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I. Introduction

The Belkin Mac-VGA Adapter allows Macintosh computers to use PC-type VGA/SVGA monitors. Through simple DIP switch settings, users can easily select what resolution is appropriate for their computer and monitor.

II. Product Detail



III. Features

- Allows a Macintosh computer with a DB15F video port to connect to a standard VGA, SVGA or Multisync monitor
- Can be set to a fixed resolution, or to Multi-mode.
- In Multi-mode, the resolution can be changed on-the-fly through the Mac Control Panel
- Supports VESA resolutions:
 - 640 x 480 800 x 600 1024 x 768
- Supports Mac resolutions:
 - 512 x 384
 - 832 x 624
 - 1132 x 870
- Quick Reference chart on the back of the adapter
- Non-powered
- No software required
- One year Warranty

IV. Installing the Adapter

- 1. Make sure the Macintosh and the monitor are powered OFF.
- 2. Attach the DB15M end of the Mac-VGA adapter to the Video port of your Mac. The Video port has a symbol looking like this:
- 3. Attach the cable of your monitor to the HDDB15F end of the Mac-VGA adapter.
- 4. Set the DIP Switches accordingly see the next section.
- 5. Power up your Monitor first, then the Mac. You're all set to go!

V. Setting the DIP Switches

Switch Descriptions

- DIP switches 1 through 6 set the resolution of the monitor and computer.
- DIP switches 8 and 9 set external sync. These are to be turned OFF if the computer uses "sync on green." Otherwise, they have to be turned ON. Switch 8 is Horizontal Sync and Switch 9 is vertical sync.
- DIP switch 7 is composite sync. This maybe turned ON instead of switch 8 and 9 being ON. If the computer is using "sync on green", this may have to be turned OFF as well.

Multi-mode Settings - Recommended for newer Monitors

Most VGA/SVGA monitors are Multisync. This means they can automatically change resolutions depending on the signal they receive. Hence, it is preferred that the Multisync settings are used so that the resolution can be changed through the Mac Control Panel, without having to reboot.

- Determine the maximum resolution your monitor can handle. This can be found in your monitor documentation or at your monitor manufacturer's website.
- Below are the Multisync settings for the Mac-VGA adapter. Select the setting which corresponds to the maximum resolution of your monitor can support. For example, if your monitor can only support up to 1024 x 768, you must use the 19" Multisync setting:

| Setting | DIP Switch # | | | | | | | | | Supported Resolutions | | | | |
|-------------------|--------------|---|---|---|---|---|---|---|---|-----------------------|--------------|--------------|---------------|---------------|
| Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 512 x 384 | 640 x 480 | 832 x 624 | 1024 x 768 | 1132 x 870 |
| 21" Multi | • | • | | | | • | • | • | • | No | Yes | Yes | Yes | Yes |
| 19" Multi | • | • | | | • | | • | • | • | No | Yes | Yes | Yes | No |
| 16" Multi | • | • | | | • | • | • | • | • | Yes | Yes | Yes | No | No |
| VGA/SVGA Multi | | | • | • | | | • | • | • | No | Yes | 800 x 600 | No | No |

NOTE: A "•" means that DIP switch is set ON (up).

- WARNING: When changing settings on the Mac Control Panel, also make sure that the refresh rate specified is supported by your monitor. Otherwise, an unstable, incorrectly sized image, or no image may appear at all. Sometimes, unsupported refresh rates may destroy monitors. To make sure, check your monitor documentation. The refresh rate that your monitor supports must be equal to or HIGHER than what is specified on your Macintosh computer at the same resolution. For example, if your monitor supports a maximum of 85Hz at 1024x768, the Macintosh Control Panel/Monitors must specify a refresh rate of 85Hz or less when at 1024x768.
- NOTE: YOU MUST RESTART YOUR MAC AFTER CHANGING SETTINGS ON THE MAC-VGA ADAPTER IN ORDER FOR THE NEW SETTING TO TAKE EFFECT.

READ THIS MANUAL CAREFULLY FROM BEGINNING TO END BEFORE ATTEMPTING TO USE THIS PRODUCT.

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Fixed-mode Settings

Fixed-mode settings set your Mac to a single resolution, which cannot be changed through the Mac Control Panel. If you wish to change resolutions, you must change the DIP switch settings, and restart you computer. Or, you can select a Multi-mode setting from the previous page.

- Determine the maximum resolution your monitor can handle. This can be found in your monitor documentation or at your monitor manufacturer's website.
- Below are the Fixed-mode settings for the Mac-VGA adapter. Select the setting which corresponds to the maximum resolution of your monitor can support. For example, if your monitor can only support up to 1024 x 768, you must use the 19" Fixed setting:

| Setting | | | Resolution | | | | | | | |
|-----------|---|---|------------|---|---|---|---|---|---|------------|
| Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 21" Fixed | • | • | • | • | | | • | • | • | 1152 x 870 |
| 19" Fixed | | • | • | | | | • | • | • | 1024 x 768 |
| 16" Fixed | | • | | • | | | ● | • | • | 832 x 624 |
| 13" Fixed | • | • | | | | | • | • | • | 640 x 480 |

NOTE: A "•" means that DIP switch is set ON (up).

• WARNING: When changing settings on the Mac Control Panel, also make sure that the refresh rate specified is supported by your monitor. Otherwise, an unstable, incorrectly sized image, or no image may appear at all. Sometimes, unsupported refresh rates may destroy monitors. To make sure, check your monitor documentation. The refresh rate that your monitor supports must be equal to or HIGHER than what is specified on your Macintosh computer at the same resolution. For example, if your monitor supports a maximum of 85Hz at 1024x768, the Macintosh Control Panel/Monitors must specify a refresh rate of 85Hz or less when at 1024x768.

<u>NOTE:</u> YOU MUST RESTART YOUR MAC AFTER CHANGING SETTINGS ON THE MAC-VGA ADAPTER IN ORDER FOR THE NEW SETTING TO TAKE EFFECT.

VI. Troubleshooting

1. There is no image, the image has no vertical hold, or the image is generally unstable.

- The monitor and the computer are not synchronized correctly. Try changing the settings of DIP switches 8 and 9, or 7. Turning OFF switch 7 usually fixes problems.
- The monitor does not support the resolution selected. Not all PC monitors support the Macintosh resolutions (832 x 624 and 1132 x 870). Try changing to a different setting, and restart the computer.

- 2. There is no color in the image.
 - This is most likely caused by changing switch settings while the computer boots up. Go into the *Control Panel, Monitors* in the Macintosh Apple menu. Select the color depth you prefer and click "OK".
- 3. The image is too small on the screen.
 - Adjust the screen size using the controls on your monitor.
 - If the monitor cannot expand the image to fit the entire screen using its controls, the monitor simply cannot support that resolution. Try switching to a lower resolution.

BELKIN COMPONENTS LIMITED ONE-YEAR WARRANTY

Belkin Components warrants this product against defects in materials and workmanship for one year. If a defect is discovered, Belkin will, at its option, repair or replace the product at no charge provided it is returned during the warranty period, with transportation charges prepaid, to the authorized Belkin dealer from whom you purchased the product. Proof of purchase may be required.

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