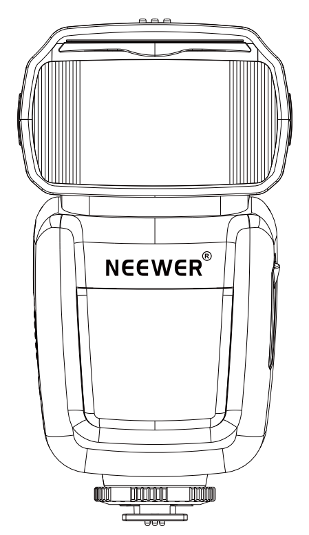
N-055 FK580G-N (NW655) 尼康说明书 2021.8.17

材质:100克书纸, 单色正反印刷　尺寸:480X470mm

NEEWER®
NW655 机顶闪光灯
尼康使用说明书



感谢您购买此款闪光灯

在使用本产品之前，请先仔细阅读说明书，以确保您能安全使用，请保存好本说明书以备将来参考。

前言

该型号机顶闪光灯适用于尼康系列相机，兼容 TTL 自动闪光。使用 TTL 闪光灯，您将获得更简单的拍摄体验，在光线变化复杂的情况下，可以自动获得准确的闪光曝光，拍摄轻松自如。产品特点突出表现在以下几方面：

- **GN60 (m ISO 100, ZOOM 200mm), 22级调光(1/1~1/128)**
- **兼容尼康 TTL**

支持TTL自动闪光，可作为无线多灯闪光系统的主控或从属单元，拍摄更简单快捷。

- **断码液晶屏**

显示直观，操作更加简易

- **内置2.4G无线传输**

收发一体，超远距离，创意无限

- **无线功率遥控触发**

可以另购Q-N触发器，实现无线TTL控制引闪（不包括的）

- **功能齐全，无限享用**

支持手动和频闪闪光模式，高速同步/第二帘快门同步/闪光曝光补偿等TTL 功能

- **光学研究，输出稳定**

高速连闪，每次输出亮度和色温连续一致(5600±200K)，光线均匀分布

▲ 警 告

1. 请保持干燥。
2. 请勿私自拆卸产品，如产品出现故障须由本公司或授权的维修人员进行检查维修。
3. 请勿让儿童接触本产品。
4. 禁止拆卸、撞击、挤压或投入火中，若出现严重鼓胀，请勿继续使用。请勿放置在超过50度的高温环境中。
5. 请勿将闪光灯头正对人眼闪光(特别是婴儿的眼睛)，否则可能会在短时间内造成视力障碍。
6. 请勿在化学品、可燃性气体或其他特殊物质附近使用闪光灯，这些物质在特殊情况下可能对闪光灯发出的瞬间强光敏感，有可能导致火灾或电磁干扰。在这些场合下，请注意相关警告标识。
7. 本产品不能防水，在雨天及潮湿环境下请注意防水。
8. 若发生任何故障，请立即关闭闪光灯电源。

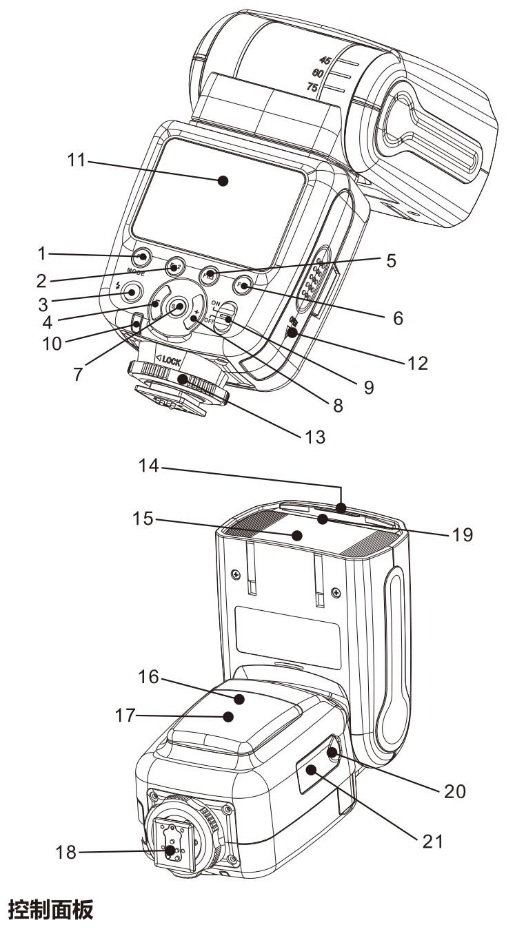
- **标配物品**

1. 灯体 2. 微型底座 3. 保护包 4. 说明书

- 说明书中使用以下警告符号：

▲ 该"小心"符号表示避免出现拍摄问题的警告。 ℹ 该"注意"符号提供补充信息。

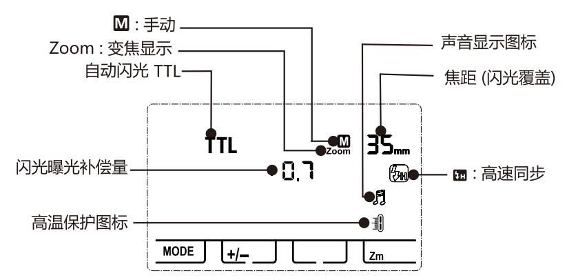
部件名称



- **控制面板**

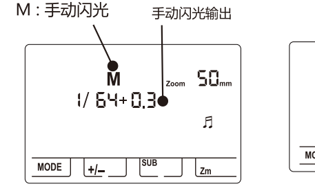
1. <MODE>闪光模式选择按钮/功能按钮1　2. 功能按钮2
3. < ⚡ >试闪按钮　4. 功能左键　5. 功能按钮3　6. 功能按钮4
7. <SET>设置按钮　8. 功能右键　9. ON/OFF电源开关　10. 回电指示灯
11. 显示屏　12. 电池仓　13. 固定旋钮　14. 眼神光板　15. 闪光灯头
16. 从属单元状态指示灯　17. 辅助对焦灯　18. 热靴　19. 内置广角散光板　20. 外部电源插槽　21. 同步插孔

- **LCD液晶显示屏**

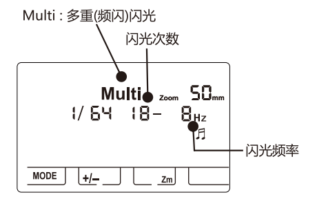


ℹ
- 显示屏将只显示当前应用的设置。
- 在功能按钮1至功能按钮4上方显示的功能 (如< +/– >) 根据设置的状态发生变化。
- 当操作按钮或拨盘时，液晶显示屏点亮。
- 同时按住功能键2和功能键3不放，3秒后可恢复出厂设置。

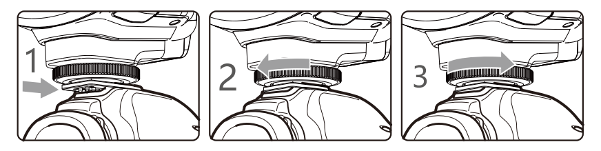
(2)M手动闪光



(3)Multi频闪闪光



装卸闪光灯



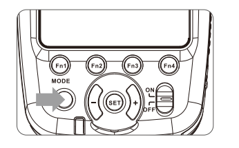
1. 安装闪光灯。
- 滑动闪光灯固定座使其完全插入相机的热靴插座。

2. 拧紧闪光灯。
- 旋转固定座上的锁定旋钮，直到锁定闪光灯。

3. 取下闪光灯。
- 旋转固定座上的锁定旋钮，直到闪光灯解除锁定。

电源管理

* ON/OFF电源开关控制该产品的打开和关闭，长时间不使用时请关闭电源。本产品设计有电源自动关闭功能。



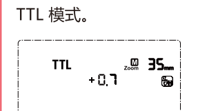
注意: 闪光灯在长时间（约90秒）无人操作时，闪光灯会自动关闭，按下灯上试闪按钮< ⚡ >才能进行激活

