

UHF Antenna

取扱説明書 _____ JP

Operating Instructions _____ GB

Mode d'emploi _____ FR

Bedienungsanleitung _____ DE

Istruzioni per l'uso _____ IT

Manual de instrucciones _____ ES

AN-01

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電気製品は安全のための注意事項を守らないと、
火災や人身事故になることがあります。

この取扱説明書には、事故を防ぐための重要な注意事項と製品の
取り扱いかたを示してあります。**この取扱説明書をよくお読みのうえ、**
製品を安全にお使いください。お読みになったあとは、
いつでも見られるところに必ず保管してください。



Table of Contents

Overview	18
Identification of Parts and Controls	19
Attaching the Antenna	20
Attaching the Supplied Microphone Stand Attachment Pole/Grip	20
Attaching to the Microphone Stand	21
Important Notes on Operation.....	22
On Installation	22
On Using the Antenna	23
On Cleaning	24
Specifications	24

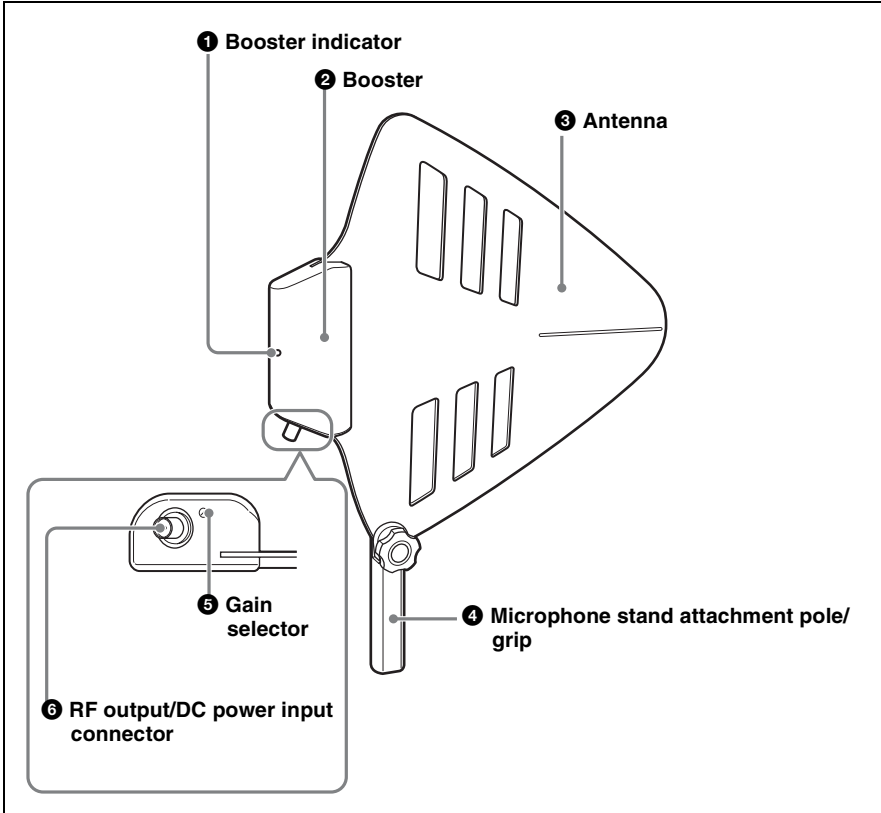
Overview

The AN-01 UHF Antenna is designed to be used with the Sony wireless microphone receiving system. This antenna can be used with both analog system and digital system.

The features of this antenna are as follows:

- This wide-band directional antenna uses log-periodic dipole array system that provides improved practical reception sensitivity in its effective directivity, compared to the non-directional antenna.
- Built-in low-noise, low-distortion antenna booster
- Selectable booster gain (18 dB/10 dB/0 dB)
- The grip with screw for attaching to the microphone stand allows this antenna to be attached to the microphone stand or to be hand-held.
- Antenna angle can be adjusted in 30 degrees in vertical direction to allow installation to suit the circumstances.

