



Bear's Hand User's Manual

Moments Studio

URL: <http://moments-studio.com/en/>

Mail: support@moments-studio.com

NOTE: This manual does not describe about functions related with TV channel controls, because they works with IO data GV-1394TV/M and GV-1394TV/M2 tuner box which is sold only in Japan.

1 Outline

1.1 Version and Expiration date

version; 0.8.3.X

Expires at : Please check Bear's Hand Web site (expected to be a shareware, but it may later than this date.)

1.2 Requirement

Hardware

Intel Mac or Power PC Mac

OS and QuickTime

OS: OS10.7.5, QuickTime7.6.6 or higher.

Input devices

- Video and audio Devices which is compatible with QuickTime, like DV cam with Firewire.

(ex. home DV movie camera, iSight and Canopus ADVC-100)

- USB cameras that supports Mac OSX

- Digital camera equipped with PTP protocol and capture control. (I tested Canon PowerShot A300 and A70)

Bear's Hand handles devices with no audio output like web cam, but to use device only with audio output (ex. iVoice), another video device (ex. web cam) is needed.

Some users reported Blackmagic intensity Pro board works.

(Currently macam seems not to work)

Capturing

Still Picture

- Output: JPEG

- Multiple capturing to reduce noise reduction in dark place.

Movie

- Output: QuickTime movie (*.mov)

- Codec: (depends on the version of QuickTime)

- Convert output: movie file, 3GPP, movie for 5G iPod and other formats. Expandable with QuickTime plug-in.

Timer

Start and End

Start Date

- date

- day of week

- everyday

Start time, end time, interval and duration of a capturing:

- Once at start time (for still picture)

- From start time to end time (for movie)
- Repeat with defined period between start time and end time (for still picture)
- Repeat with defined duration and period between start time and end time (for movie)
- Repeat with defined period forever (for still picture)
- Repeat with defined duration and period forever (for movie)

Output from capturing

Any combination of followings:

- local
- send mail with attachment
- uploading to FTP server

Movie Converting

When capturing using timer, captured file can be converted.

Movie: convert codec and file format

Still Picture: resize. output is jpeg

Up to four converting actions are available for one capturing output.

Output location of each convert output can be selected from followings:

- local file
- send mail with attachment
- uploading to FTP server
- add to iTunes

AppleScript

Executes scripts at five timing while running timer - before/after capture, After Conv.1 to 3

1.3 Function flow with timer reservation

Next chart illustrates the flow of capturing and converting using timer.

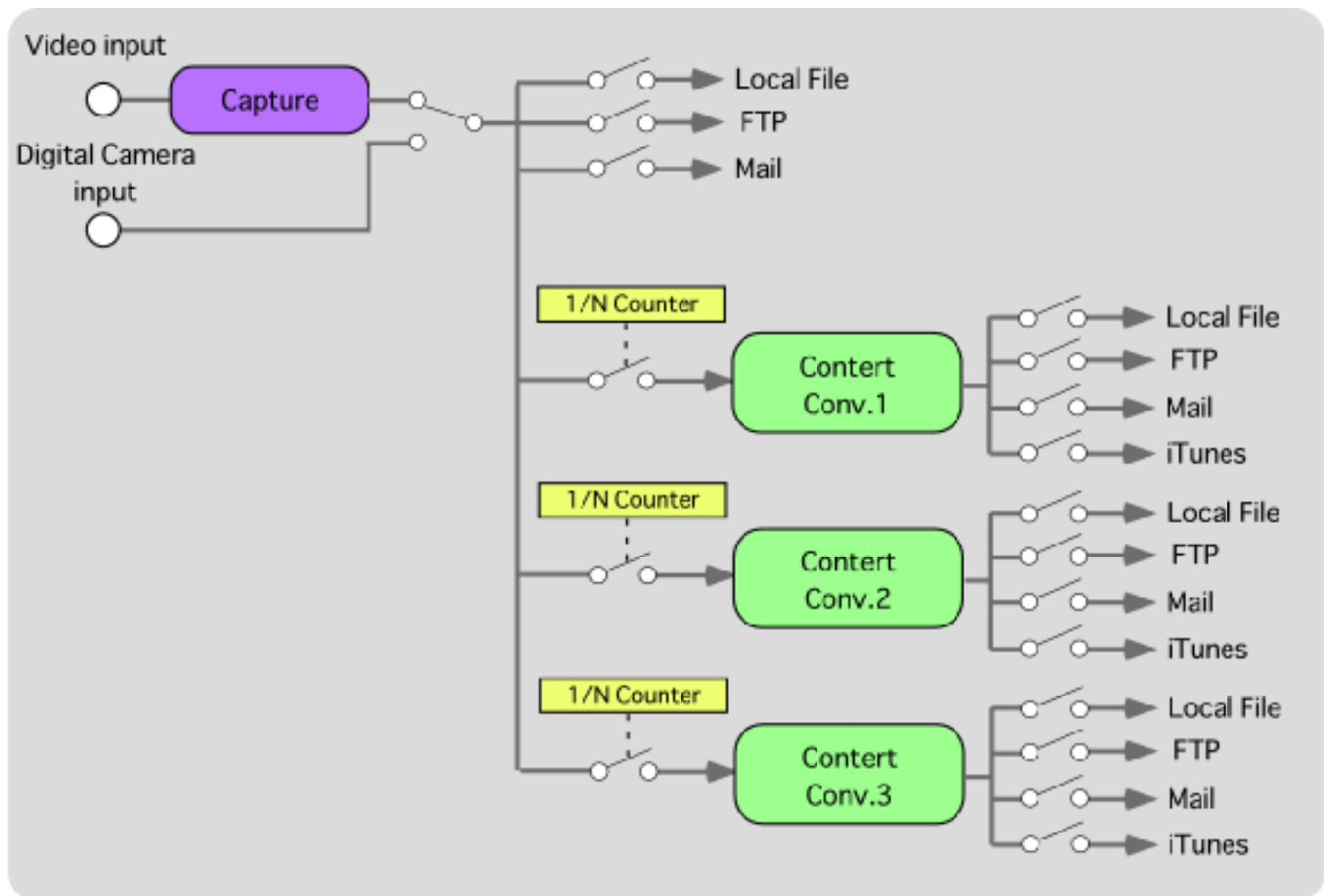


Fig. 1

Bear's Hand has two processes to make movie files, capture and conversion. Capture is a process to get movie file (.mov) or still picture file (.jpg) from video input. Conversion makes movie or 3G files from captured movie files. Because QuickTime can't make 3G output directly by video capturing, movie file is needed as intermediate file even if you need not it. To get best 3G file, loss-less setup for capturing is ideal.

If we don't need local files, Bear's Hand make temporary files and remove them after FTP uploading, sending mail or movie conversion.

2 Installation and uninstallation

2.1 To install

Put the file with "Bear's Hand" icon into your application folder.

2.2 To uninstall

Move the file with "Bear's Hand" icon in your application folder and "(HOME)/library/Preference/BearsHand.plist" into trash.

3 Launching application

3.1 To launch application

- (1) Connect video source device (ex. DV camera) is activated to Mac.
 - (2) Launch Bear's Hand.
- Be sure that no other heavy task (ex. Backup, Software Update or Web) is working.
An obstacle may be caused depending on Mac's model.

3.2 Saved Preferences

After launching, following setup is set up similarly to that of last quit time.

- Picture size (If using full screen, the size before entering full screen is applied)
- Window location on screen
- Monitor volume
- Settings in "**Preference**" menu and Settings under "**Option**" menu.

After resizing window if needed, input audio and video monitoring will begin.

NOTE

(1) Because timer reservations revives after launching Bear's Hand, timer will be activated when timer is reserved at last time.

If you want to stop timer, push the darkened button with "**RESERVED**" label.

(2) If you update QuickTime to the latest version after exiting Bear's Hand last time, Bear's Hand clears all of setups depending of QuickTime (ex. video, audio and converting setups) in following step:

1. Launch Bear's hand
2. Bear's Hand shows the caution dialog
3. Push "**Exit**" button on the dialog.
4. Launch Bear's Hand again. Here All video, audio and movie converting setups are cleared to default.

4. Controls on Main Window

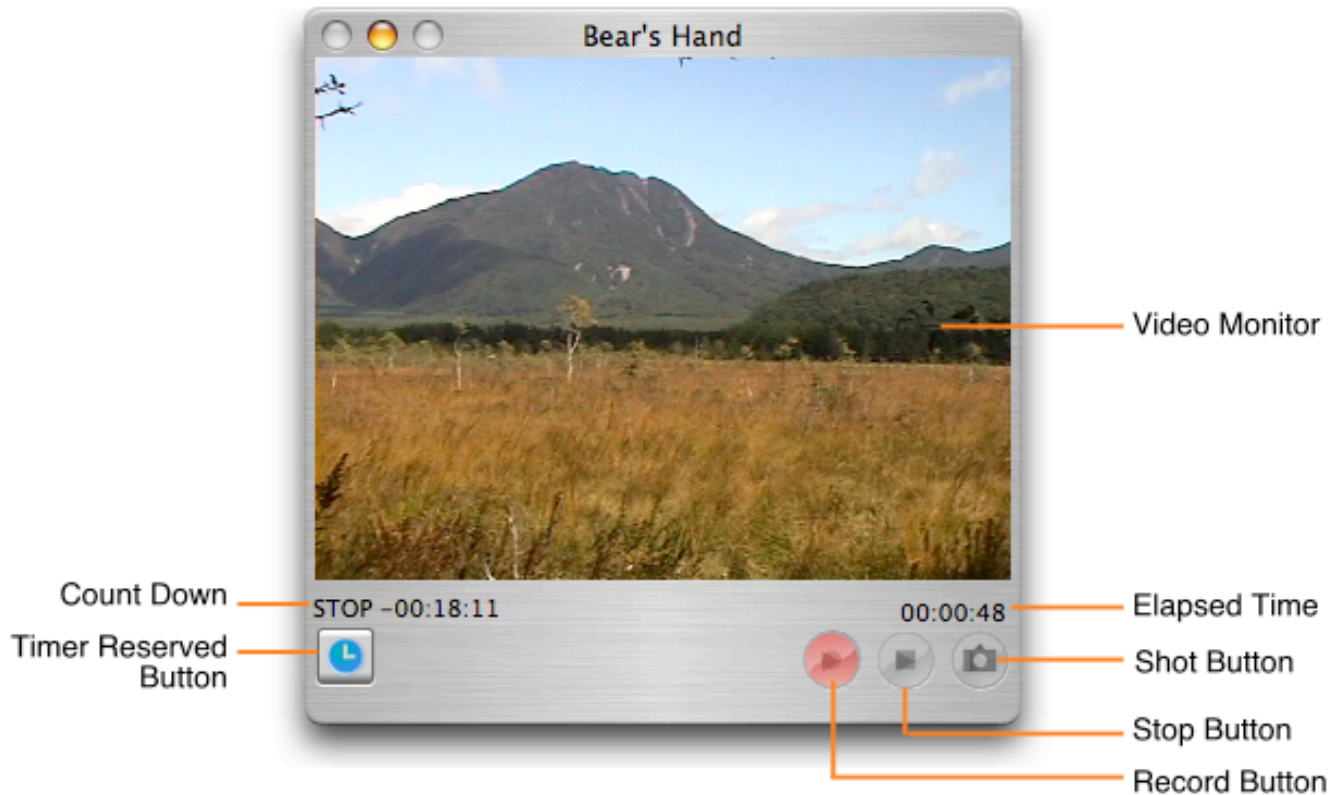


Fig. 2

4.1 Video Monitor

Monitors video input. Frame rate depends on that of video setting. The picture size of output movie file is same as this monitor size. Capture output size is same as the size of this view.

4.2 Record Button

Starts the movie capturing. Output filename is defined by current date.

NOTE

To capture movie, disk room space must be more than 500MBytes. If disk space goes lower than 500MBytes while capturing movie, Bear's Hand shows a caution dialog *"The room of output device is getting too small."*, and stops capturing.

4.3 Stop button

Stops movie capturing.

4.4 Recording Indicator

Indicates that movie capturing is running.

4.5 Shot Button

Capture one still picture. Output filename is defined by current date.

4.6 Reserved Button

This button has two functions:

1. While being darkened, it indicates that timer is reserved
2. Toggle timer reservation to On/Off.

4.7 Count Down

Counts down until next start/stop capturing while timer is running.

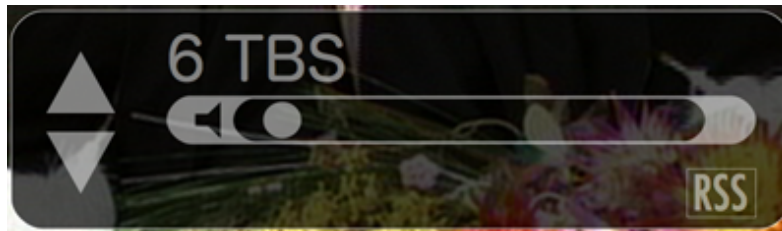
4.8 Elapsed Time

Elapsed time of movie capturing.

4.9 Monitor Volume and Transparency

Moving mouse on monitor display, a control panel appears and you can setup volume and transparency. Moving mouse outside the panel, the panel disappears.

On fullscreen mode, following panel will be displayed, upper and down button, channel name is available when io data GV-1394TV/M, M2 is connected.



Pressing RSS button, RSS news will be shown. And clicking on RSS display when showing a news, the web site will displayed on Web browser.
Refer to "8. Apple Remote Control".

