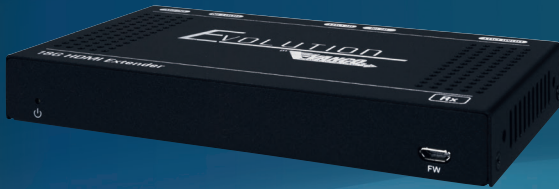# 4K HDR HDBaseT™
## RECEIVER
### with PoC and Bi-directional IR

**4K HDR HDBaseT™ Receiver with POC and Bi-directional IR**

**Part Number:**

**EVRXHD2**

# EVOLUTION
BY **VANCO**
ADVANCING DIGITAL CONNECTIVITY

**www.vanco1.com • 800.626.6445**

# DEAR CUSTOMER

Thank you for purchasing this product.
For optimum performance and safety, please
read these instructions carefully before connecting, operating or
adjusting this product. Please keep this manual for future reference.

**This product is 100% inspected and tested in the United States to verify HDMI performance parameters.**

# WARNING

1. Do not expose this unit to water, moisture, or excessive humidity.

2. Do not install or place this unit in a built-in cabinet, or other confined space without adequate ventilation.

3. To prevent risk of electrical shock or fire hazard, due to overheating do not obstruct unit's ventilation openings.

4. Do not install near any source of heat, including other units that may produce heat.

5. Do not place unit near flames.

6. Only clean unit with a dry cloth.

7. Unplug unit during lightening storms or when not used for an extended period of time. A surge protector is strongly recommended.

8. Protect the power cord from being walked on or pinched, particularly at the plugs.

9. Use unit only with accessories specified by the manufacturer.

10. Refer all servicing to qualified personnel.

# CAUTION

HDMI is a very complex technology requiring continuous authentication of the signal and the same video resolution and audio settings on all electronic equipment in the system. When there are multiple sources and displays, the video resolution and audio setting on all connected units must be adjusted to correspond with that of the display having the lowest video and audio capability.

# INTRODUCTION

Th Evolution by Vanco EVRXHD2 4K HDR HDBaseT™ Receiver with POC and Bi-directional IR, allows extension of 4K@60Hz, 4:4:4 Chroma Subsampling, and HDR up to 131ft/40m and 1080p up to 230ft/70m over a single Cat6 cable. PoC (Power over Cable) allows the EVRXHD2 to be powered over Cat6 from the matrix unit. Features IR pass-through to be able to control either sources and/or displays. The EVRXHD2 is compatible with the Evolution EVMX4X3, EVMX8X6, EVMX44PRO, and EVMX88PRO matrix units.

Need more options for audio, control, and scaling ability? The EVRXDSC receiver has all the same features as the EVRXHD2 plus more, including RS-232 pass-through, ARC, audio extraction, and downscaling. Both receivers can be mixed and matched with compatible Evolution matrix units, resulting in a flexible and modular matrix switching system for any application!

## 4K HDR HDBaseT™ Receiver with POC and Bi-directional IR
### Part # EVRXHD2

- Supports HDMI resolutions up to 4K@60Hz, 4:4:4 chroma sampling and HDR
- Extends 4K@60Hz 4:4:4, and HDR10 up to 131ft/40m and 1080p up to 230ft/70m over a single Cat6 cable
- 18Gbps high bandwidth
- Features Power over cable (POC) Technology, which provides power for the receivers resulting in easy installation
- Bi-directional IR pass-through for source and/or display control
- Compatible with the Evolution EVMX4X3, EVMX8X6, EVMX44PRO and EVMX88PRO matrix units
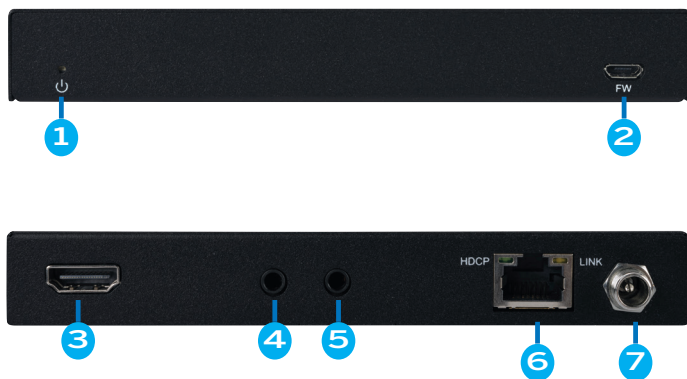- Dimensions: 5.5" W x 0.8" H x 3.3" D

