

10 BUTTON Programmable Control Keypad



**Vanco Part Number:
EVCTL10B**

**10 Button
Programmable Control
Keypad**

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

The Evolution by Vanco EVCTL10B is a 10-button IP enabled keypad controller aimed at providing a simple and easy control solution for specific actions. Able to control wall presentation switchers, matrices, HDMI over IP solutions, and more over TCP/IP or RS232 protocols and can be powered over PoE, or with the Vanco 110018 Universal Power Supply (sold separately). Mount as a single gang wall plate into the wall or a box in a conference room table, and with a press of a button commands are automatically sent to other components. With up to 10 presets, the EVCTL10B is a perfect solution to automate different actions and themes for any space. Automate multiple actions to create a theme or setting for a conference room or home theater with a press of a button.

Evolution 10 Button Programmable Control Keypad

Part # EVCTL10B

- 10 button custom programmable control keypad
- Single gang design
- Able to be powered remotely over PoE or hardwired 2-conductor cabling using the Vanco 110018 Universal Power Supply (sold separately)
- Controls devices over TCP/IP and RS232 protocols
- Software allows for customizing commands, macros, or to backup or upload templates from previously configured keypads
- Dimensions: 1.77" W x 4.16" H x 1.42" D (45mm x 105.6mm x 36mm)

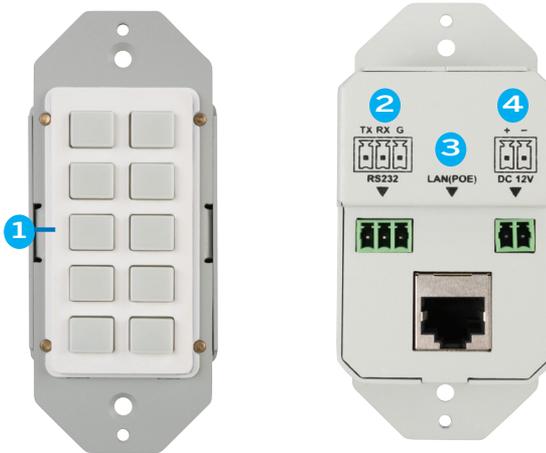
PACKAGE CONTENTS

- (1) EVCTL10B Keypad
- (1) Single Gang White Decora Plate
- (1) Phoenix Male Connector (3.5mm, 2 Pins)
- (1) Phoenix Male Connector (3.5mm, 3 Pins)
- (1) Set of Mounting Hardware
- (1) Sheet of pre-printed button labels
- (1) Product Manual

SPECIFICATIONS

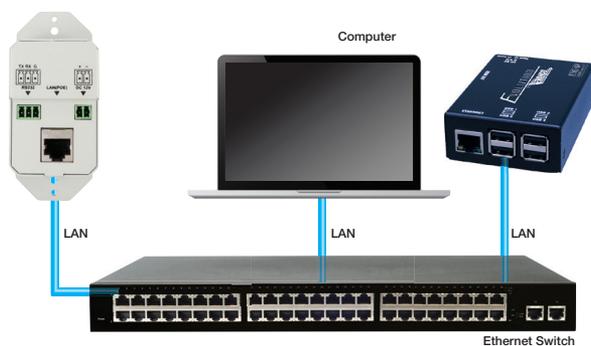
Port and Buttons	Front Panel: 10 x Button; Rear Panel: 1 x LAN (RJ45, PoE); 1 x RS232; 1 x DC 12V Power In
Power Supply Input	12V, 500mA
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Power Consumption (Max)	1.3W
Dimensions	1.77" W x 4.16" H x 1.42" D (45mm x 105.6mm x 36mm)
Weight	0.18kg/0.40lb

PANEL DESCRIPTIONS



- Buttons (1-10): Each button can store 1-6 commands. Press the button once, it blinks once and goes out. Power on the device, all buttons will be lit and blink 3 times. **(Note: Press the two buttons at the bottom of the front panel simultaneously, the device will restore to factory default settings.)**
- RS-232: Connect to the controlled device
- LAN (PoE): Connect to an Ethernet switcher or connect to an Ethernet enabled device to control
- DC 12V: Connect to DC 12V power adapter (not included)

