

OPERATION MANUAL

VDA-106B

Video Distribution Amplifier

1ST Edition





Edition Revision History

Edit.	Rev.	Date	Description	Section/Page
1	-	2016/02/02	1 st Edition	



Precautions

Important Safety Warnings




[Power]

 Caution	Operate unit only at the specified supply voltage.
 Caution	Disconnect the power cord via the power plug only. Do not pull on the cable portion.
 Stop	Do not place or drop heavy or sharp-edged objects on the power cord. A damaged cord can cause fire or electrical shock hazards. Regularly check the power cord for excessive wear or damage to avoid possible fire / electrical hazards.
 Caution	Ensure the power cord is firmly plugged into the AC outlet.


[Grounding]

 Caution	Ensure the unit is properly grounded at all times to prevent electrical shock.
 Hazard	Do not ground the unit to gas lines, units, or fixtures of an explosive or dangerous nature.




[Operation]

 Hazard	Do not operate the unit under hazardous or potentially explosive atmospheric conditions. Doing so could result in fire, explosion, or other hazardous results.
 Hazard	Do not allow liquids, metal pieces, or other foreign materials to enter the unit. Doing so could result in fire, other hazards, or a unit malfunction.
 Caution	If a foreign material does enter the unit, turn the power off and immediately disconnect the power cord. Remove the material and contact an authorized service representative if damage has occurred.


[Transportation]

 Caution	Handle with care to avoid impact shock during transit, which may cause malfunction. When you need to transport the unit, use the original or suitable alternative packing material.
--	--


[Circuitry Access]

	<p>Do not remove covers, panels, casing, or access the circuitry with power applied to the unit. Turn the power off and disconnect the power cord prior to removal. Internal servicing / adjustment of unit should only be performed by qualified personnel.</p>
 Stop	<p>Do not touch any parts / circuitry with a high heat factor. Capacitors can retain enough electric charge to cause mild to serious shock, even after the power has been disconnected. Capacitors associated with the power supply are especially hazardous.</p>
 Hazard	<p>Unit should not be operated or stored with cover, panels, and / or casing removed. Operating the unit with circuitry exposed could result in electric shock / fire hazards or a unit malfunction.</p>


[Potential Hazards]

 Caution	<p>If abnormal odors or noises are noticed coming from the unit, immediately turn the power off and disconnect the power cord to avoid potentially hazardous conditions. If problems similar to the above occur, contact an authorized service representative before attempting to operate the unit again.</p>
--	---

[Rack Mount Brackets, Ground Terminal, and Rubber Feet]

 Caution	<p>To rack-mount or ground the unit, or to install rubber feet, do not use screws or materials other than those supplied. Doing so may cause damage to the internal circuits or components of the unit. If you remove the rubber feet that are attached to the unit, do not reinsert the screws that secure the rubber feet.</p>
---	--

[Consumables]

 Caution	<p>Consumable items that are used in the unit must be periodically replaced. For further details on which parts are consumables and when they should be replaced, refer to the specifications at the end of the Operation Manual. Since the service life of the consumables varies greatly depending on the environment in which they are used, such items should be replaced at an early date. For details on replacing consumable items, contact your dealer.</p>
--	---

Upon Receipt

VDA-106B units and their accessories are fully inspected and adjusted prior to shipment. Check your received items against the packing lists below. Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

◆ **VDA-106B**

ITEM	QTY	REMARKS
VDA-106B	1	
AC Cord	1	
Rubber foot	1 set	
Operation Manual	1	(This manual)

Option

ITEM	QTY	REMARKS
Rack mount bracket set	1 set	For mounting single or two units.
Rack mount bracket set (Type 2)	1 set	For mounting two units to a 1RU rack space.

Rack Mounting

This product is EIA compliant so dedicated rack mount brackets for a single unit or two units connection are supplied as optional. Install the VDA-106B into a rack using dedicated mount brackets.

Table of Contents

1. Overview and Features	7
1-1. Overview	7
1-2. Features	7
1-3. About This Manual	7
2. Panel Descriptions	8
2-1. Front Panel.....	8
2-2. Rear Panel	8
3. Internal Settings	9
4. Connection	10
4-1. 6-Distribution from 1-Input.....	10
4-2. 3-Distribution from 2-Channels	11
5. Installation of the rubber foot pads.....	11
6. Specifications and Dimensions	12
6-1. Unit Specifications.....	12
6-2. External Dimensions	13
6-2-1. One-unit Rack (Optional)	13
6-2-2. Two-unit Rack (Optional)	13

1. Overview and Features

1-1. Overview

The VDA0-106B video distribution amplifier is capable of producing up to 6 video outputs from one input. Three video outputs (two-channel) from one input can also be output by a simple setting change.

