SONY.

Compact MPEG Wireless System

DLXA-002

OPERATION MANUAL

For the customers in the USA

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.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Important Notice
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and body (excluding extremities: hands, wrists and feet).

Table of Contents

1. Introduction and Features

1-1. Introduction

The DLXA-002 is a wireless transmitter using Orthogonal Frequency Division Multiplexing (OFDM) modulation technology. The OFDM transmitter transfers data such as pictures, audio and etc. at a rate of 4 to 15 Mbps within 8MHz bandwidth in the Industrial, Scientific and Medical (ISM) band. It consists of MPEG encoder, modulator and RF circuit. The DLXA-002 is docked onto a Sony Camcorder and works only with the signal from Sony Camcorder. The signal of the DLXA-002 is received by the optional antenna and tuner/de-modulator.

1-2. Features

1-2-1. COFDM Transmission

Provides very stable RF link

Excels in high multi-path environments

Significantly outperforms the analog FM system

1-2-2. Mobility

Omni-directional Antenna offers more shooting flexibility due to stable RF link

1-2-3. Fast set up and ease of use

Dockable to camcorder

Compact transmitter

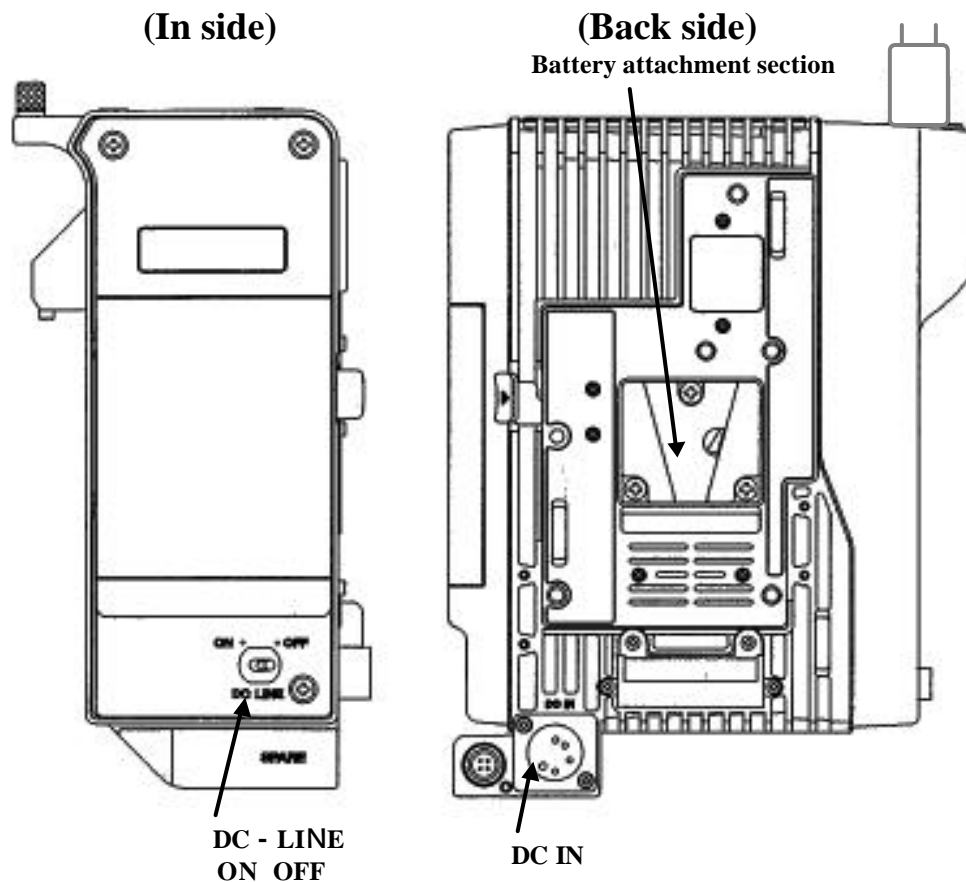Built-in MPEG-2 encoder/COFDM modulator/RF

Eliminates triax cable usage

1-2-4. MPEG-2 Encoding

High Picture Quality

1-2-5. Low Power Consumption

One hour operation using BP-L60A battery

2. Locations and Functions of Parts

(In side)   **(Back side)**

Battery attachment section

DC LI E
ON OFF

DC IN

Battery attachment Section

Attaches a BP-L60A Battery Pack

DC IN (DC power input) connector (XLR type,4-pin, male)

The external DC is fed to the camcorder through DLXA-002.
The power switch of the camcorder and the DLXA-002 are managed independently. The camcorder works even if the DXLA-002 is turned off.

