

OPERATION MANUAL

CC-106B
Cable Compensator

1st Edition - Rev. 1





Edition Revision History

Edit.	Rev.	Date	Description	Section/Page
1	-	2015/12/04	1 st Edition	
1	1	2017/06/23	Added detailed dimensions of the sides	P 13



Precautions

Important Safety Warnings




[Power]

 Caution	Operate unit only at the specified supply voltage.
 Stop	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.
 Stop	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

Unpacking

CC-106B units and their accessories are fully inspected and adjusted prior to shipment. Operation can be performed immediately upon completing all required connections and operational settings.

Check your received items against the packing list below. Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

ITEM	QTY	REMARKS
CC-106B	1	
AC Cord	1 set	(Including an AC cord retaining clip)
Operation Manual	1	
Rubber Foot	4	

Option

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

Table of Contents

- 1. Prior to Starting.....7
 - 1-1. Welcome7
 - 1-2. Features7
 - 1-3. About This Manual7

- 2. Panel Descriptions8
 - 2-1. Front Panel.....8
 - 2-2. Rear Panel8

- 3. Internal Settings.....9

- 4. Connection10
 - 4-1. When Used as a Cable Compensator10
 - 4-2. When Used as a Distributor10

- 5. Fitting of the Rubber Foot.....11

- 6. Specifications and Dimensions11
 - 6-1. Unit Specifications.....11
 - 6-2. External Dimensions12
 - 6-2-1. Dimensions with Optional Rack Mount Bracket.....13

1. Prior to Starting

1-1. Welcome

Congratulations! By purchasing a CC106B Cable Compensator you have entered the world of FOR-A and its many innovative products. Thank you for your patronage and we hope you will turn to FOR-A products again and again to satisfy your video and audio needs.

FOR-A provides a wide range of products, from basic support units to complex system controllers, which have been increasingly joined by products for computer video-based systems. Whatever your needs, talk to your FOR-A representative. We will do our best to be of continuing service to you.

1-2. Features

This product is manufactured to the highest technical standards to bring you clear color video signals that do not suffer from frequency response loss when transmitted over long distances.

The CC-106B Cable Compensator is a dual function unit. Its primary function is to compensate for frequency response and color video signal losses, when transmitted over long distances.

The CC-106B Cable Compensator can compensate for these losses up to an adjustable distance of 300m for type 5C-2V and 200m for type 3C-2V coaxial cables.

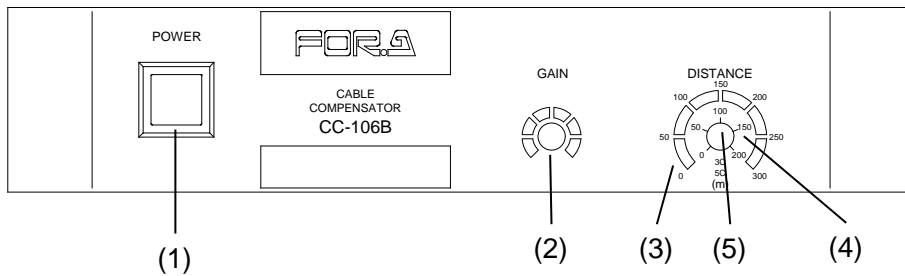
As a secondary function the CC-106B Cable Compensator can also be used as a 1 input x 6 output, adjustable gain Distribution Amplifier.

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, it is important to keep this manual in a safe place and available for reference.

