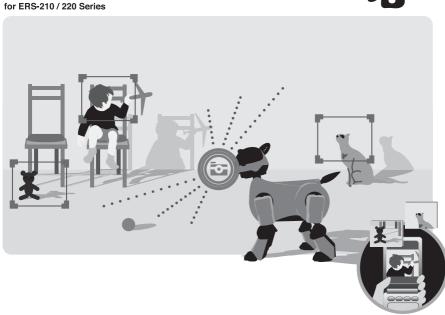


AIB EYES User's Guide





Notice to Users

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- The supplied software cannot be used with any device other than those devices specified herein.
- Some mobile communication devices may not work with AIBO EYES due to unique configurations. Sony Corporation assumes no responsibility, in the case that AIBO EYES does not work with such mobile communication devices.
- The specifications of the supplied software are subject to change without notice.

Customer Support

How to contact AIBO Customer Link.

1-800-427-2988 (USA)

E-mail address:

aibosupport@info.sel.sony.com

For more information about "AIBO" ERS-210/220 Series (names of parts, settings, "Memory Stick" installation, safety precautions, etc.), please refer to the "AIBO" ERS-210/220 Series Operating Instructions.

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.

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.

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

Safety Information

Warning

- This product is not intended for children under 8 years of age.
- The AIBO wireless LAN card should be attached to AIBO under the supervision of an adult with knowledge of the proper procedure.

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OPEN-R

"OPEN-R" is the standard interface for the entertainment robot system that Sony is actively promoting. This interface expands the capability of the entertainment robot through a flexible combination of hardware and interchangeable software to suit various applications. "AIBO EYES" conform to OPEN-R version 1.1 (software specifications).

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• In this manual, the "ERS-210 Series" is referred to as the "ERS-210", and the "ERS-220 Series" is referred to as the "ERS-220."

For more information on AIBO, please refer to the following Internet site: http://www.aibo.com/

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Welcome to AIBO EYES

AIBO EYES is an AIBO-ware application for the AIBO ERS-210/220 Series. This software lets you control AIBO from your PC or a mobile communication device, using e-mail commands.

Controlling AIBO by utilizing AIBO MAIL. (page 32)

To control AIBO, simply send a command via e-mail to AIBO. AIBO will check e-mails at set intervals, and upon receipt will execute the particular command.

Picture taking by AIBO utilizing your PC or mobile communication device. (page 33)

AIBO will take pictures upon receipt of AIBO MAIL or automatically at set intervals, and e-mail the picture back to you.

Sending AIBO message. (page 43)

You can send messages or have AIBO play selected songs to family and friends in close proximity of AIBO's location.

You can pre-record messages as well.



AIBO alerts you when it receives e-mail. (page 47)

Upon receiving e-mail, AIBOs indicator light will flash.

AIBO can receive and send e-mails.

Via Wireless LAN, AIBO is always connected to the Internet so it can receive and send e-mail independent of a PC*.

(*You must be connected to an "always On" broadband connection. For example; Cable modem, DSL, etc.)

Autonomous mode.

You can also enjoy an autonomous AIBO. AIBO plays with its favorite pink ball and communicates with you. When on its Energy Station (separately available), AIBO alarm can function.



Protection of privacy:

With AIBO EYES, multiple users can send photo command mails to AIBO and view the pictures AIBO took. To protect your privacy, use "Private Mode" which allows the following:

· Restriction of Users

AIBO users can be restricted to a maximum of five users.

User name notification

AIBO will announce the registered user name when notifying you about picture taking or messages via Voice Signature (page 26).

Setup Procedure

To setup AIBO EYES, follow these procedures:

Confirm system requirements (page 12)

₩

AIBO's network setup (page 14)

Connect AIBO to a wireless LAN.

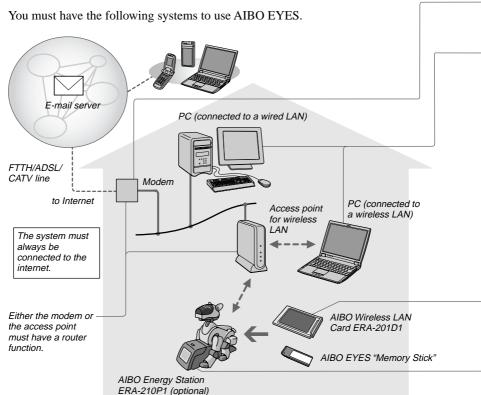


AIBO EYES Setup (page 19)

Set up the e-mail address you would like AIBO to check, and register the users of *AIBO EYES*.



Confirming system requirements



Caution

AIBO EYES cannot be used with a USB-type DSL modem.

- A PC is used to setup your network settings for AIBO EYES. The PC can be connected to the access point via a wired or wireless connection.
 - To connect the PC to an access point via a wireless LAN, the PC must have an IEEE802.11b-compatible wireless LAN adapter.
 - A Web browser must be installed.
 - You must set up the POP* (receiving) and SMTP (sending) e-mail servers for your e-mail account.
 - * The POP server must support the UIDL command (for listing IDs of e-mails). For details about the UIDL command, consult your provider.
 - The "Memory Stick" Reader/Writer is not required, but it can be used to setup network settings and back up data, etc.

- An AIBO Wireless LAN Card ERA-201D1 is also supplied with AIBO EYES ERF-220AP08. For installation with AIBO ERS-210/220 series, refer to the operating instructions for your AIBO Wireless LAN Card.
- The Energy Station ERA-210P1 is not required, but it is useful for taking pictures from a stationary point at a regular interval. When AIBO is on the Energy Station, AIBO will tell the time.

AIBO's network setup

To connect AIBO to a wireless LAN, you may need to change the default network settings of the AIBO Wireless LAN Card, PC and the access point.

Network setup procedure

Do you have a Memory Stick Reader/Writer?

A) If you have a Memory Stick Reader/Writer*

You can change the AIBO EYES "Memory Stick" settings directly to match your network.

For settings, see the next page.

* We recommend that you use a Sony Memory Stick Reader/Writer.