CONNECTION DIAGRAM



CONNECT AND OPERATE

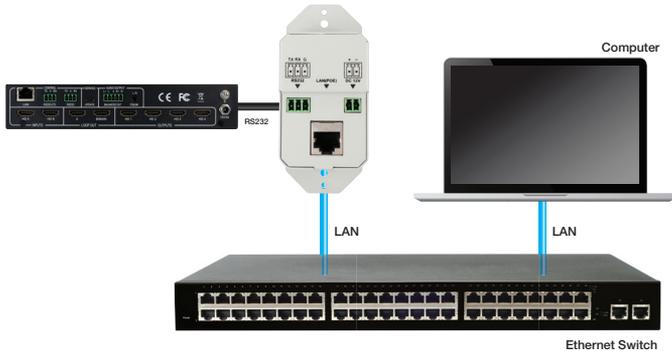
TCP/IP Control

1. Connect the controller and the device being controlled to an Ethernet switch, and connect the PC to the same network
2. If using the PoE function, the controller can be powered by a switch and no additional power adapter is needed. If not, connect a 12V Power Supply (recommend Vanco 110018-sold separately) to provide power to the keypad
3. Power on all devices and test
4. Install it into a box in wall with decora wall plate once testing is confirmed

CONNECT AND OPERATE

RS-232 Control

1. Connect the controller to an ethernet switch
2. Connect the device being controlled to the RS232 port on the back of the EVCTL10B using the provided 3-pin phoenix connector
3. If using the PoE function, the controller can be powered by a switch and no additional power adapter is needed. If not, connect a 12V Power Supply (recommend Vanco 110018-sold separately) to provide power to the keypad
4. Power on all devices and test
5. Install it into a box in wall with decora wall plate once testing is confirmed



WEB UI CONTROL

The Web UI is accessible through a browser, e.g. Chrome, Firefox, Safari, Opera, IE10+, etc.

ACCESS TO THE WEB UI

1. Connect the RJ45 port of the controller to the Ethernet switcher using a Cat5e/6 cable.

Note: If the switcher does not support PoE, connect a DC 12V power adapter to the controller

2. Connect a PC to the same switcher.
3. Use the tool such as FING or Advanced IP Scanner to get the IP address of the EVCTL10B
4. Input the IP address in your browser and press Enter. The following window will display



The screenshot shows the login interface for the EVOLUTION web UI. At the top, the word "EVOLUTION" is displayed in a large, black, serif font. Below this, there is a white rectangular box containing the login form. The form has two input fields: "Username" with a user icon on the left, and "Password" with a lock icon on the left. A "Login" button is located to the right of the password field.

5. Input the Username and Password, then click "Login". The default Username and Password are both "admin"

The main page includes five submenus: Key settings, Command Settings, Device Settings, Network Settings, System Settings.

Store commands to the buttons, you should set "Device Settings" first, then "Command Settings", "Key Settings".

DEVICE SETTINGS

Key Settings Command Settings **Device Settings** Network Settings System Settings

MCU Version: 1.2
Web Version: 1.03

Active	Device Name	Interface	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove
<input type="checkbox"/> DISABLE	-	-	Edit	Remove

Edit: Click the first edit to enter the following interface.

Device edit
✕

Device Name:

IP Address:

Connect Port:

Device Name: Set the device name you want. (Start with letters, numbers or underscores, less or equal to 16 characters in length.)

IP Address: Enter the IP address used to login the web page

Connect Port: Enter the connect port number such as "23"

Save: Click "Save" to save all the settings above

Cancel: Cancel all the settings above

After save the settings above, the "Active" of the table will slide to ENABLE

Click the second "Edit" to enter the following interface

Device edit
✕

Device Name:

Baud Rate:

Parity Bits:

Data Bits:

Stop Bits:

Device Name: The name you set in the first Edit tab

Baud Rate: Select the baud rate from the drop-down menu. Such as select 9600

Parity: Select the parity bits from the drop-down menu. Such as "NONE"

Data Bits: Select the data bits from the drop-down menu. Such as "8". Stop Bits: Select the stop bits from the drop-down menu. Such as "1"

