



Product Overview

# VX USB-C & HDMI Video Extender Kit

AV Technology from **ab.** Ashton Bentley.

## Introduction.

The Ashton Bentley VX USB-C & HDMI Video/Audio Extender Kit is a two-box system that extends USB-C or HDMI over a single Cat6a/Cat7 cable up to 35m (100ft).

Simplify connectivity between USB-C & HDMI sources and video bars, displays or other devices.

What is included in the kit:

- VXT –Video Transmitter
- VXR –Video Receiver
- System PSU
- 10m CAT6a/Cat7 cable





VXR.

VXT.

### System Basics.

The VXT Transmitter is installed under a table, in a lectern or wherever connection to laptops is required.

The VXR Receiver is placed near the Video Bar/VC equipment or display/projector.

The two boxes are linked with a single Cat6a/Cat7 cable, which can be up to 35m. A 10m interconnect cable is included as standard.

Simple to install, with minimal cabling.



## VXT Transmitter.

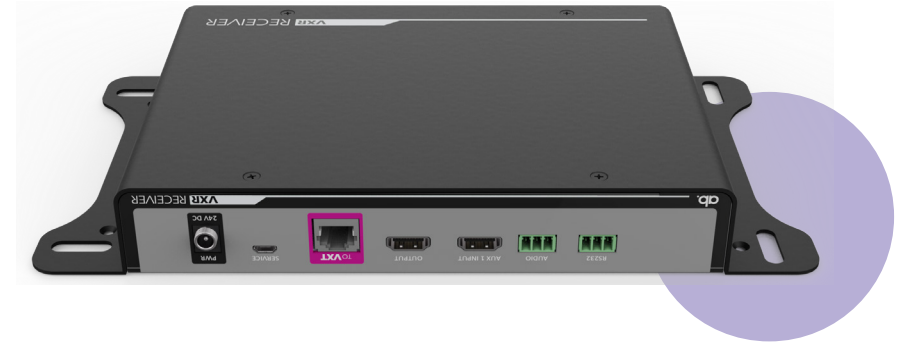
The main functionality of the VXT is a 2:1 switcher with HDMI and USB-C inputs.

Supports video resolution up to 4K2K@50/60Hz 4:4:4 and bi-directional RS232 pass-through, with the signals capable of being transmitted up to 35m (100ft).

The VXT is remotely powered from the VXR via the Cat6a/Cat7 interconnect.

An optional PSU can be connected to the VXT that provides charging power for laptops via the USB-C connection. Mounting position on the back plate for this USB-C charging PSU.

The ABNET port allows the connection of an optional Ashton Bentley Tablebox with Touch Panel to manually control the switching operation. The Tablebox has 1 x HDMI and 1 x USB-C



## VXR Receiver.

The VXR Receiver provides a single HDMI output with embedded audio from either the USB-C or HDMI connections at the VXT.

There is an additional AUX HDMI Input allowing the connection of a video conferencing system or a presentation device.

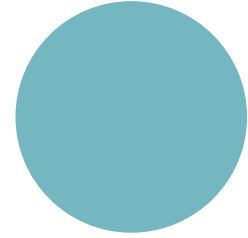
Note: this AUX Input cannot be selected if there is a source connected to the VXT. Removing all sources from the VXT will result in the VXR automatically switching to the AUX input.

The RS-232 port provides bi-directional pass-through connectivity to the VXT for any 3rd party devices.

The VXR has a separate stereo analogue audio output switched with the video signal to allow the connection of an amplifier and speakers.



## VXT Transmitter Connectivity Overview.



Connection	Type	Function
TO VXR	RJ45	Connection To VXR
ABNET	RJ45	AB peripherals like Tablebox Touch Panel
SERVICE	Micro USB	Engineering port
USB-C PWR IN	USB-C	Optional charging power for USB-C laptop
USB-C	USB-C Locking	USB-C Laptop Connection
RS232	3-Pin Phoenix	RS232 control signal pass-through to VXR
HDMI	HDMI Locking	HDMI Laptop Connection