闪光模式：TTL自动闪光模式

该闪光灯有TTL自动闪光，M手动闪光，Multi 频闪闪光三种模式。在 TTL 模式下，相机的测光系统会侦查从主体反射回来的闪光照明，从而自动调节闪光输出量，使主体和背景得到均衡曝光。支持曝光补偿、高速同步、第二帘快门同步，曝光锁定, 光圈预览造影闪光，等功能。按下< MODE>模式选择按钮，三种闪光模式将会依次出现在液晶屏上。

TTL模式

通过按< MODE >模式选择按钮，将闪光灯设置为 <TTL >, 可以使闪光灯进入 TTL 模式。

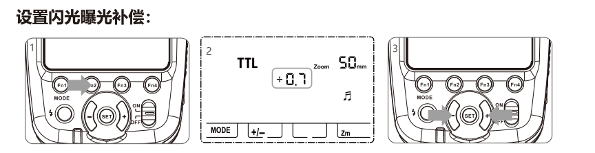


- 半按相机快门按钮进行对焦 。
- 在快门释放前的瞬间进行一次预闪，闪光灯接收相机信息进行主闪光。

+/– 闪光曝光补偿

该闪光灯可以在±3档间以1/3档为增量调节闪光曝光补偿。由于环境的需求而需要微调TTL系统时，这个功能非常有用。

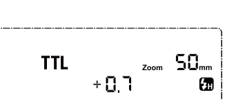
设置闪光曝光补偿:



1. 按下功能按钮 2< +/– >,令屏幕上闪光曝光补偿图标跳动。
2. 设置闪光曝光补偿量。
- 调节左右功能键钮设置曝光补偿量。
- "0.3"表示1/3档，"0.7"表示2/3档。
- 要取消闪光曝光补偿，将闪光曝光补偿量设为 "+0"。
3. 按下< **SET** >设置按钮，确定闪光曝光补偿。

高速同步

使用高速同步(FP闪光)，您可以在所有的快门速度下同步使用闪光 灯 。高速同步模式下，使用光圈优先对人像进行填充闪光时特别方便。
选择高速同步< >。



1. 闪光灯装上相机后，在尼康相机机身设置中，将闪光同步速度设置为1/320S (自动FP) 或1/250S(自动FP), 半按下快门键, 闪光灯屏幕显示高速同步 < >图标。此时闪光灯高速同步功能启动。
2. 转动相机拨盘, 快门速度能设置为1/250S或更高的快门速度。
3. 要确认目前是否正在使用FP高速同步功能, 通过相机取景器检查快门速度即可判断。如果快门速度为1/250S或更高, 表示高速同步功能启动。

ℹ
- 如果在尼康相机机身设置中, 将闪光同步速度设置为1/320S (自动FP) 或 1/250S (自动FP), 无论实际的快门速度是多少,闪光灯屏幕上的< >图标都会显示。
- 使用高速同步时, 快门速度越高, 有效的闪光范围就越小。
- 要恢复普通闪光, 请在尼康相机机身设置中, 将闪光同步速度设置为非(自动FP)选项, 半按快门时, 闪光灯屏幕上的< >图标会消失。
- 使用高速同步模式下, 无法设置频闪闪光。
- 连续高速同步闪光15次后, 闪光灯热保护功能可能会被激活。

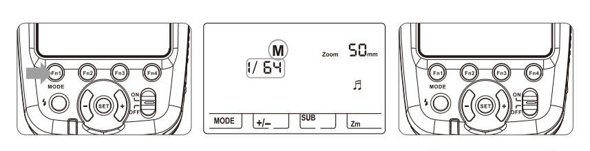
▷▶ 第二帘快门同步

使用慢速快门，您可以在被摄体后创建一条光线轨迹。在快门关闭前的瞬间闪光灯闪光。

1. 在尼康相机机身设置中, 选择 Rear 闪光方式, 即可实现后帘同步。
2. 在尼康相机机身设置中, 选择非 Rear 闪光方式, 即取消后帘同步。

闪光模式：M 手动闪光

您可以在1/128功率至1/1全功率间以1/3档为增量设置闪光输出。
为获得正确的闪光曝光，请使用手持的闪光测光表来确定所需的闪光输出。



1. 按<MODE>模式选择按1 钮，屏幕显示<M>。
2. 按功能按钮2闪光输出功率图标跳动,调节左右功能按钮设置闪光输出功率。
3. 按下<SET>设置按钮，确定闪光曝光补偿。

显示闪光输出

拍摄过程中更改闪光输出时，下表将清楚地显示光圈值是如何更改的，如1/4+0.3→1/4+0.7。您可以在增加或减少闪光输出时查看光圈值的更改规律。
例如，将闪光输出量减少至1/2、1/2+0.7或1/2+0.3、然后再将其增加至大于1/2、1/2+0.3、1/2+0.7时，将显示1/1。

减少闪光输出指数→

1/1	1/2+0.7	1/2+0.3	1/2	1/4+0.7	1/4+0.3	1/4	......

←增加闪光输出指数

S1光控单元设置

在M手动闪光模式下，短按功能按钮3，可以进入S1功能，闪光灯可作为副灯使用，创造多种照明效果，适用于手动闪光环境。它会与主闪光灯的第一次闪光同步触发闪光，效果与使用无线引闪器一致。

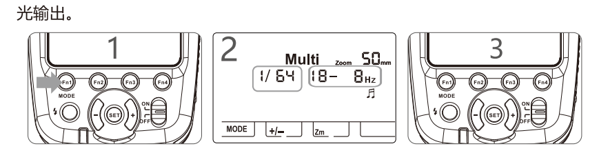
S2光控单元设置

在M手动闪光模式下，短按功能按钮3，进入S1功能，松开再按功能按键3可以使用S2功能，闪光灯可作为副灯使用，适用于TTL闪光环境。具有防预闪功能，使用带一次预闪功能的相机能用光控实现同步闪光。它会与主闪光灯的第二次闪光同步触发闪光，即2次光控引闪。退出时，在S2功能界面下，短按功能按键3可以退出。

ℹ ● 只有在**M**模式下才支持**S1/S2**光控引闪模式。

闪光模式：Multi 频闪闪光

使用频闪闪光，可以发出一系列快速的闪光。它可以在一张照片上拍摄移动物体的多个图像。您可以设置闪光频率(每秒的闪光次数，以Hz表示)、闪光次数和闪光输出。



1. 按<**MODE**>闪光模式选择按钮，屏幕显示<**MULTI**>
2. 设置闪光频率和闪光次数。
- 按<**SET**>按钮，闪光次数图标跳动，调节左右功能按钮设置数字。
- 按<**SET**>按钮两次，闪光频率图标跳动，调节左右功能按钮设定数字。
3. 按功能按键2，闪光输出功率图标跳动，调节左右功能按钮设置闪光输出功率。按下<SET>设置按钮确定，所有设置都将显示出来。

计算快门速度

在频闪闪光过程中，到闪光停止为止快门应保持开启状态。使用下面的公式计算快门速度，然后用相机进行设置。

闪光次数/闪光频率＝快门速度

例如，如果闪光次数是10，闪光频率是5Hz，快门速度则至少为2秒。

▲ 为防止闪光灯头过热并损坏，请勿执行连续 10次以上的频闪闪光连拍。闪光 10次后，请让闪光灯至少冷却15分钟。如果您试图执行连续 10次以上的频闪闪光连拍，为防止闪光灯头 过热，闪光可能自动停止。如果发生了这种情况，请让闪光灯至少冷却15分钟。

ℹ
- 反光很强的被摄体在暗背景前使用频闪闪光更加有效。
- 推荐使用三脚架和遥控开关。
- 闪光输出为1/1和1/2时不能设置频闪闪光。
- 频闪闪光时也可以使用"buLb"。