B) If you do not have a Memory Stick Reader/Writer

Please change the settings of your PC and access point to match AIBO's default configuration in order to communicate with default setup of the AIBO Wireless LAN Card.

For settings, see the Operating Instructions of the AIBO Wireless LAN Card ("AIBO's network setup").

- AIBO EYES can only be used in (A) and (B) of the four network system samples printed in the "Wireless LAN Network System."
- You cannot continue to use AIBO EYES after you change the settings of your PC and access point to match the default settings of AIBO. Once you have successfully finished the setup, please reset the network to its original setting.

If you have a Memory Stick Reader/Writer

You must change the Wireless LAN setting file "WLANCONF.TXT" and adjust to your network.

- 1 Insert the AIBO EYES "Memory Stick" into the "Memory Stick" Reader/Writer.
- 2 Copy the wireless LAN settings file "WLANCONF.TXT" in the SAMPLE folder to a parent directory.

Copy "/OPEN-R/SYSTEM/CONF/WLAN/HTML/SAMPLE/WLANCONF.TXT" to "/OPEN-R/SYSTEM/CONF/WLAN/HTML/".

3 Edit the copied file "WLANCONF.TXT" by using a text editor.

Settings will be different depending if the DHCP server function* is used. The DHCP server function automatically assigns IP addresses to devices within your network.

* For details of the DHCP sever function, see the instructions of your modem or access point.

Confirm if the DHCP server function is used in the network.

(This procedure is for Windows XP only. For other operating systems, please refer to the software help information.)

- ① Click the Start button and select Control-Panel.
- 2 Select Network & Internet Connections, and Network Connections.
- 3 Right click Network Connection, and select Properties.
- **(4)** In "This connection uses the following items" select Internet Protocol (TCP/IP) and click the Properties button.
- **⑤** Confirm the settings.

If Obtain an IP Address automatically is selected,

the DHCP server function is used.

If *Use the following IP address* is selected,

the DHCP server function is not used.

In this case, you must enter the IP address manually as follows:

Record the PC IP address that is displayed, and then change it to the AIBO IP address to avoid IP address duplication within the network.

Example: PC IP adress: 192.168.0.10

AIBO IP adress: 192.168.0.11

1 When the DHCP server function is used in the network

```
#WLAN
HOSTNAME=AIBO
ESSID=AIBONET
               ← Set the SSID for Wireless LAN access point (less than 32 characters)
WEPENABLE=1
APMODE=1
# IP network
USE DHCP=1
# If DHCP is not used (USE DHCP=0), you need to specify IP
# network configuration.
#USE DHCP=0
#ETHER IP=192.168.0.11
#ETHER NETMASK=255.255.255.0
                                    Lines that start with a sharp symbol (#)
#IP GATEWAY=192.168.0.1
                                    are recognized as a comment line and
                                    I are thus ignored.
#DNS SERVER 1=192.168.0.1
# SSDP
SSDP ENABLE=1
```

For each parameter, refer to "List of WLANCONF.TXT parameters" on page 64.

2 When the DHCP server function is not used in the network

```
#WLAN
HOSTNAME=AIBO
WEPENABLE=1
WEPKEY=AIBO2
                 ← Set the WEPKEY for Wireless LAN access point (less than 5 characters).
APMODE=1
#
# IP network
#USE_DHCP=1
# If DHCP is not used (USE DHCP=0), you need to specify IP
# network configuration.
                                ← Delete # at the head of the line
USE DHCP=0
                                ← Fnter the AIBO IP address*
ETHER IP=192.168.0.11
ETHER NETMASK=255.255.255.0 ← Enter the sub-net mask for AIBO.
IP GATEWAY=192.168.0.1

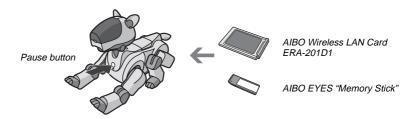
    Enter the IP address for the router.

DNS_SERVER_1=192.168.0.1
                        * For confirming the AIBO IP address, refer to page 16.
# SSDP
                                          Lines that start with a sharp symbol (#)
                                           are recognized as a comment line and
                                           I are thus ignored.
SSDP_ENABLE=1
```

For each parameter, refer to "List of WLANCONF.TXT parameters" on page 64.

After the network setting is completed, you must now register the e-mail address AIBO will check, along with the registration of AIBO EYES users. When using AIBO EYES in "Private Mode" (page 24), you can register up to five users that can communicate via e-mail with AIBO. Setup is performed by using a Web browser.

Insert the AIBO Wireless LAN Card and AIBO EYES "Memory Stick" into AIBO, and press the chest pause button on AIBO to activate AIBO.



Caution

After you set up the network, if you don't have an AIBO Wireless LAN Card inside AIBO and you activate it, the network settings will reset to the default settings ("/OPEN-R/SYSTEM/CONF/WLAN/HTML/WLANCONF.TXT" file is deleted). In this case, you will need to perform AIBO's Network Setup procedure again.

2 Confirm AIBO's IP address.

When the "Universal Plug & Play" setting is ON under Windows XP/Windows Me environment, this step is unnecessary.

An AIBO icon will appear in the "My Network Places" folder. Double-click the AIBO icon to show "AIBO EYES TOP PAGE", and then go step 4.

The method for confirming the IP address will vary, depending on whether your network has a DHCP server function or not (page 16).

When the DHCP server function is used in your network:

- ① Start the Web browser on the PC and access the equipment being used as the router (modem or access point. Refer to your router operation manual.)
- ② Confirm AIBO's IP address. For further details, refer to the instruction manual of the equipment being used as the router.

When the DHCP server function is not used in your network:

Remember the AIBO IP address entered manually at "ETHER_IP" in "WLANCONF.TXT" (page 18).

3 Start up the Web browser, and access the URL shown below.

http://XXX.XXX.XXX.XXX

Type in the AIBO IP address confirmed in step 2. (for example; 192.168.0.11)

The AIBO EYES TOP PAGE appears.

