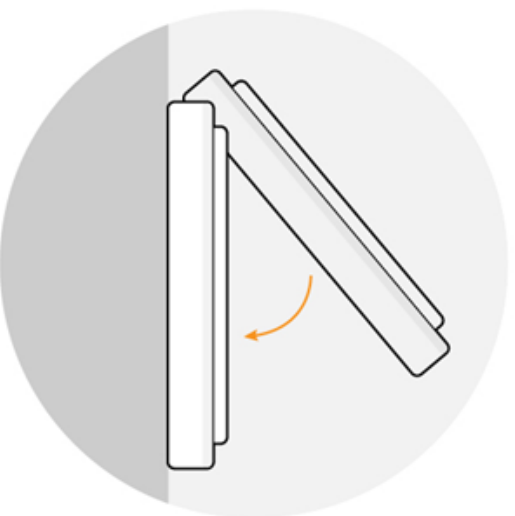
**!** Level out the bracket and mark the 4 holes for drilling or insert screws directly if suitable. Remember washers!



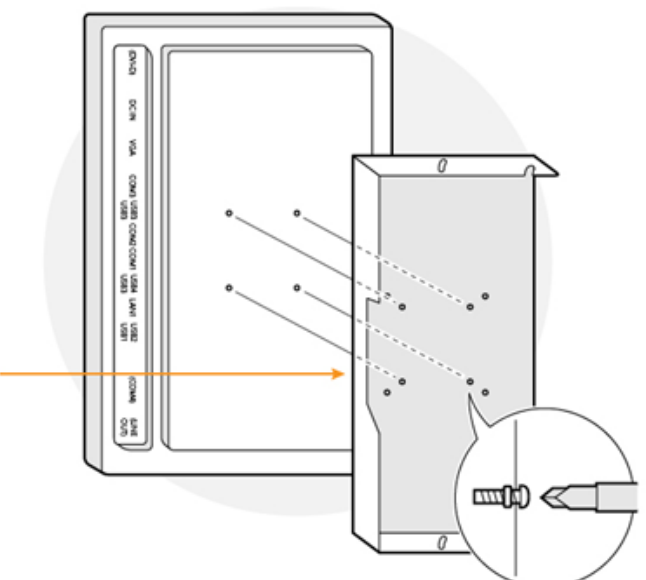
If the outlets are not to be covered by the bracket, we recommend placing the bracket 7-10 cm (2,7-3,9") below the desired top of the OnDemand unit



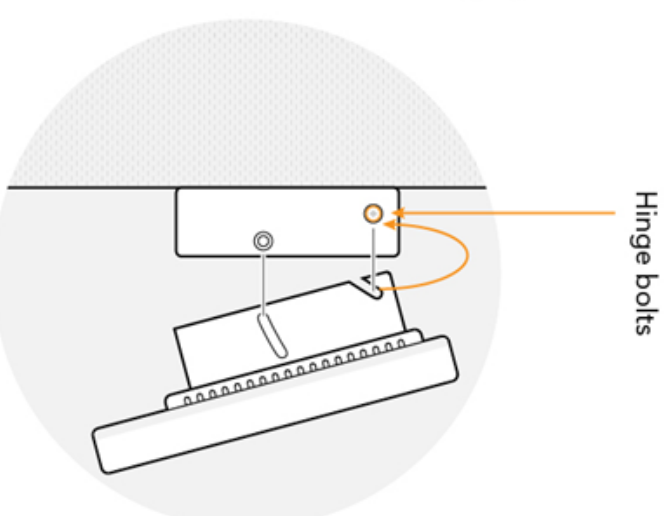
## Mounting the player plate on the OnDemand unit



Place the OnDemand unit face down on an appropriate surface.



Make sure the cut-out is facing towards the bottom of the unit.



Hinge bolts

Hang the player using the wall bracket hinge bolts. Secure the bolts but do not fully tighten them yet.