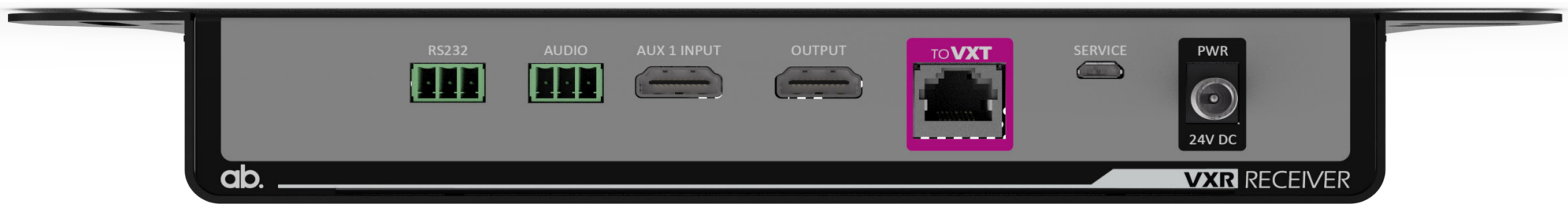
### Status LED's

The VXT Transmitter includes status LED indicators to show active connections, and help diagnose potential problems:





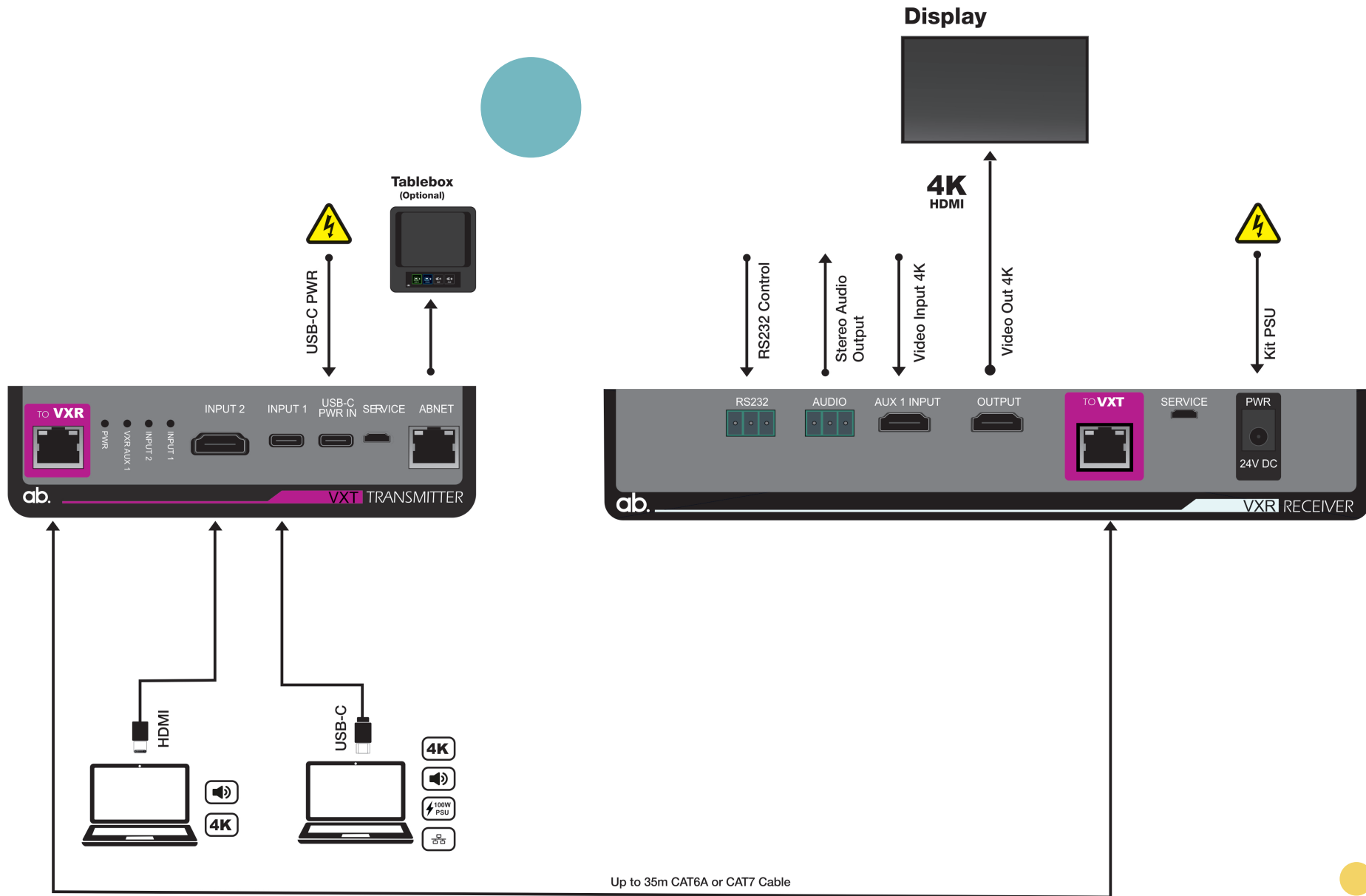
## VXR Receiver Connectivity Overview.



