my point of view

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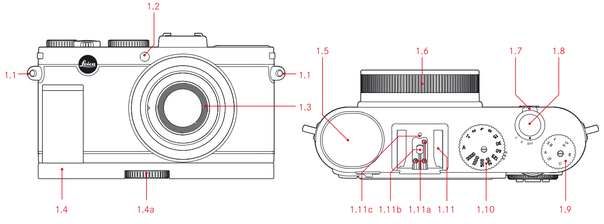
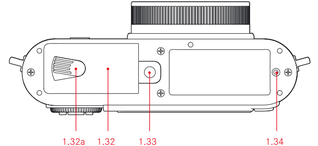
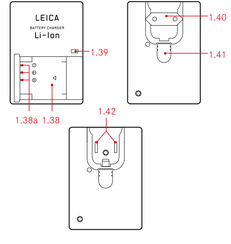
93383 V/12/AV/B

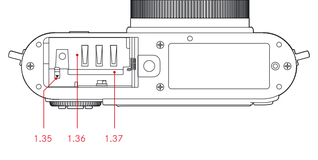
LEICA X2

说明书/ Instructions









LEICA X2
使用说明书

English instructions on pages 82 - 164


LEICA X2
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ELMARIT 1:2.8/24 ASPH.
4236510

前言

亲爱的顾客：

希望您的全新LEICA X2能为您带来无比的乐趣与成就，高性能 LEICA DC ELMARIT 1:2.8/24 mm ASPH. 镜头将为您提供绝佳的照片品质。
LEICA X2 的全自动程设曝光控制模式和自动闪光功能，能让您轻松享受拍照乐趣。您也可以随时使用手动设定，自行完成构图。
如果在曝光难度非常高的条件下拍照，您可以选择各种不同的特殊功能改善照片品质。
请仔细阅读本手册，充分掌握 LEICA X2 的所有功能。

提供配件

第一次使用LEICA X2之前，先检查所提供的配件是否完整。

A. 电池 LEICA BP-DC8
(订单号 18 706)

B. 电池盒
(订单号 423-089.003-012)

C. 电池充电器 BC-DC8，含可转换插头
(订单号 423-089.803-008)

D. USB 线
(订单号 423-089.003-022)

E. 真皮相机腕带
(订单号 439-612.060-000)

F. 镜头盖
(订单号 423-089.003-024)

G. 热靴 / 取景器插槽盖
(订单号 439-097.001-026)

H. 相机登录卡（包括TAN）用以下载 Adobe® Photoshop® Lightroom® (必须先在 Leica Camera AG 首页完成相关登录)

本手册以100%无氯漂白纸印刷，高品质制程既防水，又不会增加环境负担。

我们产品文件的 CE 标志符合现行 EU 准则的基本规定。

警告讯息

- 现代电子元件会对静电放电产生灵敏的反应，例如：当您走过人造地毯时，会轻易汲起几十万瓦的电荷，因此当您碰触 LEICA X2（特别是放置于导电表面上）时，将会产生放电。如果只有相机外壳受到影响，内部元件将不会因为放电而损坏。然而，尽管受到内建安全电路的保护，但为了安全上的理由，最好不要碰触外部触点（例如相机底座)。
- 请勿使用光学微纤清洁布（合成布）清洁触点，应使用棉质或亚麻清洁布进行清洁。碰触触点之前，可以先故意碰触暖气管或水管（具导电性的接地材料)，确定已经放掉所有静电电荷。您也可以将 LEICA X2 储藏在干燥场所，并且盖上镜头盖或接口盖，避免造成触点变脏或氧化。
- 请只使用建议的配件，避免故障、短路或触电。
- 请勿企图拆下机身（护盖）零件；只能由授权服务中心提供专业维修服务。

法律注意事项

- 务必遵守著作权法的规定。对预录的媒体（如录影带、CD 或其他已发行或播放的材料）进行录影或发行可能触犯著作权法。
- 此亦适用于所提供的软体。
- SD、HDMI 及 USB 标志为登录商标。
- 本手册提及之其他名称、公司或产品名称皆为各相关公司之商标或登录商标。

处理电器及电子设备

(适用于EC 国家及其他拥有隔离式废弃物收集系统的欧洲国家)

本产品含有电气及电子元件，不可做为一般家庭垃圾处理！
本产品应交由当地政府设置的废弃物回收站处理，此处理方式对您并不会造成任何不便。
如果本产品使用可更换（可再充电）的电池，必须先取出电池，视需要另依相关法律处理。
如需相关详细资讯，请洽询当地政府、废弃物处理机关，或购买本产品的。

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前视图 (已装上选购的握把，闪光灯缩回)

1.1 相机腕带的穿孔

1.2 自拍计时器LED / 自动对焦辅助灯

1.3 镜头

1.4 握把（选购），包括

a. 锁紧螺丝

俯视图

1.5 闪光灯

1.6 附件螺纹保护环

1.7 配备止动位置的主开关，用于：

- **OFF** (关闭相机)
- **S** (单拍)
- **C** (连拍)
- ⏲ (自拍计时器)

1.8 快门释放钮

1.9 光圈转盘，包括

- **A** 用于自动光圈控制（速度优先）的止动位置

1.10 快门速度转盘，包括

- **A** 用于自动快门速度控制（光圈优先）的止动位置，

1.11 闪光 (热) 靴，包括

a. 中央 (闪光) 触点

b. 控制触点

c. 锁定销孔

后视图

1.12 **INFO** 按钮，用于：

- 在录影和检视模式下选择监视器显示
- 将手动调整过的自动对焦框重设至中心
- 打开解析度、压缩比、白平衡及影像稳定状态的设定画面（按住1秒或以上之后消失约5秒）

1.13 **ISO** 按钮，用来调出感光度选单

1.14 **WB** 按钮，用来调出白平衡选单

1.15 **DELETE/FOCUS** 按钮，用于：

- 调出删除选单
- 调出对焦模式选单
- 启动自动对焦框

1.16 **PLAY** 按钮，用于：

- 启动 (连续) 检视模式
- 回到完全 1:1 照片显示

1.17 闪光灯释放滑杆

1.18 电子取景器插槽（插槽盖已取下[1]）

1.19 对焦 / 曝光状态指示灯

(只有在按压快门释放钮压至压力点时才会亮起，不适用于手动对焦)

a. 闪烁： 无法对焦

b. 亮起： 对焦及曝光皆完成设定并且锁住

1.20 设定轮，用于：

- 手动对焦
- 卷动选单目录
- 卷动照片记忆

[1]只适用于LEICA EVF2电子取景器(请参阅第72页）

1.21 USB 及 HDMI 插孔上方的护盖

1.22 设定转盘，用于：
- 卷动选单及子选单项目清单
- 设定曝光补偿、曝光包围、闪光灯曝光包围值
- 卷动照片记忆
- 放大 / 缩小观赏中的照片

1.23 **EV+/-**方向按钮，用于：
- 打开曝光补偿、曝光包围及闪光灯曝光补偿选单
- 卷动选单及子选单的项目清单
- 卷动照片记忆
- 自动对焦区域选择

1.24 ϟ方向按钮，用于：
- 打开闪光灯模式选单
- 进入子选单
- 卷动照片记忆
- 自动对焦区域选择

1.25 **MENU/SET** 按钮，用于：
- 打开选单
- 储存选单设定并离开子选单和选单

1.26 **AF/MF**方向按钮，用于：
- 打开对焦模式选单
- 卷动选单及子选单的项目清单
- 卷动照片记忆
- 自动对焦区域选择

1.27 ⏲方向按钮，用于：
- 打开自拍计时器选单
- 离开子选单及选单，但不储存选单设定
- 自动对焦区域选择

1.28 LED表示载入检视模式资料 / 记录影像资料
(在所有模式下皆短暂亮起，关闭监视器后永久亮起)

1.29 监视器

右视图 (盖子已打开)

1.30 USB 插口

1.31 HDMI 插口

底视图

1.32 电池室 / 记忆卡插槽盖，含
a. 锁定杆

1.33 三架脚螺纹 A$^1/_4$, DIN 4503 ($^1/_4$")

1.34 握把导销孔 (盖子已打开)

1.35 电池锁定滑杆

1.36 电池室

1.37 记忆卡插槽

充电器

1.38 电池充电座，包括
a. 触点

1.39 状态 LED

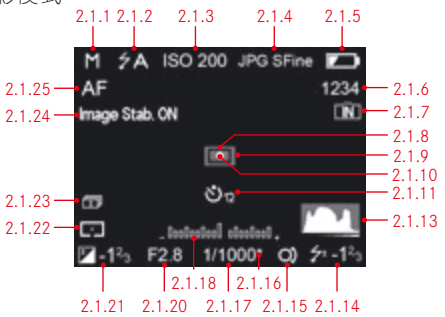
1.40 可转换电源插头

1.41 插头锁定钮(已拆卸可转换插头)

1.42 触销

显示屏上的显示

2.1 录影模式



附注：
此处及本说明书其它位置所列出之显示画面适用于机身上之荧幕及选购之外接式电子取景器，若选购之外接式电子取景器电源为关闭状态，则此处之说明仅适用于机身上之荧幕。
有关 Leica电子取景器EVF2的详细资讯，请参阅P45及取景器使用说明。

2.1.1 曝光模式

a. **P**: 程式化自动曝光模式
b. **A**: 光圈优先模式
c. **T**: 速度优先模式
d. **M**: 手动设定快门速度及光圈

2.1.2 闪光灯模式
(适用于内置及外接闪光灯单元，如果闪光灯尚未就绪则闪红色灯，其余情形皆闪白色灯)

a. A: 闪光灯自动启动
b. A: 闪光灯自动启动，包括预闪光
c. : 闪光灯手动启动
d. : 闪光灯手动启动，包括预闪光
e. S: 闪光灯自动启动，快门速度较慢
f. S: 闪光灯自动启动及预闪光，快门速度较慢
g. SLOW: 固定闪光功率释放从属闪光灯

2.1.3 ISO 感光度
(闪光灯关闭后，出现在位置2.1.2 /
即使荧幕在按下快门释放按钮时已关闭，画面仍会显示自动感光度数值。)

a. AUTO ISO
b. 100
c. 200
d. 400
e. 800
f. 1600
g. 3200
h. 6400
i. 12500

2.1.4 补偿率 / 档案格式

a. JPG 极精细
b. JPG 精细
c. **DNG+ JPG** 极精细
d. DNG+ JPG 精细

2.1.5 电池的电量

a. ▬:电量足够

b. ▬:电量下降

c. ▬:电量不足

d. ▭:有更换或充电的必要

2.1.6 画格数(余下相片数目)

(如果记忆容量不足，则以闪烁的0表示)

2.1.7 表示内部记忆体被用来储存影像
(未装入记忆卡的情形)

2.1.8 重点自动对焦场
(2.1.9 的替代项目)

2.1.9 一般自动对焦场

2.1.10 表示重点测光已开启

2.1.11 拍计时器(2.1.9 ~ 2.1.12 的替代项目)

a. : 2 秒延迟

b. : 12 秒延迟

2.1.12 放大影像的中央部位
(仅在手动对焦时出现)

2.1.13 长条图
(只有在启动时才会出现；闪光灯开启 / 快门速度低于 1/2 秒时显示黄色；其他时候则显示白色)

2.1.14 闪光灯曝光补偿已设定，包括补偿值

2.1.15 表示程式转换 (PS) 选项/表示用设定转盘设定最低快门速度
(仅在程式化自动曝光模式下出现 / 仅适用于快门速度转盘设定为2+的情形)

2.1.16 表示一组转换数值
(仅在移动之后于程式化自动曝光模式下出现)

2.1.17 快门速度
(在手动设定【即速度优先及手动模式】时出现；在自动设定下轻按快门释放按钮【即程式化自动曝光及光圈优先模式】后出现；若在程式化自动曝光、光圈优先及速度优先模式下超过设定范围，则在将快门释放按钮按至压力点时为红色，在其余情况下为白色)

2.1.18 光平衡
(2.1.19的替代项目，在手动设定快门速度及光圈时出现)

2.1.19 距离刻度盘
(仅在手动对焦时出现，提供公尺及英尺刻度)

2.1.20 光圈值
(在手动设定【即光圈优先及手动模式】时出现；在自动设定下轻按快门释放按钮【即程式化自动曝光及速度优先模式】后出现；若在程式化自动曝光、光圈优先及速度优先模式下超过设定范围，则在将快门释放按钮按至压力点时为红色，在其余情况下为白色)

2.1.21 曝光补偿已设定，包括补偿值
(不适用于手动设定快门速度及光圈)

2.1.22 测光法

a. ▭:中央重点测光

b. ▭:多场测光

c. • :重点测光

2.1.23 自动曝光包围已启动

2.1.24 影像稳定

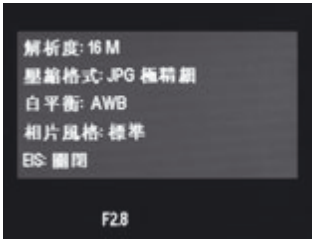
2.1.25 对焦模式

a. **AF**: 自动对焦

b. **MF**: 手动对焦

显示屏上的显示

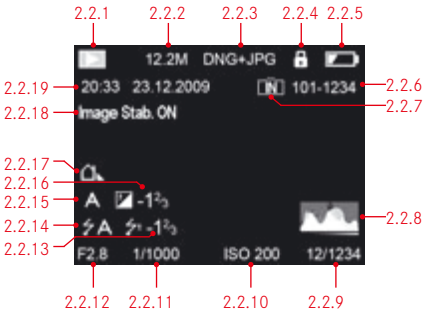
2.1 录影模式

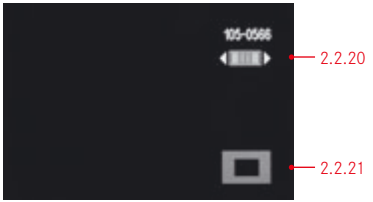


2.1.26 **INFO** 画面与设定值，适用于

- 解析度
- 补偿率 / 档案格式
  (参阅 2.1.4)
- 白平衡
  (符号后面加上*号，表示已经设定白平衡微调)
  a. 无显示： 自动设定
  b. ：适用于钨丝灯
  c. ：适用于日光
  d. ：适用于电子闪光灯单元
  e. ：适用于阴天环境
  f. ：适用于背阴环境
  g. ：适用于手动设定 1
  h. ：适用于手动设定 1
  i. ：适用于色温设定
- 偏色 (相片风格)
- 影像稳定度

2.2 检视模式





2.2.1 检视模式指标

2.2.2 解析度

2.2.3 补偿率 / 档案格式
(参阅 2.1.4)

2.2.4 受保护的照片

2.2.5 电池的电量
(参阅 2.1.5)

2.2.6 资料夹/照片编号

2.2.7 表示内部记忆被用来储存影像
(未装入记忆卡的情形)

2.2.8 长条图
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2.2.9 照片序号/记忆卡内的照片总数

2.2.10 ISO 感光度 (参阅 2.1.3)

2.2.11 快门速度 (参阅 2.1.7)

2.2.12 光圈 (参阅 2.1.20)

2.2.13 闪光灯曝光补偿 (参阅 2.1.14)

2.2.14 闪光灯模式 (参阅 2.1.2)

a. 无显示：不用闪光灯拍照

b. ϟA / ϟ / ϟS / ϟSlow：用闪光灯拍照，不预闪

c. ϟA👁 / ϟ👁 / ϟS👁：用闪光灯拍照，会预闪

2.2.15 曝光模式 (参阅 2.1.1)

2.2.16 曝光补偿 (参阅 2.1.21)

2.2.17 白平衡 (参阅 2.1.26)

2.2.18 影像稳定度 (参阅 2.1.24)

2.2.19 所示照片的日期与时间

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2.2.21 放大部位在照片中的位置

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快速指南

您需要以下项目：
- 相机
- 电池 (A)
- 按钮充电器及正确的电源插头 (C)
- 记忆卡 (不随产品提供)

使用前设定

1. 将正确的电源插头接入充电器 (参阅第19页)。
2. 将电池 (A) 放入电池充电器 (B) 充电 (参阅第 19 页)。
3. 将充电器接至电源插座 (参阅第 19页)。
4. 将主开关 (1.7) 设定至 **OFF** 位置 (参阅第24页)。.
5. 将充满电的电池放入相机 (参阅第20页)。
6. 装入记忆卡 (参阅第22页)。
7. 取下镜头盖 (F)。
8. 将主开关 (1.7) 设定至 **S** 位置 (参阅第24页)。
9. 设定想要的选单语言 (参阅第32页)。
10. 设定日期与时间 (参阅第32页)。

拍摄照片

11.设定
   a. 将快门速度 (1.10) 和光圈 (1.9) 转盘设定至 **A** (参阅第46页)，
   b. 将对焦模式设定至 **AF** (参阅第40页)，
   c. 将曝光模式设定至 ▭ (参阅第46页)。

以上设定建议可确保您在第一次使用 LEICA X2 时，简单、快速且可靠无误地拍照。有关相机的各种模式及功能，请参阅上述各页相关章节的详细说明。

12. 按压快门释放钮 (1.8) 至第一个压力点，启动对焦及测光 (参阅第44页)。
13. 完全按下快门释放钮拍照。

检视照片

1. 按 **PLAY** 按钮 (1.16)。
2. 按向左或向右方向按钮 (1.23/1.27) 检视其他照片。

放大照片

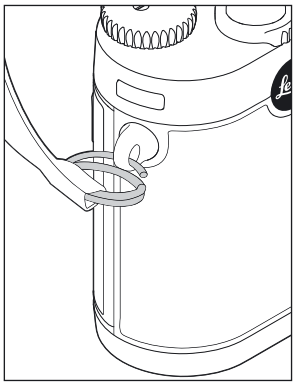
以顺时针方向转动设定转盘 (1.22)，放大显示的照片以利检视 (参阅第62页)。

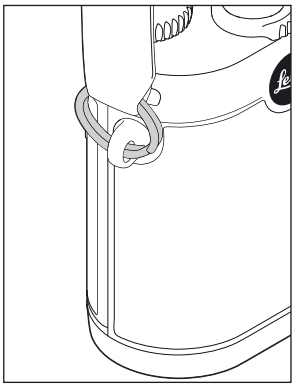
删除照片

按**DELETE/FOCUS**下删除按钮 (1.15)，然后从选单内选择想要的删除功能。

详细使用说明

安装相机腕带





电池充电

LEICA X2 以一颗锂离子电池供应所需的电力 (A)。

注意：

本相机只可使用本手册及 / 或 Leica Camera AG 指定及描述的电池类型。使用未经Leica Camera AG 授权指定的电池，可能会损坏电池 / 相机，甚至可能引起爆炸。

此电池依其设计只能用于指定的装置，且须依以下说明正确充电。

使用电池时若违反本说明书，或使用非指定电池类型者，在某些情况下可能会发生爆炸。

电池不可长时间暴露于阳光、热能、湿气或潮湿的环境。亦不可将电池放入微波炉或高压容器，以免发生火灾或爆炸。

请勿将电池投入火中，否则可能引起电池爆炸！

不论在任何情况下皆不可对潮湿或者湿的电池充电，亦不可将其放入相机。

务必确保电池的触点干净无污垢且可顺利接触。虽然锂离子电池具有防短路功能，仍应避免接触回形针或珠宝首饰等金属物品。短路的电池可能变得非常烫而造成烫伤。

如果电池掉落，请立即检查外壳及触电是否损坏，使用损坏的电池可能造成相机故障。

- 发生噪音、掉色、变形、过热或液体外泄等情形时，必须立即从相机或充电器取出电池更换。连续使用电池可能造成电池过热，进而引起火灾或爆炸。
- 若发现液体外洩或闻到烧焦味，请确保电池远离热源。外洩的液体可能引起火灾。
- 只可使用本手册指定及描述的充电器，或 Leica Camera AG 指定及描述的其他充电器。使用未经 Leica Camera AG 核准的其他充电器可能造成电池损坏，在极端情况下甚至造成严重或危及生命的伤害。
- 随产品提供的充电器只能用来对此类型电池充电，请勿将充电器用于其他用途。
- 确保可顺利连接主电源插座。
- 充电过程中会释放一定量的热能，故请勿在狭窄的密闭空间充电，尤其是通风不良的局限空间。
- 不可打开电池及充电器，只能由授权服务中心负责维修工作。
- 确保将电池放在儿童无法拿取之处，吞入电池可能造成窒息。

急救：

- 电池液碰触眼睛可能造成失明。
  请立即用清水彻底冲洗眼睛，不可用手搓揉双眼。
  请立即送医院。
- 电池液碰触皮肤或衣服可能造成受伤。请用清水冲洗碰触的部位， 无须送医院。

注意事项：

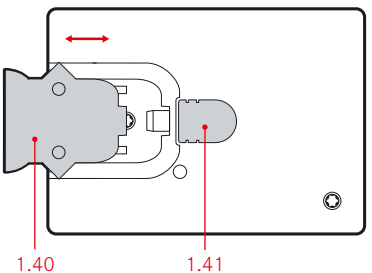
- 只能在相机外对电池充电。
- 第一次使用相机前，电池应先充电。
- 电池温度必须在0°-35°C/32°-95°F之间才能充电(否则将无法开启充电器，开启后也会再次关闭)。
- 不论目前电量为何，皆可随时对锂离子电池充电。如果电池在充电时仅部分放电，将可加快充满电池的速度。
- 只可储存部分放电的电池，不可储存全部放电或充满电的电池。如果要储存一段长时间，应每年两次对电池充电约15分钟，以避免全部放电。
- 充电时电池和充电器都会变热，这是正常现象，并非故障。
- 新电池必须在充满电后再于相机内使用至全部放电2到3次，才能达到最高电量。此放电程序每25次循环应实施一次。
- 充电式锂电池透过内部化学反应产生电力， 这些反应受到外界温度及湿度的影响。为确保最长的电池寿命，不可让电池长时间暴露于极端（极高或极低）温度下（如夏季或冬季停驻的车辆内)。
- 即使在最佳条件下使用电池，每颗电池仍受到使用寿命的限制！经过数百次充电循环后，便可从供电量缩短看出此征兆。
- 有瑕疵的电池应依照相关指示 (参阅第5页) 交由回收站处理，以确保正确回收。
- 可更换电池供应电力给永久安装于相机内的备用电池，此备用电池维持设定的日期与时间达3天之久。如果备用电池放电，必须装入一颗充满电的主电池对备用电池充电。装入可更换电池后，备用电池会约60小时后恢复最大电量。进行此过程时不需要开启相机，但必须再次设定日期和时间。
- 如果将长时间不使用相机，请取出电池。取出电池前，请先用主开关关闭相机。(参阅第24页)。否则在几星期后，电池将完全放电。这是因为相机虽然已经关闭却仍继续消耗少量电流（维持您的设定)，而导致电压急剧下降。

准备充电器(C)

充电器必须配备适合当地电源插座的插头(1.40)。

安装插头

将适合的插头推入充电器，直到听见卡入声。



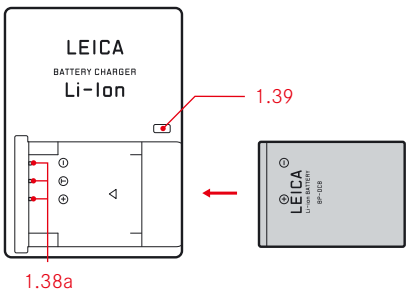
同时取出插头

a. 按下锁定钮 (1.41)，并且
b. 往上将插头拔离其正常位置。

注意事项：
充电器自动切换至主电源电压。

电池充电

1. 将充电器接至电源插座。
2. 将电池插入充电器，方法如下：
   a. 将电池的触点朝下，指向电池充电座内对应的触点 (1.38a)，然后
   b. 插入电池，直到平放于充电座上。



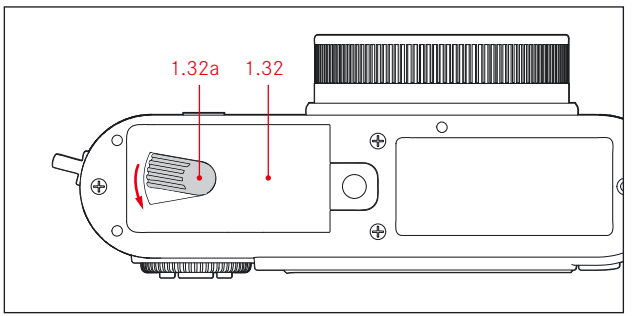
充电状态指示
状态 LED (1.39) 亮红色灯表示正确装入电池，指示灯变成绿色表示完成充电。

装入及取出电池 / 记忆卡

将主开关 (1.7) 设定至 **OFF**。(参阅 24页)

打开电池室 / 记忆卡插槽盖

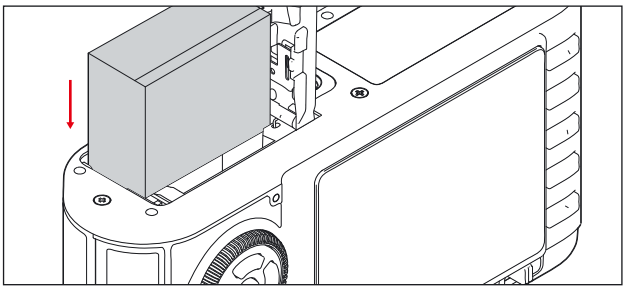
以顺时针方向转动锁定杆 (1.32a)，打开电池室 / 记忆卡插槽盖 (1.32)。弹簧盖会自动打开。

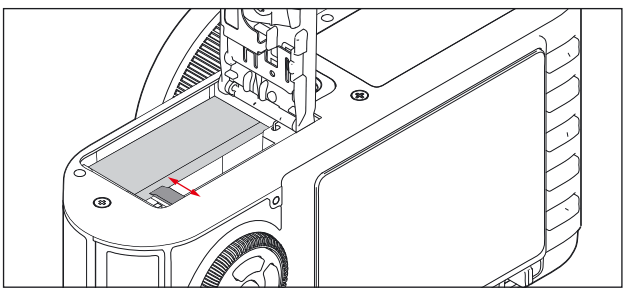


装入/取出相机电池

将电池装(A)入电池室，触点朝向相机背面。将电池推入电池室 (1.36)，直到浅灰色弹簧锁钩 (1.35) 突出于电池上将其锁至定位。

盖上电池室/记忆卡插槽盖，然后以逆时针方向转动锁定杆。





若要取出电池，请依上述说明的相反顺序操作即可。电池室内的浅灰色弹簧锁钩必须往旁边推开，将电池解锁。

注意事项：

若在相机开启状态下取出电池 (参阅第24页)，您在选单内的设定将被删除 (参阅第25页)，记忆卡也会损坏。

电量显示

电池的电量显示在监视器上 (参阅第10，2.1.5页)。

注意事项：

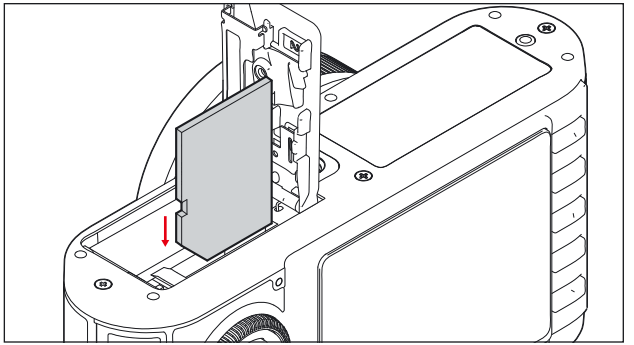
- 如果将长时间不使用相机，请取出电池。取出电池前，请先用主开关关闭相机。(1.7，参阅第24页)。
- 最晚必须在相机内电池的电量用尽(参阅第32页)3天后，重新设定日期和时间。

装入及取出记忆卡

LEICA X2 使用SD、SDHC或SDXC 记忆卡。这些记忆卡有写入保护开关，可避免他人擅自储存及删除照片。此开关以滑块的形式设置于记忆卡未截角的一侧；于较低的位置标示 LOCK，表示卡片上的资料受到保护。您可使用不同品牌的SD、SDHC、SDXC记忆卡，其容量与读写速度也各有不同。.