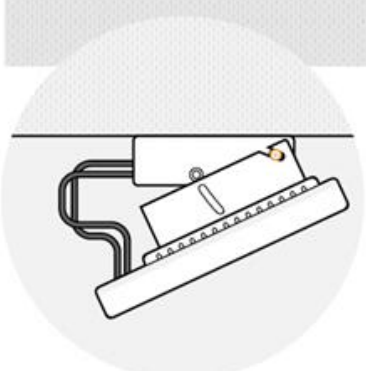
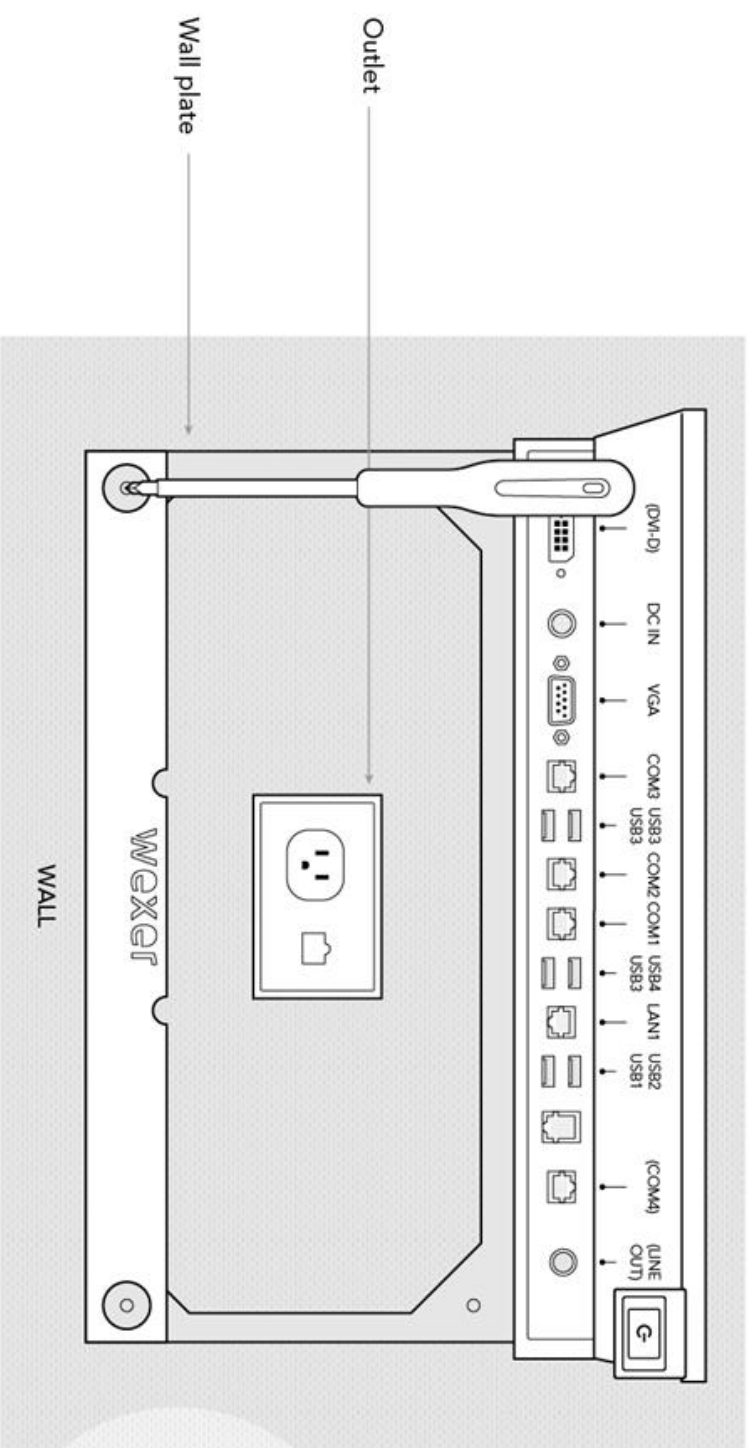


## Preparing the unit for cables

With the OnDemand unit securely hinged, lift it up to expose the I/O ports.



