

1/4 vµ® · xâ PowerVCR

Áý¹q, £ÁÜ; ¹¼Æ; ì; ý¹¼v³¼ ÷ aº; n²£«~

SY® É¹¼Æ; ì; ý¹¼v

PowerVCR → O°T³s → ì; §p © Ò¶ } µº aº x @ ® MMPEG-1 ¹¼Æ; ì; ý¹¼v-
µ§Y® É; ý»s³nÁé; C¨ ä¹º ® É¥Nºº³nÁé¹¼v-
µÀ£ÁÝ§p³N; MÁý ± z¥í³ ì; §Cºº; ¥» ; M³ ì; x Öººº è x O§¹; ¹¼Æ; ì; ý¹¼v; CÁý ± zºº¹q, £·n¨-
x @ ÁÜ; M; ¹º MPEG-1 ¹¼Æ; ì; ì; ý¹¼v³¼ ÷ ; M¨ É¨ ü¨¨ » s§ @ ÄÝ © ó Ó x H-
· ® æ¹¼v x ùºº¹¼ Ö¹² ì; C PowerVCR; b¹¼v µÀ£ÁÝ§p³Nºº → ð¨ }
; A¥i¥H ± N; ý¹¼v³¼ ÷ (VCR); B x â´ £Áá¹¼v³¼ ÷ (Hi8, V8); B
© ¹¼v¹³ Á¨¨ ú, Ë, m x Wºº¹q µø; ì; ¥x³¼¹ (TV Tuner) Á¨¨ ú; Ü Ó x H¹q, £ºº µø°T¹¼v¹³ x Í-
µ® Á; A x £¥², g ¥ Ñ AVI Á à Á É; Mº½ ± µ; ý¹¼v»s; ¹ºº « ~ ¹² è; B § C Á x; sº Á ¶; aº MPEG-1
® æ; ì; Á É ® x; C

ÁÜ¥i¥H¶; ì; æ AVI Á à Á É; ¹ MPEG-1 x u § @

· í µ M; M; pº G ± z ¥ í x â x Wºº¹¼v µ¹² s; è x u¨ ¨ ä » s § @ x Fº è ¹²ºº AVI Á É ® x; M; Ó W
´ o © ó¨ ¨ ä © Ò; ù³¼ Üºº Á è x jº Á ¶; M PowerVCR x]´ £¨ Ñ x F, Ñ¨ M x è ® x; C PowerVCR
´ £¨ Ñºº § á; Á à´ « ¥¨ ¨ à; A¨ ¨ à ± N¨ ¨ ä ¥; µø°T Á¨¨ ú, Ë, m © Ò; ý¹¼v»s; B © Í → O, g ¥ Ñ¹¼v-
µ¹² s; è x u¨ ¨ ä³ B² z¹ Lºº AVI Á É ® x; M¨ ¨ ¨ ¨ ¨ t Á à´ « → MPEG-1 Á É ® x ® æ; ì; C; ¹³ ¥
¨ ¨ à ¥ R x Á B ¥ Í MPEG-1 µø°T¹¼v · Ç ® æ; ì; aº Á u Á ¶ w
¶ w ¥ i, ¨ ¨ Ù ¥¨ ¨ x jºººººººººº Á x; sº Á ¶; ì; A; Ó ¶ È; ì; b¹¼v µ« ~ ¹² è x è ±º µ ¥ X³ ì; x Öººº Á ý¨ B; C

ì; b µø°T¹¼v x ù x Wººº; æ; ì; uº Á x U x Í ¶ K x W; v ¥ \ ¨ à

PowerVCR x]; ì; uº Á x U x Í ¶ K x W; vºº¹² s; è ¥ \ ¨ à; A ¥ i Á ý¨ ¨ í ¥ í à ì ± q; ý¹¼v»sºº¹¼v x ù x x
; A Á¨¨ úºº è µø³; ¥ ÷ ; M © Í → O; X¨ ¨ Ö; h Ó M MPEG-1 ¹¼v µ Á É; M » s § @ Ä Ý © ó Ó x H-
· ® æºº¹¼v x ù; C x £¹² x § @ → ° Ó · ~ Á²³ ø; B · s ¶ ì; u x uº V¹² m © Í¨ Áºº é-
Ó x H¨ d © Á; A PowerVCR → O ± z; ì; bººº · ~ Á³ ¥ Í © M´ £ºº a ¥ í ¨ ¨ ; « ~ ¹² èººº ì; ¨ ¨ x u¨ ¨ ä; C

PowerVCR aºº ¥ D n ¥ \ ¨ à

n ± N¹¼v µ § Y® É; ý¹¼v»s → MPEG-1 ® æ; ì; A¹¼v µ, Ñº R « x ¥ i¹ F
352x288; C µ L » Ý, g ¥ Ñ AVI Á É Á à´ «; A ¥ i, ¨ ¨ Ù x j ¶ q Á x; sº Á ¶; ì; C

- n 'É"Ñšâ|,æèak±N AVI ÀÉÂà'«-° MPEG-1 ÀÉ;A"Ã"ãšâ|,ÂàÀÉ¥\`à;C
- n 'É"Ñ°ÅxU©M¶KxW^{201/2}sçè¥\`à;AÀ°§U±z°Åçè©Î;X"ÖMPEG-1μø°T^{1/4}vxù;C.
- n ^{1/4}vμçý»s¶i¶¥±±"î;Cμø°T±M·~xHû¥i°ö;æ§^{13/4}ã²⁰ MPEG-1 çý»s°Ñ^{1/4}Æ³]©w;C
- n Äá^{1/4}v^{3/4}÷²⁰±±"î;C¥i^{21/2}±μ±q PowerVCR "Ó^{1/2}Ö^{3/4}ãÄá^{1/4}v^{3/4}÷²⁰«G«x xî¹i;xñ;C
- n "ã¹³μwøD|s¶q«ü^{1/4}Ð¥i-Ý"iμwøD³Ñ^{3/4}|²⁰¥i¥îÄ¶i;C
- n "ã¹³¹wçý¹qμø,`¥ø²⁰¹w-ùçý»s¥\`à;C
- n ¹İšî"İ¥î-É±;CÂÎ«ö·Æ¹«§Y¥i§¹;"MPEG -1^{1/4}v-μÀÉ®x²⁰çý»s;B^{1/4}^{1/2}©ñ;B¹wÁý©M^{1/2}sçèμø°Tμ¥¥\`à;C
- n «K§Q²⁰³Á§J·xî³â¥zμ¶q±±"î;C
- n ±²°Ê¶b(Scroll Bar) ¥i"³³t©w¥X;u¶}©|;v»P;uμ²§ô;vÁ"Ó^{1/2}sçèxwçý»s²⁰μø°Tμxù;C

§P³N³W®æ

"t²î»Ý"D

!p|óçý»sMPEG-1^{1/4}Æ;îÀÉ®x?