DC-LINE switch

This switch turns the power to the DLXA-002 and off.

(Left view)   **(Front view)**

Fixed antenna
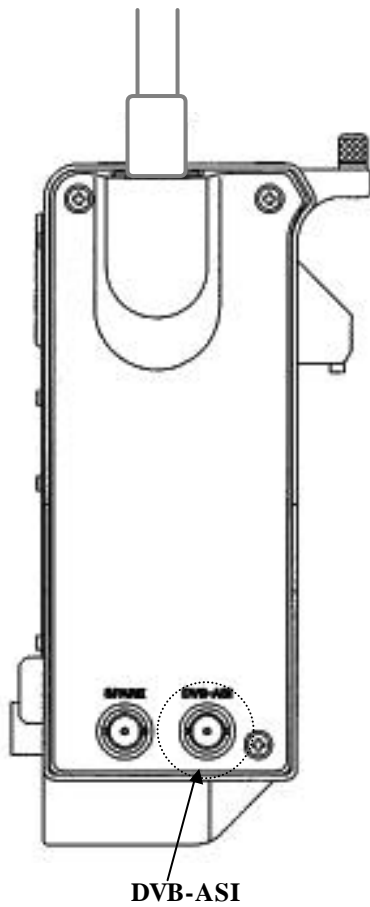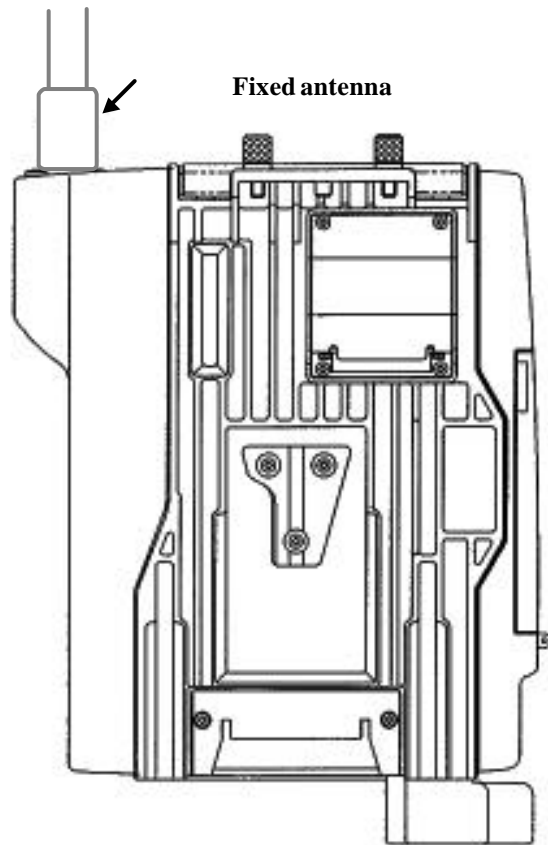
DVB-ASI

DVB-ASI

For DVB serial bit stream output.

Antenna

It is unable for user to change the antenna.