最大频闪闪光次数

闪光输出 \ Hz	1	2	3	4	5	6-7	8-9	10	20-50	60-199
1/4	7	6	5	4	4	3	3	2	2	2
1/8	14	14	12	10	8	6	5	4	4	4
1/16	30	30	30	20	20	20	10	8	8	8
1/32	60	60	60	50	50	40	30	20	16	12
1/64	90	90	90	80	80	70	60	50	30	20
1/128	100	100	100	100	100	90	80	70	40	40

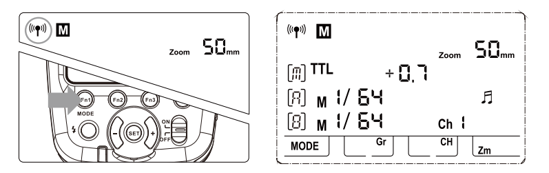
无线闪光拍摄：无线电(2.4G)传输

- 安装在相机上的NW655称为主控单元，受无线控制的NW655称为从属单元。
- 还可以用闪光灯信号发射器Q-N(另购)无线控制设为从属单元的NW655。有关设定主控单元功能的详细说明，请参考信号发射器的使用说明书。

1. 无线设置

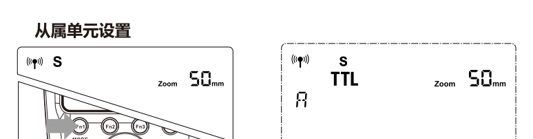
您可以在普通闪光和无线闪光之间切换。对于普通闪光，请务必将无线设置设为"关"。

主控单元设置

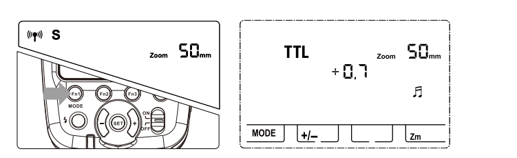


长按功能按钮1 令屏幕显示 < >和< M >。

从属单元设置



首先第一次长按功能按钮 1 令屏幕显示 < >和< M >。
然后第二次长按功能按钮 1 令屏幕显示 < >和< S >。



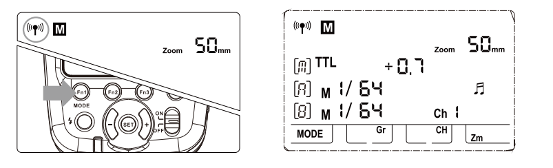
从属单元界面模式下，长按功能按钮1，可以进行退出，展示退出界面。

设置主控单元：分组频道参数

2. 设置通讯频道

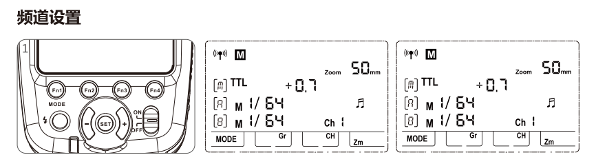
TTL、M无线闪光拍摄组别及参数设置：首先进入主控单元设置界面，如下

主控单元设置



长按功能按钮1 令屏幕显示 < >和< M >。
按功能按键2选择主控组别 Ⓜ 及A/B/C 三组, 选中对应组别后，然后再按功能按键1<MODE>，选择TTL、M、OF选项（功率调节可以按左右按键调节），M组控制主灯模式和参数。

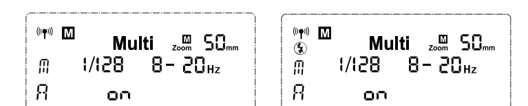
频道设置



1. 轻按功能按键3，频道闪烁，按左右功能键进行调节频道，然后按SET进行确认。
2. 再按功能按键4,闪光覆盖范围值闪烁,按下面左右功能键进行调节闪光覆盖范围,然后按SET进行确认。
3. 按SET按键，可以选中主控组别 Ⓜ，按功能按钮1，可以选择TTL, M, OF (TTL: 副灯引闪时主灯以TTL模式自身也闪。M: 副灯引闪时主灯以M模式自身也闪。OF：副灯引闪时主灯自己关闭模式不引闪。)

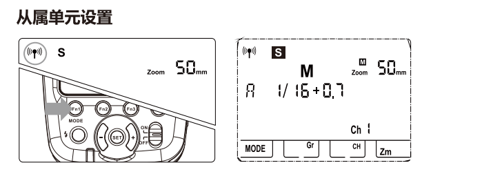
3. Multi:手动无线闪光拍摄

1. 设定<Multi>频闪模式。
- 按功能按钮1,<MODE>按钮，令屏幕显示<Multi>。



2. 闪光功率/闪光频率/闪光次数设置。
- 按功能按键2, 可以选择主控组别 Ⓜ 及（A/B/C）三组，选中后在按功能按钮1<MODE>，选择on、oFF选项，功能按钮4可以调节变焦。
- 按SET按钮1次，闪光输出功率图标跳动（闪光输出功率图标调动，调节左右功能按钮设定数字），按SET按钮2次（闪光次数图标调动，调节左右功能按钮设定数字），按SET按钮3次（闪光频率图标调动，调节左右功能按钮设定数字）。
- 按功能按钮3（频道图标调动，调节左右功能按钮设定数字，调节后按SET确认）。

从属单元设置

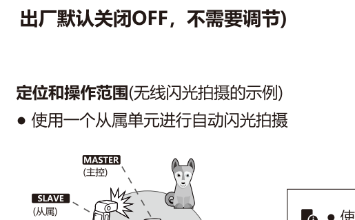


在主控界面模式下，再长按功能按钮1，进入从属界面令屏幕显示 < >和< S >

1. 按功能按键1可以选择不同模式TTL、M、Multi
2. 按功能按键2选择组别（A/B/C/D/E）
3. 按功能按键3选择频道1-32（频道图标调动，调节左右功能按钮设定数字, 调节后按SET确认）
4. 按功能按键4选择焦距20-200mm（焦距图标调动，调节左右功能按钮设定数字，调节后按SET确认）

注意：主控闪光灯与从属闪光灯必须在ID设置一致情况下，设置频道和分组一致才能进行无线布光引闪(ID设置在自定义功能05界面，出厂默认关闭OFF，不需要调节)

