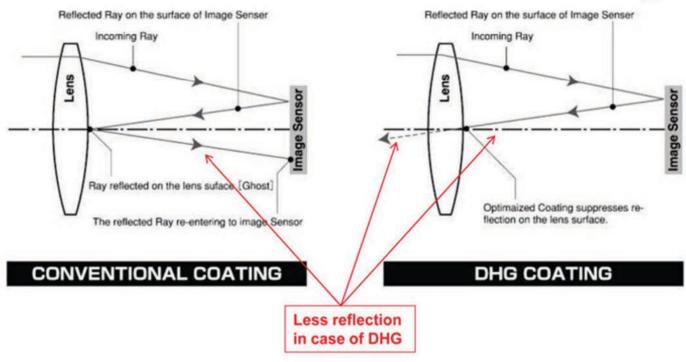
# Digital High Grade Filters Conventional vs DHG Coating



# **Digital Cameras Need Special Filters**

Marumi DHG Filters eliminate the flare and ghosting prevalent when the CCD or CMOS chips in digital cameras convert light into electrical signals.

- Newly developed ultra-low reflection coating increases light transmission.
- · Lens outer rim is blackened to minimize internal reflection.
- Satin smooth, ultra thin, matte-black metal filter frame further minimizes reflection.





# **Frame Features**

Thinner Frame for wider angle

Thinner frame for wider image capture angle is employed. Thread can be used for lens cap, and also can be used for another filter.

33%less





# Essential Characteristics of Marumi DHG Filters

| Grade | Туре            | Number of coats     |                 |                  | (                |      |         |      |
|-------|-----------------|---------------------|-----------------|------------------|------------------|------|---------|------|
|       |                 | Anti-<br>Reflection | Total<br>Lavers | Transmission (%) | Thickness of Rim |      |         |      |
| DHG   | Lens Protect    | 10                  | 10              | 99.5%            | 49~58mm          | 6.3t | 62~82mm | 6.5t |
| DHG   | UV (L390)       | 10                  | 10              | 98.5%            | "                | "    | "       | "    |
| DHG   | C-PL            | 10                  | 10              | 32~35%           | 49~82mm          | 7.0t |         |      |
| DHG   | Light Control-8 | 10                  | 10              | 12.5%            | 49~58mm          | 6.3t | 62~82mm | 6.5t |
| DHG   | Soft Fantasy    | 8                   | 8               | 98.7%            | "                | "    | "       | "    |
| DHG   | Star Cross      | 8                   | 8               | 97.7%            | 49~82mm          | 7.0t |         |      |

## **Lens Protect**

Minimizes flaring and ghosting and optimizes the performance of lenses for digital imaging. Pictures taken with super wide-angle lenses will not vignette because of the very thin frame.

| Size   | Item Number |
|--------|-------------|
| 37mm   | AMDLP37     |
| 40mm   | AMDLP40     |
| 40.5mm | AMDLP405    |
| 43mm   | AMDLP43     |
| 46mm   | AMDLP46     |
| 49mm   | AMDLP49     |
| 52mm   | AMDLP52     |
| 55mm   | AMDLP55     |
| 58mm   | AMDLP58     |
| 62mm   | AMDLP62     |
| 67mm   | AMDLP67     |
| 72mm   | AMDLP72     |
| 77mm   | AMDLP77     |
| 82mm   | AMDLP82     |
| 95mm   | AMDLP95     |
| 105mm  | AMDLP105    |
|        |             |



#### Circular Polarizer

The DHG Circular Polarizer allows you to eliminate unwanted reflection from water, glass, etc. It also helps saturate colors and increases contrast. The DHG CPL is often used to enhance blue skies and white clouds. The thin frame allows it to be used with wide angle lenses. Front threads accept a lens cap.

| Size   | Item Number |
|--------|-------------|
| 37mm   | AMDCPL37    |
| 40mm   | AMDCPL40    |
| 40.5mm | AMDCPL405   |
| 43mm   | AMDCPL43    |
| 46mm   | AMDCPL46    |
| 49mm   | AMDCPL49    |
| 52mm   | AMDCPL52    |
| 55mm   | AMDCPL55    |
| 58mm   | AMDCPL58    |
| 62mm   | AMDCPL62    |
| 67mm   | AMDCPL67    |
| 72mm   | AMDCPL72    |
| 77mm   | AMDCPL77    |
| 82mm   | AMDCPL82    |
| 95mm   | AMDCPL95    |
| 105mm  | AMDCPL105   |





#### Star Cross

The DHG Star Cross generates a 4 cross star effect to areas of brightly pin pointed light and generally softens the rest of the image. The direction of the star can be changed by rotating the frame.

| Size | Item Number |
|------|-------------|
| 49mm | AMDCS49     |
| 52mm | AMDCS52     |
| 55mm | AMDCS55     |
| 58mm | AMDCS58     |
| 62mm | AMDCS62     |
| 67mm | AMDCS67     |
| 72mm | AMDCS72     |
| 77mm | AMDCS77     |
| 82mm | AMDCS82     |





## **Light Control 8 (ND8)**

With the ND8, you can open up the lens or slow the shutter speed 3 stops from where you would be without the filter. This enabes the photographer to:

- A Use slower shutter speeds at higher ISO's to show movement in waterfalls, cars, etc.
- B Use wide apertures to narrow depth of field for effect.
- C To use video cameras with fixed shutter speeds in very bright situations like snow that would cause over exposure.

The ND8 doe not affect color rendition.

| Size   | Item Number |
|--------|-------------|
| 37mm   | AMDND837    |
| 40.5mm | AMDND8405   |
| 43mm   | AMDND843    |
| 46mm   | AMDND846    |
| 49mm   | AMDND849    |
| 52mm   | AMDND852    |
| 55mm   | AMDND855    |
| 58mm   | AMDND858    |
| 62mm   | AMDND862    |
| 67mm   | AMDND867    |
| 72mm   | AMDND872    |
| 77mm   | AMDND877    |
| 82mm   | AMDND882    |
|        |             |





# Soft Fantasy

The ideal soft-effect filter for digital imaging. The image is softened just enough to make the filter ideal for portrait photography.

| Item Number |
|-------------|
| AMDSF49     |
| AMDSF52     |
| AMDSF55     |
| AMDSF58     |
| AMDSF62     |
| AMDSF67     |
| AMDSF72     |
| AMDSF77     |
| AMDSF82     |
|             |





#### Macro 3

Ideal for close-up shooting with digital cameras. The DHG Macro 3 shortens the lens focal distance to enable the photographer to easity enjoy macro photography. The deeper rim acts as a sunshade and minimizes extra reflection.

| Size | Item Number |
|------|-------------|
| 49mm | AMDCU49     |
| 52mm | AMDCU52     |
| 55mm | AMDCU55     |
| 58mm | AMDCU58     |
| 62mm | AMDCU62     |
| 67mm | AMDCU67     |
| 72mm | AMDCU72     |
| 77mm | AMDCU77     |