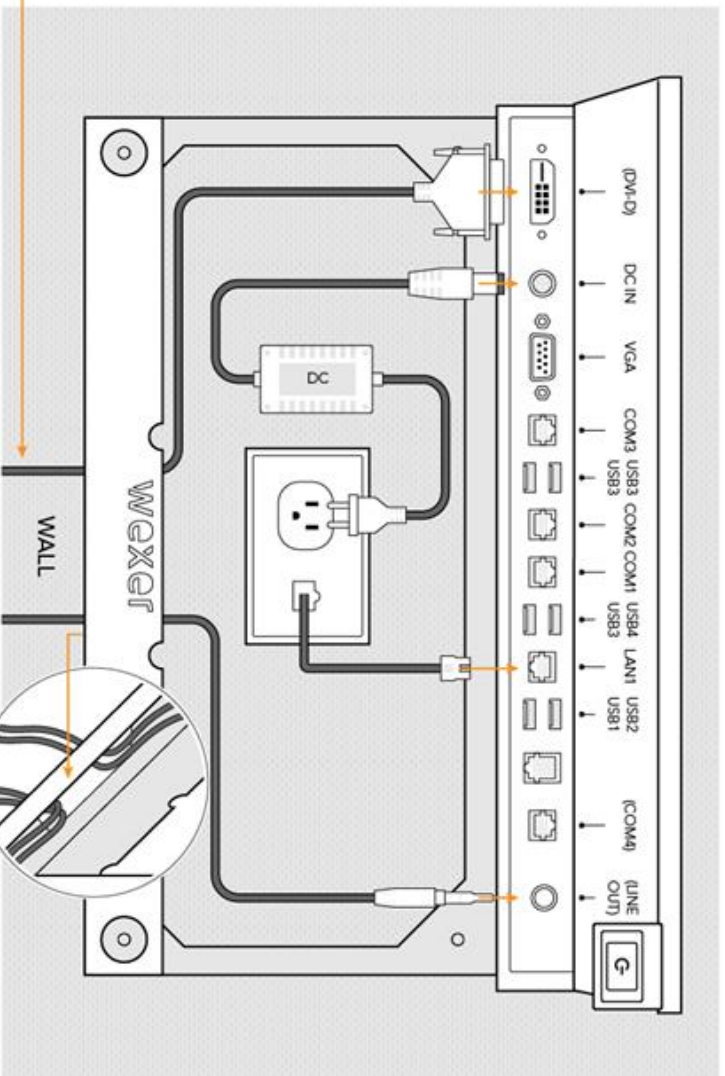
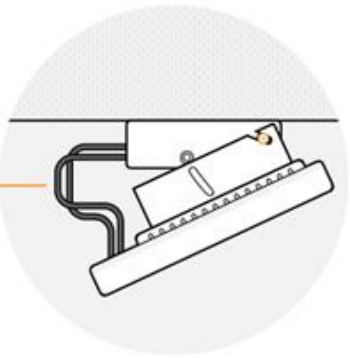
To have both hands free and to secure the bracket from falling, inserting a rod, your screwdriver for instance, in the corner of the two brackets.



Side view

## Inserting the cables

Insert the cables to the OnDemand unit (side view)



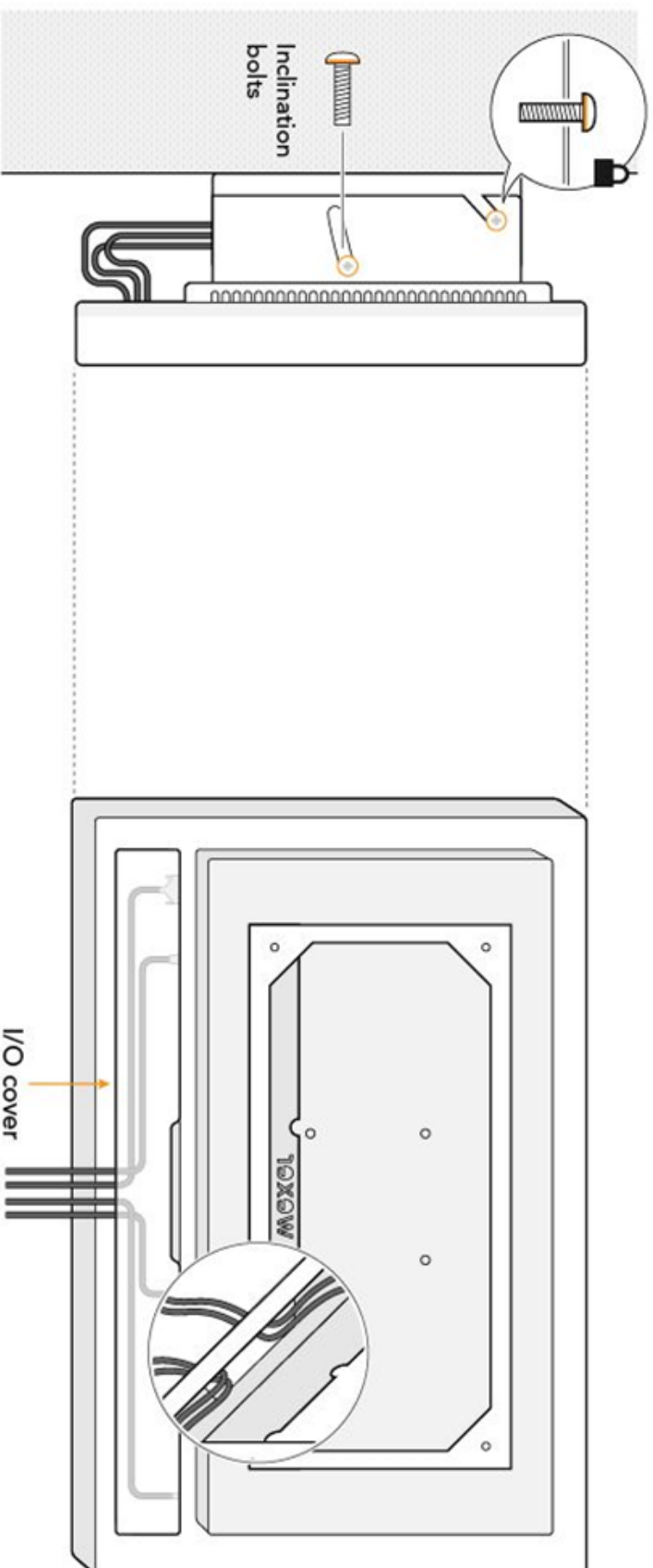
Pack the surplus cabling inside the bracket.

