

UHF Synthesized Transmitter

Operating Instructions

WRT-805B



Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. WRT-805B Serial No. _____

Notice for customers in the U.S.A.

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 licence.

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

Notice for customers in Canada:

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.

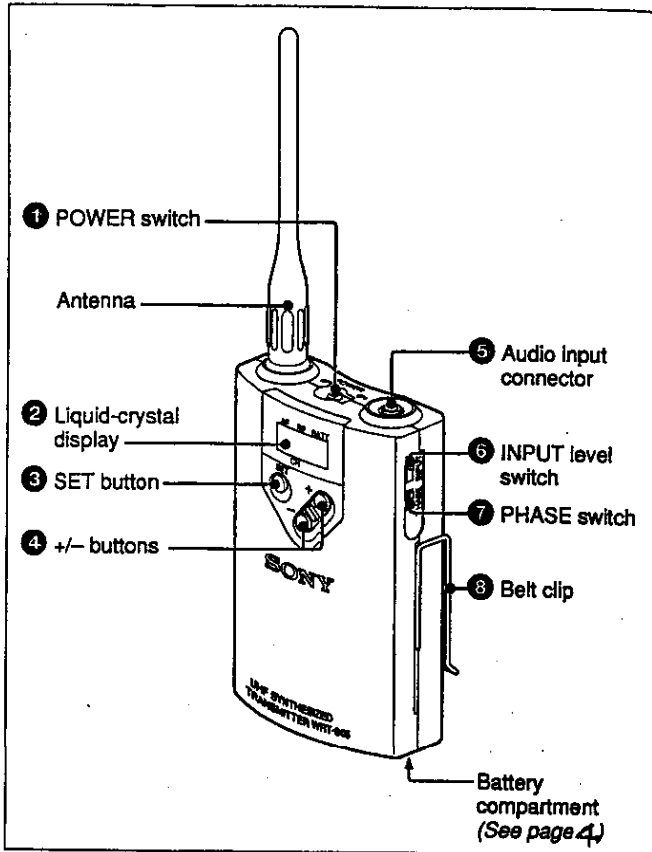
Operation of this device is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Avis pour les clients au Canada:

L'usage des appareils sans-fil Sony est réglé par l'Industrie Canada comme décrit dans leur Cahier des Normes Radioélectriques CNR-123.

Une licence est normalement requise. Le bureau de l'Industrie Canada doit être contacté. Lorsque l'opération de l'appareil est dans les limites de la bande de radiodiffusion, la licence est émanée sur la base de non-interférence, non-protection avec les signaux de radiodiffusion.

L'utilisation de cet appareil est soumise aux deux conditions suivantes : (1) cet appareil ne peut causer d'interférences, et (2) cet appareil doit accepter toutes les interférences, y compris les interférences capables de provoquer un fonctionnement indésirable de l'appareil.



Location of parts

1 POWER switch

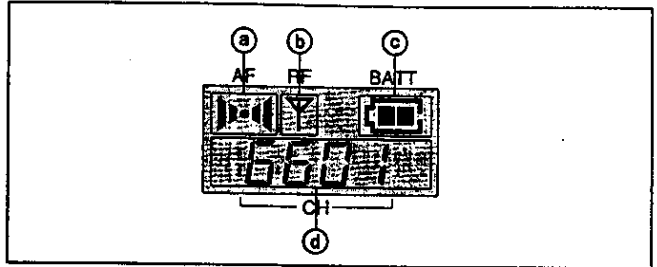
Turns the power of the transmitter ON or OFF. When you set this switch to ON without holding any other button, the transmitter is set to normal Transmit mode and transmits the signal of the selected channel. When you set this switch to ON while holding the SET button down, Setting mode is initiated. No signal is transmitted in Setting mode.

For setting mode, see "Settings" on page 5

Note

Be sure to connect a microphone or guitar cable before turning the power ON.

2 Liquid-crystal display



(a) AF (audio input) indication

Lights when an audio signal over the reference level is being supplied.

(b) RF (antenna output) indication

Lights when a signal is being transmitted from the antenna.

(c) BATT (battery) indication

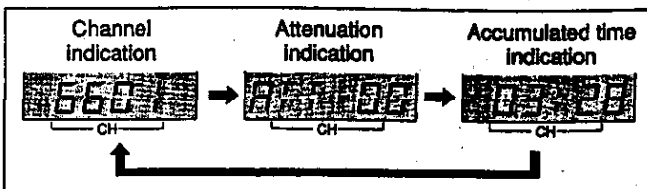
Displays the status of the battery.