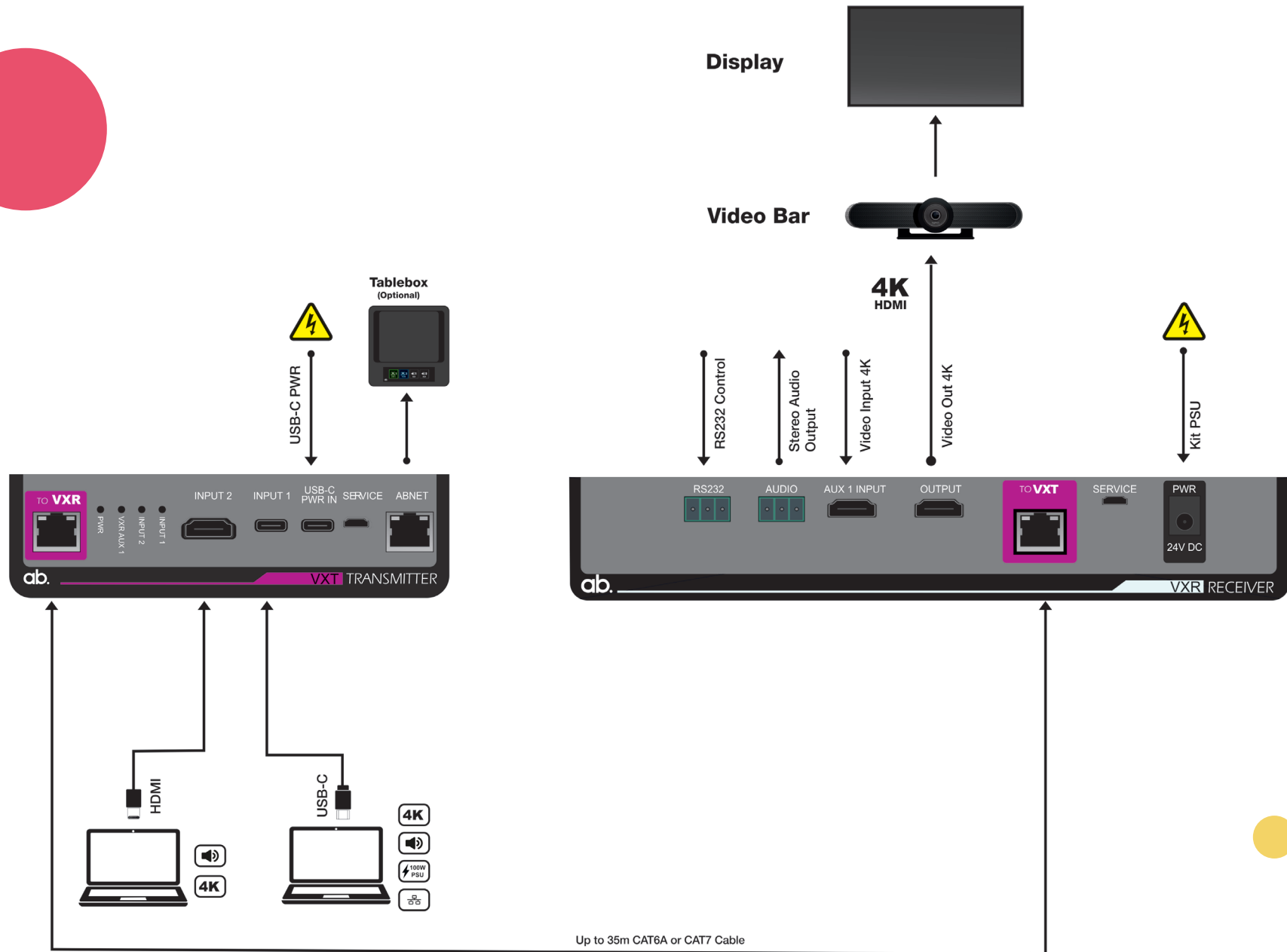
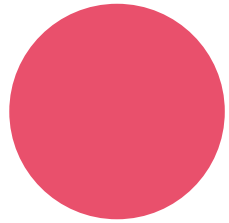
Connection	Type	Function
PWR	DC Jack	24V power for both VXR and VXT
SERVICE	Micro USB	Engineering port
TO VXT	RJ45	Connection to the VXT
VIDEO OUT	HDMI	Video out
VIDEO IN	HDMI	Aux HDMI Input
AUDIO	3-Pin Phoenix	Analogue stereo audio out
RS232	3-Pin Phoenix	RS232 control signal passthrough to VXT