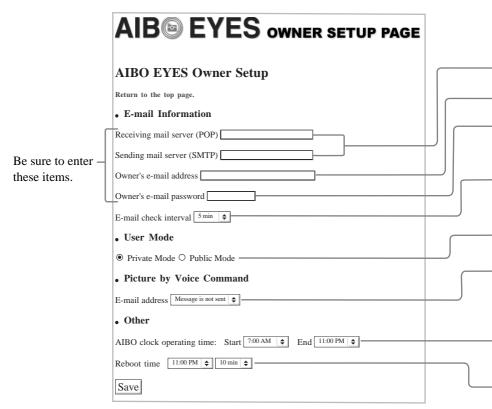


4 Click "AIBO Owner Setup".



The AIBO EYES OWNER SETUP window appears.

Complete the settings on the AIBO EYES OWNER SETUP window.



C	Check your e-mail software or consult your provider.
—• Т	The e-mail address AIBO will check.
• P	Password for the above e-mail address.
Y	You can set the desired interval for AIBO to check e-mails (range: 1-60 minutes)
	Choose either "Private Mode" (which limits access of users to AIBO EYES) or Public Mode". See next page for each detail.
s S	The User number who receives the e-mail when you call out "Send a mail," can be et. The user number (User 1 - User 5) is set by using the AIBO EYES USER SETUP display (page 26). If you do not want an e-mail sent, select "Message is not sent."
a	This sets the time period during which AIBO makes time notifications by sound and motion every 30 minutes starting on the hour while in Station mode. "Never-*": always OFF / "Always-*": always ON).
	To download and save data, AIBO will automatically restart itself once a day. Please set the time you would like it to restart.

Private Mode

Users of AIBO can be restricted to 5 registered users. This mode is convenient if you want to limit users who can use photo commands or observe images to your family or close friends.

In Private Mode, you can also use the Voice Signature function. This feature makes AIBO vocally recite the user name of the person sending the command before taking a picture or playing a message. You can also record each user voice for this Voice Signature function (page 46). When AIBO receives e-mail from an unregistered user, AIBO will send an error e-mail reply to the owner's e-mail address (page 64).



Public Mode

AIBO EYES does not restrict usage to the five registered users in this mode. This is convenient when utilizing AIBO in public spaces, as it enables multiple users have AIBO take various pictures. In Public Mode, the Voice Signature function is not available.

6 After you have completed the owner settings, click the Save button.

The "Setup is complete" is displayed.

7 Click "Return to the top page".

The AIBO EYES TOP PAGE is displayed.

This completes the owner setup. Continue below with the user setup.

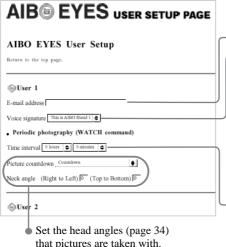
8 Click "AIBO User Setup".



The AIBO EYES USER SETUP window is displayed.

9 Complete the User Setup.

In Private Mode, you can register up to five users.



Set the head angles (page 34) that pictures are taken with. You can specify picture-taking at regular intervals through AIBO MAIL using the WATCH command (page 39).

- The e-mail address of the user.
- In Private Mode, AIBO will vocally identify the person who sent the command before taking a picture or giving the message (Voice Signature function). The Voice Signature can be either the default voice or one recorded by the user.
 - To use a voice recorded by the user, select from "User recording 1" through "User recording 5". To perform the user recording, see page 46.
- When making AIBO take pictures periodically, you can set the desired interval. AIBO will then e-mail the picture to the user. Leave the default settings (0 hour/0 minutes) if you don't want AIBO to perform this periodical picture-taking feature. You can also command AIBO to perform this task via AIBO MAIL's WATCH command (page 39). AIBO will automatically take the first picture after the desired interval, once you have saved these settings.

10 After the setup is completed, click the Save button.

The "Setup is complete" is displayed.

To confirm the updated settings, click "Return to the top page" to show the AIBO EYES TOP PAGE and click "AIBO Owner Setup" or "AIBO User Setup."

Your settings can be changed whenever you want to update the users or other settings.

11 Wait a while, and then verify that AIBO is connected to the e-mail server.

Wait until AIBO checks its e-mail (set via the "Email check interval" setting. Page 22.) at the set interval.

You can confirm that AIBO is connecting to the e-mail server by observing AIBO's tail lamp.

When an e-mail check is successfully completed:

ERS-210, ERS-210A → Tail lamp color: Purple ERS-220, ERS-220A → Tail lamp color: Blue

If you have received e-mail:

ERS-210, ERS-210A → Tail lamp: Purple flashing ERS-220, ERS-220A → Tail lamp: Blue flashing

If the e-mail server connection fails, AIBO's tail lamp will turn off.

Using AIBO EYES

After learning how to write AIBO MAIL, let's send AIBO MAIL to make AIBO take pictures and convey messages.





Using AIBO with the Energy Station [ERA-201P1];

You can use AIBO EYES with AIBO sitting on or off of its Energy Station.

Pause Mode (AIBO not active.)



When you push the pause button on AIBO's chest. AIBO's power turns off. You need to put AIBO in this mode when you are changing AIBO's batteries or Memory Stick.

Active Mode

In this mode, AIBO can periodically check e-mail, receive AIBO Mail and take pictures, play messages, and notify you of new e-mail.

Autonomous Mode



Mode lamp turns off



AIBO walks around, plays with its pink ball, and communicates with you.



Chest lamp:

Caution

- Do not use AIBO on unstable surfaces where it may fall or experience severe vibrations.
- · Do not surround AIBO with objects that may obstruct its movements.

Place AIBO on the Station

Using AIBO off the Energy Station [ERA-201P1]

Station Mode

Take

of the

Station

AIBO off



AIBO will have minimal movements while recharging itself on the Energy Station. When in this Station Mode. AIBO will sound an alarm at each hour and half hour (page 23). It is convenient to have AIBO sit on the Energy Station when you are making AIBO take periodic pictures at particular angles.



The AIBO Energy Station [ERA-210P1] is an option that is separately sold.

- · Picture taking, message play-back, e-mail notification are all features that AIBO can perform, regardless of whether AIBO is on its Energy Station or not.
- Please refer to page 58 for voice commands that AIBO can understand when in Autonomous or Station Mode.

When AIBO is suddenly picked up.

> When AIBO is placed on the floor.