# PACKAGE CONTENTS

- EVRXHD2 Receiver
- (2) Mounting ears with hardware
- (4) Plastic feet
- Product Manual

# SPECIFICATIONS

Input...... ........................................................(1) HDBT

Input Connector..........................................................(1) RJ45

Input Resolution..........................................................Up to 4K@60Hz, 4:4:4 chroma and HDR10

Output..........................................................(1) HDMI

Output Connector..........................................................(1) Type-A female HDMI

Output Resolution......... ..........................................................Up to 4K@60Hz, 4:4:4 chroma and HDR10

Control Part...... ..........................................................(1) FW, (1) IR IN, (1) IR OUT

Control Connector..........................................................(1) Micro-USB port, (2) 3.5mm jacks

Bandwidth.......... ..........................................................18Gbps

HDMI Standard..........................................................2.0

HDCP Version..........................................................2.2, 1.4 compliant

CEC... ..........................................................Pass-through

Bi-directional IR......... ..........................................................Supported

HDMI 2.0 Cable Length.......... ..........................................................4K@60Hz 4:4:4 ≤ 5m, 4K@60Hz 4:2:0 ≤ 15m, 1080P ≤ 20m

Transmission Standard..........................................................HDBaseT

Transmission Distance........ ..........................................................1080P@60Hz ≤ 230 ft/70m; 4K@60Hz ≤ 131 ft/40m

Operation temperature..........................................................23-131 degrees F

Storage temperature..........................................................-13 – 158 degrees F

Relative humidity..........................................................10-90% RH (no condensation)

Power Supply..........................................................Input:100V~240V AC; Output:24V DC 1.25A

Power Consumption.......... ..........................................................12W (max)

Dimensions.......... ..........................................................5.5" W x 0.8" H x 3.3" D

Weight.......... ..........................................................0.6 lb

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# PANEL DESCRIPTIONS

1. POWER LED: Illuminates red when powered on either by PoC or connected power supply

2. FW: Micro-USB port for firmware upgrade; any available firmware updates will be located on the product page for this part # on www.vanco1.com, under the "downloads" tab

3. HDMI OUT: Connect an HDMI display

4. IR IN: Connect the compatible IR receiver to send IR commands to the matrix unit location for source control

5. IR OUT: Connect the compatible IR transmitter to send IR commands to the EVRXHD2 for display control from the matrix unit location

6. HDBT IN: Connect a single Cat6 (home-run cable strongly recommended) to the matrix unit

The LINK LED illuminates when there is a link between the matrix unit and the receiver. The HDCP LED illuminates when the video contains HDCP content

7. DC 24V: Optional, connect a power supply for redundant power, the EVRXHD2 features PoC and will receive power from the Evolution EVMX4X3, EVMX8X6, EVMX44PRO, or EVMX88PRO matrix units

# CONNECTION DIAGRAM



HDTV

HDMI

Evolution Series
HDBaseT Matrix
(Sold Seperately)

HDBaseT over Cat5e/6

# CONNECT AND OPERATE

1. Connect a single Cat6 cable (home-run cable strongly recommended) from a compatible Evolution matrix unit to the EVRXHD2 (HDBT in)

2. Connect an HDMI display to the HDMI output (NOTE: HDMI certified cables are strongly recommended for 4K HDR resolution)

3. OPTIONAL: Connect the compatible IR accessories for IR source and/or display control; IR receiver to the IR IN port; IR transmitter to the IR OUT port

4. OPTIONAL: Connect a power supply; the EVRXHD2 features PoC and will be powered up by the compatible Evolution matrix unit

# LIMITED WARRANTY

With the exceptions noted in the next paragraph, Vanco warrants to the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in Vanco's opinion, prove defective within this warranty period, Vanco, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of Vanco. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into Vanco products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to Vanco. A surge protector, power conditioner unit, or an uninterruptible power supply must be installed in the electrical circuit to protect against power surges.

If repairs are needed during the warranty period the purchaser will be required to provide a sales receipt/sales invoice or other acceptable proof of purchase to the seller of this equipment. The seller will then contact Vanco regarding warranty repair or replacement.

# TECHNICAL SUPPORT

In case of problems, please contact Vanco Technical Support by dialing 1-800-626-6445.  You can also email technical support issues to techsupport@vanco1.com.

When calling, please have the Model Number, Serial Number (affixed to the bottom of the unit) and Invoice available for reference during the call.

