

## **Suggested FL-36/50 Flash Setups**

By English Bob

Over a period of time I've experimented extensively with the E system and its flash capabilities and put together suggested flash setups for various situations. Some have seen my suggested flash setups in the past and have successfully used them. Some others may be new to the E system and these will give you a good start setting up and using the FL-36 or FL-50 with your E system cameras. The settings I suggest should be applicable to both flash units and all E system cameras though the camera manual references I give are all for the E-1. Use of my recommended flash setups are intended to be implemented exactly as I suggest since I believe that changing the settings will adversely affect the automation built into the flash/camera combination. I specifically do not recommend changing camera exposure modes or metering modes.

My suggested flash setups fall into six categories, each explained in a separate post following this one:

1. Indoor flash at night or with no sunlight illuminated windows in the scene.
2. Outdoor fill-in flash during daylight.
3. Indoor flash during the day with daylight illuminated windows in the scene.
4. Manual flash setup for folks that think that manual flash is easier or somehow better than automated flash.
5. Nighttime Outdoor flash with brightly lit background.
6. Nighttime Outdoor flash without brightly lit background.

I hope that everyone finds at least a little useful in the following six posts.

## Indoor Flash Setup at Night FL-50/36

a. When you do the custom setup for the FL-50 (instructions in the FL-50 manual) make sure that the following settings are:

ILL = A

CLP = ON

Zoom= 4-3

Light intensity adjustment=ON

b. Camera setup (per instructions in the English language E-1 PDF manual) should be:

Set flash mode to auto flash (P.103)

Set metering to ESP mode (P.68)

Set exposure mode to Aperture (P.59)

Set White Balance to Auto (P.87-88)

Set ISO to Auto (P.83)

No exposure compensation should be set on the camera (P.65)

c. Mount FL-50 on camera hot shoe.

d. Turn on camera, then turn on flash. Set flash to TTL Auto flash control mode by pressing the Mode button on the flash until that appears in the display. No exposure compensation should be set on the flash.

e. Adjust your aperture by turning the camera dial (P. 59 again) to accomplish two things; select desired depth of field and secondly, set the operating distance of the flash. This is shown on the bottom line of the flash LCD display. Changing the aperture will change this operating distance and any subject within the near/far distances shown will be exposed properly.

f. The camera will select a proper shutter speed. If you are using a zoom lens note that when you zoom the camera changes the shutter speed. The camera does that continually to give you a slow shutter speed that will include as much of the ambient lit background as possible to meld in with the flash exposed foreground and at the same time the shutter speed the camera selects will be the lowest speed that you can safely hand hold that focal length lens on the E-1. If you are using normal to wide angle focal lengths the shutter speeds will be fairly slow and you will get very good ambient illumination of the background as well as a properly exposed flash foreground. Helps avoid those pictures of properly exposed subjects that look like they are standing in a black cave.

g. After looking at some of your images you may notice in the EXIF data that the ISO used for the exposure was not 100. That is because when the ISO is set to Auto and the camera is using a flash it will change the ISO to anywhere between 100 and 400 in increments of 20 to help obtain a good exposure. There is no need to recheck or reset the ISO after flash exposures. It will still be set at Auto. The only way you can tell that the camera used other than an ISO of 100 for any given exposure is to check the image EXIF data.

h. The FL-50 provides excellent results as a direct flash. For those that prefer, it is also possible to use bounce flash with the setup described above without any adjustment to camera or flash settings (the flash compensates automatically). To do so, first make sure that the ceiling is not too high and is a neutral color that will not lend a color caste to your subject. Tilt back the head of the flash to about the 45 degree position. When you do this, the flash effective distance scale at the bottom of the flash LCD will go blank since it is no longer appropriate. Face your subject and take a test exposure. Be sure to check the image for shadowing under the eyes and chin and false color

bounced off of the ceiling, walls or room decorations. If either condition exists, direct flash exposure is probably more appropriate in your venue. If all appears well, continue with your photo session but make frequent checks on captured images because movement about a room may significantly affect the results of a bounce flash since proximity to walls, windows and curtains can have a major effect on the bounce flash lighting and color. If you are moving extensively about a room direct flash will probably provide more consistent results.

i. The FL-50 provides excellent results with direct flash without any diffuser except for close-ups of people with short focal length lenses. It is possible to use a Stofen or other diffuser on your flash head with the above setup without having to alter any camera or flash settings (the flash compensates automatically) in those situations, but a third party diffuser should not be needed for routine use. You can also adjust the exposure compensation on the flash.

j. Recommend not using a lens hood on closeup shots as the flash may cast a shadow from it under some shooting conditions.