³]©wçý»s^{1/4}vμÀÉ²⁰®æ!;

³]©wMPEG-1^{1/4}vμÀÉçý»s^{1/2}d¥»

!p|ó»P°T³s§P³Nxä'©xHûÁpμ,

PowerVCR §B³N³W®æ

μø°T³W®æ

- n μø°T®æ||;GYV12;B Y41P YUY2;B RGB16;B RGB24;B UYUV;B YUV9©M I420 FOURCC
- n ,Ñ²R«x;G176x144 (QCIF);B352x240 (SIF);B352x288 (CIF) ¤³20x240
- n °T®ØÀW²v;G30;B 29.97 (VCD-NTSC);B 25 (PAL);B 24;B 12;B 10 FILM
- n ¥i¿i¬°μø°T¹wÄý(Preview mode)¤¹«Á|¼Ò|;(Overlay mode)

μ°T³W®æ

- n μ°T®æ||;GPCM®æ|i¬°¿é¤μ°T;A MPA ;]MPEG-1 μ°T) ®æ|i¬°¿é¥Xμ°T
- n |¤,ÀW²v;G¥i¿i 8 ©Í 16 |¤, ¨ú¼ÈÀW²v
- n ¼Ò|;G¥i¿i³æμ;B¥ßÁéÁn;BÂùμ;B¤ÍÁp;X¥ßÁéÁnμ¥μ°T«~½è

MPEG À£ÁY³]©w°Ñ¼Æ

- n ¥i¿i I/B/P μe±;BI/Pμe±;B¤Í¶ÈIμe±μ¥¿ý»s¿i¶μ
- n ¨C¤@ GOP;]μe±,s²Õ;^º P- ¤ÍB- μe±¥i¥Ñ¨Í¥Í¤]©w, q¨ä¼Æ¶q
- n ´£¨Ñ©T©w|¤,ÀW²v;B©T©w«~½è;B©Í¨Í¥Í¤|;Û©wº¿ý»s½d¥»

Πρόζυ»SMPEG-1¼vαù?

PowerVCR™tî!w.Ë

α½±μ±qζý¼v±ajB¹qμø. `¥ØjB¼Æi!jý¼v¾÷ζý»SMPEG-1¼vαù

AVIÀà!™MPEG-1¼vμÀÉ®x

°Áζè©MjX™ÖMPEG-1ÀÉ®x

ÀË¬dPowerVCRζý¼vª¬°A

"t²î»Ý" D

- n §Y®É¿ý»s;G Pentium II 300MHz ³B²z³/4¹;A¶D°O³/4ÐÁé³ìœÖ 32MB
- n AVI ÂàÀÉ;GPentium 166 MHz MMX ³B²z³/4¹;A¶D°O³/4ÐÁé³ìœÖ 32MB
- n PCI ¼v¹³Â^¨ú¶d»Ýœä´© Video for Windows œ¶±;C(œ@¨ë¼v¹³Â^¨ú¶d;BTV-Tuner¶d;B¶HœÎPCÄá¼v³/4÷³£œä´©;¹œ¶±³W®æ)
- n ²Â;XPCI©ÎISAœ¶±²ºµ®Ä¶d
- n Windows 95 ;B 98

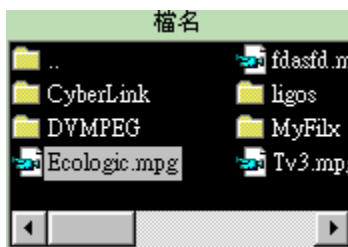
°Á¿èMPEG-1µø°T»s§@¼vαù

PowerVCR ¥i¥H;s"ú MPEG-1 µø°TÀÉ® x|b-YÓ® ÉÂªººë½Tµε±;C¥Ñ©ó
 PowerVCRªº³o¶µ" S® í¥\`à;A±z¥i¥HÀH·N¿i"ú²{¶³ MPEG-
 1ÀÉªº¥ô;ó³;αÀ;A©Í±N"ä»P"ä¥;MPEG-1ÀÉ;X"Ö;A»s§@ÄÝ©ó;Ûαv·®æªº¼vαù;C

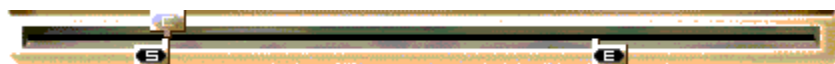


¥Ñ³æα@MPEG-1ÀÉ¿i"úºëµø³;¥÷

1. «öα@αU<¿i³¼Ûµ{||>«ö¶s"Ä¿i"ú<¼AE|i¼vµ°Á±µ¾÷>;C
2. «öα@αU<¥[α]¼vµÀÉ® x>«ö¶s;M|b PowerVCR"İ¥íª|α¶±¥καUαè;µÀÉ;W
 ;vªºµøµ;αº¿i"ún·s¼W"i½s¿èαu§@²M³æªº¥ô;óMPEG-
 1"Ó·½ÀÉ;J"äi³ºÆÀÉ;W.mpgi^;C«öα@αU< >«ö¶s"Ó¿i"ú±z-
 n,ÑÀÆÁYα§µø°T°Á¿èªº®É¶i½d³ò;C



3. |pªG±z¶Èn¿i"ú;¹MPEG-
 1"Ó·½ÀÉªºα@³;αÀ;A«h½Ð·Æ°ÊS«ö¶s"Ó©w,¶¶}©IAI;A"Ä·Æ°ÊE«ö¶s"Ó©
 w,¶µ²§òÁI;CµM«á«öα@αU<>«ö¶sµ²§òµø°T¿i"ú¹Lµ{;C

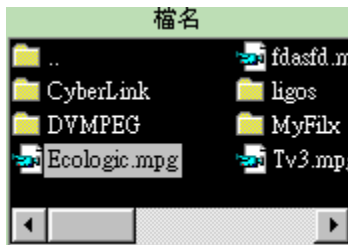


·Æ°Ê<S>¶s¶í<E>¶s"Ó³]©wÀàÀÉªº¶¶}©IAI©Mµ²§òÁI

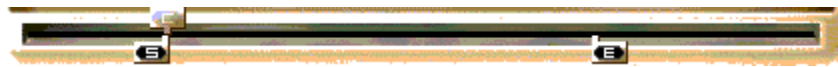
1. ½Ð«öæ@æU<°ö!æ>«ö¶s¶¶} ©IÀÉ® x°Å¿è¹Lµ{;CPowerVCR ·|
 Åã¥Üæ@!ï, Üæè¶¶ô"Ãn"D±z¿éæ¶Ø¼Ð, ô®|
 ©MÀÉ!W;C½ÐæU<Àx;sÀÉ® x>«ö¶s;C
5. ·f§¹ï"°Å¿è¹Lµ{ «á;A«öæ@æU<¼¼½ ©ñ>«ö¶sÀË-ñd½s¿è²ºµ²ªG;C

¿ï"ú!hÓMPEG-1ÀÉ"Ã±N"ä°Å±µ!X"Ö

1. «öæ@æU<¿ï¾Üµ{!; >«ö¶s"Ã¿ï"ú<¼Æ!;¼vµ°Å±µ¾÷>;C
2. «öæ@æU<¥[æ]¼vµÀÉ® x>«ö¶s;M|b PowerVCR"ï¥!à!æ¶±¥kæUæ;uÀÉ!W
 ;v²ºµøµ;æº¿ï"ún·s¼W"ì½s¿èæu§@²M³æ²º¥ô!óMPEG-
 1"Ó·½ÀÉ!j"ã!³°ÆÀÉ!W .mpg; ^;C«öæ@æU< >«ö¶s"Ó¿ï"ú±z-
 n, ÑÀÆÁYæ§µø°T°Å¿è²º®É¶!½d³ò;C



3. !pªG±z¶¶Èn¿ï"ú!¹MPEG-
 1"Ó·½ÀÉ²ºæ@³;æÀ;A«h½Ð·Æ°ÊS«ö¶s"Ó©w, q¶¶} ©IÀ!;A"Ã·Æ°ÊE«ö¶s"Ó©
 w, qµ²§ôÀ!;CµM«á«öæ@æU<>«ö¶sµ²§ôµø°T¿ï"ú¹Lµ{;C



·Æ°ÊS¶sæ!E¶s"Ó³} ©wÀàÀÉ²º¶¶} ©IÀ!©Mµ²§ôÀ!