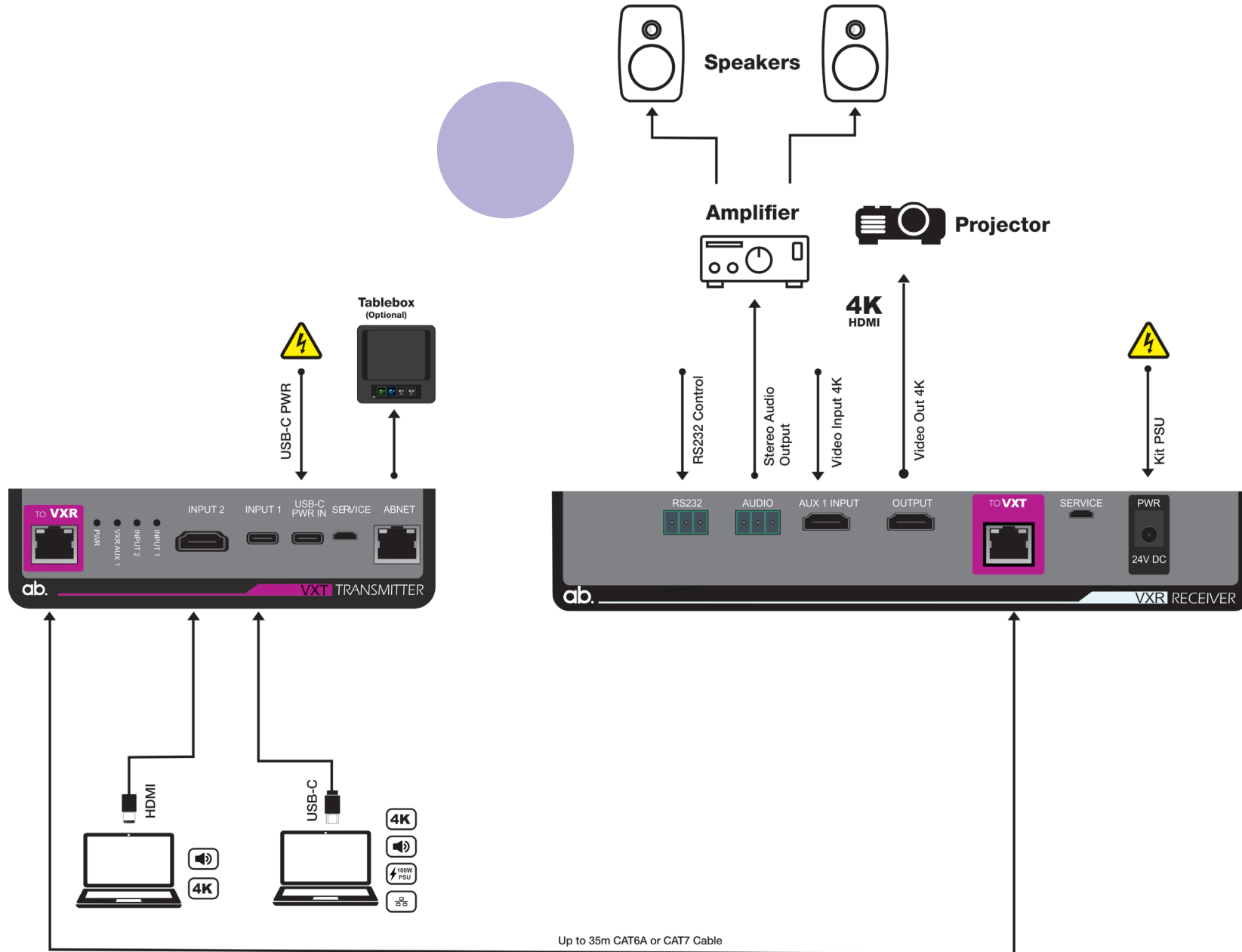
# Presentation.