#### CAUTION:

1. keep an eye on the effective flash distances shown on the bottom line of the flash LCD display when using direct (versus bounce) flash. To avoid subject under/over exposure your subject must be between those limits. You can adjust those limits to be closer to you or farther away by adjusting the aperture the camera uses.

2. The flash will illuminate wide angle shots quite well, but if you are shooting with a lens that allows focal lengths shorter than 12mm the flash will signal a need to apply the diffuser lens by a blinking warning in the top left corner of the flash LCD display when you zoom to wider than 12mm focal length. Keep an eye out for this, otherwise the flash lighting on the right and left sides of the image will fall off.

If your subject is particularly reflective or dull, you may care to adjust some exposure compensation (I rarely do). If so, do it on the flash with the large dial near the bottom back of the flash. Don't do it by adjusting exposure compensation in the camera. Two reasons: the big dial on the rear of the flash is easier to get to and use than the camera controls and secondly once you take the flash off the camera and step outside you don't have to readjust the exposure compensation because you made it on the flash and not the camera.

## Outdoor fill-in flash using the FL-50/36

a. When you do the custom setup for the FL-50 (per instructions in the FL-50 manual) make sure that the following settings are:

ILL = A

CLP = ON

Zoom= 4-3

Light intensity adjustment=ON

b. Camera setup (per instructions in the English language E-1 PDF manual) should be:

Set flash mode to Fill-in flash (P.103)

Set metering to ESP mode (P.68)

Set exposure mode to Program (P.57)

Set White Balance to Auto (P.87-88)

Set ISO to Auto (P.83)

No exposure compensation should be set on the camera (P.65)

c. Mount FL-50 on camera hot shoe.

d. Turn on camera, then turn on flash. Set flash to FP TTL Auto flash control mode by pressing the Mode button on the flash until that appears in the display. No exposure compensation should be set on the flash. Be sure and check the effective operating distance of your flash. This is shown on the bottom line of the flash LCD display and your subject should be between the near and far operating distances indicated on that display for effective fill-in flash.

e. Take an outdoor exposure that needs fill-in flash (e.g. pictures of people that are backlit or sidelit by the sun) and see if this doesn't give a properly exposed fill-in flash.

Note: The operating range of the flash in this setup is partially dependent on the focal length of the lens being used. The longer the focal length (up through 42mm) the greater the operating range of the flash to approximately 20 feet. If you are using a zoom lens, you can see the operating distance of the flash (as displayed on the bottom of the flash LCD) change as you zoom. Also note that increasing the ISO does not increase the effective flash range when the flash is set to FP TTL Auto mode, it reduces it. It is important to set the ISO to AUTO as noted above.

f. The FL-50 provides excellent results with direct flash without any diffuser except for close-ups of people with short focal length lenses. It is possible to use a Sto-fen or other diffuser on your flash head with the above setup without having to alter any camera or flash settings (the flash compensates automatically), but a third party diffuser should not be needed for routine use.

Note that the exposure Program Shift function (P.58) is disabled while using the flash and AE bracketing (P.70) is also disabled.

## Indoor daylight flash with sunlight outdoor scene visible through windows using the FL-50/36

Everyone has at some time or other taken an indoor flash shot that was properly illuminated but had a window somewhere in the scene that was totally overexposed because there was a sunlit scene outdoors. This flash setup will balance the indoor flash illumination with the outdoor illumination so that both the scene viewed out the window and the indoor scene will be equally well exposed.

a. When you do the custom setup for the FL-50 (per instructions in the FL-50 manual) make sure that the following settings are:

ILL = A

CLP = ON

Zoom= 4-3

Light intensity adjustment=ON

b. Camera setup (per instructions in the English language E-1 PDF manual) should be:

Set flash mode to Fill-in flash (P.103)

Set exposure mode to Manual (P.63)

Set White Balance to Auto (P.87-88)

Set ISO to Auto (P.83)

No exposure compensation should be set on the camera (P.65)

c. Mount FL-50 on camera hot shoe.

d. Turn on camera, then turn on flash. Set flash to TTL Auto flash control mode by pressing the Mode button on the flash until that appears in the display. No exposure compensation should be set on the flash. Now set the camera shutter speed to the fastest speed the camera will synchronize at with TTL Auto flash (normally about 1/180 second).

e. Set the camera to spot metering (P. 68) and, while standing where you are going to take the picture from, meter the exposure while aiming the camera at the brightest lit window outdoor scene and adjusting the aperture setting as necessary for a proper exposure.