1-2. Features

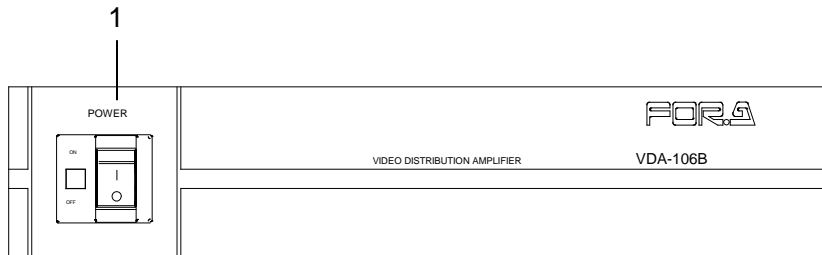
- Small and lightweight product that is capable of being installed in any location.
- 2 units can be mounted side by side into a 19 inches wide rack.
(Optional mounting rack for 2 units is required.)

1-3. About This Manual

This manual is intended to help the user easily operate this product and make full use of its functions during operation. Before connecting or operating your unit, read this operation manual thoroughly to ensure you understand the product. Afterwards, store this manual in a safe place for future reference.

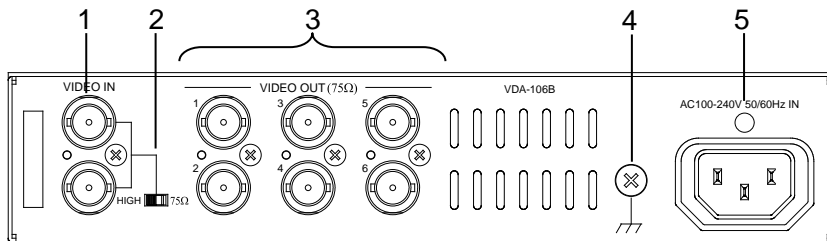
2. Panel Descriptions

2-1. Front Panel



No.	Name	Description
1	POWER	Switch used to turn unit power ON/OFF. Power indicator is lit green when power is applied to unit.

2-2. Rear Panel

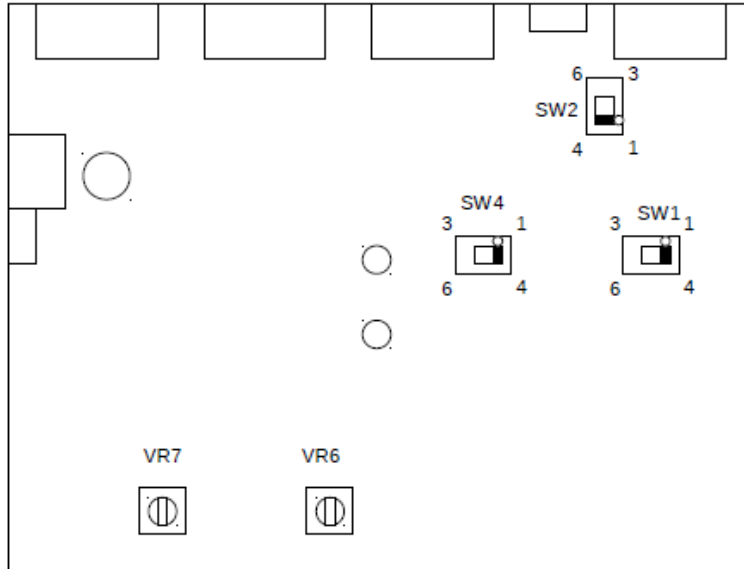


No.	Name	Description
1	VIDEO IN	Used to input video signal. Connect with video camera output or video output of signal source. Loop-through connection is available with BNC connectors on the top and bottom. When *6 distribution outputs are selected, input signal into only one VIDEO IN connector. * (factory setting)
2	75Ω/ HIGH	Used for switching input impedance. Set to HIGH when setting loop through connection strings. Set to 75Ω when distributing 3 outputs.
3	VIDEO OUT	Used to output video signal input (VIDEO IN) for distribution.
4	Ground Terminal	Used to ground the unit to protect operators against static electricity and / or electrical shock.
5	AC 100-240V 50/60Hz IN	Used to connect to an AC power source via the supplied accessory cord. (AC 100V-240V, 50/60Hz)





3. Internal Settings

1. Turn OFF the unit power of the VDA-106B.
2. Unscrew the 4 screws on the top panel, then lift and remove the top panel.
3. After completing settings, put the top panel back on and fasten the 4 screws.