See "Battery indication" on page 4

(d) CH (channel) indication

Displays the transmission channel.

Each time you press the SET button in normal Transmit mode, the channel indication changes to the input attenuation and accumulated time indications.



In Attenuation indication mode, it displays the input attenuation setting in dB, which can be changed in a range of 0 to 21 dB in 3-dB steps.

In Accumulated time indication mode, it displays the accumulated time of battery use (in 1-minute increments).

For adjustments, see "Changing the Channel Selection" on page 6, "Changing the Input Attenuation Setting" on page 6, or "Resetting the Accumulated Time Indication" on page 7.

3 SET button

In normal transmit mode, press this button to change the indication items in the lower half of the liquid-crystal display.

When you set the POWER switch to ON while holding this button down, setting mode is initiated. In Setting mode, press this button to select the item to be set.

For Setting mode, see "Settings" on page 5~6

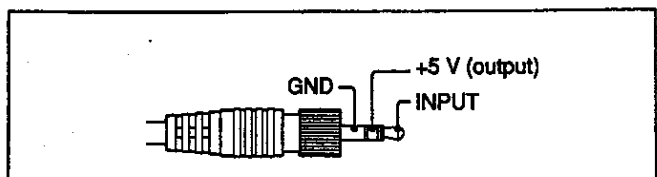
4 + (+ selection) / - (- selection/reset) buttons

In setting mode, select the transmission channel and attenuator level using either of these buttons, or reset the time-of-use indication to "00:00" with the - button.

For Setting mode, see "Settings" on page 5~6

5 Audio Input connector (ø3.5 mm, with locking mechanism)

To connect a microphone or other audio source.



See "Connections" on page 5.

Parts Identification

⑥ INPUT level switch

Select the reference input level appropriate for the connected audio source.

-60 dBV: For a microphone

-40 dBV: For an electric guitar

⑦ PHASE switch

Select the input phase appropriate for the connected audio source.

= : For a microphone other than the ECM-44BMP or an electric guitar

∅ : For the ECM-44BMP

Switch functions

⑦ PHASE switch	⑥ INPUT level switch	
	-60 dBV	-40 dBV
=	ECM-121BMP ECM-122BMP ECM-310BMP	GC-0.7MP
∅	ECM-44BMP	—

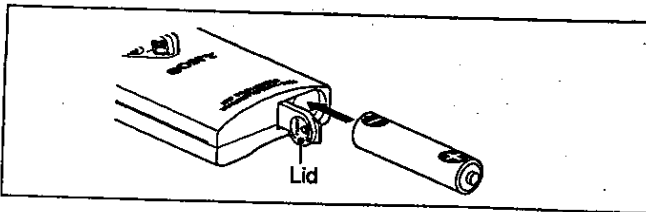
⑧ Belt clip

You can easily carry the transmitter attached to your clothing on your belt, etc. Depending on your selection of the mount holes for the belt clip, you can adjust the position or even carry the unit with the antenna downward.

Power Supply

The transmitter can operate on one LR6 (size AA) alkaline battery continuously for about 6 hours at 25°C (77°F).

Inserting the battery






1 Slide the lid in the direction of the arrow (▼) to open the battery compartment.

2 Match the polarities and insert the battery.

3 Close the lid and slide it in the reverse direction to lock.

Battery Indication

When you turn the power on, the battery status appears in the BATT indication on the liquid-crystal display.

	1	2	3	4
BATT Indication	Lights 	Lights 	Flashes 	Goes off
Battery condition	Good	Less than half-charge	Almost exhausted	Completely exhausted

Notes on battery

- Use a new alkaline battery.
- Be careful to insert the battery with the correct polarity.
- When not using the transmitter for a long period, remove the battery to avoid leakage. If the battery does leak, clean all leakage from the unit and insert a new battery. Leakage left in the unit may cause poor battery contact. If there seems to be poor battery contact, consult your Sony dealer.

Note

The indication may be incorrect if the battery is not new when inserted. If you plan to use the transmitter for a long period, it is best to replace the battery with new one.