定位和操作范围(无线闪光拍摄的示例)
- 使用一个从属单元进行自动闪光拍摄

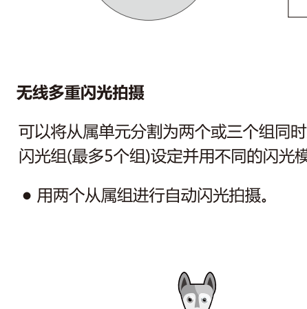


ℹ
- 使用附带的微型支架定位从属单元。
- 开始拍摄前请进行测试闪光和试拍。
- 受从属单元的位置, 周围环境, 天气状况等影响, 传输距离可能更短。

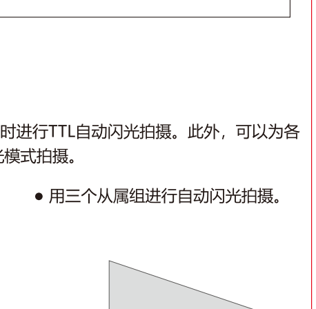
无线多重闪光拍摄

可以将从属单元分割为两个或三个组同时进行TTL自动闪光拍摄。此外，可以为各闪光组(最多5个组)设置并用不同的闪光模式拍摄。

- 用两个从属组进行自动闪光拍摄。



- 用三个从属组进行自动闪光拍摄。



其他应用

自动辅助对焦灯

在低亮度或低对比度的拍摄情况下，闪光灯内置的自动对焦辅助灯将开启，使自动对焦更容易。当对焦困难时，红色辅助对焦灯亮起；当对焦准确，辅助对焦灯自动熄灭。

位置	有效范围
中央	0.6~4米
边缘	0.6~2.5米

自动辅助对焦灯

在低亮度或低对比度的拍摄情况下，闪光灯内置的自动对焦辅助灯将开启，使自动对焦更容易。当对焦困难时，红色辅助对焦灯亮起；当对焦准确，辅助对焦灯自动熄灭。

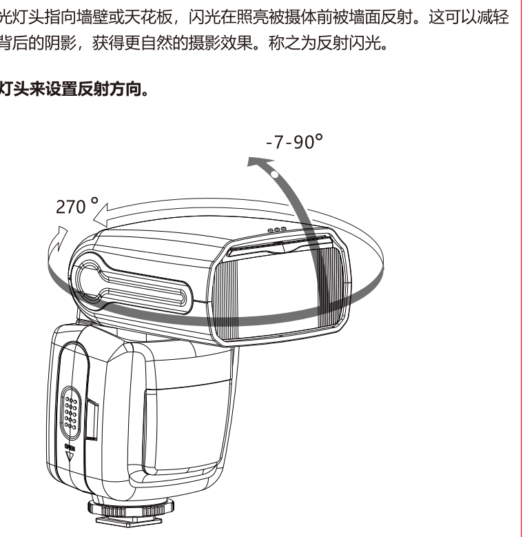
ℹ ● 用户在使用时，如发现辅助对焦灯未亮起，是因为相机已经处于准确对焦状态。

位置	有效范围
中央	0.6~10米 / 2.0~32.8英尺
边缘	0.6~5米 / 2.0~16.4英尺

反射闪光

通过将闪光灯头指向墙壁或天花板，闪光在照亮被摄体前被墙面反射。这可以减轻被摄体背后的阴影，获得更自然的摄影效果。称之为反射闪光。

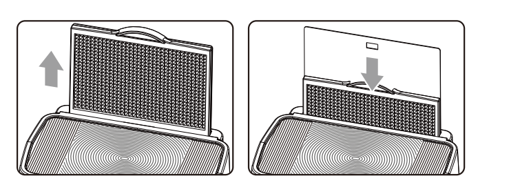
旋转闪光灯头来设置反射方向。



ℹ
- 如果墙壁或天花板太远，反射闪光可能太弱而导致曝光不足。
- 墙壁或天花板应该是平坦的、白色的以利于高效的反射。如果反射表面不是白色的，照片将出现偏色。

创建眼神光

使用眼神光板，您可以在被摄体的眼睛中创建眼神光以使面部表情更加生动。

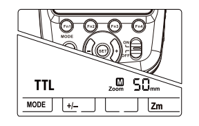


1. 将闪光灯头向上旋转90°。　2. 拉出广角散光板，同时弹出眼神光板。
3. 推入广角散光板。
- 仅推入广角散光板。● 按照反射闪光中相同的步骤进行。

▲
- 请将闪光灯头向前指然后向上旋转90度。如果左右旋转闪光灯头就不会产生眼神光。
- 要获得最好的眼神光效果，被摄体不能处于相机1.5米/4.9英尺以内。

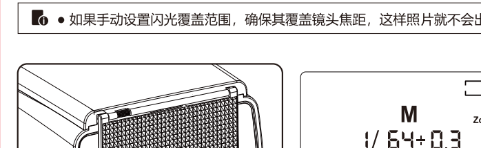
ZOOM：设置闪光覆盖范围并使用广角散光板

该闪光灯有两种变焦方式：自动变焦和手动变焦。可以设置闪光覆盖范围以匹配20-200毫米的镜头焦距。自动变焦时，焦距会随相机变焦镜头的改变而变化，以提供最佳闪光效果。同样，使用内置的广角散光板，闪光覆盖范围可以扩展为14毫米广角镜头。



手动变焦时，按下功能按钮4，ZOOM 变焦数值闪烁。
- 调节左右功能按钮更改闪光覆盖范围。
- 在 ZOOM 图标上方不显示<M>状态下，将自动设置闪光覆盖范围。

ℹ ● 如果手动设置闪光覆盖范围，确保其覆盖镜头焦距，这样照片就不会出现阴影边缘。



1. 使用广角散光板

拉出广角散光板并将其置于闪光灯头上。闪光覆盖范围将扩展至14毫米。
- 同时弹出眼神光板。请推回眼神光板。 ● 功能按钮4不起作用

2. 电池电量低时，电池符号< ▭ >会闪烁，此时请更换电池。

Fn：设置自定义功能

请对照以下图表本机应用栏，使用自定义功能来完成设置。

功能	功能符号	设置符号	设置和说明
回电声音	01-Sd on	ON	启动
		OF	关闭
低电声音	02-Lb on	ON	启动
		OF	关闭
背光显示	03-bL on	15秒	15秒后自动熄灭
		OF	一直熄灭
		ON	一直点亮
从属单元自动关闭时间	04-SL 30	30分钟	从属灯30分钟后关闭电源
		1H	从属灯1H后关闭电源
		2H	从属灯2H后关闭电源
ID	05-AF 1	1	OFF-99
版本号	06-Ur 2	2	版本号:2

1. 长按功能按钮3和功能按钮4进入自定义界面
2. 按功能按钮2选择自定义项目。
3. 按左右按钮选择自定义功能。
4. 按<SET>按钮确定。
5. 按功能按钮4退出Fn菜单。

保护功能

1. 热保护

- 为防止闪光灯头过热并损坏，请勿在1 /1功率时进行超过30次的快速连续闪光。30次连续闪光后，要让闪光灯至少冷却12分钟。
- 如您在进行超过30次连续闪光后马上继续进行更多次闪光，内部的防过热功能可能会被激活，使充电时间变为12秒以上。如果发生这种现象，请让闪光灯冷却约10分钟，闪光灯便会恢复正常。
- 热保护启动后，显示屏上 ▯ 的符号会显示。

激活热保护功能的连续闪光次数:

功率	次数
1/1	30
1/2 +0.7	40
1/2 +0.3	50
1/2	60
1/4(+0.3,+0.7)	100
1/8(+0.3,+0.7)	200
1/16(+0.3,+0.7)	300
1/32(+0.3,+0.7)	500
1/64(+0.3,+0.7)	1000
1/128(+0.3,+0.7)	

高速同步模式下，激活热保护功能的连续闪光次数:

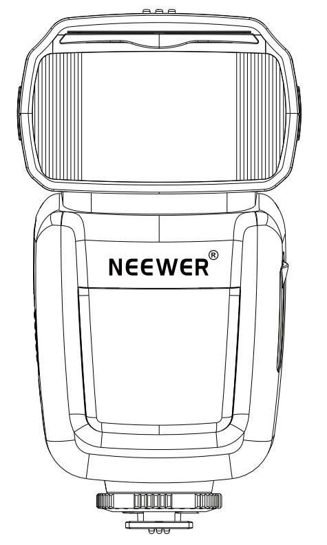
功率	次数
1/1	15
1/2(+0.3,+0.7)	20
1/4(+0.3,+0.7)	30
1/8(+0.3,+0.7)	
1/16(+0.3,+0.7)	40
1/32(+0.3,+0.7)	
1/64(+0.3,+0.7)	50
1/128(+0.3,+0.7)	

规格参数

型号		NW655
兼容相机		Nikon 数码单镜反光照相机
闪光指数 (1/1档位；200mm焦距)		60 (m ISO 100) 190 (feet ISO 100)
闪光覆盖范围		20 – 200mm (使用广角散光板为14mm)
		自动变焦 (自动设置适合镜头焦距和图像尺寸的闪光覆盖范围)
		手动变焦
		闪光灯头旋转/倾斜，水平0~270°，垂直-7°~90° (反射闪光)
闪光持续时间		1/300秒 - 1/20000秒
曝光控制系统		TTL 自动闪光、手动闪光
同步方式		高速同步(最高1/8000秒)，前帘同步，后帘同步
频闪闪光		具备(次数：100次；199Hz)
无线功能		主控单元，从属单元，关闭
可控制从属单元组		光学: S1 S2
		2.4G: A, B, C
传输范围(约)	光学	室内：12～15米/39.4~49.2英尺 室外：8~10米/26.2~32.8英尺 接收角度：水平±40°，垂直±30°
	2.4G	100m
频道	2.4G	32组：1~32
从属单元状态指示灯		红灯指示灯亮起
造型闪光		使用相机的景深预视按钮进行闪光
自动对焦辅助光有效范围(约)		中央：0.6 -10米 / 边缘：0.6-5米
AA型电池		镍氢电池(推荐)或LR6类型碱性电池*4节
回电时间		约 0.1-2.6秒(松下eneloop镍氢电池)，闪光灯准备就绪，LED红色指示灯亮起
全功率闪光次数		约230次(2500mA镍氢电池)
节能		闪光灯在无人操作90秒左右将会自动关闭电源。设置为从属单元时60分钟进入休眠状态。
同步触发方式		热靴，3.5mm同步线，无线控制
色温		5600±200
尺寸		78.5X62X195 mm
净重(不含电池)		365g

- 产品规格及外观如有变化，恕不另行通知。

NEEWER®
NW655 Set-top flash
Nikon User Manual



Thank you for purchasing this product

Before use, please read this user manual carefully in order to ensure your safety. Keep it properly for reference in future.

