Contents

INTRODUCTION

CHAPTER 1: PRELIMINARY SETUP

Charging and Inserting the Battery	3
Choosing and Inserting a Memory Card	4
Setting the Language, Date, and Time	7

1

3

9

21

CHAPTER 2: BASIC OPERATIONS

uction to Main Controls	9
of Camera	9
of Camera	9
it of Camera	10
It Side of Camera	10
Side of Camera	10
om of Camera	
Pictures in Auto Mode	
ations from Fully Automatic	13
hoto Creativity Feature	13
h	
e Mode: Self-Timer and Continuous Shooting	
ew of Movie Recording	
g Pictures	19
ewing While in Shooting Mode	19
ewing Images in Playback Mode	19
ing Movies	

CHAPTER 3: SHOOTING MODES

Intelligent Auto Mode	. 21
Superior Auto Mode	. 22
Program Mode	23
Aperture Priority Mode	. 24
Shutter Priority Mode	. 26

41

Manual Exposure Mode
Scene Mode
Portrait
Advanced Sports Shooting
Landscape
Sunset
Night Scene
Hand-Held Twilight
Night Portrait
Anti Motion Blur
Pet
Gourmet
Beach
Snow
Fireworks
Soft Skin
High Sensitivity
iSweep Panorama Mode
Memory Recall Mode

Chapter 4: Shooting Menu

Image Size
Aspect Ratio
Quality
Panorama Size and Panorama Direction
File Format
Record Setting
Drive Mode
Single Shooting
Continuous Shooting
Self-Timer
Self-Timer (Continuous)
Continuous Exposure Bracketing
Single Exposure Bracketing
White Balance Bracketing
DRO Bracketing
Bracket Settings
Flash Mode
Flash Off
Autoflash
Fill-Flash
Slow Sync
Rear Sync
Flash Compensation.
Red Eye Reduction
Focus Mode (Available as Menu Option on HX90V Only)
Single-Shot AF
Continuous AF
DMF (HX90V Only)
Manual Focus (HX90V Only)
Focus Area
Wide
Center
Flexible Spot
Expand Flexible Spot
AF Illuminator

Exposure Compensation
ISO
Multi Frame Noise Reduction
Metering Mode
White Balance
DRO/Auto HDR
Creative Style
Adjusting Contrast, Saturation, and Sharpness
Standard
Vivid
Portrait
Landscape
Sunset
B/W
Sepia
Picture Effect
Off
Toy Camera
Pop Color
Retro Photo
Soft High-Key
Partial Color
High Contrast Monochrome
Soft Focus
HDR Painting
Rich-Tone Monochrome
Miniature Effect
Watercolor
Illustration
Focus Magnifier (HX90V only).
High ISO Noise Reduction
Center Lock-on AF
Smile/Face Detection
Face Detection On (Registered Faces)
Face Detection On
Smile Shutter
Soft Skin Effect.
Auto Object Framing
Scene Selection
Movie
SteadyShot (Movies)
Auto Slow Shutter, Micref Level, and Wind Noise Reduction
Shooting Tip List.
Memory Recall
Memory
-

CHAPTER 5: PHYSICAL CONTROLS

de Dial	87
utter Release Button	87
om Lever	87
wer Button	88
ilt-in Flash and Flash Pop-up Switch	88
ctronic Viewfinder	88
Illuminator/Self-Timer Lamp	89
ntrol Ring (HX90V Only)	90
yback Button	91

87

Movie Button
Menu Button
Function Button
Shooting Mode: Function Menu
Quick Navi System
Playback Mode: Send to Smartphone
In-Camera Guide/Delete Button
Control Wheel and Its Buttons
Control Wheel
Center Button
Direction Buttons
Up Button: Display
Right Button: Flash Mode
Down Button: Photo Creativity/Exposure Compensation
Exposure Compensation
Left Button: Self-Timer/Drive Mode
Tilting LCD Screen 100
Ports and Other Items on Sides and Bottom of Camera

CHAPTER 6: PLAYBACK AND PRINTING

lormal Playback	103
ndex View and Enlarging Images	103
layback Screens.	105
Peleting Images with the Delete Button	106
layback Menu	106
Delete	107
View Mode	108
Image Index	108
Display Rotation	109
Slide Show	109
Rotate	110
Enlarge Image	111
4K Still Image Playback	111
Protect	111
Motion Interval Adjustment	111
Specify Printing	112
Beauty Effect	113