4. !pªG±zn!X"Ö¼ÆÓµø°T°Å¿è²º!hÓMPEG-1ÀÉ!"-º³ææ@ÀÉ® x;A ½Ð-
 «½Æ"BÆJ1"ì"BÆJ3;C
5. Yn±qæu§@²M³æææ²¾°£MPEG-1ÀÉ;A±z¥u-
 næï¥Ö!bæu§@²M³æææW²º, ÓÀÉ® x;A"Ã«öæ@æU<§R°£¼vµÀÉ® x>«ö¶s;C
6. !pªG±zæ£º;·Næu§@²M³æææW²ºÀÉ® x|, §Ç;A±z¥!;bæu§@²M³æææW±N¥!ì¥[¥H-
 «²Ö;C½Ð¥ýæï¥Ö±zn-
 «²Ö²º«ü©wÀÉ® x;AµM«á«öæ@æU<æW>©!<æU>«ö¶s"Ó½Ö¾ã, ÓÀÉ® x²º;
 , §Ç;C
7. ½Ð«öæ@æU<°ö!æ>«ö¶s¶¶} ©IÀÉ® x!X"Ö¹Lµ{;CPowerVCR ·|
 Åã¥Üæ@!ï, Üæè¶¶ô"Ãn"D±z¿éæ¶Ø¼Ð, ô®|

©MÀÉ!W;C^{1/2}ĐαU<Àx;sÀÉ® x>«ö¶s;C

8. ·í§¹! ÀÉ® x|X"Ö¹Lμ{ «á;A«öα@αU<^{1/4}^{1/2}©ñ>«ö¶sÀË→d^{1/2}s;è²⁰μ²⁰G;C

→Ý§¹αF!¹»;©ú;MαF, Ñ"ì"Ï!PowerVCR"Ó;ý»s^{1/4}Æ;ì^{1/4}vαù¹ê;b→Oα@¥ó»'ÃP!^{31/2}ì²⁰
ααu§@;C;óα£²⁰w²⁰M©@°Ø§ααU"Ó;M¶}©|±z²⁰²Äα@Ó^{1/4}Æ;ì^{1/4}vαù;ý^{1/4}v©O?

©w,qÂ^"ú¹/₄vμ®æ|i

μø°T"Ó·½©w,q

μ°T"Ó·½©w,q

¶i¶¥³]©w

¶i¶¥³]©w

§¹¥þæ´©Pentium !!! ·s¹Bºâ«ü¥O

PowerVCR æW§¹¥þ³ìîíæ!Ó±o¥H¹B¥ÍPentium ºº¹Bºâ`àæO;A¥H¥
[³t»P§ì"}µø°T³B²z®Ä`àæÍ«~½è;CPowerVCR
¥ì;Û°Ê°»´ú`t²îºº³]³Æ;A`Ä±Ò¥Í¾¼A·íººCPU¹Bºâ«ü¥O;C;pºG±zººCPU→OPentium!!!
©Í°õ;æ SIMD(single instruction multiple data)©µ;ù«ü¥O;A«h¿ý»sºº®Ä`à·|§ó`Í;C
|pºG±zºº¹q, £→OPII 300Mhz¥HæW;M¥i¥HæÄ¿;üu\$Y®Éµ®ÄÀ£ÁY;v;C;pºG±z-
n§ó§iPowerVCRººæu\$@,ê®Æ§`"î"ä¥ìººí©Í¥Ø¿ý;M«h½Ð¿éæJ·sºº,ô®|;C



¼vµ¶i¶¥³]©w

¥t¥~|pºG±zºº¹q, £ææ¥ì³B²z¾¼¹|bPentium II 350¥HæWºº,Ü;A½ÐæÄ¿;üu\$Y®É-
µ®ÄÀ£ÁY;v¿;¶µ;C;p|¹¥i¥HÅý¼vµÀ£ÁY®Ä²v§ó;n;C

©w,qMPEG-1ζý»s¹/₂d¥»

PowerVCR²⁰MPEG-1²⁰ÀÉÁY\$P³N\$P³N³W®æ·\$z©óαU|C¹îáíαα·Ñ±z°Ñ!Ò;C

¶i¶¥\$P³N³W®æ

μ⁰T³W®æ

- μ⁰T³W®æ MPEG-1, YV12, Y41P, YUY2, RGB16, RGB24, UYUY, YUY2, YUV9, αÍ 1420 FourCC
- ζý»s²⁰,Ñ²R«x 176 x 144 (QCIF), 352 x 240 (SIF), 352 x 288 (CIF) and 320 x 240
- μe±Áã¥Ü³t²v 30, 29, 97 fps ;] NTSC ¥iζĩ"äα@i^ 25 fps ;] PAL©Ò¥íi^
- ¥iζĩ©É¹/₄Ò; μ⁰T¹wÄý¹/₄Ò;]]Video Previewi^αÍ μ⁰T¹ÄĐÁ¹/₄Ò;]]Video Overlayi^

μ⁰T³W®æ

- μ⁰T®æ; ζéα;]GPCM
- ζé¥X;]GMPA (MPEG-1 μ⁰T)
- !;α,³t²v ¥iζĩ©É 8 ©Í 16 !;α,³t²v
- ¹/₄Ò; ¥iζĩ©É³æμ;B¥βÁéÁn;BÁù- μαÍÁp;X¥βÁéÁnμ⁰T«~¹/₂è

MPEG ÀÉÁY¥i³]©w°Ñ¹/₄Æ

- n ¥iζĩ³/₄Ü"î¥Í I/B/P μe±;BI/P μe±αÍ¶È Iμe±ζý»sζĩ¶μ
- n "î¥íáí¥i©w,q" Cα@ GOP (¹îμe,s²Ö)²⁰ PαÍ Bμe±¹/₄Æ¥Ø
- n ¥i¹/₂Ö³/₄ãI;BPαÍBμe±²⁰αÀ⁰t
- n 'É"Ñ VCD (©T©w;!;α,³t²v);B©T©w«~¹/₂è©M"î¥íáí©w,qζý»s³]©w

©w,qMPEG-1¹/₄vαùζý»s¹/₂d¥»