Preface

The roof flash models applicable to the Nikon series camera, compatible with TTL automatic flash. Use TTL flash light, you will get more simple shooting experience, under the condition of complex changes in light and can automatically obtain accurate flash exposure, shooting at ease. The product features outstanding performance in the following respects：

- **GN60 (m ISO 100, ZOOM 200mm), 22 dimming level (1/1~1/128)**
- **Compatible with Nikon TTL**

Support TTL flash automatically, can be used as a wireless multiple lights flash system master or slave unit, shooting is more simple and quick.

- **Broken code LCD screen**

Direct display, easy to operate

- **Built-in 2.4 G wireless transmission**

Transceiver, capable, creative

- **Wireless remote control power trigger**

Q-N trigger can be purchased separately to achieve wireless TTL control flash (not included)

- **Function is all ready, enjoy unlimited**

Support manual and frequency flash mode, high-speed sync/second curtain sync/such as flash exposure compensation function of TTL.
The flash, even every time the output brightness and color temperature consistent (5600±200K), the light evenly distributed.

▲ WARNING

1. Please stay dry.
2. Please do not disassemble the product without permission, such as product failure by the company or authorized maintenance personnel for inspection maintenance.
3. Please do not let children contact with this product.
4. It is prohibited to remove the, impact, extrusion or into the fire, if severe ballooning, please do not continue to use. Please do not put in more than 50 degrees of high temperature environment.
5. Do not use flash head is the eye flash (especially the baby's eyes), otherwise it may cause visual impairment in a short period of time.
6. Please do not in the vicinity of chemicals, combustible gas or other special material use flash light, these substances under special circumstances may be sensitive to the instant of the flash light, could lead to fire or electromagnetic interference. In these cases, please pay attention to relevant warning labels.
7. This product is not waterproof, please pay attention to waterproof and damp environment in rainy day.
8. In case of any trouble, please turn off your flash power immediately.

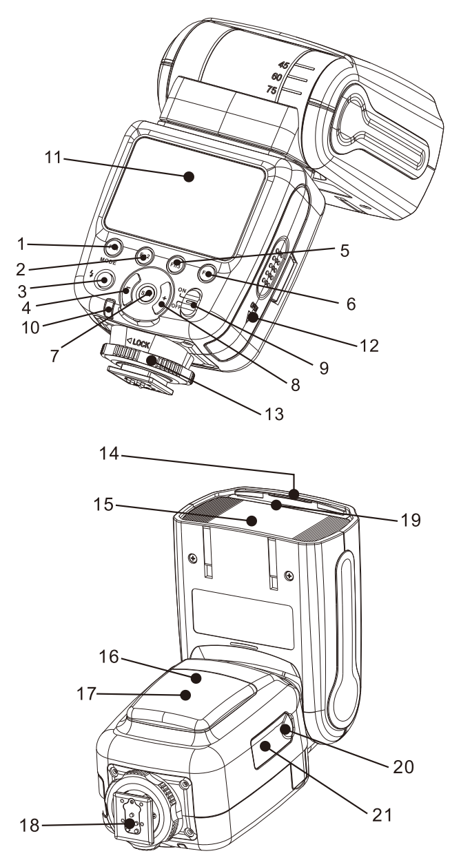
- **Standard items**

1. Lamp body 2. Micro base 3. Protect the package 4. Instruction manual

- Specifications used in the following warning signs:

▲ The "carefully" warning symbol to avoid shooting problems.
ℹ The "notice" to provide supplementary information symbols.

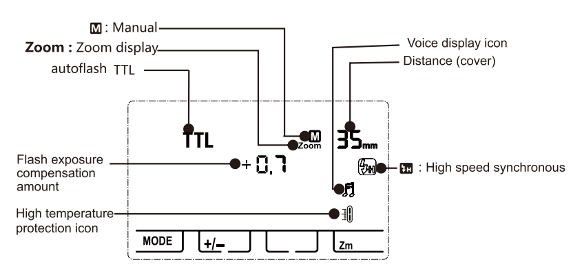
Component Name



- **Control Panel**

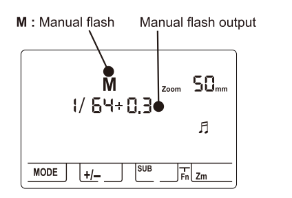
1. **<MODE>**Flash mode button/function button 1
2. Function button 2　3. < ⚡ >Test button　4. Function left button
5. Function button 3　6. Function button 4　7. **<SET>** set button
8. Function right button　9. **ON/OFF** power switch　10. Return indicator lamp　11. Display　12. Battery compartments　13. Fixed a knob
14. Eye plate　15. Flash head　16. Slave units status indicators
17. Auxiliary focus light　18. Hot shoe　19. Built-in wide-angle plate
20. External power supply socket　21. Synchronous jack

- **LCD liquid crystal display**

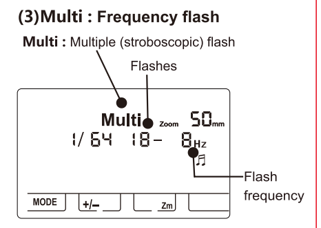


ℹ
- Screen will display only the current application settings.
- According to above the function button 1 to function button 4 function (such as +/–) according to the set of state change.
- When the action button or dial, liquid crystal display light.
- Press and hold function button 2 and function button 3 at the same time, the factory settings can be restored after 3 seconds.

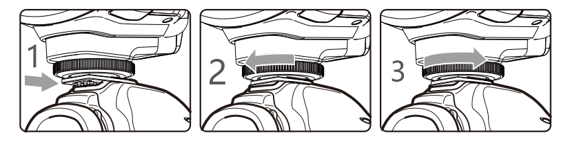
(2)M: Manual flash



(3)Multi : Frequency flash



Loading and unloading of the flash



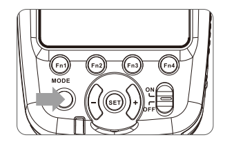
1. Install the flash.
- Sliding flash block to make it fully inserted into the camera's hot shoe.

2. Tighten the flash.
- Spin lock knob on the fixed seat until the lock flash.

3. Remove the flash.
- Spin lock knob on the fixed seat, unlocked until the flash.

Power management

* The ON/OFF power switch controls the opening and closing of the product. Turn off the power when not in use for a long time. This product is designed with automatic power off function.



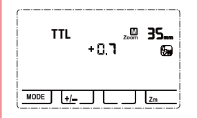
Note: When the flash is unattended operating for a long time (approximately 90 seconds), the flash will automatically turn off. Press the flash test button < ⚡ > on the light to activate it.