Operation panel
(Right view)
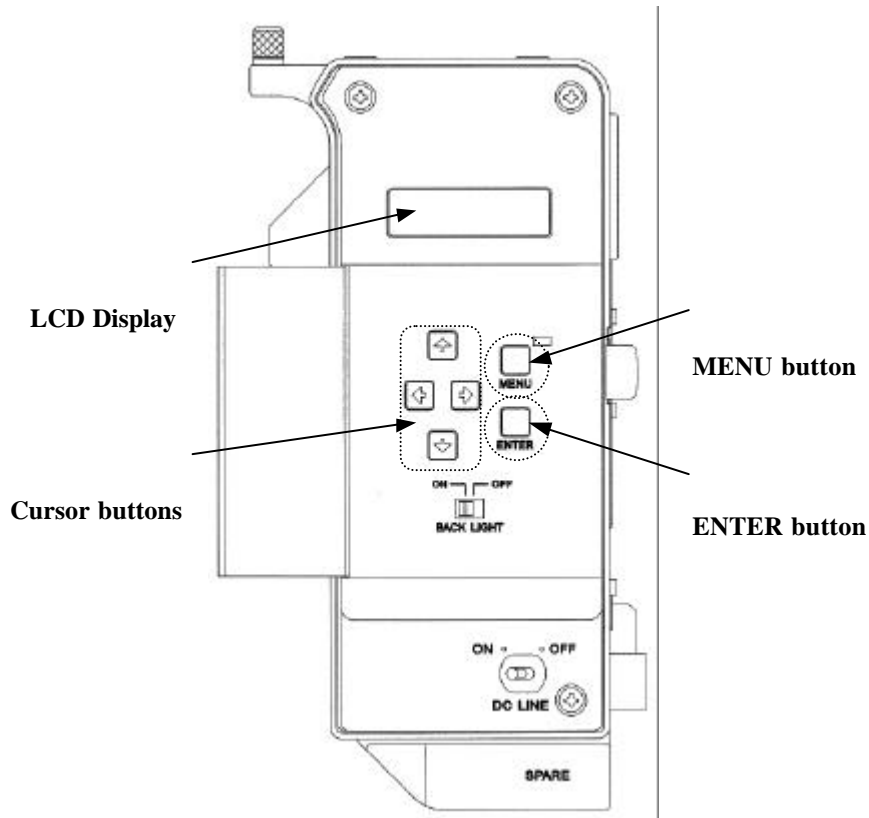
LCD display

The LCD indicates Status, Setup menu, Items parameters and variables.

Cursor buttons

While at Menu mode, use these keys for changes.

MENU button

For selection of the modes.

ENTER button

To register the selection at the cursor position in each mode.

3. System Configuration Example

DLXA-002 Transmitter
(Encoder/Modulator/RF)

Li-ion
Battery

Camcorder

Receiver side
(Optional)

