

SONY

5-014-890-03 (1)

Digital Wireless Transmitter

Before Using This Unit

Before operating the unit, please read this manual thoroughly and retain it for future reference.

DWT-B30

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English

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

When you dispose of the battery, you must obey the law in the relative area or country.

CAUTION

- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.
- When you dispose of the battery or the product, you must obey the law in the corresponding area or country. Do not dispose of the battery or the product in a fire or a hot oven, or mechanically crush or cut the battery. It may explode or cause a fire. Do not subject the battery to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.
- Do not place the battery in a high temperature place, such as under direct sunlight or near fire. It may ignite, explode, or cause a fire. Do not immerse or wet the battery in water or seawater. This may cause an electric shock.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



CAUTION

Danger of explosion if battery is incorrectly replaced.

When the internal battery needs to be replaced, please contact a qualified service person.

Danger of fire or explosion.

When you dispose of the battery or the product, you must obey the law in the relative area or country.

Do not dispose of the battery or the product into a fire or a hot oven, or mechanically crush or cut the battery.

Danger of fire, explosion or electric shock.

Avoid operating or storing the product in the following locations.

- Extremely hot or cold places (for operating temperature, see Installation Manual.)
- Locations where corrosive gas or flammable gas is emitted, or where salt damage may occur.

All interface cables used to connect the equipment to peripherals must be shielded type to comply with EMC standard(s) and to prevent undesired operation due to radiated emissions. When cables are supplied, always use them for this purpose.

ATTENTION

The electromagnetic fields at the specific frequencies may influence the sound of this unit.

For the customers in the U.S.A.

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.

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

If you have any questions about this product, you may call: Sony Customer Information Service Center 1-800-222-7669 or <http://www.sony.com/>

Supplier's Declaration of Conformity	
Trade Name	: SONY
Model	: DWT-B30, DWT-B30 /90
Responsible party	: Sony Electronics Inc.
Address	: 16535 Via Esprillo, San Diego, CA 92127 U.S.A.
Telephone Number	: 858-942-2230
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.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of part 15 of FCC Rules.

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).

FCC Radiation Exposure Statement

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. DWT-B30, DWT-B30 /90 has been tested and found to comply with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Antenna type: λ/4 flexible wire

Users need to register with and check a white-space database to determine available channels prior to operation at a given location.

This model contains an FCC-approved RF module.

RF Module	: RM-215
Contains FCC ID	: AK8RM215

In order to comply with FCC radio-frequency radiation exposure guidelines for an uncontrolled exposure, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

For DWT-B30 /90 model only

Use of Sony wireless devices is regulated by the Federal Communications Commission as described in Part 74 subpart H of the FCC regulations and users authorized thereby are required to obtain an appropriate license.

For the customers in Canada

CAN ICES-3 (B)/NMB-3(B)

For the customers in Canada

This device complies with Industry Canada's applicable licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

IC Exposure of Humans to RF Fields

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/index-eng.php

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This device operates on a no-protection, no-interference basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio licence is required. For further details, consult Innovation, Science and Economic Development Canada's document Client Procedures Circular CPC-2-1-28, Voluntary Licensing of Licence-Exempt Wireless Microphones in the TV Bands.

This radio transmitter (409B-DWTB30, 409B-DWTB3090) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device. Antenna type: λ/4 flexible wire, Gain: 2.14 dBi

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. DWT-B30, DWT-B30 /90 has been tested and found to comply with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules.

For DWT-B30 /90 model only

Use of Sony wireless devices is regulated by the Industry Canada as described in their Radio Standard Specification RSS-123. A licence is normally required. The local district office of Industry Canada should therefore be contacted. When the operation of the device is within the broadcast band, the licence is issued on no-interference, no-protection basis with respect to broadcast signals.

For the customers in Europe

Hereby, Sony Corporation declares that this equipment is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://www.compliance.sony.eu>

Frequency range : 470 MHz to 714 MHz
Maximum RF power output : 25 mW e.r.p.

IEEE 802.15.4 : 2,400 MHz - 2,483.5 MHz, < 3 dBm e.i.r.p.