f. Now reset the camera metering mode to ESP (P. 68) and check the operating distance indicated at the bottom of the LCD window of the flash. Make sure that the primary subject of the flash is within the operating distance specified. If not, either move camera or subject to get the subject within the proper operating range. Do not adjust the lens aperture to change the operating range of the flash.

g. Now focus on the subject and take your flash exposure. Check the playback of the image captured. The sunlit window with outdoor scene should be properly exposed as well as the indoor primary subject. If you need only minor adjustments of the indoor lighting, do it by selecting exposure compensation using the large dial near the bottom of the back of the flash unit. This setup can strain the power capability of the FL-50 and sometimes exceed the power of the FL-36 depending on the brightness of the sun outdoors so the size of the room that can be illuminated this way is roughly limited to a very large living room. The flash does not have the power to illuminate a whole church interior at the same time it is matching the illumination of a sunlit outdoor scene viewed through a window.

Note that the exposure Program Shift function (P.58) is disabled while using the flash and AE bracketing (P.70) is also disabled.

## Part 1: Ideal Manual Camera Settings With Indoor Flash – FL-50/36

a. When you do the custom setup for the FL-50 (instructions in the FL-50 manual) make sure that the following settings are:

ILL = A

CLP = ON

Zoom= 4-3

Light intensity adjustment=ON

b. Camera setup (per instructions in the English language E-1 PDF manual) should be:

Set flash mode to auto flash (P.103)

Set metering to ESP mode (P.68)

Set exposure mode to Manual (P.63)

Set White Balance to Auto (P.87-88)

Set ISO to Auto (P.83)

No exposure compensation should be set on the camera (P.65)

c. Mount FL-50 on camera hot shoe.

d. Turn on camera, then turn on flash. Set flash to TTL Auto flash control mode by pressing the Mode button on the flash until that appears in the display. No exposure compensation should be set on the flash.

e. Adjust your shutter speed by turning the camera subdial (P. 63 again) to the desired speed (1/180 second or less to ensure proper flash synchronization per P.99) fast enough for you to easily hand hold the camera. Remember that the slowest shutter speed you can hand hold the camera at depends on the focal length of the lens in use so if you are using a zoom you must reevaluate shutter speeds as you change focal lengths. Use as slow a shutter speed as possible. This will maximize the amount of ambient illumination captured in the background. Helps avoid those pictures of properly exposed subjects that look like they are standing in a black cave. Now adjust the aperture with the camera main dial (P.63 again) to accomplish two things; first, obtain a proper exposure which is defined as that indicated by the camera metering system as correct OR an underexposure (the flash will provide the needed extra lighting as long as the subject is within the operating distance of the flash); secondly, select desired depth of field.

Note that the operating distance of the flash is shown on the bottom line of the flash LCD display and the subject must be between the maximum and minimum distances. Changing the aperture will change this operating distance of the flash (within limits) and it also varies with the focal length of the lens you are using and will vary as you zoom back and forth between 12mm and 42mm. Be very careful while selecting the aperture and therefore setting the exposure value. The flash will correct underexposures automatically (as long as you keep the subject between the minimum and maximum flash operating distances as shown on the flash LCD display) but overexposures cannot be corrected.

f. After looking at some of your images you may notice in the EXIF data that the ISO used for the exposure was not 100. That is because when the ISO is set to Auto and the camera is using a flash it will change the ISO to anywhere between 100 and 400 in increments of 20 to help obtain a good exposure. There is no need to recheck or reset the ISO after flash exposures. It will still be set at Auto. The only way you can tell that the camera used other than an ISO of 100 for any given exposure is to check the image EXIF data.

g. The FL-50 provides excellent results as a direct flash. For those that prefer, it is also possible to use bounce flash with the setup described above without any adjustment to camera or flash settings (the flash compensates automatically). To do so, first make sure that the ceiling is not too high and is a neutral color that will not lend a color cast to your subject. Tilt back the head of the flash to about the 45-degree position. When you do this, the flash effective distance scale at the bottom of the flash LCD will go blank since it is no longer appropriate. Face your subject and take a test exposure. Be sure to check the image for shadowing under the eyes and chin and false color bounced off of the ceiling, walls or room decorations. If either condition exists, direct flash exposure is probably more appropriate in your venue. If all appears well, continue with your photo session but make frequent checks on captured images because movement about a room may significantly affect the results of a bounce flash since proximity to walls, windows and curtains can have a major effect on the bounce flash lighting and color. If you are moving extensively about a room direct flash will probably provide more consistent results.

h. The FL-50 provides excellent results with direct flash without any diffuser except for close-ups of people with short focal length lenses. It is possible to use a Sto-fen or other diffuser on your flash head with the above setup without having to alter any camera or flash settings (the flash compensates automatically) in those situations, but a third party diffuser should not be needed for routine use.

i. Recommend not using a lens hood on close-up shots as the flash may cast a shadow from it under some shooting conditions.