Please read this Instruction Manual prior to calling or installing this unit, since it will familiarize you with the capabilities of this product and its proper installation.
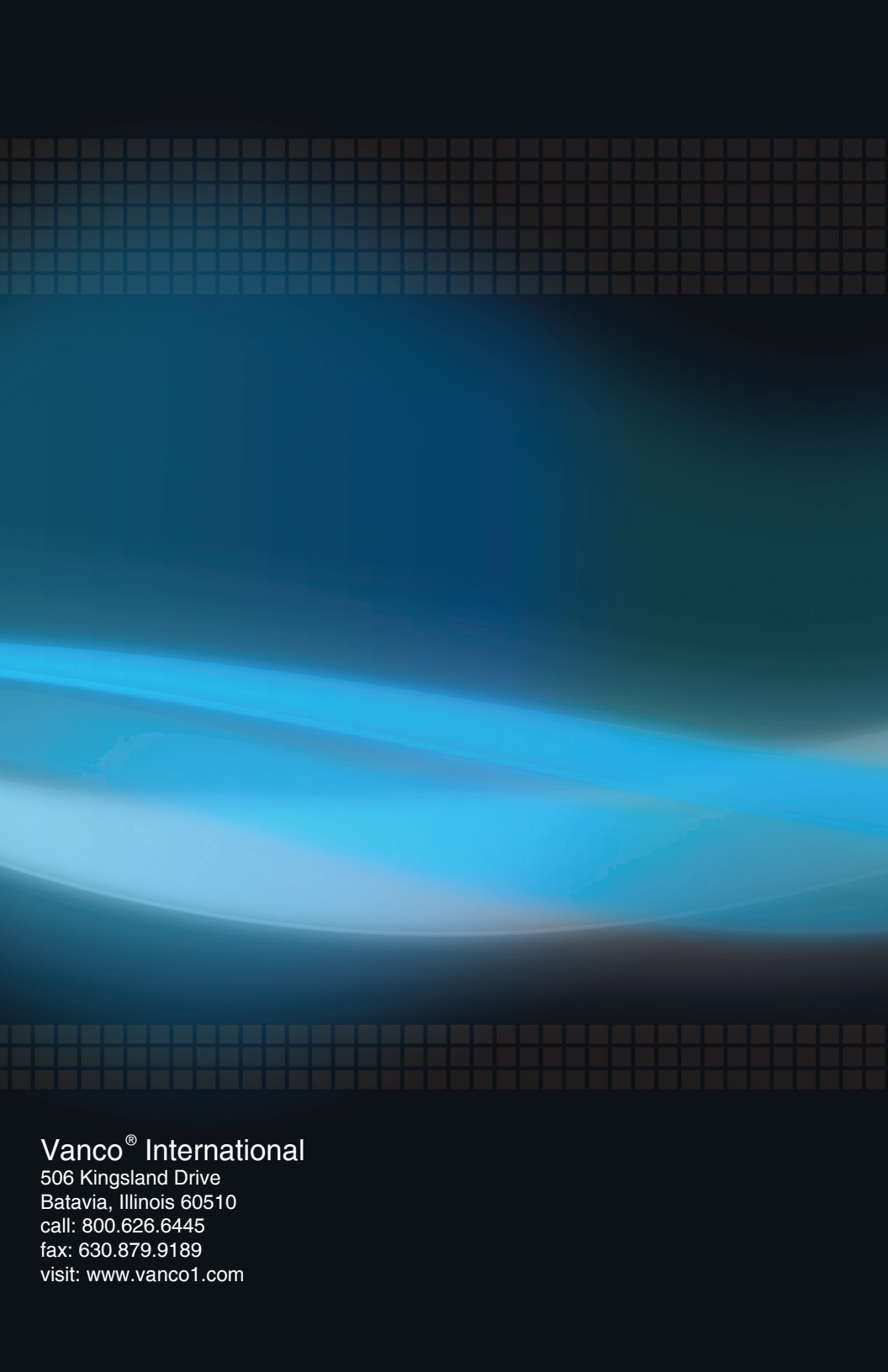
All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theater applications.

For additional information, such as helpful installation videos, etc. please visit www.vanco1.com

# LIABILITY STATEMENT

Every effort has been made to ensure that this product is free of defects. The manufacturer of this product cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user and installer of the hardware to check that it is suitable for their requirements and that it is installed correctly. All rights are reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

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