Flash mode：TTL automatic flash mode

The flash has three modes: TTL auto flash, M manual flash, and Multi stroboscopic flash. In TTL mode, the camera's metering system will detect the flash light reflected from the main body, thereby automatically adjusting the flash output to achieve a balanced exposure of the main body and background. Support exposure compensation, high-speed synchronization, second-curtain shutter synchronization, exposure lock, aperture preview and contrast flash, etc. Press the <MODE> mode selection button, and the three flash modes will appear on the LCD screen in sequence.

TTL mode

By pressing the < MODE > mode selection button, set the flash to <TTL>, can make flash into TTL mode.

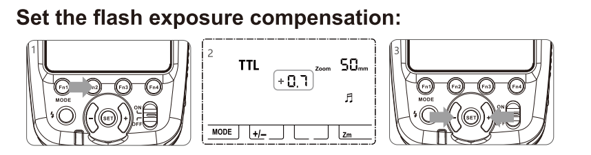


- Half focus according to the camera shutter button.
- In the moments before the shutter release a flash, flash receiving the main flash camera information.

+/– Flash exposure compensation

The FEC range is adjustable from-3 to +3 in precision 1/3 f-stop increments.
Due to the demand of environment
need to fine tune the TTL system, this feature is very useful.

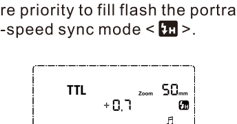
Set the flash exposure compensation:



1. Press the function button 2 < +/– >, make flash exposure compensation icon on the screen.
2. Set the flash exposure compensation amount.
- Adjust the left and right function buttons to set the amount of exposure compensation.
- "0.3" means 1/3 gear, "0.7" means 2/3 gear.
- To cancel the flash exposure compensation, will flash exposure compensation amount is set to"+0".
3. Press the < **SET** >settings button, determine flash exposure compensation.

High speed synchronization

With high-speed sync (FP flash), you can use the flash simultaneously at all shutter speeds. In the high-speed sync mode, it is more convenient to use the aperture priority to fill flash the portrait.
Selecting high-speed sync mode < >.



1. After the flash light is installed on the camera and set the flash sync speed to 1/320S (auto FP) or 1/250S (auto FP) in the Nikon camera body settings, half press the shutter button and the flash screen displays high-speed sync< > icon. At this time, the flash high-speed sync function is activated.
2. Turn the camera dial, the shutter speed can be set to 1/250S or higher shutter speed.
3. To confirm whether the FP high-speed sync function is currently being used, check the shutter speed through the camera viewfinder to determine it. If the shutter speed is 1/250S or higher, shows the high-speed sync function is activated.

- If, in the Nikon fuselage set will flash sync speed s (FP) automatically set to 1/320S or 1/250S (FP) automatically, no matter how much is the actual shutter speed, flash < > icon is displayed on the screen.
- Using high-speed synchronous, the higher the shutter speed, the less the effective range.
- To restore normal flash, please in Nikon fuselage Settings, set the flash sync speed is not automatic (FP) option, half press the shutter, the flash on the screen < > icon will disappear.
- Low in high-speed synchronous mode. Unable to set frequency flash.
- After high-speed synchronous flash 15 consecutive, flash heat protection function may be activated.

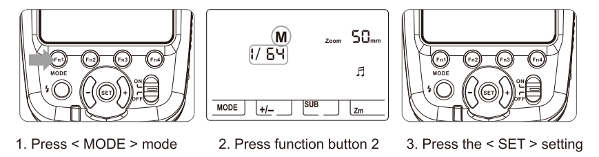
▷▶ Second curtain shutter synchronization

With the slow shutter, you can create a ray path behind the object. The flash flashes immediately before the shutter closes.

1. In the Nikon camera body settings, select Rear flash mode to achieve rear-curtain synchronization.
2. In the Nikon camera body settings, select non-Rear flash mode to cancel the rear-curtain synchronization.

Flash mode: M manual flash

You can set the flash output in increments of 1/3 between 1/128 power and 1/1 full power. To get the correct flash exposure, use a hand-held flash meter to determine the required flash output.



1. Press < MODE > mode to select 1 button and display < M > on the screen.
2. Press function button 2 flash output power icon to jump, adjust left and right function button to set flash output power.
3. Press the < SET > setting button to determine the flash exposure compensation.

Display flash output

When the flash output is changed during the shooting process, the following table will clearly show how the aperture value is changed. For example 1/4+0.3→1/4+0.7. You can see how the aperture values change when you increase or decrease the flash output.
For example, when the flash output is reduced to 1/2, 1/2+0.7 or 1/2+0.3, and then increased to 1/2, 1/2+0.3, 1/2+0.7, 1/1 will be displayed.

Reducing flash output index →

1/1	1/2+0.7	1/2+0.3	1/2	1/4+0.7	1/4+0.3	1/4	......

← Increasing flash output index

S1 Optical control unit settings

In the M manual flash mode, short press the function button for 3, to enter the S1 function, the flash can be used as a secondary light to create a variety of lighting effects, suitable for manual flash environment. It will trigger the flash in synchronization with the first flash of the main flash, the effect is the same as using the wireless flash trigger.

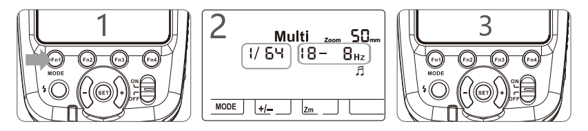
S2 light control unit settings

In M manual flash mode, short press the function button 3 to enter the S1 function, release and then press the function button 3 to use the S2 function, the flash can be used as a secondary light, suitable for TTL flash environment. With anti-flash function, using a camera with a pre-flash function can use light control to achieve synchronized shooting. It will trigger the flash in synchronization with the second flash of the main flash, that is, 2 light-controlled flashes. When exiting, in the S2 function interface, short press function button 3 to exit.

ℹ ● Only in M mode can S1/S2 flash mode be supported.

Flash mode：Multi stroboscopic flash

With stroboscopic flash, a series of fast flashes can be produced. It can take multiple images of moving objects on a single photograph. You can set the flash frequency (the number of flashes per second, expressed in Hz), the number of flashes and the flash output.



1. Press < **MODE** > flash mode to select the button and display < **MULTI** > on the screen.
2. Set the flash frequency and the number of flashes.
- Press the <SET> button, the flash times icon will bounce, adjust the left and right function buttons to set the number.
- Press the <SET> button twice, the flash frequency icon will bounce, adjust the left and right function buttons to set the number.
3. Press function button 2, the flash output power icon bounces, adjust the left and right function buttons to set the flash output power. Press the <SET> button to confirm, and all settings will be displayed.

Calculate shutter speed

In the process of stroboscopic flash, the shutter should be kept open until the flash stops. Use the following formula to calculate the shutter speed, and then use the camera to set it.

Flash number/flash frequency = shutter speed

For example, if the number of strokes is 10, the frequency of strokes is 5 Hz, and the shutter speed is at least 2 seconds.

▲ In order to prevent the flash head from overheating and damage, do not take more than 10 consecutive stroboscopic shots. After 10 flashes, please let the flash cool for at least 15 minutes. If you attempt to perform more than 10 consecutive stroboscopic shots, the flash may stop automatically to prevent the flash head from overheating. If this happens, let the flash cool for at least 15 minutes.

ℹ
- It is more effective to use stroboscopic flash in front of a dark background for highly reflective subjects.
- It is recommended to use a tripod and remote control switch.
- Stroboscopic flash cannot be set when the flash output is 1/1 and 1/2.
- You can also use "bulb" when stroboscopic flashing.