#### CAUTION:

The flash will illuminate wide angle shots quite well, but if you are shooting with a lens that allows focal lengths shorter than 12mm the flash will signal a need to apply the diffuser lens by a blinking warning in the top left corner of the flash LCD display when you zoom to wider than 12mm focal length. Keep an eye out for this, otherwise the flash lighting on the right and left sides of the image will fall off.

If your subject is particularly reflective or dull, you may care to adjust some exposure compensation (I rarely do). If so, do it on the flash with the large dial near the bottom back of the flash. Don't do it by adjusting exposure compensation in the camera. Two reasons: the big dial on the rear of the flash is easier to get to and use than the camera controls and secondly once you take the flash off the camera and step outside you don't have to readjust the exposure compensation because you made it on the flash and not the camera.

#### Part 2: IF YOU'RE TOTALLY FRUSTRATED WITH ALL THE ABOVE HASSLE BUT WANT TO USE FLASH IN MANUAL MODE ANYWAY:

1. Set your shutter speed to 1/30 and your aperture to f8 and your flash to TTL-Auto and the flash will do the best it can for you.

OR

2. Try my suggested automated settings for indoor flash. Better results and so much easier.

## Flash Outdoors at Night with Bright Background “ FL-50/36

This setup is intended to be used for those situations where you are outdoors at night photographing a nearby primary subject but want to include a brightly lit background (e.g. city skyline, lighted city street, brightly lit house) that is too large or too far away to be illuminated by the flash unit. This setup can also be used for large indoor venues such as auditoriums but does require that no movement be going on in the background.

a. When you do the custom setup for the FL-50 (instructions in the FL-50 manual) make sure that the following settings are:

ILL = A

CLP = ON

Zoom= 4-3

Light intensity adjustment=ON

b. Camera setup (per instructions in the English language E-1 PDF manual) should be:

Set flash mode to Slow 2nd Curtain (P.103)

Set metering to ESP mode (P.68)

Set exposure mode to Aperture (P.59)

Set White Balance to Auto (P.87-88)

Set ISO to Auto (P.83)

No exposure compensation should be set on the camera (P.65)

c. Mount FL-50 on camera hot shoe.

d. Mount camera on tripod.

e. Turn on camera, then turn on flash. Set flash to TTL Auto flash control mode by pressing the Mode button on the flash until that appears in the display. No exposure compensation should be set on the flash.

f. Adjust your aperture by turning the camera dial (P. 59 again) to accomplish two things; select desired depth of field and secondly, set the operating distance of the flash. This is shown on the bottom line of the flash LCD display. Changing the aperture will change this operating distance and any subject within the near/far distances shown will be exposed properly. The primary subject distance, not the background, should be the primary factor in selecting the aperture setting to control the operating distance of the flash.

g. The camera will select a proper shutter speed and the shutter speed will be slow enough to allow for a time exposure of your background which is why you need to have the camera tripod mounted. Check what shutter speed the camera proposes to use (half depress the shutter button) and, if the speed is slow enough on your camera to require that you set Noise Reduction to ON, be sure to do so.

h. Position your camera so the subject is in the center 1/3 of the viewfinder to ensure a proper flash measurement and exposure. Caution your subject that they will see two flashes separated by as much as a minute and that they should not move until after the second flash. Press the shutter button. The flash unit now emits the TTL preflash which allows it to compute the necessary flash power to use. After the preflash, the camera will take a time exposure which will properly expose the lighted background which you wanted to include in your night image. After the time exposure, the flash will flash the second time to illuminate your primary subject to include it in the image and

then the camera shutter will close and your subject can be allowed to move.

- i. After looking at some of your images you may notice in the EXIF data that the ISO used for the exposure was not 100. That is because when the ISO is set to Auto and the camera is using a flash it will change the ISO to anywhere between 100 and 400 in increments of 20 to help obtain a good exposure. There is no need to recheck or reset the ISO after flash exposures. It will still be set at Auto. The only way you can tell that the camera used other than an ISO of 100 for any given exposure is to check the image EXIF data.
- j. The FL-50 provides excellent results with direct flash without any diffuser except for close-ups of people with short focal length lenses. It is possible to use a Stofen or other diffuser on your flash head with the above setup without having to alter any camera or flash settings (the flash compensates automatically) in those situations, but a third party diffuser should not be needed for routine use. You can also adjust the exposure compensation on the flash.