PowerVCR ¥iÁý±z³]©wMPEG-1ÀÉÁY°Ñ¹/₄Æ¶i;æζý»s©ÍÀà'«¹/₄vαù;C PowerVCR 'É"ÑαU;C5⁰Ø¹/₄Đ·Ç²⁰μ⁰T¹/₂d¥»;GConstant Quality (©T©wμe¹/₂è);B VCD (NTSC);B VCD (PAL);BVCD(FILM);BEasy Movie(Â²©ö°Éμe) ;A¥H²Á;Xα@"Ç¹/₄Đ·Ç²⁰¹/₄vαùμo;æ»Ý"D;C«öα@αU<MPEG-1¹/₄vαù¹/₂d¥»> «ö¶s;A\$Y¥i®e©ö;aíî-Ý³o"Ç,ê⁰T;C

!p±z©Ò"£;A¼vαù½d¥»²M³æ!C¥X 5 °Øα
 £!Pª³]©wÀÉ"Ñ±z;ï"ú;C;ï"ú«á;A¥Ø«e¥;!b\$@¥!ª³]©wÀÉ·|
 ¥X²{-°;u¥Ø«e¼vαù½d¥»;v;A"Ã!C¥X"ä;uα°®e;vα!;u»;©ú;v"Ñ±z°Ñ!Ò;C
 !pªG±z!³;³½!©!·Qn¶!iα@"BαF,Ñ!³Ãö"SSO³]©wÀÉª,Ô²Ó,ê®Æ;AαU!C!ª!·|
 !i±z!³©ÒÀ°\$U;C

3	NA	NA	NA	4
α£©w α£©w	1152 kbps SIF	1152 SIF	1152 kbps CIF	α£©w α£©w
	(352x240)	(352x240)	(352x288)	
24 fps	29.970 fps	29.970 fps	25.000 fps	15 fps
IBBPBBPBBP	IBBPBBPBB	IBBPBBPBB	IBBPBBPBB	IP
°a³t	°a³t	°a³t	°a³t	°a³t
¥βÅéÁn	¥βÅéÁn	¥βÅéÁn	¥βÅéÁn	¥βÅéÁn
384 kbps	224 kbps	224 kbps	224 kbps	128 kbps
¼h! , 2	¼h! , 2	¼h! , 2	¼h! , 2	¼h! , 2



|p^aGn©w,q·s^{a0}¼v-

μ¿ý»s½d¥»;M¥i¥H«öαU<·s¼W>;M½Ð°Ñ!Ò;u©w,q·s^{a0}¿ý»s½d¥»;iv

|p^aG·QαF,ÑMPEGÀ£ÁYî²z;M½Ð°Ñ!ÒÃö©óMPEGÀ£ÁYαè;¡;C

¡p!ó»PŞb³NªA°ÈxHûÁpÃ´

³sµ, ¥»x¹/²¥qŞb³Nªä

´©xŞ«e;M¹/²ÐÝí; bªâ¥Uxî¹/²uªW»; ©ú´´t²íxºÀË¬d°ÝÃD¬OŞ_xv!³, Ñ´´Mªèªk; C!pª
G¬dŞ¹xŞ«áx´¥¼à´, Ñ´´M±zªº°ÝÃD; M«h¹/²ÐŞQ¥íxU!C´XºØªè!; Àð±o²£«~ªä
´©;C

¬d¬ÝWebºº¶!ÀËµø±´´£ºÝÃD, Ñµª

ºT³s¬ìŞbŞb³Nªä´©³;ªù·|©w´Áşó·s!bºº¶!xWªº²£«~ºÝÃD, Ñµª; C!b±z»PŞb³Nªä
´©xHû¶!ix@´´BÁpÃ´xŞ«e;A¹/²Ð, Ô²Ó³/4\Áª©Ò!Cªº°ÝÃD»P, Ñµª;C
ºT³s¬ìŞbªª^ªªºº, :<http://www.cyberlink.com.tw>

¹qª¶!¶!¥ó

¥í³z¹Lºº»Úºº, ôªº¹qª¶!¶!¥ó; M, ßººÝºÝÃD´´Á·|Àð±o¥»x¹/²¥q; uŞb³Nªä
´©³;ªù; vªºµªªª; C¹/²Ð±N¹qª¶!¶!¥óµººe´´ixU!C±b, ¹; M±zŞY¥í; ¬´´¹qª¶!¶!¥óªºµªªª; C

PowerVCR@cyberlink.com.tw

¹/²Ðª´·N; G¥»x¹/²¥q¶!È¹;µù¥U¹Lªº´´í¥íª!´´£´´ÑŞb³Nªä
´©; M¹/²ÐºÈ¥²; b¹qª¶!¶!¥óªWµù©ú±zªº²£«~¥úººªùCD-Key, ¹/²X;C

¶!Ç¬u

±zª¶!¥í¥í¶!Ç¬u, ßººÝºÝÃD; M´´Á³z¹L¶!Ç¬uÀð±oµªªª; CºT³s¬ìŞbª¹/²¥qŞb³Nªä
´©³;ªùªº¶!Ç¬u, ¹/²X¬º; G886-2-8667-1300;C

¹/²Ðª´·N; G¥»x¹/²¥q¶!È¹;µù¥U¹Lªº´´í¥íª!´´£´´ÑŞb³Nªä
´©; M¹/²ÐºÈ¥²; b¶!Ç¬uªWµù©ú±zªº²£«~¥úººªùCD-Key, ¹/²X;C

¹q, Ü

±z¥í´´í¥í¹q, Ü»PºT³s¬ìŞb¬ìŞbªººŞb³Nªä´©³;ªù³sµ, jM³q, Ü®É¶!; ¬º¬P´Áª@!Ü¬P
´Áª´´CªÑªWªÈªE®É´´ixUªÈª-

®É; C·í±z¹q, Ü, ßººÝ®É; M³!; n¹/²Ð±zŞª!b¹q, £®ÇÃä; A´´Á³ÆŞ

´±zªºªª¥ó, ê®Æ; C¹/²Ð´´£´´ÑxU!C, êºTµ¹ŞÚ!; G

| µù¥U©Ò¥íªº²£«~CD-Key, ¹/²X;C

| ²£«~ªª¥»», ¹/²X;C

| ©Ò´´í¥íªºµwÁéÃª«¬; C

| ¥X²{!b±z; Á¹ðªW¥ó!óºT®Ş; C

| µº¥íªººÝÃD¬º; ó; MººÝÃDµº¥í©ó!ó®É; C

| şp³Nᄁä´©³;ᄁù¹q,Ü,¹¹/²X;G 886-2-8667-1298

¹/²ᄁᄁ·N;Gᄁ»ᄁ¹/²ᄁq¶ᄁÈ¹;µùᄁU¹Lᄁᄁ“İᄁİᄁı´£“Ñşp³Nᄁä´©;M¹/²ᄁ°Èᄁ²³ÆŞ
´±zᄁᄁ²£«~ŞÇ,¹(CD-key);C

ᄁg³/⁴P°Ó

¹/²ᄁ³sµ,±zÁÊ¶Rᄁ»²£«~©Ò;ᄁ°ê®ᄁᄁᄁ°T³s-İşP,ᄁg³/⁴P°Ó©İᄁN²z°Ó;C

PowerVCR™

PowerVCR™ is a CD-ROM based software that allows you to watch and record TV programs on your PC. To install the software, insert the CD-ROM into your CD-ROM drive and run the *Setup.exe* file. The installation process will take a few minutes. Once installed, you can watch and record TV programs on your PC. For more information, please refer to the user manual.