Antenna and Receiver

IF Cable

Monitor

Tuner and Demodulator

MPEG Decoder
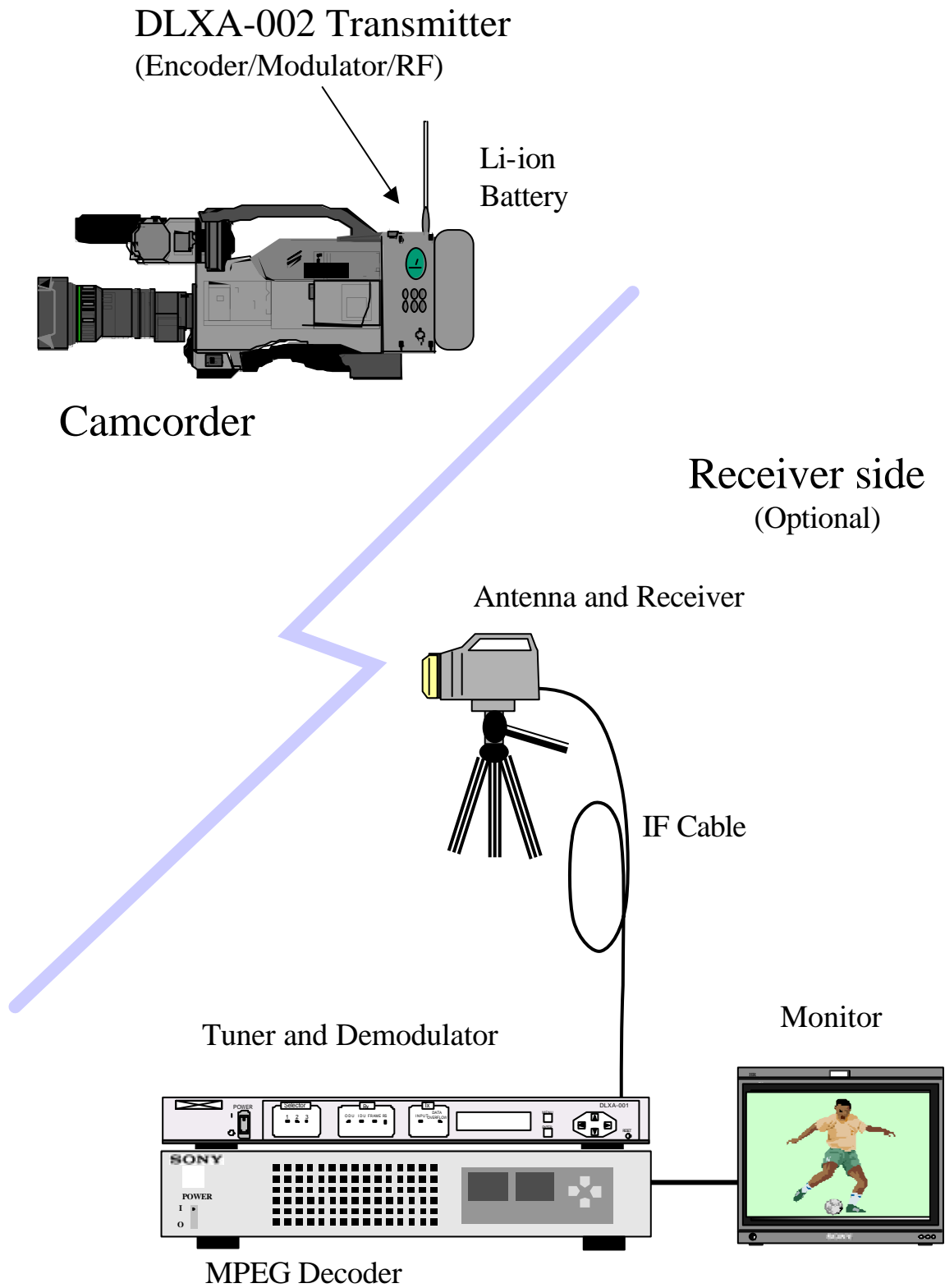
4. Connections

Attaching the DLXA-002 to a Camcorder

1. Attach the DLXA-002 to the back of the Camcorder

Camcorder

DLXA-002

Battery connector

Connector
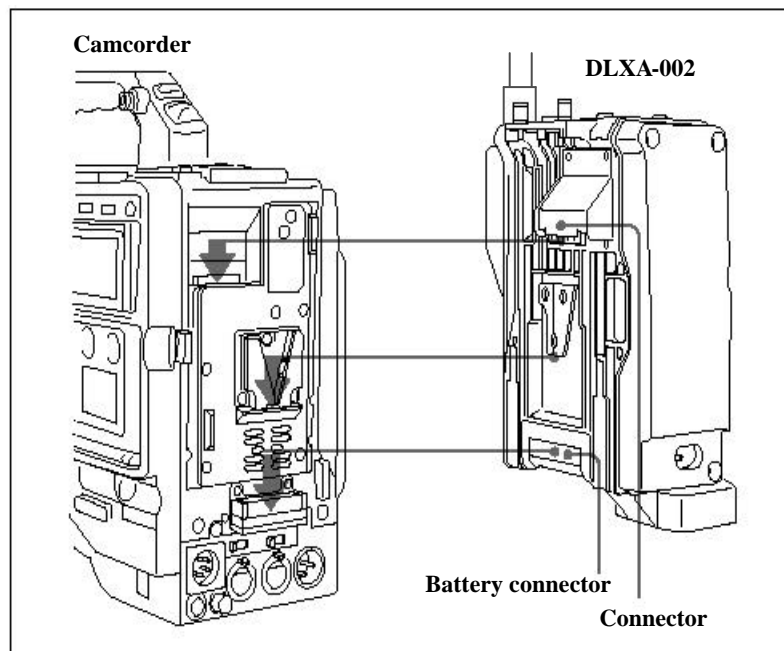
2. Tighten the screws.