#### CAUTION:

1. keep an eye on the effective flash distances shown on the bottom line of the flash LCD display when using direct (versus bounce) flash. To avoid subject under/over exposure your subject must be between those limits. You can adjust those limits to be closer to you or farther away by adjusting the aperture the camera uses.
2. The flash will illuminate wide angle shots quite well, but if you are shooting with a lens that allows focal lengths shorter than 12mm the flash will signal a need to apply the diffuser lens by a blinking warning in the top left corner of the flash LCD display when you zoom to wider than 12mm focal length. Keep an eye out for this, otherwise the flash lighting on the right and left sides of the image will fall off.

If your subject is particularly reflective or dull, you may care to adjust some exposure compensation (I rarely do). If so, do it on the flash with the large dial near the bottom back of the flash.

## Outdoors at Night with No Illuminated Background – FL-50/36

a. When you do the custom setup for the FL-50 (instructions in the FL-50 manual) make sure that the following settings are:

ILL = A

CLP = ON

Zoom= 4-3

Light intensity adjustment=ON

b. Camera setup (per instructions in the English language E-1 PDF manual) should be:

Set flash mode to auto flash (P.103)

Set metering to ESP mode (P.68)

Set exposure mode to Aperture (P.59)

Set White Balance to Auto (P.87-88)

Set ISO to Auto (P.83)

No exposure compensation should be set on the camera (P.65)

c. Mount FL-50 on camera hot shoe.

d. Turn on camera, then turn on flash. If the subject distance is 50 feet or less, set flash to TTL Auto flash control mode by pressing the Mode button on the flash until that appears in the flash's LCD display. If the subject distance is over 50 feet, set flash to Auto flash control mode by pressing the Mode button on the flash until that appears in the display.

e. Adjust your aperture by turning the camera dial (P. 59 again) to accomplish two things; select desired depth of field and secondly, set the operating distance of the flash. This is shown on the bottom line of the flash LCD display. Changing the aperture will change this operating distance and any subject within the near/far distances shown will be exposed properly. Try to keep the subject(s) within the same plane (equidistant from the camera) and within the center 1/3 of the viewfinder. Multiple subjects at different distances from the camera will be illuminated unequally and the general appearance of the image will be unsatisfactory.

f. The camera will select a proper shutter speed. If you are using a zoom lens note that when you zoom the camera changes the shutter speed. The camera does that continually to give you a slow shutter speed that will include as much of the ambient lit background as possible to meld in with the flash exposed foreground and at the same time the shutter speed the camera selects will be the lowest speed that you can safely hand hold that focal length lens on the E-1. If you are using normal to wide angle focal lengths the shutter speeds will be fairly slow and you will get very good ambient illumination of the background as well as a properly exposed flash foreground. Helps avoid those pictures of properly exposed subjects that look like they are standing in a black cave.

g. After looking at some of your images you may notice in the EXIF data that the ISO used for the exposure was not 100. That is because when the ISO is set to Auto and the camera is using a flash it will change the ISO to anywhere between 100 and 400 in increments of 20 to help obtain a good exposure. There is no need to recheck or reset the ISO after flash exposures. It will still be set at Auto. The only way you can tell that the camera used other than an ISO of 100 for any given exposure is to check the image EXIF data.

h. The FL-50 provides excellent results with direct flash without any diffuser except for close-ups of people with short focal length lenses. It is possible to use a Stofen or other diffuser on your flash head with the above setup without having to alter any camera or flash settings (the flash

compensates automatically) in those situations, but a third party diffuser should not be needed for routine use. You can also adjust the exposure compensation on the flash.

#### CAUTION:

1. keep an eye on the effective flash distances shown on the bottom line of the flash LCD display when using direct (versus bounce) flash. To avoid subject under/over exposure your subject must be between those limits. You can adjust those limits to be closer to you or farther away by adjusting the aperture the camera uses.
2. The flash will illuminate wide angle shots quite well, but if you are shooting with a lens that allows focal lengths shorter than 12mm the flash will signal a need to apply the diffuser lens by a blinking warning in the top left corner of the flash LCD display when you zoom to wider than 12mm focal length. Keep an eye out for this, otherwise the flash lighting on the right and left sides of the image will fall off.

If your subject is particularly reflective or dull, you may care to adjust some exposure compensation (I rarely do). If so, do it on the flash with the large dial near the bottom back of the flash. Don't do it by adjusting exposure compensation in the camera. Two reasons: the big dial on the rear of the flash is easier to get to and use than the camera controls and secondly once you take the flash off the camera and step outside you don't have to readjust the exposure compensation because you made it on the flash and not the camera.