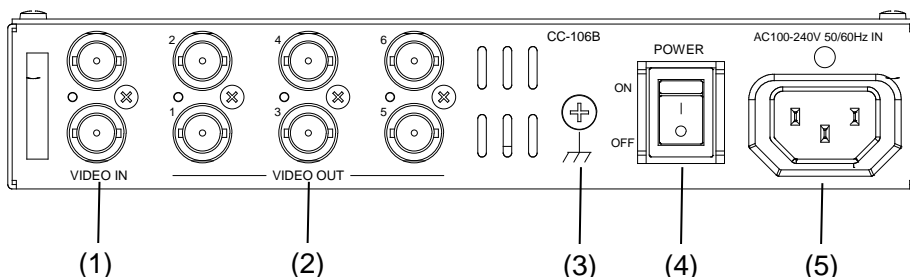
2. Panel Descriptions

2-1. Front Panel



No.	Name	Description
1	POWER	Power indication is lit when power is applied to unit.
2	GAIN	Gain adjustment volume for Video output (Adjustment Range: -0.3dB to +3.0dB)
3	DISTANCE	Distance Indicator for 5C-2V coaxial cable (0 to 300m)
4		Distance Indicator for 3C-2V coaxial cable (0 to 200m)
5		Cable Compensation Adjuster Volume Set scale (3) or (4) according to the applying cable type for setting of compensating distance.

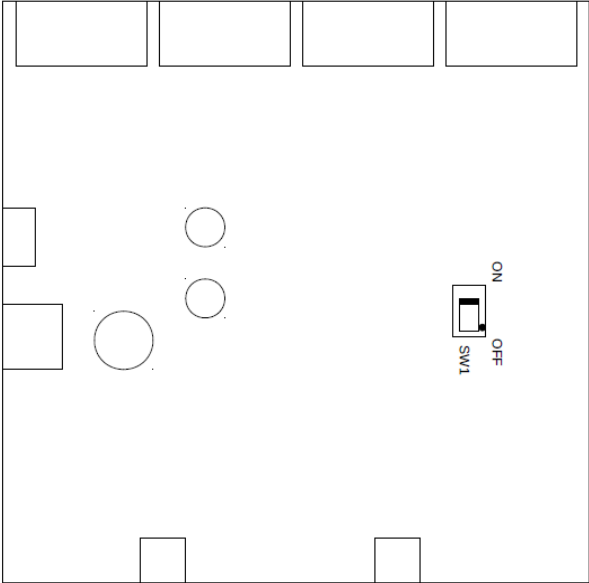
2-2. Rear Panel



No.	Name	Description
1	VIDEO IN	Loop through connector. When loop through connection is not used, terminate the unused connector with 75Ω terminate plug.
2	VIDEO OUT 1-6	6 x Video Output of the compensated video signal.
3	GROUND TERMINAL	Used to ground the unit to protect operators against static electricity and / or electrical shock
4	POWER	Switch used to turn unit power ON / OFF.
5	AC 100-240V 50/60Hz IN	Connect to AC power source with the supplied accessory cord. (100V-240V AC 50/60Hz)

3. Internal Settings

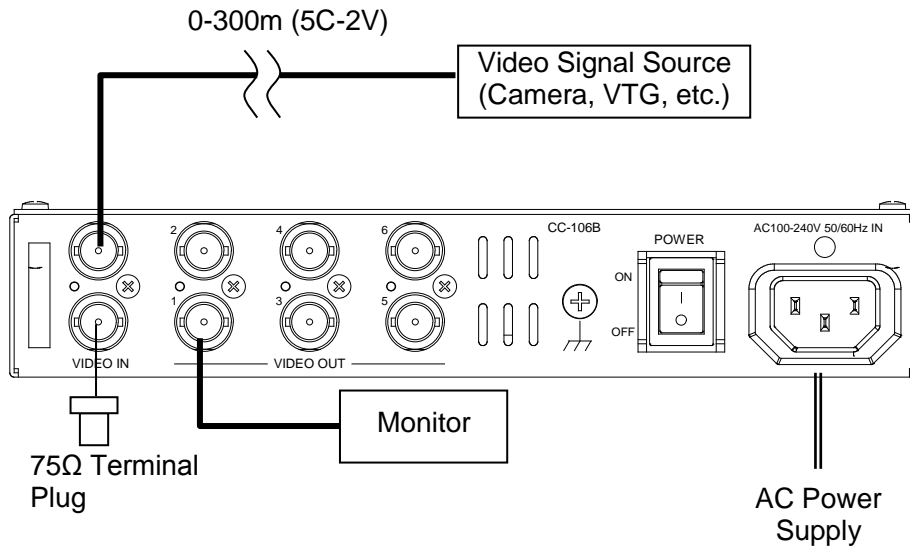
Open the top panel and set the switch inside of CC-106B.