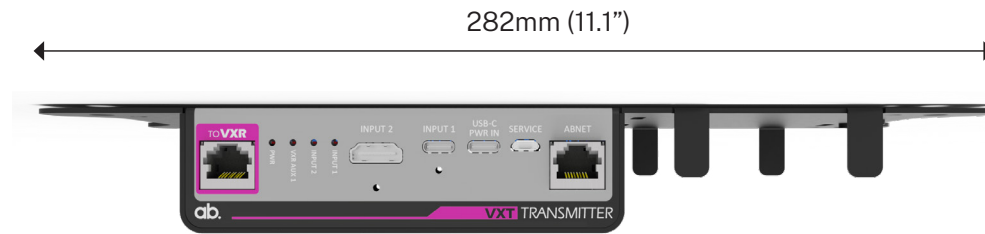
# Video Conferencing.



# Projection.



## VXT Transmitter Mechanical Dimensions.



The VXT unit is on a standard Ashton Bentley back plate for simple mounting.

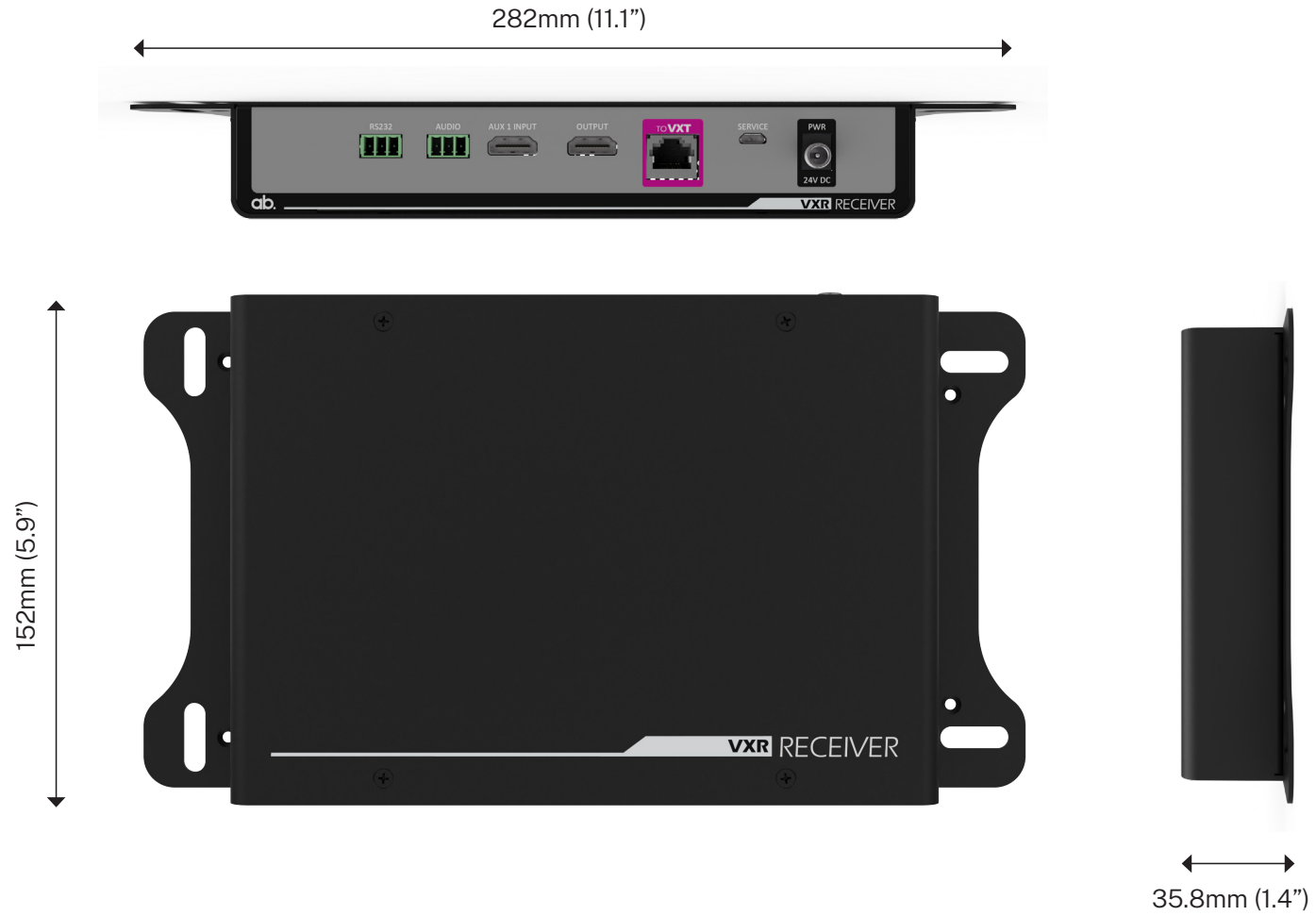
## VXT Technical Overview.