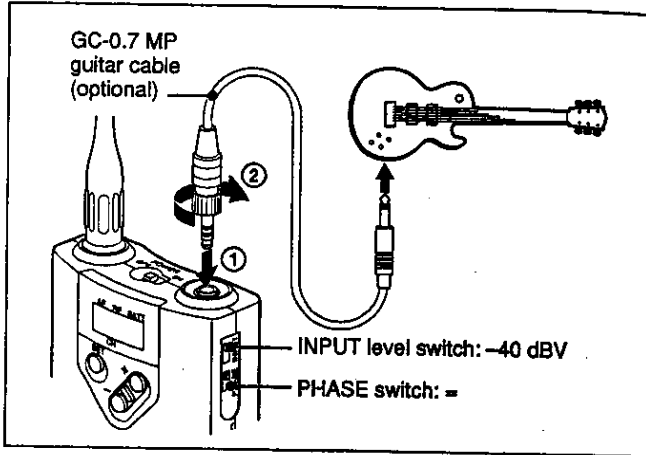
Connections

Caution

When connecting a microphone or electric guitar to the unit, be sure to turn the unit off.

To connect an electric guitar

For connection of an electric guitar, use the optional GC-0.7 MP Guitar Cable.



To obtain the proper output level

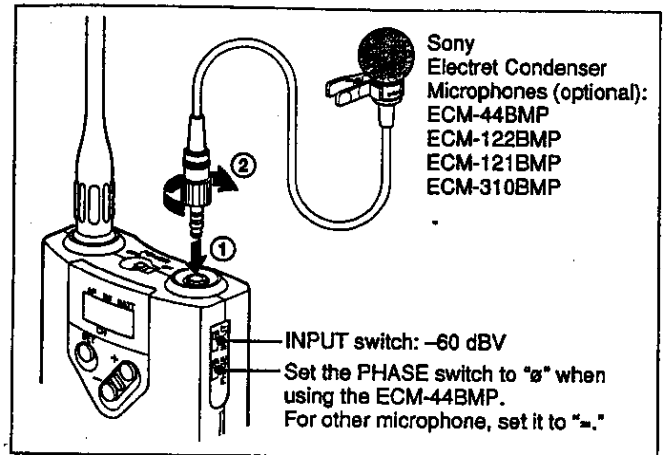
The optimum level setting depends on type of guitar. Set the INPUT level switch and the ATT (attenuator) level of this unit according to the guitar to be used.

Loud noise: If noise is not negligible even if the INPUT switch is set at "-40 dBV" and the ATT level is "0 dB," set the INPUT switch to "-60 dBV" and adjust the ATT level for an optimum result.

Distortion: If the guitar sound is distorted even if the INPUT switch is set at "-40 dBV" and the ATT level is "0 dB," increase the ATT level by 3 dB (0 to 3 to 6 . . . 21 dB). For the ATT level adjustment, see page 6.

To connect a microphone

When using one of the following optional Sony Electret Condenser Microphones equipped with a miniature phone plug, connect it as illustrated below.



Settings

Initiating Setting Mode

In Setting mode, you can change the transmission channel and the attenuation level, or reset the accumulated time indication.

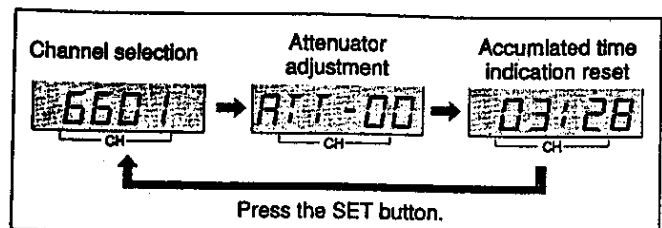
To enter Setting mode

While holding down the SET button, set the POWER switch to ON.

Hold the SET button down until a display appears on the liquid-crystal display.

The transmitter enters Setting mode and the indication before the transmitter was previously turned OFF flashes on the liquid-crystal display.

Each time you press the SET button, Channel selection mode, Attenuator adjustment mode (page 6) and Accumulated time indication reset mode (page 7) are cyclically switched.