When AIBO detects a jam in one of its joints.

Solution: Press the head sensor for 3 seconds (ERS-210)/ Press the headtouch sensor in the front or rear direction (ERS-220)

Pick-up Condition







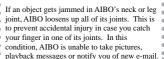
When AIBO is picked up and held in your arms, it naturally assumes a posture to conform to that position. This prevents the person picking up AIBO from suddenly being surprised by AIBO's movements, and accidentally dropping AIBO.

Caution

When more than two of AIBO's paws sense pressure, AIBO will think it has been placed back on the floor and return to Autonomous Mode. Please do not touch AIBO's paws when you are holding AIBO as AIBO may try to start walking when it is back in Autonomous Mode. AIBO cannot take pictures in this Pick up Condition.

Jam Condition



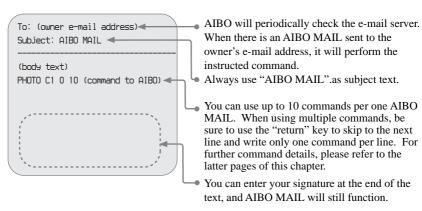


AIBO MAIL

AIBO MAIL is the e-mail you will send to AIBO, to make it take pictures or send messages. AIBO MAIL needs to be written along these particular guidelines:

How to write AIBO MAIL

- Use "text format" (not HTML) when creating AIBO MAIL.
- The size of each AIBO MAIL must be less than 10KB per e-mail (no more than 10,000 characters, including the characters in headers.)



Checking and retrieving AIBO MAIL

- With AIBO EYES, AIBO can check up to 200 e-mails on the e-mail server. Please ensure that your e-mails on the server does not exceed 200.
- AIBO will not perform an AIBO MAIL command if that e-mail has already been opened and read (deleted) through other means (for example; reading the e-mail through your PC).



Viewing pictures taken by AIBO

With AIBO EYES, you can send photo commands from your PC or mobile communication device* (*must be able to receive JPEG files). AIBO will perform the command in the AIBO MAIL that it receives, take a picture, and then send it back. Up to 10 pictures can be stored on the "Memory Stick".

Voice Signature function

In Private Mode, AIBO will play the Voice Signature (for example; "It's Dad") and identify the photo command sender. For Voice Signature setup, refer to page 26. For Recording Voice Signature, refer to page 46.

Caution

- The "Memory Stick" can store up to 10 pictures, and will automatically continue to delete the oldest picture as you exceed 10 pictures.
- Sony is not responsible for any rights-infringement disputes and other issues that may
 arise between you and another person or entity resulting from photographs taken with
 AIBO. Do not take any photographs that may infringe on another person's or entity's
 rights.

About the picture (photo image)

- The picture (photo image) will be sent on JPEG format, and will automatically be stored on the "Memory Stick".
- Picture (photo image): Approximately 180 × 140 pixels.
- Depending on the surrounding light, horizontal lines may appear in the photo or the photo may have a reddish or bluish hue.
- The image may be distorted if AIBO takes a photo of a fast-moving object.

AIBO's position while taking pictures

AIBO can take pictures in both situations: On its Energy Station (Station Mode) or Autonomous Mode.



AIBO is able to periodically take pictures of a certain fixed point at desired intervals.

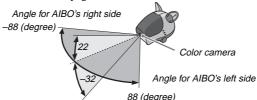
In Autonomous mode



If AIBO receives AIBO MAIL commanding it to take a picture, it will do so in a standing position upon receiving the AIBO MAIL.

About the angle of AIBO's color camera

You can position AIBO's color camera angle (up/down, right/left) using commands in your AIBO MAIL. Refer to page 37 for details.



When using the voice command to make AIBO take a picture, you cannot change the angle of AIBO's camera. It will look straight ahead and take the picture.

Taking pictures on command

You can make AIBO take pictures on command. Send an AIBO MAIL with the photo command when you want AIBO to take the picture. AIBO will respond on command.

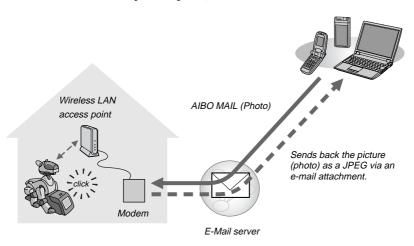
Caution

AIBO will check the e-mail server for e-mails at the desired interval you have intially set (see AIBO EYES OWNER SETUP window, page 22.) When it acknowledges receipt of an AIBO MAIL with a photo command, it will take a picture.

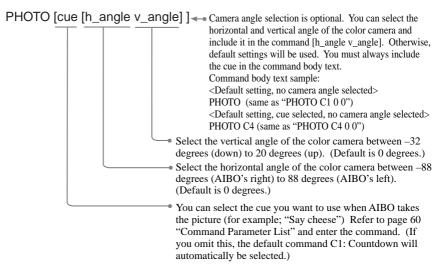
The command to use in your AIBO MAIL body text to have AIBO take a picture and e-mail it back via a JPEG attachment is: **PHOTO**

Receiving pictures (photos) AIBO took by e-mail JPEG attachments [PHOTO command]

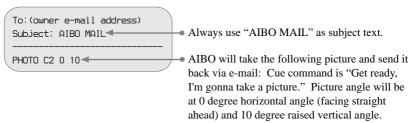
AIBO will e-mail back the picture (photo) it took as a JPEG attachment.



How to write Photo commands



AIBO Mail example for Photo command



Directly commanding AIBO to take a picture via Voice command

You can directly command AIBO to take pictures via voice command.

For example, you can have AIBO take a picture of your child and send it to your mother's PC or mobile communication device* (*must have JPEG format viewing capability.)

1 Say "Take a picture" to AIBO.

After giving the command, follow AIBO's voice instruction.

While AIBO is speaking, you can bypass the guide and instantly make AIBO start the photo countdown and take a picture if you do the following:

ERS-210, ERS-210A → Press the head sensor.

ERS-220, ERS-220A → Hold the head touch sensor forward or backwards.



- AIBO faces straight forward and takes a picture.
- In Autonomous mode, AIBO will stand up first and than take the picture.