Rear (Back)



Front

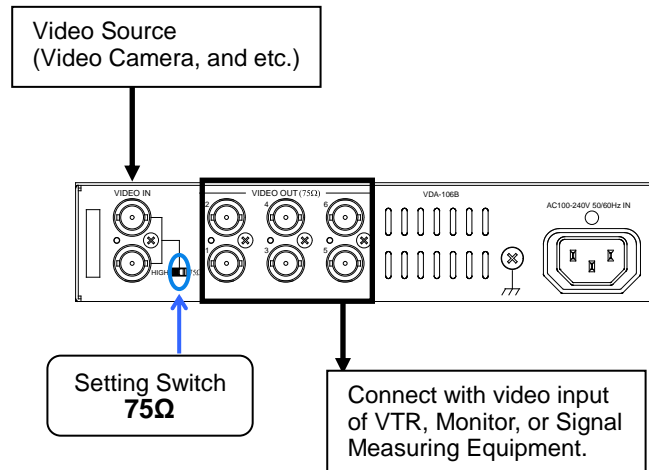
Name	Description	
SW2 (Distribution Setting)	Jumper pins used to switch distribution settings. Factory setting: 6-distribution	
	6-distribution (Factory setting)	Set SW2 to 1-4 side. 
	3-distribution (2-channel)	Set SW2 to 3-6 side. 
VR6, VR7(GAIN)	Video output level adjustment knobs. Gain adjustable at a range ± 3 dB.	
	GAIN settings	VR6: Adjusts VIDEO OUT terminals 1, 2, 3. VR7: Adjusts VIDEO OUT terminals 4, 5, 6. (Turn clockwise to increase video output level.)
SW1, SW4 (Clamp Function ON/OFF setting)	Pedestal clamp function ON/ OFF switch. SW1: Switch for VIDEO OUT connectors 1, 2, and 3. SW4: Switch for VIDEO OUT connectors 4, 5, and 6.	
	OFF(Factory Setting)	Set SW1 to 1-4 side. Set SW4 to 1-4 side. 
	ON	Set SW1 to 3-6 side. Set SW4 to 3-6 side. 

4. Connection

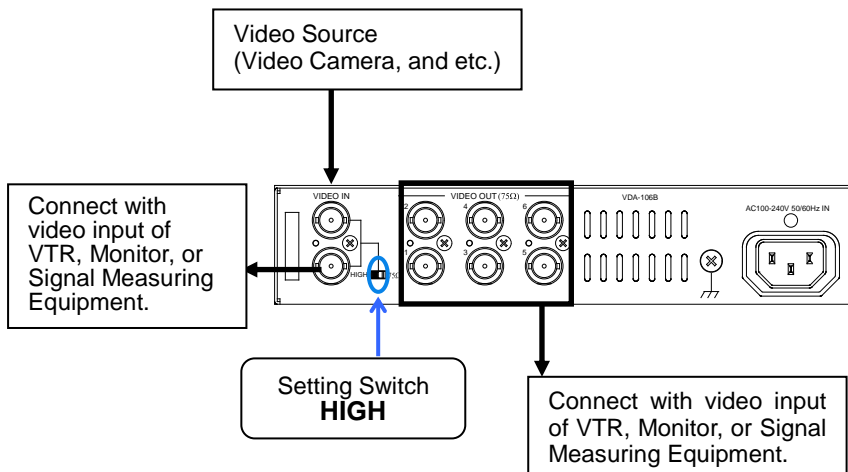
4-1. 6-Distribution from 1-Input

Connect multiple VDA-106Bs via a loop-through connection to increase distribution.

When a loop through connection is not applied, switch the input impedance setting to 75Ω.