Settings

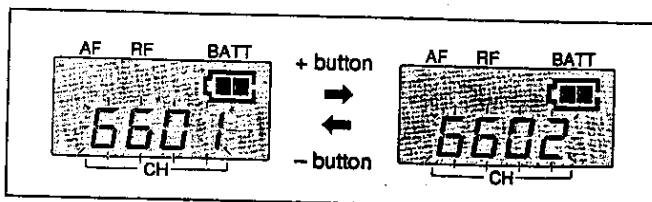
Changing the Channel Selection

- 1 Set the unit to Setting mode.

If the channel number is not displayed, press the SET button to obtain the channel number indication.

- 2 Press the + or - button to select the channel.

Pressing the + button cyclically changes the channel indication in the order shown in the table of "Channels and Carrier Frequencies" Pressing the - button changes it in reverse order.



- 3 Once the desired channel number appears, set the POWER switch to OFF to release Setting mode. Or, press the SET button to continue operations in Setting mode.

The next time you turn on the power only by setting the POWER switch to ON, the transmitter will be set to Transmit mode with the selected channel.

Notes

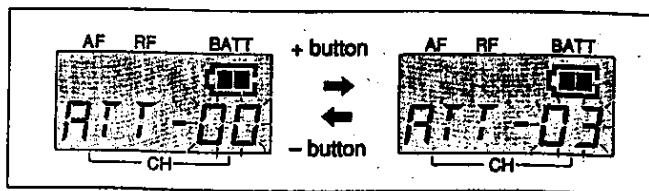
- The unit cannot transmit in Setting mode.
- Make sure that the channel selected is the same as that selected on the tuner used in the same system.
- Depending on the noise or interference conditions, the selectable channels may not necessarily all be usable. If necessary, you can determine the usable channels by stepping the channel selection through a number of channels on a tuner with the transmitter set to OFF. Those channels on which the RF indicator of the tuner does not light are usable.
- If there is a TV broadcasting station near by, do not use the station's channel.
- The unit may not operate correctly if it is turned on again immediately after turning off the power while in setting mode. Pause for a few seconds or more before turning on the power again.

Changing the Input Attenuation Setting

You can change the input attenuation setting in 3-dB steps in a range of 0 to 21 dB. You can change it either in Setting mode or in Transmit mode.

Changing in Setting mode

- 1 Set the unit to Setting mode.
- 2 If the attenuation level is not displayed, press the SET button to obtain the attenuation indication.
- 3 Press the + or - button to select the attenuation setting.



If you keep either button pressed, the level will be incremented or decremented successively.

- 4 Once the desired level appears, set the POWER switch to OFF to release Setting mode. Or, press the SET button to continue operations in Setting mode.

The next time you turn on the power only by setting the POWER switch to ON, the transmitter will be set to Transmit mode with the selected attenuation setting.

Changing in Transmit mode

You can also change the input attenuation setting during transmission.

- 1 If the attenuation level is not displayed, press the SET button to obtain the attenuation indication.
- 2 Press the + or - button to select the attenuation setting.

Settings

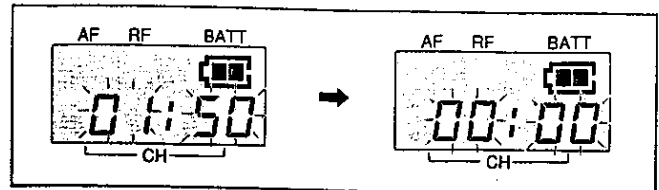
Resetting the Accumulated Time Indication

The time indication accumulates time in hours and minutes when the WRT-805B is on.

Reset the indication to "00:00" whenever you replace the battery so that it can display the running time of the battery.

- 1 Set the unit to Setting mode.
- 2 If the accumulated time is not displayed, press the SET button to obtain the accumulated time indication.
- 3 Press the - button.

The time indication resets to "00:00."



While you see "00:00" indication, you can go back to previous value by pressing the + button.

- 4 Set the POWER switch to OFF to release Setting mode.

Error Messages

When a problem occurs, one of the following error messages may appear on the display.