Identification of Parts and Controls



1 Booster indicator

Changes the color to show the operation status of the antenna booster.

Red: 18 dB gain

Green: 10 dB gain

Blue: 0 dB gain

2 Booster

Amplifies the signal received by the antenna. By using the booster, output signal loss due to a long coaxial cable can be compensated.

The power to the booster is supplied from the device connected to the RF output/DC power input connector.

3 Antenna

Wide-band directional antenna using log-periodic dipole array system.

4 Microphone stand attachment pole/grip

With the PF1/2 screw at the bottom, this antenna can be attached to a microphone stand.

The grip also allows hand-held operation.

For details on how to attach this to the antenna, see “Attaching the Supplied Microphone Stand Attachment Pole/Grip” on page 20.

5 Gain selector

Switches the antenna booster gain.



REMOTE: The gain switches automatically according to the supplied power voltage as follows:

- When 9 V DC is supplied: 10 dB
- When 12 V DC is supplied: 18 dB

18dB: 18 dB gain regardless of the supplied power voltage

10dB: 10 dB gain regardless of the supplied power voltage

0dB: 0 dB gain regardless of the supplied power voltage

Note

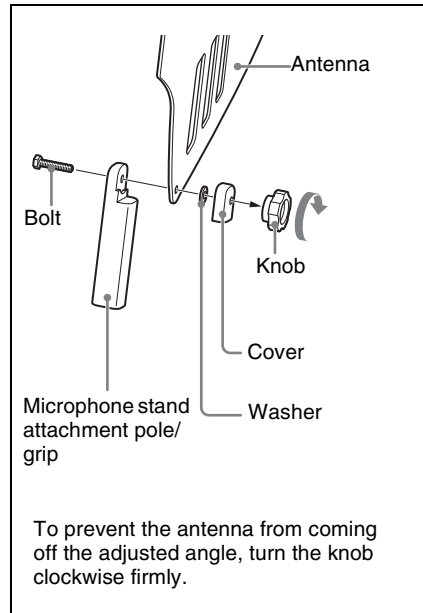
Be sure to supply power to this antenna even when the gain selector is set to “0dB”. When no power is supplied, no signal is output from the RF output/DC power input connector.

6 RF output/DC power input connector (BNC-R)

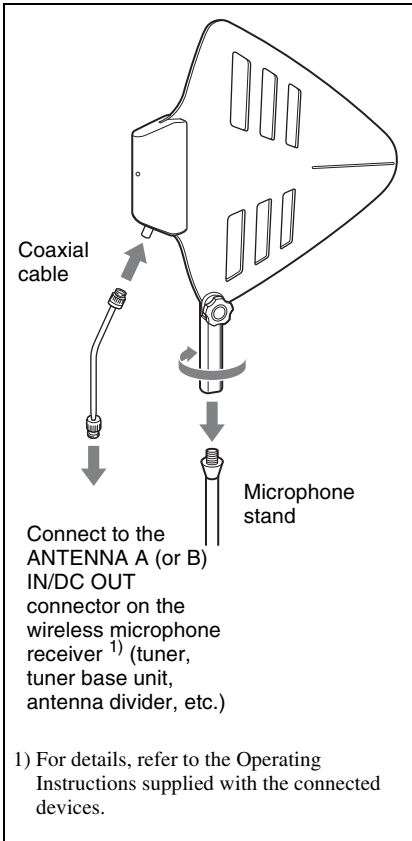
Connect to the antenna input connector of the receiver (tuner, tuner base unit, or antenna divider, etc.) to output the signal amplified with the booster. The power is supplied to the booster through this connector.