VCD	α@αÄÄμø°	α@αÄÄMPEG-
«~½è¼v	T»Ý18 MB	1μø°TÀÉ»Ý 9 MB
αù(NTSC)		

| ±Ø°ÊPowerVCR¥Dμ{||«á;APowerVCR^{αø}μø°TÄã¥Üμ;|
 Äã¥Ü¥Ø«eμø°T°Ö·½,Ë,m©Ò¼¼½©ñ^{αø}¼vαù;CYn±Ø°ÊMPEG-
 1¿ý»s;A¶É»Ý«öα@αU<¿ý¼v>«ö¶s;A§Y·|¥β°è±Ø°Ê¿ý»s¶¥¬q§@·~;CYn°±
 α¿¿ý»s¹Lμ{;A¶É»Ý«öα@αU<°±α¿>«ö¶s;C

|

¿ý»s¹Lμ{§¹;«á;A¥i«öα@αU<¼¼½©ñ>«ö¶sÄËμø¿ý»s^{αø}¼vαùα°®e;C|p^αG·Q
 ¥Í¥β;Ä¹ø¼Ö;ÖÀËμøμø°T;A¶É»Ý«öα@αU<³¿¿¿Æ>«ö¶s;C

| |p^αG±znÄx|sαw¿ý»s^{αø}μø°Tα°®e;A'N«öαU<|sÄÉ>«ö¶s;C PowerVCR·|'£
 ¥Ü±z«ü©wÄÉ®x^{αø}¥Ø^{αø}|a;C PowerVCR·|¥Í.mpg
 °ÆÄÉ;W'ÓÄx|s±z^{αø}μø°TÄÉ®x;C·í±z¿ý»s^{αø}μø°T|sÄÉ«á;A²{|b±z¥i±Ø°Ê¥t
 α@Ö¿ý»s^{αø}¶¥¬q§@·~;C

- |p^αG±zn|b¥ý«e¿ý»s^{αø}μø°Tμuαùα²K¥
 [·s^{αø}¿ý»sμø°T;A¶É»Ý«öαU<±Ø°Ê>«ö¶s;M·s^{αø}¿ý»sαùÄ'N·||Û°Ê¥
 [·|¥ý«e^{αø}¿ý»sαù¬q§«á;C

- ©Í¿;A·Qn¿ý»s·s^{αø}¼vαùÄÉ®x;A½Ð¥ý«öαU<²M°£>«ö¶s§R°£|b
 PowerVCRα§αu§@¥Ø¿ýα^{αø}¼É;SÄÉ;M;A«öαU<¿ý¼v>«ö¶s¿ý»s·s^{αø}¼vαù;C

1w¬ù PowerVCR ¿ý»s®Éμ{αÍ«ùÄò®É¶;|

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n«ü©w¿ý»s®Éμ{©Í¿ý»s«ùÄò®É¶;|A½Ð«öα@αU<¹w¬ù¿ý¼v>«ö¶s;C¥X²{^{αø}1;
 Üαè¶ø¥i¹w³|¶}©|¿ý¼vαÍμ²§ð¿ý¼v^{αø}®É¶;|A©Í¹w³|

¿ý»s«ùÄò®É¶;| (¿í'ú¿ý»s«ùÄò®É¶;|¿í¶μ;C¿é¶|¶}©|®É¶;αÍμ²§ð®É¶;|A©Í¿é¶|¥
 ¿½T®æ;| (αp®É;GαÄÄ;G¬íÄÄ)^{αø}¿ý»s«ùÄò®É¶;|,

μM«á«öαU;u½T©w;v«ö¶s;A PowerVCR ±N·|

|b¹w³|®É¶;|·¹F®É±Ø°Ê¿ý»s¹Lμ{;A"Ä;P"°B°ø;æË¼Æ-

p®É(¥i¹¬ÝPowerVCR"Í¥Í¿α¶±αUαè^{αø}©w®É¾¼Äã¥Ü)

;C·í¹w³|®É¶;|·¹F®É;A¿ý»s¹Lμ{±N·||Û°Ê±Ø°Ê;C

ÁÛ¹³α@αè^αk¥i¥H«ü©w¿ý»sÄÉ^{αø}αjαp;CY«Ü¾¼áαβμw^{αø}Ð^αÄ¶;α

£¼Ä"Í¥Í;A³o¶μ¿ý»s¥\`à·|«D±`|³®Ä;C¥i;Ö¼{ÄÇ¥Ñ³}©w;u°±

α¿¿ý¼v©óÄÉ®x^{αø}«xαj©ó...;v¶|;æ¿ý¼v"í;C

PowerVCR"Í¥Í¿α¥i¥H¹B¥Í;|;u¿ý»sÄÉ^{αø}«x;v¿í¶μ»P;u¹w¬ù¿ý¼v°Ñ¼Æ;v^{αø};U°Ø¿í¶
 μ;A»'©ö;α½Ö¾¼ã¿ý»s»Ý"°D;C

°ò¥»αW;A PowerVCR"¿ý»sα@αÄÄμø°T·|²£¥Í20

MB^{αø}ÄÉ®x(|p^αG|b;u©T©w«~½è;v;Bμe±αjαp¬° 352 x 240 |B"C¬í30μe-

±²⁰@æ;|;U¶|;æ¿ý»s);Cæf¹L¹ê»ÚæW;A±z»Ýn;ÛæÖ»P¿ý»sÀÉ;P¹/₄Ëæjæp²⁰â-
 ¿|øÐ²Å¶; (°´N→OÁ`!@40 MB);A¥H«K;|bø|øÐæW°ð;æ;uÀà´«;v\$@·~ (swapping)
 (|¹æDæ@ø»P¿ý»s°Ê\$@æ@°_µø¥í²⁰¥²»Ý¹Lµ{)
 ;Cæ@,g¿ý»s¶¥→q\$@·~µ²\$ð`ÃÀx|s→°ÀÉ@x;A«h`ï¥í¹L;`¥í±¹/₄²⁰µwøÐ²Å¶; (\$Y→°
 °ð;æÀà´«²⁰;æÀ)·|;A«x;|`→°¥í¥í²Å¶;|;C



