

ACR GEAR

2 port / 4 port USB KVM switch
DVI-Interface

DAG-12
DAG-14
DAAG-14
DAKG-14



USER'S

Manual

Rextron

Package Contents

DVI Dual Link Model

DAKG-14 (w/ Audio)

4-Port AcroGear (DAKG-14)	x 1
User's manual	x 1
Rubber foot pad	x 1 set

DVI Single Link Model

DAG-12

2-Port AcroGear (DAG-12)	x 1
User's manual	x 1
Rubber foot pad	x 1 set

DAG-14

4-Port AcroGear (DAG-14)	x 1
User's manual	x 1
Rubber foot pad	x 1 set

DAAG-14 (w/ Audio)

4-Port AcroGear (DAAG-14)	x 1
User's manual	x 1
Rubber foot pad	x 1 set

Rextron Technology, Inc.

PP5-T7300-300-ID

Printed in Taiwan

Table of Content

Introduction of DVI Dual Link Model

Overview.....	1
Features	3

Introduction of DVI Single Link Model

Overview.....	4
Features	5

System Requirements

Console side.....	6
Computer side	6

Installations

PC BIOS Notice.....	7
Console Connection	9
Computers Connection.....	10

Operations

Front Panel operation.....	12
Rack Mount Kit	17

Appendices

Specifications.....	18
---------------------	----

Troubleshooting	20
------------------------------	----



Please read this manual thoroughly and follow the **Installation** procedures to prevent any damage to the AcroGear or any connecting device.

-- Introduction of DVI Dual Link Model

Overview of DVI Dual Link Model

The DVI DL (Dual Link) interface contains additional pins to send a second signal along the cable to produce the higher resolution as well as improves the video response time because it uses two channels as opposed to the single link that uses one. The DAKG-14 is the one supports the DVI DL with the resolution up to 2560 x 1600 @ 60 Hz. Along with the DUAL Link, it also supports the audio function (Speaker + MIC). The DAKG-14, fully compatible with USB specification, is the combination of USB KVM (keyboard/Video/mouse) switch and USB peripherals sharing device. With the DAKG-14, you can easily operate up to 4 computers or servers from 1 USB keyboard, 1 USB mouse, and 1 DVI monitor saving you space, time, equipment and money. Its peripheral sharing function enables you to share more USB peripherals among all computers. The DAKG-14 has the "FUNC" button for selecting the audio and adjusting the video signal strength. Yet, Installation is as easy as connecting USB A-B cables to computers and to the DAKG-14. Computer selecting is as easy as front panel button pressing. The built-in USB hub ensures smooth switching from one computer to the other. The DAKG-14 provides the easiest way to manage multiple computers with USB interface and

share USB peripherals among computers. No more tangled cables and messy working environment; let the DAKG-14 does the computer switching for you.

Features of DVI Dual Link Model

- Support DVI Dual Link with the resolution up to 2560 x 1600 @ 60Hz.
- 4 computers share up to 4 different USB peripherals.
- Front panel push buttons for easy computer selection.
- Front panel “FUNC” button for easily adjusting the video signal strength.
- Front panel “FUNC” button for easily selecting the audio.
- No drivers needed for keyboard and mouse operation.
- Support keyboard and mouse plug-n-play.
- Buzzer sound for computer switching confirmation.
- Activate Auto Scan by front buttons pressing.
- Selectable Scan Time interval.
- Support the DVI monitor.
- Saves time, space, equipment and power.
- USB self-power operation.
- No software required.

-- Introduction of DVI Single Link Model

Overview of DVI Single Link Model

The DAG-12 / DAG-14 / DAAG-14, fully compatible with USB specification, are the combination of USB KVM (keyboard/Video/mouse) switch and USB peripherals sharing device. With the DAG-12 / DAG-14 / DAAG-14, you can easily operate up to 2 or 4 PCs, G3/G4 Macs, or iMacs respectively from 1 USB keyboard, 1 USB mouse, and 1 DVI monitor saving you space, time, equipment and money. Its peripheral sharing function enables you to share more USB peripherals among all computers. The DAG-12 / DAG-14 / DAAG-14 have the "FUNC" button for selecting the audio and adjusting the video signal strength. Yet, the DAAG-14 supports the audio function (Speaker + MIC) as well.