注意事项：

请勿碰触记忆卡的触点。



将记忆卡(B)插入插槽(1.37)，将接触点朝向电池。将记忆卡推入，压至弹簧处，直到听见卡入声为止。

若要取出记忆卡，请依上述说明的相反顺序操作即可。若要将记忆卡解锁（如盖上所示），必须先将记忆卡稍微往内推。

注意事项：

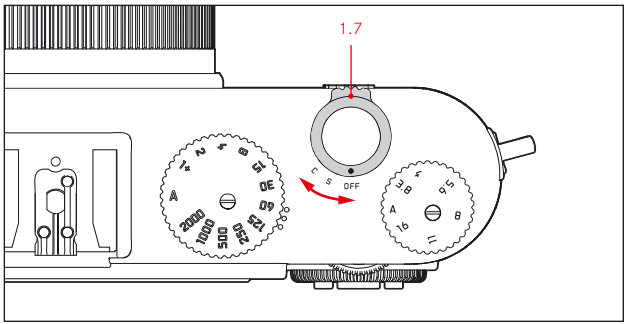
- 如果插入记忆卡，照片只会储存在记忆卡中。若未插入记忆卡，相机会将影像资料储存在内部记忆体中。
- 如果无法装入记忆卡，请检查是否正确对齐。
- 虽然使用其他类型的记忆卡不会损坏相机或记忆卡，但于某些不知名品牌记忆卡，不完全符合 SD/SDHC/SDXC 标准，Leica Camera AG 无法保证其功能可正常运作。
- 可用的记忆卡种类经常改变，有些记忆卡用于 LEICA X2 时可能造成故障。
- 只要表示相机正在存取记忆卡的 LED 1.28 指示灯亮起，则不可打开电池室盖，亦不可取出记忆卡或电池，否则卡片上的资料将会损毁，相机功能也可能异常。
- 电磁场、静电荷及相机或记忆卡故障可能导致记忆卡上的资料损毁或遗失，建议您将资料传送并储存至个人电脑(参阅第 69页)。
- 基于此原因，建议您将记忆卡储存于抗静电盒中。

盖上电池室/记忆卡插槽盖

盖上电池室 / 记忆卡插槽盖(1.32)，然后以逆时针方向转动锁定杆(1.32a)。

开启 / 关闭相机

用主开关(1.7)开启及关闭LEICA　X2；只要将主开关转至相关位置，即标示**OFF**、**S**（单拍）、**C**（连拍）的位置即可。
• 出现监视器影像 (2.1)。



注意事项：
如果在开启相机前忘记打开镜头盖，将会出现相关讯息。如果相机从待机模式启动(参阅第33页)且未取下镜头盖，同样会出现相关讯息。

将主开关设为［**C**］时，Leica X2 就能产生连拍效果。有每秒3张（低）或每秒5张（高）的频率可选。在选单中选取 Continuous (连拍)(3.5)，然后在子选单中选取所需设定。

附注：
- 使用闪光灯时无法连续曝光。若启用闪光灯功能，则只能单张拍摄。
- 若**C** 模式与自拍（请参阅第58页）功能搭配使用，则只能曝光一次。
- 只有在快门速度为 1/60 秒或更快时才能达到 5fps 最高频率（1/4 秒可达 3fps）。
- 无论连拍几张照片，［**播放**］（请参阅第26页）及［**自动检视**］（请参阅第26页）功能都会先显示组后一张照片。要选取连拍中的其他照片，请按下向右 / 向左按钮 (1.24/1.27)。

设定录影及检视模式

在正常情况下，开启LEICA X2（参阅前一节说明）或借由按下快门释放钮(1.8，参阅第27页) 而重新启动相机 (从待机模式，参阅第33页) 时，相机将进入录影模式 (参阅第40 页)。

要检视照片，有两种模式可选：

1. **播放** 无限制检视
2. **自动检视** 拍照后快速检视

无限时检视：播放

按下 **PLAY** 播放按钮 (1.16)，切换到检视模式。

最后拍摄的照片会连同对应的显示屏出现在画面上（请参阅第13页）。

但是，如果内部记忆卡或外插式记忆卡都沒有影像档案的，您在切换到检视模式时会出现以下讯息：**沒有影像可播放。**

注意事项：

如果想在开启相机时直接进入检视模式，可按住**PLAY**按钮并且同时开启主开关。

自动检视最后一张照片

当**自动检视**开启时，拍摄后之照片将自动立即显示于荧幕上，以方便您检视照片是否成功或需要重新拍摄。本功能可自行选择播放的时间长久或永久播放，也可选择是否要显示色阶分布图。

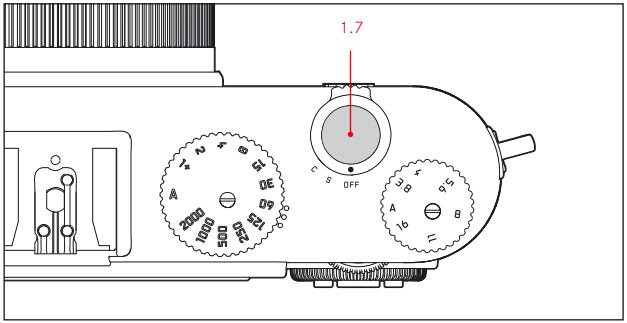
于主选单中选择**自动检视**选项 (请参阅第28页或14页之3.23)，在第一个子选单中选择周期或色阶分布图，以分别调整该项设定。

附注：

在使用连拍模式 (请参阅第24页) 或包围式曝光 (请参阅第52页) 时，检视功能将显示最后一张拍摄的照片，若检视时照片档案仍在相机的缓冲记忆体处理中，则检视功能将显示最后一张储存至记忆卡或内建记忆体中之照片。其它检视模式的相关设定及如何

选择要检视的照片于第62页起的"检视模式"章节中有详细介绍。

快门释放钮



快门释放钮(1.7)采两段式操作设计。轻按释放钮(至第一个压力点)启动自动对焦（若已设定)、测光及曝光控制，同时储存相关设定值 / 数值 (参阅第46页)。如果相机之前在待机模式(参阅第33页)，轻按释放钮将再次启动相机，显示屏影像亦随之出现。在完全按下快门释放钮之前，请先确定已完成对焦 / 自动对焦（若已开启）及测光（有关曝光设定、AF及显示屏上的相关指示，请参阅第46、41、10的详细说明)。完全按下快门释放钮拍照。

注意事项：

- 选单系统除了可用来选择和设定按键及快门确认音外，亦可调整其音量 (参阅第33页)。
- 应轻轻按下快门释放钮，切勿要按不按，以免造成相机震动。

选单控制

LEICA X2 的大部分设定皆透过选单执行。浏览选单时，只需要使用设定转盘 (1.22) 及4个方向按钮(1.23/.24/.26/.27)。设定转盘(1.20)亦可用作快速浏览选单。

附注：

主选单的控制可经由荧幕上(请参阅第34页第1.29项)或电子观景器上(请参阅第72页)的显示来设定。

进入选单

按下 **MENU/SET** 按钮 (1.25)。

- 出现选单目录。目前使用的选单项目被框住，亦即以红色轮廓线框住黑色背景上的白色字元。
  右侧红色三角形指出如何进入个别子选单。
  右端有一黄色直条会随着选项卷动时上下移动，使您得以立刻看见您于选单中所在的位置。

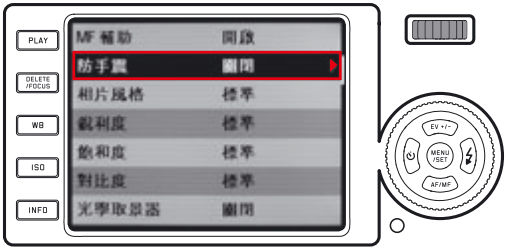
卷动选单目录

按项目卷动

转动设定转盘 (1.22；顺时针=下，逆时针=上)，或者按向上 (1.23) 或向下 (1.26) 方向按钮。.

按每页卷动

左右转动设定转盘1.20竹；向右=下页，向左=上页。



打开选单项目的子选单

按下向右方向按钮(1.24)。

- 出现子选单目录，此目录亦以红色轮廓线框住。目前使用的项目以黑色背景上的白色字元表示。

选择子选单里的一个设定值/数值

转动设定转盘(1.22)或者按向上(1.23) 或向下(1.26)方向按钮。

- 目前使用的项目在方框内向上或向下移动。

确认设定

按下 **MENU/SET** 按钮 (1.25)。

- 子选单方框消失，确认的 (新) 设定显示在目前选单项目行的右侧。

离开子选单但不确认设定

按下向左方向按钮 (1.27) 或按下快门释放钮(1.8)

- 子选单方框消失，保留（之前）的设定显示在目前选单项目行的右侧。

离开选单

按下

- **MENU/SET** 按钮 (1.25)，或者
  - 选单画面回到录影模式 (参阅第40页)。
- 快门释放钮(1.8)，或者
  - 选单画面回到录影模式 (参阅第40页)。
- **PLAY** 按钮 (1.16)。
  - 选单画面回到检视模式 (参阅第45页)。

附注：

- 有些功能在某些设定下会没有作用，在此情况下该选项将呈现灰色并无法选择。
- 选单开启时将显示最后一次检视的选项。
- 选单开启时将显示最后一次检视的选项。
  有些包含子选单的选项，右端将显示一红色三角型图示。
  前述各项附注亦适用于子选单中之设定项目。
  进入子选单候选项将完整显示于整个荧幕上，亦即主选单将不再显示。

许多功能以同样方式来选择，当按下以下按键时分别可控制：

- **ISO** (1.13) 以控制感光度
- **WB** (1.14) 以控制白平衡
- **DELETE/FOCUS** (1.15) 以删除照片档案(于检视模式)或选择对焦模式(于拍摄模式)
- **EV+/–** (1.23) 以控制曝光补偿、包围式曝光、以及闪光曝光补偿
- ϟ (1.24) 以选择闪光灯模式
- **AF/MF** (1.26) 以选择对焦模式
- ⏲(1.27) 以开启自拍器及设定延迟时间

若不使用选单按钮，您可以经由半按快门按钮以确定当前各项功能的设定(1.8)
相关细节请参阅各项说明。

基本相机设定

选单语言

可以选择以下语言：
德文、日文、英文、法文、西班牙文、意大利文或繁体中文、简体中文、俄文及韩文。

从选单中选择LANGUAGE (3.31)，然后在子选单中选择想要的设定。

日期

可在2009到2099之间设定任何一个日期。

从选单中选择 **日期** (3.27)、在第一层子选单中选择 **设定**或**排序**，再分别于第二层选单中选择想要的设定。
在 **设定**子选单中用设定转盘 (1.22) 或向上及向下方向按钮(1.23/1.26) 变更数字及月份，用向左及向右方向按钮(1.24/1.27) 在三组项目间来回切换。

时间

在选单中选择 **时间** (3.28)、在第一层子选单中选择 **设定** 或 **查看**，再分别于第二层选单中选择想要的设定。
在 **设定** 子选单中用设定转盘(1.22) 或向上及向下方向按钮(1.23/1.26) 变更数字及月份，用向左及向右方向按钮(1.24/1.27) 在两组项目间来回切换。
在 **查看** 子选单中选择24小时或 12小时格式。

注意事项：
即使未装入电池或电池电力用尽，日期和时间仍然由一颗内键的缓冲电池维持大约2天。然而，在此期间过后必须依上述方式重设日期及时间。

自动待机模式

启动后，此功能会在所选的时间结束时将相机切换至待机模式以节省电力。

从选单中选择 **电源自动关闭** (3.24)，然后在子选单中选择想要的设定。

注意事项：

即使相机已进入待机模式，仍可随时按下快门释放钮 (1.8) 再次开启相机，或者用主开关 (1.7) 关闭相机，然后再开启。

按键确认（回应）及快门音

使用 LEICA X2 时，您可以决定是否以声响确认设定及其他功能（两种音量可供选择），或者操作相机及实际拍照是否完全无声。

快门音的设定

从选单中选择 **快门音量** (3.29)，然后在子选单中选择想要的设定：**关闭**、**最低** 或 **最高**。

按键确认及记忆卡容量限制音

从选单中选择 **声音讯号** (3.30)、在第一层子选单中选择 **音量**，再于第二层子选单中选择想要的设定：**关闭**、**最低** 或 **最高**。按键确认及记忆卡容量限制音可分别从从子选单 **按键音** 及 **SD 卡已满** 独立开启和关闭。

显示器与电子取景器设定

附注：
荧幕和选购的电子取景器所显示的影像相同。影像会显示的位置，取决于取景器之专属开关是否开启。
即使在以下状态，各项设定仍会处于开启状态：
– 相机自动切换到待机模式 (请参阅第33页)、
– 透过住开关关闭相机 (请参阅第24页)，或是
– 取出电池 (请参阅第20页)。
有关 Leica 电子取景器EVF 2的详细资讯(配件，请参阅第72页)，请参阅取景器说明。

切换显示
用 **INFO** 按钮 (1.12) 选择想要的选项。按一次或多次按钮浏览不同的选项（不断重复轮回)。

顺序：

录影模式
a. 所有显示 (参阅第10页及长条图 [若已设定]，参阅第47页)
b. 仅显示基本曝光设定 (第 10页) 及AF和测光区
c. b. 显示格线 (及长条图 [若已设定]，参阅第47页)
d. 荧幕已关闭（在此情况下，指示灯1.28会永久亮灯）

检视模式
a. 所有显示(参阅第13页及长条图 [若已设定]，参阅第47页)
b. 仅显示基本曝光设定 (参阅第13页)

注意事项：
- 模式d需事先在选单中设定，否则无法使用。请参阅下一节。
- 在录影模式下，只要开启监视器开，便可按住**INFO**按钮1秒钟或以上，叫出列有五个重要设定的画面(2.1.26参阅第12页)。

仅从荧幕检视影像
即使正在使用 Leica电子子取景器EVF2，仍可选择每次按下播放按钮 (1. 16) 时便让荧幕自动开启，以便检视影像。
在选单中选取在**荧幕上显示**(3.19)，然后在子选单中选取开启，让显示器始终在检视模式下处于开启状态；若要使用电子取景器EVF2的显示器，则选取关闭（若为开启状态，请参阅前述或取景器操作说明）。

附注：
此功能只有在**播放**模式下才能使用，不适用于**自动检视**模式，也就是说，不论在荧幕上显示开启与否，只要开启电子取景器EVF2与**自动检视**(请参阅第26页)，影像都会显示在取景器上。

关闭荧幕

若使用选购配件外接光学取景器 (请参阅第72页)，荧幕影像可能会让人分心，为避免此状态，您可在录制模式下连同荧幕一并关闭。

在选单中选取选用**取景器**(3.13)，然后在子选单中选取开启，以关闭荧幕；或选取关闭，以开启荧幕。

附注：

即使从选单关闭荧幕，在检视模式下仍可始终看到荧幕影像，也可从选单控制。

亮度与色彩转换

为确保最佳视觉效果，并配合各种环境照明情境，您可调整荧幕及电子取景器的亮度与色彩转换。

关于亮度设定

在选单中选取荧幕亮度(3.15) 或电子取景器亮度(3.16)，然后在子选单的五级中选取其中一级。

关于色彩调整

1. 在选单中选取**荧幕色彩调整**(3.17)或**电子取景器色彩调整**(3.18)。
   播放的照片上会重叠一个交叉记号。交叉记号末端有黄色、绿色、蓝色、洋红色标示，代表可调整的色彩。
2. 请使用方向键将置中的游标移至所需方向，只要在画面区域内皆可使用。
   画面的色彩转换会根据设定而变更。

荧幕与电子取景器逾时模式

若启动，此功能将开启荧幕；若安装电子取景器，电子取景器会在指定是时间过后关闭，这样不只能省电，也能降低荧幕产生的热。

在选单中选取**自动关闭LCD**(3.25)，然后在子选单中选取所需设定。

JPEG 影像解析度
如果选择其中一个 JPG 格式 (参阅下一节)，便可用4 种不同的解析度（画素的数目）录影。此功能可让您配合预定用途或记忆卡的容量精准地调整照片。

从选单中选择 **解析度**(3.1)，然后在子选单中选择想要的设定。

注意事项：
不论采用何种JPG 影像设定，原始格式影像 (DNG格式) 皆以最高解析度录制。

档案格式 / 压缩率
两种不同的JPG 压缩率可供选择：**JPG 精细** 及 **JPG 极精细**，两者皆可与同步 **DNG**(RAW影像资料格式) 录影结合。

从选单中选择**压缩格式** (3.2)，然后在子选单中选择想要的设定。

注意事项：
荧幕上显示的剩余照片数或剩余录影时间仅为约略值，因为各影像压缩档的大小视拍摄影物的不同而可能出现非常大的差异。

白平衡
在数位摄影中，白平衡在任何光现下皆可确保色彩的自然重现。相机经过预设将某个特定的颜色重现为白色，此为白平衡的基本原理。您可以从不同的预设值、自动白平衡、两种固定手动设定及直接色温设定中选择。
此外，您也可以针对目前的拍摄条件及 / 或您自己的构想选择精确地微调所有设定。

固定预设值
按下 **WB** 按钮 (1.14)，然后从监控器的选单中选择 **AWB**（自动设定)，或 (白热灯照明)、 (户外阳光下拍照)、 (电子闪光灯)、 (户外阴天拍照)、 (户外拍摄阴影下的景物)。

手动测定设定

按下**WB** 按钮 (1.14)，然后从监视器的选单中选择 SET 或 SET。

将监视器中央的黄色框对准表面呈现均匀白色或灰色的物体，待物体填满黄色框后，依照讯息指示按下 **MENU/SET** 按钮 (1.23)。

设定已储存，且可随时选择 或 叫出。

直接色温设定

按下 **WB** 按钮 (1.14)，然后在监视器的选单中显示**SET K**。

使用设定转盘 (1.22) 或向上及向下方向按钮 (1.23/1.26) 变更监视器影像中央方框内的数字。

设定已储存，且可随时选择**K**。

微调白平衡设定

完成上述任何设定后，可以依红色三角形的指示，按下向右方向按钮 (1.24)，从白平衡选单进入 **白平衡调整** 荧幕画面。

使用方向按钮将圆形游标移至在荧幕上提供所需色彩重现的位置，也就是往四周边缘各彩色方块的方向移动。

设定值连同相关基本设定一起储存。

ISO 感光度

ISO感光度设定确立了即定光线下可能的快门速度 / 光圈组合。在较高的感光度下，快门速度较快且 / 或光圈较小（分别用来『冻结』快速动作及建立较大的景深），但影像杂质较高。

按下 **ISO**按钮 (1.13)，然后从监视器的选单中选择 **自动 ISO** (自动设定）或四个固定设定中的一个设定。

可在 **自动ISO**选项中限制感光范围，达到例如控制杂质位准的目标。也可用此选项设定最长的快门速度，避免在拍摄移动中的景物时造成画面模糊。

从选单中选择**自动ISO设定** (3.3)，然后在第一层子选单中选择**最低快门速度** 或 **最高 ISO**，再分别于第二层选单中选择想要的设定。

附注：

半按快门时(1.8,请参阅第27页)，即使关闭荧幕显示器 (请参阅第35页)，仍可检视相机的**自动感光度**。

影像属性 / 对比、清晰度、色彩饱和度

数位摄影的诸多优点优先之一在于能非常方便地改变影像的重要属性，进而决定影像的特性。LEICA X2 甚至允许您在拍照之前改变三个重要的影像属性：

- 对比，也就是明暗部位的差异，决定照片以「偏暗」或「偏亮」的色彩呈现。因此可借着增加或减少此差异（即让明亮部位更明亮，让黑暗部位更黑暗）的方式影响对比。
- 以正确的距离设定重现清晰度（至少重现主景物的清晰度)是成功拍照的先决条件。此外，对照片清晰度的印象主要由轮廓清晰度（亦即照片轮廓明 / 暗过渡有多小）决定，因此可借由增加或减少这些部位改变清晰效果。
- 色彩饱和度决定照片的颜色为「灰白」柔淡或「明亮」鲜艳。虽然照明和天候条件（薄雾 / 晴朗）足以影响拍照，但您可以利用上述功能决定重现。

除了 标准（即依原来条件重现）之外，亦可分别为三个影像属性的每个属性选择两种弱化或強化等级。

从选单中选择 **锐利度** (3.10)、**饱和度** (3.11) 或 **对比度** (3.12)，然后分别在子选单中选择想要的设定。

注意事项：

这些设定仅适用于 JPG 档案，DNG 档案保持不变。

色彩重现

除了调整清晰度、饱和度及对比度（参阅前一节）之外，亦可选择基本色彩重现选项。您可以选择**标准、艳丽**（用于高饱和色彩）或 **自然**（用于略低的色彩饱和度及略为柔和的对比），以及两种黑白设定 **B&W 自然** 及 **黑白/高对比** (高对比)。

从选单中选择 **相片风格** (3.9)，然后在子选单中选择想要的设定。

注意事项：

- 此设定仅适用于 JPG 档案，DNG 档案保持不变。
- 所有五个设定皆可调整，且伴随着分别于前几节及以下各节说明的影像属性及杂讯降低选项。
  在这些设定和选项中，色彩重现另以星号（如 标*）标示。

对焦

Leica X2具备自动与手动对焦两种模式，对焦范围为30公分至无限远处。

选取模式

按下下方方向键 (**AF/MF**, 1.26)，在出现的选单中选取 **AF** 或 **MF**。按下快门释放按钮 (1.8) 或**MENU/SET**按钮 (1.25)，确认设定。

画面会出现以下资讯：

- 使用中的对焦模式 (2.1.25)
- 对焦区域，以白色长方形标示
  （使用单区对焦、11区对焦，及单点自动对焦模式时，请参阅第 10 / 42 / 43页）

自动距离设定 / 自动对焦

在自动对焦模式下，在您半按快门按钮 (1.8) 时，相机将执行自动对焦，也就是说，相机会自动测量距离、调整并锁定（另请参阅第67页）

自动对焦正确且已锁定的标示

– 外框颜色变为绿色，
– 若为11电对焦，会出现多达9个绿色长方形 (请参阅第43页)
– 绿色对焦状态指示灯(1.19)亮起，且
– 发出讯号音（若此选项已选取，请参阅第43页）

附近：

自动对焦设定与曝光设定同时锁定 (请参阅第46页)。

在特定条件下，自动对焦系统无法正确对焦，例如：

– 被摄物的距离超出可对焦范围，或
– 被摄物不够明亮（请参阅下一节）。

这类情况或被摄物的标示

– 外框颜色变为红色，
– 若为11电对焦，显示幕会变为单个红色外框，且
– 对焦转头指示灯(1.19) 闪烁。

重要事项：

不论被摄物是否正确对焦，快门释放按钮 (1.8) 皆可释放。

自动对焦辅助灯

内建的自动对焦辅助灯 (1.2) 将自动对焦系统的操作范围扩大至低光环境。此功能启动后，辅助灯会在按下快门释放按钮 (1.8) 时自动亮起。

从选单中选择 **AF辅助灯** (3.6)，然后在子选单中选择想要的设定。

注意事项：

自动对焦辅助灯的范围约为4 m/13 ft.，因此在低光环境中自动对焦系统无法在此距离外操作。

AF 测光模式

LEICA X2 提供四种自动对焦模式，您可针对不同的景物、实境和构图，对自动对焦系统做最适当的调整。

按下 **DELETE/FOCUS** 按钮 (1.15)，从监视器上的选单中选择想要的设定。按下快门释放钮(1.8)或**MENU/SET**按钮 (1.25)确认选择。

1 单点模式

以监视器画面中央自动对焦框提示的区域为准进行对焦。由于此区域比重点模式大，对目标的锁定失误较小而且较为容易。此模式亦可选择性对焦。.

高速版提供更快速的对焦，但卻可能影响监视器影像的流畅度，尤其在拍摄快速移动的景物时。因此，如果以最佳监视器影像为第一考量，应选择一般机型。

此外，您可将自动对焦框移到监视其画面上的任何位置，例如为了在拍摄未在中央的景物时更容易构图。

按住 **DELETE/FOCUS** 按钮 (1.15) ≥1 秒或以上。

- 除了自动对焦框外，所有显示皆消失。自动对焦框四周的红色三角形指出可能的移动方向。若相关三角形消失在边缘附近，则表示已到达移动极限。

使用方向按钮将自动对焦框移到想要的位置。您可随时用 **INFO** 按钮(1.12) 使自动对焦框回到中央位置。按下快门释放钮 (1.8) 或 **DELETE/FOCUS** 按钮离开此模式。

11 点模式

以11个自动对焦框指示的区域未准进行对焦，这些区域经过分组以涵盖大部分影像，确保快照类的拍照能获得最大的对焦保障。所有区域皆完成清晰度记录，但对焦系以记录中最靠近的物体未准自动设定。

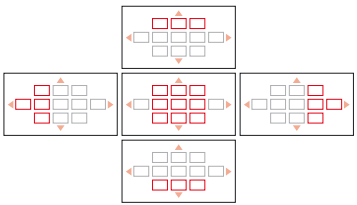
高速机型提供更快速的对焦，但卻可能影响监视器影像的流畅度，尤其在拍摄快速移动的景物时。因此，如果以最佳监视器影像为第一考量，应选择一般机型。

此外，也可减少区域的数目并选择相关分组，将焦点聚集在影像四个边的任何一边。

按住 **DELETE/FOCUS** 按钮 (1.15) ≥1 秒或以上。

•在监视器上，所有显示皆以11个自动对焦框取代。开始时，只有构成中央组的9个对焦框有红色轮廓。各边的红色三角形代表可能的设定。

除了中央组之外，亦可选择上方或下方三个组，或四个左 / 右自动对焦区。按下**INFO**按钮(1.12)可随时返回中间9个方格群组。使用方向按钮选择想要的自动对焦框组，按下快门释放钮(1.8)或**DELETE/FOCUS**按钮离开此模式。



重点对焦模式

以监视器画面中央自动对焦小框指示的区域未准进行对焦。此区域的大小甚至可让焦点聚集在最小的景物细节上，例如：在拍摄人像时，一般建议眼睛的轮廓要分明。

此外，您可将自动对焦框移到监视器画面上的任何位置，例如为了在拍摄未在中央的景物时更容易构图。

按住 **DELETE/FOCUS** 按钮 (1.15) ≥1 秒或以上。

•除了自动对焦框外，所有显示皆消失。自动对焦框四周的红色三角形指出可能的移动方向。若相关三角形消失在边缘附近，则表示已到达移动极限。

使用方向按钮将自动对焦框移到想要的位置。您可以随时用 **INFO** 按钮 (1.12) 使自动对焦框回到中央位置。按下快门释放钮 (1.8) 或 **DELETE/FOCUS** 按钮离开此模式。

人脸侦测模式

在此模式下，LEICA X2 会自动识别影像中的人脸，并以记录中最靠近的人脸为准进行对焦。如果未侦测到人脸，则使用11点模式对焦。

手动对焦

对于某些景物及实境，最好自行对焦，不要使用自动对焦功能 (参阅之前章节)。例如，如果好几张照片都需要相同的设定，以致使用对焦记忆锁 (参阅第50页) 将耗费较多时间，或者例如在拍摄风景时需要以无限远对焦，亦或照明条件不佳（即非常暗）导致无法操作或自动对焦速度太慢。

按下向下方向按钮 (**AF/MF**,1.24)，然后从监视器的选单中选择**MF**。按下快门释放钮(1.8)或**MENU/SET**按钮(1.25)确认设定。

一旦设定后，即可转动设定轮 (1.20) 进行手动对焦，直到景物的重要部位影像依照您的需要重现在监视器上。

会显示对焦距离表 (2.1.20)。表上的绿色列代表各个距离所造成的景深（以及自动控制或手动设定的光圈，另请参阅「曝光测光与控制」，参阅第46页）。对焦距离表会在最后一次对焦后约 5 秒消失。