TRA

REGISTERED No:ER81066/20

DEALER No:DA0130386/14

Voor klanten in Europa

Hierbij verklaart Sony Corporation dat deze radioapparatuur conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: <http://www.compliance.sony.eu>

Frequentiebereik: 470 MHz tot 714 MHz
Maximaal RF-vermogen: 25 mW e.r.p.

För kunder i Europa

Härmed försäkrar Sony Corporation att denna utrustning överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: <http://www.compliance.sony.eu>

Frekvensintervall: 470 MHz till 714 MHz
Maximal RF-effekt: 25 mW e.r.p.

Para clientes na Europa

O(a) abaixo assinado(a) Sony Corporation declara que o presente equipamento está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: <http://www.compliance.sony.eu>

Intervalo de frequência: 470 MHz para 714 MHz
Potência máxima de RF: 25 mW e.r.p.

For kunder i Europa

Herved erklærer Sony Corporation, at dette udstyr er i overensstemmelse med direktiv 2014/53 / EU. Den fulde ordlyd af EU-overensstemmelseserklæringen er tilgængelig på følgende internetadresse: <http://www.compliance.sony.eu>

Frekvensområde: 470 MHz til 714 MHz
Maksimal RF-udgangseffekt: 25 mW e.r.p.

Asiakkaille Euroopassa

Sony Corporation vakuuttaa, että tämä laite on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: <http://www.compliance.sony.eu>

Taajuusalue: 470 MHz – 714 MHz
Enimmäislähetysteho radiotaajuudella: 25 mW e.r.p.

For kunder i Europa

Herved erklærer Sony Corporation at utstyrstypen er i samsvar med direktiv 2014/53/EU. EU-erklæring fulltekst finner du på Internett under: <http://www.compliance.sony.eu>

Frekvensområde: 470 MHz til 714 MHz
Maksimal RF-utgangseffekt: 25 mW e.r.p.

Για τους πελάτες στην Ευρώπη

Με την παρούσα Sony Corporation δηλώνει ότι, αυτή η συσκευή πληροί τους όρους της οδηγίας 2014/53/EU. Το πλήρες κείμενο της δήλωσης συμμόρφωσης EE διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: <http://www.compliance.sony.eu>

Περιοχή συχνότητων: 470 MHz έως 714 MHz
Μέγιστη ισχύς εξόδου RF: 25 mW e.r.p.

Dla klientów w Europie

Sony Corporation niniejszym oświadcza, że to urządzenie jest zgodne z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: <http://www.compliance.sony.eu>

Zakres częstotliwości: od 470 MHz do 714 MHz
Maksymalna moc wyjściowa częstotliwości radiowej: 25 mW e.r.p.

Pro zákazníky v Evropě

Sony Corporation tímto prohlašuje, že toto zařízení je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: <http://www.compliance.sony.eu>

Frekvenční rozsah: 470 MHz až 714 MHz
Maximální vyzářený výkon na rádiové frekvenci: 25 mW e.r.p.
(ekvivalentní vyzářený výkon)

Európai ügyfeleinknek

A Sony Corporation igazolja, hogy ez a készülék megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: <http://www.compliance.sony.eu>

Frekvenciartomány: 470 MHz – 714 MHz
Max. nagyfrekvenciás kimeneti teljesítmény: 25 mW e.r.p.

Pentru clienții din Europa

Prin prezenta, Sony Corporation declară că acest echipament este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: <http://www.compliance.sony.eu>

Gama de frecvență: de la 470 MHz până la 714 MHz
Tensiunea de ieșire maximă RF: 25 mW e.r.p.

За клиентите в Европа

С настоящото, Sony Corporation декларира, че това оборудване е в съответствие с Директива 2014/53/EU. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: <http://www.compliance.sony.eu>

Честотен обхват: 470 МХц до 714 МХц
Максимална изходна радиочестотна мощност: 25 мВт e.r.p.

Pre zákazníkov v Európe

Sony Corporation týmto vyhlasuje, že zariadenie je v súlade so smernicou 2014/53/EÚ. Úplné vyhlásenie EÚ o zhode je k dispozícii na tejto internetovej adrese: <http://www.compliance.sony.eu>

Frekvenčný rozsah: 470 MHz až 714 MHz
Maximálny RF výkon: 25 mW e.r.p.