Installation is as easy as connecting USB A-B cables to computers and to the DAG-12 / DAG-14 / DAAG-14. Computer selecting is as easy as front panel button pressing. The built-in USB hub ensures smooth switching from one computer to the other. The DAG-12 / DAG-14 / DAAG-14 provide the easiest way to manage multiple computers with USB interface and share USB peripherals among computers. No more tangled cables and messy working environment; let the DAG-12 / DAG-14 / DAAG-14 do the computer switching for you.

Features of DVI Single Link Model

- Support DVI Single Link with the resolution of 1600 x 1200 @ 60Hz or 1920 x 1200 @ 60Hz respectively for DAG-12 or DAG-14 / DAAG-14..
- 2 or 4 computers share up to 3 or 4 different USB peripherals with DAG-12, DAG-14, and DAAG-14 respectively.
- Front panel push buttons for easy computer selection.
- Front panel “FUNC” button for easily adjusting the video signal strength. (for DAAG-14 only)
- Front panel “FUNC” button for easily selecting the audio. (for DAAG-14 only)
- No drivers needed for keyboard and mouse operation.
- Support keyboard and mouse plug-n-play.
- Buzzer sound for computer switching confirmation.
- Activate Auto Scan by front buttons pressing.
- Selectable Scan Time interval.
- Support the DVI monitor.
- Saves time, space, equipment and power.
- USB self-power operation.
- No software required.

System Requirements

Console side

- One DVI monitor
- One USB keyboard
- One USB mouse

Computer side

Each USB-enabled computer must be connected to the DAG-12 / DAG-14 / DAAG-14 / DAKG-14 by

- One DVI cable for monitor, as shown in Figure 1.

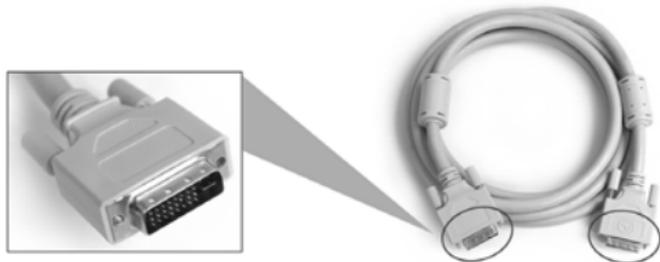


Figure 1. DVI cable

- One USB A-B cable with Type-A and Type-B plug for USB devices, as shown in Figure 2.

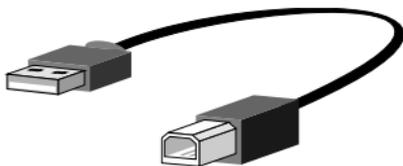


Figure 2. USB A-B cable

Installation

PC BIOS Notice

*The following BIOS setup changes are necessary for PC users and **not** necessary for Mac users:*

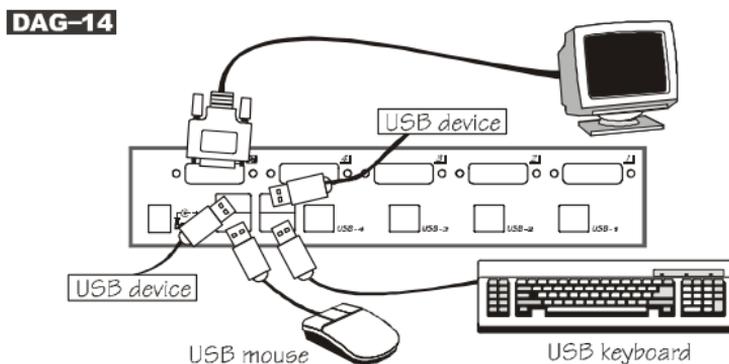
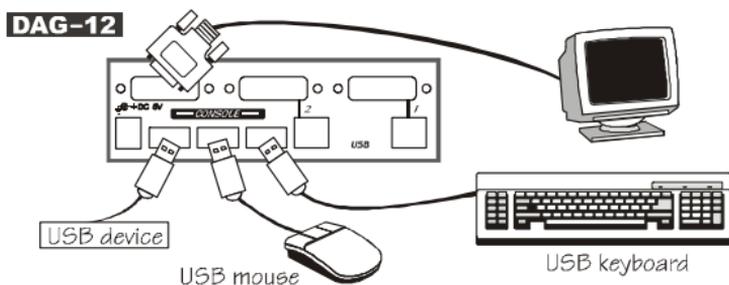
1. In STANDARD CMOS, set HALT ON ERROR to ALL BUT KEYBOARD.
2. In PNP AND PCI SETUP, set PNP OS INSTALLED to YES and set USB IRQ to ENABLED.