手动对焦则因转轮的旋转速度而有所不同：
– 粗略对焦：快速旋转转轮
– 精细对焦：缓慢转动转轮
这样设定可快速、更精确。

您可使用**MF辅助**功能，增加手动对焦的准确度（参阅下一节）。

附註：

- 要锁定手动对焦位置，可长按 **DELETE/FOCUS** 按钮 (1.15) 超过一秒。这项功能可避免错过所需的位置，特别适用于连拍同一主题。
- 手动对焦位置会维持不变，即使重新开启相机也一样 (参阅第47页)。这项功能有时非常实用，例如在拍摄距离相近的情况下，长时间连拍同一主题时，或是为了节省电池电力，在拍摄空档关闭相机时。

手动对焦辅助功能

较大的景物细节显示在监视器上，这些细节的焦距估算得越准，对焦就越准确。为达此目标，LEICA X2 提供一个具有放大功能辅助选项，可将监视器影像的中央部位复制放大。

从选单中选择 **MF辅助** (3.7)，然后在子选单中选择想要的设定。

用设定论 (1.20) 对焦

- 此功能启动后，一个大约放大六倍的影像部位出现在尺标上方。此放大的部位在完成最后对焦设定大约5秒后消失。

注意事项：

可按下**DELETE/ FOCUS**按钮 (1.15) 叫出放大的部位，例如重新检查设定，确定未因疏忽而改变设定值。

此外，您可将放大的部位移至监视器画面上的任何位置，例如为了方便对未在中央的景物对焦，或确保看见影像中的其他部位。

使用方向按钮将放大的部位移到想要的位置。您可随时用**INFO**按钮 (1.12) 使放大的部位回到中央位置。

测光模式

LEICA X2 提供三种测光模式，让您配合光线条件、实境、您的工作风格和创意构想进行调整。
从选单中选择**测光模式** (3.4)，然后在子选单中选择想要的设定。

多场测光 – ▭

采用此测光方法的相机会自动分析景物的亮度差异，将此差异与设定的亮度分布模式进行比较，确定最可能的主景物位置及相应的最佳曝光。
因此，此方法特别适合用于即使在困难环境下也要讲求自然优美、不复杂且可靠的摄影需求。也因为如此，多场测光多与程式化自动曝光模式搭配使用 (参阅第48页)。

中央重点测光 – ▭

此测光法将最高权值分配給像场中央，但亦记录所有其他部位。
特别是在与对焦记忆锁(参阅第50页)搭配使用时，此测光方法会在整个像场的考量下，选择性地将曝光调整至景物的特定部位。

重点测光 – •

此方法将焦点集中在影像中央的一个微小的区域，并以监视器上的一个绿色点 (2.1.10) 表示。
重点测光确保对微小的细节进行精确的量测和曝光，最好和手动设定 (参阅第50页) 搭配使用。
例如：在拍摄背光照片时，通常应避免较暗的背景造成主景物曝光不足。您可利用重点测光模式的微小测光区，选择性地操作这类细节。

长条图 Histogram

长条图 (2.1.13/2.2.8) 显示照片中的亮度分布，与此相关的横轴对应黑色（左侧）、灰色到白色（右侧）等色调，纵轴对应各亮度的画素数目。

这种伴随影像呈现长条图提供一种快速且简易的方法，让您在拍照前后评估曝光设定。长条图特别适合用于手动曝光设定 (参阅第50页)，亦可用来检查自动曝光控制 (**P**、**T**、**A**；参阅第48/49 页)。

长条图适用于录影及检视 (参阅第48/49页) 模式。

在录影模式下从选单选择 **录像–直方图** (3.20)，然后在子选单中选择想要的设定。

注意事项：

使用闪光灯拍照时，因为闪光灯在显示后才闪光，因此长条图无法呈现最终曝光情形。

在检视模式下从选单选择**播放–直方图** (3.21)，然后在子选单中选择想要的设定。选择一个具有修剪功能的选项，将照片上太亮或太暗的部位标示起来。

注意事项：

- 使用长条图时，无法同时检视缩小或放大的照片 (参阅第63页)。
- 在录影模式下，长条图应理解成「趋势显示」，不可认为其呈现的是正确的画素数目。
- 播放照片时，长条图可能和拍照时略微不同。

曝光控制

LEICA X2提供四种曝光模式选项，您可针对您的工作方法或相关景物将相机调整至最佳状态。

这四种模式及手动快门速度和光圈设定皆透过不同的转盘选择 (1.10/1.9)。

可用的快门速度从 30秒到 1/2000秒，可用的光圈从2.8 到16。这两种控制都有手动设定限制，且每格调整皆有一个步进卡入位置。速度转盘以一个步进为一单位，光圈转盘以 $^{1}/_{3}$ 个步进为一单位，两者皆有一个自动操作位置A。

若要将快门速度设定为1秒或以下，先要将快门速度转盘转至位置 1+-，然后用设定转盘 (1.22) 选择速度。

- 另外以 (2.1.15)表示此状态。

注意事项：

视目前光线条件而定，监视器影像的亮度可能和实际照片有所不同。特别是在对黑暗场景进行长时间曝光时，监视器影像会比正确曝光的照片暗很多。

程式化自动曝光模式

用于全自动快速摄影。在此模式下，以自动设定快门速度和光圈的方法控制曝光。

将两个转盘转至位置 **A** 设定此模式。

• 此模式以 **P** (2.1.1)表示。

在此模式下拍照

1. 按下快门释放钮 (1.8) 至其压力点。
   • 快门速度 (2.1.17) 及光圈 (2.1.20) 以白色显示。
   此外，亦出现有关程式转换功能使用可能性的指示 (2.1.15，参阅下一节)。
   如果即使以光圈全开或全闭搭配最慢或最快快门速度，仍可能造成曝光不足或过度曝光，则这两个值会变成红色作为警示。

如果这一组自动设定的值似乎适合用于预定的构图：

2. 将快门释放钮按到底拍照。

否则，可在按下快门释放钮之前改变光圈值。

程式转换模式

程式转换曲线将全自动曝光的可靠度及速度与随时改变速度 / 光圈组合（即相机根据您的构想选择的组合）的可能性结合。

所有这些皆利用设定转盘 (1.22) 完成，例如：如果在拍摄运动照片时使用增加快门速度，请向左转（逆时针）。另一方面，如果需要大景深（小光圈）并且依需要使用较慢的快门速度，请向右转（顺时针）（例如拍摄风景）。

整体曝光（即影像的亮度）保持不变。转换范围因为要确保正确的曝光而受到限制。

- 每当一组数值利用转换而改变时，会出现两个指示：数值旁边的星号 (2.1.16) 以及设定转盘的代表符号 (2.1.15)。如此便可随时辨识自动预设的一组数值。
- 测光功能启动12秒自动关闭后，程式转换将重新设回相机建议的预设值。
- 程式转换也会在拍照后重设回预设值，以避免误用。

速度优先模式

速度优先模式依手动设定的快门速度自动控制曝光。若要拍摄移动中的景物，而且该动作的清晰度（由所使用的快门速度决定）为构图的关键元素，则特别适合用此模式拍照。

如果先以手动选取一个速度适当的快门速度，就可避免产生模糊的动作影像。您可以「冻结」景物，反之，也可以用较慢的快门速度，刻意用「抹除」效果表达动作的动感。

设定此模式时，请将光圈转盘(1.9)转至位置**A**并且用相关转盘(1.10)设定想要的快门速度。

- 此模式以**T**(2.1.1)表示。手动设定的快门速度以白色显示(2.1.17)。

在此模式下拍照

1. 按下快门释放钮(1.8)至其压力点。
   - 自动设定的光圈以白色显示(2.1.20)。
     如果即使以光圈全开或全闭搭配设定的快门速度仍可能造成曝光不足或过度曝光，则这两个值会变成红色作为警示。

如果自动设定的光圈值似乎适合用于预定的构图：

2. 将快门释放钮按到底拍照。否则，可在按下快门释放钮之前改变快门速度。

光圈优先模式

光圈优先模式依手动设定的光圈自动控制曝光，此模式特别适合用来拍摄以景深（由所使用的光圈决定）为构图关键元素的照片。

先以手动选取一个适当的低光圈值（= 大光圈），可缩小景深。例如在拍摄人像时让脸部「突出」，也就是在不重要或不清晰的背景上清楚显示脸部。反之，可在拍摄风景时用适当的高光圈值（= 小光圈）增加景深，清楚重现前景至背景的所有景物。

设定此模式时，请将快门速度转盘(1.10) 转至位置**A** 并且用相关转盘 (1.9) 设定想要的光圈。

- 此模式以**A** (2.1.1)表示。手动设定的光圈以白色显示(2.1.20)

在此模式下拍照

1. 按下快门释放钮(1.8) 至其压力点。
- 自动设定的光圈以白色显示 (2.1.17)。
  如果即使以最快或最慢的快门速度搭配设定的光圈仍可能造成曝光不足或过度曝光，则这两个值会变成红色作为警示。

如果自动设定的快门速度似乎适合用于预定的构图：

2. 将快门释放钮按到底拍照。否则，可在按下快门释放钮之前改变快门速度。

手动模式

例如：您想要创造一种特殊效果，而此效果只能用一种相当特别的曝光才能达成，或者您要确保以不同角度拍摄的数张照片都有绝对相同的曝光，您可以手动设定快门速度和光圈。

设定此模式时，请用快门速度及光圈转盘(1.10/1.9)设定想要的值。

- 此模式以**M**(2.1.1)表示。手动设定的快门速度 (2.1.17) 及光圈 (2.1.20) 以白色显示。

在此模式下拍照

1. 按下快门释放钮(1.8)至其压力点。
   - 出现一个光平衡尺标(2.1.18)。尺标涵盖范围 ±2 EV (曝光值)，以 $^{1}/_{3}$ EV 为一增量单位。
     在±2 EV范围内对目标景物完成正确的曝光设定后，将以其中一个尺标标记变成红色表示。如果设定范围超过±2 EV，则以尺标底端的 – 或 + 符号变成红色表示。

调整快门速度及 / 或光圈设定值，当中央标记变成红色时，即表示设定正确的曝光值。

2. 将快门释放钮按到底拍照。

对焦记忆锁

基于构图上的理由，不将主景物放在照片中央可能较好。然而，自一开始就将主景物放在中央以外的位置，经常会造成以非常近或非常远的景物部位作为对焦的基准。单点及重点自动对焦模式 (参阅第42/43页) 在清晰度方面，以及曝光模式 **P**、**T** 及 **A** (参阅第 48/49页) 在亮度差异方面都有此情形。

结果：主景物失焦及 / 或明暗重现失败。

为了解决这个问题，LEICA X2 的对焦记忆锁定功能可让您先量测主景物，然后保留此设定，直到取好角度并完成拍照。

程序：

1. 将相关自动对焦框 (2.1.8/2.1.9) 及 / 或绿色测光点 (2.1.10) 对准需要正确对焦及曝光的景物部位。一旦设定焦距及曝光，并且按下快门释放钮至第一个压力点 (参阅第67页) 锁定设定，自动对焦框的颜色会变成绿色，对焦讯指示灯 (1.19) 会亮起表示确认。
2. 保持快门释放钮在按至一半的位置，然后移动相机选择拍摄角度。
3. 将快门释放钮按到底拍照。

注意事项：

在拍照前锁定量测值的次数并无限制。

曝光补偿

曝光表针对一般正常的摄影景物进行校正。如果相关景物细节无法满足这些要求（例如大面积雪地，或者在反面案例中，一辆黑色蒸汽火车头佔满整个方框），或者您想在这类情况下以相同的曝光修正拍几张照片，使用适当的曝光补偿比每次都用对焦记忆锁（参阅前一节）来得方便。

1. 按一下向上**EV+/-**方向按钮 (1.23) 设定曝光补偿。
   • 出现相应的子选单。
2. 用向左及向右方向按钮(1.24/1.27)选择想要的补偿值。补偿值的可用范围从 +3 至 -3 EV，以 $^{1}/_{3}$ EV 为一增量单位。
   • 设定时，监视器影像会相应地变暗或变亮，您可借此观察效果。
3. 按下快门释放钮 (1.8) 或 **MENU/SET** 按钮 (1.25) 确认设定。
   • 出现曝光补偿符号及设定值 (2.1.21)。

注意事项：

- 在手动曝光模式下无法设定曝光补偿 (参阅第39页)
- **EV+/-**方向按钮也可用来叫出曝光包围（参阅下一节）及闪光灯曝光补偿 (参阅第50页) 选单。这些值不断轮迴卷动，因此可重复按下按钮进行选择。
- 设定的补偿值在切换至 ±0 (参阅步骤 2) 之前持续有效（不论连拍几次或甚至在关闭相机后仍然有效)。

自动曝光包围

许多引人注目的景物都有非常亮及非常暗的部位，对比非常強烈。以不同的部位作为曝光基准，最后得到的效果可能会出现相当大的差异。在此情况下，可用自动曝光包围功能，以逐渐变化的曝光连拍三张照片，然后选择最适合的照片供日后使用。

1. 按两下向上**EV+/-**方向按钮 (1.23) 设定连续包围曝光。
   • 出现相应的子选单。
2. 用向左及向右方向按钮 (1.24/1.27) 选择想要的间隔。曝光包围值的可用范围从 +3 至 -3 EV，以 $^{1}/_{3}$ EV 为一增量单位。
3. 按下快门释放钮 (1.8) 或 **MENU/SET** 按钮 (1.25) 确认设定。
   • 出现包围符号 (2.1.23)。

注意事项：

• 视可用的快门速度 / 光圈组合而定，自动曝光包围的工作范围可能受到限制。

• **EV+/-**方向按钮也可用来叫出曝光补偿（参阅前一节）及闪光灯曝光补偿 (参阅第57页) 选单。这些值不断轮回卷动，因此可重复按下按钮进行选择。

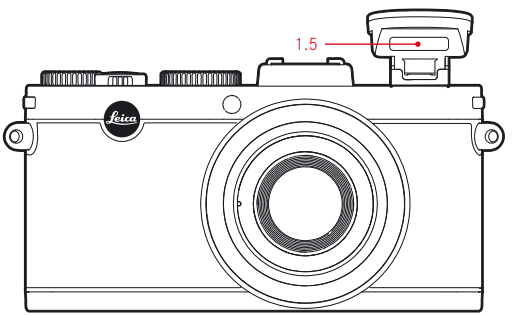
• 设定的连续包围曝光在切换至OFF (参阅步骤 2) 之前持续有效（不论连拍几次或甚至在关闭相机后仍然有效）

使用内建闪光灯拍照

LEICA X2配备一个内建闪光灯单元 (1.5)，不使用时隐藏于机身内，必须展开才能用闪光灯拍照。

做法是将释放滑杆1.17朝相机中央推。弹簧式伸缩闪光灯会展开就定位，电源也会在此时开启。若不想使用闪光灯，只要收回即可，或是小心向下推，直到卡入定位为止，即代表已回到原来位置。

- 闪光灯模式（参阅下述）以白色显示(2.1.2)。开始时，闪光灯可能短暂闪红色灯，表示尚未充满电，因此还未就绪。



闪光灯曝光由相机以预闪光量测机制控制，为了控制曝光，会在主闪光照射之前不久先触发测光闪光，然后再依据光线的反射量决定主闪光的强度。

注意事项：

连续曝光 (参阅第 24页) 及自动包围(参阅第52页) 无法使用闪光灯，因此即使已展开闪光灯单元也不会出现闪光灯指示，闪光灯也不会闪光。

闪光灯模式

按下向右 (ϟ) 方向按钮 (1.24)，然后在出现的选单中选择想要的闪光灯模式。也可使用设定转盘 (1.22)、向上及向下方向按钮(1.23/1.26)，或再次重复按下向右 (ϟ) 方向按钮选择闪光灯模式。

按下快门释放钮 (1.8) 或 **MENU/SET** 按钮 (1.25)确认设定。

- 闪光灯模式的显示(2.1.2)会做相应的改变。

自动闪光灯启动 – ϟA

此为标准模式。如果因光线不良而必须以手持方式在长时间曝光下拍照，以致可能导致模糊（例如在昏暗的室内及戶外、在黄昏或不良天候下拍照）时，闪光灯每次都会自动闪光。

自动闪光灯及预闪光启动 – ⚡A👁

(减少「红眼」效果)

「红眼」效果是因为闪光灯的光线从眼角膜反射至相机所造成，在拍摄人像或团体照时可能发生此情形。因此，如果被摄体不直视相机当然最好。由于瞳孔在低光环境中放大时会造成更明显的红眼效果（例如在室内拍照），因此应尽可能打开室内照明灯，让瞳孔缩小。

预闪光是在主闪光照射之前不久触发，因此直视相机的被摄体瞳孔会因为预闪光而缩小，减少「红眼」效果。

手动闪光灯启动 – ⚡

适合用于拍摄背光照片，主景物在阴影中且未佔满画格的情形，或想要缓和高对比（例如在陽光直射环境下）(闪光灯补光）时。

此模式启动后，不论当时的照明条件为何，闪光灯单元都会在拍摄每张照片时闪光，在其他功能方面则与自动闪光灯启动模式完全相同。

在此应用中，闪光灯的效能须视测得的户外亮度而定：光线不良情形与自动模式相同，但输出随着环境亮度的增加而降低（最高 – $1^2/_3$ EV)。闪光灯在此情况下当成补光使用，例如用来打亮前景或背光景物的黑暗阴影，以增加整体的平衡照明。

手动闪光灯及预闪光启动 – ⚡👁

用于上述情况与功能组合。

自动闪光灯启动与较慢的快门速度 – ⚡S

用于更适切（更明亮）的同步重现，尤其适合用于黑暗背景及闪光灯前照补光。为了将模糊风险降至最低，在闪光灯开启后，其他模式下的快门速度不可超过 $^1/_{30}$秒。使用闪光灯拍照时，背景中位于闪光灯照射范围以外的物体通常会出现曝光严重不足的情形。

在这种情况下拍照时，适切考量环境亮度后，可视情况使用较长的快门速度（长达30秒）。

注意事项:

相机所使用的最长快门速度可由 自动 设定(3.3，参阅第38页)决定。

另外， **自动ISO**设定 设定的不同，相机可能不需要设定较慢的快门速度，因为在此情况下係以提高ISO感光度为第一优先考量。

自动闪光灯及预闪光启动与较慢的快门速度 – ⚡S👁

用于上述情况与功能组合。

SLAVE 模式

此模式专门用来触发其他闪光灯单元，例如配备某项从属功能的摄影棚闪光灯单元（由相机的闪光灯进行光学触发）。也就是说，此模式不适合用于一般闪光灯拍照。

注意事项：

为了避免在 SLOW、SLOW 及 REAR SLOW 模式下拍照时因为放慢快门速度而造成影像模糊，请握稳或撑住相机，或使用三脚架。或者，也可以选择较高的 ISO 速度 (参阅第38页)。

闪光范围

有效的闪光范围视光圈及大约ISO速度设定值而定，重要的是主景物必须在闪光范围内，才能确保获得最佳的拍摄效果。请参阅下表详细资料。

感光度	最大闪光范围[1]
ISO 100	2.0m/6ft
ISO 200	2.8m/9ft
ISO 400	4.0m/13ft
ISO 800	5.6m/18ft
ISO 1600	8.0m/26ft
ISO 3200	11m/36ft
ISO 6400	16m/53ft
ISO 12500	22m/73ft

[1] 范围以2.8光圈为准， 若采用其他光圈设定，范围将随之缩小。

同步化至闪光结束

用闪光灯拍照时有两个光源提供照明：可用光源和闪光灯光源。全部或大部分受到闪光灯照射的景物部位，因为受到极快速的光脉冲作用而在重现时显得特别清晰（若正确对焦）。对比之下，在同一张照片中受到可用光的足够照射或自行发光的景物部位则呈现不同的清晰度。

这些景物部位在重现时是否清晰或「模糊」以及模糊的程度，係由两个独立的因素决定。

1. 曝光时间长度，也就是这些景物部位「作用」于感应器的时间有多长。
2. 这些景物部位或相机本身于曝光期间移动的速度有多快。

快门速度／曝光的时间越长或移动越快，照片上两个（叠加）部分的差异度就越明显。

当闪光灯在开始曝光时的正确时刻闪光（亦即在快门完全打开后立即闪光），可能会造成一种明显的矛盾，例如车辆看起来好像被自己尾灯的轨迹给「超车」了。

LEICA X2 提供正确时刻闪光及同步化至曝光结束两种选择，后者係指在快门打开之前立即闪光，并持续到快门再次关闭。在此模式下，清晰的影像将出现在动作结束时刻。在上述范例中，尾灯轨跡将一如预期地出现在车辆后方。因此，这项闪光技术可提供一种更加自然的动作和动态印象。

从选单中选择**闪灯同步** (3.14)，然后在子选单中选择想要的设定。

注意事项：

从影像的观点来看，使用较快的快门速度几乎没有什麼差别，可能也只是在两次闪光之间的快速移动有些不同而已。

闪光灯曝光补偿

不论可用光的曝光情形如何，都可使用此功能选择性减少或加強闪光曝光，例如：在晚上于戶外拍照时，即必须照亮前景某个人的脸，又必须维持当时的光线气氛。

1. 按三下向上**EV+/-** 方向按钮 (1.23)设定闪光灯曝光补偿。
   - 出现相应的子选单。
2. 用向左及向右方向按钮(1.24/1.27)选择想要的补偿值。补偿值的可用范围从+3至-3 EV，以$^{1}/_{3}$EV为一增量单位。
3. 按下快门释放钮(1.8)或**MENU/SET**按钮(1.25)确认设定。
   - 出现曝光补偿符号及设定值 (2.1.14)。

注意事项：

- 因为设定正补偿值而选择的较亮闪光照射需使用较大的闪光输出，亮度较低的闪光照射则使用较小的闪光输出。因此闪光灯曝光补偿多少会影响闪光灯的照射范围：正补偿值缩小闪光范围，负补偿值扩大闪光范围。
- **EV+/-**方向按钮也可用来叫出曝光包围（参阅下一节）及闪光灯曝光补偿 (参阅第52页) 选单。这些值不断轮迴卷动，因此可重复按下按钮进行选择。
- 设定的补偿值在切换至±0(参阅步骤2) 之前持续有效(不论连拍几次或甚至在关闭相机后仍然有效)

使用外接闪光灯单元

LEICA X2的ISO闪光靴(1.11)亦允许使用功率更大的外接闪光灯单元。我们特别建议使用专用的闪光灯单元，如LEICA SF 24D (请参阅 p. 73)。

安装外接闪光灯单元后，如果设定闪光灯模式和预闪光功能(ϟA👁/ϟ👁/ϟS👁)，相机将会切换至无预闪光 (ϟA/ ϟ/ ϟS) 功能的闪光灯模式，并将此模式显示。

然而，如果取下外接闪光灯单元，相机会重新设回原来的模式。

若使用 LEICA SF 24D，应设定 **TTL/GNC** 模式，允许相机自动控制。如果设定为 **A**，亮度在平均水准以上或以下的景物可能无法获得最佳的曝光。如果设定为 **M**，必须相应地设定一个较低的功率输出级，配合相机指定的光圈与距离值调整闪光灯曝光。

注意事项：

安装外接闪光灯单元后，必须将其开启（即使其准备就绪），否则将会造成不正确的曝光，一个錯误讯息也会出现在相机上。

您无法同时使用外接式电子取景器EVF 2 (请参阅 p. 72)

其他功能

自拍计时器

自拍计时器可设定2 或 12秒的延迟拍照时间。在拍摄团体照时，如果您希望自己也能入镜，或想避免在按下快门时因为相机震动而使照片失焦，便可使用这个实用功能。拍摄这类照片时，建议您使用三脚架。

设定

1.按下向左 ⏲ 方向按钮(1.27)
2.然后在出现的选单中选择想要的延迟时间。也可使用设转盘(1.22)、向上及向下方向按钮(1.23/1.26)，或再次重复按下向左方向按钮选择延迟时间。
3.按下快门释放钮(1.8)或**MENU/SET**按钮(1.25)确认设定。

操作

将快门释放钮(1.8，参阅第47页) 按到底拍照。

- 延迟进程(12秒延迟)以自拍计时器上闪烁的LED(1.2)表示。
  - 12秒延迟，一开始速度较慢(1Hz)，最后2秒会加快速度(2Hz)。
  - 2秒延迟，运作情况如上述的最后2秒。
    监视器上有一讯息倒数剩余的时间(2.1.11)。

注意事项：

- 在延迟时间倒数中可随时再次按下快门释放按钮，重新开始计时。
- 只要用主开关选择另一个模式或关闭相机，便可取消倒数中的延迟时间。
- 启动自拍计时器后，只能拍摄单张照片，连续曝光 (参阅第24页) 和自动曝光包围 (参阅第52页) 无法与自拍计时器搭配使用。如果启动连续曝光，相应的符合会以删除形式显示。

记忆卡或内部记忆体的格式化

在正常情况下不需要对使用过的记忆卡进行格式化（初始化），但必须对第一次使用的记忆卡进行格式化。

然而，我们建议不时对记忆卡进行格式化，因为某些数量的残留资料（附属资料）会占据部分记忆卡空间。

从选单中选择 **格式化**(3.32)，然后在子选单中确认或拒绝格式化程序。

注意事项：

• 如果只是单纯的格式化不会无可挽回地删除记忆卡内的资料，此程序只会删除目录，以致无法再直接存取现有的资料。在某些情况下，您可以使用适合的软体再次存取资料。只有因为储存新资料而被覆写的资料才会完全遭到删除，所以您应养成习惯，尽快将所有照片程式转换到安全的大量储存媒体，例如个人电脑。

- 记忆卡格式化期间，请勿关闭LEICA X2。
- 如果记忆卡曾在电脑或其他装置中格式化，您应再次用LEICA X2进行格式化。
- 如果记忆卡无法格式化，请洽询经销商或联络Leica Information Service (请参阅第80页)。
- 即使是受到保护的照片(参阅第66页) 也会在格式化时遭到删除。
- 如果未插入记忆卡，将对内部记忆进行格式化。

工作色域

数位照片档案可用于各种用途，对色彩重现亦有相当不同的要求。为因应此情况因此开发了不同的色域，例如标准RGB (红 / 绿 / 蓝) 可以完全满足简单印刷的需求。在要求更严苛的软体影像处理方面（例如校正颜色），Adobe© RGB 已发展成相关领域的标准。

从选单中选择**色彩管理**(3.26)，然后在子选单中选择想要的设定。

注意事项：

- 如果要由大型摄影研究室、小型研究室或透过网路照片服务公司列印照片，请务必选择sRGB 设定。
- 只有在实施完全色彩校正的工作环境进行影像处理时，才建议使用Adobe RGB 设定。

从内部记忆复制影像资料至记忆卡

LEICA X2大约110MB的内部记忆无须使用记忆卡也能在相机中储存多张影像。如果想要永久储存这些影像，则应将影像资料复制至记忆卡。

从选单中选择**复制**(3.35)，然后在子选单中确认或拒绝复制程序。

建立新的资料夹代号

LEICA X2按升序将照片代号储存于记忆卡内。在初期阶段，相关档案皆储存在一个资料夹内。您可随时建立新的资料夹储存后续照片，例如更有系统地将照片分为群组。

从选单中选择**重设影像编号**(3.22)，然后在子选单中确认或拒绝重新设定程序。

注意事项：

- 档案名称 (例如L1002345. jpg)包含**100**及**2345** 两组数字。第一组3位数为相关资料夹的代号，第二组4位数为资料夹中的照片序号。此编号系统确保在使用功能将资料程式转换至电脑后，不会出现完全一样的档案名称。
- 若要将资料夹名称重新设定为100，可对记忆卡或内部记忆体进行格式化，然后立即重新设定影像代号。此步骤亦重新设定照片代号（设为0001)。

使用设定档

所有选单设定的任何可能组合都可永久储存在LEICA X2内，例如：为了随时快速轻松地截取设定值，让实境或景物再现。总共三个记忆插槽可用于这些组合，亦可将所有选单项目重新设定为原厂设定值。

建立设定档

1. 从选单设定想要的功能。
2. 从选单中选择**使用者设定档**(3.38)。
3. 在子选单中选择**储存使用者设定**。
4. 在第二层子选单选择想要的记忆插槽。
5. 按下**MENU/SET**按钮(1.25)确认设定。