Attaching the Antenna

Attaching the Supplied Microphone Stand Attachment Pole/Grip



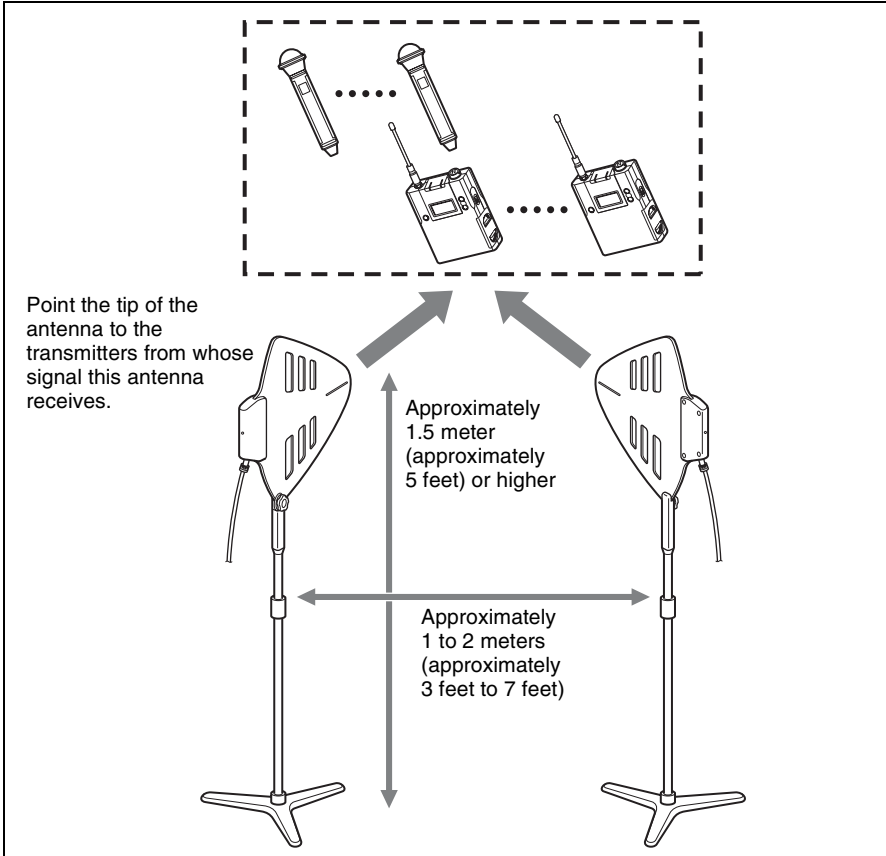
Attaching to the Microphone Stand



Important Notes on Operation

On Installation

- For diversity signal reception, always use two or more AN-01 units in pairs.
- Note the following when installing this antenna:



- Place the antennas approximately 1.5 meter (approximately 5 feet) or higher from the installation surface
- Install each pair of units at least approximately 1 to 2 meters (approximately 3 feet to 7 feet) apart from each other.
- Make sure that the units installed are visible from where the transmitters (wireless microphones or transmitters, etc.) with the tip of the antenna pointing towards them.

- Avoid installing the units:
 - near a window or metal paneling
 - immediately adjacent to electrical equipment, which may produce RF interference
 - where they are vulnerable to physical damage.
- Keep the coaxial cables as short as possible and keep the same lengths.
- See the table below for the relationship between gain setting and approximate length of the coaxial cable. Note, however, that excessive or low gain may result depending on the conditions of use. Be sure to set the gain after checking the operation of the antenna.

Guide for coaxial cable length (for RG-212/U cable)

- Operating frequencies: 600-MHz band

		Distance between the transmitters and the receiving antennas	
		Approximately 30 meters (100 feet)	Approximately 60 meters (200 feet)
Gain setting of the booster	0 dB	0 to 12 meters (0 to 36 feet)	0 to 6 meters (0 to 18 feet)
	10 dB	12 to 90 meters (36 to 270 feet)	6 to 60 meters (18 to 180 feet)
	18 dB	90 to 180 meters (270 to 540 feet)	60 to 120 meters (180 to 360 feet)

- Operating frequencies: 800-MHz band

		Distance between the transmitters and the receiving antennas	
		Approximately 30 meters (100 feet)	Approximately 60 meters (200 feet)
Gain setting of the booster	0 dB	0 to 10 meters (0 to 30 feet)	0 to 5 meters (0 to 15 feet)
	10 dB	10 to 75 meters (30 to 225 feet)	5 to 50 meters (15 to 150 feet)
	18 dB	75 to 150 meters (225 to 450 feet)	50 to 100 meters (150 to 300 feet)

On Using the Antenna

- This unit must be used within a temperature range of 0 °C to 50 °C (32 °F to 122 °F).
- Operating this unit near electrical equipment (motors, transformers, or dimmers) may cause it to be affected by electromagnetic induction. Keep this unit as far from such equipment as possible.