p@É³/₄¹³]@w

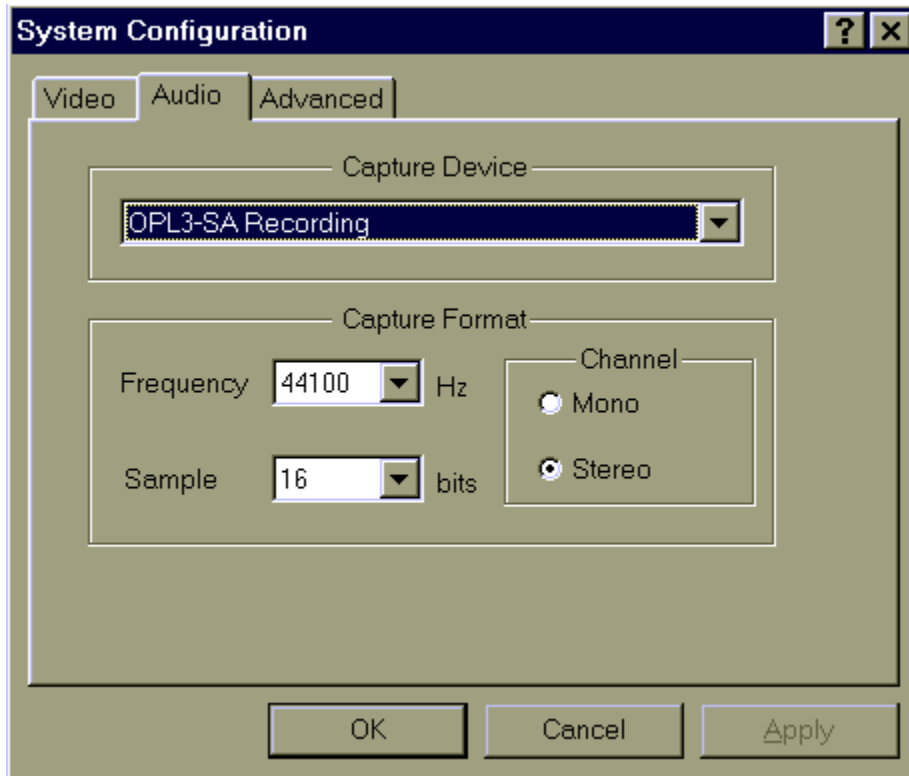
PowerVCR ´f`Ñ¹w³]æMPEG-
 1³]@wÀÉ°Ñ¹/₄Æ→°;u"}|n«~¹/₂è;vµø°T¿ý»s;C|p²G±z;|→°`S\$O¥ø²⁰;A·Q-
 n³]@w`ä¥í²⁰¿ý»s³]@wÀÉ@í@w,q±z;|Ûæv²⁰¿ý»s³]@wÀÉ;A
 «h±z¥í«öæ@æU³]@wÀÉ«ö¶s`Ó\$¹||¹æu\$@;C¹/₂Ð°Ñ³/₄\
²Ã³¹æ;uµø°T@æ;|;vD@w,qMPEG_1µø°T@æ;|;A¥H`ú±ø;|³Ãö³]@wMPEG-
 1³]@wÀÉ²⁰,ê°T;C¥ç¹/₂Ð°Ñ³/₄\@w,qMPEG-1
[1/4væ¿ý»s¹/₂d¥»°ð¥»²/₄ÃÑ;A¹ê»ÚæF,Ñ³\]@w¿ý»s¹/₂d¥»²⁰æèæk;C](#)

3]@wµø°T/µ°T,Ë,m

|p²G±znÀÇ°t,mµø°T/-
 µ°T²⁰µwÀé,Ë,m`Ó¹/₂Ö³/₄ã¿éæ|,ê@Æ→y;A¹/₂Ð«öæ@æU<³]@w>«ö¶s«K¥í°ð;æ;|æ¹æ
 u\$@;C¹/₂Ð°Ñ;|[1/4vµ°T,1¿éæ|\]@w](#)@w,qÀ^`úµø°T²⁰@æ;|;A¥H`ú±øó|h,ê°T;C

μ®Ä"Ó·1/2³]©w

¡μ®Ä³]©w;v→O¹q, £ªμ®Ä¿d³]©w;A¿Ñªº-
μ°T¿dÅX°Êμ{!;!Ó©w;CαU|C¹ê"Ò→O;uESS Audio Drive;vÅX°Êμ{!;ªºμ°T²ÕªA;CY-
n°t, mμ°TÂ^"ú@æ!;A½D°Ñ¾\μ®Ä¿d"í¿!|αâ¿U¿Hα!MPEG-1 ³]©wÄÉ-
μ°T©w, q"Ó°t, m±zªºμ°T¿d;C



μø°T"Ó·1/2³]©w

μø°T³]©w;]Video Configuration; ^

;uμø°T³]©w;v→O±Nμø°TÂ^"ú,Ë,m²º;éxj"ì¹q,£
 xW²ºT,¹§@³]©w³B²z;C;]¹;A;uμø°T³]©w;v§¹¥þ→O®Ú¾ÚμwÁéÁX°Êμ{;;²ºÃþ«
 →"Ó"Mcw;CxU;C¹é"Ò→° xOÐA©Ò¥X²f²ºFlyvideo II
 μø°TÂ^"ú¥dÁX°Êμ{;;²º³]©wμe±;C;p²G±z²ºÂ^"úÁX°Êμ{;;x
 £→O³ºx@º;A«h¥X²{²º;Ã¹õ·|x£;P;C



μø°T³]©w

μø°T"Ó·1/2→O©w, q PowerVCR ¥Ø«e¥¿§@¥íx
 x²ºμø°T"Ó·1/2²ºÃþ«→;C;p²G³s±μ"ì±z²º¹q, £;³¹/4ÆÓμø°T"Ó·1/2
 ("Ò;p;A¿½¼v¾÷;B¹qμø¿i¥x¾¹);A±z»Ýn→° PowerVCR «ü©wx@-
 Óμø°T"Ó·1/2"Ó¿ý»s¼væù;C

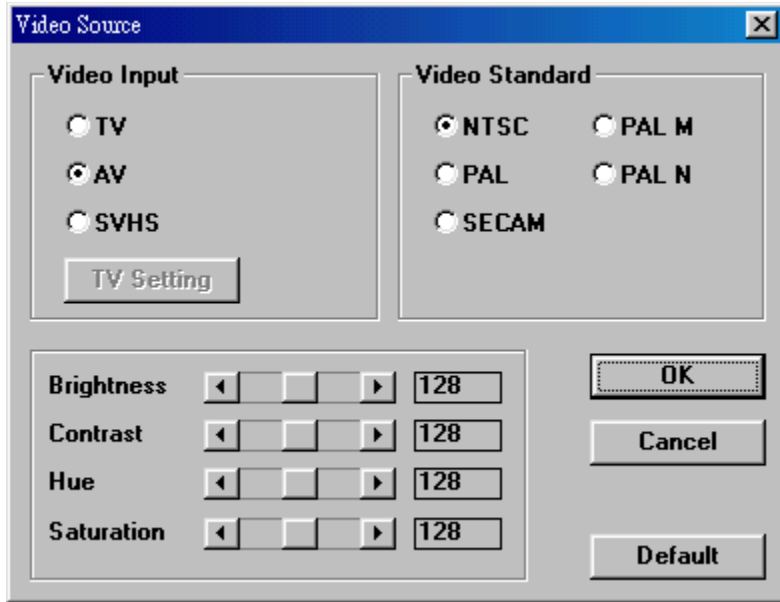
μø°T®æ;]©w, qμø°T¿éxj²º, Ñ²R«xæí, Ñ²R«x;C¹/4v¹³®æ;]³q±`¥HFour Character
 Code(FOURCC)®æ;]"Ó²i¥Ü;C½Ð°Ñ¾\