使用设定档

从选单中选择**使用者设定档**，然后在子选单中选择想要的记忆插槽。

预设所有选单设定

从选单中选择**使用者设定档**，然后在子选单中选择**恢复出厂预设值**。

注意事项：

预设功能不会重新设定时间、日期及語言设定值。

影像稳定

特别是在低光环境中，即使启动**自动ISO**功能(参阅第38页)，所需的快门速度仍可能因为太慢而无法保证拍出清晰的照片。LEICA X2 提供一种在如此慢的快门速度下亦能拍出清晰照片的功能。

从选单中选择**影像稳定化**，然后在子选单中选择想要的设定。

注意事项：

- 相机在此功能下，分别以较快和较慢的快门速度自动连续拍摄两张照片（您会在操作过程中听到快门操作两次的声音）。接着，相机取得这两次曝光的资料，并在数位资料处理过程中将两者合二为一。
- 因此，请握稳相机，直到快门第二次释放。
- 由于此功能使用两次曝光，因此只能拍摄静态景物。
- 只有当快门速度在 $^{1}/_{4}$ 秒到 $^{1}/_{30}$ 秒而且感光度高达ISO1600时，才能达到影像稳定。

检视模式

选择检视模式

您可以随时按下**PLAY**按钮(1.16)，从录影或选单设定模式切换至检视模式。

此外，您也可以选择在拍完照后立即自动显示您拍摄的每张照片。

1. 从选单中选择**自动检视**(3.23)，
2. 从子选单中选择**持续时间**，然后
3. 在相关第二层子选单中选择想要的功能或持续时间。
4. 若要选择在显示照片时是否同时显示长条图(请参阅第47页)，再叫出第一层子选单。
5. 选择**直方图**，然后
6. 选择想要的选项。

• 上一张照片显示在监视器上，而且出现所选的检视模式画面(请参阅第73页)。
如果记忆卡或内部记忆体(请参阅第60页)未储存影像，则会出现**无可播放的有效影像**讯息。

注意事项：

•如果已经插入记忆卡（请参阅第82页），则只能存取记忆卡上的照片进行检视。如果想要检视储存在内部记忆中的照片，必须先取下记忆卡。

- LEICA X2 依DCF（相机档案系统之设计规则）标准储存照片。
- 无法检视非由LEICA X2建立的档案。
- 监视器的影像有的时候可能会出现比平常差的画质，有的时候除了档名外，其他部分皆呈现黑色。

选择照片

您可以利用以下按钮选择其他储存的照片：

- 向左及向右方向按钮 (1.24/1.27)，或者
- 设定轮 (1.20)。

往左按或向左转动时，显示编号较低的照片；往右按或向右转动时，显示编号较高的照片。按住按钮将以大约每张照片2秒针的速度不停卷动。

在到达最高及最低编号后，照片将以无止尽的轮迴方式再次重新显示，所以无论您从哪个方向都可以检视有照片。

• 照片和档案的名称随着卷动而改变。

放大照片 / 同时检视16张照片

LEICA X2可将照片特定部位放大到16倍，例如用于近距离研究 。相反的，也可以同时检视16张照片，如浏览或快速找到照片。

顺时针方向转动设定转盘(1.22)放大照片，逆时针方向转动将以超过正常的尺寸显示16张照片。

- 照片放大后出现画面，指出该部位(2.2.21)的大约尺寸。您仍然可以使用设定轮选择其他照片(2.2.20)。
  在16张照片的画面上，之前以正常尺寸检示的照片以红框表示。

注意事项：

•放大的照片越多，监视器上的重现品质将因为解析度依比例降低而越来越差。

•可能无法放大用其他类型相机拍摄的照片。

•如果在显示放大部位时用设定轮欣赏其他照片，所有照片都将放大显示。

• 无法在放大检视时使用长条图 (参阅第47页)。

在16张照片的画面上，选择其他照片将得到以正常尺寸检查相同的结果。若按住按钮，画面会以非常快的速度卷动。

• 所选的照片以红框表示。

可以随时顺时针转动设定转盘或按下**MENU/SET**按钮(1.25)。

选择拍摄角度

放大照片时，可将放大部位移出中央位置，如对未在中央的景物进行细部色彩重现控制。

使用各方向按钮将放大的部位往上、下、左或右(1.23/1.24/1.26/1.27)移动。

• 画面 2.2.21指出放大部位在照片中的大概位置。

删除照片

可随时删除储存在记忆卡或内部记忆中的照片。如果已经将照片储存在其他媒体，如果不再需要照片，或如果要从记忆卡上释出更多记忆空间，此功能将非常好用。

LEICA X2亦提供删除单张或同时删除全部照片选项供您选择。

注意事项：

- 如果已经插入记忆卡（请参阅第22页），则只能存取记忆卡上的照片进行删除。如果想要删除储存在内部记忆中的照片，必须先取下记忆卡。
- 受保护的照片必须先解除保护才能删除。请参阅第66页的详细说明。
- 删除一张照片时，画面计数器(2.29)内的其他后续照片将依以下方式重新编号：例如，如果删除3号照片，之前的4号照片会变成3号，之前的5号照片变成4号，依此类推。但资料夹(2.2.6)中的剩余照片档案号码仍保持不变，不会重新编号。

重要资讯：

照片是永久删除，无法再撷取删除的照片。

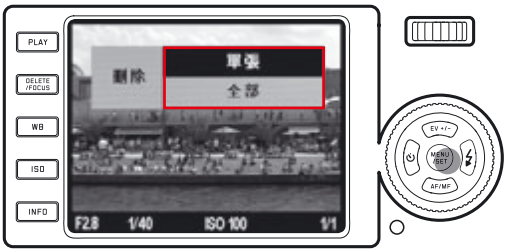
若要叫出删除功能，请按**DELETE/FOCUS**按钮(1.15)。

- 出现删除选单。

后续动作端视您要删除单张照片或同时删除全部照片而定。

删除单张照片

1. 选择 单张 并按下**MENU/SET** 按钮(1.25)。
   - 删除之后随即显示下一张照片。
     若照片受到保护(请参阅66页)，该照片将继续显示，且短暂出现**防写保护**讯息。



删除所有照片

1. 选择**全部**并按下**MENU/SET**按钮(1.25)。
   •出现一个子选单。
2. 确认或退出流程，并再按一下**MENU/SET**按钮。
   •**无可播放的有效影像**讯息或原来显示的照片（若未被删除的话）再次出现。
   然而，如果有些照片受到保护（请参阅下一节），将短暂出现**防写照片未被删除**，最后出现这些照片中的第一张照片。

注意事项：

如果在重新考虑后决定不删除该单张或全部照片，则可再次按下**DELETE/FOCUS**按钮离开删除选单。

照片保护 / 解除保护

可对储存在记忆卡或内部记忆的照片加以保护，以避免意外删除。

1. 从选单中选择 **防写保护**(3.34)。
   •一会兒之后，之前显示的照片会和选单一起再次出现。视照片是否受到保护而定，选单会出现**取消保护**或**防写保护选项**。

2. 选择相关选项，并
3. 按下**MENU/SET**按钮(1.23)确认。
   •受到保护的照片以上锁符号(2.2.4)表示

注意事项：

•如果已经插入记忆卡（请参阅第22页），则只能存取记忆卡上的照片进行保护／解除保护。如果想要保护／解除保护储存在内部记忆中的照片，必须先取下记忆卡。

•可以随时按下 **退出** 回到一般检视模式。

•在**保护／解除保护**选单的显示画面上，您可以选择用向左及向右方向按钮(1.24/1.27)选择其他照片。

•即使是受到保护的照片(请参阅第59页) 也会在记忆卡格式化时遭到删除。

•若嘗試刪除 (请参阅第66页) 受保护的照片，画面上將会出现警告讯息。　若要删除受保护的照片，请依上述步骤解除保护。

•保护仅在本相机有效。

•您也可以将记忆卡的防写开关移至标示LOCK的位置 (请参阅第22页) 来防止意外删除。

检视人像格式照片

在正常情况下，照片係以其拍摄时的原样显示在监视器上。如果以水平方向握持相机，照片也将以水平方向显示。在人像格式的照片(即相机以垂直方向拍照)，这可能会带来不便，因为若日后以水平方向握持相机，监视器不会以垂直方向显示照片上的影像。

LEICA X2对此提供弥补。

从选单中选择**自动转正**(3.32)，然后在子选单中选择想要的设定。

如果选择**开启**，人像格式照片会自动以垂直方向显示。

注意事项：

- 以垂直方向显示在监视器上的人像格式照片必然会变得相当小。
- 此功能不适用于自动检视 (请参阅第26页)。

用HDMI设备播放

您可以使用电视、投影机或配备HDMI输入的监视器观察LEICA X2拍摄的照片，但请确保最佳的色彩重现。此外，您可以在三种解析度之间进行选择：1080i、720p及480p。相机会在最高解析度设定范围内，针对连接的设备自动选择最佳的解析度。

设定

从选单中选择HDMI (3.33)，然后在子选单中选择想要的设定。

连接 / 播放照片

1. 将HDMI 缆线插入相机及监视器或投影机的 HDMI 插孔。
2. 开启电视、投影机或荧幕，如果未自动侦测到HDMI 连线，请选择正确的输入。
3. 开启相机并按下**PLAY**按钮(1.16)，将相机设定为检视模式。

注意事项：

- HDMI线(选购)是连接电视、荧幕或投影机必须使用的连接线。只可使用Leica提供的型式 (参阅第153页)。
- 若电视、荧幕或投影机的最高解析度低于相机所指定的等级，相机会自动切换到连接装置的最高解析度。例如，若相机设为1080i，连接装置的最高解析度为480p，则相机会自动使用 480p。
- 请参阅HDMI TV、投影机或监视器相关手册中的详细设定说明。
- 外接显示器上显示的影像不包含相机荧幕/取景器上的任何资讯。

将资料程式传送至电脑

LEICA X2 与以下作业系统相容：
Microsoft®: Windows® XP / Vista® / 7®

Apple® Macintosh®: Mac® OS X (10.4) 以上版本

LEICA X2配备USB 2.0高速资料传输介面，可将资料程式转换至电脑。此配备确保以相同的介面将资料快速程式转换至电脑。所使用的电脑必须配备一个USB埠 (用来直接连接Leica X2) 或 SD / SDHC / SDXC读卡机（包括 UHS I 标准类型）。

连接及程式转换相机外接装置的资料

Windows作业系统：

如果用USB 线将 LEICA X2 接至电脑，作业系统会侦测相机，将其当作外接装置，并指派一个磁碟机代号給相机。
用Windows Explorer程式转换照片资料至电脑并储存照片。

Mac作业系统：

如果用USB 线将LEICA X2接至电脑，所使用的记忆卡会在桌面显示为储存媒体。用Finder将照片资料程式转换至电脑并储存照片。

重要资讯：

- 只可使用随产品提供的USB线 (D)。
- 资料从LEICA X2程式转换至电脑时，无论如何都不可拔下USB线中断连线，否则电脑及 / 或LEICA X2 可能会「当机」，记忆卡甚至可能会无可挽回地损坏。
- 应确定在资料从LEICA X2程式转换至电脑时不会关闭LEICA X2，LEICA X2 也不会因为电池沒电而自行关闭，否则可能造成电脑当机。基于相同理由，在连线期间切勿取出相机电池。如果电池的电量在资料程式转换过程中降低，**INFO**画面(2.1.26) 会出现，且电池电量指示灯(2.1.5) 会闪烁。发生此情况时，请停止程式转换资料，关闭LEICA X2(参阅第24页)，并对电池充电(参阅第20页)。

使用读卡机连接及程式转换资料

也可使用SD / SDHC / SDXC 记忆卡（包括 UHS I 标准类型）标准读卡机将照片档案程式转换至其他电脑；亦提供USB介面电脑使用的读卡机及USB介面。

注意事项：

LEICA X2配备一个用来侦测相机纵向或横向（双向）位置的整合式感应器，可用于每张照片。当照片日后在执行相关程式的电脑上显示时，此资讯会自动使照片垂直显示。

处理 DNG 原始资料

如果选择了具前瞻性的标准DNG(数位负片)格式，则需使用高度专业化的软体将储存的原始资料转换成最佳品质，例如专业 Adobe® Photoshop® Lightroom® 原始资料转换器。此软件在数位彩色处理领域提供最佳品质演算功能，使照片同时具备低照片杂讯及超高解析度。

可在编辑过程中调整白平衡、降低杂讯、渐层、清析度等参数，创造最佳的影像品质。

您在 Leica Camera AG 的首页完成 LEICA X2 的登录后，便可免费下载 Adobe® Photoshop® Lightroom® 软体。有关其他详细资讯，请参阅相机包装内的登录卡。

安装 Adobe® Photoshop® Lightroom®

在开始安装之前，电脑必须先连接网路（即电脑必须上线）。另外亦需准备有效的电子邮件位址。

备妥所需的软体授权代码。在您选择下载软体后，将从Leica的回信中收到此代码。

如果您需要有关 Adobe® Photoshop® Lightroom® 的任何支援：您可从 Leica Camera AG 首页的所有人专区（也就是您登录相机和下载软体的页面）获得支援。

系统需求

与所有软件一样， Adobe® Lightroom® 的每种版本也有对应的作业系统 (Windows/Mac)，因此，请在下载 Adobe® Lightroom® 前，查看作业系统的相容性。

某些 Windows 版本的作业系统会在遗失 Windows 数位签章时发出警告，请略过此讯息并且继续安装。

安装软件更新资料

Leica一向致力于开发产品及创造最高的产品品质。数位相机有许多由电子控制的功能，这些功能的某些改善及強化项目可在日后安装。

为达此目的，Leica 定期提供软件更新资料，您可从首页轻松下载。

Leica 会在您完成相机的登录后，通知您最近更新的资料。

配件

重要事项：
只有以下Leica Camera AG 所述或指定的配件，才适用于本相机。

皮套 X
材质为高品质真皮（黑色）。直立式收纳相机，相机可滑入滑出，方便携带与拍摄。配备颈带
（订单编号 18 755）

相机保护套 X
套上保护套后，您仍可自由使用相机内部的操作按钮。放在保护套内仍可拍摄。材质为高品质真皮（黑色）。
（订单编号 18 731）

专用皮套 X
传统样式，材质为高品质真皮（棕色）。采前开式设计，除了方便拍摄，还能同时保护机身。配备颈带。
（订单编号 18 732）

帆布器材包
体积小、质软，材质为高级防水帆布（黑色）。可携带相机与配件，例如手柄、取景器与闪光灯。
（订单编号 18 757）

手腕带 X
采流线型设计，材质为真皮（黑色）。
（订单编号 18 713）

外接式取景器

Bright Line Finder 36mm观景器
高级外接式光学观景器。明亮的线框可指定 60cm – 无限远及 30cm - 60cm 的像场。
（订单编号 18 707）

电子式观景器 EVF 2
EVF 2 提供将近100%的TTL影像检视框，解析度为1.4M 像素，让您精确、轻松构图，还能同时全面掌控所有相关影像设定。EVF 2特别适用于现场光过亮导致看不清楚荧幕影像的状况，其铰链式设计也让低于视线的拍摄更容易。
（订单编号 18753）

两种观景器都是安装在相机的热靴上，和外接闪光灯的安装方式相同，因此只能择一安装。如需详细瞭解使用外接观景器时的荧幕相关设定，请参阅第34/35页。

LEICA X2握把

LEICA X2握把提供安全舒适的相机握感。握把底部的滚花螺丝可接上相机的三架脚螺纹。
(订购号码 18 712)

注意事项:

- 此为LEICA X2及LEICA X1专用握把。由于其他相机的尺寸及三架脚螺纹与LEICA X2不同，因此不可安装在其他相机上。
- 握把会盖住相机的电池室/记忆卡插槽，因此更换电池及/或记忆卡前须先取下握把。
- 请确定握把导销与相关相机孔 (1.34)对齐，否则可能刮伤相机。

闪光灯

Leica SF 24D 闪光灯设计精巧，不占空间，能与相机完美搭配。配备闪光灯脚架，含所有必要接点，操作容易。
（订单编号 14 444)

HDMI传输线

可使用 HDMI 传输线透过相应的 HDMI 插孔非常快速地将照片资料传至播放或储存设备。长度约 1.5m/5ft
(订购号码 14 491)

替换零件	订购号码
镜头盖	423-089.003-024
热靴/观景器插槽盖	423-097.001-026
真皮相机腕带	439-612.060-000
USB 线	423-089.003-022
LEICA BP-DC 8 锂离子电池组*	18 706
电池盒	423-089.003-012
LEICA BC-DC8 充电器(含可转换插头)	423-089.803-008
AC-插头 欧洲	423-089.003-014
AC-插头 美国/日本	423-089.003-016
AC-插头 英国/香港	423-089.003-018
AC-插头 中国	423-089.003-020
AC-插头 韩国	423-089.003-028
AC-插头 澳洲	423-089.003-030

* 为了在长期间使用相机时（如参加活动或旅行时）能确保电力供应，建议最好准备备用电池。

一般注意事项

请勿在会产生強力磁场、静电场或电磁场的装置（例如：感应炉、微波炉、电视机或电脑显示器、游戏机、手机、无线电设备）附近使用 LEICA X2。

- 若将LEICA X2放置在电视机上或非常靠近电视机，其磁场可能会干扰照片记录。
- 在手机附近使用相机也可能发生同样情况。
- 強力磁场（例如扬声器或大型电动马达）会损坏储存的资料或照片。
- 若LEICA X2受到电磁场的影响而发生故障，请取出电池后再重新开启相机。

请勿在无线电发射器或高压电线的附近使用LEICA X2。

- 其磁场也会干扰相片记录。

请避免LEICA　X2接触到杀虫剂或其他腐蚀性化学物质。请勿使用石油溶剂、稀释剂及酒精清洁本产品。

- 某些化学制品及液体会损伤LEICA X2的机身或表面处理。
- 由于橡胶及塑胶有时会散发腐蚀性化学物质，因此请勿使LEICA X2长期接触这些物品。

在海滩等场所，请防止沙子或灰尘进入LEICA X2。

- 沙子和灰尘会对相机及记忆卡造成损伤，在插入及取出记忆卡时请特别留意。

下雪、下雨或在海边时，请避免水进入LEICA X2。

- LEICA X2及记忆卡受潮可能造成故障或甚至是永久性损伤。
- 若LEICAX2碰到海水，请将一块软布用自来水浸湿，拧干后擦拭相机。然后使用干布将相机擦拭干净。

重要事项：

只有本说明书之Leica Camera AG 所述或指定的配件，才适用于本相机。

显视屏

- 若 LEICA X2 暴露于温差变化大的环境中，显视屏上会凝结水氣。请使用干燥软布小心擦拭。
- 若开机时 LEICA X2 非常冰冷，显视屏在刚开始会较平常稍暗。温度回升后显视屏就会回复到正常亮度。

显视屏经高精密流程制成。此流程确保在总数约230,000画素中，超过99.995%的画素运作正常，而僅有0.005%为亮点或暗点。此并非故障现象，对照片的重现也不会造成损害。

感应器

宇宙辐射(例如在飞机上)会导致像素损坏。

水气凝结

若 LEICA X2表面或内部形成水气凝结，应将其关机并在室温中放置约一小时。一旦相机温度调整至室温，凝结的水氣便会自动消失。

保养说明

由于污垢也是微生物生长的温床，因此应注意保持本设备干净。

相机保养

- 仅能使用干燥软布清洁LEICA X2。首先使用稀释过的清洁剂去除顽強汙垢，然后使用干布擦拭干净。
- 若要去除汙痕及指纹，应使用干净的无尘布擦拭相机。相机机身难以擦拭到的角落污垢可使用小刷子去除。
- 请为 LEICA X2 的机械操作承轴及滑杆表面上油；长时间不使用本相机前请记得上油。为避免润滑点沾粘，应每三个月释放快门数次。也建议您经常操作及使用其他控制装置。

镜头保养

- 一般而言软毛刷便足以清除镜头外部的灰尘。不过若要去除顽强污垢，可使用非常干净且完全沒有异物的软布，以画圆动作从裡到外小心清洁。我们建议使用超细纖维擦拭布(可从相机专卖店购买)，这种擦拭布存放于保护容器内，可用高达40°C/104°F 的温度清洗(不需使用衣物柔软剂，也不必熨烫！)。而由于眼镜擦拭布浸泡过化学物质，因此请勿用于清洁镜头，以免损伤镜头玻璃。
- 随附镜头盖，以免不小心在镜头上留下指纹，或被雨淋湿。

电池保养

充电式锂电池透过内部化学反应产生电力，这些反应受到外界温度及湿度的影响。温度过高或过低会減少电池寿命。

- 长时间不使用 LEICA X2 前，请务必取出电池。否则几週后电池会完全放电，也就表示电压会大幅降低。
- 只可储存部分放电的电池，不可储存全部放电或充滿电的电池(相关的显示为2.1.5/2.2.5)。如果要储存一段长时间，应每年两次对电池充电大约15分针，以避免全部放电。
- 为电池充电的环境温度必须在 0°-35°C/32°-95°F 之间（否则您将无法开启充电器，或是充电器会再关闭）。

- 务必确保电池的触点干净无污垢且可顺利接触。虽然锂离子电池具有防短路功能，仍应避免接触回纹针或珠宝首饰等金属物品。短路的电池可能变得非常烫而造成烫伤。
- 如果电池掉落，请立即检查外壳及触点是否损坏。使用损坏的电池可能造成 LEICA X2 故障。
- 电池受到使用寿命的限制。
- 请将损坏的电池交由回收站处理，并确保正确回收。
- 请勿将电池投入火中，否则可能引起电池爆炸。

充电器保养

- 在无线接收器附近使用充电器可能干扰讯号接收；请确保装置间保持至少1 公尺的距离。
- 使用充电器时可能产生噪音 (嗡嗡声) – 这是正常现象，并非故障。
- 充电器不使用时应切断与主电源的连接，否则即使在没有电池充电的情况下也会耗损一定数量 (非常少) 的电力。
- 务必保持充电器触点的清洁，绝不可引起短路。

记忆卡保养

- 在储存照片或读取记忆卡时不可将记忆卡取出，也不可关闭或摇晃 LEICA X2。
- 为了安全起见，请将记忆卡储存在所提供的抗静电盒中。
- 请勿将记忆卡储存于会暴露在高温、直接日晒、磁场或静电放电的场所。
- 请勿掉落或弯折记忆卡，以免造成损伤并导致所储存的资料遗失。
- 长时间不使用 LEICA X2 前，请务必取出记忆卡。
- 请勿碰触记忆卡尾部的连接点，并防止其沾污垢、灰尘或受潮。
- 由于在执行删除时会进行重组以致占用部分记忆容量，因此建议您不时重新格式化记忆卡。

储存

- 若将长时间不使用LEICA X2，我们建议您：
  a. 关机(请参阅第24页），
  b. 取出记忆卡 (请参阅第22页)，并
  c. 取出电池 (请参阅第20) (时间及日期将会遗失，请参阅第22页)。
- 若明亮的阳光直射于相机上，镜头便会产生有如放大镜的效果，因此不可将相机放置于日照強烈处。使用镜头盖并将相机放置于阴影处 (或立即放进箱子) 可避免损伤相机内部。
- 最好将LEICA X2储存于密闭且能防撞的容器内，防止损伤并避免沾染灰尘。
- 将LEICA X2存放在干燥且能适当通风的地方，避免产生高温或潮湿。在潮湿的环境使用LEICA X2后，应先徹底将其潮湿处清洁干净再存放。
- 若使用时弄湿了照片盒应先将其清空，避免您的设备受潮损伤或释放残留制革药剂。
- 在炎热潮湿的热带气候中使用时，为避免发霉，应尽量让相机暴露于日照下并通风。建议您在气密容器或盒子内放置矽胶等干燥剂后，才将相机存放于该容器内。
- 为了防止发霉，请勿长时间将LEICA X2存放在皮套中。
- 请记下您的LEICA X2的序号 (刻在热靴上)，当您的相机遗失时此序号非常重要。

感应器 APS-C-size (23,6 x 15,7 mm) CMOS 感应器，1650 / 1620 万像素（总像素/有效像素），长宽比 3:2

解析度 JPEG格式可选择4928 x 3264 像素 (16.2M), 4288 x 2856 像素 (12.2M), 3264 x 2160 像素 (7M), 2144 x 1424 像素 (3.1M), 1632 x 1080 像素 (1.8M), DNG: 4944 x 3272 像素

镜头 Leica Elmarit 24mm f/2.8 Asph. (符合 36 mm/35 mm格式)，8个镜头元素分为6组，1个球面。

光圈设定 自 f/2.8 至 f/16 1/3 EV 增量

最小景物视野 18 x 27cm / 7 $^{7}/_{8}$" x 10 $^{5}/_{8}$" (从距离 30 cm开始)

影像资料档格式/压缩率 可选择：JPG 极精细、JPG 精细、DNG + JPG 极精细、DNG + JPG 精细。

储存媒体 SD/SDHC/SDXC 记忆卡，MultiMedia 卡。

内部缓冲记忆 大约110 MB。

ISO感光度设定 自动、可选择搭配快门及 / 或ISO感光度极限、ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12500.

白平衡 可选择的模式：自动及日光、阴天、卤素灯、阴影、电子闪光灯、2种手动设定、手动色温设定等预设值，可选购所有设定的微调功能。

色彩设定 可选择：标准、鲜艳、自然、黑色自然色、黑白高对比。

自动对焦系统 对比式系统，使用影像感应器、选购的低光环境自动对焦辅助灯。

对焦范围 30cm/1ft. ~ 无限远。自动（自动对焦）或手动对焦（利用机身背面的设定轮对焦），可将放大功能当作对焦辅助。

自动对焦模式 单区域对焦、11 区域对焦、单点对焦、脸部侦测对焦。

曝光模式 程式化自动曝光模式 (**P**)、程式转换选项、光圈优先 (**A**)、快门速度优先 (**T**) 及手动设定 (**M**)。

测光 多场测光、中央重点测光、重点测光、选购长条图显示以分析亮度分布。

曝光补偿 ±3 EV $^{1}/_{3}$ EV 增量。

自动曝光包围 3张照片，可设定间隔及高达3 EV 之曝光值，$^{1}/_{3}$ EV 增量。

快门速度范围 30 秒 ~ 1/2000 秒，一般闪光模式是 $^{1}/_{30}$ 秒以上，慢速同步闪灯模式是 30 秒以上。.