### REMEMBER!

 When using the DVI output, please be aware of the distance limitation. For more information, please see page 2 in our Install Guide (enclosed with the OnDemand player)

## Final fastening of the OnDemand unit

Lower the unit back into place and insert the inclination bolts on each side



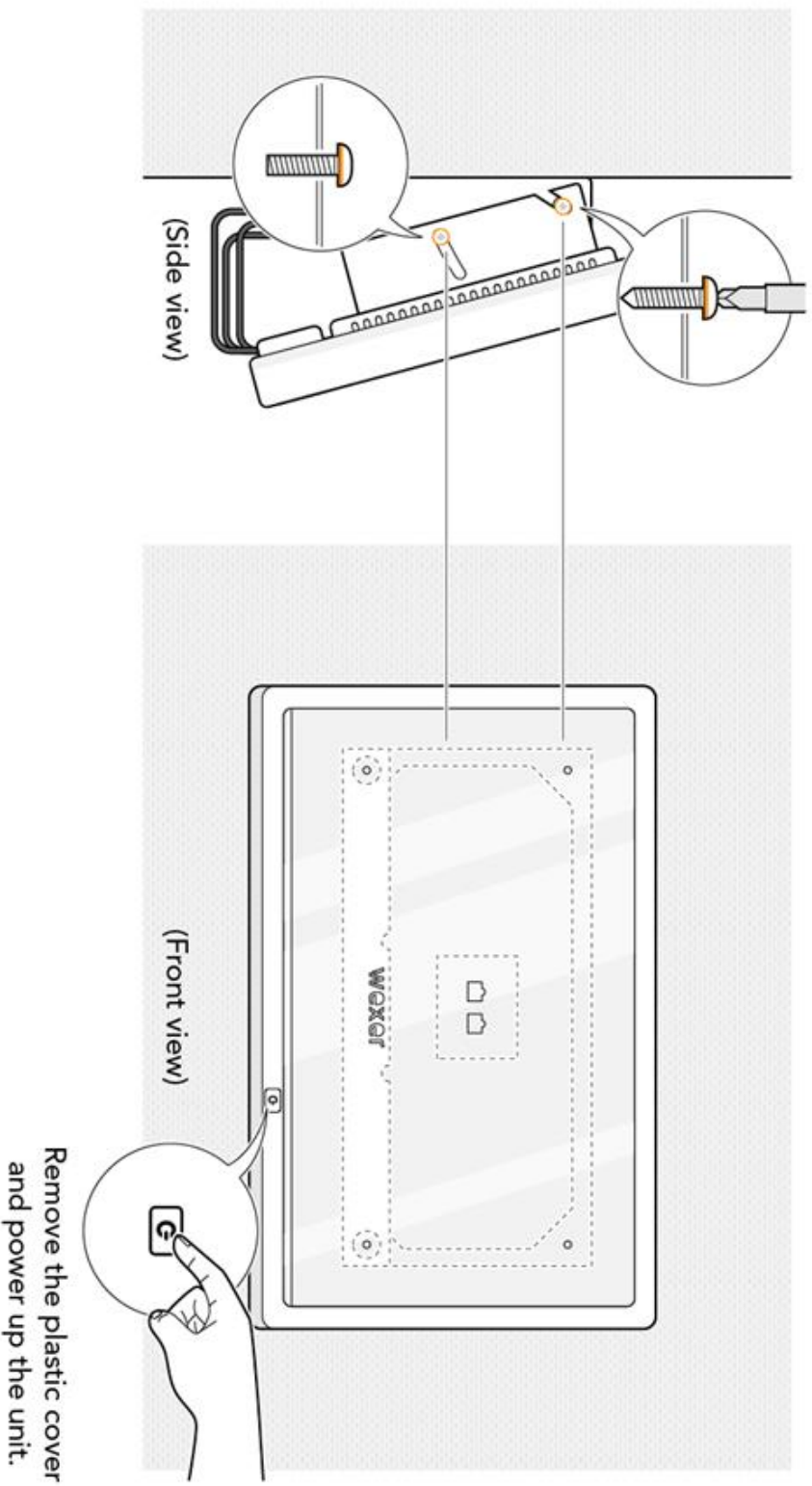
Tidy up the cables and put in place the I/O cover