- HDMI Compliance HDMI 2.0b
- HDCP Compliance HDCP 2.2
- DP Compliance Display Port 1.2a
- Video Bandwidth USB-C: 5.4 Gbps  
HDMI: 18 Gbps
- Video Resolution 480i-1080p50/60Hz, 4Kx2K@24/30Hz, 4k2k@60Hz
- Colour Space RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
- Colour Depth 8/10/12-bit (1080P@60Hz)
- HDR 8-bit (4K@60Hz)  
Support
- HDMI Audio Formats LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-H Master Audio, DSD
- Transmission Distance Max distance 1080P & 4K 35m (100ft)
- ESD Protection Max distance 1080P & 4K 35m (100ft)  
Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

## Mechanical Overview.

- Housing Metal Enclosure
- Color Black
- Weight 1.5Kg
- Dimensions See page 12
- Power Supply 24v power supply (supplied)
- Power Consumption 24W Maximum
- Operating Temperature 32-104°F / 0-40°C
- Storage Temperature -4-140°F / -20-60°C
- Relative Humidity 20-90% RH (no condensation)

## VXR Receiver Mechanical Dimensions.



The VXR unit is housed on a standard Ashton Bentley back plate for simple mounting.

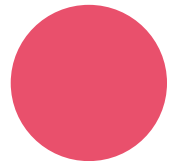
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## Mechanical Overview.

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- Dimensions See page 14
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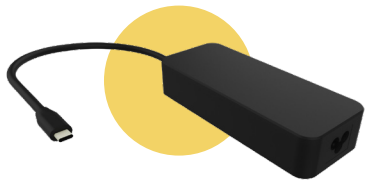
## Optional Accessories.

### USB-C Charging PSU (100W).



Connect the PSU to the VXT and provide your connected USB-C device with charging power up to 100W.

Charging power will be supplied over a USB-C Cable or Retractor.



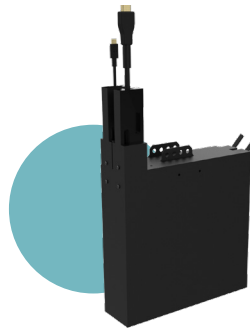
### Tablebox & Retractors.



Ashton Bentley Tablebox that can be supplied with 2 Retractors (HDMI & USB-C) or just house input cables.

Manual input selection via optional integrated Touch Panel with colour changing buttons that provide status feedback.

Simple to install and use. Conceals cables when not in use keeping table surface clear.



## Want to know more?

Ashton Bentley Collaboration Spaces Ltd

[www.ashtonbentley.com](http://www.ashtonbentley.com) | [spaces@ashtonbentley.com](mailto:spaces@ashtonbentley.com) | +44 (0)207 100 1200

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