When taking a picture using the voice command, the cue signal and camera angle can not be set.

2 Say "Send e-mail" to AIBO.

AIBO will send an e-mail (with the JPEG picture attached) to the e-mail address pre-registered in the AIBO EYES OWNER SETUP window "Picture by Voice Command" (page 22).

AIBO will send the most recent picture it took via e-mail JPEG attachment.

Taking periodic pictures at a set interval [Watch command]

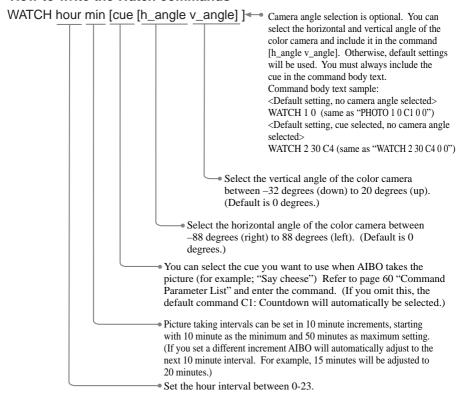
AIBO will take periodic pictures at a set interval and e-mail them via JPEG attachment. The picture taking interval can be set in 10 minute increments, starting with 10 minute as the minimum, and 50 minutes as maximum setting. (If you set a different increment AIBO will automatically adjust to the next 10 minute interval. For example, 15 minutes will be adjusted to 20 minutes.)

Caution

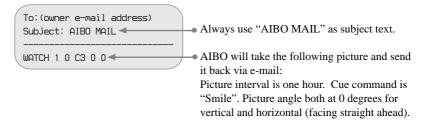
When AIBO is in the middle of checking the e-mail server, or is in motion, depending on the situation, there may be a slight delay in taking the picture. In this case, the picture might not be taken on the exact timing of the pre-set picture taking interval.

Periodic picture taking by AIBO can be set via each User Setup (by Web browser setup: for details see page 26) or by AIBO MAIL.

How to write the Watch commands

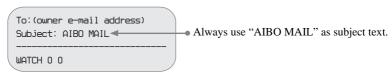


AIBO MAIL example for a WATCH command



Cancelling the periodic picture taking function

Simply send a WATCH command AIBO MAIL to AIBO, with body text specifying the hours and minutes as "0".



Viewing the pictures (photos) on the Memory Stick

The pictures that AIBO takes will be stored on AIBO's "Memory Stick". To view these, you will need a "Memory Stick" reader/writer.

1 Remove the "Memory Stick" from AIBO.

Refer to the AIBO Operating Instruction that came with your AIBO on how to remove the "Memory Stick" from AIBO.

$2\,$ Insert the "Memory Stick" into the "Memory Stick" reader/writer.

For details, refer to the Operating Instructions of the "Memory Stick" reader/writer.

3 Copy/Move the photo data on the "Memory Stick" to your PC.

Copy/Move the JPEG files in " $\OPEN-R\APP\PC\PHOTO$ " of the "Memory Stick" to your PC.

The photo data has five digit consecutive numbers ("IMG-XXXXX.JPG"). For details on copying files, refer to the Operating Instruction of your PC.

Memo

If there is no photo file in the folder, the five digit number in the file name will start from "00000".

If there are existing photos in the folder, the five digit number in the file name will start from the next highest number.

4 Remove the "Memory Stick" from the PC.

For details on how to remove the "Memory Stick", please refer to the Operating Instruction for the PC and its accessories.



Sending AIBO a message or song

Using e-mail from your PC or mobile communication device, you can send AIBO messages or songs that can be played back or performed by AIBO.

You can select a message from pre-recorded messages, or record your own unique personal message.

You can record up to five unique personal messages and save them as files. You can then command AIBO to play these back by selecting the particular file and including it in your AIBO MAIL body text.

For recording instructions, please see page 46.

There are two commands you can choose from to include in the AIBO MAIL body text, depending on when you want AIBO to play back the message or the song.

- Send AIBO the message or the song and have it play back when requested by the recipient.
 MSG
- Send AIBO the message or the song and play back immediately **PLAY**

Having the recipient play back AIBO's message and song [MSG command]

This command is convenient when the recipient is not near AIBO, and the recipient can play back the message or song at their convenience.

Caution

You can send up to 100 messages and songs to AIBO. When unplayed messages exceed 100, an error e-mail is sent to the AIBO MAIL (Message command) sender.

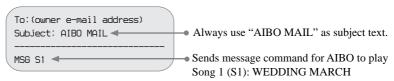
Message sender

Select the message or song and include it in the body text of the AIBO MAIL.

How to write commands

MSG msg Include the message or song you would like AIBO to perform, by selecting the command from "SONG" or "WORD" from page 60 "List of codes that can be used for AIBO MAIL commands".

AIBO MAIL example of a MSG command



AIBO's face LED lights up to indicate receipt of e-mail.

ERS-210, ERS-210A

Green light



Face side center lights: Blue

When AIBO has received a message command

Press the back sensor (ERS-210, ERS210A) or the back-touch sensor (ERS-220, ERS-220A) of AIBO.

AIBO will play back the message or song.

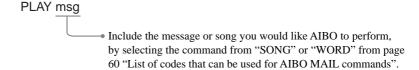
To play again:	Say "One more time" to AIBO.
To play the next message/song: (current message/ song will be deleted.)	ERS-210, ERS-210A → Press the back sensor. ERS-220, ERS-220A → Press the back-touch sensor.
To stop playing:	ERS-210, ERS-210A → Press the head sensor. ERS-220, ERS-220A → Hold the head touch sensor backward for a few seconds.

Playing back the message or song immediately [PLAY command]

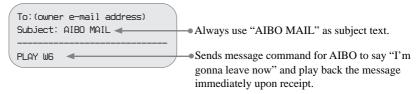
You can use this command when you know that the recipient is near AIBO, and you want instant play back.

Select the message or song and include it in the body text of AIBO MAIL.

How to write commands



AIBO MAIL example of a PLAY command



How to record a unique message and Voice Signature

You can pre-record a unique voice message (page 43) and also record the Voice Signature (page 26).