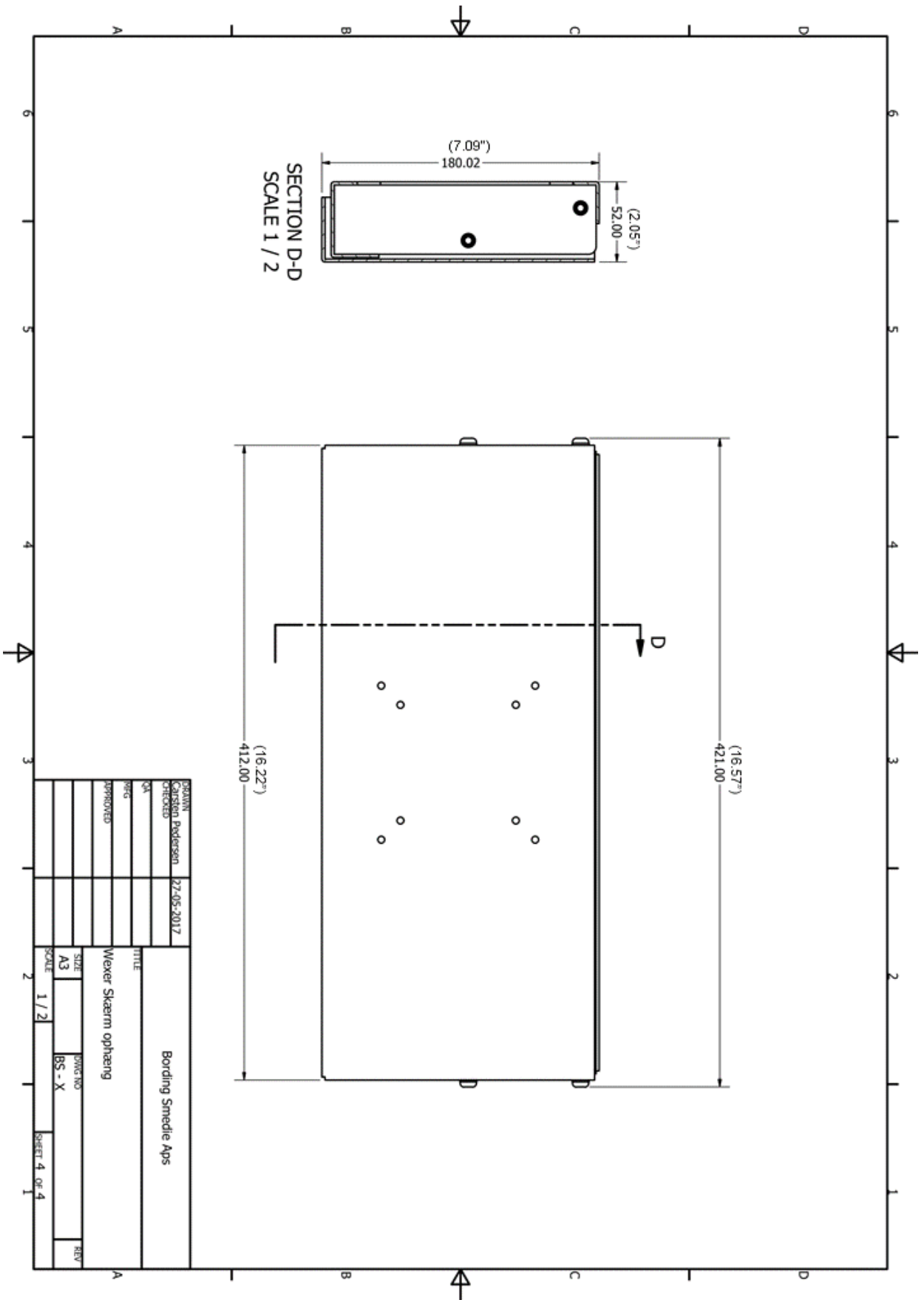
**!** For ease of access, temporarily tighten the bolts in the outer most position.