μø°T®æ;]A¥H"ú±º, Ó²Ó, ê®Æ;C;p²GPowerVCR "t²î²ºxä

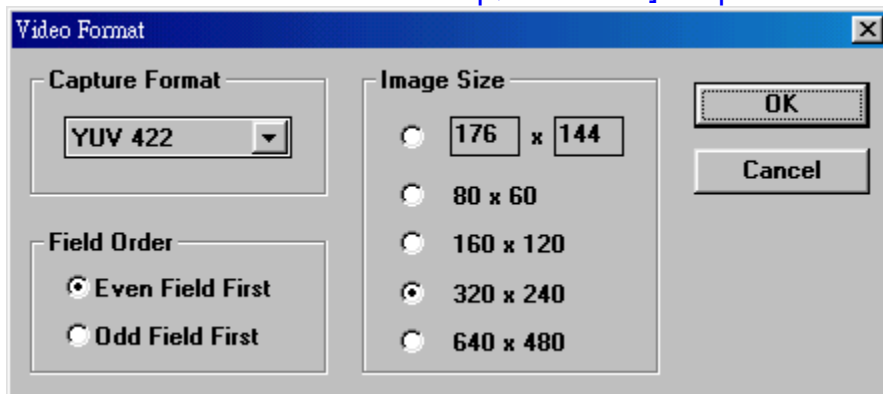
´©©Ò¿¾¼Ü²ºμø°T®æ;]A«h"ä³]©wÈx·|

Åä¥Ü;b¼ÐÅÒ¥kxUæ²ºμø°T®æ;]Äæ;]i;C´N;¹¹ê"Ò;Ó"¥

;A©Ò¿i"ú²ºμø°T®æ;]→°Y41P;C;p²G±qμø°T²ÖºA¼ÐÅÒ©Ò¿¾¼Ü²ºμø°T®æ;]¥
 ¼"ü"ìPowerVCR²ºxä´©;A«h·|¥X²{;uPowerVCRx£xä´©;¹μø°T®æ;]v²ºT®§;C



μø°T"Ó·½³]©wμε±



μø°T@æ|i

μø°TÅã¥Ü (Video Display) - Â°é - °μwÅé, Ë, m; Ó³]ªº²ÖºA; CPowerVCR α£· |
±Ä¥Í³o"Ç°Ñ¼Æ"Ó¿ý»sμø°T;C

Â½Âà¼v¹³ μwÅéÂ^"ú, Ë, m©Ò'£"Ñº - YÃpμø°T@æ|i ("Ò;pYUY2); A¥i - à; b¿ý»s
'Á¶; ¥H; uαWαUÄÄË;]up-side-
down; ^; vªº¼Ò; ; "ÓÅã¥Ü; C±z¥iÀË - d; ¹¿i¶"Ã±N, Óμø°TÅã¥Ü x¥¿ - °¥
¿±`¼Ò; ; C

μø°TÂÐÄ| (Overlay¼Ò; ;) » Pμø°T¹wÄÝ (Preview) ¼Ò; ; G; uμø°TÂÐÄ|
; v¼Ò; ; ¥i¥H±N¹q, £¹§ÍÄ| ©ñ; b²{³ö©Íαw¿ý»s; nªºμø°T«H, ¹αW±
; A"ÄÄx; s"ä; X; "ªºμø°T¼v¹³"iμwºÐαW; Cαx"ä - OÆ[- Ý¼vαù; r¹ºº, Ü; M'N»Ý -
n"ÍÏ"i; uÂÐÄ|¼Ò; ; v; C - O§_ - à¥H; ¹αè; ; - Ý"i, Óμø°T; A¥p¥Ñ¹q, £
αWªºÄ, ¹ÏdÃp« - ©"Ò" M©w; C(α@ - ë, û·sªºÄã¥Ü¥d; A; pAGP¶x - y±ÆªºÄã¥Ü¥d;
A³£αä'©; ¹¥ - à; C; ¹¥ - ±zªº¹q, £¥²¶·; w, ËDirectXαÍDirectDrawα~ - à¶¶§QÄX°Ê¥; ; C)
; ý - O; ³"ÇÄ, ¹Ïd; b; uμø°TÂÐÄ|; v¼Ò; ; αUα£ - à¾A·íÄã¥Üμø°T; C³o -

Óª¬ªp¡³®É¬O¡]¬°µwÁéÂ^¨ú,Ë,m»PÃ,¹ï¥dÃX°Êµ{¡¡ªº½Ä¬ð©Ò³y¡¨¡C¡pªGµo¥
Í¡¹±¡ªp¡A½Ð¨Ï¥Í¡µµø°T¹wÃý¼Ò¡¡¡v¿ï¶¡C

½Ð°Ñ¡Òµ°T¨Ó·½³]©w

©w,q-s²⁰zý»s^{1/2}d¥»

μ⁰T©w,q

|p^aG±z|³-S@í¼vαù¥X^a©»Ý"D;A¥i¥H©w,q;Ûαv²⁰zý»s^{1/2}d¥»;C;Û©ó³ÃöMPEG-1
ÀÉÁY²⁰,é°T;A½Ð°Ñ;ÒMPEG-1μ⁰TÀÉÁY¼Ð·Ç³Ãö MPEG-1¼vαù-[⁰c²⁰»;©ú;C

PowerVCR

´É°Ñ;u©T©w"C-í;¼,¼Æ;v©Í;u©T©wμ^{1/2}è;v°ð¥»ÀÉÁYαè;í;¼i¶μ"Ózý»s¼vαù
;C

;u©T©wμ^{1/2}è;v;Mzý»s²⁰MPEG-1 ("Ò;p"Constant Quality Movie"αÍ"Easy

Movie")²⁰"C-í;¼,¼Æ¥i"àαÉ©T©w;A;ý-Ö PowerVCR

·|«OÃÒzý»s²⁰μ^{1/2}è;Czý»s²⁰μ^{1/2}è¥i±q1-Å"í4-Å;B4-Å-Ö³í"Í;A;Ó1-Å-Ö¥i±μ"üμ
e^{1/2}è;C²⁰«~½èzý»s»Ýn§ó|h²⁰μ⁰T,é®Æ;A·íμM-Û¹iα]·|

Àà;"-°§ó|h²⁰í;Ð^aÅ¶;²⁰»Ý"D;C



·s¼WMPEG-1¼vαù½d¥»

©T©w"C-í;¼,¼Æ°ð¥»αW-Ö¹³VCD³]©wÀÉ(NTSCαPAL)

;A"ä"C-í;zý»s²⁰í;¼,¼Æ-Ö©T©w;A;í;¼¥i¥H;ð°â¥ð;óαw^{3/4}®É¶;²⁰«xαSMPEG-1
μ⁰T©Ò»Ý²⁰μw²⁰Ð^aÅ¶;í;CμM;Ó;AVCD³]©wÀÉ"ÃαÉ"à«OÃÒzý»s²⁰μ^{1/2}è;C