CHAPTER 7: CUSTOM AND SETUP MENUS

Lustom Menu	114
Zebra	114
MF Assist (HX90V Only)	115
Focus Magnification Time (HX90V Only)	115
Grid Line	116
Rule of Thirds Grid	116
Square Grid	116
Diagonal Plus Square Grid	117
Marker Display	117
Marker Settings	117
Auto Review	118
Display Button	119
Peaking Level (HX90V Only)	121
Peaking Color (HX90V Only)	122
Exposure Settings Guide	122
Zoom Speed	

Zoom Setting	
Finder/Monitor	
Release without Card	
Self-portrait Timer	-
Face Registration	-
Write Date	
Function Menu Settings	128
Custom Key Settings	129
Control Ring (HX90V Only)	-
Center Button	
Standard	
MOVIE	132
Download Application	132
Not Set	132
Left Button	133
Right Button	133
Down Button	133
In-Camera Guide Button	133
Zoom Function on Ring (HX90V Only)	133
Movie Button	134
Setup Menu	134
Monitor Brightness	135
Viewfinder Brightness	135
Finder Color Temperature	135
Volume Settings	135
Audio Signals	136
GPS Settings (HX90V Only).	136
GPS On/Off	
GPS Auto Time Correction.	137
GPS Area Adjustment	
Use GPS Assist Data	
GPS Log Recording	
Upload Settings	
Tile Menu	
Mode Dial Guide	-
Delete Confirmation	
Display Quality	
Power Save Start Time	
NTSC/PAL Selector (Cameras Sold in Europe and Other PAL Areas Only)	
Function for VF Close	
Demo Mode	
HDMI Settings.	
HDMI Resolution.	-
24p/60p Output	
	-
CTRL for HDMI	
USB Connection	
USB LUN Setting	
USB Power Supply	
Language	
Date/Time Setup	
Area Setting	
Format	
File Number	
Select REC Folder	
New Folder	-
Folder Name	
	· · ·4/

Recover Image Database	147
Display Media Information	147
Version	148
Setting Reset	148

CHAPTER 8: MOTION PICTURES

150

Movie-Making Overview	150
Details of Movie Settings	150
Movie-Related Shooting Menu Options.	151
File Format	151
XAVC S HD	151
AVCHD	151
MP4	151
Record Setting	151
XAVC S HD	152
AVCHD	152
60i and 60p Video Formats	152
24p Video Formats	153
MP4	153
Movie (Exposure Mode)	153
Program Auto	154
Aperture Priority.	154
Shutter Priority.	155
Manual Exposure	155
SteadyShot (Movies)	156
Auto Slow Shutter	157
Micref Level	158
Wind Noise Reduction	158
Effects of Mode Dial Position on Recording Movies	158
Effects of Other Shooting Menu Settings on Recording Movies	160
Effects of Physical Controls When Recording Movies	161
Summary of Options for Recording Movies	163
Other Settings and Controls for Movies	164
Movie Playback	164
Motion Shot Feature	165
Editing Movies	166

CHAPTER 9: WI-FI, APPLICATIONS, AND OTHER TOPICS

168

Connections Using Wi-Fi and NFC	168
Sending Images to a Computer	168
Sending Images to a Smartphone	170
Connecting with NFC	172
Using a Smartphone or Tablet as a Remote Control	173
<i>N</i> i-Fi Menu	
Send to Smartphone	176
Send to Computer	
View on TV	177
One-touch (NFC)	177
Airplane Mode	
Access Point Settings	178
Edit Device Name	
Display MAC Address	179
SSID/PW Reset	179
Reset Network Settings	179

Applications and Application Menu	80
Other Topics	81
Using the Superzoom Lens	81
Macro Photography	84
Street Photography	85
Connecting to a Television Set	86

APPENDIX A: Accessories

Cases	187
Batteries and Chargers	
Remote Controls	189
External Flash and LED Light	191
External Video Recorder	192
External Audio Recorder	192
Tripods	193

APPENDIX B: QUICK TIPS

194

196

187

Appendix C: Resources for Further Information

Books	196
Websites and Videos	196
Digital Photography Review	196
Reviews of the HX80 and HX90V.	196
The Official Sony Site	197
Other Resources	197
ndex	198