Switch	Setting
SW1	An ON/OFF switch for pedestal clamp function. (Factory setting: OFF)

4. Connection

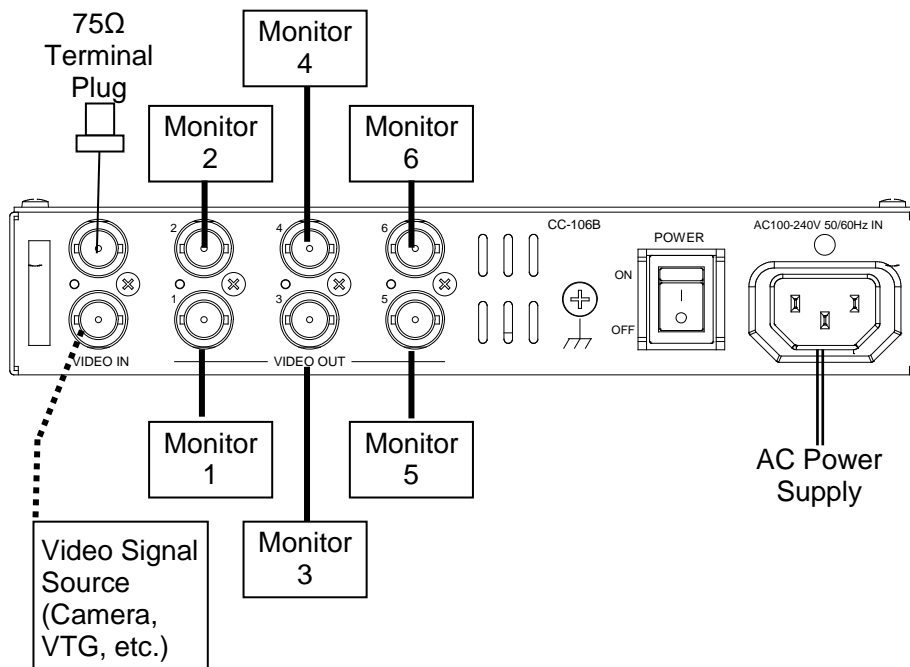
4-1. When Used as a Cable Compensator



IMPORTANT

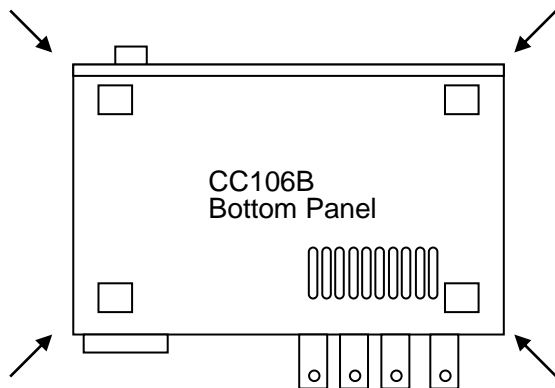
CC-106B compensates input cable length.
Output cable length is not compensated by CC-106B.

4-2. When Used as a Distributor



5. Fitting of the Rubber Foot

Stickers are applied on the provided rubber feet (4 pcs.) so stick on the rubber feet as per drawing below if necessary.