5. Menu

5.1. Bear's Hand

5.1.1 Preferences...

5.1.1.1 [Output Files] Tab

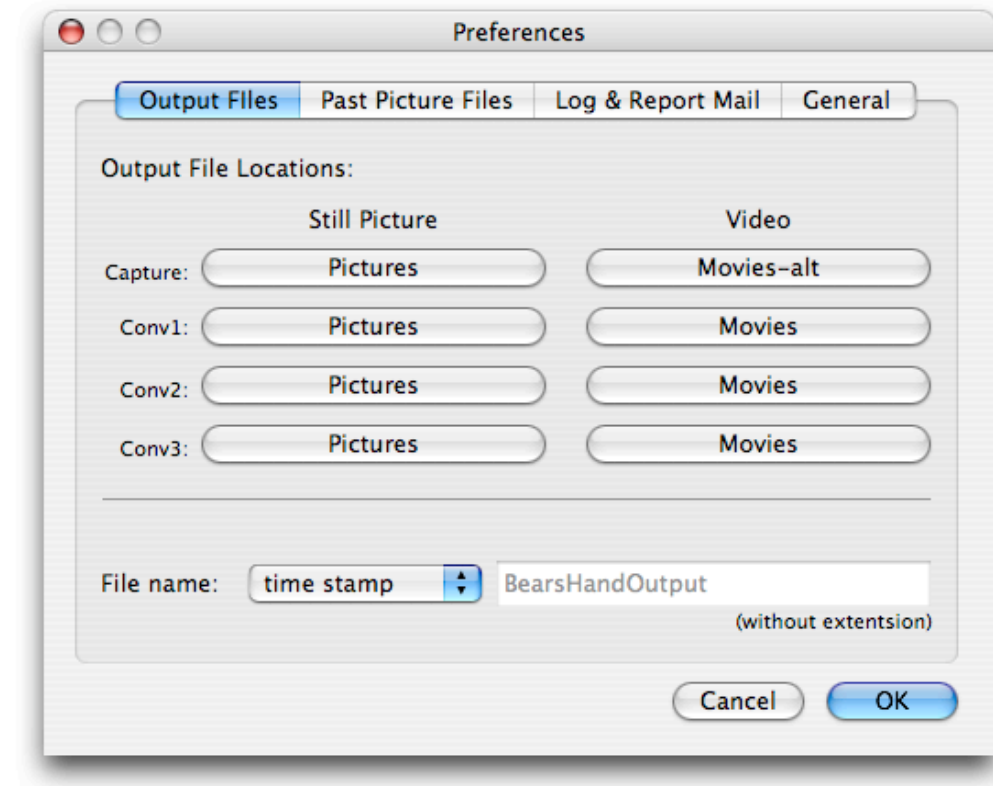


Fig. 3

Select capture output folder and convert output folder by clicking the buttons each button.

It is recommended that all folders are different.

Even if local output is not needed (ex. only FTP upload), Bear's Hand use these setups for intermediate files.

All Button shows folder's name on it.

Still Picture: Still picture capture output locations. Default is (HOME)/Pictures

Video: Movie file locations. Default is (HOME)/Movies

Capture: Capture output location

Conv1: conversion #1 output location

Conv2: conversion #2 output location

Conv3: conversion #3 output location

Caution: select different folders for "Capture", "Conv1", "Conv2" and "Conv3", or sometimes output overwrites existing file.

File name:

Defines capture how output file is named while timer recording.

- Time Stamp

File name consists of time stamp numbers.

Format: YYYYMMDD-HHMMSS.(extension)

(ex. "20040101-103000.mov")

- Fixed Name

File name is always same. So new capture overwrites previous file.

Fill output file name in text field without extension. Extension (.mov or .jpg) will be added automatically.

- Serial Number

File name consists of time serial numbers. Serial number is 8 digit numbers, from 00000001 to 99999999, adding extension.

After timer starts, file name starts with 00000001 followed by 00000002 and so on. After 99999999, it go back to 00000001.

if same named file exists, it will be removed.

NOTES:

- To make live camera web site, if Bear's Hand and Web server are running on the same macintosh, or you want to use .Mac HomePage, select "fixed name" so that users can always watch file with same name.

- When sending file by mail or FTP, spaces in file name will replaced to '_' (under score).

5.1.1.2. [Past Picture Files] Tab

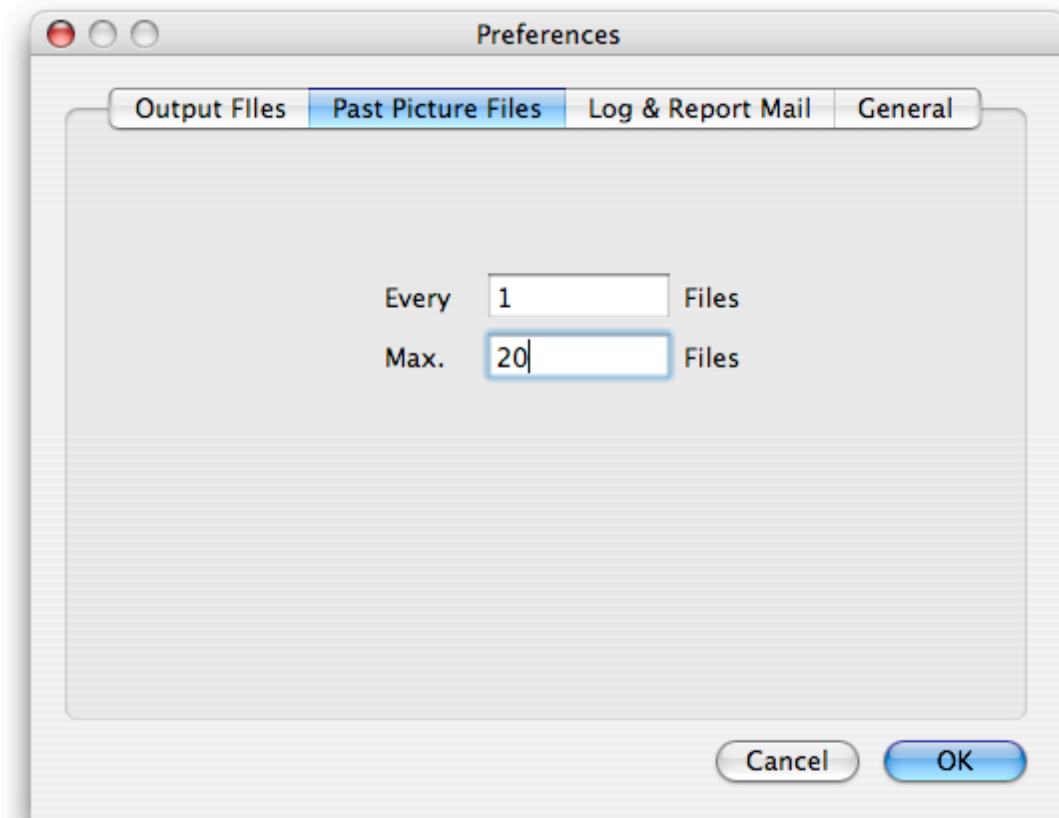


Fig. 4

This enables showing past still pictures on web cam home page, You can show limited number of past pictures, from newest one to oldest one. When a new past picture is made, oldest past picture will be deleted and other past files is renamed so that each file name from oldest to newest are constant.

This function

Each:

Defines how often past file will be left, 1 for every captured picture, If capturing every 1 minute and set "Each" to 60, past file will made once an hour.

Max.:

Number of past files. Maximum limitation is 9999.

Each past file's name has a number before period. Number of digits depends on "Max.". if "Max" is 10, number of digits is 2.

(ex. If file name on local or FTP server is abc.jpg and "Max." is 10, file names of past files are "abc01.jpg", "abc02.jpg", ..., and "abc10.jpg".)

Example

Time interval: 5 min.
 File name on local or FTP server: abc.jpg
 Each: 2 files
 Max.: 4 files

Fig. 5 illustrates pictures on web page at every five minutes from 12:00 in the case of the above-mentioned setup.

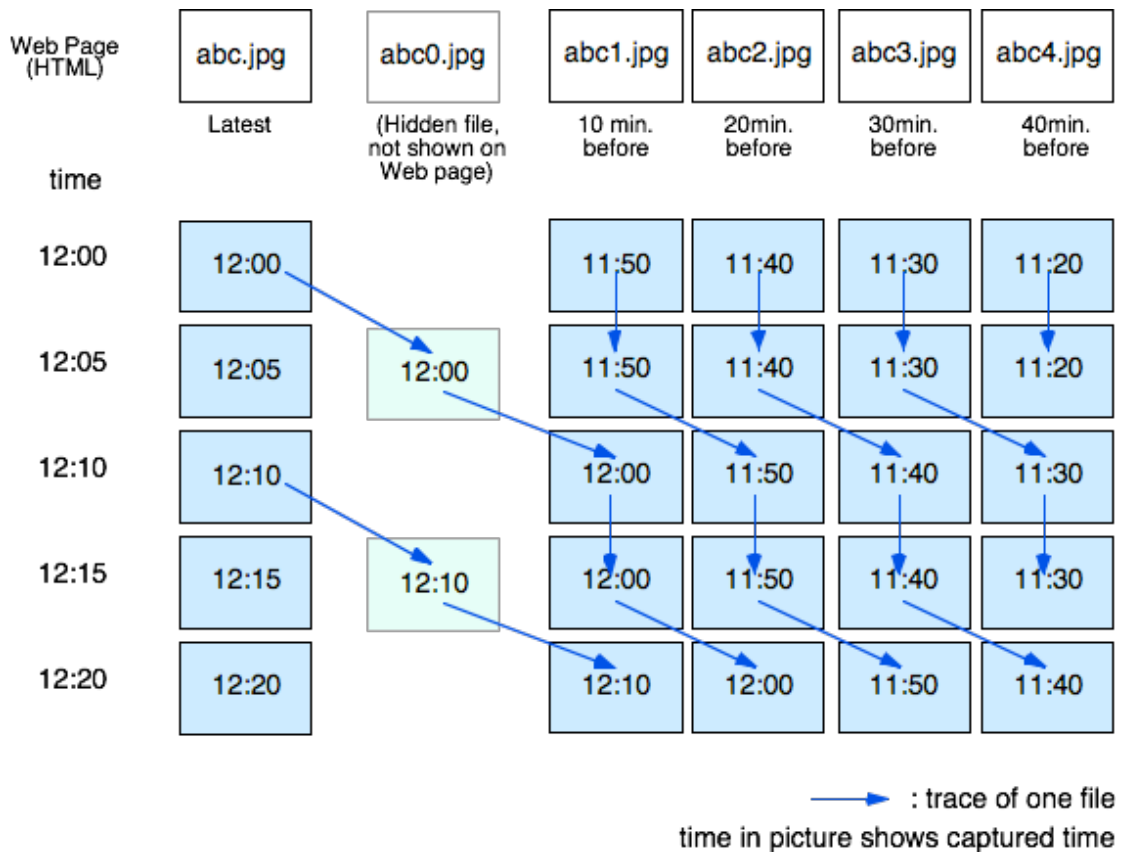


Fig. 5

A picture made at 12:00 will be renamed to "abc0.jpg" to become a hidden file that is not displayed on Web page but stay on Web server. And at 12:10, it will be renamed to "abc1.jpg" to be displayed on Web page.

Notes:

- Past file is available for still pictures.
- To use past files on local output, select File name to "Fixed name" on [Preference] -> [Output Files] Tab.

5.1.1.3 [Log & Report Mail] Tab

Setups for logging while timer is running. While timer is running, displaying a dialog to show a error report should interrupt timer, so Bear's Hand use logging to know error or cautions. To know error on remote mac, you can use report mail.

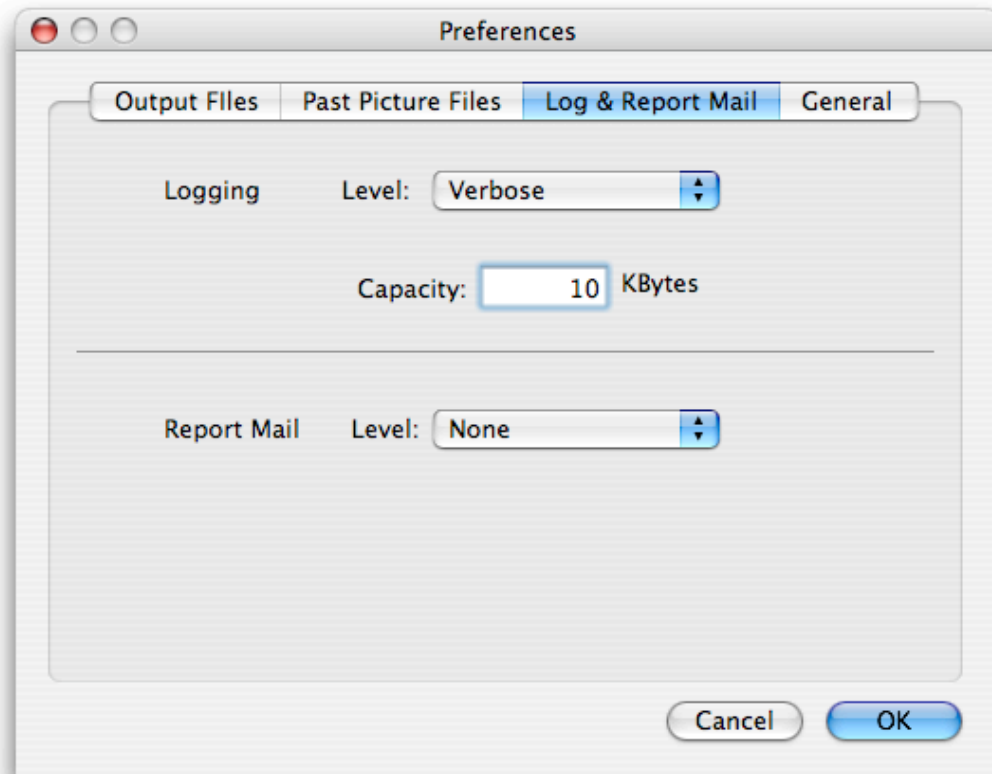


Fig. 6

Logging has four levels as followings:

- | | |
|---------|---|
| Error | Shown with red characters on logging window. A process could not executed correctly because of some error. |
| Caution | Shown with orange characters on logging window. A process could executed correctly but some trouble may be assumed in future. |
| Normal | Shown with orange characters on logging window. A process could executed correctly. |
| Verbose | Shown with green characters on logging window. Detailed logging. Especially in case of trouble shooting of FTP, you can know all transaction between FTP and mac. |

Logging

Level: Logging level on logging window.

None	No logging
Error	Reports <i>error</i> level
Error and Caution	Reports <i>error</i> and <i>caution</i> level
All	Reports <i>error</i> , <i>caution</i> and <i>normal</i> level
Verbose	Reports <i>error</i> , <i>caution</i> , <i>normal</i> and <i>verbose</i> level

Capacity: character capacity in logging window.

Report Mail

Level:

Select level of report mail. Each selection's functions are same as level of logging level.

Message sent by e-mail are same as that of logging window. One mail has only one line message. So verbose is not selectable to avoid sending to many mail.

About easy link in report mail

Bear's Hand make it easy to download FTP uploaded file with link in report mail. Selecting **Report Mail** to **All**, email like following will be sent after FTP upload.

FTP upload to
"ftp:(longinname):(password)@ftpserver.com/movieupload/20060125-062757.m4v" (size: 1.312 Mbytes) completed.

Clicking the link in email, download begins if you use Mail.app and Safari. You need not have any FTP client app.

This enables you receiving captured file outside home via FTP server. But FTP server must have enough large storage, In most cases, at least few hundred MB.