Note: The DAG-12 / DAG-14 / DAAG-14 / DAKG-14 are applicable for USB keyboard and mouse switching from one computer to the other. If you plan to share other peripherals such as a CCD camera, printer or scanner, it is required to shut down the driver of the computer before switching to another computer. Because port switching is equivalent to unplugging the USB cable from one computer and plugging it to another one, some USB drivers check attached USB peripherals all the time and do not accept plug-n-play function.

Console Connection

Before installation, make sure all devices and computers to be connected to the DAG-12 / DAG-14 / DAAG-14 / DAKG-14 have been turned off.

Plug a monitor to the Console's DVI port; plug a USB keyboard and a USB mouse to any two of the Console's USB ports as shown in Figure 3.



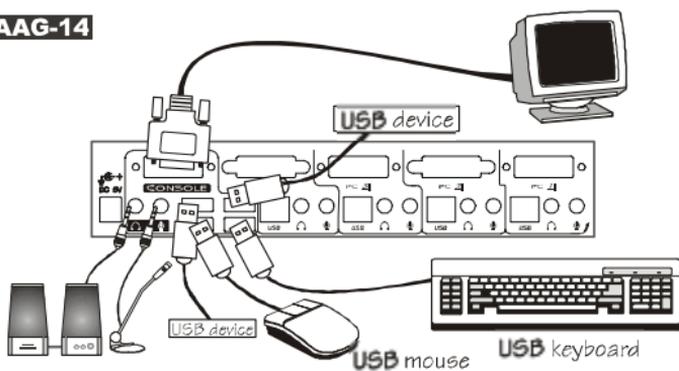
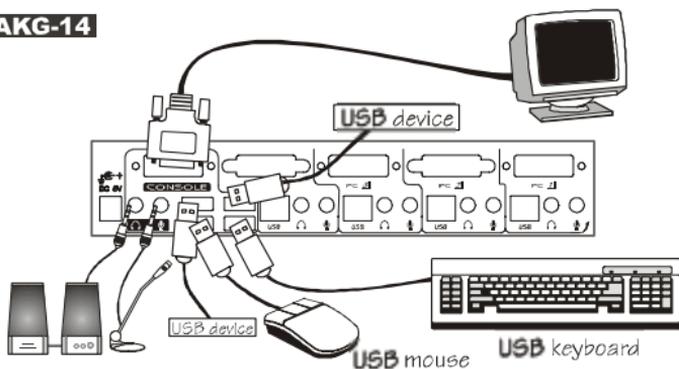
DAAG-14**DAKG-14**

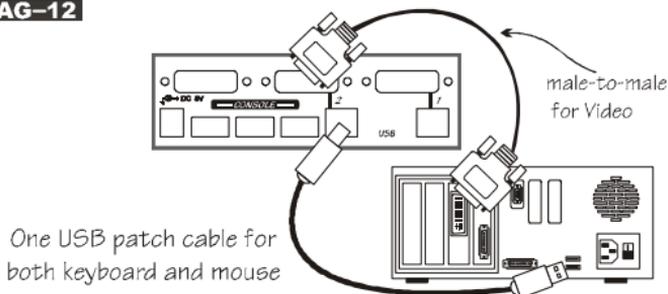
Figure 3. Console Connection

Computers Connection

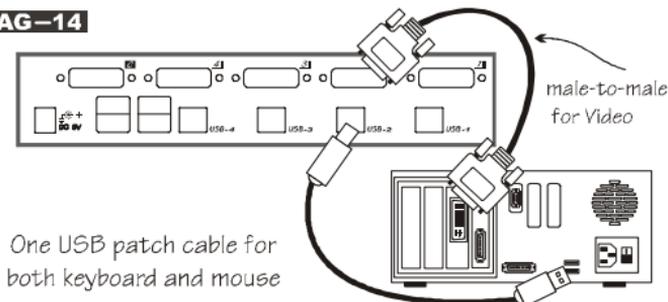
Use a male-to-male cable to connect from a computer's DVI port to DAG's DVI port of **PC** side, as shown in Figure 4.