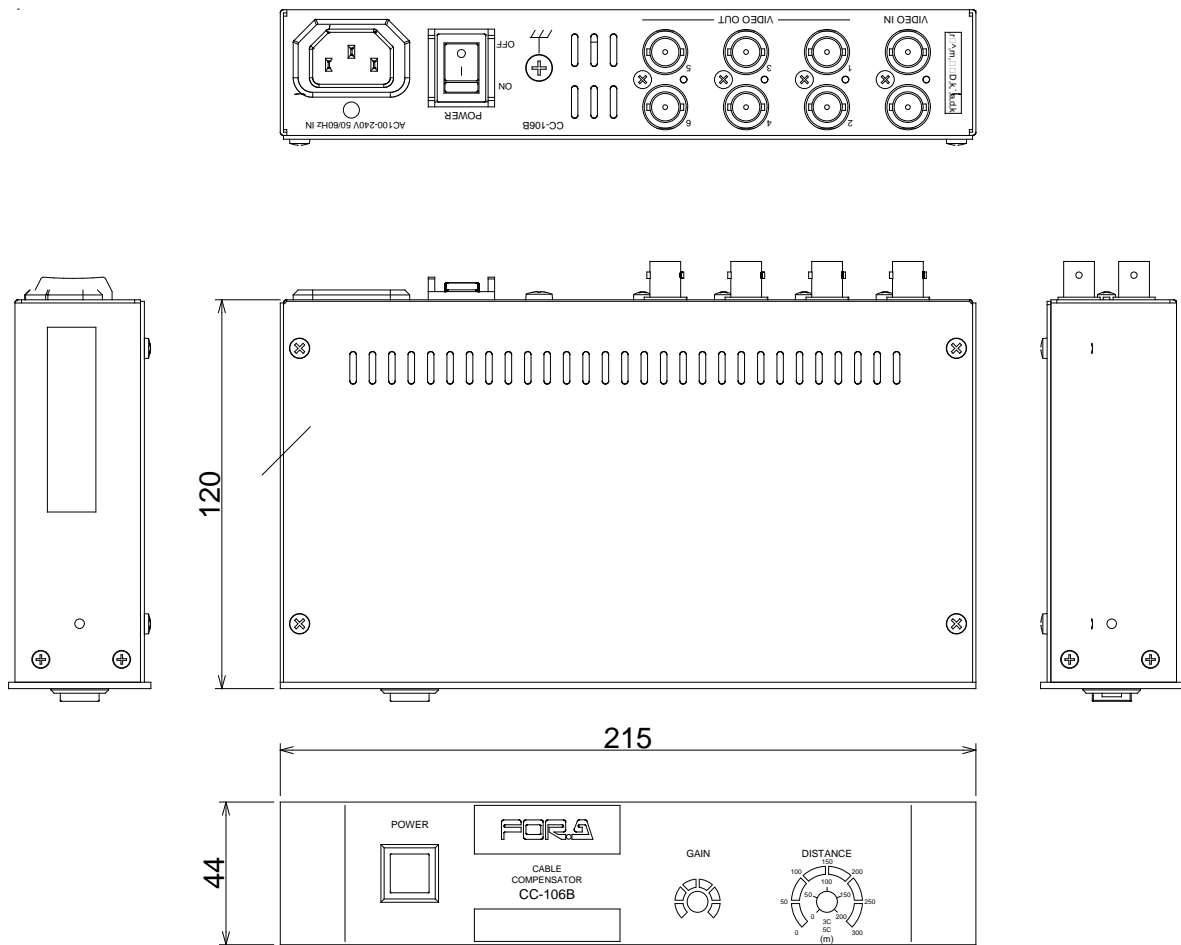
6. Specifications and Dimensions

6-1. Unit Specifications

Video Input	Analog composite: 1.0Vp-p Loop through BNC x 1
Video Output	Analog composite: 1.0Vp-p 75Ω BNC x 1
Frequency Characteristic	60 Hz – 12 MHz: ±0.5dB (when 0m is compensated) Higher than 12 MHz:
Tilt	60 Hz 1% or below (when 0m is compensated)
Overshoot	15 kHz 1% or below (when 0m is compensated)
DG / DP	0.3% / 0.3° (when 0m is compensated)
Gain	-0.3DB - +0.3dB
Cable Compensating Range	Max. 300m (When using 5C-2V) Max. 200m (When using 3C-2V)
Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	100V to 117V AC or 220V to 240V AC ±10% 50 / 60 Hz
Power Consumption	5VA at 100V to 117V AC 7VA at 220V to 240V AC
Dimensions	215 (W) x 44 (H) x 120 (D) mm
Weight	1.2 kg