5.1.1.4 [General] Tab

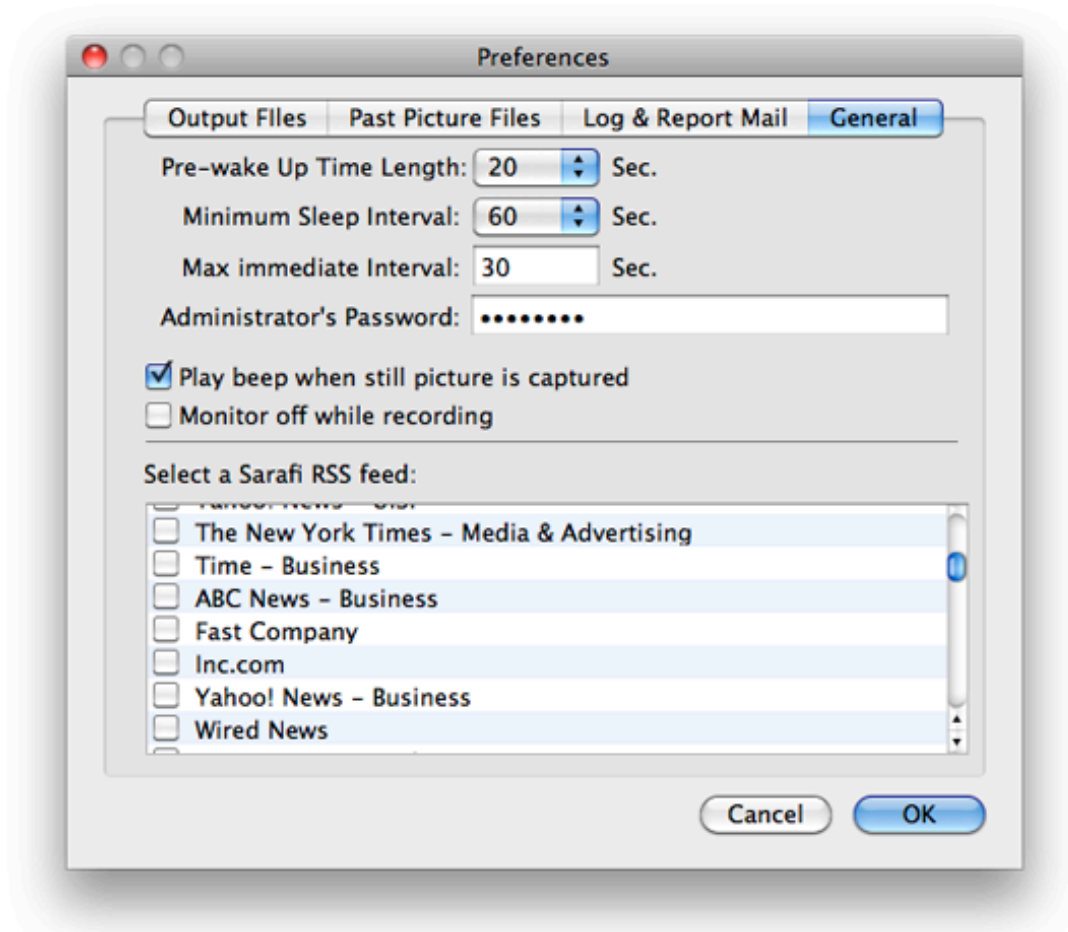


Fig. 7

To reduce power consumption, fun noise and heat radiation, Bear's Hand can sleeps Mac while it is waiting for capturing after long interval. This function is useful if time interval of capturing is more than one or two minutes in most cases. And if check box of "*Put the hard disk to sleep when possible*" in [**Sleep**] tab of [**Energy Saver**] in System Preferences is checked and HDD is sleeping, Bear's Hand can wake HDD before starting capturing to ensure reserved start time of movie capturing. If this function is not needed, select Minimum Sleep Interval to "Off". This function works with timer reservation.

Pre-wake Up Time Length: This defines wake up time from system sleep or HDD sleep prior to starting capture. Select safe time length that system or HDD takes to wake up.

Minimum Sleep Interval: If time interval to next capturing is longer than this interval, Bear's Hand put Mac to sleep. If "Off" is selected, Bear's Hand doesn't put Mac to sleep.

CAUTION:

Macbook Air (late 2010) needs 30 seconds to sleep, so while going to sleep, you should not operate to avoid unsupposed behavior. For other Macbook models, same caution may be needed.

Max immediate Interval:

If time interval between two timer reservation is shorter than this interval, Bear's Hand process post-proceesings (mail, FTP, convert, iTunes) immediately after finishing recording by timer. Otherwise, post-processings will be postponed until completion of all timer recording. This parameter ensures starting timer recording in time after short interval after previous timer recording which requires long time processing like convert, mail, FTP. You should set this interval considering time required for post-processes. Longer interval is safer. If you don't use post-process, leave this as default (=30 sec.).

Administrator's Password:

Administrator's password.

IMPORTANT: This text input field does not have error check or retry process, so enter correct password.

Select a Safari RSS feed:

Select one or more RSS site list. The list is made by bookmark of Safari. RSS is displayed at fullscreen mode.

5.2. [Capture] Menu

5.2.1. Record

Start movie capturing. Output file name is defined by time stamp and location is decided by [Bear's Hand] -> [Preference] -> [Output Files] tab. Same function as [Rec] button on main window.

5.2.2. Record to File...

Start movie capturing, after prompting you for a location to save.

5.2.3. Stop

Stop movie capturing. Same function as [Stop] button on main window.

5.2.4. Instant Stop Timer Rec.

Select record time length by sub menu and start movie capturing. Output location is decided by [Bear's Hand] -> [Preference] -> [Output Files] tab.

5.2.5. Stop

Capture a still picture. Output file name is defined by time stamp and location is decided by [Bear's Hand] -> [Preference] -> [Output Files] tab. Same function as [Shot] button on main window.

5.2.6. Shot to File...

Capture a still picture, after prompting you for a location to save.

5.3. [Window] Menu

5.3.1 Video Size

Select picture size of capture and monitor from sub menu with *width x height*. A size menu that indicates same size as input has "**(Source)**" mark after size indication.

NOTE

1) If you Select "DV/DVCPRO - NTSC" for Compression Type in [Option>Video Settings...] Panel, 720x480 is recommended, because QuickTime Player 7.1 or later plays 720x480 movies recored by Bear's Hand with size of 640x480. If you select 640x480, it will played in size 568x480 which shows narrow picture.

TV standard:

Selecting NTSC or PAL, size dimensions on Video Size menu changes following the selection.

About Full Screen:

Because in full screen mode you can't use menu, use short cut key or click screen to leave from full screen. After clicking on screen, the window before full screen appears again.

5.3.2 Floating

Switch main window between normal and floating window.

5.3.4 Show Log Window

Show log window. The log window shows logging report from time reservation. "Clear" button on log window clears all logging.

5.4. [Option] Menu

5.4.1 Timer Settings

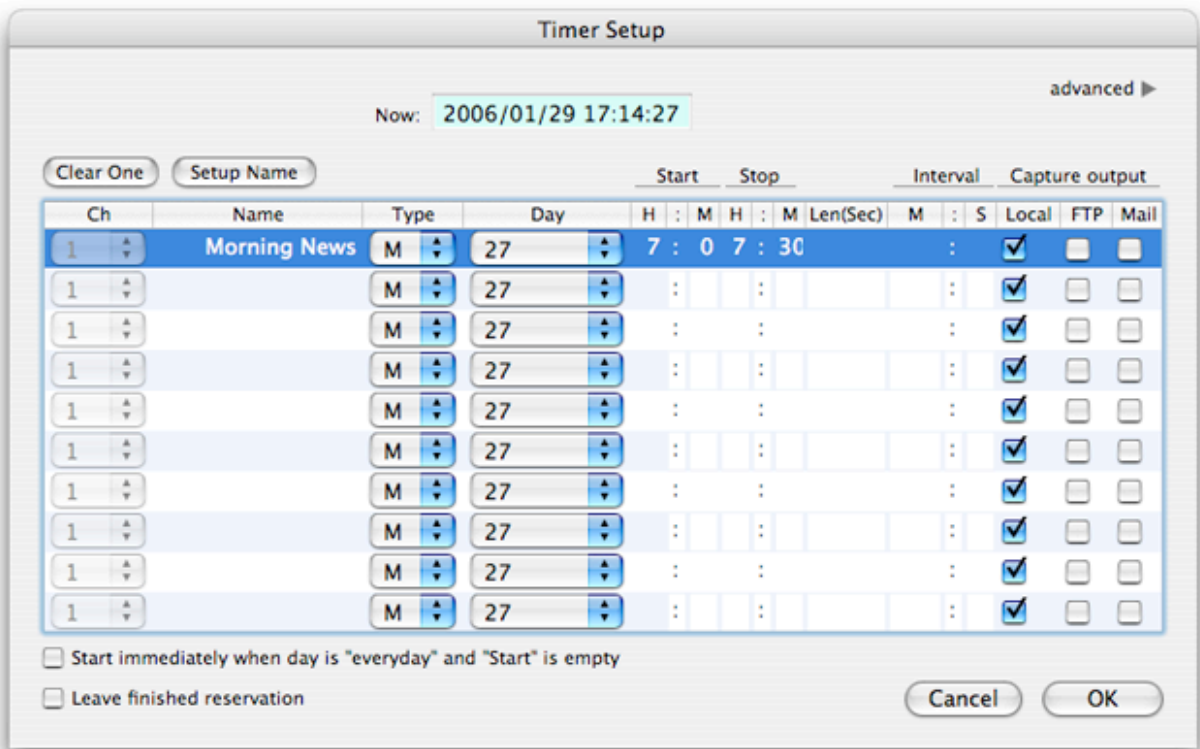


Fig. 8

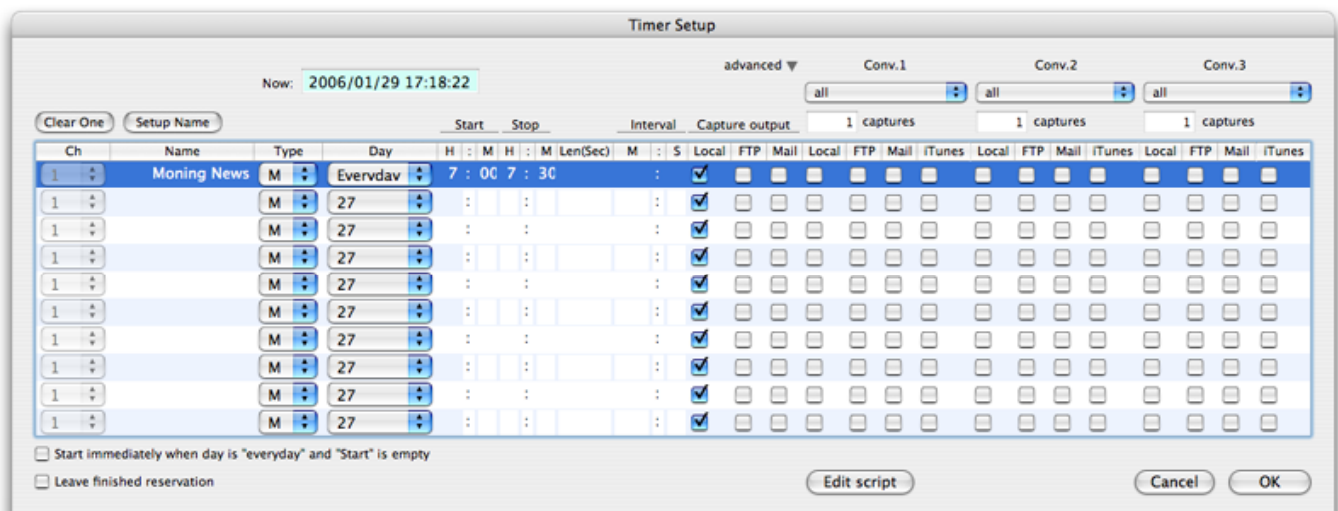


Fig. 9

Up to ten reservations can be registered. Each row stores one reservation. It is not needed to fill all columns in row. To open Conv.1 to Cont.3 setups, click triangle besides "**advanced**".

IMPORTANT: After entering string or number in any column, be sure to type return, tab or click on another column to ensure entering.

How Timer Works:

- (1) After clicking **OK** button, timer searches the earliest one in ten reservations and waits for the first one. "**Reserved**" button on main window will be darkened.
- (2) After completing reservation in one row, it's setups will cleared, and timer searches next earliest reservation and waits.
- (3) If Day is "everyday", the reservation goes forever and no other reservation will be processed.

Clear One:

Clears settings of selected line.

Setup Name:

Shows dialog for selected line like Fig. 10. Double Clicking Name column in table also show same dialog.

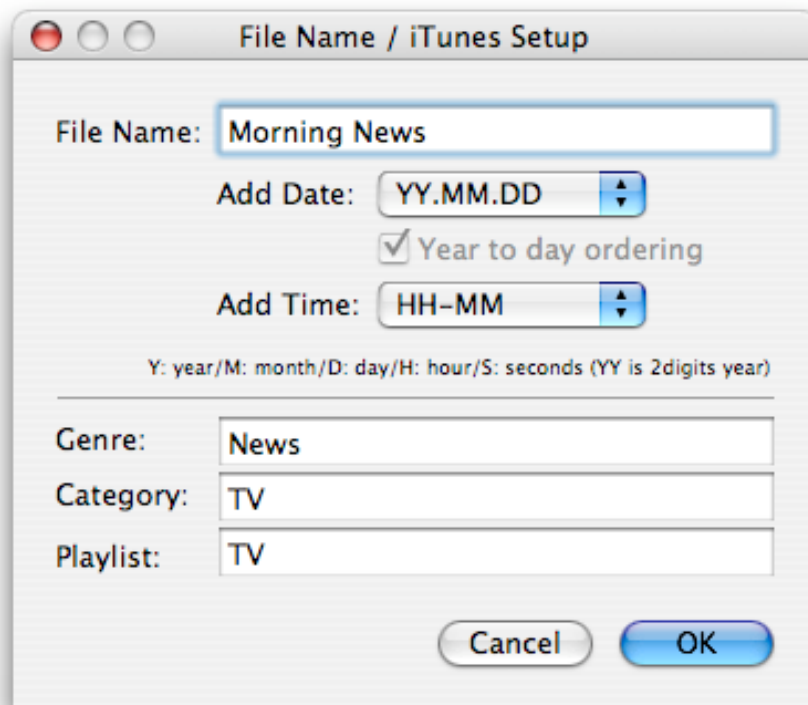


Fig. 10

File Names: same as Name in fig.9. This overwrites "File name:" setup in [Bear's Hand] -> [Preferences...] -> [Output Files] Tab.

Caution: Output filename must consist of lesser or equal to 31 characters. So this dialog has limiter for File Name. Max character length of this text field varies following "Add Date:" and "Add Time:" selection.

Add Date: adds date after file name. The ordering of year, month and day according to your setup in formats tab in "System Preferences -> International"

Year to day ordering: Forces date format to year to day order. This selector is available when language environments that use Month/Day/Year or Day/Month/Year order are selected.

Add Time: adds time after file name.