## Final adjustments

Find the desired inclination angle and tighten the inclination bolts.

Tighten the hinge bolts.



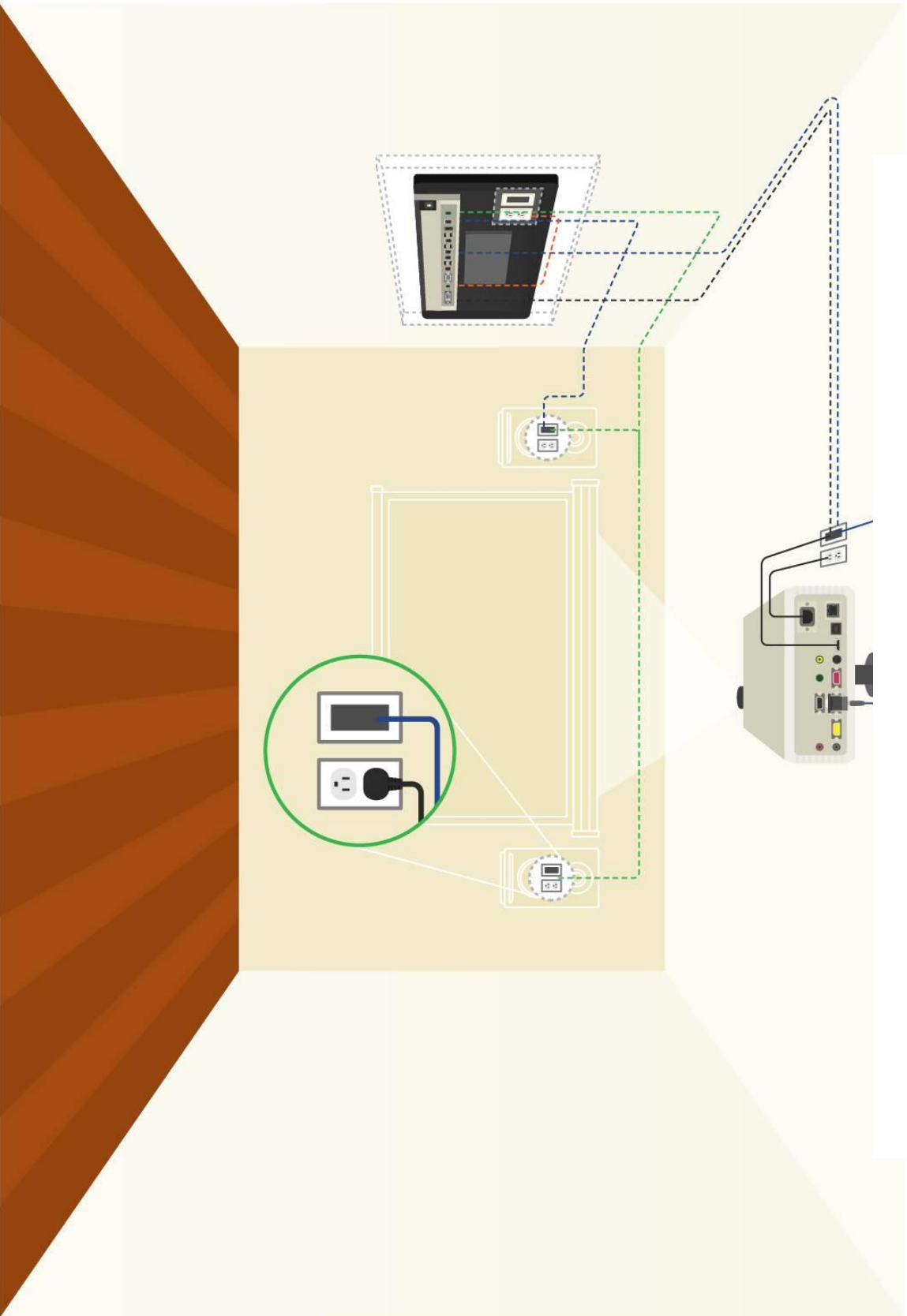