连续曝光 可选择：每秒3张或每秒5张，最多连续拍 8 张。影像传输率稳定，DNG + JPG 精细。

闪光灯模式 闪光灯单元在展开或缩回的同时开启或关闭，自动闪光灯启动含（或不含）预闪光、手动闪光灯启动含(或不含）预闪光、自动闪光灯启动搭配较慢快门速度（含或不含预闪光)、摄影棚模式触发配备从属功能的外接闪光灯系统。

闪光灯曝光补偿 ±3 EV $^{1}/_{3}$ EV 增量。

内置闪光灯单元的工作范围 (ISO 100/21°) 0.3-2.0m/1-6ft，指引代号 5。

内置闪光灯单元的再循环时间 约5秒（电力满的电池）。

显视屏 2,7“TFT LCD，大约 230,000 像素。

显示 参阅第10页

自拍计时器 延迟时间 2 或 12秒。

连接 5-pin 小型 USB 插孔 2.0 高速埠，用于快速传送资料至电脑，HDMI 插孔直接对相关设备进行数位连接外接电子观景器专属插座 Leica EVF 2。

电源供应器 锂离子电池，3,7V 1600 mAh, 电量(依 CIPA 标准)：大约450张照片，充电时间（完全放电后)：大约200分针。

充电单元 输入：AC 100-240 V，50/60 Hz，自动反转；

机壳 Leica Design 机壳以实心超轻镁铝合金制成，相机腕带双孔安装。ISO 闪光靴采中央及控制触点设计，可连接大功率外接闪光单元，例如Leica SF 24D与外接电子取景器EVF 2。

三脚架螺纹 A $^{1}/_{4}$ DIN 4503 ($^{1}/_{4}$“)。

尺寸宽 x 高 x 深 约 124 × 69 × 51.5mm/4 $^{7}/_{8}$ × 2 $^{11}/_{32}$ × 2 $^{1}/_{32}$ 英寸。

重量 约 307/345g / 10.83/12.17oz （含/不含电池）。

徕卡学院

除了从观测到播放领域各种要求严苛的高性能产品外，我们自多年前开始在徕卡学院提供一项以实务为主的研讨会和训练服务，初学者和进阶摄影迷为了探索摄影世界以及投影和放大技术而齐聚一堂。课程在拥有现代化设备的索姆斯(Solms)及临近古德亚腾堡(Gut Altenberg)的摄影棚教室内举行，由受过专业训练的专家团队负责上课。课程内容包罗万向，从一般摄影到有趣的专业领域应有尽有，而且还提供完整的实务建议、资讯与咨询。

若需要详细资讯及最新的研讨会课程表和摄影旅游资料，请联络：

Leica Camera AG
Leica Akademie
Oskar-Barnack-Str. 11
D-35606 Solms Germany.
电话： +49 (0) 6442-208-421
传真： +49 (0) 6442-208-425
la@leica-camera.com

徕卡网站

关于产品、最新消息、活动及徕卡企业的最新资讯，请浏览本公司网站：
http://www.leicacamera.com

徕卡资讯服务

有关徕卡相机应用技术方面的问题请以书信、电话或者邮件方式与下址联系：

Leica Camera AG
Informations-Service
Postfach 1180
D-35599 Solms Germany
电话： +49 (0) 6442-208-111
传真： +49 (0) 6442-208-339
info@leica-camera.com

徕卡客戶服务

在徕卡器材需要维护以及受损时，徕卡公司的客戶服务中心，或者您所在国家的徕卡代理处下属维修服务部将竭诚为您效劳（地址见保修卡)。

Leica Camera AG
Customer Service
Solmser Gewerbepark 8
D-35606 Solms Germany
电话： +49 (0) 6442-208-189
传真： +49 (0) 6442-208-339
customer.service@leica-camera.com

This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

FCC Note: (U.S. only)

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.

FCC Caution:

To assure continued compliance, follow the attached installation instructions and use only shielded interface cables with ferrite core when connecting to computer or peripheral devices.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Trade Name: LEICA
Model No.: LEICA X2
Responsible party/
Support contact: Leica Camera Inc.
1 Pearl Count, Unit A
Allendale, New Jersey 07401
Tel.: +1 201 995 0051
Fax: +1 201 995 1684
technicalinfo@leicacamerausa.com

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.

This Class B digital apparatus complies with Canadian ICES-003

LEICA X2

Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

LEICA X2

Instructions

FOREWORD

Dear Customer,

We wish you a great deal of pleasure and success using your new Leica X2. The high-performance Leica DC Elmarit 24mm f/2.8 Asph. lens will give you excellent picture quality.
Thanks to its fully automatic programmed exposure control mode and autoflash feature, the Leica X2 provides uncomplicated photography. Alternatively, you can take over picture composition yourself at any time using the manual settings.
You can select from numerous special functions to improve the picture quality even in very difficult exposure conditions.
Please read these instructions so that you can make the most of your Leica X2's capabilities.

These instructions are printed on 100% chlorine free bleached paper, whose high-quality manufacturing process protects the water and is environmentally friendly.

SCOPE OF DELIVERY

Before using your Leica X2 for the first time, please check that the supplied equipment is complete.

A. Battery Leica BP-DC 8
(order no. 18 706)

B. Battery case
(order no. 423-089.003-012)

C. Battery charger Leica BC-DC8 with interchangeable plugs
(order no. 423-089.003-008)

D. USB cord
(order no. 423-089.003-022)

E. Leather carrying strap
(order no. 439-612.060-000)

F. Lens cap
(order no. 423-097.001-024)

G. Hot shoe/viewfinder socket cover
(order no. 439-097.001-026)

H. Camera registration booklet with TAN to download Adobe® Photoshop® Lightroom®
(after registering the camera on the Leica Camera AG homepage)

The CE identification of our products documents adherence to the fundamental requirements of the valid EU guidelines.

WARNING MESSAGES

- Modern electronic components react sensitively to electrostatic discharge. As people can easily pick up charges of tens of thousands of volts, by walking on synthetic carpets for example, a discharge can occur when you touch your Leica X2, particularly if it is placed on a conductive surface. If only the camera housing is affected, this discharge is harmless to the electronics. However, despite built-in safety circuits, the outer contacts, such as those on the base of the camera, should not be touched if at all possible for safety reasons. For any cleaning of the contacts, do not use an optical micro-fiber cloth (synthetic); use a cotton or linen cloth instead. Before touching the contacts, you can make sure you discharge any electrostatic charge by deliberately touching a heating or water pipe (conductive, earthed material). You can also avoid soiling and oxidization of the contacts by storing your Leica X2 in a dry place with the lens cap attached.
- You should exclusively use the recommended accessories to prevent faults, short circuits or electric shock.
- Do not attempt to remove parts of the body (covers); specialist repairs can be carried out only at authorized service centers.

LEGAL NOTES

- Please ensure that you observe copyright laws. The recording and publication of pre-recorded media such as tapes, CDs, or other published or broadcast material may contravene copyright laws.
- This also applies to all of the software supplied.
- The SD, HDMI, and USB logos are registered trademarks.
- Other names, company or product names referred to in this manual are trademarks or registered trademarks of the relevant companies.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

(Applies within the EC, and for other European countries with segregated waste collection systems)

This device contains electrical and/or electronic components and should therefore not be disposed of in general household waste! Instead it should be disposed of at a recycling collection point provided by the local authority. This costs you nothing.
If the device itself contains replaceable (rechargeable) batteries, these must be removed first and, if necessary, also be disposed of in line with the relevant regulations.
Your local authority or waste disposal authority, or the store where you bought this device, can provide you with further information on this issue.

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[1] Exclusively for use of Leica EVF2 (see also p.152)

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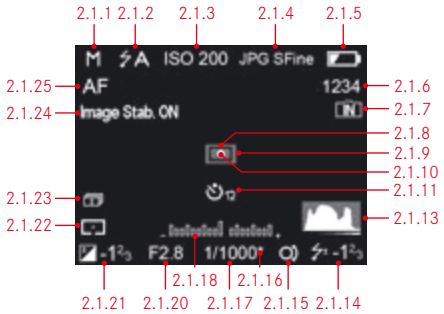
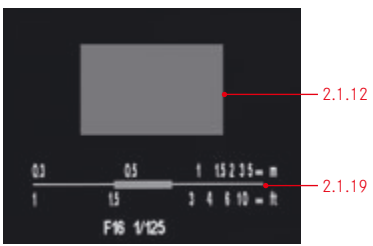
DISPLAYS

2.1 IN RECORD MODE





Note:
The displays listed here and mentioned throughout these instructions all appear either in the monitor or the optionally available external electronic viewfinder, depending on whether the latter is switched on or off with its own respective button. None the less, these instructions only refer to the monitor.
For more information on the Leica EVF 2, see p. 152 and the viewfinder's instructions.

2.1.1 Exposure mode
- a. **P**: Programmed automatic exposure mode
- b. **A**: Aperture priority mode
- c. **T**: Speed priority mode
- d. **M**: Manual setting of shutter speed and aperture

2.1.2 Flash mode
(for built-in and external flash units, flashes in red if flash is not ready, otherwise white)
- a. : Automatic flash activation
- b. : Automatic flash activation with pre-flash
- c. : Manual flash activation
- d. : Manual flash activation with pre-flash
- e. : Automatic flash activation with slower shutter speeds
- f. : Automatic flash activation with pre-flash and slower shutter speeds
- g. : fixed flash power to release slave flash lights

2.1.3 ISO sensitivity[1]
(appears in the place of 2.1.2 when flash is switched off; **AUTO ISO** values appear even if displays are switched off when shutter release button is pressed)
- a. **AUTO ISO**
- b. **100**
- c. **200**
- d. **400**
- e. **800**
- f. **1600**
- g. **3200**
- h. **6400**
- i. **12500**

2.1.4 Compression rate
- a. **JPG Super fine**
- b. **JPG fine**
- c. **DNG + JPG S. fine**
- d. **DNG + JPG fine**

[1] According to CIPA DC-004 Standard

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- b. : Falling capacity
- c. : Insufficient capacity
- d. : Replacement or recharging necessary

2.1.6 Frame counter (Number of remaining pictures)
(If memory capacity is low, **0** flashes as a warning)

2.1.7 Indication that internal memory is used to store images
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- b. : 12 seconds delay

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(appears only with manual focusing)

2.1.13 Histogram
(appears only when activated, yellow when flash unit is switched on, and/or with shutter speeds slower than 1/2s, otherwise white)

2.1.14 Flash exposure compensation set, including compensation value
(appears in the area of 2.1.37 with autofocus mode)

2.1.15 Indication of program shift option / for setting the slowest shutter speeds with the setting dial
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2.1.16 Indication of shifted pair of values
(appears only with programmed automatic exposure mode and after shifting)

2.1.17 Shutter speed
(appears immediately with manual setting, i.e. with speed priority and manual modes, after tapping the shutter release button with automatic setting, i.e. with programmed automatic exposure and aperture priority modes, red after pressing the shutter release button to the pressure point when the setting range is exceeded with programmed automatic exposure, aperture priority and speed priority modes, otherwise white)

2.1.18 Light balance
(alternatively to 2.1.19, appears only with manual setting of shutter speed and aperture)

2.1.19 Distance / depth of field scale
(appears only with manual focusing, with meter and feet graduations)

2.1.20 Aperture value
(appears immediately with manual setting, i.e. with aperture priority and manual modes, after tapping the shutter release button with automatic setting, i.e. with programmed automatic exposure and speed priority modes, red after pressing the shutter release button to pressure point when the setting range is exceeded with programmed automatic exposure, aperture priority and speed priority modes, otherwise white)

2.1.21 Exposure compensation set, including compensation value
(not with manual setting of shutter speed and aperture)

2.1.22 Exposure metering method
- a. : Center-weighted exposure metering
- b. : Multi-field metering
- c. : Spot metering

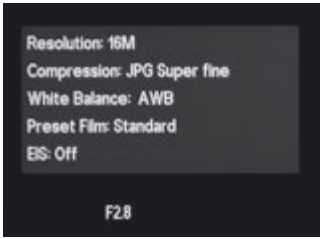
2.1.23 Automatic exposure bracketing

2.1.24 Image stabilization

2.1.25 Focusing mode
- a. **AF**: Autofocus
- b. **MF**: Manual focusing

DISPLAYS

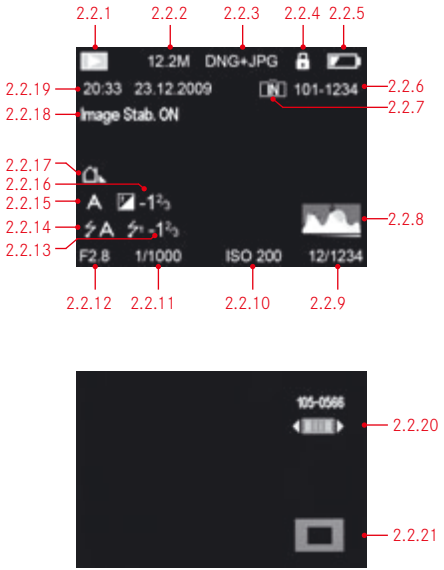
2.1 IN RECORDING MODE



2.1.26 **INFO**-screen with settings for

- Resolution
- File format/Compression rate
  (see 2.1.4)
- White balance
  (Symbols with additional *– if white balance fine tuning is set)
  a. No display: automatic setting
  b. : For tungsten lighting
  c. : For daylight
  d. : For electronic flash units
  e. : For cloudy conditions
  f. : For shady conditions
  g. : Manual setting 1
  h. : Manual setting 1
  i. : For Color temperature setting
- Color bias (**Preset Film setting**)
- Image stabilization

2.2 IN REVIEW MODE



2.2.1 Review mode indication

2.2.2 Resolution

2.2.3 File format / Compression rate
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2.2.4 Protected picture

2.2.5 Battery charge level
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2.2.6 Folder/picture number

2.2.7 Indication that internal memory is used to store images
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2.2.8 Histogram
(see 2.1.13)

2.2.9 Continuous picture numbers/total number of pictures on memory card

2.2.10 ISO sensitivity
(see 2.1.3)

2.2.11 Shutter speed
(see 2.1.17)

2.2.12 Aperture
(see 2.1.20)

2.2.13 Flash exposure compensation
(see 2.1.14)

2.2.14 Flash mode
(see 2.1.2)

a. No display: picture without flash

b. ϟA/ ϟ/ ϟS /ϟSLOW: Flash picture without pre-flash

c. ϟA/ϟ/ϟS: Flash picture with pre-flash

2.2.15 Exposure mode (see 2.1.1)

2.2.16 Exposure compensation (see 2.1.21)

2.2.17 White balance (see 2.1.26)

2.2.18 Image stabilization (see 2.1.24)

2.2.19 Picture date and time for picture shown

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QUICK GUIDE

You will need the following items:

- Camera
- Battery (A)
- Battery charger with appropriate power plug (C)
- Memory card (not included in scope of delivery)

PRESETS

1. Attach the appropriate power plug to the charger (see p. 99).
2. Place the battery (A) in the battery charger (C) to charge it (see p. 99).
3. Attach the charger to a power outlet (see p. 99).
4. Set the main switch (1.7) to **OFF** (see p. 104).
5. Place the charged battery in the camera (see p. 100).
6. Insert a memory card (see p. 102).
7. Remove the lens cap (F).
8. Set the main switch (1.7) to **S** (see p. 104).
9. Set the date and time (see p. 112).
10. Set the desired menu language (see p. 112).

TAKING PHOTOGRAPHS

11. Set
    a. both shutter speed (1.10) and aperture (1.9) dials to **A** (see p. 126),
    b. Focusing mode to **AF** (see p. 120),
    c. Exposure metering mode to ▣ (see p. 126).

Note:

The settings recommended above ensure simple, quick and reliable photography for your first shots with the Leica X2. Details on the various modes/functions can be found in the relevant sections on the pages indicated.

12. Press the shutter release button (1.8) to the first pressure point to activate focusing and exposure metering (see p. 124).
13. Press the shutter release button all the way down to take the photograph.

VIEWING PICTURES

1. Press the **PLAY** button (1.16).
2. Press right or left direction buttons (1.23/1.27) to view other pictures.

ENLARGING PICTURES

Turn the setting ring (1.22) clockwise for an enlarged view of the displayed picture (see p. 142).

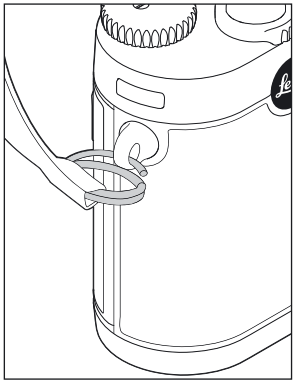
DELETING PICTURES

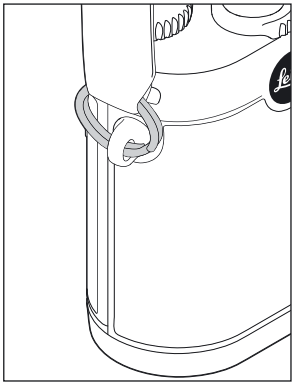
Press the **DELETE/FOCUS** button (1.15) and, in the menu appearing, select the desired function.

DETAILED INSTRUCTIONS

PREPARATIONS

ATTACHING THE CARRYING STRAP





CHARGING THE BATTERY

The Leica X2 is supplied with the required power by a lithium ion battery (A).

Caution:

- Only the type of battery specified and described in these instructions should be used. The use of other batteries not approved bei Leica Camera AG can cause damage to the battery and/or the camera, and in extreme cases can cause an explosion.
- Defective batteries should be disposed of according to the respective instructions (see p. 85) at a collection point to ensure proper recycling.

Attention:

- This battery may only be used in the units for which it is designed and may only be charged exactly as described below.
- Using this battery contrary to the instructions can under certain circumstances result in an explosion.
- The batteries may not be exposed to sunlight, heat, humidity or moisture for long periods. Likewise, the battery may not be placed in a microwave oven or a high-pressure container to prevent a risk of fire or explosion.
- Never throw batteries into a fire as this can cause them to explode!
- Humid or wet batteries may not be charged or used in the camera under any circumstances.
- Always ensure that the battery contacts are clean and freely accessible. While lithium ion batteries are proof against short circuits, they should still be protected against contact with metal objects such as paper clips or jewelry. A short-circuited battery can get very hot and cause severe burns.
- If a battery is dropped, check the casing and the contacts immediately for any damage. Using a damaged battery can damage the camera.

- In case of noise, discoloration, deformation, overheating of leaking fluid, the battery must be removed from the camera or charger immediately and replaced. Continued use of the battery carries a risk of overheating, resulting in fire and/or explosion.
- In case of leaking fluid or a smell of burning, keep the battery away from sources of heat. Leaked fluid can catch fire.
- Only the charger specified and described in these instructions, or other chargers specified and described by Leica Camera AG, may be used. The use of other chargers not approved by Leica Camera AG can cause damage to the batteries and, in extreme cases, to serious or life-threatening injuries.
- The charger supplied should be used exclusively for charging this battery type. Do not attempt to use it for other purposes.
- Ensure that the mains outlet used is freely accessible.
- The battery and charger may not be opened. Repairs may only be carried out by authorized workshops.
- Ensure that batteries cannot be accessed by children. Swallowing batteries can cause asphyxiation.

First aid:

- If battery fluid comes into contact with the eyes, there is a risk of blinding. Rinse out the eyes thoroughly with clean water immediately. No not rub the eyes. Seek medical attention immediately.
- If leaked fluid gets onto the skin or clothing, there is a risk of injury. Wash the affected areas with clean water. There is no need to seek medical attention.

Notes:

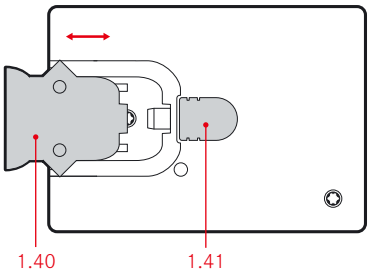
- The battery can only be charged outside the camera.
- Batteries should be charged before the camera is used for the first time.
- The battery must have a temperature of 0°–35°C/32°–95°F to be charged (otherwise the charger will not switch on, or will switch off again).
- Lithium ion batteries can be charged at any time, regardless of their current charge level. If a battery is only partly discharged when charging starts, it is charged to full capacity more quickly.
- Lithium ion batteries should only be stored when partially charged, i.e. not when fully discharged or fully charged. For very long storage periods, they should be charged for around 15 minutes twice a year to prevent total discharge.
- The batteries and the charger heat up during the charging process. This is normal and not a malfunction.
- A new battery only reaches its full capacity after it has been fully charged and – by use in the camera - discharged again 2 or 3 times. This discharge procedure should be repeated around every 25 cycles.
- Rechargeable lithium ion batteries generate power through internal chemical reactions. These reactions are also influenced by the external temperature and humidity. To ensure a maximum service life of the battery, it should not be exposed to constant extremes (high or low) of temperature (e.g. in a parked car in the summer or winter).
- Even when used under optimum conditions, every battery has a limited service life! After several hundred charging cycles, this becomes noticeable as the operating times get significantly shorter.
- The replaceable battery provides power to a back-up battery that is permanently fitted in the camera. This back-up battery retains the set date and time for up to 2 days. If this back-up battery becomes discharged it must be recharged by inserting a charged, main battery. Once the replaceable battery has been inserted, the full capacity of the back-up battery is recovered after about 60 hours. This process does not require the camera to be turned on. However, you will have to set the date and time again in this situation.
- Remove the battery if you will not be using the camera for a long period of time. When doing so, turn the camera off using the main switch first (see p. 104). Otherwise, after several weeks the battery could become totally discharged, i.e. the voltage is sharply reduced as the camera still consumes a small amount of current (for saving your settings) even when it is turned off.

Preparing the charger (C)

The charger must be equipped with the right plug (1.40) for the local power outlets.

To attach the plug,

The appropriate plug type is pushed onto the charger until it clicks into place.



To remove a plug, simultaneously

a. press the locking button (1.41) and

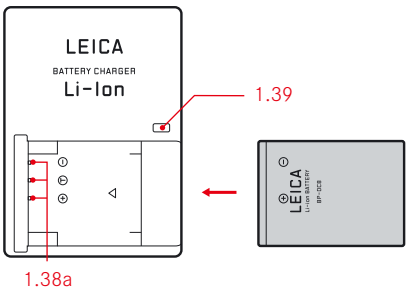
b. pull the attached plug off upwards from its normal position.

Note:

The charger automatically switches to the prevailing mains voltage.

Inserting the battery into the charger

1. Connect the charger to a power outlet.
2. Insert the battery into the charger by
   a. positioning it with its contacts face down and pointing at the counterparts (1.38a) in the battery bay, and
   b. pushing it down until it lies flat in the bay.



Charge status indications

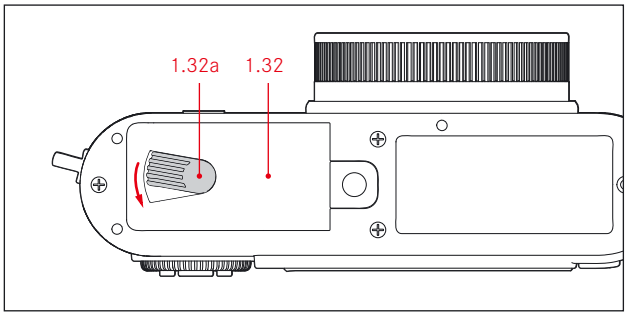
Correct loading is indicated by the status LED (1.39) glowing red, when it turns green the battery is completely charged.

INSERTING AND REMOVING THE BATTERY / THE MEMORY CARD

Turn off the camera (see also p. 104) with the main switch (1.7).

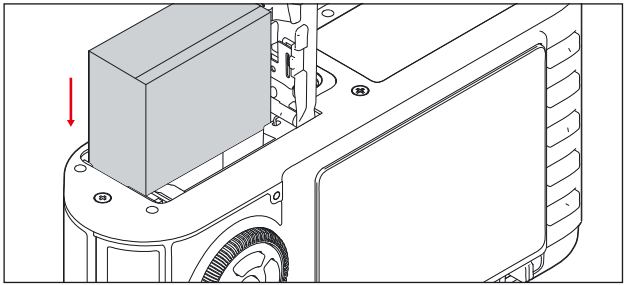
Opening the battery / memory card door

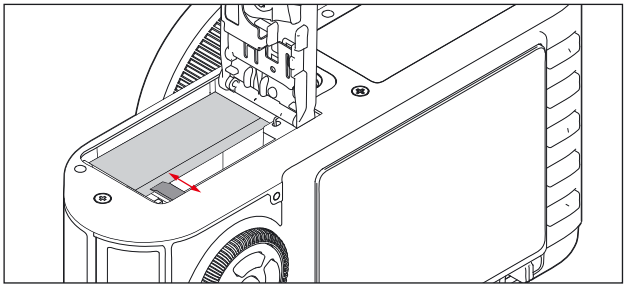
Turn the locking lever (1.32a) clockwise. The spring-loaded door (1.32) then opens automatically.



Inserting and removing the battery

Inset the battery (A) into the compartment with its contacts towards the back of the camera. Push it all the way into the compartment (1.36) until the light gray spring locking catch (1.35) moves over the battery to hold it in place.





To remove the battery, follow these instructions in reverse order. The light grey sprung locking catch at the battery compartment must be pushed aside to unlock the battery.

Important:
Removing the battery while the camera is switched on (see p. 104) can result in the settings you made in the menus being erased (see p. 105), and it may also damage the memory card.

Charge level displays
The charge level of the battery is displayed on the screen (see p. 90, 2.1.5).

Notes:
- Remove the battery, if you will not be using the camera for a long period of time. When doing so, turn the camera off using the main switch (1.7, see p. 104) first.
- The date and time must be reset after approx. 3 days at the latest after the capacity of a battery in the camera has expired (see p. 112).

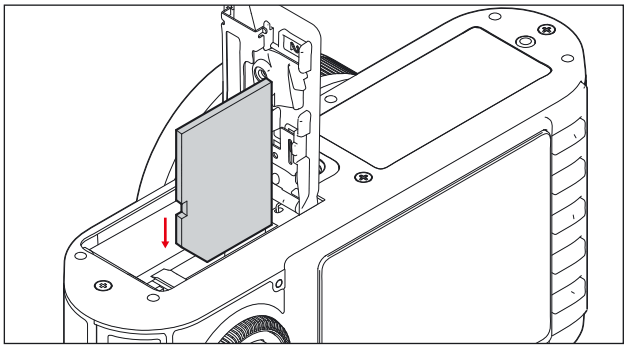
Inserting and removing the memory card

The Leica X2 takes SD, SDHC, or SDXC memory cards. These cards have a write-protection switch that can be used to prevent unintentional storage and deletion of pictures. This switch takes the form of a slider on the non-beveled side of the card; in the lower position, marked LOCK, the data on the card is protected.

SD, SDHC, and SDXC memory cards are available from different suppliers and with different capacities and read/write speeds.

Note:

Do not touch the memory card contacts.



Insert the memory card (B) into the slot (1.37) with the contacts facing the battery. Push it in against the spring resistance until you hear it click into place.

To remove the memory card, follow these instructions in reverse order. For unlocking, the card – as specified in the cover – it must first of all be pushed a little further in.

Notes:

- With a memory card inserted, image data will be saved to the card. If no card is inserted, image data will be saved to the camera's internal memory.
- If you cannot insert the memory card, check that it is aligned correctly.
- The range of SD/SDHC/SDXC cards available is too extensive for Leica Camera AG to fully test all available types for compatibility and quality. Therefore, we recommend for example the "Extreme III" cards from the leading brand "SanDisk".
  Although no damage to the camera or the card is to be expected when using other card types, because some unbranded cards in particular do not fully comply with the SD/SDHC/SDXC standards, Leica Camera AG cannot provide any guarantee of function.
- Do not open the door and do not remove the memory card or the battery for as long as the LED 1.28 indicating that the camera accessing the memory is lit. Otherwise, the data on the card can be destroyed and the camera may malfunction.
- As electromagnetic fields, electrostatic charge, as well as defects on the camera or the card can lead to damage or loss of the data on the memory card, we recommend that you also transfer the data to a computer and save it there (see p. 149).
- For the same reason, it is recommended that cards are always stored in an antistatic case.

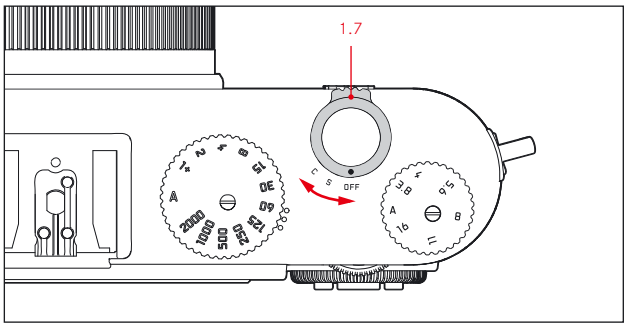
Closing the battery / memory card door

Close the battery / memory card compartment door (1.32) and turn the locking lever (1.32a) anti-clockwise.

SWITCHING THE CAMERA ON / OFF / SELECTING THE EXPOSURE FREQUENCY

The Leica X2 is turned on and off using the main switch (1.7). This is done by turning it from **OFF** to the desired mode, i.e. to **S** (single shot), or **C** (continuous shooting).

- The image (2.1) appears on the screen.



Note:

If you forget to remove the lens cap before switching the camera on, a respective message will appear. The same applies if the camera is activated from stand-by mode (see p. 113) with the cap on.

When the main switch is set to **C**, the Leica X2 produces continuous picture sequences. Frequencies of either 3fps (**Low**) or 5fps (**High**) are available.

