

# LS-P4

- High sound quality. Small file size.
- Hi-Res 96kHz/24-bit audio
- Professional editing functions with simple usability
- Bluetooth compatibility

- Loss-less compression format "FLAC" Recording & Playback
- Incredibly compact: light
  and small
- TRESMIC ~ Three microphone system for high-quality sound recording



# High sound quality. Small file size.

Your perfect companion for creative recordings.

The LS-P4 is one of the first linear PCM recorders worldwide to be compatible with recording in the FLAC format. Achieve nearly perfect 96kHz/24-bit recordings that are better than CD quality – but with file sizes which are up to 30% smaller compared to the PCM WAV format.

# Specifications

#### **Recommended Application Area**

| Application |  |
|-------------|--|
|             |  |
|             |  |

#### Video Music Nature Broadcasting

#### **USB** functionality

| Direct USB Connection | Yes                  |
|-----------------------|----------------------|
| USB Speed             | USB 2.0 High Speed   |
| USB Classes           | USB Storage class    |
|                       | USB Composite device |

#### Display

| Display Type    | Full Dot Matrix Display (108 |
|-----------------|------------------------------|
|                 | x 84 dots)                   |
| Display Size    | 27.5 x 23.9mm / 1.43"        |
| Display colour  | White                        |
| Display Backlit | LED (White)                  |

#### **Device** operation

| Main Switch  | Push |
|--------------|------|
| HOLD switch  | Yes  |
| Power switch | Yes  |

#### **Microphone System**

| TRESMIC (3 Mic System) | Yes       |
|------------------------|-----------|
| Max. Sound Pressure    | 120dB SPL |

#### **Recording Modes**

| Recording format | FLAC / PCM (WAV) / MP3 |
|------------------|------------------------|
| PCM (WAV) format |                        |
| 96kHz / 24bit    | 3h 30min               |
| 88.2kHz / 24bit  | 3h 45min               |
| 48kHz / 24bit    | 7h                     |
| 48kHz / 16bit    | 10h 30min              |
| 44.1kHz / 24bit  | 7h 30min               |
| 44.1kHz / 16bit  | 11h                    |
| 44.1kHz (Mono)   | 22h 30min              |
| FLAC             |                        |
| 96kHz / 24bit    | 5h                     |
| 88.2kHz / 24bit  | 5h 15min               |
| 48kHz / 24bit    | 10h                    |
| 48kHz / 16bit    | 15h                    |
| 44.1kHz / 24bit  | 10h 30min              |
| 44.1kHz / 16bit  | 16h                    |
| 44.1kHz (Mono)   | 32h 30min              |
| MP3 format       |                        |
| 320 kbps         | 50h                    |
| 128 kbps         | 126h                   |
| 64 kbps (Mono)   | 253h                   |
|                  |                        |



### **Playback Modes**

Playback format

FLAC / PCM (WAV) / MP3

## Frequency response

| PCM                  | 96kHz / 20 - 44000Hz   |
|----------------------|------------------------|
|                      | 88.2kHz / 20 - 42000Hz |
|                      | 48kHz / 20 - 23000Hz   |
|                      | 44.1kHz / 20 - 21000Hz |
|                      | 44.1kHz (mono) / 20 -  |
|                      | 21000Hz                |
| MP3                  | 320kbps / 20 - 20000Hz |
|                      | 128kbps / 20 - 17000Hz |
|                      | 64kbps (mono) / 20 -   |
|                      | 13000Hz                |
| Internal microphones | 20 - 20.000Hz          |
|                      |                        |

## **Record function**

| Index              | Up to 99 per file        |
|--------------------|--------------------------|
| Auto recording     | VCVA (Variable Control   |
|                    | Voice Actuator)          |
|                    | Voice Sync               |
|                    | 2-mic Noise Cancel*      |
|                    | * Support in Rec Scene   |
|                    | Select                   |
| Recording Scenes   | Music                    |
|                    | Dictation                |
|                    | Meeting                  |
|                    | Conference               |
|                    | Lecture                  |
|                    | Speech-Recognition       |
| Advanced recording | Rec Monitor              |
|                    | Manual Rec level control |
|                    | Low Cut-Filter           |
|                    | Zoom Mic. Setting        |
|                    | Overdubbing              |
| Editing            | Fade in/out (PCM)        |
|                    | Normalize (PCM/MP3)      |

## Playback function

| Playback speed     | Adjustable (50 - 350%)  |
|--------------------|-------------------------|
| File operation     | Forward / Reverse Skip  |
|                    | Fast forward and rewind |
| File selection     | File Playback           |
|                    | Folder Playback         |
|                    | All Files Playback      |
| Repeat functions   | Repeat playback         |
|                    | A-B repeat playback     |
| Automatic playback | Random playback         |
| Sound enhancement  | Voice Balancer          |
|                    | Equalizer               |
|                    | Noise Cancel            |
| Advanced Play      | Voice Playback          |
|                    |                         |

## Data organisation

| Erase                        | Erase single files<br>Erase all files<br>Music folders<br>Partial (PCM only)<br>Trimming (PCM only) |
|------------------------------|---|
| No. of folders               | 5   |
| Folder Music                 | max. 300  |
| Files per folder             | 200   |
| File move                    | Yes   |
| File Copy (Folder to Folder) | Yes   |
| File Replace                 | Yes   |
| File divide                  | Yes   |
| Calendar Search              | Yes   |
| Normalize                    | Yes   |

## **Other Features**

| Remote Control | Yes (via Bluetooth App for |
|----------------|----------------------------|
|                | Android)                   |
| Bluetooth®     | Support HFP HF             |
| Voice guidance | Yes                        |

# Storage Media

| Internal / Removable Media | Internal + Removable     |
|----------------------------|--------------------------|
| External Memory            | microSD card / SDHC card |
|                            | (512 MB - 32 GB)         |
| Internal memory            | 8GB                      |

# Interfaces Input

| 3.5 ø mm mini-jack,  |
|----------------------|
| impedance 2 kΩ       |
| High / Middle / Low/ |
| Intelligent Auto     |
| USB Storage class    |
|                      |



## Interfaces Output

| Max. working output      | 150mW (8 $\Omega$ speaker) |
|--------------------------|----------------------------|
| Maximum headphone output | 3 mW + 3 mW                |
| Speaker Diameter         | Built-in ø 18 mm round     |
|                          | dynamic speaker            |
| Earphone jack            | 3.5 ø mm jack, impedance   |
|                          | $8\Omega$ or more          |

## **Power Supply**

| Power Supply          | Battery: 1 x AAA            |
|-----------------------|-----------------------------|
| Alkaline battery life | Recording: 39h              |
|                       | Playback: 31h via earphones |
| Internal Charging     | AC / USB                    |
|                       | Note: Internal charging     |
|                       | operable only with Olympus  |
|                       | rechargable batteries.      |
|                       | AC-adapter is an optional   |
|                       | item.                       |

### Dimensions

| Height | 108.9mm             |
|--------|---------------------|
| Width  | 39.6mm              |
| Depth  | 14.4mm              |
| Weight | 75g (incl. battery) |

#### Exterior

Housing material

Metal

# Languages

| Menu languages | EN, FR, DE, IT, ES, RU, PL, |
|----------------|-----------------------------|
|                | CS, SV, NL, DA, CN          |

# **Operating Systems & Requirements**

| Windows   | Operating system: Windows |
|-----------|---------------------------|
|           | Vista/7/8/8.1/10          |
| Macintosh | Operating system: Mac OS  |
|           | X 10.8 - 10.12            |