Genre, Category, Playlist. Setup parameters for iTunes for individual timer reservations. These overwrites same setups in dialog "Option"->"Converter Settings"->"iTunes" Tab.

Ch:

(this is for Japanese IO data GV-1394TV/M and TV/M2 tuner box)

Type:

Capture type. *S* (Still) or *M* (Movie).

Day:

Capture start day

Start:

Capture start time (H:M, hour and minutes). Be sure to enter 0 if zero. And this also defines start time of all interval captures.

Stop:

Capture end time (H:M) or end time of interval capturing. Be sure to enter 0 if zero. If this time is earlier than start time, capture stops at end time of next day. And this also defines end time of all interval captures.

Len(Sec):

Time length of movie capture.

If you fill this and stop is empty, Record duration is defined by Start and length.

Interval (M:S):

Time interval of each capture

To enable interval capture, follow these:

(1) To specify start and end time of all interval capture, fill both **Start** and **Stop**. If you don't define start and end time, select **Day** to "everyday" and leave **Start** and **Stop** blank. Then capture goes forever.

(2) If **Type** is **M** (Movie), fill **Len** to define length of each interval capture. If

Type is **S** (Still), **Len** is ignored.

(3) Fill **Interval**

This defines interval of each capture start time. (not end to start time length of movie capture).

Local:

Enables local output of captured movie file (.mov) or still picture (.jpg).

FTP:

Enables uploading captured file to FTP server.

Mail:

Enables sending captured file by mail.

Clear:

Clear entries in row.

(Conv1~3) "all/every" Popup Menu:

all: converts all captures

every: converts every N captures. N is defined in "**captures**" input under popup menu

(Conv1~3) Local:

Enables converted movie file to output to local.

(Conv1~3) FTP:

Enables converted movie file to FTP upload.

(Conv1~3) Mail:

Enables converted movie file to mail.

(Conv1~3) iTunes:

Enables converted movie file to add to iTunes.

Start immediately when day is "everyday" and "Start" is empty

If this is selected and **Start** (H:M) and **End**(H:M) are blank, capture starts immediately after clicking OK.

If this ckeck box is not selected, capture starts at 0(zero) second.

Leave finished reservation

Leave finished reservation for next time usage. Without checking, finished reservation will be deleted from panel.

Edit AppleScript

Start editing AppleScript. You can make independent scripts for #1 to 10 reservations. To edit AppleScript, select a line and push "Edit script". About AppleScript, see section "**6. AppleScript**" for detailed description.

After clicking OK, timer start. If you want to stop timer, press **[RESERVED]** button (clock icon) on main window. To restart timer, press **[RESERVED]** button again.

Setup example

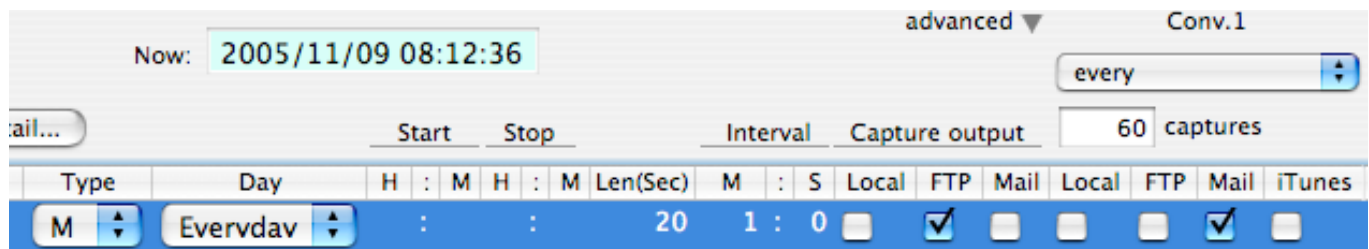


Fig. 11

In case of Fig. 11 and two check box on panel is off, after clicking OK button, Bear's Hand works like followings:

- 1) Starts movie capturing at 8:13, 8:14, 8:15,... (forever)
- 2) Each capture duration is 20 Sec. and it's output is into temporary movie file. (Because "**Local**" of "**Capture Output**" is off, capture output is temporary file.)
- 3) After capturing, movie file will be uploaded by FTP.

3) at 8:13, 9:13, 10:13, ...(forever) movie file will be converted to temporary file. (Because "**Local**" of "**Conv.1**" is off, conversion output is temporary file.)

4) Converted file will be sent by mail.

5) After sending mail, temporary movie file and converted file will be removed.

You can make movie live cam updating it every 1 minute by uploading by FTP, and monitor it by mobile phone receiving e-mail every one hour by converting movie to 3G.

Following example assume that current day and time is, Jan. 15, 2003 9:00

Capture movie once

Capture from Jan. 20 10:00 to 11:00.

Type: M / day: 20 / Start: 10:00 / Stop: 11:00 / Len: (blank) / Interval: (blank)

Capture start from Jan. 20 10:00 for 90 seconds.

Type: M / day: 20 / Start: 10:00 / Stop: (blank) / Len: 90 / Interval:

(blank)

Capture from Jan. 30 23:30 to Jan. 31 0:30

Type: M / day: 30 / Start: 23:30 / Stop: 0:30 / Len: (blank) / Interval: (blank)

Capture from Jan. 25 9:00 for 24 hours.

Type: M / day: 25 / Start: 9:00 / Stop: 9:00 / Len: (blank) / Interval: (blank)

Interval Movie Capture

From Jan. 20 10:00 to 11:00, capture 10 seconds every 3 minutes.

Type: M / day: 20 / Start: 10:00 / Stop: 11:00 / Len: 10 / Interval: 3:00

Interval Movie Capture everyday

From 9:00 to 17:00 everyday, capture movie for 10 seconds at every 15 minutes.

Type: M / day: everyday / Start: 9:00 / Stop: 17:00 / Len: 10 / Interval:

15:00

Interval capture forever

From now, capture still every 30 minutes.

Type: S / day: everyday / Start: (blank) / Stop: (blank) / Len: (blank) /

Interval: 30:00

5.4.2 FTP settings

5.4.2.1. [Uploading] tab

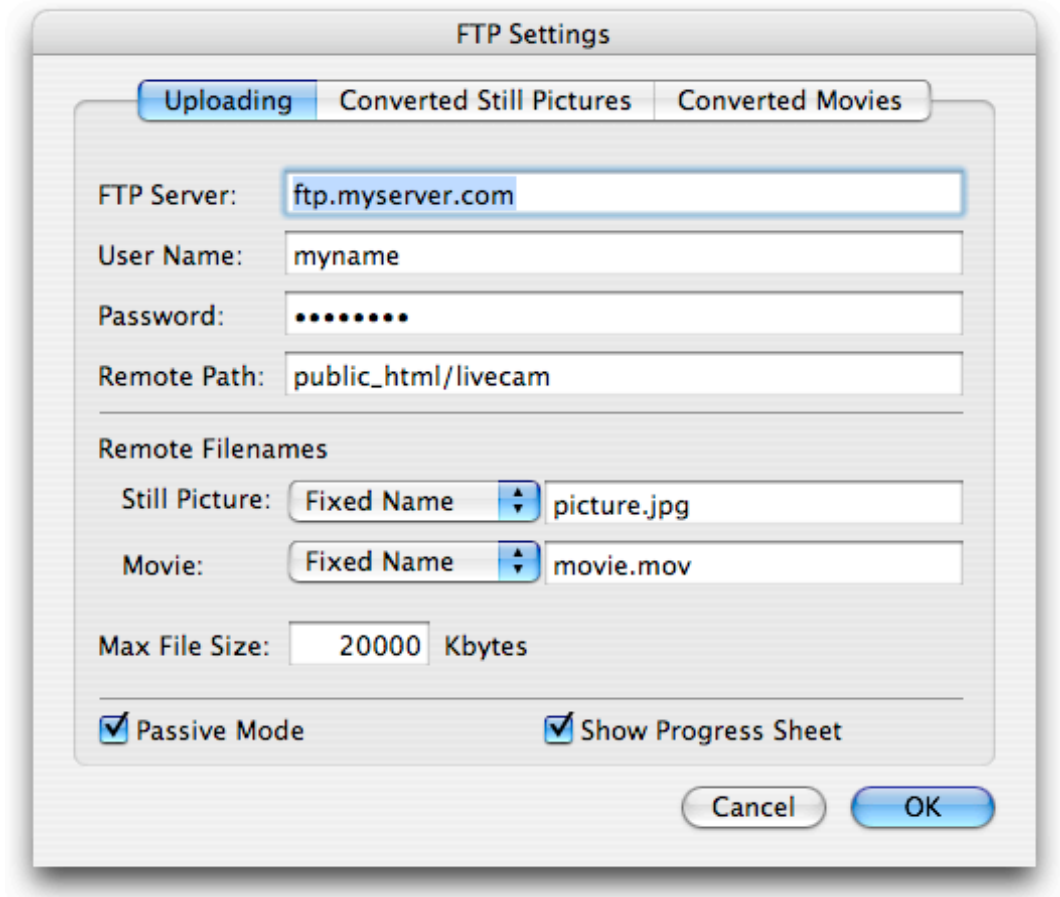


Fig. 12

FTP Server: Address of FTP server.

User Name: User name to login FTP server.

Password: Password to login FTP server.

Remote Path: destination directory for captured movie or still picture files. Directory must be made on server in advance.

Remote Filenames

Still Picture: Defines name of JPEG file (*.jpg) on server.

Same As Local: Uploaded file will named that is same as local.

Fixed Name: Define name using text field.

In this case, "public_html/honey/picture.jpg" is path to the uploaded file on FTP server. Extension is required.

Movie: Defines name of QuickTime movie file (*.mov) on server.

Same Ad Local: / Fixed Name: (refer to the explanation of **Still picture:**)

In this case, "/public_html/honey/movie.mov" is path to the uploaded file on FTP server. Extension is required.

Max File Size:

Define the maximum size of file to be uploaded. If file size exceeds this size, file will not be uploaded.

If you don't want to use this parameter (ie. unlimited), leave it blank or 0.

Passive Mode: click to enable passive mode

Show Progressive Sheet: Click to enable showing the sheet showing FTP upload progress. Uncheck this if you don't like bouncing Bear's Hand icon in dock.

5.4.2.2. [Converted Still Pictures] Tab

This tab contains Setups for FTP uploading of converted still picture file.

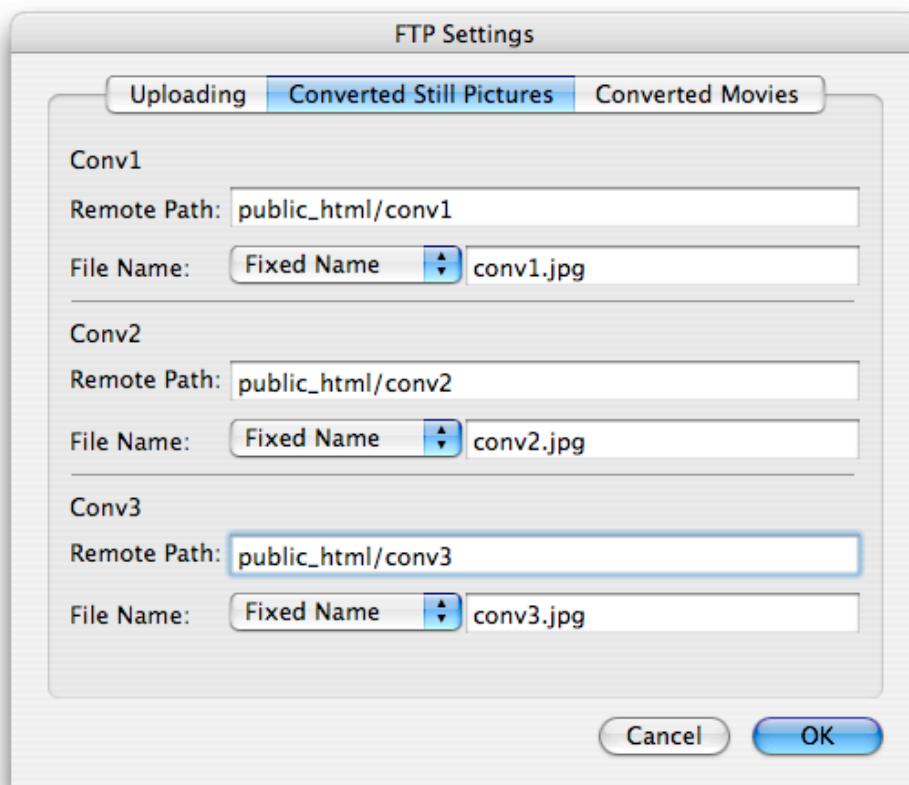


Fig. 13

Remote Path:

Directory on FTP server. Directory must be made on server in advance.

File Name:

To understand popup menu **Same As Local / Fixed Name**, refer to description of same popup menu in **Uploading** tab. If you select **Fixed Name**, name in text field must end with extension (".jpg").

5.4.2.3. [Converted Movies] Tab

This tab contains Setups for FTP uploading of converted movies.

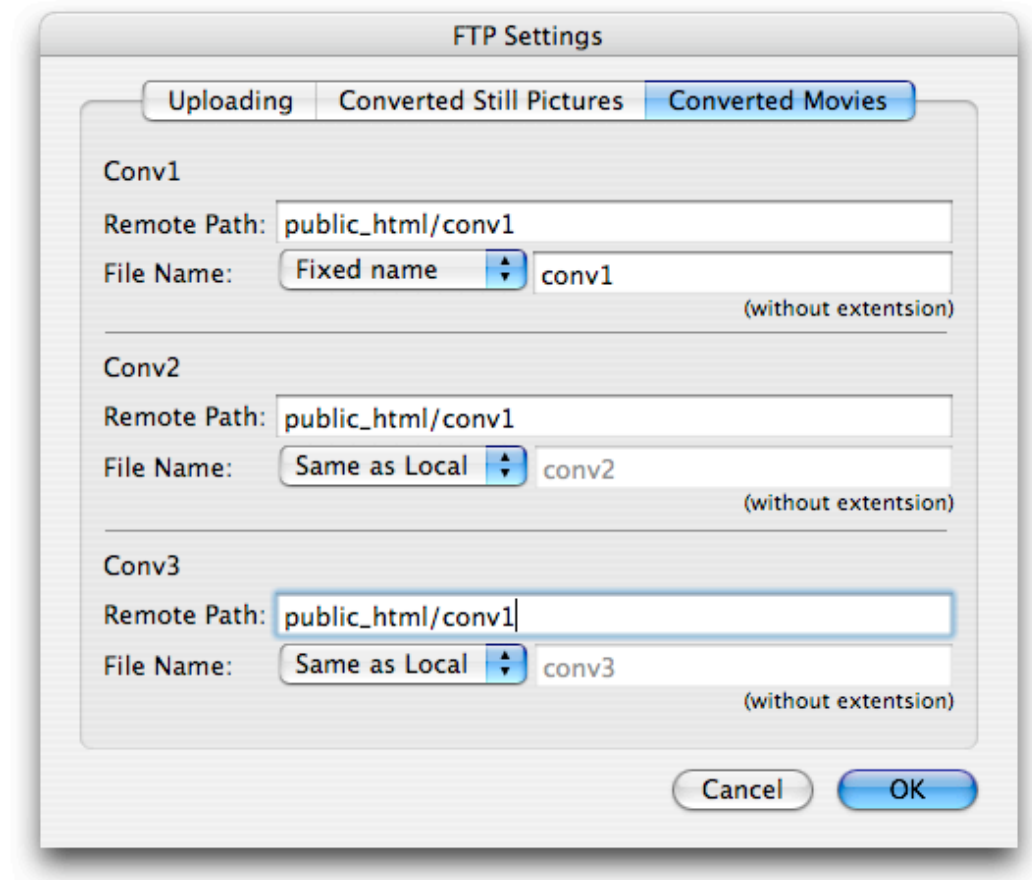


Fig. 14

Remote Path:

Directory on FTP server. Directory must be made on server in advance.