Save: Click "Save" to save all the settings above

Cancel: Cancel all the settings above

After the settings saved, the previous interface will be displayed as the follow picture

MCU Version:1.2
Web Version:1.03

Key Settings
Command Settings
Device Settings
Network Settings
System Settings

Active	Device Name	Interface	Edit	Remove
<input checked="" type="checkbox"/>	A-1	IP Control	Edit	Remove
		RS232 Control	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove
<input type="checkbox"/>	-	-	Edit	Remove

Remove: Remove the corresponding settings above

COMMAND SETTINGS

[Key Settings](#)
[Command Settings](#)
[Device Settings](#)
[Network Settings](#)
[System Settings](#)

MCU Version: 1.2
Web Version: 1.03

Device Name	Command Name	Command	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove
-	-	-	Edit	Remove

Edit: After “*Device Settings*” configured, the Device Name in the table of Command Settings part will display the name you set. Click “Edit”, enter the following page.

Command Edit 1 ✕

Command Name:

Command:

Command Name: Enter the command name you want to set. (Start with letters, numbers or underscores, less or equal to 32 characters in length.) **Command:** Enter the command you want to save, such as “OPEN”.

Save: Click to save the settings.

Cancel: Click to cancel the settings.

Device Name	Command Name	Command	Edit	Remove
A-1	00	OPEN	Edit	Remove
	01	CLOSE	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove
	-	-	Edit	Remove

Remove: Remove the corresponding settings above

KEY SETTINGS

This section is used to set commands to each button. Click the right corner of the button to enter the following interface.



Key 1 edit

Key alias edit:

KEY1 Save

Command

Device Name	Command Name	Interface	Param 1	Param 2	Delay(ms)	Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove

Save

* Cancel

Key alias edit: Change the button name (Start with letters, numbers or underscores, less or equal to 24 characters in length), then click "save" to take effect.

Command: Click "Edit" in the table, open the following page

Device List

A-1	-
-	-
-	-
-	-
-	-

* Cancel

Click the device name you want. Enter the next page.

Command Destination

Delay(ms): 10

Interface: RS232

Command: 00

Save Cancel

Delay (ms): Set the command delay time sent to the controlled device.

Interface: Select the interface (Telnet or RS232) to send the command. Command: Select the commands set previous in "Commands Settings" part.

Save: Click to save the settings.

Cancel: Click to cancel the settings.

After save the settings, enter the following page:

Key 1 edit

Key alias edit:

KEY1 Save

Command

Device Name	Command Name	Interface	Param 1	Param 2	Delay(ms)	Edit	Remove
A-1	00	RS232	9600	none	10	Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove
						Edit	Remove

Save Cancel

The page above shows the information set before. Each button can save 1-6 commands, other commands are set as above operations.

Remove: Remove the corresponding command.

Save: Click "Save" to save all commands settings.

Cancel: Cancel all the operation for the button.

After stored the commands for the buttons, connect the device to the controlled device, press the button, the controller sends the commands to the controlled device after the delay time you set.

NETWORK SETTINGS

Key Settings Command Settings Device Settings **Network Settings** System Settings

MCU Version:1.2
Web Version:1.03

Network Settings

IP Mode: DHCP ▾

IP : IP addr

Netmask : Netmask

Gateway : Gateway

Save

This tab allows you to select between the dynamic and static IP addressing.

- **DHCP:** When enabled, the IP address of the device is assigned automatically by the DHCP server connected.
- **Static:** When the device fails to obtain an IP address from the network connected, select "Static" to set up the IP address manually.
- **Save:** Save the setting changes.

Note: The default setting is DHCP. If the device fails to obtain an IP address from the network, or is set as "Static", ensure your PC is in the same network segment as the device.

SYSTEM SETTINGS

Key Settings | Command Settings | Device Settings | Network Settings | **System Settings**

MCU Version: 1.2
Web Version: 1.03

Web User Settings

Username:

Old Password:

New Password:

Confirm Password:

Save

Web Login Timeout(Minutes)

10 min

Download Current Configuration

Download

Restore Configuration

Select a File **Restore**

Reset to Default

Reset

Reboot the Unit

Reboot

WEB Upgrade

Select a File **Upgrade**

MCU Upgrade

Select a File **Upgrade**

(1) Web User Settings

This tab used to change User Name and Password.