In the menu, select **Continuous** (3.5), and in the submenu the desired setting.

Notes:

- Exposure series are not possible when using the flash. If a flash function is activated, only one picture is taken.
- When **C** mode and the self timer (see p. 138) are being used in conjunction, only a single exposure will be created.
- The maximum frequency of 5fps is only achieved with shutter speeds of $^1/_{60}$s or faster ($^1/_4$s with 3fps).
- Regardless of how many pictures are taken in a series, the **PLAY** (see p. 106) and **Auto Review** (see p. 106) functions always show the last picture first. The other pictures in the series can be selected by pressing the right and/or left direction buttons (1.24/1.27).

SELECTING THE RECORD AND REVIEW MODES

Normally, when the Leica X2 is switched on (see previous section), or when it is reactivated (from stand-by mode, see p. 113) by pressing the shutter release button (1.8, see p. 107), it is to record mode (see p. 120).

To review the pictures, you can choose between two modes:

1. **PLAY** Unlimited review
2. **Auto review** Brief review after taking the picture

REVIEW FOR UNLIMITED TIME - PLAY

Pressing the **PLAY** button (1.16) switches to review mode.

- The last picture taken appears on the screen along with the corresponding displays (see p. 93).
  However, if neither the internal memory nor an inserted card contain any image files, the following message appears when you switch to review mode: **No valid image to play**.

Note:

If you wish to switch the camera on directly to review mode, you can do so by keeping the **PLAY** button pressed while turning it on.

AUTOMATIC REVIEW OF THE LAST PICTURE

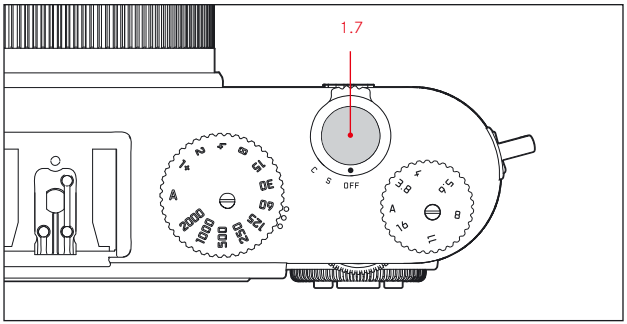
If **Auto Review** is turned on, every picture is shown on the screen immediately after it has been taken. This provides a quick and easy way for you to check whether the picture was taken successfully or you need to repeat it. The function allows selection of the length of time for which the picture is to be shown, a setting for permanent review, and the option to have the Histogram displayed as well.

In the Menu, select **Auto Review** (see p. 108/94, 3.23), in the first submenu either **Duration** or **Histogram**, and the respective second level submenus the desired settings.

Note:

If you have taken photographs using the serial exposure (see p. 104) or the automatic exposure bracketing functions (see p. 132), in both review modes the last picture in the series is displayed first, or the last one saved to the card/the internal memory, if not all of them have been transferred from the camera's buffer memory at the time of viewing. Details of how to select the other pictures in the series and further options in review mode are described in the sections under "Review mode" starting on p. 142.

SHUTTER RELEASE BUTTON



The shutter release button (1.7) works in two stages. Pressing it lightly (to the first pressure point) activates automatic focusing if set, exposure metering, and exposure control and also saves the respective settings/ values (see p. 126). If the camera was previously in stand-by mode (see p. 113), this activates the camera again and the monitor image reappears (see also p. 114).
Before completely depressing the shutter release button make sure that focusing/autofocus (if switched on) and exposure metering have been completed (for details on exposure settings, AF, and the corresponding indications in the monitor, please see pp. 126, 121, 90, respectively).
Pressing the shutter release button all the way down takes the picture.

Notes:

- The menu system can be used to select and set key and shutter acknowledgement tones, and to adjust their volume (see p. 113).
- The shutter release button should be pressed gently and not jerkily to prevent camera shake.

MENU CONTROL

Most settings on the Leica X2 are performed in the menu. Navigating in the menu is done with the setting ring (1.22) and the 4 direction buttons (1.23/.24/.26/.27). The setting wheel (1.20) can be used as an alternative for quick scrolling in the menu item list.

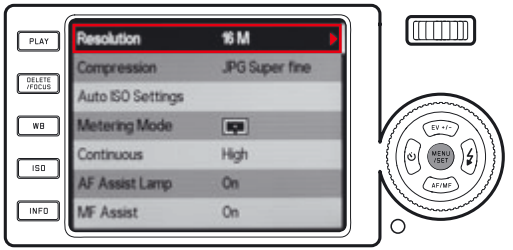
Note:

Menu control operations are possible either with the help of the monitor (1.29, see p. 114) or the electronic viewfinder (see p. 152).

ENTERING THE MENU

Press the **MENU/SET** button (1.25).

- The menu list appears. The active menu item is boxed, i.e. outlined in red with white characters on a black background.
  A red triangle on the right indicates how to access the respective submenu.
  A yellow bar on the right edge moves along while scrolling in the list, making it easy to immediately see which page of the menu list you are on.

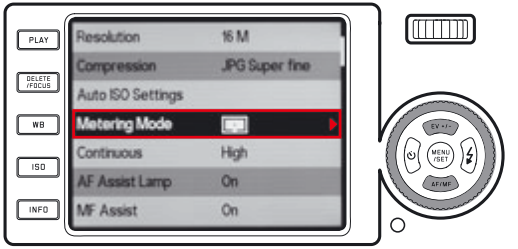


SCROLLING IN THE MENU ITEM LIST

You can choose to scroll either item by item, or page by page.

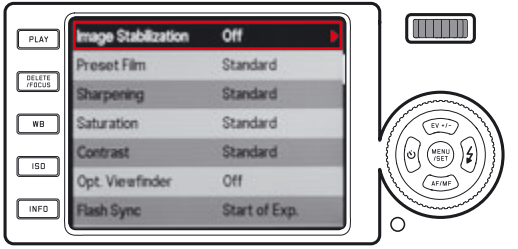
SCROLLING ITEM BY ITEM

- Either rotate the setting ring 1.22 (clockwise = down, anticlockwise = up),
- or press the upper (1.23) or lower (1.26) direction button.



SCROLLING PAGE BY PAGE

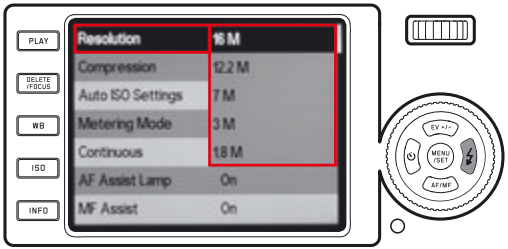
Rotate the setting wheel 1.20 to the right (= down) or to the left (= up).



CALLING UP A MENU ITEM'S SUBMENU

Press the right direction button (1.24).

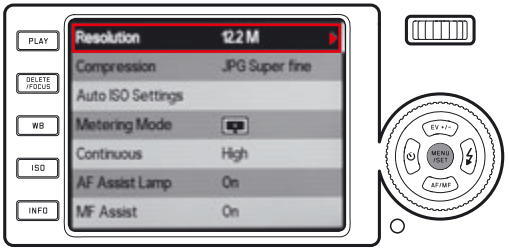
- The submenu list appears, it is boxed, i.e. outlined in red. The active item is indicated by white characters on a black background.



CONFIRMING A SETTING

Press the **MENU/SET** button (1.25).

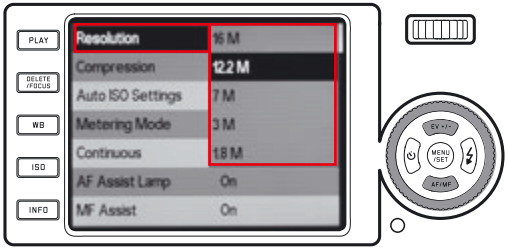
- The submenu box disappears, the confirmed (new) setting is displayed on the right side of the active menu item line.



SELECTING A SETTING / A VALUE IN A SUBMENU

Rotate the setting ring (1.22) or press the upper (1.23) or lower (1.26) direction button.

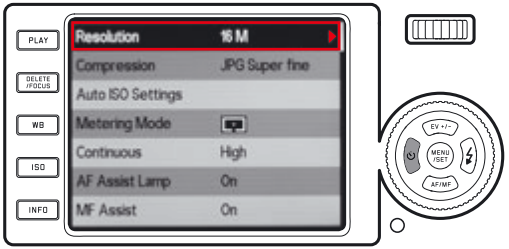
- The active item moves up or down in the box.



EXITING A SUBMENU <u>WITHOUT</u> CONFIRMING A SETTING

Press the left direction button (1.27) or the shutter release button (1.8).

- The submenu box disappears, the retained (former) setting is displayed on the right side of the active menu item line.



EXITING THE MENU

Press either

- the **MENU/SET** button (1.25),
  - The menu screen returns to record mode (see p. 120).
- or the shutter release button (1.8),
  - The menu screen returns to record mode (see p. 120).
- or the **PLAY** button (1.16).
  - The menu screen returns to review mode (see p. 125).

Notes:

- Some functions are not available depending on other settings, in this case the menu item is displayed in grey and cannot be selected.
- The menu usually opens at the position of the last item that was set before.
- Some menu items include settings in second level submenus. In these cases a red triangle instead of a setting on the right side of the line serves as an indication.
  Settings in second level submenus are accessed and performed exactly as described above.
  Second level submenus occupy the complete menu screen, i.e. the menu item list is no longer displayed in the background.

- A number of other functions are also controlled in principally the same way, after being accessed by pressing the respective buttons:
  - **ISO** (1.13) for Sensitivity
  - **WB** (1.14) for White balance
  - **DELETE/FOCUS** (1.15) for deleting image files/selecting focus metering modes (only in review /record modes, respectively)
  - **EV+/–** (1.23) for exposure compensation, exposure bracketing, and flash exposure compensation settings
  - ϟ (1.24) for selecting flash modes
  - **AF/MF** (1.26) for selecting focus modes
  - ⏲ (1.27) for switching on the self timer and selecting the delay time

As opposed to the menu items, you can also confirm your settings for these functions using the shutter release button (1.8) (by pressing to the first pressure point).
See the respective sections for further details.

BASIC CAMERA SETTINGS

MENU LANGUAGE

The following languages can be selected:
German, Japanese, English, French, Spanish, Italian or traditional Chinese, simplified Chinese, Russian and Korean.

In the menu, select **Language** (3.31), and in the submenu the desired setting.

DATE

The date can be set anywhere between 2009 and 2099.

In the Menu, select **Date** (3.27), in the first submenu either **Setting** or **Sequence**, and the respective second level submenus the desired settings.

In the **Setting** submenu, use the setting ring (1.22) or the up and down direction buttons (1.23/1.26) to change the figures and the month, the left and right direction buttons (1.24/1.27) to switch between the three groups.

TIME

In the menu, select **Time** (3.28), in the first submenu either **Setting** or **View**, and the respective second level submenus the desired settings.

In the **Setting** submenu, use the setting ring (1.22) or the up and down direction buttons (1.23/1.26) to change the figures, the left and right direction buttons (1.24/1.27) to switch between the two groups.

In the **View** submenu, either the 24-hour or 12-hour format can be selected.

Note:
Even if no battery is used or if it is flat, the date and time setting is stored by a built-in buffer battery for around 2 days. However, after this period, the data and time have to be reset as described above.

AUTOMATIC STAND-BY MODE

If active, this function switches the camera to stand-by mode after the selected time to save power.

In the menu, select **Auto Power Off** (3.24), and in the submenu the desired setting.

Note:

Even if the camera is in stand-by mode, it can be turned on again at any time by pressing the shutter release button (1.8) or by turning it off and back on with the main switch (1.7).

KEY ACKNOWLEDGEMENT (RESPONSE) AND SHUTTER SOUNDS

With the Leica X2, you can decide whether you want your settings and other functions to be acknowledged by an acoustic signal – two volumes are available, or whether operation of the camera and actually taking photographs should be predominantly free of noise.

For shutter sounds

In the menu, select **Shutter Volume** (3.29), and in the submenu the desired setting, **Off**, **Low**, or **High**.

For key acknowledgement and memory card capacity limit sounds

In the Menu, select **Acoustic Signal** (3.30), in the first submenu **Volume**, and in the second level submenu the desired setting, **Off**, **Low**, or **High**.
The sounds acknowledging key presses and a memory card capacity limit can be switched on or off separately in the respective submenus **Keyclick** and **SD card full**.

MONITOR AND ELECTRONIC VIEWFINDER SETTINGS

Note:

The monitor and the optional electronic viewfinder image displays are identical. Where they appear depends on whether the viewfinder is switched on or off with its own respective button.

The respective settings remain active even if

- the camera automatically switches itself to stand-by mode (see p. 113),
- the camera is switched off with the main switch (see p. 104), or
- the battery is removed (see p. 100).

For details on the Leica EVF 2 (available as accessory, see p. 152), see the viewfinder's instructions.

SWITCHING THE DISPLAY SETS

Select the desired option with the **INFO** button (1.12). Scroll through the different options (in an endless loop) by pressing once or several times.

The sequences:

In record mode

a. all displays (see p. 90, plus histogram if set, see p. 127)
b. only basic exposure settings (see p. 90) and AF and exposure metering areas
c. with gridlines (plus histogram if set, see p. 127)
d. monitor switched off (In this case, the LED 1.28 is permanently lit as an indication)

In review mode

a. all displays (see p. 93, plus histogram if set, see p. 127)
b. basic exposure settings (see p. 93) only

Notes:

- Mode d. is only available if previously set in the menu, see next section.
- In record mode, you can press the **INFO** button ≥1s to call up a screen listing five important settings (2.1.26, see p. 92).

DETERMINING THE MONITOR AS THE EXCLUSIVE DISPLAY FOR REVIEWING IMAGES

You can determine that the monitor is automatically switched on every time you press the PLAY button (1.16) to review images, even if the Leica EVF 2 is being used.

In the menu, select **Play on Monitor** (3.19), and in the submenu **On** so the monitor is always switched on with review mode, or **Off** if you wish to use the EVF 2's display instead (if it is switched on, see above and the viewfinder's instructions).

Note:

This function is only effective for **PLAY** mode, not for **Auto Review** mode, i.e. regardless of whether **Play on Monitor** is switched on or off, when the EVF 2 and **Auto Review** (see p. 106) are switched on, the images are displayed in the viewfinder.

SWITCHING THE MONITOR OFF

When using the optional external optical viewfinder (see p. 152) the monitor image may be distracting. To prevent this, you can switch the monitor off altogether during record mode.

In the menu, select **Opt. Viewfinder** (3.13), and in the submenu **On** to switch the monitor off, or **Off** to switch it on.

Note:

Even if the monitor is switched off in the menu, a monitor image is always available in review mode, and for menu control.

BRIGHTNESS AND COLOR RENDITION

To ensure perfect visibility and to adapt to different ambient lighting situations, the brightness and the color rendition of both the monitor and the optional external electronic viewfinder can be adjusted.

For brightness Settings

In the menu, select **Monitor Brightness** (3.15) or **EVF Brightness** (3.16), and in the respective submenues one of the five levels.

For color adjustments

1. In the menu, select **Monitor Color Adjustment** (3.17) or **EVF Color Adjustment** (3.18).
   - A picture is played back with an overlaid cross. The cross ends have yellow, green, blue, and magenta color marks which represent the possible adjustments.
2. Use the direction buttons to move the initially centered cursor in the desired direction, any setting within the screen area is possible.
   - The color rendition of the screen changes according to the setting.

MONITOR AND ELECTRONIC VIEWFINDER TIMEOUT MODE

If active, this function switches the monitor and, if attached, the electronic viewinder off after the selected time. This not only saves power, but also reduces the heat induced by the monitor.

In the menu, select **Auto LCD Off** (3.25), and in the submenu the desired setting.

JPEG RESOLUTION

When one of the JPG formats is selected (see next section) image recording is possible with 4 different resolutions (numbers of pixels). This allows you to adjust the pictures precisely to the intended use or to the available memory card capacity.

In the menu, select **Resolution** (3.1), and in the submenu the desired setting.

Note:

Raw images (DNG-format) are always recorded with the highest resolution, regardless of the settings for JPG-images.

FILE FORMAT / COMPRESSION RATE

Two different JPG-compression rates are available: **JPG fine** and **JPG super fine**. Both can be combined with simultaneous **DNG** (RAW-image data format) recording.

In the menu, select **Compression** (3.2), and in the submenu the desired setting.

Note:

The remaining number of pictures or recording time indicated on the screen are an approximation due to the fact that the file size for compressed images can vary strongly depending on the photographed subject.

WHITE BALANCE

In digital photography, white balance ensures neutral, i.e. natural, reproduction of color in any light. It is based on the camera being preset to reproduce a particular color as white. You can choose from several presets, automatic white balance, two fixed manual settings and direct color temperature setting. Furthermore, you also have the option to fine-tune all settings precisely to the current photographic conditions and/or your own ideas.

Fixed presets

Press the **WB** button (1.14), and in the menu appearing on the screen, select either **AWB** for automatic setting, or (for incandescent lighting), (for outdoor sunlight shots), (for electronic flash lighting), (for outdoor shots in cloudy conditions), (for outdoor shots of subjects in the shade).

Manual setting by metering

Press the **WB** button (1.14), and in the menu appearing on the screen, select SET or SET.

Aim the yellow frame appearing in the center of the screen at an object with a uniformly white or grey surface that completely fills the frame and press the **MENU/SET** button (1.23) as indicated by the message.

The settings are saved and can be recalled at any time with the options or .

Direct color temperature setting

Press the **WB** button (1.14), and in the menu appearing on the screen, select **SET K**.

Use the setting ring (1.22) or the up and down direction buttons (1.23/1.26) to change the figure in the box appearing in the center of the monitor image.

The setting is saved and can be recalled at any time with the option **K**.

FINE-TUNING WHITE BALANCE SETTINGS

After finishing any of the above settings, access the **WB Adjust** screen from the white balance menu by pressing the right direction button (1.24) as indicated by the red triangle.

With the direction buttons, move the circular cursor to the position that delivers the desired color reproduction on the screen, i.e. in the direction of the respective colored squares at the edges.

The settings are saved together with the respective basic setting.

ISO SENSITIVITY

The ISO setting determines the possible shutter speed/aperture combinations for a given illumination level. Higher sensitivities allow faster shutter speeds and/or smaller apertures (for “freezing” fast action or creating a larger depth of field, respectively) at the expense of increasing image noise.

Press the **ISO** button (1.13), and in the menu appearing on the screen, select either **AUTO ISO** for automatic setting or one of the six fixed settings.

Within the **AUTO ISO** option it is possible to limit the range of sensitivities used – e.g. to control the image noise level, and also to determine the longest shutter speed used – e.g. to prevent blurred images of moving subjects.

In the menu, select **Auto ISO Settings** (3.3), in the first submenu either **Slowest Speed** or **Max ISO**, and the respective second level submenus the desired settings.

Note:

The **AUTO ISO** value (2.1.3) set by the camera can be viewed even if the monitor displays are switched off (see p.115) by pressing the shutter release button (1.8, see p.107) to its first pressure point.

IMAGE PROPERTIES / CONTRAST, SHARPNESS, COLOR SATURATION

One of the many advantages of digital photography is that it is very easy to change critical properties of an image, i.e. those that determine its character. The Leica X2 allows you to influence three of the most important image properties even before taking the picture:

- The contrast, i.e. the difference between light and dark areas, determines whether a picture appears as more „flat” or „brilliant”. As a consequence, the contrast can be influenced by increasing or reducing this difference, i.e. by making light areas lighter and dark areas darker.
- Sharpness reproduction – at least of the main subject – by using the correct distance setting is a prerequisite for a successful picture. In turn, the impression of sharpness given by a picture is, to a great extent, determined by the contour sharpness, i.e. how small the light/dark transition is on contours in the picture. The sharpness effect can therefore be changed by increasing or reducing these areas.
- The color saturation determines whether the colors in the picture appear as „pale” and pastel-like or „bright” and colorful. While the lighting and weather conditions (hazy / clear) are given conditions for the picture, the reproduction can definitely be influenced here.

Besides the **Standard**, i.e. unchanged rendition, you can - independently - also selected two weakened or strengthened levels for each of the three image properties.

In the menu, select either **Sharpening** (3.10), **Saturation** (3.11), or **Contrast** (3.12), and in the respective submenus the desired settings.

Note:

These settings only come into effect with JPG files, DNG files remain unchanged.

COLOR RENDITION

In addition to the adjustments concerning sharpness, saturation, and contrast (see previous section) you can also select basic color rendition options. You can choose between **Standard**, **Vivid** - for highly saturated colors, and **Natural**- for slightly less saturated colors and slightly softer contrast, plus two black and white settings **B&W Natural** and **B&W High Contr**. (high contrast).

In the menu, select **Preset Film** (3.9), and in the submenu the desired setting.

Notes:

- This setting only comes into effect with JPG files, DNG files remain unchanged.
- All five settings can be adjusted further with the image properties and noise reduction options described in the previous and following sections, respectively. In such cases, the color rendition options are marked with an additional asterisk, e.g. **Standard***.

FOCUSING

The Leica X2 offers both automatic and manual focusing modes, both cover a distance range of 30cm to infinity.

Selecting the mode

Press the lower direction button (**AF/MF**, 1.26), and in the appearing menu, select **AF** or **MF**. Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).

- The following information appears on the screen:
  - the active focus mode (2.1.25)
  - the metering area, indicated by a white rectangle (in the case of 1 area, 11 area, and spot AF metering modes, see pp. 90/122/123)

AUTOMATIC DISTANCE SETTING / AUTOFOCUS

With the AF mode set, focusing is performed automatically when the shutter release button is pressed to the first pressure point (1.8), i.e. the distance is measured, set, and locked (see also p. 147).

- To indicate a correct and locked AF setting,
  - the frame color changes to green,
  - up to 9 green rectangles appear in the case of 11 area metering (see p.123),
  - the green focus status LED (1.19) lights up, and
  - an acoustic signal is generated (if selected, see p. 123).

Notes:

- AF settings are locked together with the exposure settings (see p. 126).
- In certain conditions, the AF system cannot set the correct focus, e.g.
  - if the distance to the targeted subject is outside the available range, and/or
  - if the subject is not sufficiently illuminated (see next section). ‘ To indicate such situations/subjects
  - the frame color changes to red,
  - in the case of 11 area metering, the display changes to a single red frame, and
  - the focus status LED (1.19) flashes.

Important:

The shutter release button (1.8) is not locked, regardless of whether a subject is correctly focused or not.

AF ASSIST LAMP

The built-in AF assist lamp (1.2) extends the AF system’s operational range into low light conditions. With the function activated, the lamp lights up automatically in such situations whenever the shutter release button (1.8) is pressed.

In the menu, select **AF-Assist Lamp** (3.6), and in the submenu the desired setting.

Note:

The range of the AF assist lamp is approx. 4 m/13 ft. Therefore, in low light conditions, AF operation is not possible for distances beyond this limit.

AF METERING MODES

The Leica X2 offers a choice of four AF metering modes. This allows you to adapt the AF system to cope best with different subjects, situations, and compositional ideas.

Press the **DELETE/FOCUS** button (1.15), and in the appearing menu, select the desired setting. It is confirmed by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).

1 AREA MODE

Focusing is based on the area indicated by an AF frame (2.1.9) in the center of the screen. Since the area is larger than with Spot mode, targeting is less discriminate and therefore easier, while still allowing selective metering.
In addition, you can move the AF-frame to anywhere on the screen, e.g. for easier composition in the case of off-center subjects.

Press the **DELETE/FOCUS** button (1.15) for ≥1 second.

- On the screen, all displays except for the AF frame disappear. Red triangles on all sides of the frame indicate the possible movement directions. To indicate the movement limits, the respective triangles disappear near the edges.

Use the direction buttons to move the AF frame to the desired position. You can return the frame to the central position at any time with the **INFO** button (1.12). Press either the shutter release button (1.8) or the **DELETE/FOCUS** button to exit this mode.

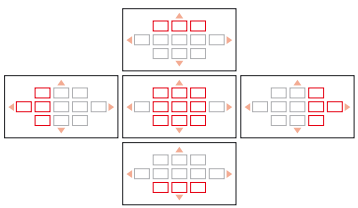
11 AREA MODE

Focusing is based on the areas indicated by the 11 AF frames. They are grouped so as to cover a major part of the image, thus ensuring maximum focusing security for snapshot type photography. Sharpness is registered in all 11 areas, but focusing is automatically determined by the closest objects registered.
In addition, you can concentrate focusing to any of the four sides of the image by reducing the number of areas used and selecting respective groups.

Press the **DELETE/FOCUS** button (1.15) for ≥1 second.

- On the screen, all displays are replaced by the 11 AF frames. Initially, only the 9 frames constituting the central group have red outlines. Red triangles on all sides indicate the possible settings.

Besides the central group, you can select groups of either the top or bottom three or the four left or right AF areas. Use the direction buttons to select the desired AF frame group. You can return to the central 9 frame group at any time with the **INFO** button (1.12). Press either the shutter release button (1.8) or the **DELETE/FOCUS** button to exit this mode.



SPOT MODE

Focusing is based on the area indicated by a small AF frame in the center of the screen. The size of this area allows concentrating the metering on even the smallest subject details. For portraits, e.g., it is normally recommended that the eyes are rendered totally sharp.
In addition, you can move the AF-frame to anywhere on the screen, e.g. for easier composition in the case of off-center subjects.

Press the **DELETE/FOCUS** button (1.15) for ≥1 second.

- On the screen, all displays except for the AF frame disappear. Red triangles on all sides of the frame indicate the possible movement directions. To indicate the movement limits, the respective triangles disappear near the edges.

Use the direction buttons to move the AF frame to the desired position.
You can return the frame to the central position at any time with the **INFO** button (1.12). Press either the shutter release button (1.8) or the **DELETE/FOCUS** button to exit this mode.

FACE DETECTION MODE

In this mode the Leica X2 automatically recognizes faces in the image and bases the focus on the closest ones registered. If no faces are detected, the 11 point mode is used.

MANUAL FOCUSING

For certain subjects and situations, it can be beneficial to set the focus yourself, rather than using autofocus (see the previous sections). For example, if the same setting is needed for several pictures and using metering memory-lock (see p. 130) would therefore involve more effort, or if the setting for e.g. landscape pictures is to be kept at infinity, or if poor, i.e. very dark, lighting conditions do not allow any or only slower AF operation.

Press the lower direction button **AF/MF**, 1.24, and in the menu appearing on the screen, select **MF**. Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).

Once set, manual focusing is performed by rotating the setting wheel (1.20) until the image of the important part/s of your subject is/are rendered as desired.

- A distance scale (2.1.20) appears. A green bar on the scale indicates the depth of field resulting from the respective distance setting (and the automatically controlled or manually set aperture, see also the sections about “Exposure metering and control”, p. 126). The scale disappears approx. 5s after the last focus setting.

Manual focusing operation is determined by how quickly the setting wheel is rotated:

- For rough focusing: rotate the wheel quickly
- For fine focusing: rotate the wheel slowly

This allows both quicker and more precise setting.

You can improve manual focusing accuracy with the help of the **MF Assist** function (see next section).

Notes:

- A manually set focus position can be locked by pressing the **DELETE/FOCUS** button (1.15) for more than one second. This can prove to be very useful to prevent unintentional miss-setting, especially in the case of several consecutive shots of the same subject.
- A manually set focus position is retained even after switching the camera off and back on (see p. 127). This can prove to be helpful, e.g. when several shots of subjects in similar distances are made over a longer stretch of time, and the camera is turned off in between to save battery power.

Manual focus assist function

The larger subject details are shown on the screen, the better their focus can be assessed, and the more accurate the focusing. For this purpose, the Leica X2 offers an optional help of a magnification function, where a central section of the image is reproduced in enlarged form.

In the menu, select **MF Assist** (3.7), and in the submenu the desired setting. Focus using the setting wheel (1.20).

- With the function activated, an approx. 6x enlarged section of the image appears above the scale. It disappears approx. 5s after the last focus setting.