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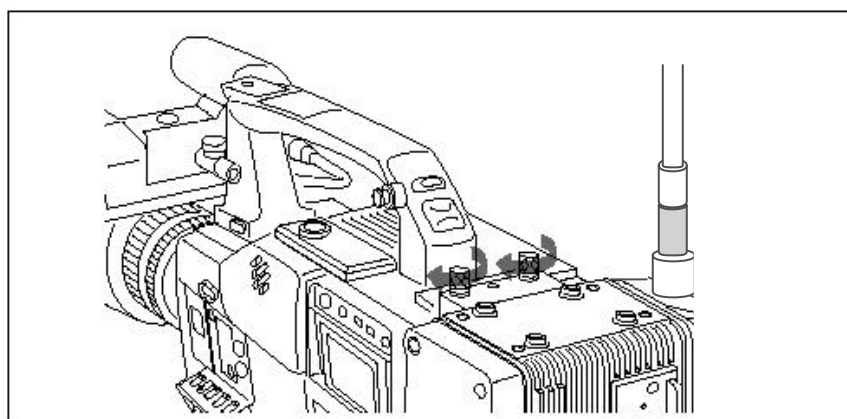
5. Menu Operations

5. 1 Operations

Turn on

The DLXA-002 starts to operate when both DC-LINE switch and a camcorder power switch are turned on.

The last status memory

When the DLXA-002 is turned off, the status information on the LCD is stored and then stops to work.

Save & Load

The Configuration Window mode enables to save eight mode combinations as pre-set program, and to load them with ease.

5. 2 Frequency Table

In MHz

			2,406	2,408
2,410	2,412	2,414	2,416	2,418
2,420	2,422	2,424	2,426	2,428
2,430	2,432	2,434	2,436	2,438
2,440	2,442	2,444	2,446	2,448
2,450	2,452	2,454	2,456	2,458
2,460	2,462	2,464	2,466	2,468
2,470	2,472	2,474		

5-3. Operations Flow

The LCD indicates Status, Setup menu, Items to be changed and variables.
"Operations Flow (5-1) "and "MENU structure (5-2)" explains relations between the modes.

POWER ON

INIT
(Transition)

RF Emission
(Transition)

[Y]
ENTER

RF Emission
Yes / No ?

[N] ENTER

MENU
Button

MENU
Button

MENU
Button

ENTER Button

ENTER Button

STATUS

RF

BB

ENC

Config

SETUP MENU

RF

BB

ENC

Config.

ITEM

Video Rate

Audio Rate

RF Frequency

RF Power

ENTER in case of Value changed

VALUE

MENU
Button

ENTER Button

MENU Button

MENU Button

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5-4. MENU Structure

```
Menu Window
    ├── RF Setting Window
    │       ├── 1. RF center freq
    │       ├── 2. RF emit power
    │       └── 3. RF emission control
    ├── BB Setting Window
    │       ├── 1. Constellation
    │       ├── 2. Code rate
    │       ├── 3. Guard interval
    │       └── 4. Time interleave
    ├── ENC Setting Window
    │       ├── 1. Profile & level
    │       ├── 2. Coded video rate
    │       ├── 3. Audio layer
    │       ├── 4. Audio comp. mode ch1/2
    │       ├── 5. Audio comp. mode ch3/4
    │       ├── 6. Coded audio rate ch1/2
    │       ├── 7. Coded audio rate ch3/4
    │       ├── 8. TS rate
    │       ├── 9. PID video
    │       ├── 10. PID audio ch1/2
    │       ├── 11. PID audio ch3/4
    │       ├── 12. PID PMT
    │       ├── 13. PID PCR
    │       ├── 14. TS byte length
    │       └── 15. TS stream mode
    └── Configuration Window
            ├── 1. Load
            ├── 2. Save
            ├── 3. Init
            └── 4. LCD
```

6. Specifications

General

DC power voltage	DC12V
Power consumption	18W
Operating temperature	0 to +40
	(+32° F to + 104° F)
Storage temperature	-20 to + 60
	(-4° F to +140° F)
Dimensions	152(w)× 207(H) × 103(D)
Mass	1.5kg

RF section

Frequency	2402 ~ 2478 MHz
Center Frequency	2406 ~ 2474 MHz by 2MHz steps
Occupied Bandwidth	8MHz
Rated RF Power	40mW
EIRP	100mW

Connectors

External DC IN	XLR-type	4pin, male 11.3 to 18VDC
DVB-ASI OUT	BNC-type	0.8Vp-p 75

Supplied accessories

Operation Manual	(1)

Optional accessories

BP-L60/60A/90/90A Battery Pack
DC-L1, DC-L90 Battery Adaptor
AC-550/550CE, AC-DN1 AC Adaptor

Design and specifications are subject to change without notice.

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Sony Corporation