1 Say "Recording Mode" to AIBO.

Another way to record:

ERS-210. ERS-210A → Press the head sensor for more than three seconds.

ERS-220, ERS-220A → Hold the head touch sensor forward or backward for more than 3 seconds.

2 Follow AIBO's voice instructions.

To skip the voice instructions:

ERS-210, ERS-210A → Press the head sensor.

ERS-220, ERS-220A → Hold the head touch sensor forward or backward.



AIBO e-mail reception notification

When the owner's e-mail address receives regular e-mail, AIBO's tail light will flash to indicate this. (This is only for regular e-mail and not AIBO MAIL.)



AIBO will periodically check for e-mail at the intervals you selected in AIBO EYES OWNER SETUP window: "E-mail check interval" (page 22). Say "Mail check" to AIBO, and it will retrieve and say the results to you:

- "You have new mail" (1-9 e-mails*)
- "Wow, you've got lots of mail" (10 or more e-mails*)
- "You don't have any mail"
- * AIBO MAIL is not included in this count.

Caution

You can confirm AIBO's e-mail server connection via AIBO's tail lamp.

When e-mail check is successfully completed:

ERS-210, ERS-210A → Tail lamp will light purple.

ERS-220, ERS-220A → Tail lamp will light blue.

When e-mail check is successfully completed and you have new e-mail:

ERS-210, ERS-210A → Tail lamp will flash purple.

ERS-220, ERS-220A → Tail lamp will flash blue.

When communication has failed between AIBO and the e-mail server, AIBO's tail lamp will turn off.

Additional Information

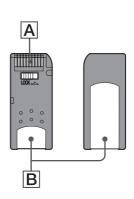
This chapter provides notes on usage and a troubleshooting guide.



Notes on use

The supplied AIBO Programming Memory Stick [ERA-MS06] contains the AIBO EYES application to be utilized with the AIBO ERS-210 or ERS-220 Series. In order to protect the data that is currently recorded on the AIBO EYES "Memory Stick", please note the following:

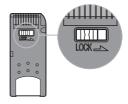
- Do not use the AIBO EYES "Memory Stick" for other data storage purposes with your digital camera, video camera, etc., and only use it with the AIBO ERS-210 or ERS-220 Series.
- AIBO EYES is designed exclusively for use with "AIBO" ERS-210/210A/220/ 220A and cannot be used with other AIBO models.
- We recommend that you use a Sony "Memory Stick" Reader/Writer.
- Do not touch terminal A with your hand or metal objects.
- The saved data may be erased or broken if the "Memory Stick" is used in a place subject to static electricity or electric noise.
- Do not attach anything other than a dedicated "Memory Stick" sticker in the area indicated by
 B. A sticker has already been attached to the AIBO-ware "Memory Stick" at the factory.
- Do not bend, drop or apply strong physical shock to the "Memory Stick."
- Do not disassemble or modify the "Memory Stick."



- To remove the "Memory Stick" from AIBO while it is still operating, first press
 the pause button to stop AIBO's movements and refer to the AIBO Operating
 Instructions.
- Do not let the "Memory Stick" get wet.
- Do not use or store the "Memory Stick" in places subject to:
 - Excessively high temperatures, such as a car parked in the sun
 - Direct sunlight
 - High humidity or corrosive gas
- When carrying or storing the "Memory Stick," keep it in the supplied case.
- Sony assumes no responsibility for any malfunctions that may occur as a result
 of using AIBO EYES in a way not specified in this manual.
- The specifications of this software are subject to change without notice.

Caution

- Do not set the safety switch (for data erase/over-write protection) of the "Memory Stick" to
 "LOCK" position. If you lock this, AIBO will
 not be able to store the pictures it has taken.
- If the safety switch of the "Memory Stick" is in "LOCK" position and you insert this into AIBO and activate AIBO, it will notify you of the locked situation and the red eye/face lights will appear. Press the AIBO pause button on AIBO's chest to turn AIBO off. Take the "Memory Stick" out of AIBO and unlock the safety switch. You are now ready to use AIBO and AIBO's eye light should turn green when you activate AIBO again.



Troubleshooting

If you experience any of the following difficulties, use this troubleshooting guide to correct the problem.

Should the problem persist, please contact AIBO Customer Link. (See page 3 for details on AIBO Customer Support/Link.)

Symptom	Remedy
AIBO does not activate after releasing the pause button.	 The battery pack is not installed. Insert the battery pack (see AIBO ERS-210/210A, ERS-220/220A Operating Instructions.) Restart AIBO by pressing the pause button again. The battery power is low. → Recharge the battery pack or replace it with a charged one.
When you press the pause button, the chest light rapidly flashes in green and orange, and AIBO emits a warning tone.	The battery pack may have over-heated. → Power AIBO off and wait until the battery pack cools off.
AIBO emits a sad melody and does not activate when the pause button is released.	 The inserted "Memory Stick" does not contain AIBO-ware. The inserted "Memory Stick" is not compatible for use with ERS-210, ERS-210A, ERS-220, ERS-220A. The AC adaptor and conversion plug is connected to AIBO's charging terminal. → Disconnect the AC adapter and conversion plug from AIBO, than restart AIBO.

Symptom	Remedy
The battery pack is locked and cannot be ejected.	The program is still running. →Press AIBO's chest pause button to stop the program, then remove the battery pack from AIBO.
It takes a long time for AIBO to start moving.	AIBO is loading data from the "Memory Stick." Wait a while.
AIBO tries to walk but it does not move forward.	 The floor may be too slippery. → Place AIBO on a surface that is not too slippery, such as a low pile carpet.
AIBO falls often.	The floor may be too slippery, inclined or unstable. → Place AIBO on a flat surface that is not too slippery.
After picking AIBO up, it stops moving its legs and has very minimal movement.	• ABIO can sense that it has been picked up and reduces movements. → Check that the mode indicator is flashing and place AIBO on the floor. After a while if AIBO still does not move: ERS-210, ERS-210A: Press the head sensor for about 3 seconds. ERS-220, ERS-220A: Hold the head touch sensor forward or backward for about 3 seconds.
The mode indicator flashes and all limbs become loose, and AIBO does not move anymore.	• AIBO's joint is jammed. → Place AIBO on the floor. ERS-210, ERS-210A: Press the head sensor for about 3 seconds. ERS-220, ERS220A: Hold the head touch sensor forward or backward for about 3 seconds.