File Name:

To understand popup menu **Same Ad Local / Fixed Name**, refer to description of same popup menu in **Uploading** tab. If you select **Fixed Name**, name in text filed must be without extension. Extension will added according to output format of conversion (ex. .mov, .3gp, 3g2).

5.4.3. [Option] -> [Mail Settings...]

5.4.3.1. [Server] Tab

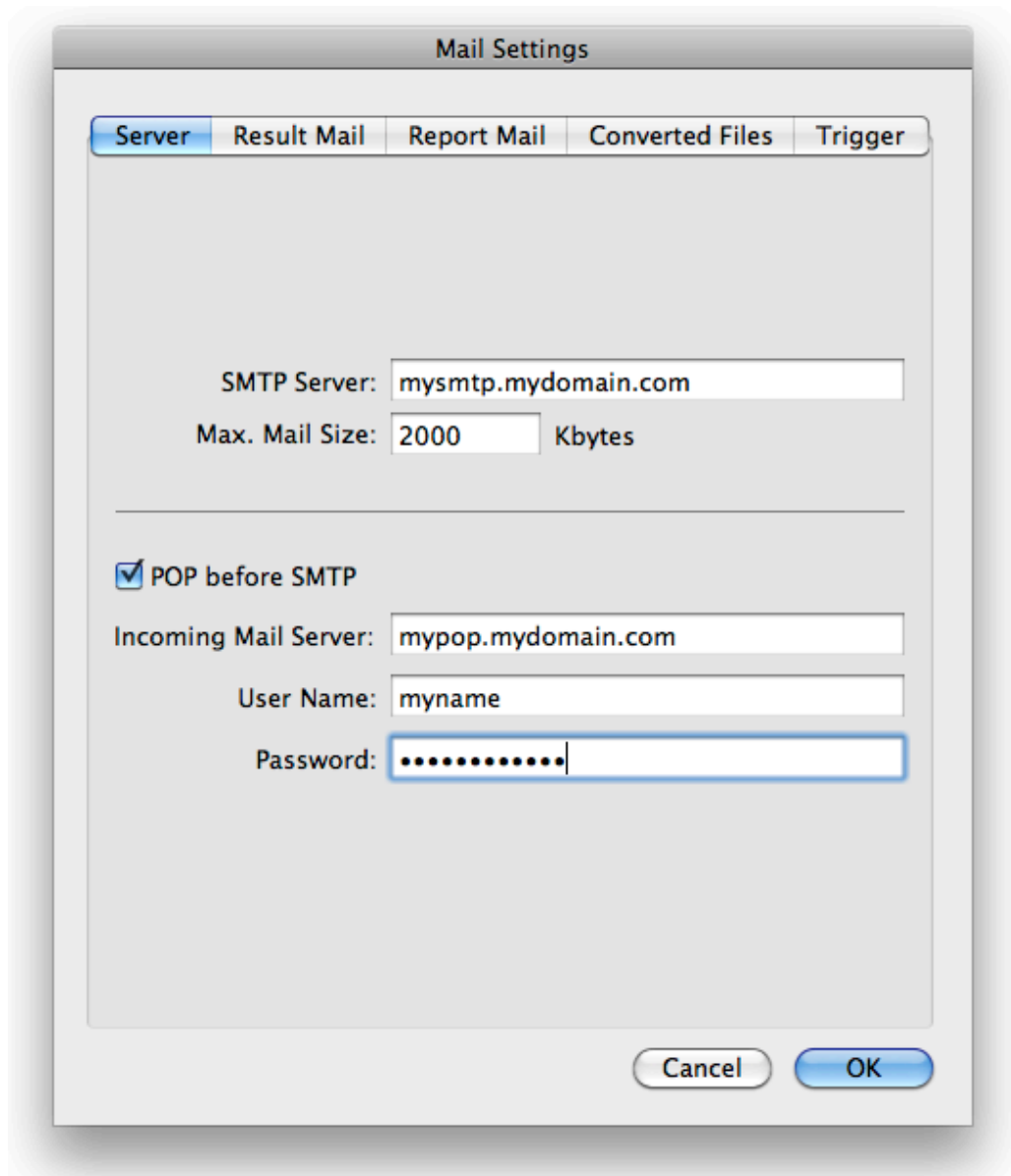


Fig. 15

SMTP Server: address of SMTP server

Max. Mail Size: Mail size limitation. If Mail exceeds this size, mail will not be sent. If no limitation, leave this 0 or blank.

POP before SMTP: Check to use POP before SMTP

Incoming Mail Server: POP Server address

User Name: User name to POP Server

Password: Password for POP Server

5.4.3.2. [Result Mail] Tab

Setups for e-mail that attaches captured movie or still picture.

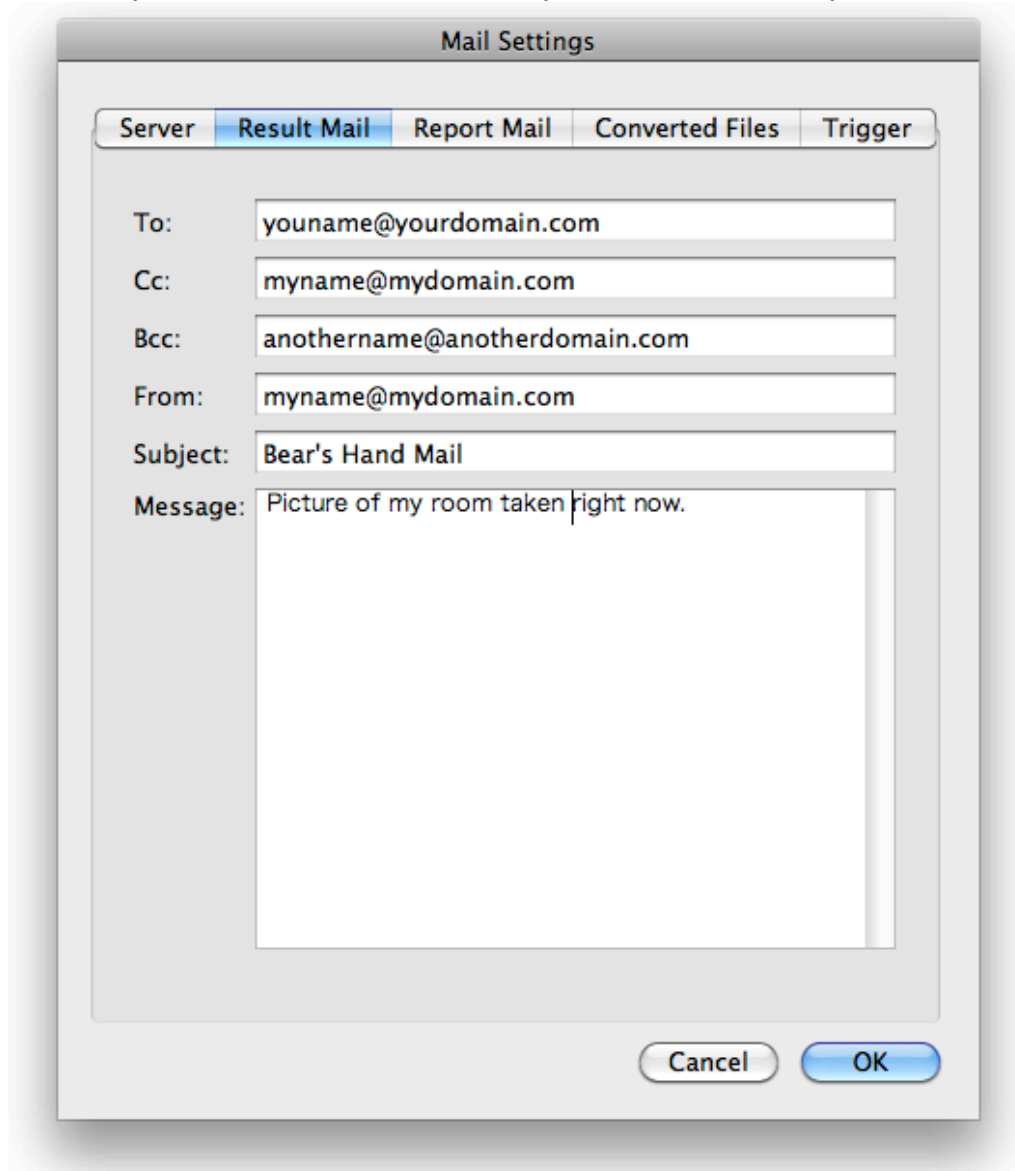


Fig. 16

- To:** Mailing addresses to which the message is addressed. For more than one address, use commas to separate them.
- Cc:** Addresses for carbon copies. For more than one address, use commas to separate them.
- Bcc:** Addresses for blind carbon copies. For more than one address, use commas to separate them.
- From:** Your address.
- Subject:** Subject of mail. English and Japanese Kanji is available.
- Message:** Message to be sent. English and Japanese Kanji is available.

5.4.3.3. [Report Mail] Tab

Setups for e-mail that reports error or cautions to watch activity of Bear's Hand.