Za stranke v Evropi

Sony Corporation potrjuje, da je ta oprema skladna z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: <http://www.compliance.sony.eu>

Frekvenčni obseg: od 470 MHz do 714 MHz
Največja izhodna moč RF: 25 mW e.r.p.

Klientidele Euroopas

Käesolevaga deklareerib Sony Corporation, et käesolev seade vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: <http://www.compliance.sony.eu>

Sagedusvahemik: 470 MHz kuni 714 MHz
Maksimaalne raadiosageduslik väljundvõimsus: 25 mW e.r.p.

Klientiem Eiropā

Ar šo Sony Corporation deklarē, ka šī iekārta atbilst direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: <http://www.compliance.sony.eu>

Frekvenču diapazons: no 470 MHz līdz 714 MHz
Maksimālā RF izejas jauda: 25 mW e.r.p.

Europos klientams

Mes, Sony Corporation, patvirtiname, kad šis įrenginys atitinka direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas pasiekiamas šiuo internetiniu adresu: <http://www.compliance.sony.eu>

Dažnių intervalas: nuo 470 MHz iki 714 MHz
Didžiausia RD galios išvestis: 25 mW e.r.p.

Za korisnike u Europi

Sony Corporation ovime izjavljuje da je ova oprema u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o skladnosti dostupan je na sljedećoj internetskoj adresi: <http://www.compliance.sony.eu>

Raspon frekvencije: 470 MHz do 714 MHz
Maksimalna izlazna snaga radijske frekvencije: 25 mW e.r.p.

Avrupa'daki müşteriler için

Sony Corporation, bu cihazın 2014/53/EU Direktifi ile uyumlu olduğunu beyan eder. AB uygunluk beyanının tam metni aşağıdaki internet adresinde mevcuttur: <http://www.compliance.sony.eu>

Frekans aralığı: 470 MHz ila 714 MHz
Maksimum RF gücü çıkışı: 25 mW e.r.p.

Za kupce u Evropi

Ovim, kompanija Sony Corporation izjavljuje da je ova oprema usaglašena sa direktivom 2014/53/EU. Pun tekst Izjave o usaglašenosti za EU je dostupan na sledećoj internet adresi: <http://www.compliance.sony.eu>

Frekventni opseg: od 470 MHz do 714 MHz
Maksimalna izlazna snaga RF emisije: 25 mW e.r.p.

Частотний діапазон: від 470 МГц до 714 МГц
Макс. радіочастотна потужність: 25 мВт ЕВРП

Türkiye'deki müşteriler için

AEEE Yönetmeliğine Uygundur

For the customers in the U.S.A.

SONY LIMITED WARRANTY- Please visit <http://www.sony.com/psa/warranty> for important information and complete terms and conditions of Sony's limited warranty applicable to this product.

For the customers in Canada

SONY LIMITED WARRANTY - Please visit <http://www.sonybiz.ca/pro/lang/en/ca/article/resources-warranty> for important information and complete terms and conditions of Sony's limited warranty applicable to this product.

For the customers in Europe

Sony Professional Solutions Europe - Standard Warranty and Exceptions on Standard Warranty. Please visit https://pro.sony/en_GB/support-services/warranty/support-professional-solutions-europe-standard-product-warranty for important information and complete terms and conditions.

For the customers in Korea

SONY LIMITED WARRANTY - Please visit <http://bpeng.sony.co.kr/handler/BPAS-Start> for important information and complete terms and conditions of Sony's limited warranty applicable to this product.

Usage Precautions

Notes

- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
- SONY WILL NOT BE LIABLE FOR CLAIMS OF ANY KIND MADE BY USERS OF THIS UNIT OR MADE BY THIRD PARTIES.
- SONY WILL NOT BE LIABLE FOR THE TERMINATION OR DISCONTINUATION OF ANY SERVICES RELATED TO THIS UNIT THAT MAY RESULT DUE TO CIRCUMSTANCES OF ANY KIND.

If the unit is suddenly taken from a cold to a warm location, or if ambient temperature suddenly rises, moisture may form on the outer surface of the unit and/or inside of the unit. This is known as condensation. If condensation occurs, turn off the unit and wait until the condensation clears before operating the unit. Operating the unit while condensation is present may damage the unit.

Due to the characteristics of the material used in the OLED panel, permanent burn-in or reduction in brightness may occur. These problems are not a malfunction.