Symptom	Remedy
The chest light flashes in orange.	There is a problem with the battery pack. → Check to ensure that the battery pack is inserted in AIBO correctly. Should the problem persist, please contact the AIBO Customer Link.
AIBO asks to be charged even with a fully charged battery pack.	With a fully charged battery, AIBO EYES can normally operate for about 1.5 hours in Autonomous mode. If the battery pack continues to operate for a much shorter period, the battery pack may be reaching the end of its service life. Replace it with a new battery pack.
AIBO does not emit any sound.	• The volume may be set to mute. → Adjust the volume level (see AIBO ERS-210/210A, ERS-220/220A Operating Instructions.)
AIBO cannot connect to the e-mail server and the tail lamp turns off.	 The wireless LAN card is not inserted correctly. → Insert the wireless LAN card (see the Wireless LAN Card instruction manual). Check the "E-mail Information" settings on the AIBO EYES OWNER SETUP window (page 22). Check the settings for your network.

Symptom	Remedy	
After you have told AIBO to "Send e-mail" and AIBO has responded and said it has sent the e- mail, but the recipient has not yet received the e-mail.	The E-mail address settings are incorrect. → Check "E-mail Information" and "Picture by Voice Command" settings on the AIBO EYES OWNER SETUP window (page 22).	
•	 The E-mail check interval you set is too long. → Check the "E-mail check interval" setting on the AIBO EYES OWNER SETUP window (page 22) and reduce the length of the interval. You have exceeded the storage limit of the e-mails and you have more than 200 e-mails on the server. → With AIBO EYES, AIBO can only check up to 200 e-mails. Please maintain your server periodically and limit the number of e-mails within the 200 limit. AIBO will not perform the AIBO MAIL command if that e-mail has already been opened and read (deleted) through other means (for example; reading the e-mail through your PC). 	
The audio is interrupted while playing back the message or song.	Interruption may occur when the network is saturated.	

Appendix

- Words understandable to AIBO
- List of codes that can be used for AIBO MAIL commands
- AIBO's eye and tail lights
- Error e-mail examples
- List of "WLANCONF.TXT" parameters





Words understandable to AIBO

AIBO can understand the following words in Autonomous mode or Station mode.

AIBO does not understand what you say when:

- AIBO is emitting sounds or is in motion, because it is difficult for AIBO to understand and hear you.
- AIBO senses it is being carried, or when something is caught in AIBO's limbs, or it is in Jam mode.
- AIBO cannot hear you if its environment is noisy. Please speak to AIBO in a quiet location
- · When the pronunciation of a word is unclear. Try to pronounce each word clearly.

Calling out to AIBO

AIBO

When you call AIBO's name (say "AIBO" to AIBO), it will react and greet you.

Greeting

Shake paw
Hello

Bye-bye

Taking a picture

Take a picture

Follow AIBO's voice guide. (See page 38.)

Send e-mail

AIBO sends the most recent photo it took to the registered user. (See page 38.)

Message playback

One more time

AIBO plays back the last message or song again. (See page 45.)

Recording

Recording mode

You can record messages or Voice Signature by following AIBO's voice guidance. (See page 46.)

Notification of new e-mail arrival

Check e-mail

AIBO will check for new e-mail and will let you know the result.

AIBO in action

Over here, over here

AIBO will come to you, however, in Station mode, it will decline.

Dance

AIBO will perform a dance.



List of codes that can be used for AIBO MAIL commands

The following codes are used with the commands in AIBO MAIL.

- In the body text of AIBO MAIL: Following the command, enter the code (code is shown here in bold type) you selected (for example; "MSG S.SAINTS", "PLAY W9").
- For the songs and words, you can select from either the abbreviated codes (code 1: for example; S1, W1) or the short codes (code 2: for example; S.WEDDING, W.USER1).

PHOTO and WATCH comand parameters

MSG and PLAY comand parameters

Cue

Code

- C1 Countdown (default setting)
- **C2** Get ready, I'm gonna take a picture
- C3 Smile
- C4 Say "Cheese"
- **C5** Gimme a big smile!
- **C6** OK, we're gonna take a picture

SONG

Code1 Code2

- **S1 S.WEDDING**/WEDDING MARCH
- **S2** S.BTHVN/ODE TO JOY (BEETHOVEN SYMPHONY NO.9)
- S3 S.BACH/AIR ON A G-STRING (BACH ORCHESTRAL SUITE NO.3 IN D MAJOR)
- **S4** S.SAINTS/WHEN THE SAINTS GO MARCHING IN
- **S5 S.ENERGY**/ENERGY FLOW
- **S6 S.MIAGETE**/LOVE LIGHT
- **S7** S.NAGISA/ON A SUMMER BEACH
- S8 S.SAKURAZAKA/ SAKURAZAKA (CHERRY BLOSSOM HILL)

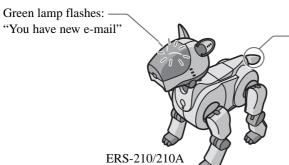
S9	S.SAKURA/KIRSHBLUTE
S10	S.SEASON/SEASON IN THE SUN
S11	S.TSUNAMI/TSUNAMI
S12	S.TRUTH/TRUTH21C
S13	S.FURUSATO/MY HOME LAND
S14	S.XMASEVE/CHRISTMAS EVE
S15	S.NEWYEAR /JAPANESE NEW YEAR SONG
WC	IRD
	PRD Code2
WC Code1 W1*	
Code1	Code2
Code1 W1*	Code2 W.USER1/User recording 1
Code1 W1* W2*	Code2 W.USER1/User recording 1 W.USER2/User recording 2
W1* W2* W3*	Code2 W.USER1/User recording 1 W.USER2/User recording 2 W.USER3/User recording 3
W1* W2* W3* W4*	W.USER1/User recording 1 W.USER2/User recording 2 W.USER3/User recording 3 W.USER4/User recording 4
W1* W2* W3* W4* W5*	W.USER1/User recording 1 W.USER2/User recording 2 W.USER3/User recording 3 W.USER4/User recording 4 W.USER5/User recording 5
W1* W2* W3* W4* W5*	W.USER1/User recording 1 W.USER2/User recording 2 W.USER3/User recording 3 W.USER4/User recording 4 W.USER5/User recording 5 W.LEAVING/I'm gonna leave now
W1* W2* W3* W4* W5* W6 W7	Code2 W.USER1/User recording 1 W.USER2/User recording 2 W.USER3/User recording 3 W.USER4/User recording 4 W.USER5/User recording 5 W.LEAVING/I'm gonna leave now W.NOTYET/I can't leave yet