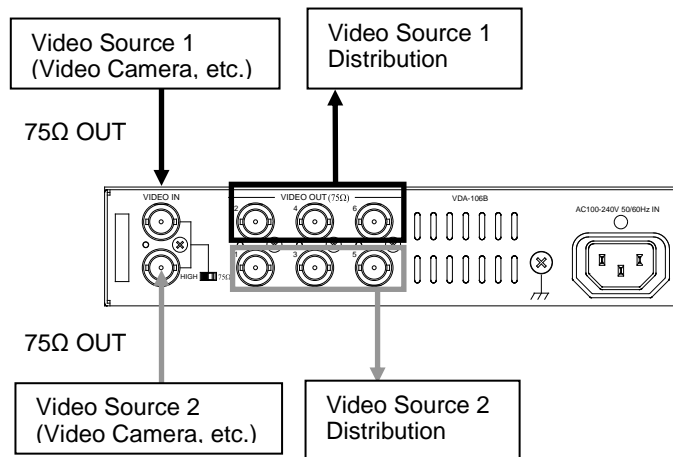


When a loop through connection is applied, switch the impedance setting to HIGH.



4-2. 3-Distribution from 2-Channels

When using 3 distributions settings, switch the input impedance setting to 75Ω.



3-channel Distribution

5. Installation of the rubber foot pads

The supplied rubber foot pads (4 pcs.) are adhesive. Stick the 4 foot pads on the four corners of the bottom plate when needed.

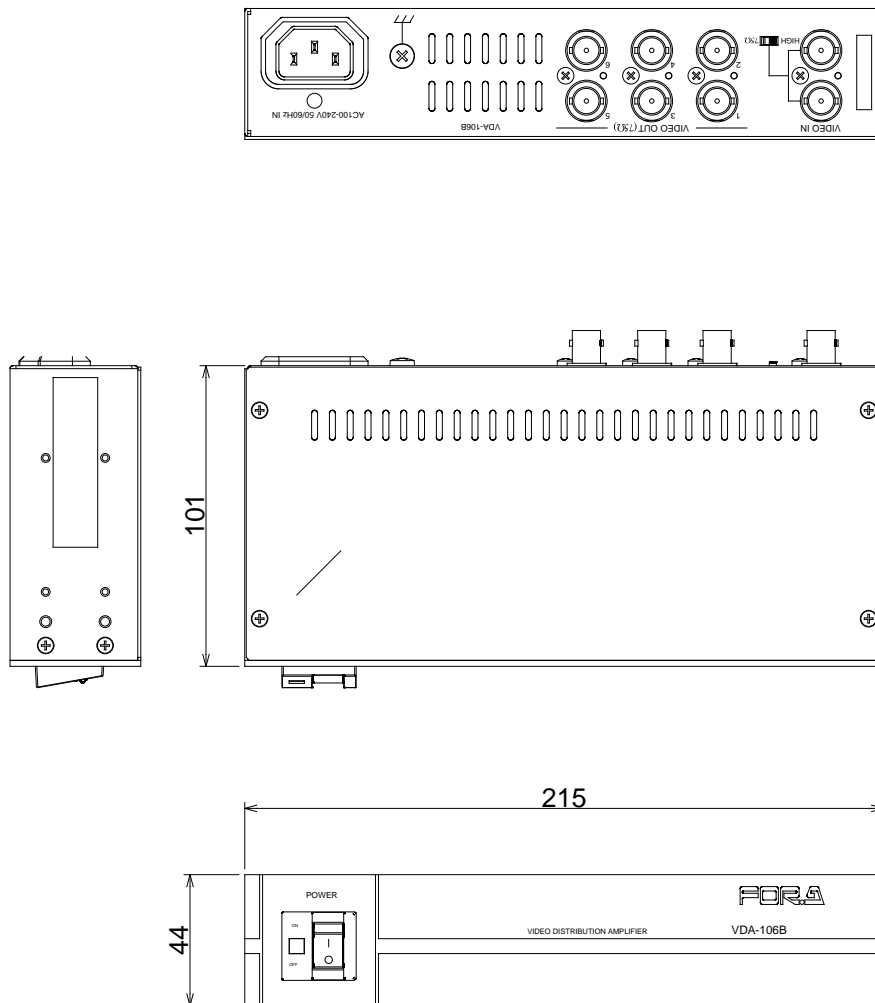
6. Specifications and Dimensions

6-1. Unit Specifications

Video input	Analog composite: 1.0Vp-p 75Ω or loop through BNC x 1
Video output	Analog composite: 1.0Vp-p 75Ω BNC x 6
Frequency characteristics	60Hz to 10MHz: ±0.5dB Less than 60Hz and over 12MHz: Dropping characteristics
Overshoot	16kHz, 250kHz, less than 1%
DG/DP	0.3% / 0.3° (APL 10% -90%)
Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	AC 100V to 240V ±10%, 50/60Hz
Power Consumption	AC100V to 120V: 7 VA(3W) AC220V to 240V: 9VA(3W)
Dimensions	215 (W) x 44 (H) x 101 (D) mm
Weight	0.9 kg