Messages	Contents	Measures
Error 11	An error occurred in backup memory data.	The data was initialized. Set the transmitting channel and the input attenuation again.
Error 21	The PLL synthesized circuit is in trouble.	Contact your Sony dealer.
Error 31	The battery voltage exceeds the allowable value.	Use the specified battery.
Error 41	Defect of an internal circuit	Contact your Sony dealer.
Error 51	Defect of the A/D converter circuit	
Error 61	Defect of an internal circuit	

Specifications

Transmitter and modulator section

Oscillator	Crystal controlled PLL synthesizer
Type of emission	110KF3E
RF power output	10 mW (50-ohm load)
Frequency stability	Within $\pm 0.002\%$
Tone signal	32.768 kHz
Type of antenna	$1/4$ -wavelength wire
Pre-emphasis	50 μ s
Deviation	± 16 kHz (-40 dBV ¹⁾ , 1 kHz input) ²⁾ ± 5 kHz (-60 dBV ¹⁾ , 1 kHz input) ²⁾
Maximum deviation	± 40 kHz
Frequency response	70 to 13,000 Hz
Signal-to-noise ratio	57 dB or more

Audio attenuator	0 to 21 dB, variable in 3-dB steps
Reference input level	$-60/-40$ dBV ¹⁾ at audio attenuator 0 dB

Carrier frequencies	62-65 758.125-781.875MHz 68-69 782.125-805.875MHz
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Power section

Power requirements	1.5 V DC (one LR6/size AA alkaline battery)
Battery life	Approx. 6 hours at 25°C or 77°F with Sony LR6 alkaline battery

General

Operating temperature	0°C to +50°C (32°F to 122°F)
Storage temperature	-30°C to +60°C (-22°F to +140°F)
Dimensions	58 × 95 × 21 mm (w/h/d) (2 ³ / ₈ × 3 ³ / ₄ × 27 ¹ / ₃₂ inches)
Mass	Approx. 100 g (3.5 oz) including battery

Supplied accessory

Operating Instructions (1)

Design and specifications are subject to change without notice.

1) 0 dBV = 1 Vrms

2) INPUT switch at -60 dBV position

Wireless Microphone System Frequency List

U62

English

The following tables show the channels and frequencies selectable on your wireless microphone, transmitter and tuner.

The group 00 permits the unit to operate on any of 47 carrier frequencies in 125 kHz steps of TV channels 62 to 65.

For the setting procedures of the transmitting channels/frequencies on your unit, refer to the Instruction Manual of your unit. Be sure to save this list together with the Instruction Manual of your unit.

Français

Les tableaux suivants illustrent les canaux et les fréquences pouvant être sélectionnés sur votre microphone sans fil, émetteur et syntoniseur.

Le groupe 00 permet à l'appareil de fonctionner sur n'importe laquelle des 47 fréquences porteuses dans les étapes 125 kHz des canaux télévisés de 62 à 65.

Pour savoir comment configurer les fréquences/canaux de transmission sur votre appareil, reportez-vous au mode d'emploi de votre appareil. Veuillez à bien conserver cette liste avec le mode d'emploi de votre appareil.

Español

En las siguientes tablas se muestran los canales y frecuencias que pueden seleccionarse en el micrófono inalámbrico, transmisor y sintonizador.

El grupo 00 permite que la unidad funcione en cualquiera de las 47 frecuencias portadoras en intervalos de 125 kHz de los canales de TV 62 a 65.

Con respecto a los procedimientos de ajuste de los canales y frecuencias de transmisión de la unidad, consulte el manual de instrucciones de la misma. Asegúrese de guardar esta lista junto con el manual de instrucciones de la unidad.

Group for transmitter and tuner / Groupe pour l'émetteur et le syntoniseur / Grupo para el transmisor y sintonizador

Group / Groupe / Grupo 00

TV-62

CH	MHz	CH	MHz
62-01	758.125	62-26	761.250
62-02	758.250	62-27	761.375
62-03	758.375	62-28	761.500
62-04	758.500	62-29	761.625
62-05	758.625	62-30	761.750
62-06	758.750	62-31	761.875
62-07	758.875	62-32	762.000
62-08	759.000	62-33	762.125
62-09	759.125	62-34	762.250
62-10	759.250	62-35	762.375
62-11	759.375	62-36	762.500
62-12	759.500	62-37	762.625
62-13	759.625	62-38	762.750
62-14	759.750	62-39	762.875
62-15	759.875	62-40	763.000
62-16	760.000	62-41	763.125
62-17	760.125	62-42	763.250
62-18	760.250	62-43	763.375
62-19	760.375	62-44	763.500
62-20	760.500	62-45	763.625
62-21	760.625	62-46	763.750
62-22	760.750	62-47	763.875
62-23	760.875		
62-24	761.000		
62-25	761.125		