Save: Click "Save" to store the settings.

The default User Name and Password are both "admin".

Note: Password settings start with letters, numbers or underscores, it must be within 4 to 16 characters in length.

(2) Web Login Timeout (Minutes)

Web login timeout settings. Click to set the timeout from the drop-down menu (5-60 minutes). The default setting is 10 minutes.

Web Login Timeout(Minutes)

10 min

5 min

10 min

15 min

20 min

30 min

40 min

50 min

60 min

(3) Download Current Configuration

Click to download current configuration.

Save/Cancel: Click to save/cancel the settings as a bin file to local.

MCU Version: 1.2
Web Version: 1.03

Web User Settings

Username:

Old Password:

New Password:

Confirm Password:

Edit

```
[auth_info]
account      = admin
password     = admin

[timeout]
timeout      = 10

[cmdlib_dev0]
cmd0         = 0.0, . .
cmd1         = 0.1, . .
cmd2         = 0.2, . .
cmd3         = 0.3, . .
cmd4         = 0.4, . .
cmd5         = 0.5, . .
cmd6         = 0.6, . .
cmd7         = 0.7, . .
cmd8         = 0.8, . .
cmd9         = 0.9, . .

[cmdlib_dev1]
cmd0         = 1.0, . .
cmd1         = 1.1, . .
cmd2         = 1.2, . .
cmd3         = 1.3, . .
cmd4         = 1.4, . .
cmd5         = 1.5, . .
cmd6         = 1.6, . .
cmd7         = 1.7, . .
```

Save Cancel

(4) Restore Configuration

Select a File: Click to select a saved configuration bin file from local PC.

Restore: Click to begin to restore the configuration from the selected bin file.

(5) Reset to Default

Click to reset the device to default settings. The following page will be popped up.

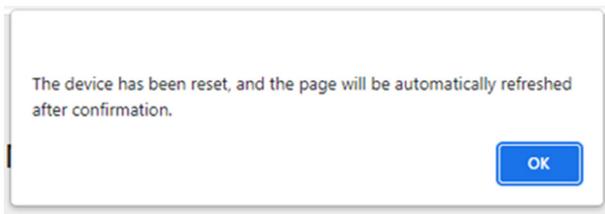
Note: The device will reboot automatically after successfully reset. The front panel will blink 3 times and the web page will return to the login page.

The device has been reset, and the page will be automatically refreshed after confirmation.

OK

(6) Reboot the Unit

Click to reboot the device. The following page will be popped up.

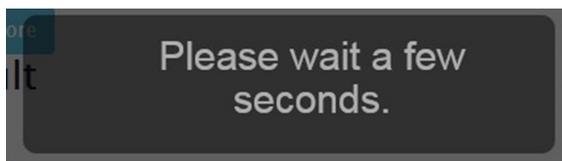


The front panel blinks 3 times and the web page returns to login page shows the reboot successfully.

(7) WEB Upgrade

Select a file: Select a WEB upgrade bin file from the local PC.

Upgrade: Click to begin to upgrade the web. The following window will be popped up.



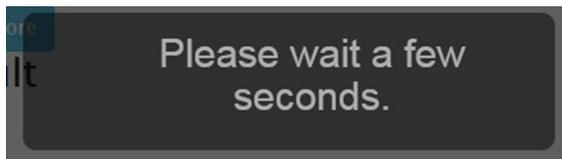
The device will be automatically reboot and the web page will be refreshed automatically after upgrading web successfully.

The front panel blinks 3 times and the web page returns to login page shows the reboot successfully.

(8) MCU Upgrade

Select a file: Select an MCU upgrade bin file from the local PC.

Upgrade: Click to begin to upgrade the MCU. The following window will be popped up.



The device will be automatically reboot and the web page will be refreshed automatically after upgrading MCU successfully.

The front panel blinks 3 times and the web page returns to login page shows the reboot successfully.