Use a USB A-B Cable to connect from the DAG's **USB** port (B connector, square connector) to the USB port on the corresponding computer (A connector, flat connector), as shown in Figure 4.

DAG-12



DAG-14



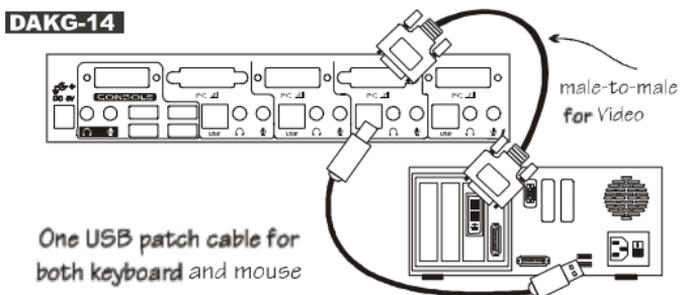
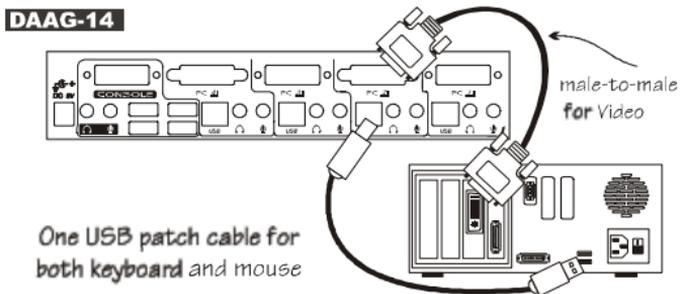


Figure. 4 Computer Connection

Now, you can turn on all devices and computers.

Operations

Front Panel

1. On-line LED & Selected LED

When the LED turns green, the connected computer is powered-on. When a computer is selected, its corresponding red LED illuminates.

2. Pushbuttons

Each computer has a button associated with it on the front panel for selection.

Auto Scan

Auto Scan automatically scan through computers one by one in a fixed interval (see *Scan Time* below).

Note: keyboard and mouse are not operable during Auto Scan.

Scan Time

It sets the scan interval for *Auto Scan*. The Scan Time options are 3, 8, 15 and 30 seconds.

Note: *Scan Time is automatically set to the default of 3 seconds when the DAG-12 / DAG-14 / DAAG-14 / DAKG-14 loses power.*

For DAG-12

To activate the *Auto Scan*, press and hold the pushbutton down for 2 seconds till you hear a long beep followed by a short beep. To exit from it tap the pushbutton again.

To change the *Scan Time* interval, press and hold the pushbutton for 4 seconds till you hear two long beeps. Then by tapping the pushbutton each time, the DAG-12 responds with 1, 2, 3 or 4 beeps corresponding to 3, 8, 15 or 30 seconds respectively. Once set, leave the DAG-12 as it is and it will automatically return for normal operation.

For DAG-14 / DAAG-14 / DAKG-14

To activate *Auto Scan*, press down front panel push buttons "3" and "4" simultaneously. The port LED flashes during *Auto Scan*. *Auto Scan* is effective for powered-on computers only. To exit the *Auto Scan* mode, just tap any one of the pushbuttons.

To change the *Scan Time* interval, press both front panel buttons "1" and "2" simultaneously. The DAG-14 / DAAG-14 / DAKG-14 beep 1, 2, 3 or 4 times for *Scan Time* of 3, 8, 15 or 30 seconds respectively.

"FUNC" Button

For DAAG-14 / DAKG-14

To adjust the optimal video signal strength corresponding to the length or quality of DVI cable, the user can press “FUNC” button combining with the other pushbuttons.

Step 1. Press “FUNC” button three times, the LED of “FUNC” will flash one time per second.

Step 2.

- Press pushbutton “1” one or two times for adjusting the equalization of selected port input video strength with one beep (normal) or two beeps (enhance) respectively.

or

- Press pushbutton “3” one or two times for adjusting the output current of selected port with one beep (normal) or two beeps (enhance) respectively.

or

- Press pushbutton “4” one, two, three, or four times for adjusting the output emphasis of selected port with one beep (no pre-emphasis), two beeps (low pre-emphasis), three beeps (medium pre-emphasis), or four beeps (high pre-emphasis).