TV-63

CH	MHz	CH	MHz
63-01	764.125	63-26	767.250
63-02	764.250	63-27	767.375
63-03	764.375	63-28	767.500
63-04	764.500	63-29	767.625
63-05	764.625	63-30	767.750
63-06	764.750	63-31	767.875
63-07	764.875	63-32	768.000
63-08	765.000	63-33	768.125
63-09	765.125	63-34	768.250
63-10	765.250	63-35	768.375
63-11	765.375	63-36	768.500
63-12	765.500	63-37	768.625
63-13	765.625	63-38	768.750
63-14	765.750	63-39	768.875
63-15	765.875	63-40	769.000
63-16	766.000	63-41	769.125
63-17	766.125	63-42	769.250
63-18	766.250	63-43	769.375
63-19	766.375	63-44	769.500
63-20	766.500	63-45	769.625
63-21	766.625	63-46	769.750
63-22	766.750	63-47	769.875
63-23	766.875		
63-24	767.000		
63-25	767.125		

TV-64

CH	MHz	CH	MHz
64-01	770.125	64-26	773.250
64-02	770.250	64-27	773.375
64-03	770.375	64-28	773.500
64-04	770.500	64-29	773.625
64-05	770.625	64-30	773.750
64-06	770.750	64-31	773.875
64-07	770.875	64-32	774.000
64-08	771.000	64-33	774.125
64-09	771.125	64-34	774.250
64-10	771.250	64-35	774.375
64-11	771.375	64-36	774.500
64-12	771.500	64-37	774.625
64-13	771.625	64-38	774.750
64-14	771.750	64-39	774.875
64-15	771.875	64-40	775.000
64-16	772.000	64-41	775.125
64-17	772.125	64-42	775.250
64-18	772.250	64-43	775.375
64-19	772.375	64-44	775.500
64-20	772.500	64-45	775.625
64-21	772.625	64-46	775.750
64-22	772.750	64-47	775.875
64-23	772.875		
64-24	773.000		
64-25	773.125		

TV-65

CH	MHz	CH	MHz
65-01	776.125	65-26	779.250
65-02	776.250	65-27	779.375
65-03	776.375	65-28	779.500
65-04	776.500	65-29	779.625
65-05	776.625	65-30	779.750
65-06	776.750	65-31	779.875
65-07	776.875	65-32	780.000
65-08	777.000	65-33	780.125
65-09	777.125	65-34	780.250
65-10	777.250	65-35	780.375
65-11	777.375	65-36	780.500
65-12	777.500	65-37	780.625
65-13	777.625	65-38	780.750
65-14	777.750	65-39	780.875
65-15	777.875	65-40	781.000
65-16	778.000	65-41	781.125
65-17	778.125	65-42	781.250
65-18	778.250	65-43	781.375
65-19	778.375	65-44	781.500
65-20	778.500	65-45	781.625
65-21	778.625	65-46	781.750
65-22	778.750	65-47	781.875
65-23	778.875		
65-24	779.000		
65-25	779.125		

Wireless Microphone System Frequency List

U66

English

The following tables show the channels and frequencies selectable on your wireless microphone, transmitter and tuner.

The group 00 permits the unit to operate on any of 47 carrier frequencies in 125 kHz steps of TV channels 66 to 69.

For the setting procedures of the transmitting channels/frequencies on your unit, refer to the Instruction Manual of your unit. Be sure to save this list together with the Instruction Manual of your unit.

Français

Les tableaux suivants illustrent les canaux et les fréquences pouvant être sélectionnés sur votre microphone sans fil, émetteur et syntoniseur.

Le groupe 00 permet à l'appareil de fonctionner sur n'importe laquelle des 47 fréquences porteuses dans les étapes 125 kHz des canaux télévisés de 66 à 69.

Pour savoir comment configurer les fréquences/canaux de transmission sur votre appareil, reportez-vous au mode d'emploi de votre appareil. Veillez à bien conserver cette liste avec le mode d'emploi de votre appareil.

Español

En las siguientes tablas se muestran los canales y frecuencias que pueden seleccionarse en el micrófono inalámbrico, transmisor y syntonizador.

El grupo 00 permite que la unidad funcione en cualquiera de las 47 frecuencias portadoras en intervalos de 125 kHz de los canales de TV 66 a 69.