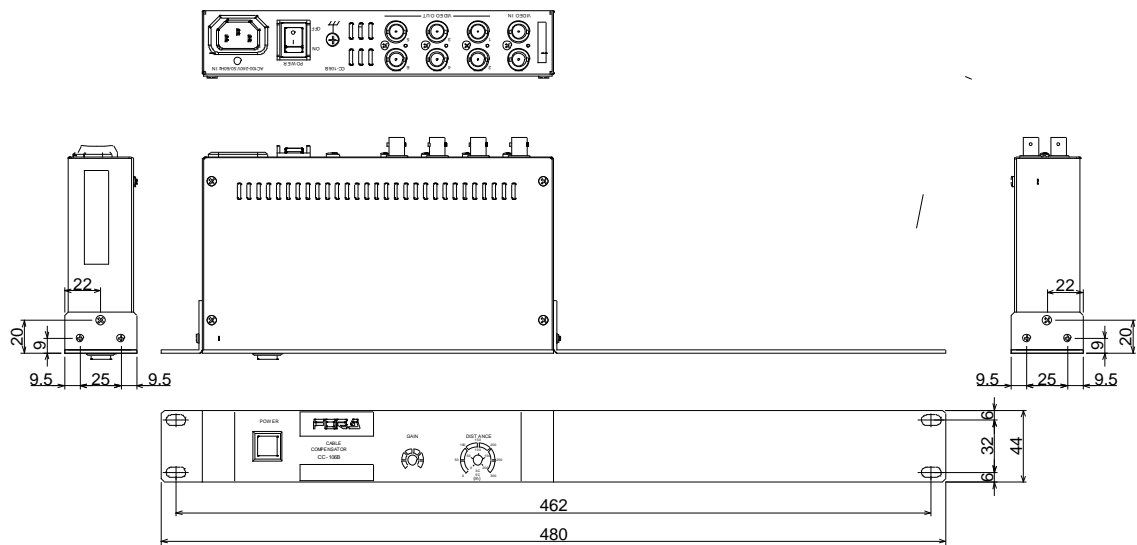
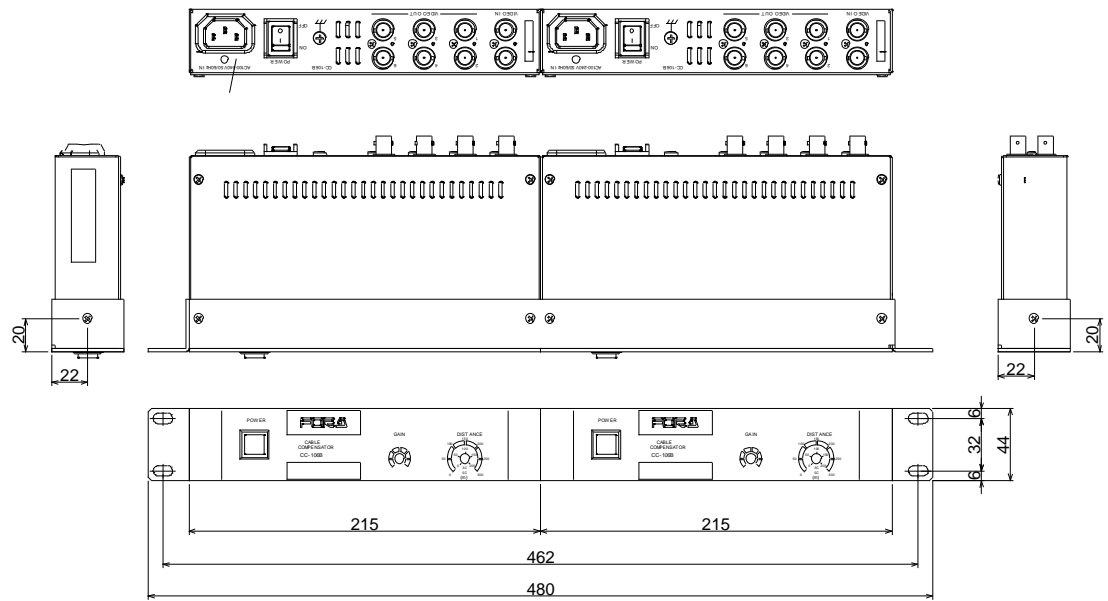
6-2. External Dimensions

(All dimensions in mm.)



6-2-1. Dimensions with Optional Rack Mount Bracket

(All dimensions in mm.)



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

8333 North West 53rd Street Suite 427 Doral, FL 33166, USA
Tel: +1 305 931 1700 Fax: +1 714 894 5399

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