The life expectancy of the electrolytic capacitor is about 5 years under normal operating temperatures and normal usage (8 hours per day; 25 days per month). If usage exceeds the above normal usage frequency, the life expectancy may be reduced correspondingly.

Features

The DWT-B30 is a digital wireless transmitter for a UHF synthesized wireless microphone system to be used for broadcast or movie production purpose. This transmitter is suitable for Electronic News Gathering (ENG) and Electronic Field Production (EFP).

Using the CD-ROM manuals

The manuals can be viewed on a computer with Adobe Reader installed. You can download Adobe Reader for free from the Adobe website.

- Open the "index.html" file on the CD-ROM.
- Select the language of the manual you want to view.

Note

If you damage or lose the CD-ROM, you can purchase a new one from your dealer or Sony service representative.

Specifications

Transmitting section

Oscillator type	Crystal-controlled PLL synthesizer
RF power output	2 mW/10 mW/25 mW (e.r.p) selectable
Antenna type	X/4 flexible wire
Occupied RF bandwidth	192 kHz or less
Audio delay	MODE1: 0.8 ms MODE2: 0.7 ms MODE3: 1.8 ms MODE4: 0.7 ms
Allowable deviation of transmission frequency	±6.5 ppm
Type of emission	G1E or G1D
Modulation method	π/4 Shift QPSK

Audio section

Maximum input level	MIC: -22 dBu (with 0 dB attenuator) LINE: +24 dBu
Audio attenuator adjustment range (pad)	0 dB to 48 dB (3 dB steps, MIC input mode only)
Microphone input connector	US model: Sony 4-pin (SMC9-4S) (female) European model: Small 3-pin connector with lock
Input impedance	4.7 kohms or more
Frequency response	20 Hz to 22,000 Hz
T.H.D	MODE1, MODE2, MODE4: 0.03% or less MODE3: 0.3% or less
Dynamic range	106 dB or more

0 dBu = 0.775 V

General

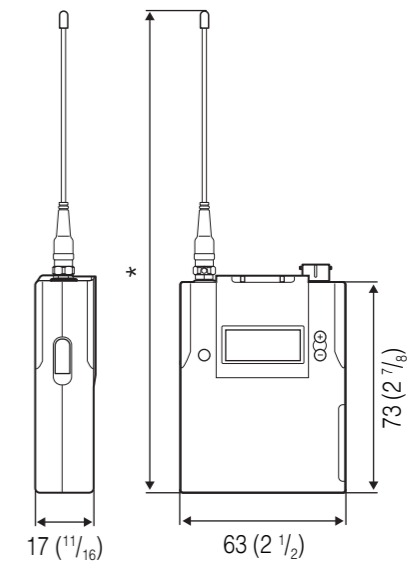
Operating voltage	3.0 V DC (2 x AA alkaline batteries) 5.0 V DC (USB power source)
Consumption current	Max. 460 mA DC (at 3V DC, 25 mW antenna power)
Battery life	Continuous operating time 6.5 hours (at 25 °C (77 °F)), 10-mW output using Sony LR6 (AA)-size alkaline batteries with CODEC MODE set to MODE1 and the wireless remote control function off and DIMMER MODE set to AUTO OFF)
Operating temperature	0 °C to 50 °C (32 °F to 122 °F)

Note

When used in locations with an ambient temperature of 45 °C (113 °F) or higher, make sure the unit does not come into direct contact with your skin, as it may cause burns due to high temperature.

Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Wireless remote control	2.4-GHz IEEE802.15.4 compliant

Dimensions (unit: mm (inches))



*L CE, H CE, UC model: 204 (8 1/8)
90UC model: 164 (6 1/2)

Mass	Approx. 125 g (4.4 oz) Including batteries, not including microphone
Supplied accessories	Spare battery case (1) Soft case (1) Microphone cable (4-pin to XLR-type 3-pin, US model only) (1) Carrying case (1) Scribble sheet (1) Before Using This Unit (3) CD-ROM (1)
Optional accessories	ECM-90BC, ECM-90LM, ECM-77LM, ECM-77BC/9X, ECM-66BC/9X, ECM-44BC/9X, and ECM-FT5BC lavalier microphones

Design and specifications are subject to change without notice.