Maximum stroboscopic number

Flash output \ Hz	1	2	3	4	5	6-7	8-9	10	20-50	60-199
1/4	7	6	5	4	4	3	3	2	2	2
1/8	14	14	12	10	8	6	5	4	4	4
1/16	30	30	30	20	20	20	10	8	8	8
1/32	60	60	60	50	50	40	30	20	16	12
1/64	90	90	90	80	80	70	60	50	30	20
1/128	100	100	100	100	100	90	80	70	40	40

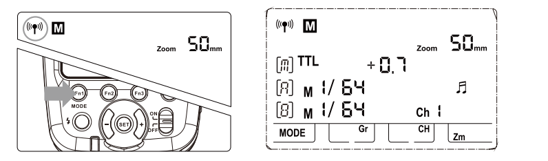
Wireless Flash Shooting: Radio (2.4G) Transmission

- The NW655 installed on the camera is called the main control unit, and the NW655 controlled by wireless is called the Slave unit.
- Flash signal transmitter Q-N (purchased separately) wireless control can also be used as the slave unit of NW655. For a detailed description of setting the function of the main control unit, please refer to the instructions for the use of the signal transmitter.

1. Wireless setting

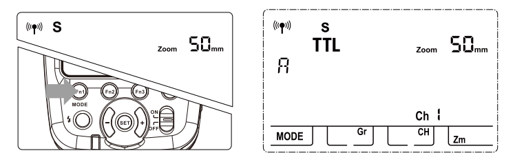
You can switch between normal flash and wireless flash. For normal flash, be sure to set the wireless setting to "Off".

Main control unit settings

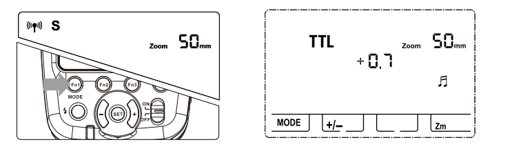


Long press function button 1 make the screen display < > and < M >.

Slave unit settings



First long press function button 1 for the first time make the screen display < >and < M >.
Then long press function button 1 a second time make the screen display < > and < S >.



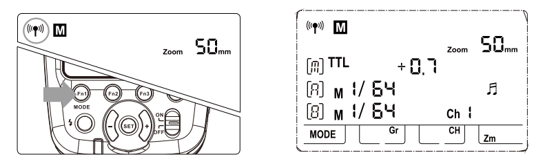
In slave unit interface mode, long press function button 1 to exit and display the exit interface.

Set the main control unit: group channel parameters

2. Set up communication channels

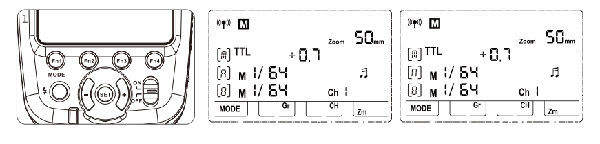
TTL, M wireless flash shooting group and parameter settings: first enter the main control unit setting interface, as follows

Main control unit settings



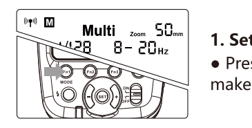
Long press function button 1 make the screen display < > and < M >.
Press function button 2 to select the main control group Ⓜ and a / B / C, after selecting the corresponding group, then press function button 1 <MODE>, select TTL, M, OF options (power adjustment can be adjusted by pressing the left and right buttons), M group control main light mode and parameters.

Channel settings

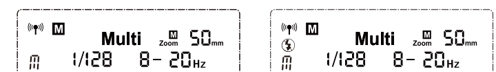


1. Lightly press function button 3, the channel flashes, press the left and right function buttons to adjust the channel, and then press SET to confirm.
2. Press function button 4 again, the flash coverage value flashes, press the left and right function keys to adjust the flash coverage, and then press set to confirm.
3. Press the SET button to select the main control group Ⓜ, and press the function button 1 to select TTL, M, OF (TTL: when the auxiliary light is flashing, the main lamp will flash in TTL mode. M: When the auxiliary lamp is flashing, the main lamp itself will flash in M mode. OF: the main lamp will not flash when the auxiliary lamp is off.)

3. Multi:Manual wireless flash shooting



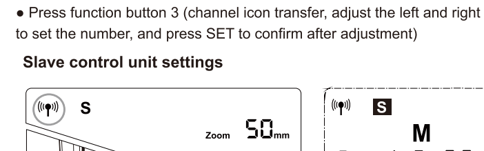
1. Set <Multi> strobe mode.
- Press function button 1, <MODE> button to make the screen display <Multi>.



2. Flash power / flash frequency / flash number settings.

- Press function key 2 to select the main control group Ⓜ and (A / B / C). After selection, press function button 1 < MODE > to select on and off options. Function button 4 can adjust zoom.
- Press the SET button 1 time to flash the flash output power icon (flash output power icon transfer, adjust the left and right function buttons to set the number), press the SET button 2 time (flash number icon transfer, adjust the left and right function buttons to set the number), press the SET button 3 time down (flash frequency icon transfer, adjust the left and right function buttons to set the number)
- Press function button 3 (channel icon transfer, adjust the left and right function buttons to set the number, and press SET to confirm after adjustment)

Slave control unit settings

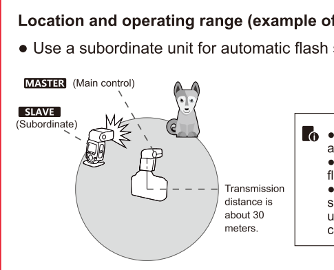


In the master interface mode, long press function button 1 again to enter the slave interface make the screen display < > and < S >.

1. Press function button 1 to select different modes TTL, M, Multi.
2. Press function button 2 to select the group (A/B/C/D/E)
3. Press function button 3 to select channel 1-32 (channel icon transfer, adjust the left and right function buttons to set the number, press SET to confirm after adjustment)
4. Press function button 4 to select focal length 20-200mm (the focal length icon is adjusted, adjust the left and right function buttons to set the number, and press SET to confirm after adjustment)

Note: The master flash and slave flash must be in the same ID setting, set the channel and group to be the same for wireless lighting flash (ID is set in the custom function 05 interface, the factory default is OFF, no adjustment is required)

Location and operating range (example of Wireless Flash photography)
- Use a subordinate unit for automatic flash shooting

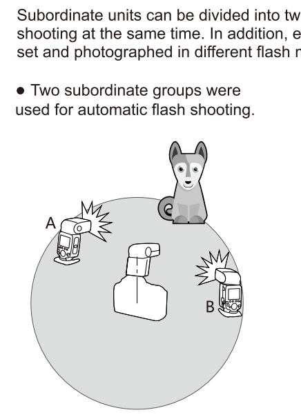

MASTER (Main control)
SLAVE (Subordinate)
Transmission distance is about 30 meters.

ℹ
- Position the subordinate unit with the attached micro-bracket.
- Before starting shooting, please test flash and test shoot.
- The transmission distance may be shorter due to the location of subordinate units, the surrounding environment, weather conditions and so on.

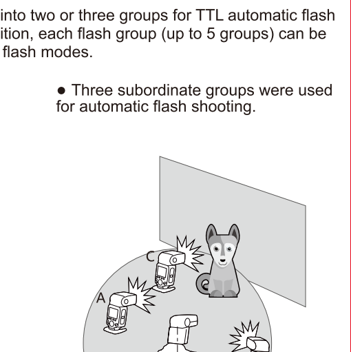
Wireless multi-flash shooting

Subordinate units can be divided into two or three groups for TTL automatic flash shooting at the same time. In addition, each flash group (up to 5 groups) can be set and photographed in different flash modes.

- Two subordinate groups were used for automatic flash shooting.



- Three subordinate groups were used for automatic flash shooting.



Other applications

Auxiliary focus light automatically

Under the condition of low brightness or contrast of filming, flash built-in af assist lamp will open, make it easier for af. When af difficult, auxiliary focus light glows red; When the focus accurately, auxiliary focus lights automatically out.

location	Effective range
Center	0.6~4m
Edge	0.6~2.5m

Auxiliary focus light automatically

Under the condition of low brightness or contrast of filming, flash built-in af assist lamp will open, make it easier for af. When af difficult, auxiliary focus light glows red; When the focus accurately, auxiliary focus lights automatically out.