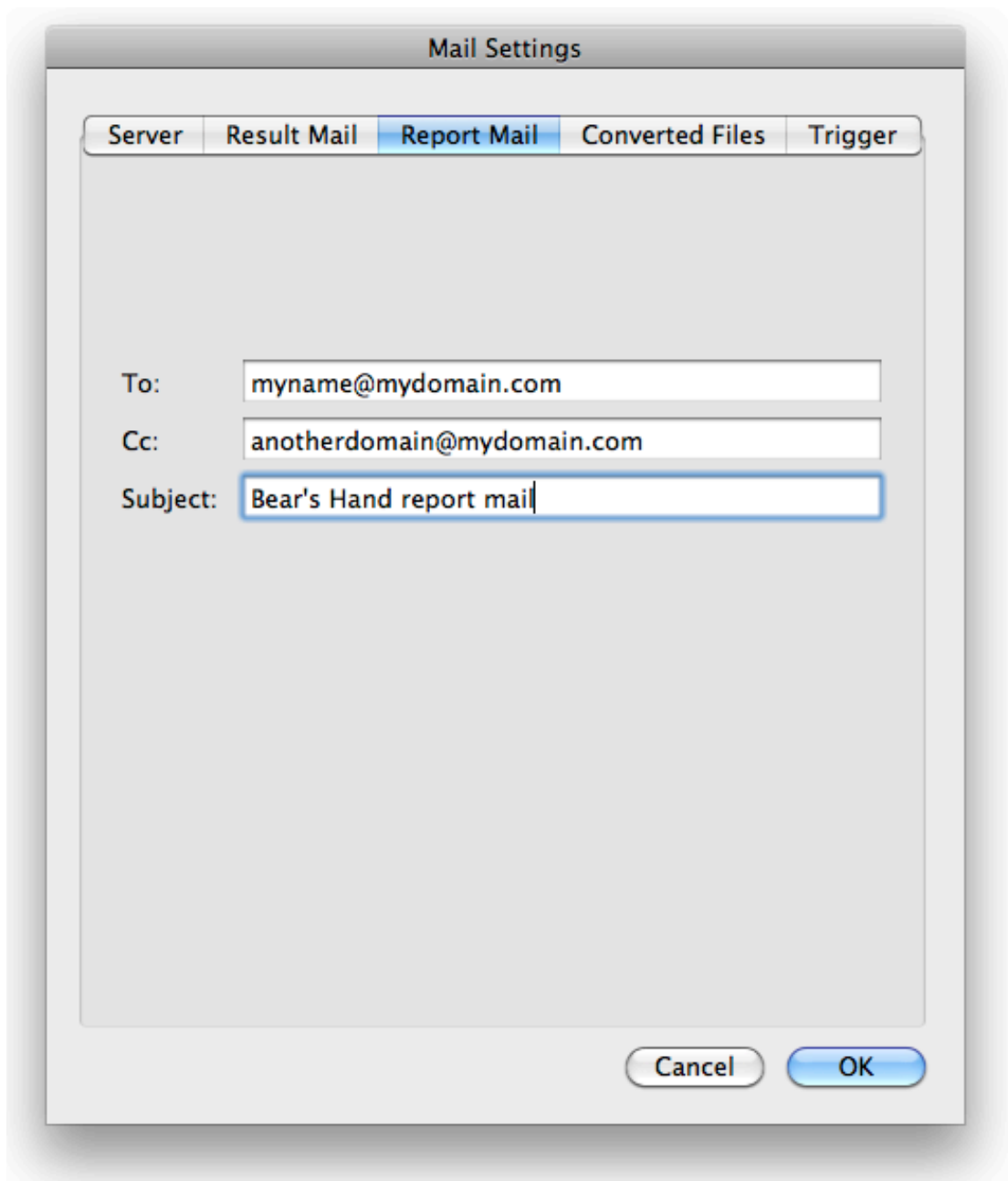


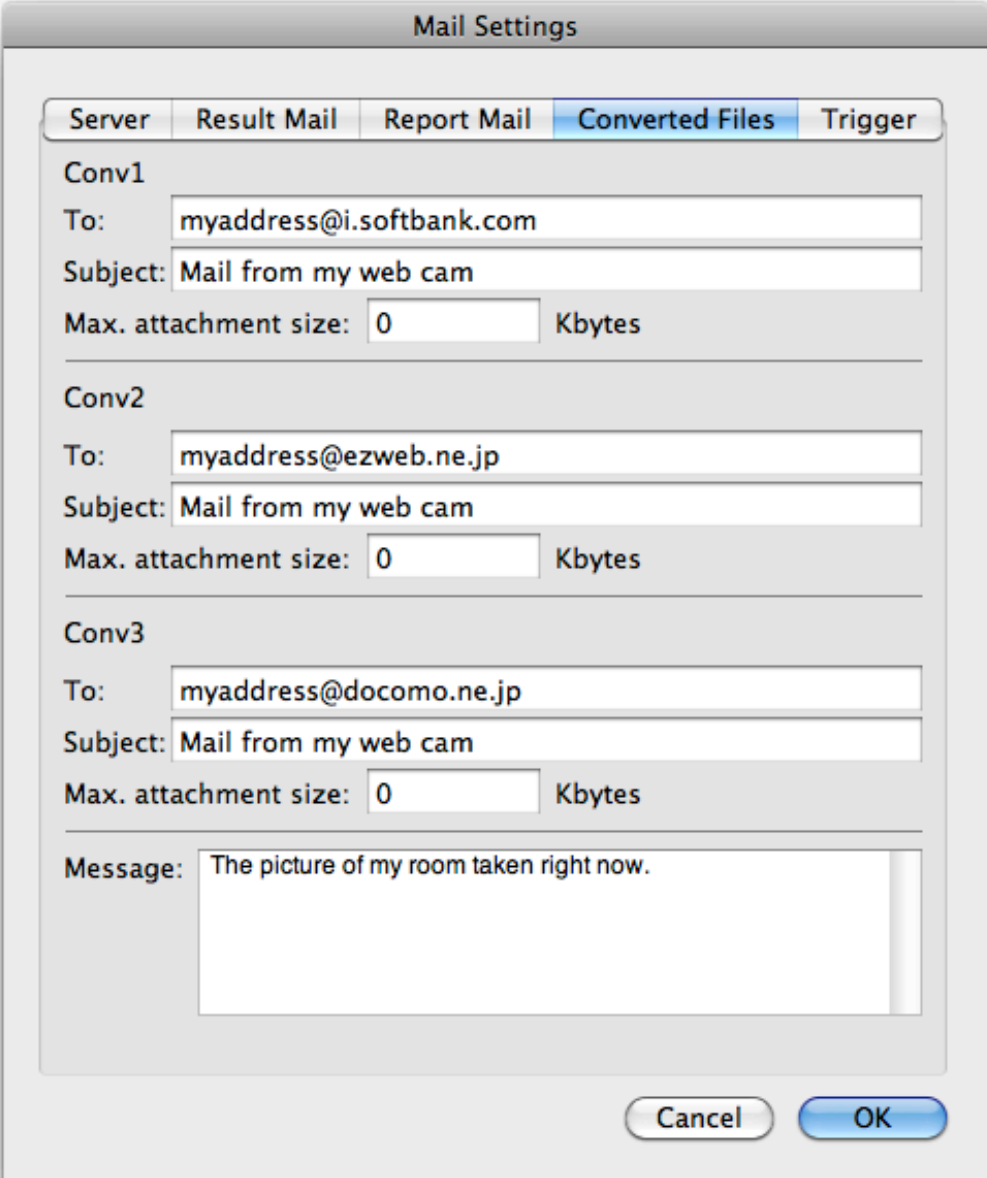
Fig. 17

To: Mailing addresses to which the message is addressed. For more than one address, use commas to separate them.

- Cc:** Addresses for carbon copies. To write more than one address, use commas to separate them.
- Subject:** Subject of mail. English and Japanese Kanji is available.

5.4.3.4. [Convert] Tab

Setup mail with attachment of converted movie file.



The image shows a 'Mail Settings' dialog box with a tabbed interface. The 'Converted Files' tab is selected. It contains three sections for configuring mail settings: 'Conv1', 'Conv2', and 'Conv3'. Each section has fields for 'To:', 'Subject:', and 'Max. attachment size:'. Below these sections is a 'Message:' field. At the bottom right are 'Cancel' and 'OK' buttons.

Server	Result Mail	Report Mail	Converted Files	Trigger
Conv1				
To: myaddress@i.softbank.com				
Subject: Mail from my web cam				
Max. attachment size: 0 Kbytes				
Conv2				
To: myaddress@ezweb.ne.jp				
Subject: Mail from my web cam				
Max. attachment size: 0 Kbytes				
Conv3				
To: myaddress@docomo.ne.jp				
Subject: Mail from my web cam				
Max. attachment size: 0 Kbytes				
Message: The picture of my room taken right now.				

Fig. 18

To	Mailing addresses to which the message is addressed. For more than one address, use commas to separate them.
Subject	Subject of mail. English and Japanese Kanji is available.
Max. attachment size	max size of attachment file (ie. converted movie file)
Message	Message to be sent. English and Japanese Kanji is available. This message is common for Conv.1 to 3.

5.4.3.5. [Trigger] Tab

Setup Trigger mail conditions.

The image shows a 'Mail Settings' dialog box with five tabs: 'Server', 'Result Mail', 'Report Mail', 'Converted Files', and 'Trigger'. The 'Trigger' tab is selected. It contains five trigger configuration sections, each with 'From' and 'Subject' fields. Trigger 1 has 'From: myaddress@i.softbank.jp' and 'Subject: shot'. Trigger 2 has 'From: trigger@triggerdomain.jp' and 'Subject: Earthquake sensed'. Triggers 3, 4, and 5 have empty fields. At the bottom right are 'Cancel' and 'OK' buttons.

Trigger	From	Subject
Trigger 1:	myaddress@i.softbank.jp	shot
Trigger 2:	trigger@triggerdomain.jp	Earthquake sensed
Trigger 3:		
Trigger 4:		
Trigger 5:		

All conditions on this panel are evaluated when the time scheduled by timer arrives. Bear's Hand check received mail and checks its *From* and *Subject* information. If condition is met, capture is executed, otherwise Bear's Hand waits until next scheduled time.

From: This string is searched in mail's *From*. String can anywhere in *From*. If this is empty, this trigger is not evaluated even if string exists in *Subject*.

Subject: This string is searched in mail's *Subject*. String can anywhere in *From*. If this is empty, *Subject* of mail is ignored and only string in *From* is evaluated.

NOTES

1) To use trigger mail, check box "Trigger by mail" on timer setup panel must be set.
And setup timer with interval repeat.

A simple example (10 minutes interval):

Option > Timer >

Day: Everyday

interval: 0:10

2) If Bear's Hand and other mailer are concurrently running, Bear's Hand may fail to retrieve incoming mail without proper setting. Setup mailer to keep mail after retrieving mail for period longer than interval of Bear's Hand timer. For example, if you setup Bear's Hand timer to 10 minutes, Setup Mail.app:

Preferences... > Accounts > Advanced

remove copy from server after retrieving a message: "After one day"

3) Bear's Hand does not remove mail from server, so old mail on server must be removed by mailer like upper 2) example.

5.4.4. [Option] -> [Audio Settings...]

Setup audio capture.

CAUTION

Depending on the contents of a setting, processing may not fulfill demand, but the condition from which a sound is disrupted or a sound and a picture shift may come out.

5.4.5. [Option] -> [Video Settings...]

Setup video capture.

CAUTION

Depending on the contents of a setting, processing may not fulfill demand, but the condition from which a sound is disrupted or a sound and a picture shift may come out.

5.4.6. [Option] -> [Still Picture Settings...]

Setup still picture capture.

[Compression] Tab

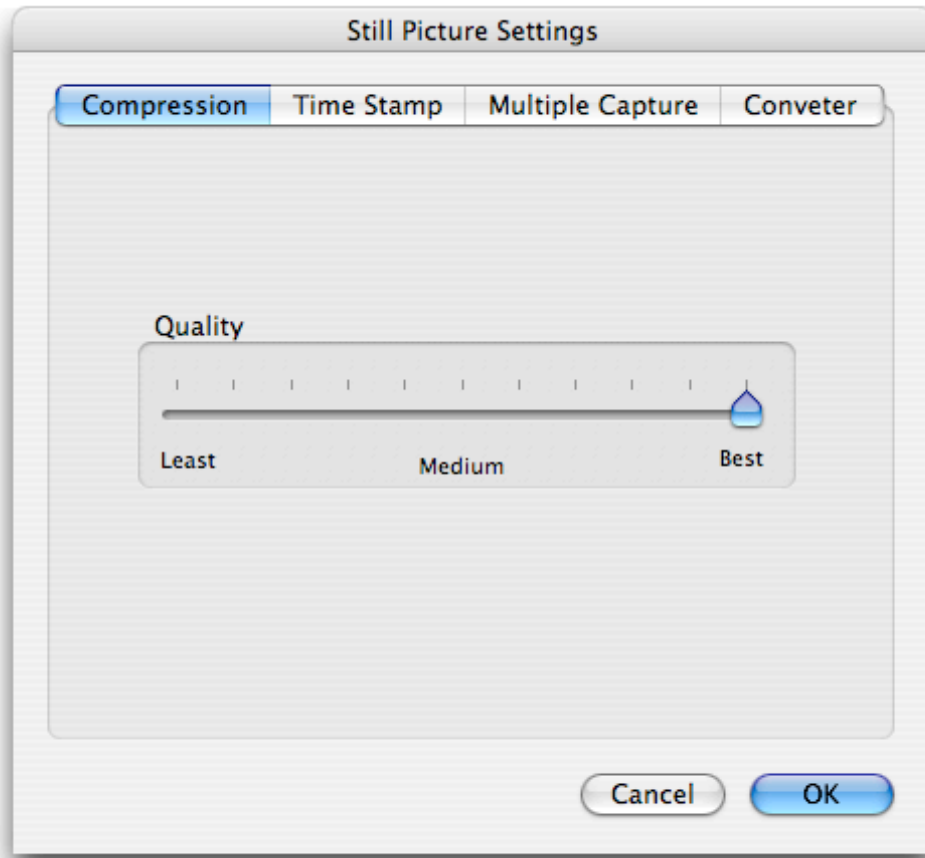


Fig. 19

The slider sets compression ratio. A quality becomes high, so that it goes to the right.

[Time Stamp] Tab

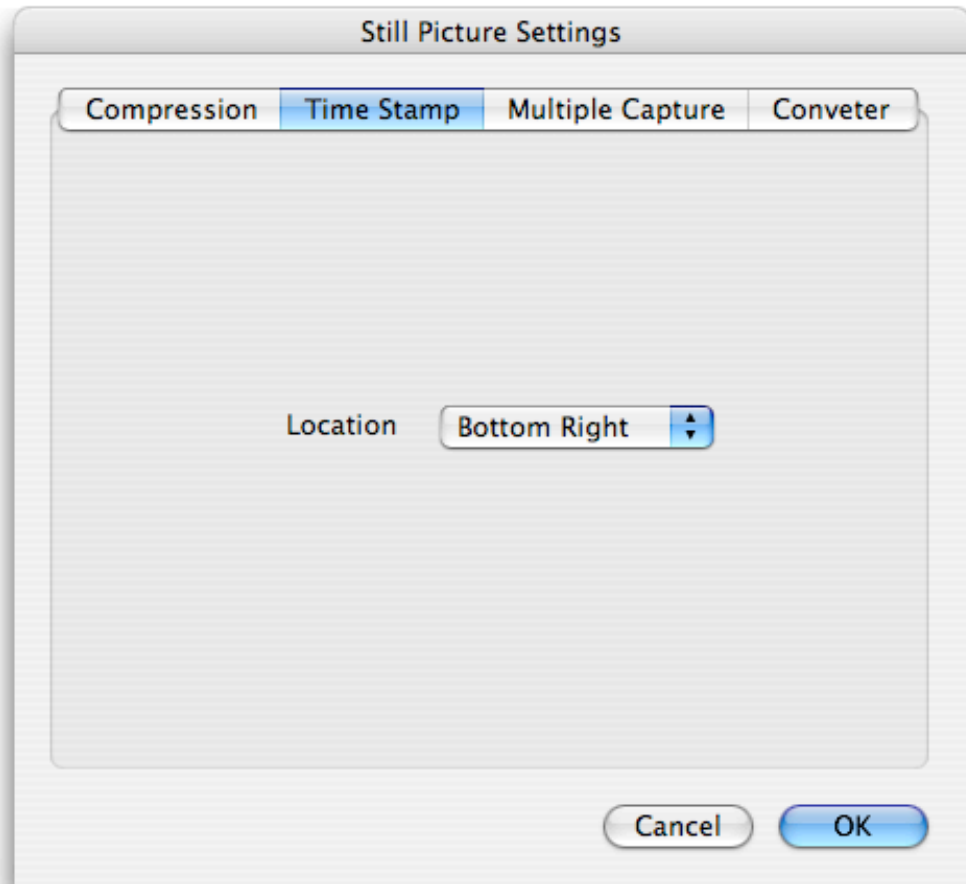


Fig. 20

You can add time stamp on still picture. Size of character is changed by picture size.

Location: Location of time stamp on picture. To turn off time stamp, select "None".

[Multiple Capture] Tab

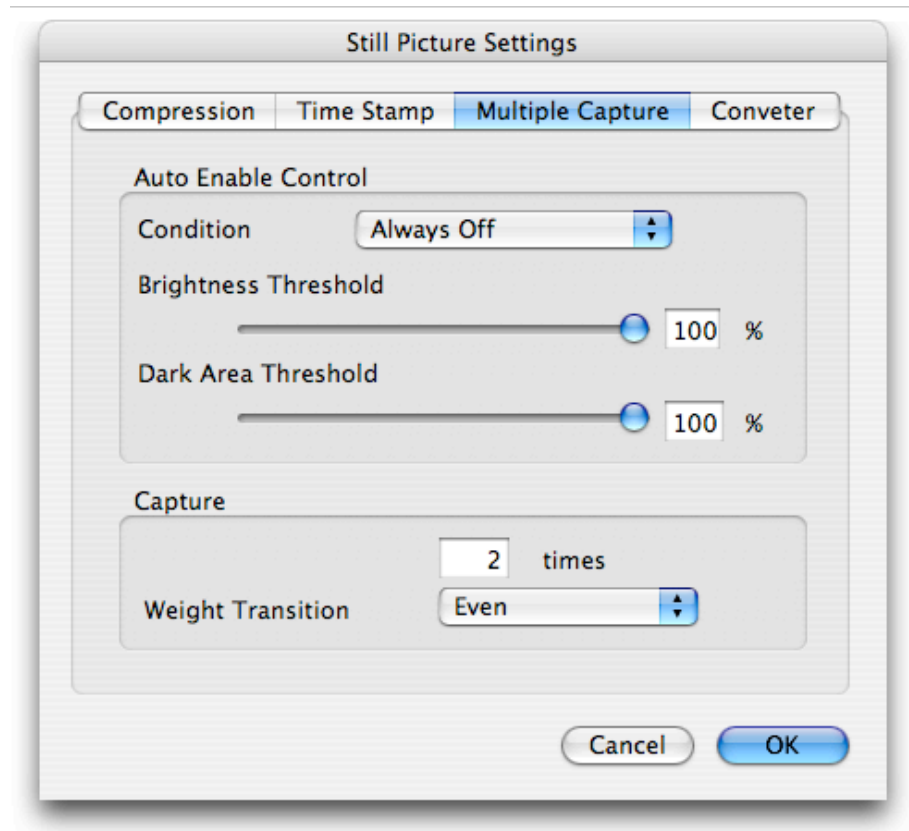


Fig. 21

Setups for multiple capture. With multiple capture, Bear's Hand captures still picture more than one time and add to make one picture, finally divide the levels of each pixels to adjust gain.