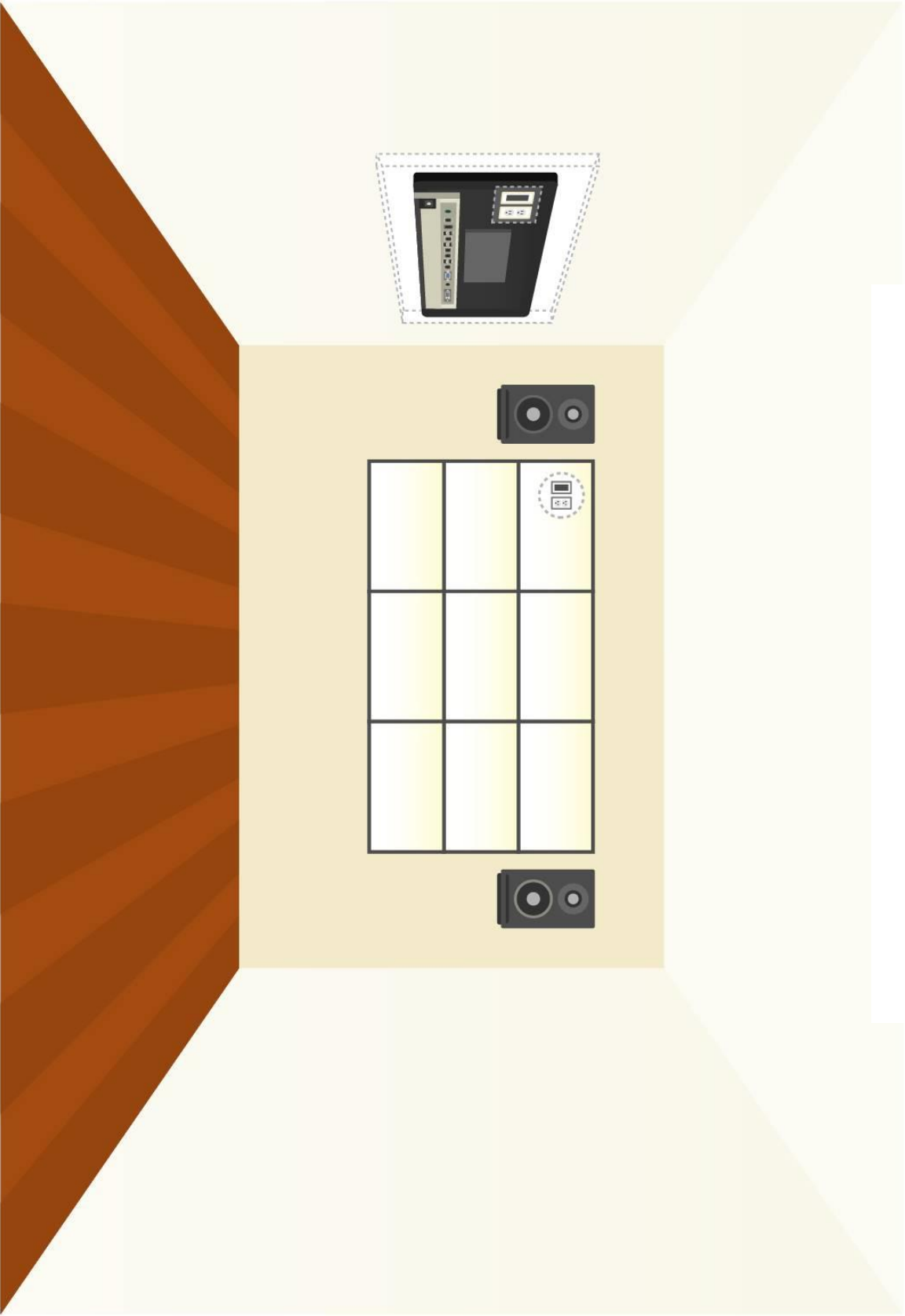
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## Standard setup example