- The presence of the lighting equipment may produce electrical interference over the entire frequency range. Position this unit so that interference is minimized.
- To avoid degradation of the signal-to-noise ratio, do not use this unit in noisy places or in locations subject to vibration, such as the following:
 - near electrical equipment, such as motors, transformers or dimmers

- near air conditioning equipment or places subject to direct air flow from an air conditioner
- near public address loudspeakers
- where adjacent equipment might knock against the tuner
- Keep this unit as far from such equipment as possible or use buffering material.

On Cleaning

- If this unit is used in a very humid or dusty place or in a place subject to an active gas, clean its surface as well as the connectors with a dry, soft cloth soon after use. Lengthy use of this unit in such places or not cleaning it after its use in such places may shorten its life.
- Clean the surface and the connectors of this unit with a dry, soft cloth. Never use thinner, benzene, alcohol or any other chemicals, since these may mar the finish.

For more information on connections of this unit, refer to the Operating Instructions supplied with the connected device (tuner, tuner base unit, or antenna divider, etc.).

Specifications

Antenna section

- Frequency range
470 to 862 MHz
- Antenna gain
5 dBi or more
- Voltage standing wave ratio
2.5 or less
- Half power angle
150 degrees or less
- Front to back ratio
12 dB or more

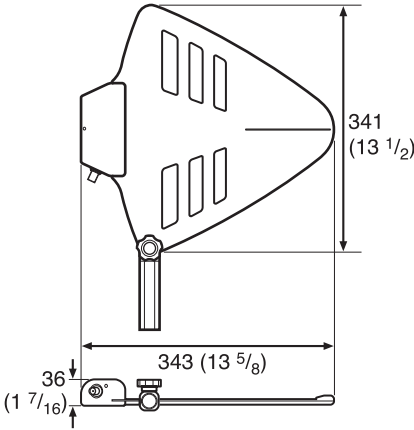
Booster section

- Frequency range
470 to 862 MHz
- Booster gain
18 dB/10 dB/0 dB, switchable
- Output impedance
50 ohms
- Voltage standing wave ratio
3 or less
- Noise figure
6 dB or less
- Third order intermodulation
60 dB or more (95 dB μ V_{EMF} input)
- Output connector
BNC-R type
- Supply voltage
9 V/12 V DC
- Current consumption
100 mA or less

General

- Operation temperature
0 °C to 50 °C (32 °F to 122 °F)
- Storage temperature
-20 °C to +60 °C (-4 °F to +140 °F)

Dimensions (unit: mm (inches))
 $343 \times 341 \times 36$ ($13 \frac{5}{8} \times 13 \frac{1}{2} \times 1 \frac{7}{16}$) (w/h/d) (excluding microphone stand attachment pole/grip)

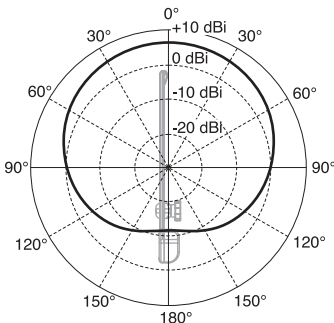


Mass Approx. 530 g (19 oz)

Supplied accessories

- Microphone stand attachment pole/grip (1 set)
- Stand Adapter
 - PF1/2 to W5/8 type (1)
 - PF1/2 to W3/8 type (1)
- Operating Instructions (1)
- Warranty card (1)
- Warranty booklet (1)

Example of horizontal directivity characteristics



Design and specifications are subject to change without notice.

Note

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.