Adding with same weight for each captured picture is what they call "average". After summation of captured pictures, gain is adjusted so that it may become the same as the time of capturing only once.

So if you are taking picture of buildings and running cars at night, the headlights of cars becomes so thin that the number of times of capture increases, but the brightness of buildings does not change.

It is useful for night pictures or astronomical pictures to reduce their noise in dark area.

And you can use time-variant weight expecting funny effect.

Auto Enable Control

Sets how to decide if turn on or off multiple capture.

Condition:

Select judges method for turn on/off decision.

- **Always Off** no multiple capture
- **Always On** always use multiple capture.

Mean Brightness:

If mean brightness of the whole picture is lower than threshold level, multiple capture will be processed. The slider labeled "*Bright Threshold*" is used to define threshold level.

Dark Area Ratio:

If share of dark area is lower than threshold, multiple capture will be processed. The slider labeled "*Bright Threshold*" sets level of dark level, and "Dark Area Threshold" sets share of dark area.

When most area of picture is dark and sometimes very blight objects appears, this method can avoid influence of the blights object.

Brightness Threshold:

Brightness threshold

Dark Area Threshold:

Dark area threshold. This is valid when "**Dark Area Ratio**" is selected" for "**Condition**"

Fig. 22 illustrates how **Brightness Threshold** and **Dark Area Threshold** works.

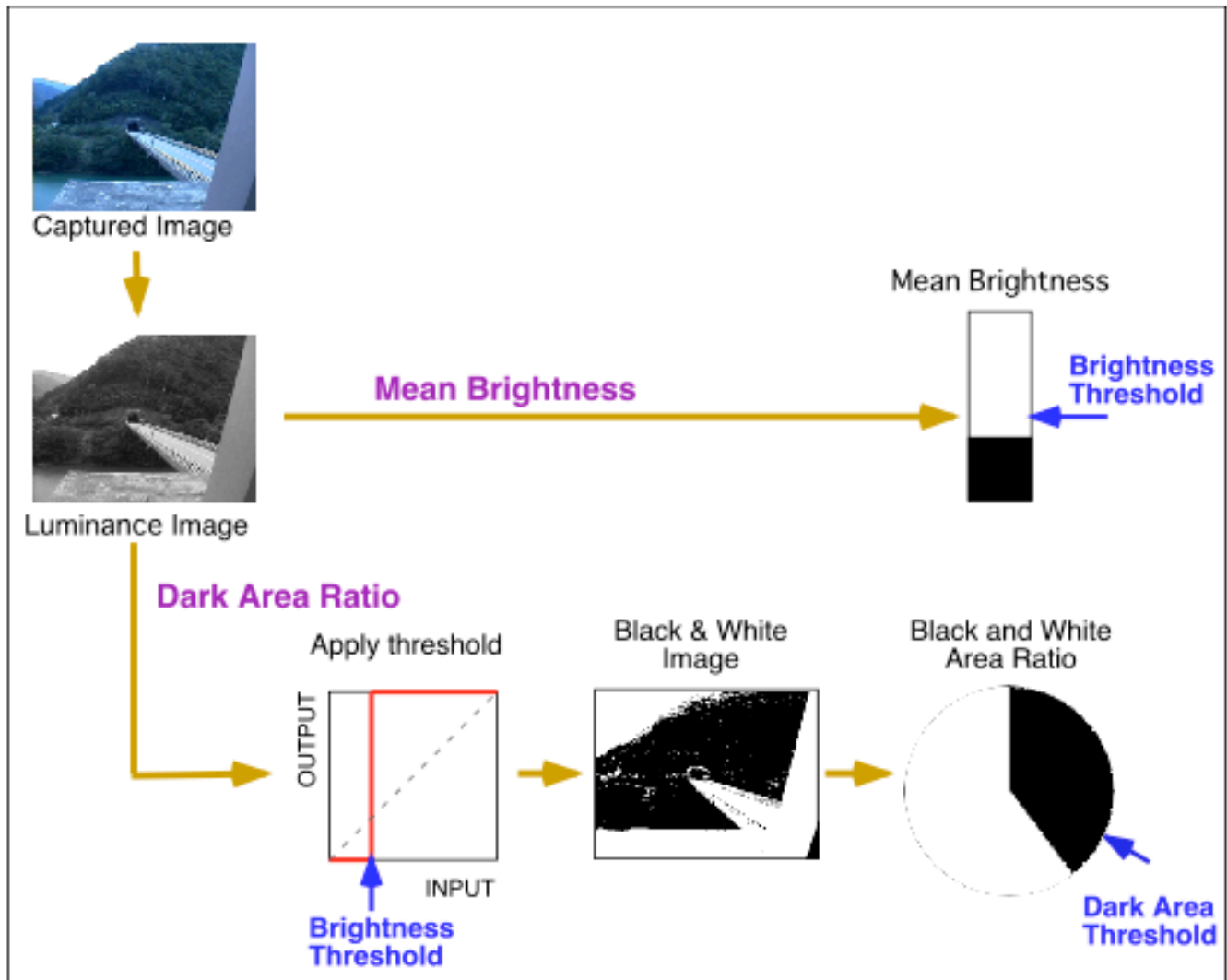


Fig. 22

Capture

times:

The number of capture times.

Weight Transition:

Selects time valiant weights type. Weights are used at the time of addition after each capture.

Bigger weight makes deeper image on result picture.

Even

All pictures are added equally. So result picture is average of all pictures.

Peak at first

There is a peak first capture and fixed lower level after that

Peak at last

Finally there is a peak and it becomes fixed till then.

Decrement

Weight becomes smaller and smaller.
Increment
Weight becomes bigger and bigger

[Converter] Tab

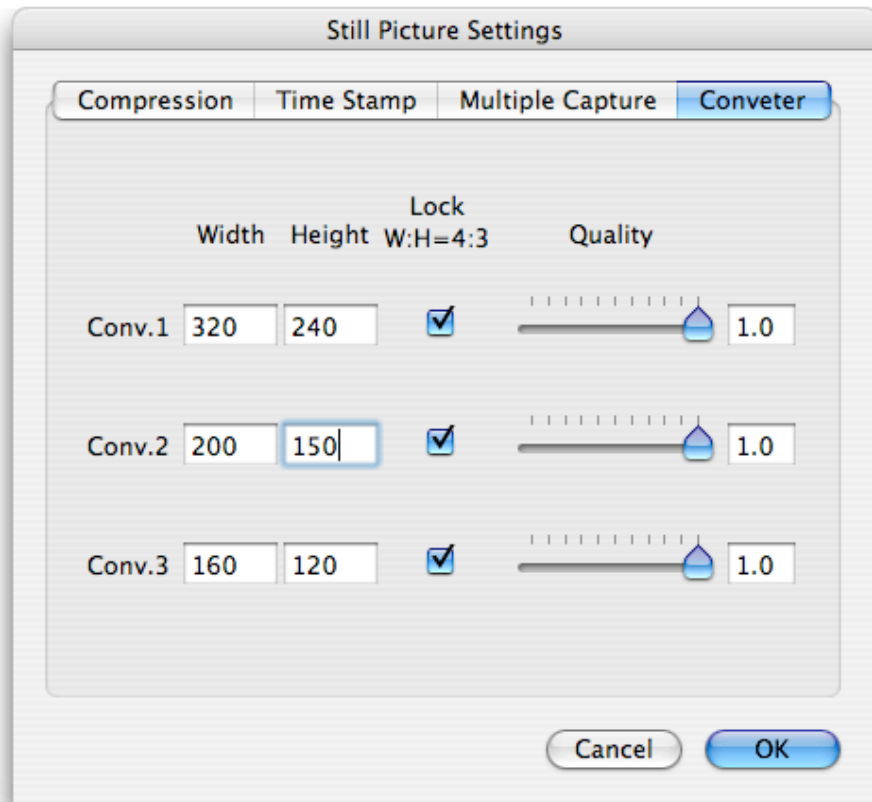


Fig. 23

Setups for still picture resizing.

Width	width after resizing
Height	height after resizing
Lock W:H=4:3	locks width:height ratio to 4:3
Quality	quality of JPEG compress after resizing

5.4.7. [Option] -> [Movie Converter settings...]

5.4.7.1 [Converter] Tab

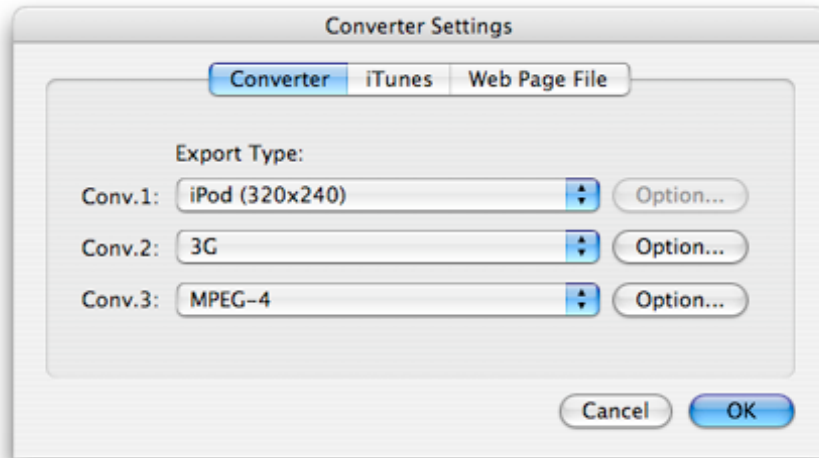


Fig. 24

This dialog setups movie conversion.

Popup menus select output format from **3G**, **FLC**, **iPod (320x240)**, **QuickTime movie**, **AVI**, **DV stream**, and **MPEG-4**.

Following explanation is for 3G.

Push "**Options...**" to setup conversion to 3G export. Following Dialog will be appear.

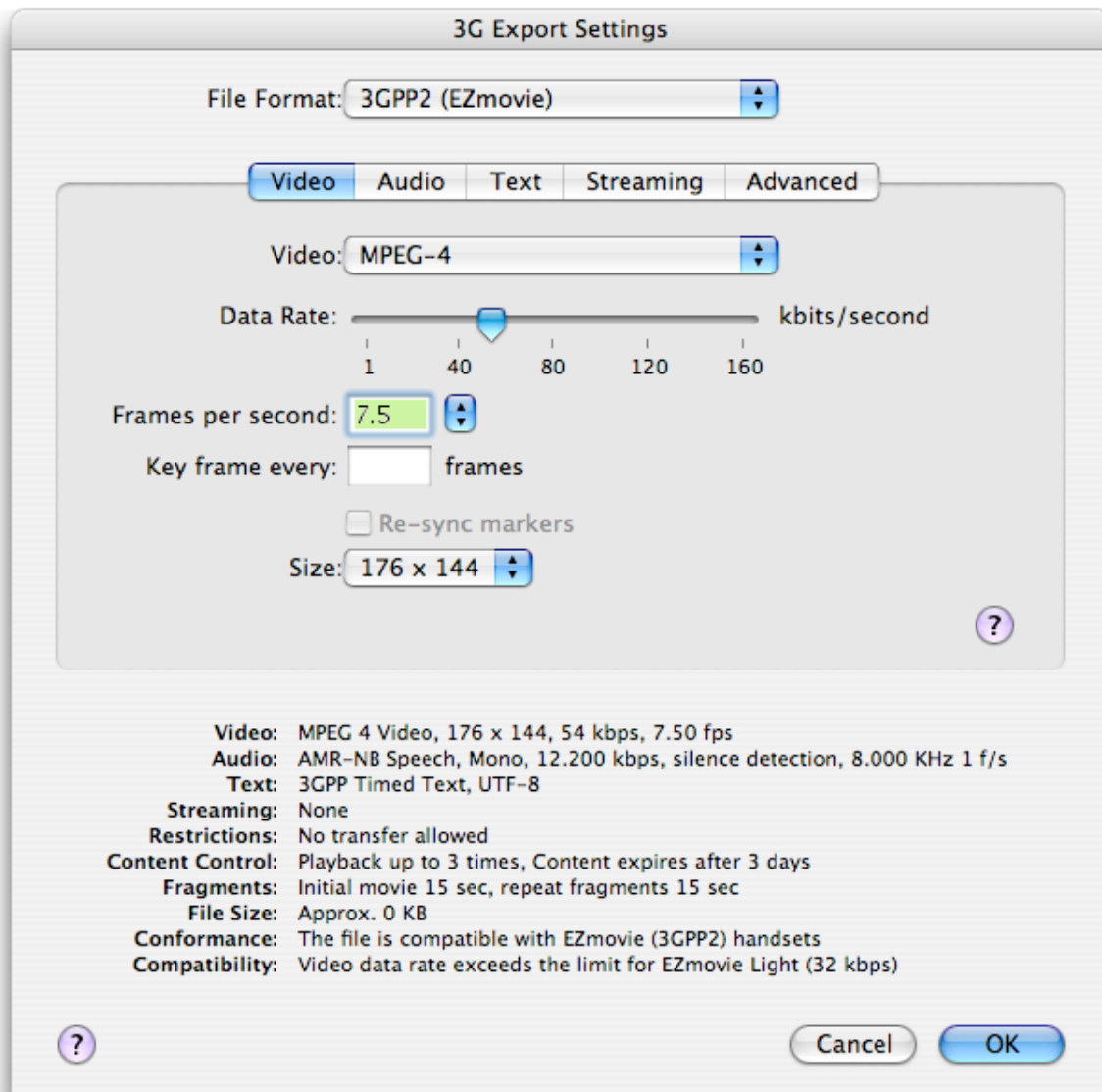


Fig. 25

File size in Fig. 25 ("Approx. 0 KB") is meaningless in Bear's Hand. These parameter depends on mobile phone carrier.

Installation of QuickTime Plug-in

Install QuickTime plug-in from third party. After installation, launch Bear's Hand. Additional item will appear in menu on the dialog shown in Fig. 24

Followings are examples of plug-in.

a) DivX Video Bundle for Mac OSX 5.2

(http://www.soft14.com/Multimedia_and_Productivity/DVD_tools/DivX_Video_Bundle_for_Mac_OSX_9106_Review.html)

Exports DivX movie. Free version is available.

b) Flix Exporter

(<http://www.on2.com/consumer/flix-exporter/?sid=HCKE-41D4-43225c2532aa2&ref=>)
Exports Flash movie (SWF and FLV). Free trial version is available.