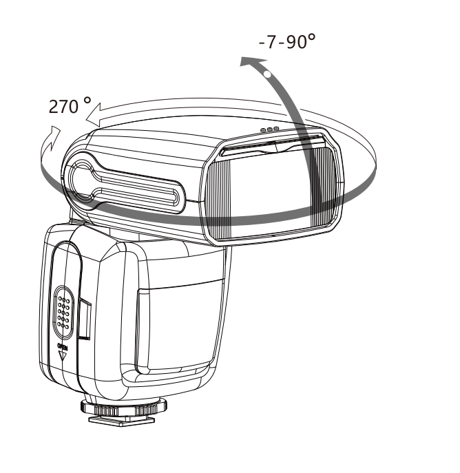
ℹ ● Users in the use, such as found auxiliary focusing the light not bright, because the camera has been in a state of focusing accurately.

location	Effective range
Center	0.6~10m / 2.0~32.8 ft
Edge	0.6~5m/ 2.0~16.4 ft

Reflection flash

By pointing the flash head at the wall or ceiling, the flash is reflected by the wall before illuminating the subject. This can reduce the shadow behind the object and get a more natural photographic effect. It's called reflective flash.

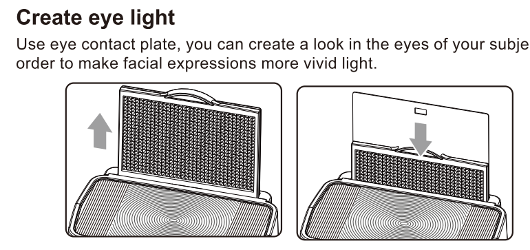
Spin flash head to set the direction of reflection.



ℹ
- If the wall or ceiling too far, reflex flash might be too weak and cause underexposure.
- The walls or ceilings should be flat and white to facilitate efficient reflection. If the reflective surface is not white, the photograph will be biased.

Create eye light

Use eye contact plate, you can create a look in the eyes of your subject in order to make facial expressions more vivid light.



1. Will flash head upward rotation 90°。　2. Pull out wide angle plate, at the same time the pop-up eye plate.
3. Push into wide angle astigmatism board.
- Only wide-angle astigmatism plate is pushed in. ● Follow the same steps in the reflective flash.

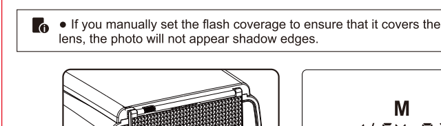
▲
- Please rotate the flash head refers to forward and upward 90°, if around rotating flash head won't produce eye light.
- To get the best eye light effect, your subject is not 1.5 m / 4.9 feet in the camera.

ZOOM: Set flash coverage and use wide-angle astigmatism

There are two kinds of the flash zoom mode: automatic zoom and manual zoom. You can set the flash coverage to match the lens focal length of 20-200 mm. Zooms in, the focus will change along with the change of camera zoom lens, in order to provide the best flash effect. Likewise, use the built-in wide-angle plate, flash range can be extended for 14 mm wide angle lens.

When zooming manually, press function button 4, ZOOM zoom value flickers.
- Adjust left and right function buttons to change flash coverage.
- Flash coverage will be set automatically when < M > is not displayed above the ZOOM icon.

ℹ ● If you manually set the flash coverage to ensure that it covers the focal length of the lens, the photo will not appear shadow edges.



1. Use wide-angle astigmatism board

Pull out the wide-angle astigmatism board and place it on the flash head. The flash coverage will extend to 14 mm.
- At the same time pop up the eyesight board. Push back the eyeplate, please.
- Function button 4 does not work

2. When the battery power is low, the battery symbol < ▭ > will flicker, please replace the battery at this time.

Fn: Setting up custom functions

Please refer to the chart below for the local application bar and use the custom function to complete the settings.

Function	Functional symbols	Set symbols	Settings and instructions
Recycling voice	01-Sd on	ON	Start-up
		OF	Close
Low power voice	02-Lb on	ON	Start-up
		OF	Close
Backlight display	03-bL on	15S	Auto-extinguishing after 15 seconds
		OF	Always extinguished
		ON	Lighten up all the time
Auto closing time of Slave unit	04-SL 30	30min	Turn off the power supply after 30 minutes for the subordinate lamp
		1H	Power off after 1H of subordinate lamp
		2H	Turn off the power after 2H subordinate lamp
ID	05-AF 1	1	OFF-99
Version number	06-Ur 2	2	Version number:2

1. Press function button 3 and function button 4 to enter the custom interface.
2. Press function button 2 to select a custom project.
3. Press left and right buttons to select custom functions.
4. Press the < SET > button to confirm.
5. Press function button 4 to exit the Fn menu.

Protection function

1. Thermal protection

- In order to prevent overheating and damage of the flash head, do not flash more than 30 times at 1/1 power. After 30 consecutive flashes, let the flash cool for at least 12 minutes.
- If you continue to flash more than 30 consecutive flashes, the internal anti-overheating function may be activated, making the charging time more than 12 seconds. If this happens, please let the flash cool for about 10 minutes, and the flash will return to normal.
- When the thermal protection is activated, the symbol ▯ on the display screen will be displayed.

Number of consecutive flashes that activate the thermal protection function:

Power	Number
1/1	30
1/2 +0.7	40
1/2 +0.3	50
1/2	60
1/4(+0.3,+0.7)	100
1/8(+0.3,+0.7)	200
1/16(+0.3,+0.7)	300
1/32(+0.3,+0.7)	500
1/64(+0.3,+0.7)	1000
1/128(+0.3,+0.7)	

In high-speed synchronization mode, the number of consecutive flashes that activate the thermal protection function is as follows:

Power	Number
1/1	15
1/2(+0.3,+0.7)	20
1/4(+0.3,+0.7)	30
1/8(+0.3,+0.7)	
1/16(+0.3,+0.7)	40
1/32(+0.3,+0.7)	
1/64(+0.3,+0.7)	50
1/128(+0.3,+0.7)	

Specification parameter

Model		NW655
Compatible camera		Nikon digital single lens reflex camera
Flash index (1/1 gear; 200mm focal length)		60(m ISO 100) 190(feet ISO 100)
Flash coverage		20 – 200mm (14 mm wide-angle astigmatism plate)
		Auto focus (automatically set flash coverage suitable for lens focal length and image size)
		Manual zoom
		Flash head rotation/tilt, level 0~270°, vertical -7°~90° (reflective flash)
Flash duration		1/300-1/20000 seconds
Exposure control system		TTL Automatic flash, manual flash
Synchronization mode		High-speed synchronization (up to 1/8000 second), front-curtain synchronization, rear-curtain synchronization
Stroboscopic flash		Have (number: 100 times;199Hz)
Wireless function		Main control unit, subordinate unit, close
Controllable subordinate unit group		Optics : S1 S2
		2.4G: A, B, C
Transmission range (about)	Optics	Indoor: 12-15 meters/39.4-49.2 feet Outdoor: 8-10 meters/26.2-32.8 feet Receiving angle: horizontal (±40 degrees), vertical (±30 degrees)
	2.4G	100m
Channel	2.4G	32 group：1~32
Subordinate unit status indicator		Red light indicator lights up
Modelling of flash		Flash using the camera's depth-of-field preview button
Autofocus auxiliary optical effective range (about)		Center: 0.6-10m/edge: 0.6-5m
AA battery		Nickel-hydrogen batteries (recommended) or LR6 alkaline batteries*4 sections
Recycle time		About 0.1-2.6 seconds (Panasonic eneloop Ni-MH battery), the flash is ready, and the red LED indicator lights up
Full power flash number		About 230 times (2500mA Ni-MH battery)
Energy saving		The flash light will automatically power off after about 90 seconds of unattended operation. When set as a slave unit, it enters the sleep state for 60 minutes.
Synchronous trigger mode		Hot boots, 3.5mm synchronous line, Wireless control
Color temperature		5600±200
Size		78.5X62X195 mm
Net weight (including battery)		365g

- Specification and appearance may change without notice.

FCC Warning:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.