Step 3. Once the setting is finished, press “FUNC”

button one time to exit the setting.

For DAAG-14 / DAKG-14

To select the audio signal from any port of 4 connected computers, the user can press “FUNC” button combining with the other pushbuttons.

Step 1. Press and hold “FUNC” button. Either all of 4 green LEDs light up or just one green LED lights up. All of 4 green LEDs light up means the audio port and the selected computer port are the same; we call it as “tracking mode”. On the other hand, just one green LED lights up (the selected audio port) means the audio port is different from the selected computer port; we call it as “non-tracking mode”.

Step 2.

- While the “FUNC” button is holding, press pushbutton “1” for selecting audio port 1.
or
- While the “FUNC” button is holding, press pushbutton “2” for selecting audio port 2.
or
- While the “FUNC” button is holding, press pushbutton “3” for selecting audio port 3.
or
- While the “FUNC” button is holding, press pushbutton “4” for selecting audio port 4.

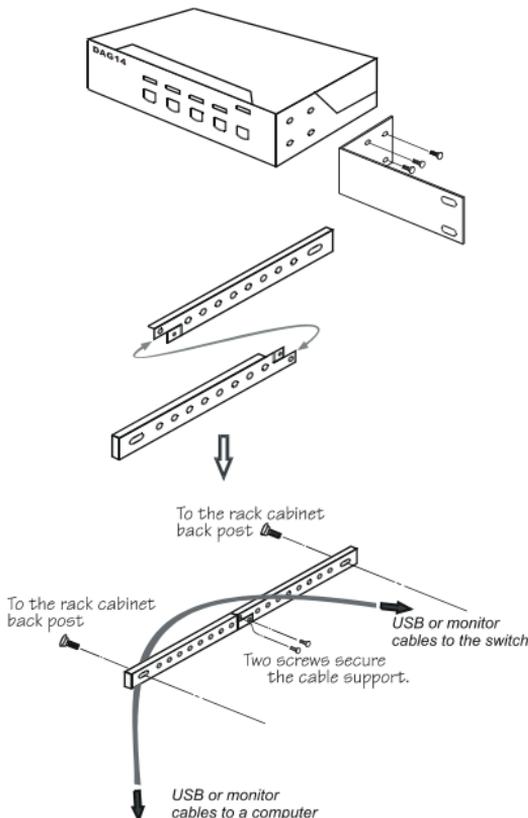
or

- While the “FUNC” button is holding, press pushbutton “1” AND “2” for entering the tracking mode.

Step 3. Once the setting is finished, release “FUNC” button to exit the setting.

Rack Mount Kit for DAG-14 / DAAG-14 / DAKG-14 (optional)

The figure below shows how to attach optional mounting brackets and cable support (RMK04) to the DAG-14 / DAAG-14 / DAKG-14 for standard 19-inch rack cabinet.



Appendices

Specifications

Specification	DAG-12	DAG-14
No. of computers supported	2	4
Front panel push button	2	4
Front panel FUNC button	1	1
Hot plug-and-play	Yes	
Automatic scan interval	3, 8, 15, 30 seconds	
Cable Length (Max)	3M(10ft) for USB	
Computer ON-LINE LED	2	4
Computer selected LED	2	4
Monitor Type	DVI	
Computer peripheral connector Monitor	USB Type B x 2 DVI female x 2	USB Type B x 4 DVI female x 4
Console peripheral connector Monitor	USB Type A x 3 DVI female x 1	USB Type A x 4 DVI female x 1
Weight (g) (oz.)	420 14.8	900 31.74
H x W x D (mm) (in.) size	40 x 124 x 75 1.6 x 4.9 x 2.9 Micro	44 x 220 x 130 1.7 x 8.7 x 5.1 Compact

Specification	DAAG-14	DAKG-14
No. of computers supported	4	4
Front panel push button	4	4
Front panel FUNC button	1	1
Hot plug-and-play	Yes	
Automatic scan interval	3, 8, 15, 30 seconds	
Cable Length (Max)	3M(10ft) for USB	
Computer ON-LINE LED	4	4
Computer selected LED	4	4
Monitor Type	DVI	
Computer peripheral connector Monitor	USB Type B x 4 DVI female x 4	
Console peripheral connector Monitor	USB Type A x 4 DVI female x 1	
Weight (g)	900	
(oz.)	31.74	
H x W x D (mm)	44 x 220 x 130	
(in.)	1.7 x 8.7 x 5.1	
size	Compact	

———— Troubleshooting

Ensure that all cables are well seated. Label the cable for each computer to avoid confusion when connected to the DAG-12 / DAG-14 / DAAG-14 / DAKG-14.