Making movie file for 5G iPod

You can select from these two ways:

1) Select "iPod (320x240)" for export type in Fig. 24

This is easy but very slow. You can modify no detail settings.

2) Select "MPEG-4" for export type in Fig. 24

This is faster than "iPod (320x240)" and you can modify settings following to spec in Apple web site (<http://www.apple.com/ipod/specs.html>):

H.264 video: up to 768 Kbps, 320 x 240, 30 frames per sec., Baseline Profile up to Level 1.3

with AAC-LC up to 160 Kbps, 48 Khz, stereo audio in .m4v, .mp4 and .mov file formats

MPEG-4 video: up to 2.5 mbps, 480 x 480, 30 frames per sec., Simple Profile with AAC-LC

up to 160 Kbps, 48 Khz, stereo audio in .m4v, .mp4 and .mov file formats

This selection is named "MPEG-4", but you can select video codec from MPEG-4 and H.264 for video in dialog from "Option.." button.

NOTE

Selecting DivX Video Bundle for Mac OSX 5.2, when **Option...** is pressed, a dialog which ask you to select movie file.

Select any movie file. Selection is used only for dialog, it does not affect movie export.

CAUTION

To view SWF and FLV file from Flix exporter, intall **Free Macromedia Flash 8 Player** after installing Flix Exporter, or you will sell black window.

5.4.7.2 [iTunes] Tab

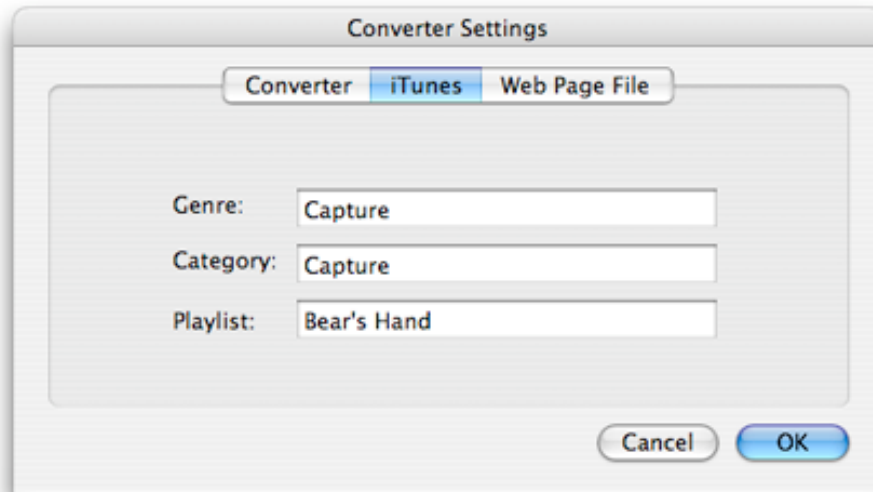


Fig. 26

Setup parameters for iTunes.

Genre Genre for movie files. If you don't need to set it, keep this blank.

Category Category for movie files. If you don't need to set it, keep this blank.

Playlist Playlist where movie file will be added. If this playlist is not exist in iTunes, it will created.

If you don't need to add to playlist, keep this blank.

All these setups can be overwritten by timer setup dialog.

5.4.7.3 [Web Page File] Tab

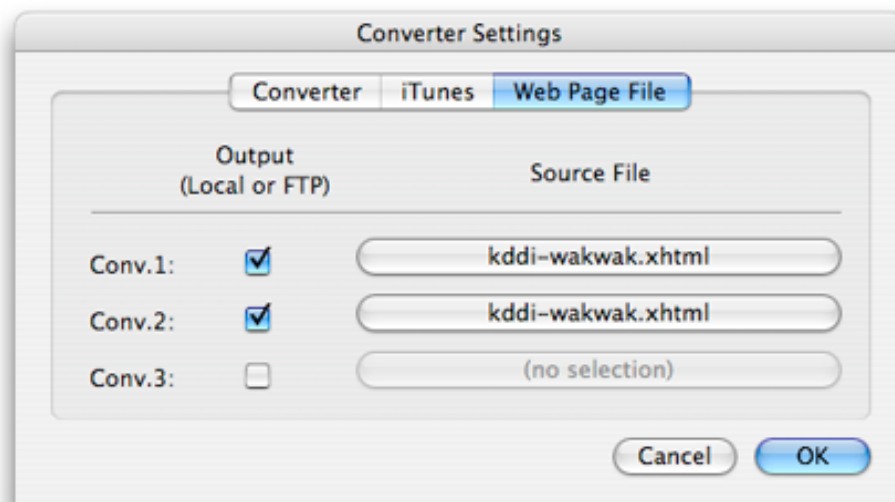


Fig. 27

Bear's Hand can generate web page file for mobile phone, because in some cases, movie file size must written in web page and we can't know it before capturing and converting. After movie converting, Bear's Hand reads source file and generates web page file dynamically.

Output(Local or FTP)	check to make Web page to local or FTP up-loading
Source File	select Web page source file

Tags in Web page source file

Tags should be written in following format:
%%tag%%

Bear's Hand recognize these tags:

MOVIE_FILE_SIZE	movie file size (bytes)
DATE_Y_4	movie created date - Year (4 digits)
DATE_Y_2	movie created date - Year (2 digits without century)
DATE_MON	movie created date - Months (2 digits)
DATE_D	movie created date - Day (2 digits)
DATE_H24	movie created date - Hour in 24H (2 digits)
DATE_H12	movie created date - Hour in 12H (2 digits)
DATE_MIN	movie created date - minute (2 digits)
DATE_S	movie created date - second (2 digits)
DATE_AMPM	movie created date - AM/PM

Sample for Japanese KDDI-AU (xhtml)

Web page source file:

```
<?xml version="1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML Basic 1.0//EN"
"http://www.w3.org/TR/xhtml-basic/xhtml-basic10.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="ja" lang="ja">
<body>
```

date:<p>

%%DATE_Y_4%%-%%DATE_MON%%-%%DATE_D%%
%%DATE_H24%%:%%DATE_MIN%%:%%DATE_S%%
%%DATE_AMPM%%

```
<object data="bh.3g2" type="video/3gpp2" copyright="no" standby="Dow-
nload movie (bear's Hand)">
<param name="disposition" value="devmpzz" valuetype="data" />
```

```
<param name="size" value="%%MOVIE_FILE_SIZE%%" value-  
type="data" />  
<param name="title" value="Bear's Hand Test" valuetype="data" />  
</object>  
</body>  
</html>>
```

Example screen image on mobile phone. (A Japanese KDDI-AU EV-DO phone)

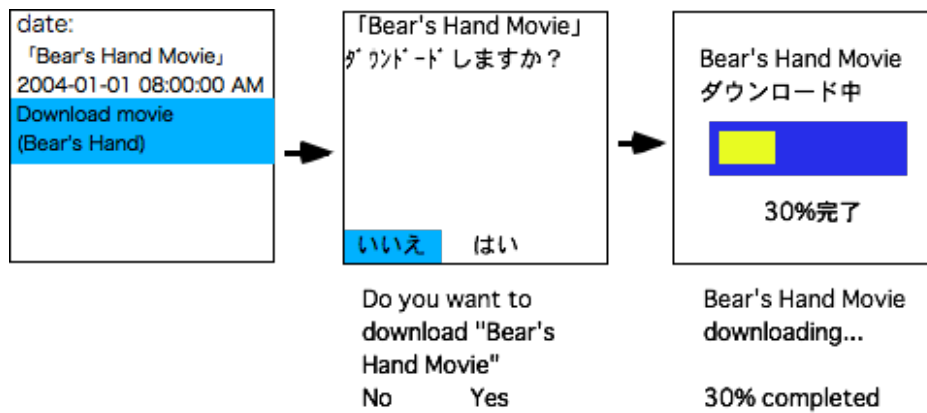


Fig. 28

6. AppleScript

While capturing with timer, Bear's Hand can execute AppleScript. The typical purpose is creating movie file which is compatible with Sony PSP.

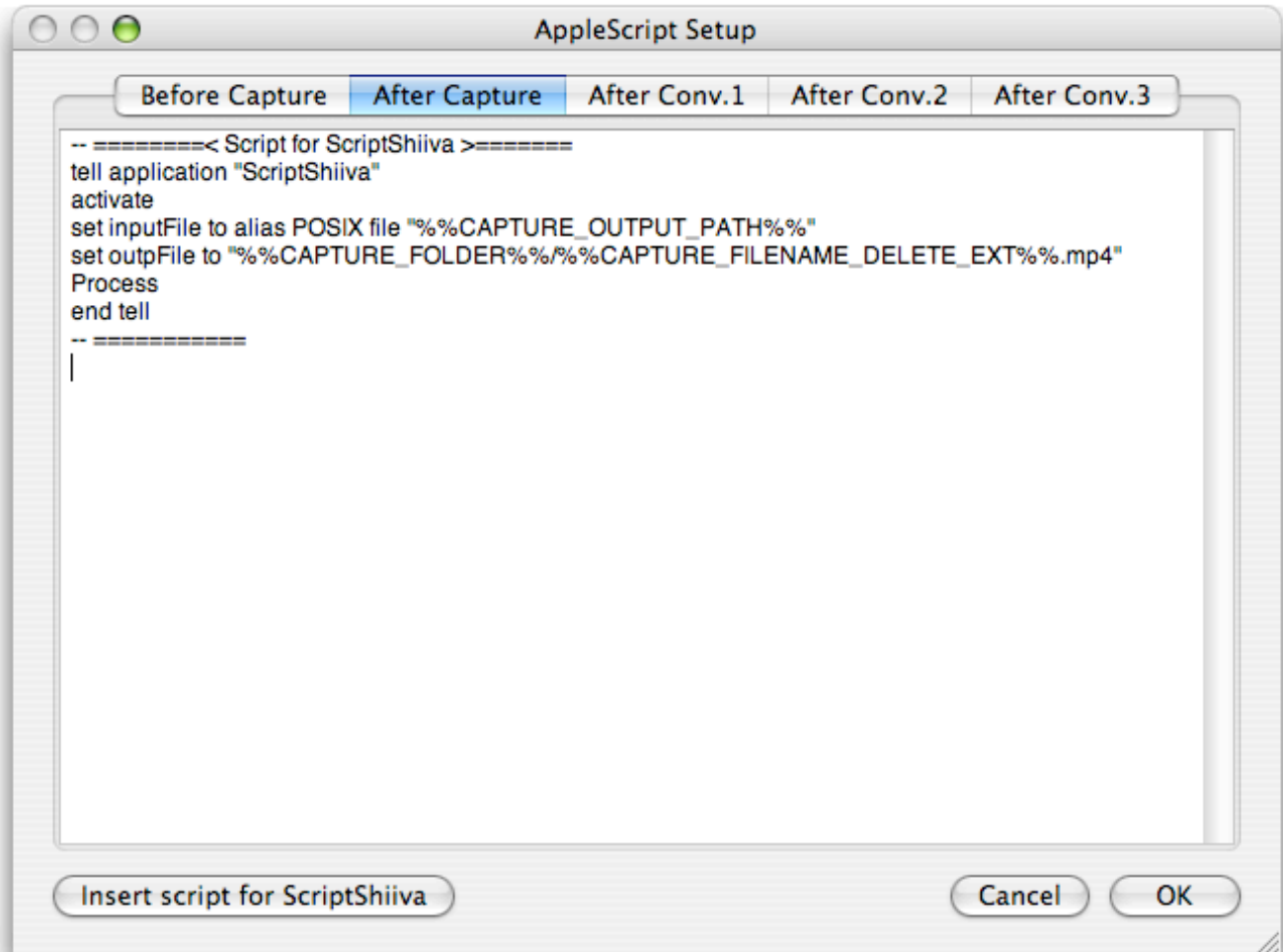


Fig. 29

Each #1 to #10 timer reservations can have its own AppleScript. AppleScript for one reservation has five AppleScripts for five steps of executing timer.

6.1 Execution timing

Each tab of Fig. 29 show the timings when AppleScript is executed.

Before Capture

N seconds before starting Rec. N seconds is defined by "**Preference -> [Sleep] Tab -> Pre-wake Up Time Length**"

After Capture

After capturing, before sending mail, FTP uploading.

After Conv.1 to 3

After converting, before sending mail, FTP uploading.

7.2. Tag

5.4.7.2 [Web Page File] Tab

You can write tags like that described in **5.4.7.2 [Web Page File] Tab**. Typical use is file name path that varies every capturing.

Description manner is, similar to Web Page File, attaching %% on front and back of the tag.

You can use following tags:

CAPTURE_OUTPUT_PATH	capture output path
CAPTURE_FOLDER	capture output folder path
CAPTURE_FILENAME_DELETE_EXT	capture output filename deleting extension, this is not a path
CONV1_OUT_FILE_PATH	convert 1 output path
CONV2_OUT_FILE_PATH	convert 2 output path
CONV3_OUT_FILE_PATH	convert 3 output path
MOVIE_CONV1_FOLDER	movie convert 1 output folder
MOVIE_CONV2_FOLDER	movie convert 2 output folder
MOVIE_CONV3_FOLDER	movie convert 3 output folder
STILL_CONV1_FOLDER	still picture convert 1 output folder
STILL_CONV2_FOLDER	still picture convert 2 output folder
STILL_CONV3_FOLDER	still picture convert 3 output folder

path is in UNIX style delimited by / (slash).

You can also use tags described in **5.4.7.2 [Web Page File] Tab**.

7.3. "Insert script for ScriptShiiva" button

This is easy way to use ScriptShiiva. You can write script without knowledge about AppleScript.

A default script is inserted at cursor position. It is for encoding capture output file using ScriptShiiva. Fig. 29 shows result of this button into no text.

This can show example of write AppleScript with tags.

Take care that this button insert long scripts at cursor position.

7.4 Verification way of the interprets apple script

You can examine interpreted AppleScript in log window that is shown by ([Window] -> [Show Log Window]) while executing timer. To show AppleScript, set [Preferences] -> [Log & Report Mail] to "Verbose"

8. Apple Remote Control

8.1 On Normal and Floating Window

Play: Capture Still Image. Image can be captured from Video devices and Digital camera that can be controlled with USB PTP.

8.2 On Full Screen

PREV/NEXT (left / right): Volume up / down

Play: Toggles RSS display on / off

MENU: Jump to page of RSS article

MENU (hold): Finish full screen

9. Other Topics

1. Movie size is equal to that of monitor size. To change this, Select [Window] -> [Video Size]. When Full screen size, movie capture is not available.
2. For trouble shooting for timer reserved actions, use log. To view log, **[Window] -> [Show Log Window]**. And set up log using **[Log & Report Mail]** pane in preference. To view transactions in FTP, select **logging level** to **verbose**. **Capacity** defines maximum capacity of log window.

10. Special Thanks

Thanks to Martin Kahr for source code for Apple Remote.