Con respecto a los procedimientos de ajuste de los canales y frecuencias de transmisión de la unidad, consulte el manual de instrucciones de la misma. Asegúrese de guardar esta lista junto con el manual de instrucciones de la unidad.

Group for transmitter and tuner / Groupe pour l'émetteur et le syntoniseur / Grupo para el transmisor y sintonizador

Group / Groupe / Grupo 00

TV-66

CH	MHz	CH	MHz
66-01	782.125	66-26	785.250
66-02	782.250	66-27	785.375
66-03	782.375	66-28	785.500
66-04	782.500	66-29	785.625
66-05	782.625	66-30	785.750
66-06	782.750	66-31	785.875
66-07	782.875	66-32	786.000
66-08	783.000	66-33	786.125
66-09	783.125	66-34	786.250
66-10	783.250	66-35	786.375
66-11	783.375	66-36	786.500
66-12	783.500	66-37	786.625
66-13	783.625	66-38	786.750
66-14	783.750	66-39	786.875
66-15	783.875	66-40	787.000
66-16	784.000	66-41	787.125
66-17	784.125	66-42	787.250
66-18	784.250	66-43	787.375
66-19	784.375	66-44	787.500
66-20	784.500	66-45	787.625
66-21	784.625	66-46	787.750
66-22	784.750	66-47	787.875
66-23	784.875		
66-24	785.000		
66-25	785.125		

TV-67

CH	MHz	CH	MHz
67-01	788.125	67-26	791.250
67-02	788.250	67-27	791.375
67-03	788.375	67-28	791.500
67-04	788.500	67-29	791.625
67-05	788.625	67-30	791.750
67-06	788.750	67-31	791.875
67-07	788.875	67-32	792.000
67-08	789.000	67-33	792.125
67-09	789.125	67-34	792.250
67-10	789.250	67-35	792.375
67-11	789.375	67-36	792.500
67-12	789.500	67-37	792.625
67-13	789.625	67-38	792.750
67-14	789.750	67-39	792.875
67-15	789.875	67-40	793.000
67-16	790.000	67-41	793.125
67-17	790.125	67-42	793.250
67-18	790.250	67-43	793.375
67-19	790.375	67-44	793.500
67-20	790.500	67-45	793.625
67-21	790.625	67-46	793.750
67-22	790.750	67-47	793.875
67-23	790.875		
67-24	791.000		
67-25	791.125		

TV-68

CH	MHz	CH	MHz
68-01	794.125	68-26	797.250
68-02	794.250	68-27	797.375
68-03	794.375	68-28	797.500
68-04	794.500	68-29	797.625
68-05	794.625	68-30	797.750
68-06	794.750	68-31	797.875
68-07	794.875	68-32	798.000
68-08	795.000	68-33	798.125
68-09	795.125	68-34	798.250
68-10	795.250	68-35	798.375
68-11	795.375	68-36	798.500
68-12	795.500	68-37	798.625
68-13	795.625	68-38	798.750
68-14	795.750	68-39	798.875
68-15	795.875	68-40	799.000
68-16	796.000	68-41	799.125
68-17	796.125	68-42	799.250
68-18	796.250	68-43	799.375
68-19	796.375	68-44	799.500
68-20	796.500	68-45	799.625
68-21	796.625	68-46	799.750
68-22	796.750	68-47	799.875
68-23	796.875		
68-24	797.000		
68-25	797.125		

TV-69

CH	MHz	CH	MHz
69-01	800.125	69-26	803.250
69-02	800.250	69-27	803.375
69-03	800.375	69-28	803.500
69-04	800.500	69-29	803.625
69-05	800.625	69-30	803.750
69-06	800.750	69-31	803.875
69-07	800.875	69-32	804.000
69-08	801.000	69-33	804.125
69-09	801.125	69-34	804.250
69-10	801.250	69-35	804.375
69-11	801.375	69-36	804.500
69-12	801.500	69-37	804.625
69-13	801.625	69-38	804.750
69-14	801.750	69-39	804.875
69-15	801.875	69-40	805.000
69-16	802.000	69-41	805.125
69-17	802.125	69-42	805.250
69-18	802.250	69-43	805.375
69-19	802.375	69-44	805.500
69-20	802.500	69-45	805.625
69-21	802.625	69-46	805.750
69-22	802.750	69-47	805.875
69-23	802.875		
69-24	803.000		
69-25	803.125		