**Standard setup example illustrated with outlets, conduit and wiring**

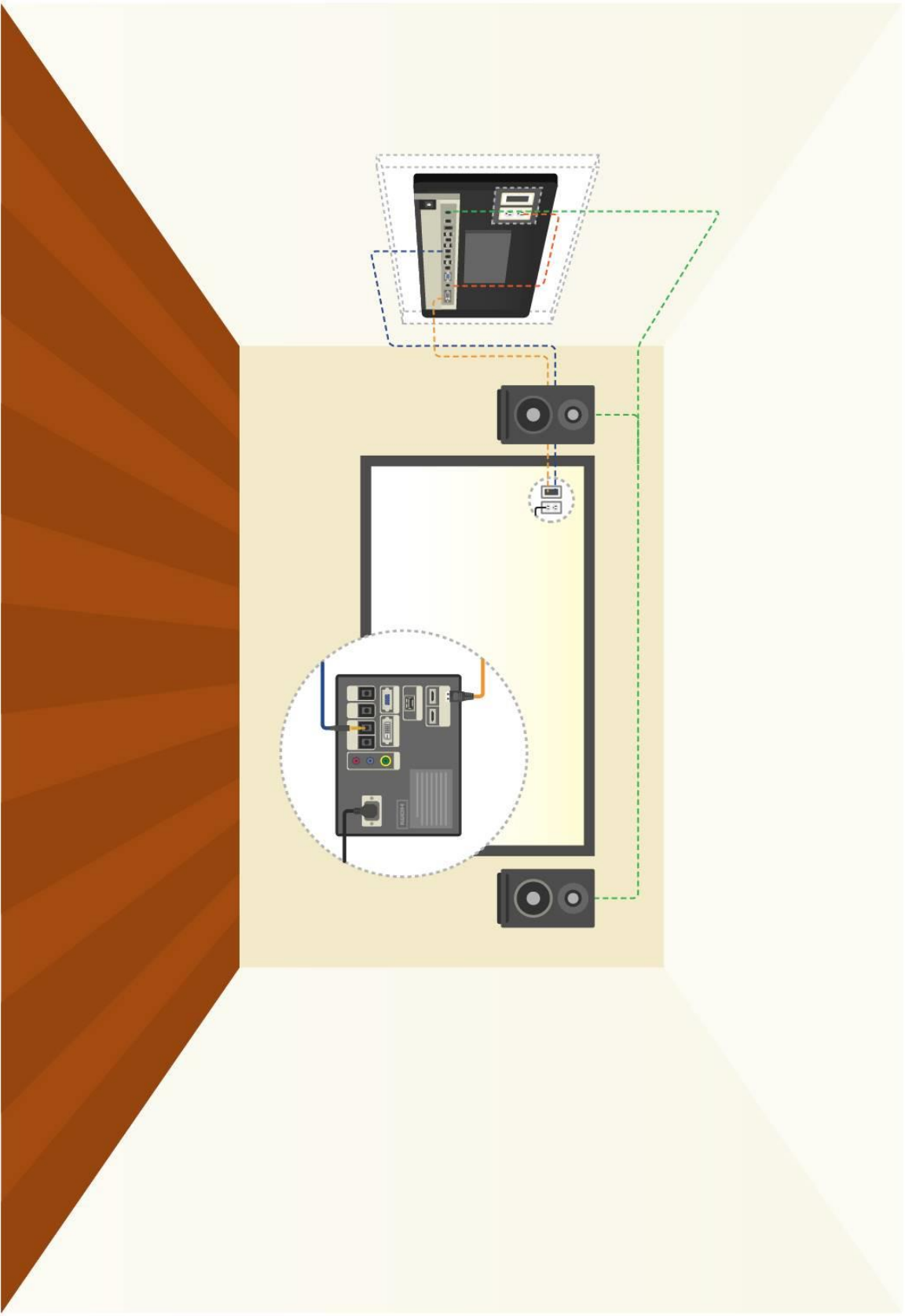




**Video-wall setup example**



# Single large TV illustrated with basic wiring



**Denmark**



**Netherlands**



**New Zealand**



**United Kingdom**



**United States**



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