W11	W.NG/That can't happen
W12	W.THANKS/Thank you
W13	W.SORRY/I'm sorry
W14	W.TOOBAD/Oh, too bad!
W15	W.UNFAIR/Hey. That's not fair!
W16	W.CONGRATS/Congratulations!
W17	W.HANGIN/Hang in there
W18	W.ITSTIME/It's time now, get a move on
W19	W.FAB/You look fabulous
W20	W.LAUGH/Ha, ha, ha
W21	W.HEY/Hey!
W22	W.SCREAM/(Actual screaming voice: sounds frightened)
W23	W.CRY/Sob, sob, sob
W24	W.LOVE/I love it!
W25	W.PEE/Peeing sound
W26	W.DOG/Arf, arf!
W27	W.AIBO/It's AIBO!
W28	W.SONY/SONY
* 13/1	W5 codes are used when you record

^{*} W1-W5 codes are used when you record your unique message. For recording instructions, refer to page 46.



AIBO's eye and tail lights



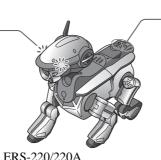
Tail light (Purple):

Lights up: When AIBO is connecting to the e-

mail server.

Flashes: When new email has arrived.

Face-side lamp flashes: "You have new e-mail"



-Tail light (Blue):

Lights up: When AIBO is connecting to the e-mail server.

Flashes: When new e-mail

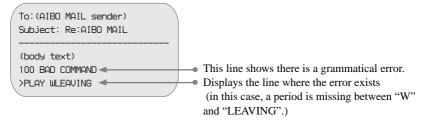
has arrived.



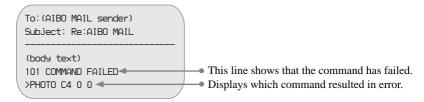
Error e-mail examples

When the following errors occur, AIBO will send an error e-mail to either the AIBO MAIL sender, or the owner's e-mail address.

AIBO MAIL command has a grammatical error.

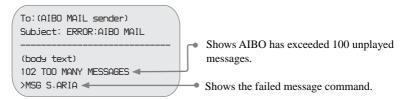


 When AIBO senses it has been picked up, or has something stuck (jammed) between its joints, and will not be able to perform the command.



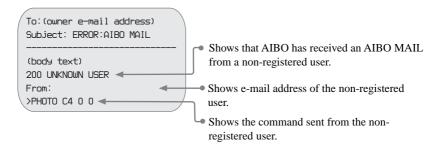
AIBO has more than 100 unplayed AIBO MAILs.

AIBO can only store up to 100 AIBO MAILs. When AIBO's unplayed messages exceeds 100, this error e-mail will be sent. You must wait until a message is played, and re-send your AIBO MAIL again (MSG Command).



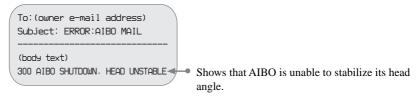
When in Private Mode, AIBO receives an AIBO MAIL from a nonregistered user.

The copy of the command line from the non-registered user



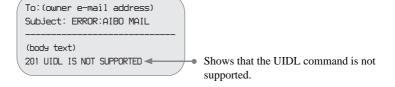
AIBO is unable to stabilize its head (color camera) angle.

When AIBO is in a position where it has difficulties maintaining its head angle and falls over, this error e-mail will be sent, and AIBO will stop moving. Please check to ensure that AIBO's Energy Station is placed on a flat surface, and that AIBO's neck joints are not broken.



• The POP server does not support the UIDL command.

AIBO EYES cannot use a POP server that does not support the UIDL command. If you receive the following error message, verify with your provider whether the POP server supports the UIDL command or not.





List of "WLANCONF.TXT" parameters

The following parameters are for the wireless LAN setting file.

HOSTNAME	Specifies the name of AIBO for the wireless LAN network (8 or less characters).
ESSID	Specifies the name of the wireless LAN network (32 or less characters.)
WEPENABLE	Specifies that the WEP system is used ("1") or not ("0").
WEPKEY	Specifies the WEP key (5 or less characters). It can be used with 64-bit WEP (WEP40).
APMODE	Specifies the wireless LAN mode. Be sure to specify the mode to "1" (connect with Infrastructure Mode) for AIBO EYES.
ETHER_IP	Specifies the IP address for AIBO. Only necessary if "USE_DHCP" is set to "0".
ETHER_NETMASK	Specifies the IP sub-net mask for AIBO. Only necessary if "USE_DHCP" is set to "0".

IP_GATEWAY	Specifies the IP address for the gateway. If the gateway does not exist in the network, specify the same IP address as ETHER_IP. Only necessary if "USE_DHCP" is set to "0".
DNS_SERVER_1	Specifies the IP address for the DNS server. Only necessary if "USE_DHCP" is set to "0".
USE_DHCP	Specifies that the DHCP (Dynamic Host Configuration Protocol) is used ("1") or not ("0"). When this setting is "1", the IP address for AIBO is set automatically.
SSDP_ENABLE	Specifies that the SSDP (Simple Service Discovery Protocol) is used ("1") or not ("0"). When this setting is "1" in the "Universal Plug & Play" mode on Windows XP/Windows Me, an AIBO icon is displayed in the "My Network Place" folder. Double clicking the icon allows you to access the AIBO EYES top page.



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* 4 6 7 5 9 1 7 1 1 *