SAFETY AND NOTICE

The EVCTL10B has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the EVCTL10B should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit.
- Always unplug the power to the device before cleaning

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.

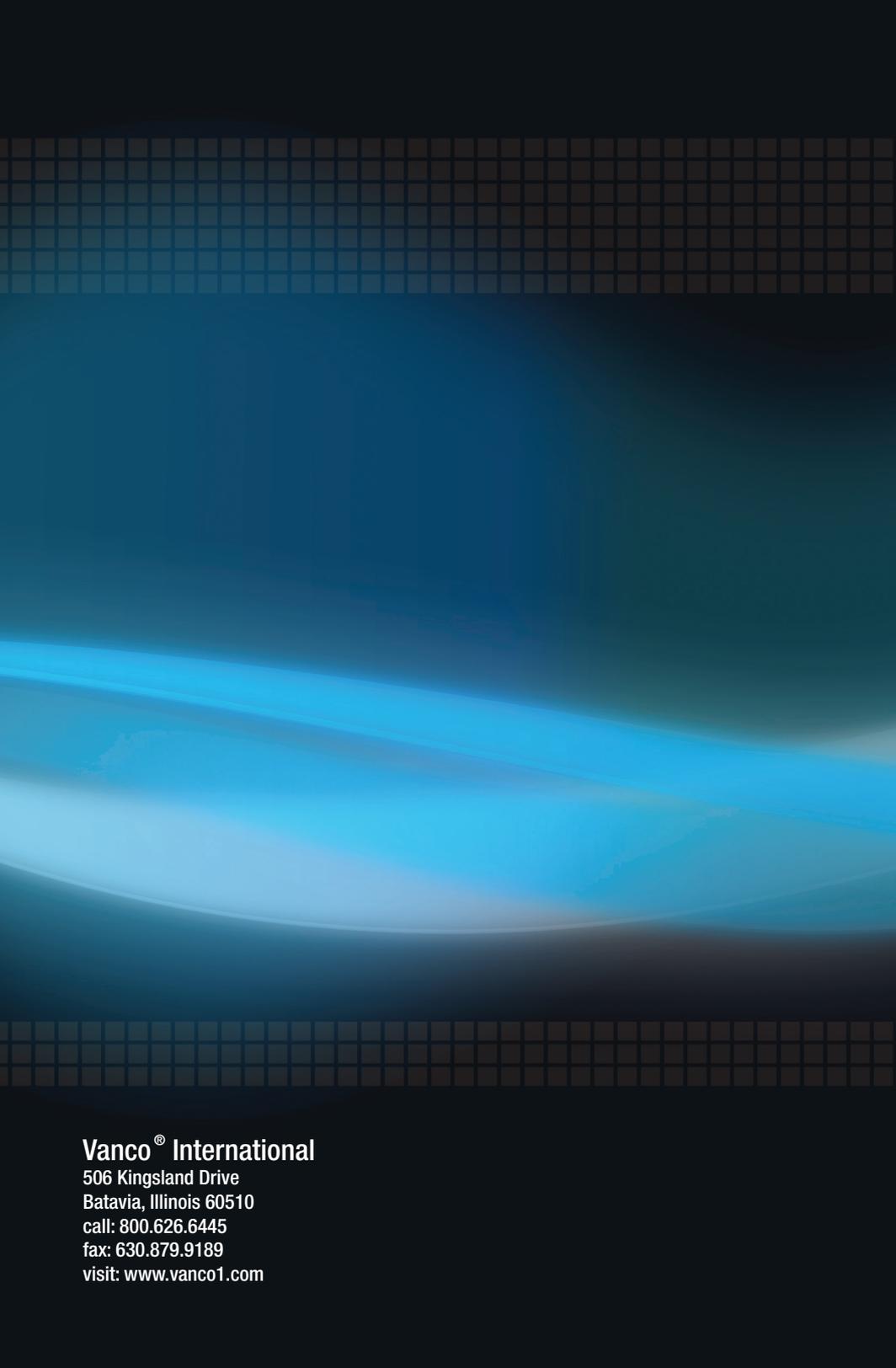
All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theater applications.

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.

Manufacturer reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.



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