The DAG-12 / DAG-14 / DAAG-14 / DAKG-14 have built-in power protection that works automatically when needed. When it works, USB communication halts and the only way to restart the DAG-12 / DAG-14 / DAAG-14 / DAKG-14 properly is to remove all power sources (USB patch cables and power adapter), wait a few seconds, apply power sources and start again.

Symptom	Causes	Solutions
Keyboard or mouse does not work	<ul style="list-style-type: none"> ■ In Auto Scan, keyboard and mouse are not operable. ■ Too many keyboards or mouse drivers installed. 	<ul style="list-style-type: none"> ■ Press any front button to select a computer, then use the keyboard and mouse. ■ Remove ALL unnecessary keyboards and mouse drivers.
Newly installed USB device does not work.	<ul style="list-style-type: none"> ■ Improper device driver. ■ Device consumes too much power. 	<ul style="list-style-type: none"> ■ Re-install device driver. ■ The device should be self-powered, add a power adapter to the device.

	<ul style="list-style-type: none"> ■ Device consumes too much power instantaneously. ■ Improper device initialization. ■ When DAG-12 / DAG-14 / DAAG-14 / DAKG-14 work under self-power, i.e., no power supply added, it supports max of 100mA as per USB spec. 	<ul style="list-style-type: none"> ■ If the device does not provide power jack, add a power adapter with DC5V of less than 1A current rating to the DAG-12 / DAG-14 / DAAG-14 / DAKG-14. ■ Be sure the USB cable is well seated to ensure communication. ■ Remove all power sources to the DAG-12 / DAG-14 / DAAG-14 / DAKG-14 by unplugging all USB A-B cables and the power adapter; then start all over again. ■ Select the computer by pushbutton, restart the computer and try again.
Computer hangs up while switching computer.	<ul style="list-style-type: none"> ■ Device initialization takes too much time. 	<ul style="list-style-type: none"> ■ Wait at least 5 seconds before computer switching to ensure proper USB communication. ■ Turn off device driver (not keyboard nor mouse) before computer switching.
Auto Scan does not switch PC	<ul style="list-style-type: none"> ■ All PCs are off or only one PC is turned on. 	<ul style="list-style-type: none"> ■ Turn computers on.

automatically and DAG-12 / DAG-14 / DAAG-14 / DAKG-14 beeps	Scan mode works for power-on computers only.	
DVI Dual Link (for DAKG-14 only) doesn't work.	Either the computer or the monitor doesn't support the DVI Dual Link mode.	Please make sure the computer or the monitor does support the DVI Dual Link mode.
The resolution is not good.	Improper video settings of DAG-12 / DAG-14 / DAAG-14 / DAKG-14	To adjust the optimal video signal strength corresponding to the length or quality of DVI cable, the user can press "FUNC" button combing with the other pushbuttons. Please see more details on page 13.

Limited Warranty

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY FOR DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFIT, LOSS OF BUSINESS, OR FINANCIAL LOSS WHICH MAY BE CAUSED BY THE USE OF THE PRODUCT EXCEEDS THE PRICE PAID FOR THE PRODUCT.

The direct vendor makes no warranty or representation, expressed or implied with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update the product or documentation without obligation to notify any user or organization of such revisions or updates. For further information, please contact your direct vendor.

All the brand names and registered trademarks are the property of their respective owners.



YS Solutions Co.,Ltd.

TOKYO
Kouji-machi Tsuruya Hachiman Blug.6F, 2-4,Koujimachi,
Chiyoda-ku, Tokyo 102-0083 Japan
Tel:+81-3-5212-3521 Fax:+81-3-5212-3524

OSAKA
Shin-Osaka Suehiro Center Blug.613, 3-11-26,Nishi-Nakajima,
Yodogawa-ku, Osaka 532-0011 Japan
Tel:+81-6-4806-7088 Fax:+81-6-6300-0122

E-mail:info@ysol.co.jp URL:<http://www.ysol.co.jp>