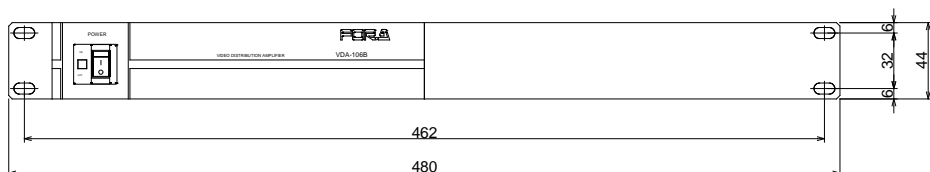
6-2. External Dimensions

(All dimensions in mm.)

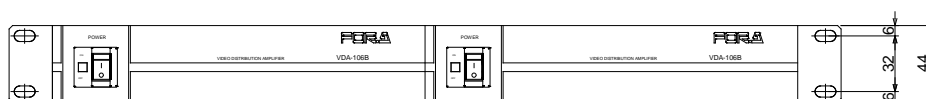


6-2-1. One-unit Rack (Optional)

OPTIONAL ACCESSORIES



6-2-2. Two-unit Rack (Optional)



Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.



FOR-A COMPANY LIMITED

Head Office 3-8-1 Ebisu, Shibuya-ku, Tokyo 150-0013, Japan
Overseas Division Tel: +81(0)3 3446 3936 Fax: +81(0)3 3446 1470
Japan Branch Offices Osaka/Okinawa/Fukuoka/Hiroshima/Nagoya/Sendai/Sapporo
R&D/Production Sakura Center/Sapporo Center

FOR-A Corporation of America

11155 Knott Ave., Suite G&H, Cypress, CA 90630, USA.
Tel: +1 714 894 3311 Fax: +1 714 894 5399

FOR-A Corporation of America East Coast Office

2 Executive Drive, Suite 670, Fort Lee Executive Park, Fort Lee, NJ 07024, USA
Tel: +1 201 944 1120 Fax: +1 201 944 1132

FOR-A Corporation of America Distribution & Service Center

2400 N.E. Waldo Road, Gainesville, FL 32609, USA
Tel: +1 352 371 1505 Fax: +1 352 378 5320

FOR-A Corporation of America Miami Office

5200 Blue Lagoon Drive, Suite 760, Miami, FL 33126, USA
Tel: +1 305 931 1700 Fax: +1 305 264 7890

FOR-A Corporation of Canada

1131A, Leslie Street Suite 209, Toronto, Ontario M3C 2J6, Canada
Tel: +1 416 977 0343 Fax: +1 416 977 0657

FOR-A Europe S.r.l.

Via Volturmo 37, 20861 Brugherio MB, Italy
Tel: +39 039 91 64 811 Fax: +39 039 878 140

FOR A UK Limited

Trident Court, 1 Oakcroft Road, Chessington, KT9 1BD, UK
Tel: +44 (0)20 3044 2935 Fax: +44(0)20 3044 2936

FOR-A Italia S.r.l.

Via Volturmo 37, 20861 Brugherio MB, Italy
Tel: +39 039 881 086/103 Fax: +39 039 878 140

FOR-A Corporation of Korea

1007, 57-5, Yangsan-ro, Yeongdeungpo-gu, Seoul 150-103, Korea
Tel: +82 (0)2 2637 0761 Fax: +82 (0)2 2637 0760

FOR-A China Limited

708B Huateng Building, No. 302, 3 District, Jinsong, Chaoyang, Beijing 100021, China
Tel: +86 (0)10 8721 6023 Fax: +86 (0)10 8721 6033

FOR-A Middle East-Africa Office

Dubai Media City, Aurora Tower, Office 1407, P.O. Box 502688, Dubai, UAE
Tel: +971 (0)4 551 5830 Fax: +971 (0)4 551 5832

Agiv (India) Private Limited (FOR-A India)

2nd Floor, Valecha Chambers, Link Road, Andheri(W), Mumbai 400053
Tel: +91-22-26733623 Fax: +91-22-26393415