Note:

You can also let the enlarged section appear at any time by pressing the **DELETE/FOCUS** button (1.15), e.g. to recheck the setting and thus avoid any risk of accidentally changing it again.
In addition, you can move the enlarged section to anywhere on the screen using the direction buttons, e.g. for easier focusing in the case of off-center subjects, or to keep other parts of the image visible.
You can return the enlarged section to the central position at any time with the **INFO** button (1.12).

EXPOSURE METERING AND CONTROL

EXPOSURE METERING MODES

The Leica X2 offers you a choice of three exposure metering modes. They allow adjustment to the prevailing light conditions, the situation and your style of work and your creative ideas.

In the menu, select **Metering Mode** (3.4), and in the submenu the desired setting.

MULTI-FIELD METERING – ▭

With this metering method, the camera automatically analyses the brightness differences in the subject and, by comparing them with programmed brightness distribution patterns, arrives at the likely position of the main subject and the corresponding best exposure.
By consequence, this method is particularly suitable for spontaneous, uncomplicated but reliable photography even under difficult conditions and therefore for use together with programmed automatic exposure (see p. 128).

CENTER-WEIGHTED METERING – ▭

This metering method allocates the highest weighting to the center of the image field, but also records all other areas.
In conjunction with metering memory-lock in particular (see p. 130) it allows selective adjustment of the exposure to particular sections of the subject with simultaneous consideration of the entire image field.

SPOT METERING – ·

This mode concentrates exclusively on a tiny area in the center of the image indicated in the monitor by a green spot (2.1.10).
It allows exact measurement of even minute details for precise exposure – preferably in conjunction with manual setting (see p. 130).
For example, in backlit pictures it is normally necessary to prevent the brighter background causing underexposure of the main subject. With its tiny metering area, spot metering allows you to selectively evaluate this kind of details.

THE HISTOGRAM

The histogram (2.1.13/2.2.8) shows the distribution of brightness in the photograph. In this connection, the horizontal axis corresponds to the tones from black (left) through gray to white (right). The vertical axis corresponds to the number of pixels in each brightness.

This form of representation allows – alongside the image itself - an additional, quick and simple assessment of the exposure setting, both before and after taking the picture. The histogram is particularly suitable for manual setting of the exposure (see p. 130) or to check the automatic exposure control (**P**, **T**, **A**; see pp. 128/129).

The histogram is available with both record and review modes (see pp. 120/142).

For record mode, select **Rec. Histogram** (3.20) in the menu, and in the submenu the desired setting.

Note:

In the case of flash photography, the histogram cannot represent the final exposure, as the flash is fired after the display.

For review mode, select **Play Histogram** (3.21) in the menu, and in the submenu the desired setting. Select an option with clipping to have too bright or dark parts of the picture marked.

Notes:

- The histogram is not available in conjunction with simultaneous review of reduced or enlarged photographs (see p. 143).
- In record mode the histogram should be understood as a „tendency display“, and not as a representation of the exact numbers of pixels.
- When playing back a picture the histogram can differ slightly from that while the picture was taken.

EXPOSURE CONTROL

The Leica X2 offers you a choice of four exposure modes, with which you can adjust the camera perfectly to your preferred working method or the relevant subject.

Both the four modes and manual settings of the shutter speed and the aperture are selected with the respective dials (1.10/1.9).

Shutter speeds from 30s to $^{1}/_{2000}$s and apertures from 2.8 to 16 are available. Both controls have manual setting ranges with click-stop positions – the speed dial in whole steps and the aperture dial in 1/3-steps, and both also have an **A**-position for automatic operation.

Shutter speeds of 1s and slower are set by first turning the shutter speed dial to the **1+**- position, and then selecting the speed with the setting ring (1.22).

- As an indication, (2.1.15) appears additionally.

Note:

Depending on the prevailing light conditions, the brightness of the screen image can differ from that of the actual pictures taken. Particularly for long exposures on dark subjects, the monitor image appears considerably darker than the – correctly exposed – picture.

PROGRAMMED AUTOMATIC EXPOSURE

For fast, fully automatic photography. In this mode, exposure is controlled by automatic setting of shutter speed and aperture.

To set this mode, turn both dials to their **A** positions.

- The mode is indicated by **P** (2.1.1).

To take a picture with this mode

1. Press the shutter release button (1.8) to its pressure point.
   - The shutter speed (2.1.17) and aperture (2.1.20) appear in white.
     In addition, the indication of the possibility to use the program shift function also appears (2.1.15, see next section).
     If even the fully opened or closed aperture in conjunction with the slowest or fastest shutter speed would result in under- or overexposure, both values turn red as an indication.

If the automatically set pair of values seems appropriate for the intended composition:

2. Press the shutter release button all the way down to take the photograph.

If not, you can change the pair of values before pressing the shutter release button:

SHIFTING PROGRAM MODE

Shifting the program mode curve combines the reliability and speed of fully automatic exposure control with the possibility of being able at any time to vary the speed/aperture combination selected by the camera according to your ideas.

This is done with the setting ring (1.22). For example, if you are taking sports photographs and prefer to use fast speeds, turn it to the left (anticlockwise). If, on the other hand, you would rather have a large depth of field (small aperture) and accept the associated slower speeds that are necessary, then turn it to the right (clockwise) (e.g. for landscape photography).

The overall exposure, i.e. the brightness of the image, remains unchanged. The shift range is limited in order to keep a correct exposure.

- Whenever a value pair is changed by shifting, there are two indications, an asterisk next to the values (2.1.16) and a symbol representing the setting ring (2.1.15). This allows the automatic default pair of values can be recognized at any time.
- When exposure metering is switched off automatically after 12s, the program shift is defaulted, i.e. reset to the values suggested by the camera.
- Program shift is also defaulted after taking a picture, thus preventing accidental use.

SPEED PRIORITY MODE

The speed priority mode automatically controls the exposure based on the manually set shutter speed. It is therefore particularly well suited for taking pictures of moving subjects, where the sharpness of the movement portrayed – which is determined by the shutter speed used – is the crucial element of composition.

By manually pre-selecting an appropriately fast shutter speed, you can therefore prevent unwanted blurring of the movement – you can „freeze" your subject. Or, in reverse, you can express the dynamics of the movement with a deliberate „wiping" effect using a correspondingly slower shutter speed.

To set this mode, turn the aperture dial (1.9) to the **A** position and set the desired shutter speed with the respective dial (1.10).

- The mode is indicated by **T** (2.1.1). In addition, the manually set shutter speed appears – in white - (2.1.17).

To take a picture with this mode

1. Press the shutter release button (1.8) to its pressure point
   - The automatically set aperture appears in white (2.1.20).
     If even the fully opened or closed aperture in conjunction with the set shutter speed would result in under- or overexposure, both values turn red as an indication.

If the automatically set aperture value seems appropriate for the intended composition:

2. Press the shutter release button all the way down to take the photograph.

If not, you can change the shutter speed before pressing the shutter release button.

APERTURE PRIORITY MODE

Aperture priority mode automatically controls the exposure based on the manually set aperture. It is therefore particularly well suited for taking pictures where the depth of field – which is determined by the aperture used – is the crucial element of composition.

By manually pre-selecting an appropriately low aperture value (= large aperture) you can reduce the depth of field, for example in a portrait to let a face „stand out", i.e. be shown clearly in front of an unimportant or distracting background. Or, in reverse, with a correspondingly high aperture value (= small aperture) you can increase the depth of field, in order to reproduce everything from the foreground to the background clearly in a landscape photograph.

To set this mode, turn the shutter speed dial (1.10) to the **A** position and set the desired aperture with the respective dial (1.9).

- The mode is indicated by **A** (2.1.1). In addition, the manually set aperture appears in white (2.1.20).

To take a picture with this mode

1. Press the shutter release button (1.8) to its pressure point.
   - The automatically set shutter speed appears in white (2.1.17).
     If even the fastest or slowest shutter speed in conjunction with the set aperture speed would result in under- or overexposure, both values turn red as an indication.

If the automatically set shutter speed seems appropriate for the intended composition:

2. Press the shutter release button all the way down to take the photograph.

If not, you can change the shutter speed before pressing the shutter release button.

MANUAL MODE

If, for example, you want to achieve a particular effect, which is only possible with a quite specific exposure, or if you want to ensure that several pictures with different trimming have an absolutely identical exposure, then you can manually set both shutter speed and aperture.

To set this mode, set the desired values on both the shutter speed and aperture dials (1.10/1.9).

- The mode is indicated by **M** (2.1.1). In addition, the manually set shutter speed (2.1.17) and aperture (2.1.20) appear in white.

To take a picture with this mode

1. Press the shutter release button (1.8) to its pressure point.
   - The light balance scale (2.1.18) appears. It covers a range of ±2EV (exposure value) in increments of $^1/_3$ EV.
     Settings within ±2EV of the correct exposure for the targeted subject are represented by one of the scale marks turning red. Settings beyond ±2EV are indicated by the – or + marks at the ends of the scale turning red.

To achieve a correct exposure, adjust your shutter speed and/or aperture settings so that the center mark is red.

2. Press the shutter release button all the way down to take the photograph.

METERING MEMORY-LOCK

For composition reasons, it can be beneficial not to have the main subject in the center of the picture. However, placing it off-center from the start would often lead to the metering being based on a part of the subject significantly closer or further away. This is equally valid for the 1 point and spot AF metering modes (see pp. 122/123) with respect to sharpness, and the exposure modes P, T and A (see pp. 128/129) with respect to differences in brightness. The result would then be that the main subject is out of focus and/or rendered unfavorably dark or light.

As a solution, the Leica X2's metering memory-lock function allows you to measure the main subject first and then to retain this setting until you have decided on your final trimming and take the picture.

The procedure:

1. Aim the respective AF-frame (2.1.8/2.1.9) and/or the green exposure metering spot (2.1.10) at that part of your subject which you want to have correctly focused and exposed. As soon as focus and exposure have been set and locked by pressing the shutter release button to the first pressure point (s. p. 147), the color of the AF frame changes to green and the focus signal (1.19) lights up as confirmation.
2. Continue to hold the shutter release button halfway down and then select your final trimming by moving the camera.
3. Press the shutter release button all the way down to take the photograph.

Note:

You can lock measured values any number of times before taking the picture.

EXPOSURE COMPENSATION

Exposure meters are calibrated to a normal, i.e. average photographic subject. If the relevant subject detail does not meet these requirements, for example large areas of snow or, in the opposite case, a black steam locomotive filling the frame, and if you wish to bias the exposure identically in such cases for a number shots, it may be more convenient to apply an appropriate exposure compensation than to use metering memory lock every time (see previous section).

1. To set a compensation, press the upper **EV+/–**direction button (1.23) once.
   - The corresponding sub-menu appears.
2. Select the desired compensation value with the left and right direction buttons (1.24/1.27). Values from +3 to -3EV with $^1/_3$ EV increments are available.
   - While setting, you can observe the effect as the monitor image gets correspondingly darker or brighter.
3. Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).
   - The exposure compensation symbol and the set value (2.1.21) appear.

Notes:

- An exposure compensation cannot be set when using manual exposure mode (see p. 119)
- The **EV+/–** direction button is also used to call up the menus for exposure bracketing (see next section) and flash exposure compensation (see p. 130). They scroll through in an endless loop and can therefore be selected by repeatedly pressing the button.
- A set compensation remains active until it is set to **±0** (see step 2.), i.e. after any number of shots and even if the camera is switched off.

AUTOMATIC EXPOSURE BRACKETING

Many attractive subjects are very rich in contrast, i.e. they have both very bright and very dark areas. The resulting effect can be quite different, depending on which sections you base your exposure on. In such cases, you can use automatic exposure bracketing to produce a series of three shots with graduated exposures. You can then select the most appropriate picture for further use.

1. To set a bracketing series, press the upper **EV+/–**direction button (1.23) twice.
   - The corresponding sub-menu appears.
2. Select the desired interval with the left and right direction buttons (1.24/1.27). Values from +3 to -3EV with $^{1}/_{3}$ EV increments are available.
3. Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).
   - The bracketing symbol (2.1.23) appears.

Notes:

- Depending on the available shutter speed/aperture combination, the working range of the automatic exposure bracketing can be limited.
- The **EV+/–** direction button is also used to call up the menus for exposure compensation (see previous section) and flash exposure compensation (see p. 137). They scroll through in an endless loop and can therefore be selected by repeatedly pressing the button.
- A set bracketing series remains active until it is set to **Off** (see step 2.), i.e. after any number of series and even if the camera is switched off.

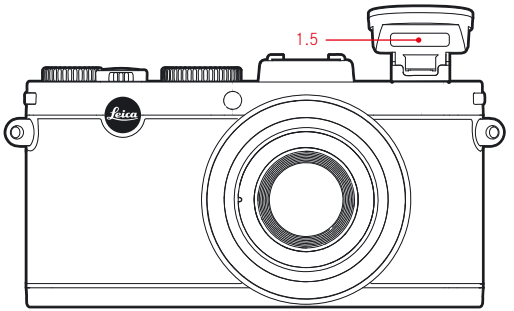
FLASH PHOTOGRAPHY

TAKING PHOTOGRAPHS WITH THE BUILT-IN FLASH UNIT

The Leica X2 is equipped with a built-in flash unit (1.5) that rests hidden in the camera body when not in use. For flash photography, it must be extended.

To do so, push the release slider 1.17 towards the camera center. The spring-loaded flash unit then unfolds into its working position whereby it is also switched on. Whenever you do not want to use the flash, simply keep it retracted or carefully push it down until it clicks into place in its home position.

- The respective display (2.1.2) for the flash mode set (see below) appears in white. Initially it may flash in red fore a short while instead to indicate that it is not yet fully charged and therefore not ready.



Flash exposures are controlled by the camera using a pre-flash measurement. For this purpose, a metering flash is triggered immediately before the main flash. The amount of light reflected then determines the strength of the main flash.

Note:

Flash use is not possible with exposure series (see p. 104) and automatic bracketing (see p. 132). Correspondingly, the flash indication will not appear even if the flash unit is extended, and the flash will not fire.

FLASH MODES

Press the right ϟ direction button (1.24), and in the appearing menu, select the desired flash mode. This can be done alternatively with the setting ring (1.22), the up and down direction buttons (1.23/1.26), or by repeatedly pressing the right ϟ direction button again.

Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).

- The flash mode display (2.1.2) changes accordingly.

AUTOMATIC FLASH ACTIVATION – ϟA

This is the standard mode. The flash is always fired automatically when, because of poor lighting conditions, long exposure times on freehand shots could lead to blurring, for example, in a dimly lit room and outdoors, at twilight or in poor weather.

AUTOMATIC FLASH AND PRE-FLASH ACTIVATION – ⚡A👁

(to reduce „red eye" effect)

„Red eye" effect is caused by light from the flash reflecting off the cornea straight back to the camera and can occur when taking portrait and group photos. It is therefore best if the people being photographed do not look straight at the camera. As the effect is worsened when the pupils are wide open in low light conditions, when taking photographs indoors for example, you should switch on as much room lighting as possible, so that the pupils become narrower.

Due to the pre-flash, which is triggered shortly before the main flash by pressing the shutter release button, the pupils of the person looking at the camera contract to reduce the „red eye effect".

MANUAL FLASH ACTIVATION – ⚡

For backlit pictures, where your main subject does not fill the frame and is in shadow, or in cases where you want to moderate high contrasts (e.g. in direct sunlight) (fill-in flash).

As long as this mode is activated, the flash unit is fired for every picture, regardless of the prevailing lighting conditions, otherwise the functioning corresponds exactly with those modes with automatic flash activation.

In this case, flash performance is controlled depending on the outdoor brightness metered: in poor light as with the automatic mode, with increasing ambient brightness, however, with reduced output (up to a maximum of -1 $^{2}/_{3}$ EV). The flash then works as a fill-in light, for example to illuminate dark shadows in the foreground or backlit subjects, in order to obtain more balanced lighting overall.

MANUAL FLASH AND PRE-FLASH ACTIVATION – ⚡👁

For the combination of the situations and functions described most recently above.

AUTOMATIC FLASH ACTIVATION WITH SLOWER SHUTTER SPEEDS – ⚡S

For simultaneous more appropriate (brighter) reproduction, particularly for dark backgrounds and flash fill-in for the foreground. To minimize the risk of blurring, the shutter speed is not extended beyond $^{1}/_{30}$ s in the other modes with flash activation. For pictures where the flash is used, this means that objects in the background, which the flash cannot reach, are often badly underexposed. To take appropriate account of the available ambient light, the longer shutter speeds necessary in these exposure situations (up to 30s) are permitted here.

Note:

The longest shutter speed used by the camera can be determined with the **AUTO ISO Settings** settings (3.3, see p. 118).

Also depending on the **AUTO ISO Settings** settings, slower shutter speeds may not have to be set by the camera since in such cases its priority is to raise the ISO sensitivity first.

AUTOMATIC FLASH AND PRE-FLASH ACTIVATION WITH SLOWER SHUTTER SPEEDS – ⚡S👁

For the combination of the situations and functions described immediately above.

STUDIO MODE – SLAVE

This mode is intended exclusively to trigger other flash units, e.g. studio flash units equipped with a slave function (triggered optically by the camera flash), i.e. it cannot be used for normal flash photography.

Note:

To prevent blurred pictures with the slower shutter speeds in the modes SLOW, SLOW RED-EYE and SLOW SYNC, you should hold the camera steady, i.e. support it or use a tripod. Alternatively, you can select a higher ISO-speed (see p. 118).

FLASH RANGE

The effective range of the flash depends on the aperture and the ISO speed set. For good results, it is crucial that the main subject is within the appropriate flash range. See the table below for details.

Sensitivity	Maximum flash range[1]
ISO **100**	2.0 m/6ft
ISO **200**	2.8 m/9ft
ISO **400**	4.0 m/13ft
ISO **800**	5.6 m/18ft
ISO **1600**	8.0 m/26ft
ISO **3200**	11 m/36ft
ISO **6400**	16 m/53ft
ISO **12500**	22 m/73ft

[1] Ranges based on aperture set to 2.8. With other aperture settings, the ranges are correspondingly shorter.

SYNCHRONIZATION TO THE END OF THE EXPOSURE

Flash photographs are illuminated by two light sources, the available light and the light from the flash. Parts of the subject that are exclusively or primarily illuminated by the flash are almost always reproduced extremely sharply (provided focusing is correct) due to the extremely fast pulse of light. By contrast, all other parts of the subject – those that are sufficiently illuminated by the available light or illuminate themselves – are portrayed with different degrees of sharpness in the same picture.

Whether these parts of the subject are reproduced sharply or „blurred", and the degree of blurring, is determined by two independent factors.

1. The length of the exposure, i.e. for how long these parts of the subject „act upon" the sensor and
2. How quickly these parts of the subject – or the camera itself – are moving during the exposure.

The longer the shutter speed/exposure time or the faster this movement, the more clearly the two – superimposed – parts of the picture can differ.

With the flash fired at the normal moment, at the beginning of the exposure, i.e. immediately after the shutter is completely open, this can even lead to apparent contradictions, e.g. a vehicle seeming to be "overtaken" by the traces of its own taillights.

The Leica X2 gives you a choice between this normal flash firing moment and synchronization to the end of the exposure, i.e. immediately before the shutter begins to close again. In this case, the sharp image is located at the end of the movement. In the mentioned example, the taillight traces would follow the vehicle as one would expect. Thus, this flash technique often gives a more natural impression of movement and dynamics.

In the menu, select **Flash Sync** (3.14), and in the submenu the desired setting.

Note:
When using faster shutter speeds, in terms of the image there is hardly any difference, or only for rapid movements between the two firing moments.

FLASH EXPOSURE COMPENSATION

This function can be used to selectively reduce or strengthen the flash exposure regardless of the exposure of the available light, e.g. in a picture taken outside in the evening, to lighten the face of a person in the foreground while retaining the lighting atmosphere.

1. To set a flash exposure compensation, press the upper **EV+/-** direction button (1.23) three times.
   - The corresponding sub-menu appears.
2. Select the desired compensation value with the left and right direction buttons (1.24/1.27). Values from +3 to -3EV with $^{1}/_{3}$ EV increments are available.
3. Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).
   - The exposure compensation symbol and the set value (2.1.14) appear.

Notes:
- A brighter flash illumination chosen with a plus compensation requires higher flash output and vice versa. Therefore flash exposure compensations influence the flash range more or less considerably: A plus compensation reduces the range, a minus compensation increases it.
- The **EV**/direction button is also used to call up the menus for exposure bracketing (see next section) and flash exposure compensation (see p. 132). They scroll through in an endless loop and can therefore be selected by repeatedly pressing the button.
- A set compensation remains active until it is switched to **±0** (see step 2.), i.e. after any number of shots and even if the camera is switched off.

USING EXTERNAL FLASH UNITS

The ISO flash shoe (1.11) of the Leica X2 also allows the use of more powerful, external flash units. We specifically recommend using dedicated units such as the Leica SF 24D (see p. 153).
As soon as an external flash unit is attached, if flash modes with pre-flash function (ϟA/ϟ/ϟS) are set, they are changed to the otherwise same modes without pre-flash (ϟA/ ϟ/ ϟS) and displayed accordingly.
However, when the flash unit is removed, the camera is reset to the originally set mode.
On the Leica SF 24D, the mode **TTL/GNC** should be set to allow automatic control by the camera. When set to **A**, subjects with above or below average brightness may not be optimally exposed. When set to **M**, the flash exposure must be adjusted to the aperture and distance values specified by the camera by setting a corresponding reduced power output level.

Notes:
- When an external flash unit is attached, it must also be turned on, i.e. ready to use, otherwise incorrect exposures and incorrect messages on the camera may result.
- Simultaneous use of the electronic viewfinder EVF 2 (see p. 152) is not possible.

ADDITIONAL FUNCTIONS

SELF-TIMER

The self timer allows you to take a picture with a delay of either 2 or 12s. This is particularly useful for group photographs, where you want to appear in the picture yourself or if you want to avoid the picture being out of focus due to camera shake when releasing the shutter. In such cases, we recommend that you mount the camera on a tripod.

Setting

1. Press the left ⏲ direction button (1.27).
   • The respective indication appears (2.2.11).
2. In the appearing menu, select the desired delay time. This can be done alternatively with the setting ring (1.22), the up and down direction buttons (1.23/1.26), or by repeatedly pressing the left direction button again.
   • The indication (2.2.11) changes accordingly.
3. Confirm the setting by pressing either the shutter release button (1.8) or the **MENU/SET** button (1.25).

Operation

Press the shutter release button (1.8, see p. 127) all the way down to take the photograph.

- Progress is indicated by flashing of the self-timer LED (1.2)
  - with 12s delay, first of all slowly (at 1Hz) and more quickly (at 2Hz) in the last 2s,
  - with 2s delay as described above for the last 2s.
    On the monitor, a message counts down the remaining time (2.1.11).

Notes:

- A running delay time can be restarted at any time by pressing the shutter release button again.
- Cancelling a running delay time is possible only with the main switch, either by selecting another mode, or by turning the camera off.
- When the self-timer is activated, only single pictures are possible, i.e. exposure series (see p. 104) and automatic exposure bracketing (see p. 132) cannot be combined with self-timer mode.

FORMATTING THE MEMORY CARD

Normally, it is not necessary to format (initialize) a memory card that has already been used. However, if a card that has yet to be formatted is inserted for the first time, it must be formatted. In such cases the **Format** sub-menu appears automatically.

Nonetheless, we recommend formatting the memory card from time to time, as certain residual quantities of data (subsidiary information) can take up some of the memory capacity.

In the menu, select **Format** (3.32), and in the submenu, confirm or reject the formatting process.

Notes:

- Simple formatting does not irretrievably delete the data on the card. It merely deletes the directory, which means that the existing data is no longer directly accessible. The data can be accessed again using appropriate software.
  Only the data that is then overwritten by saving new data is actually completely deleted.
  Nevertheless, you should make a habit of transferring all your pictures onto a secure bulk storage medium, e.g. the hard drive on your computer, as soon as possible.
- Do not switch off the Leica X2 while the memory card is being formatted.
- If the memory card has been formatted in another device, such as a computer, you should reformat it in the Leica X2.
- If the memory card cannot be formatted, you should ask your dealer or contact the Leica Information Service (address, see p. 160) for advice.
- Even protected pictures (see p. 146) are deleted when formatting the memory card.
- If no memory card is inserted, the internal memory will be formatted.

WORKING COLOR SPACE

The requirements in terms of color reproduction differ considerably for the various possible uses of digital picture files. Different color spaces have therefore been developed, such as the standard RGB (red/green/blue) that is perfectly adequate for simple printing. For more demanding image processing using appropriate programs, e.g. for color correction, Adobe© RGB has become established as the standard in the relevant sectors.

In the menu, select **Color space** (3.26), and in the submenu the desired setting.

Notes:

- If you have your prints produced by major photographic laboratories, mini labs or Internet picture services, you should always select the **sRGB** setting.
- The **Adobe RGB** setting is only recommended for professional image processing in completely color-calibrated working environments.

COPYING IMAGE DATA FROM THE INTERNAL MEMORY TO A MEMORY CARD

Thanks to its 110 MB internal memory, the Leica X2 can store several images without a card in the camera. If you wish to save these images permanently though, you should copy the image data to a memory card.

In the menu, select **Copy** (3.35), and in the submenu, confirm or reject the copying process.

CREATING NEW FOLDER NUMBERS

The Leica X2 saves the picture numbers to the memory card in ascending order. Initially, the corresponding files are all stored in one folder. However, you can create a new folder at any time, which you can use to store subsequent pictures, e.g. to group them together more clearly.

In the menu, select **Reset Image Numbering** (3.22), and in the submenu, confirm or reject the resetting process.

Notes:

- The file names (e.g. L1002345.jpg), comprise two groups **100** and **2345**. The first 3 digits are the number of relevant folder, the second 4 digits are the consecutive picture number within the folder. This ensures that there are no duplicated file names after the function is used and the data is transferred to a computer.
- If you wish to reset the folder number to 100, you can do so by formatting the card or the internal memory and, immediately afterwards, reset the image number. This also resets the picture number (to 0001).

USER PROFILE

With the Leica X2, any combination of all menu settings can be permanently stored, e.g. so that they can be retrieved quickly and easily at any time for recurring situations / subjects. A total of three memory slots are available for such combinations. You can also reset all the menu items to the factory setting.

Creating a profile

1. Set the desired functions in the menu.
2. In the menu, select **User Profile** (3.38),
3. in the submenu **Save User Profile**,
4. in the second level submenu, select the desired memory slot, and
5. confirm your setting by pressing the **MENU/SET** button (1.25).

Using a profile

In the menu, select **User Profile**, and in the submenu the desired memory slot.

DEFAULTING ALL MENU SETTINGS

In the menu, select **User Profile**, and in the submenu **Factory Setting**.

Note:

Defaulting does not reset your time and date settings.

IMAGE STABILIZATION

Especially in low light situations, the necessary shutter speed may be too slow to ensure sharp pictures, even with the activated **AUTO ISO** function (see p. 118). The Leica X2 offers a function that will often produce sharp pictures even with such slow shutter speeds.

In the menu, select **Image Stabilization**, and in the submenu the desired setting.

Notes:

- The camera takes two pictures automatically in series with this function, one with a faster and one with a slower shutter speed (you will hear the shutter operate twice during the operation). Then, it takes the data of the two exposures and combines them into one with digital image processing.
- Therefore, please hold the camera steady until the shutter has released the second time.
- Due to the function using two exposures, it can only be applied with static subjects.
- Image stabilization is only possible with shutter speeds within the range of $^1/_4$ s to $^1/_{30}$s and sensitivities up to ISO 1600.

REVIEW MODE

SELECTING REVIEW MODES

You can switch from record or menu setting mode to review at any time by pressing the **PLAY** button (1.16).

In addition, you can choose to have every picture taken to be shown automatically immediately after the shot.

1. In the menu, select **Auto Review** (3.23),
2. in the submenu **Duration**, and
3. in the respective second level submenu the desired function or duration.
4. To select whether pictures should be shown with or without histogram (see p. 127), call up the first sub-menu again,
5. select **Histogram**, and then
6. the desired option.
   - The last picture taken is shown in the monitor and the selected displays for review mode (see p. 73) appear.
     If no image file is saved in the internal memory (see p. 140) and/or on the memory card, the message **No valid image to play** appears instead.

Notes:

- If a memory card is inserted (see p. 82), only the pictures on the card are accessible for reviewing, i.e. if you want to review a picture saved to the internal memory, the card must be removed first.
- The Leica X2 saves pictures according to the DCF standard (Design Rule for Camera File System).
- It may not be possible to review files not created by the Leica X2.
- In some cases, the monitor image may either be of poorer quality than usually, or the monitor may even remain black except for the displayed file name.

SELECTING PICTURES

You can select the other saved pictures using either
– the left and right direction buttons (1.24/1.27), or
– the setting wheel (1.20).

Pressing/turning left takes you to the pictures with lower numbers, pressing/turning right to those with higher numbers. Keeping the buttons pressed results in continuous scrolling at a rate of approx. 2s per picture.

After the highest and lowest numbers, the series of pictures begins again in an endless loop, so you can reach all pictures in either direction.

• The picture and file numbers change accordingly.

ENLARGING THE PICTURE/ SIMULTANEOUS REVIEW OF 16 PICTURES

The Leica X2 allows you to enlarge a section of the picture by up to 16x, e.g. in order to study it more closely. Conversely, it is also possible to simultaneously view 16 pictures, e.g. to gain an overview or to find the picture you want more quickly.

Turn the setting ring (1.22) clockwise to enlarge the picture, counterclockwise beyond the normal size for the 16 picture display.

• With enlarged pictures, displays appear, indicating the approximate size of the section (2.2.21) and that the setting wheel is still available for selecting other pictures (2.2.20).
With the 16 picture display, the one previously viewed at normal size is indicated by a red frame.

Notes:

- The more the picture is enlarged, the more the quality of reproduction in the monitor is reduced, due to the proportionally lower resolution.
- It may not be possible to enlarge pictures created on other cameras.
- If an enlarged section is being shown, using the setting wheel to view other pictures results in these also being shown as enlarged sections.
- A histogram (see p. 127) is not available with enlarged viewing.

With the 16 picture display, selecting other pictures is the same as with normal size viewing, except that keeping the buttons pressed results in very fast scrolling.

- The selected picture is identified by a red frame.

You can return any indicated picture to normal size by turning the setting ring clockwise, or by pressing the **MENU/SET** button (1.25).

SELECTING THE TRIMMING

When a picture is enlarged, you can move the enlarged section out of the central position, e.g. to control the rendition of off-center subject detail.

Use the respective direction buttons to move the enlarged section up, down, to the left or the right (1.23/1.24/1.26/1.27).

- The display 2.2.21 indicates the approximate position of the section within the picture.

DELETING PICTURES

Pictures on the memory card and the internal memory can be deleted at any time. This can be useful, e.g. if you have already saved the pictures to other media, if you no longer need them or if you need to free up more memory space on the card.

The Leica X2 also offers you the option of deleting single or all pictures at the same time, as required.

Notes:

- If a memory card is inserted (see p. 102), only the pictures on the card are accessible for deleting, i.e. if you want to delete a picture saved to the internal memory, the card must be removed first.
- Protected pictures must be unprotected before they can be deleted. See p. 146 for details.
- Deleting a picture causes the subsequent pictures in the frame counter (2.2.9) to be renumbered according to the following pattern: If you delete picture no. 3, for example, what was previously picture no. 4 then becomes no. 3, while the picture that was previously no. 5 becomes no. 4 etc.. However, this does not apply to the numbering of the remaining picture files in the folder (2.2.6), which always remains unchanged.

Important:

Pictures are permanently deleted. You cannot subsequently retrieve them.

To call up the delete function, press the **DELETE/FOCUS** button (1.15).

- The delete menu appears.

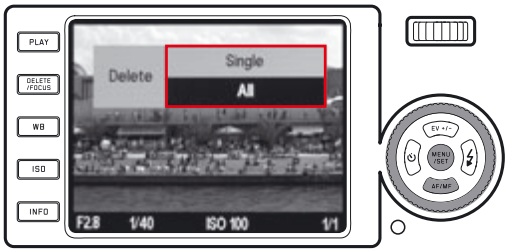
The subsequent actions depend on whether you want to delete single pictures or all pictures simultaneously.

Deleting single pictures

1. Select Single and press the **MENU/SET** button (1.25).
   - After deleting, the next picture appears.
     If the picture is protected (see p. 146), it continues to be displayed and **This is protected** appears for a short time.

Deleting all pictures

1. Select **All** and press the **MENU/SET** button (1.25).
   - A submenu appears.
2. Confirm or reject the process and press the **MENU/SET** button again.
   - The message **No valid image to play** or the originally shown picture appears again, if it has not been deleted after all.
     However, if the pictures included some with protection (see also next section), **Protected images were not deleted** appears for a short time instead, and finally the first of these pictures reappear.



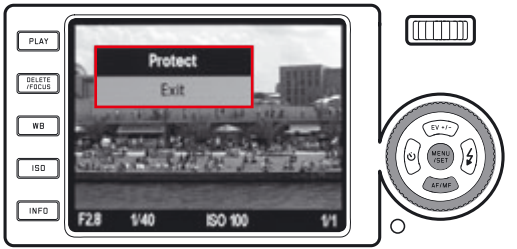
Note:

If you reconsider and do not want the delete one or all pictures, you can exit the delete menu by pressing the **DELETE/FOCUS** button again.

PROTECTING/UNPROTECTING PICTURES

The pictures saved on the memory card and in the internal memory can be protected against being accidentally deleted.

1. In the menu, select **Protect** (3.34).
   - After a short moment the picture shown before reappears along with a menu. Depending on whether the picture is protected or not, the menu contains the options **Unprotect** or **Protect**, respectively.



2. select the respective option, and
3. confirm by pressing the **MENU/SET** button (1.25).
   - A protected picture is indicated by the lock display (2.2.4).

Notes:

- If a memory card is inserted (see p. 102), only the pictures on the card are accessible for protecting/unprotecting, i.e. if you want to protect/unprotect a picture saved to the internal memory, the card must be removed first.
- You can return to normal review mode at any time by pressing **Exit**.
- With the protect/unprotect menu displayed, you can select the other pictures using the left and right direction buttons (1.24/1.27).
- Even protected pictures are deleted when formatting the memory card (see p. 139).
- If you attempt to delete (see p. 146) protected pictures, warning messages appear. To delete them, remove the protection as described above.
- Protection is only effective on this camera.
- You can also prevent accidental deletion by sliding the memory card's write protection switch to the position marked LOCK (see p. 102).

REVIEW OF PORTRAIT-FORMAT PICTURES

Normally, the pictures on the monitor are shown how they were taken, i.e. if the camera was held horizontally, the picture will be shown that way too. In the case of portrait format pictures though, i.e. if the camera was held vertically for the shot, this may be inconvenient since, with the camera held horizontally afterwards as usual, the monitor image will not show an upright picture.
The Leica X2 offers a remedy for this.

In the menu, select **Auto Rotate Display** (3.32), and in the submenu the desired setting.

When **On** is selected, portrait format pictures are automatically displayed upright.

Notes:

- Portrait format pictures shown perpendicularly on the monitor are necessarily considerably smaller.
- This function is not available for automatic review (see p. 106).

PLAYBACK WITH HDMI EQUIPMENT

The Leica X2 allows you to view your pictures on a TV, monitor, or projector equipped with HDMI input, thus ensuring the best possible rendition. In addition, you can choose between three resolution levels: **1080i**, **720p**, and **480p**.

Setting

In the menu, select **HDMI** (3.33), and in the submenu the desired setting.

Connecting / Playing back pictures

1. Plug the HDMI cable into the camera's and the TV's, monitor's or projector's HDMI sockets.
2. Turn on the TV, monitor, or projector and select HDMI input.
3. Turn on the camera and press the **PLAY** button (1.16) to set to play mode.

Notes:

- A HDMI cord is necessary for this connection to a TV, monitor, or projector. Use only the cord available as accessory from Leica for this camera (see p. 153)
- If the TV's, monitor's, or projector's maximum resolution is lower than the selected level on the camera, it automatically switches to the attached unit's maximum resolution. E.g., if you set **1080i** on the camera and the connected unit has maximum of **480p**, the camera automatically uses **480p**.
- Please refer to the instructions of the relevant TV, monitor, or projector for details on their required settings.
- The image shown on an external display does not include any of the information on the camera monitor / viewfinder.

TRANSFERRING DATA TO A COMPUTER

The Leica X2 is compatible with the following operating systems:
Microsoft®: Windows® XP / Vista® / 7®
Apple® Macintosh®: Mac® OS X (10.4) and higher
The Leica X2 is equipped with a USB 2.0 High Speed interface for transferring data to a computer. This allows fast data transfer to computers with the same kind of interface. The computer used must have either a USB port (for direct connection to the Leica X2) or a card reader for SD/SDHC/SDXC cards (including UHS I standard types).

CONNECTING AND TRANSFERRING DATA WITH THE CAMERA AS AN EXTERNAL DRIVE

With Windows operating systems:
If the Leica X2 is connected to the computer using a USB cable, the operating system detects it as an external drive and assigns it a drive letter. Use Windows Explorer to transfer the picture data to your computer and save it.

With Mac operating systems:
If the Leica X2 is connected to the computer using a USB cable, the memory card used appears as a storage medium on the desktop. Use the Finder to transfer the picture data to your computer and save it.

Important:

- Only use the USB cable (D) supplied.
- While data is being transferred from the Leica X2 to the computer, the connection may not under any circumstances be broken by removing the USB cable, as otherwise the computer and/or the Leica X2 may “crash” and the memory card may even be irreparably damaged.
- The Leica X2 cannot be switched off or automatically switch itself off due to a lack of battery power while data is being transferred from the camera to the computer, as this may cause the computer to crash‘. For the same reason the battery must never be removed from the camera while the connection is active. If the battery capacity runs short during data transfer, the INFO screen (2.1.26) appears with the battery capacity indication (2.1.5) flashing. In this case, stop the data transfer, switch off the Leica X2 (see p. 104) and charge the battery (see p. 100).

CONNECTING AND TRANSFERRING DATA USING CARD READERS

The picture files can also be transferred to other computers using a standard card reader for SD/SDHC/SDXC memory cards (including UHS I standard types). Card readers with a USB interface are available for computers with a USB interface.

Note:

The Leica X2 is equipped with an internal sensor which detects the position of the camera – horizontal or vertical (both directions) – for each picture. This information automatically allows the pictures to be displayed upright when subsequently displayed on a computer running the appropriate programs.

WORKING WITH DNG RAW DATA

If you have selected the standardized and future-proof DNG (Digital Negative) format, you require highly specialized software to convert the saved raw data into optimum quality, for example the professional Adobe® Photoshop® Lightroom® raw data converter. It provides optimum quality algorithms for digital color processing, allowing pictures that simultaneously have low picture noise and exceptional resolution.

During editing, you have the option of adjusting parameters such as white balance, noise reduction, gradation, sharpness etc. to achieve an optimum image quality.

Adobe® Photoshop® Lightroom® is available as a free download when you register your Leica X2 on the Leica Camera AG homepage. Further details can be found in the registration booklet enclosed in the camera packaging.

INSTALLING ADOBE® PHOTOSHOP® LIGHTROOM®

To start the installation, your computer must have an active Internet connection (i.e. it must be online).

You also need a valid e-mail address to activate the software.

Have the required software license code ready - you will receive it in the reply mail from Leica after you have chosen to download the software.

Should you need any support concerning Adobe® Photoshop® Lightroom® Home: You will find a support contact on the Leica Camera AG homepage in the owners area where you registered your camera and downloaded the software.

System requirements

Like every software, every version of Adobe® Lightroom® calls for different versions of the employed operating system (Windows/Mac). Therefore, please check your operating system's compatibility before downloading Adobe® Lightroom®.

On some Windows versions, it is possible that the operating system will issue a warning about a missing Windows signature. Ignore this message and continue with the installation.

INSTALLING FIRMWARE UPDATES

Leica is constantly working on developing and optimizing its products. As digital cameras have many functions that are controlled electronically, some of these improvements and enhancements to the functions can be installed on the camera at a later date.

To do this, Leica provides firmware updates at irregular intervals, which you can easily download from our homepage.

When you have registered your camera, Leica will inform you of any new updates.

ACCESSORIES

Important:
Only the accessories specified and described below, and/or those specified and described by Leica Camera AG, may be used in this camera.

Leather case X
Case made of high-quality real leather (black). The case carries the camera in vertical postion, camera slips in and out of the case for carrying and shooting. Comes with longk strap.
(Order no. 18 755)

Camera protector X
The protector gives free access to all operating elements with the camera inside. The camera can remain in the protector for shooting. Made of high-quality real leather (black).
(Order no. 18 731)

Ever-ready case X
Traditional style case made of high-quality real leather (brown). Front flap opens for shooting with the camera remaining in the rear section of the case. Comes with long strap.
(Order no. 18 732)

Small System bag
Small, soft system case made of high quality water proof canvas cloth (black). Takes the camera plus accessories such as handgrip, viewfinder, and flash unit.
(Order no. 18 757)

Wrist strap X
Contour shaped, made of real leather (black).
(Order no. 18 713)

External Viewfinders

Bright Line Finder 36mm
High quality external optical viewfinder. Bright line fames indicate the image field both for distances between 60cm and infinity, as well as between 30 and 60cm.
(Order no. 18 707)

Electronic Viewfinder EVF 2
The EVF 2 delivers a nearly 100% TTL view of the image frame with a 1.4M pixel resolution. This allows precise and easy composition as well as simultaneous comprehensive control of all relevant image parameters. The EVF 2 proves especially useful in lighting situations that reduce the visibility of the monitor image, and, thanks to its hinged design, also in the case of below eye level shots.
(Order no. 18 753)

Both viewfinders are mounted on the camera's hot shoe just like – and therefore only instead of – an external flash unit. See pp.114/115 for details on the relevant settings for the monitor when using an external viewfinder.

Handgrip X

The handgrip for the Leica X2 allows the camera to be held safely and comfortably. It is attached to the camera's tripod thread by means of the knurled screw on the bottom of the handgrip.
(Order no. 18712)

Notes:

- This handgrip is designed exclusively for the Leica X2 and the Leica X1. It cannot be attached to any other camera due to their differing dimensions and tripod thread positioning.
- Since the handgrip covers the camera's battery / card compartment, it must be removed to replace the battery and/or card.
- Take care to align the handgrip's guide pin with the camera's respective drilling (1.34) to prevent the camera from getting scratched.

Flash units

The Leica SF 24D system flash unit is particularly suitable with its compact size and design that matches the camera. It has a permanently attached flash foot with all the required contacts and is extremely easy to operate.
(Order no. 14 444)

HDMI cable

The HDMI cable allows exceptionally fast transfer of image data to playback equipment with corresponding HDMI sockets. Length = approx. 1.5m/5ft.
(Order no. 14 491)

REPLACEMENT PARTS	**Order no.**
Lens cap	423-097.001-024
Hot shoe/ viewfinder socket cover	423-097.001-026
Leather carrying strap	439-612.060-000
USB cord	423-089.003-022
Lithium-Ion-Battery Pack Leica BP-DC 8[1]	18 706
Battery case	423-089.003-012
Leica BC-DC8 Charger (includes exchangeable plugs)	423-089.803-008
AC-plug EU	423-089.003-014
AC-plug US/JP	423-089.003-016
AC-plug UK/HK	423-089.003-018
AC-plug China	423-089.003-020
AC-plug Korea	423-089.003-028
AC-plug Australia	423-089.003-030

[1] To ensure the power supply when using the camera for longer periods (e.g. at events, on trips, etc.) we recommend that you always have a spare battery with you.

GENERAL PRECAUTIONS

Do not use the Leica X2 in the immediate vicinity of devices with powerful magnetic, electrostatic or electromagnetic fields (e.g. induction ovens, microwave ovens, television sets or computer monitors, video game consoles, cell phones, radio equipment).

- If you place the Leica X2 on or very close to a television set, its magnetic field could interfere with picture recordings.
- The same applies for use in the vicinity of cell phones.
- Strong magnetic fields, e.g. from speakers or large electric motors, can damage the stored data or the pictures.
- If the Leica X2 malfunctions due to the effects of electromagnetic fields, remove the battery and then switch the camera on again.
  Do not use the Leica X2 in the immediate vicinity of radio transmitters or high-voltage power lines.
- Their magnetic fields can also interfere with picture recordings.
  Protect the Leica X2 from contact with insect sprays and other aggressive chemicals. Petroleum spirit, thinner and alcohol may not be used for cleaning.
- Certain chemicals and liquids can damage the Leica X2 body or the surface finish.
- As rubber and plastics sometimes emit aggressive chemicals, they should not remain in contact with the Leica X2 for extended periods.
  Ensure that sand and dust cannot get into the Leica X2, e.g. on the beach.
- Sand and dust can damage the camera and the memory card. Take particular care when inserting and removing the card.
  Ensure that water cannot get into the Leica X2, e.g. when it is snowing or raining and on the beach.
- Moisture can cause malfunctions and even permanent damage to the Leica X2 and the memory card.
- If salt water spray gets onto the Leica X2, wet a soft cloth with tap water, wring it out thoroughly and wipe the camera with it. Then wipe down thoroughly with a dry cloth.

Important:
Only the accessories specified and described in these instructions, and/or those specified and described by Leica Camera AG, may be used with this camera.

MONITOR

- If the Leica X2 is exposed to significant temperature fluctuations, condensation can form on the monitor. Wipe it carefully with a soft dry cloth.
- If the Leica X2 is very cold when switched on, the monitor will initially be slightly darker than normal. It will revert to its normal brightness once it has warmed up.
- The monitor is manufactured using a high-precision process. This ensures that, of the total of around 230,000 pixels, more than 99.995% work correctly and only 0.005% remain dark or are always light. However, this is not a malfunction and it does not impair the reproduction of the picture.

SENSOR

Cosmic radiation (e.g. on flights) can cause pixel defects.

CONDENSATION

If condensation has formed on or in the Leica X2, you should switch it off and leave it to stand at room temperature for around an hour. Once the camera temperature has adjusted to room temperature, the condensation will disappear by itself.

CARE INSTRUCTIONS

As any soiling also represents a growth medium for microorganisms, you should take care to keep the equipment clean.

FOR THE CAMERA

- Only clean the Leica X2 with a soft, dry cloth. Stubborn dirt should first of all be covered with a well-thinned cleaning agent and then wiped off with a dry cloth.
- To remove stains and fingerprints, the camera should be wiped with a clean lint-free cloth. Tougher dirt in hard to reach corners of the camera body can be removed with a small brush.
- All mechanically operated bearings and sliding surfaces on your Leica X2 are lubricated. Please remember this if you will not be using the camera for a long period of time. To prevent the lubrication points becoming gummed up, the camera shutter should be released a number of times every three months. It is also recommended that you repeatedly move and use all other controls.

FOR THE LENS

- Normally, a soft hair brush is sufficient to remove dust from the outer lens element. However, in case of more stubborn dirt, they can be carefully cleaned with a very clean, soft cloth that is completely free of foreign matter, using circular motions from the inside to the outside. We recommend micro-fiber cloths (available from photographic and optical specialists) that are stored in a protective container and can be washed at temperatures of up to 40°C/104°F (without fabric softener, never iron!). Cloths for cleaning glasses, which are impregnated with chemicals, should not be used as they can damage the lens glass.
- The lens cap included in the delivery also protects the lens from unintentional fingerprints and the rain.

FOR THE BATTERY

Rechargeable lithium ion batteries generate power through internal chemical reactions. These reactions are also influenced by the external temperature and humidity. Very high or low temperatures reduce the life of the battery.

- Always remove the battery if you will not be using the Leica X2 for a long period of time. Otherwise, after several weeks the battery could become totally discharged, i.e. the voltage is significantly reduced.
- Lithium ion batteries should be stored only when partially charged, i.e. not completely discharged or fully charged (in the corresponding display (2.1.5/2.2.5). For very long storage periods, it should be charged up for around 15 minutes twice a year to prevent total discharge.
- The battery must have a temperature of 0°–35°C/32°–95°F to be charged (otherwise the charger will not switch on, or will switch off again).

- Always ensure that the battery contacts are clean and freely accessible. While lithium ion batteries are proof against short circuits, they should still be protected against contact with metal objects such as paper clips or jewelry. A short-circuited battery can get very hot and cause severe burns.
- If a battery is dropped, check the casing and the contacts immediately for any damage. Using a damaged battery can damage the Leica X2.
- Batteries have only a limited service life.
- Take damaged batteries to a collection point to ensure correct recycling.
- Never throw batteries into a fire as this can cause them to explode.

FOR THE CHARGER

- If the charger is used in the vicinity of radio receivers, it can interfere with the reception; make sure there is a distance of at least 1m between the devices.
- When the charger is in use, it can make a noise (buzzing) – this is quite normal and is not a malfunction.
- When it is not in use, disconnect the charger from the mains as otherwise it uses a certain (very small) amount of power even when no battery is inserted in it.
- Always keep the charger contacts clean, and never short circuit them.

FOR MEMORY CARDS

- While a picture is being stored or the memory card is being read, it may not be removed, nor may the Leica X2 be switched off or exposed to vibrations.
- For safety, memory cards should only ever be stored in the antistatic cover supplied.
- Do not store memory cards where they will be exposed to high temperatures, direct sunlight, magnetic fields or static discharge.
- Do not drop or bend a memory card as this can damage it and result in loss of the stored data.
- Always remove the memory card if you will not be using the Leica X2 for a long period of time.
- Do not touch the connections on the rear of the memory card and keep them free of dirt, dust and moisture.
- It is recommended that the memory card be reformatted from time to time, as fragmentation occurs when deleting, which can block some of the memory capacity.

STORAGE

- If you are not using the Leica X2 for an extended period of time, we recommend that you:
  a. switch it off (see p. 104),
  b. remove the memory card (see p. 102), and
  c. remove the battery (see p. 100) (after a maximum of 3 days, the time and date will be lost, see p. 102).
- A lens works like a magnifying glass if bright sunlight shines on the front of the camera. The camera must therefore never be set aside in strong sunlight without protection. Use the lens cap and keep the camera in the shade (or immediately put it away in the case) help to prevent damage to the interior of the camera.
- You should preferably store the Leica X2 in a closed and padded container so that nothing can damage it and it is protected from dust.
- Store the Leica X2 in a dry, adequately ventilated place, where neither high temperatures nor high humidity will occur. When used in humid conditions, it should be completely cleared of all moisture before being stored away.
- Photo cases that became wet during use should be emptied to prevent damage to your equipment caused by moisture and any leather-tanning residue released.
- To prevent fungal growth during use in hot, humid tropical climates, the camera should be exposed to the sun and air as much as possible. Storage in airtight containers or cases is recommended only if a desiccant such as silica gel is placed in the container.
- To prevent the formation of fungus, do not store the Leica X2 in a leather case for extended periods of time.
- Note the serial numbers of your Leica X2, as it is extremely important in case of loss.

TECHNICAL DATA

Sensor APS-C-size CMOS Sensor (23.6x15.7mm) with 16.5/16.2 Megapixels (in total/effective), aspect ratio 3:2

Resolution Selectable for JPEG format: 4928 x 3264 pixels (**16.2M**), 4288 x 2856 pixels (**12.2M**), 3264 x 2160 pixels (**7M**), 2144 x 1424 pixels (**3.1M**), 1632 x 1080 pixels (**1.8M**), DNG: 4944 x 3272 pixels.

Lens Leica Elmarit 24mm f/2.8 Asph. (corresponds to 36mm with 35mm-format), 8 lens elements in 6 groups, 1 aspherical surface.

Aperture settings From f/2.8 to f/16 in 1/3EV increments

Smallest object field 18 x 27cm / 7 $^{7}/_{8}$" x 10 $^{5}/_{8}$" (from a distance of 30cm/1 ft.).

Image data file formats/compression rates Selectable: **JPG Super fine**, **JPG fine**, **DNG + JPG S. fine**, **DNG + JPG fine**.

Storage media SD/SDHC/SDXC Memory Cards, MultiMedia Cards.

Internal buffer memory approx. 110 MB.

ISO Sensitivity setting[2] Automatic, optionally with shutter and/or ISO sensitivity limits, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12500.

White balance Selectable modes: Automatic, presets for daylight, cloud, halogen lighting, shade, electronic flash, 2 manual settings, optionally fine tuning for all settings.

Color settings Selectable: **Standard**, **Vivid**, **Natural**, **B&W natural**, **B&W high contrast**.

Autofocus system Contrast-based system using the image sensor, optional AF assist lamp for low light conditions.

Focusing range From 30cm/1 ft. to infinity. Automatic (Autofocus) or manual focusing with setting wheel on back of camera body, optionally magnification function as focusing aid.

Autofocus metering modes 1 area, 11 area, spot, face detection.

Exposure modes Programmed automatic exposure mode (P), program shift option, aperture priority (A), shutter speed priority (T) and manual setting (M).

Exposure metering Multi-field, center-weighted, spot, optionally with histogram display to analyze brightness distribution.

Exposure compensation ±3EV in $^{1}/_{3}$EV increments.

Automatic exposure bracketing 3 pictures with intervals up to 3EV settable in $^{1}/_{3}$EV increments.

Shutter speed range 30s to $^{1}/_{2000}$s, with normal flash modes from $^{1}/_{30}$s, with slow flash modes from 30s.

Series exposures Selectable: 3fps or 5fps, max. 8 pictures. with constant frame rate and **DNG + JPG fine**.

Flash modes Flash switched on and off by extending/retracting the unit, automatic flash activation with and without pre-flash, manual flash activation with and without pre-flash, automatic flash activation with slower shutter speeds with and without pre-flash, studio mode for triggering slave equipped external flash systems.

Flash exposure compensation ±3EV in $^1/_3$EV increments.

Working range of the built-in flash unit (for ISO 100/21°) approx. 0.3-2.0m/1-6ft., guide number 5.

Recycling time of built-in flash unit approx. 5s with fully loaded battery.

Monitor 2,7“ TFT LCD with 230,000 pixels.

Displays see p. 90

Self-timer Delay optionally 2 or 12s.

Connections 5-pin mini USB socket 2.0 high-speed for quick data transfer to the computer, HDMI socket for digital direct connection to corresponding equipment, proprietary socket for external electronic viewfinder Leica EVF 2[1].

Power supply Lithium ion battery, 3.7V, 1600mAh, capacity (according to CIPA standards): approx. 450 images, charging time (from full discharge): approx 200 min.

Mains/charging unit Input: Alternating current 100-240 V, 50/60Hz, automatically switched.

Housing Housing in Leica Design made of solid, ultra-light magnesium. Two eyelets for carrying strap. ISO flash shoe with central and control contacts for connection of external, more powerful flash units, e.g. Leica SF 24D and the external electronic viewfinder Leica EVF 2[1].

Tripod thread A$^1/_4$ DIN 4503 ($^1/_4$“).

Dimensions (WxHxD) approx. 124 x 69 x 51.5mm / $4^7/_8$ x 2 $^{11}/_{32}$ x 2 $^1/_{32}$ inches

Weight approx. 307/345g / 10.83/12.17oz (with/without battery)

[1] Available as accessory; see also p. 152

[2] According to CIPA DC-004 Standard

Construction and design subject to change.

Leica Akademie

As well as outstanding high performance products for photography and viewing, for many years we have also been offering the special services of the Leica Akademie. These include practical seminars and training courses, which are intended to share our knowledge about the world of photography, image processing and presentation with both beginners and advanced photographic enthusiasts.

The contents of the courses vary from general photography to areas of special interest and offer a range of suggestions, information and advice for your own work. They are run by a trained team of experts in the modern, well-equipped training suite at our Solms factory and in the nearby Gut Altenberg.

More detailed information and the current Leica Akademie program including the photography trips are available from:

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