MPEG-1 編碼器

Yn°t, m MPEG-1 編碼器 A±z»Ýn“ú±oα@“Ç MPEG-1
 一[°c²º°ò¥»²³/4Ñ;C½Ð°Ñ;Ò MPEG-1 ÁfÁYαíµø°T@æ;í;C



MPEG-1 編碼器

I;BB;BPµ±³]@w: 'N PowerVCR 編碼器 MPEG-1 µε@æ²Ö;“æ°@e;GIPB µε±;BñÈIPµε±;BñÈ I µε±;C |pªG¿ì³/4ÜñÈµε±;A«h,Ó-µ°T·|»P°ÊªA JPEG µ°TÀÉÃb;ü;C;¹³]@w·|²£¥í·¥“í«~½è²ºµø°T¿é¥X;A;ý·|¹/4Wαj;û³/4Üªºº;ºÐªÁñ;C;ý-Ö·íq, £¹Bªâ³t«x·U\$Ö®É;AIBPµε±-Ö³|“íªº;¿³/4Ü;C;|“°IBPµε±ªº¹Bªâ-Ü·í½ÆÁø;M»Ýn,ûªÁÉªº¹q,£æ~ª³B²z\$¹µ½;A;ý-Ö¥í¥H¥H,û,gÀÜªºÀÆÁYªÁñ;Àx;sÀÉ®x;C

¾°Ê;ôñq\$P³N;]Motion Estimation; ^;C³sÄòµø°Tµε±ªº@t²\$-pªâÁYªÜ-°;u²³/4°Ê;ôñq\$P³N;v;C;pªGSÜì“í¥í°íñð°t;X\$P³N(block matching technique) ;A«h°w¹í“úñq°íñð»P“Cα@¹w“ú«Y¿í²;]predictor candidate; ^æ\$ñ;ªº@t²\$ªº;“¥»“¿¹/4Æ¥ [¥H³]αpªÆ;A«h¥í±o“ì“ª²³/4°Ê;Vñq;C¥í-àªº²³/4°Ê;Vñqα\$·j´M½d³òV,»P;“¥”“¿¹/4Æ¿íñµ«h¥í¥í“Ó°õ;æ;C,ÔªÉªº·j´M²£ ¥íªª«~½èµø°T;A;ý«o»Ýn¹í¥“αj½d³òªºññq½ÆÁø¹Bªâ-àαO;C

µ¹/4vαùµø°T«e³B²z;v;]Preprocessing; ^;C;pªG¿ì,Óñµ¥ø;A«h PowerVCR ·|;bñí;æÀÆÁY«e±NÀË-ñ¿éαjµø°T,ê®Æ-y;A¥H½T«O¿ý»s«~½èα\$“};ñ;C;ý-Ö;¹¿íñµ;bcPU³B²z³t«xα£°÷\$Ö®É;A¥í-à·|°\$C¿ý»s®Ä-à;C

MPEG-1 μθ°TÀ£ÁY¼Đ·Ç

MPEG-1 μθ°T¼Đ·Ç

MPEG-1 μθ°TÄY©ó ISO/IEC ¼Đ·Ç^{αα}® a±Ú"t|C;CMPEG;]Motion Picture Expert Group; ^2ÖÁ'©w, qαF;P" B¼Æ;ì-

μ°Tαí«D¥æ;ù©Ê¼Æ;ìμθ°T^{αα}ìα, ,ê®Æ-γ^{αí}Û^{αk};A¥iÀ£ÁYαp©ó 1.5

Mbps^{αα}μθ°T,ê®Æ;A"äαα-ù 1.1 Mbps ¥í©óμθ°T;A128kbps ¥í©óμθ°T;A³Ñ¾¼|αì¥í\$@ MPEG "t²í;C

MPEG-1 ¥]\$t¼ÆÓ³;αÀ;A"äαα^{αα}"t²í;Bμθ°Tαíμ°T³;αÀ-OSÚìÃöαβ^{αα};¥÷;CMPEG-1 "t²í^αd\$âα@Óμθ°T,ê®Æ-γ»Pα@Ó©Í!hÓμ°T,ê®Æ-γ¥[¥H|h- «³B²z"Ã²V©M;]multiplexing; ^"Ã"ï"ä|P" BαÆ(synchronizing);C°£ αFÂ²³æ¼¼½©ñ¥~;AMPEG-1 "t²í,ê®Æ-γ"Ã"ã|³\$ó|h½ÆÂ^{αα}¥\ ~à;A"Ò;pÀH¾÷;s"ú;B\$ÖÂàαíËÂà;C

MPEG-1 '£"Ñ½d³ò¼e¼s^{αα}μθ°T,Ñ^{αR}«xαí,ê®ÆÂ^"ú³t²v;CMPEG-1 ^{αα}¥D-nÀ³¥í-°Àx|s¼vμ,ê°T©óÀx|s' CÀé;pCD-ROMαíDAT;A"ä,ê®ÆÂ^"ú³t²vαj-ù;b1.2 Mbps¥^{αα}¥k;C'N"C-í30Óμε±»PÅãÛÜ,Ñ^{αR}«x-°352x240^{αα}¼vαù|Ó"¥ ;A|b|¹,ê®ÆÂ^"ú³t²vαUÀ£ÁY»P,ÑÀ£ÁYμθ°T^{αα}«~½è;A»P VHS ¿ý»s^{αα}«~½è-Û;ü;C

[MPEG-1 μθ°T-í°c](#)

[MPEG-1 μθ°T-í°c](#)

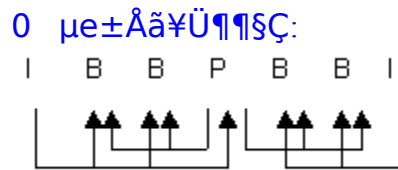
MPEG-1 1/4vαù- [°c

MPEG-1 α°ÀÉÁYαè!;

¥Ø«e±z©Ò-Ý"ì²°VCD³f-OMPEG-1²°ÀÉÁYαè!;C"ä¹êVCD¥u-OMPEG-1α
 α²°α@¶μ³W®æ!Óαw;M©w,q»PVHSζý¹/₄v±a-Û!Pμ¥-Å²°¹/₄vμ«~¹/₂è;C
 !p²G±z¹!¹/₄vαù¹/₂!±²!³α@©w²°»{ÃÑ;M·|μ²{α³;¥÷²°¹/₄vαùμ±
 ;M"ä¹ê«eα@±i»P«áα@±iμ±¥u!³«Ûαp²°!ααèαf
 α@¹/₄É;CMPEG§Y-OSQ¥!¹α@-S©É;M!bα@²Öμ±(frame)α
 α©w,q¥X²Äα@±i;u"Ñ!Òμ±;v;M«áÄ²°μ±;M¥u-öζýα
 £!P²°³;¥÷;C-íμM¥ÑMPEGÀÉÁY¥X"Ó²°μ±·!³"Ç¥ç-u²°±;αp;Mα
 £¹L»P©Ò,`-Û²°αÄ¶!;αñ_ "Ó(¶W¹L50ζ¥HαW²°ÀÉÁYαñ²v)
 ;M¹ê!b-O;u"qÀÁα;J;v;Cα@²Öμ±®æ²°²Ö!";M!bMPEG-1³N»yαα°Ùα§-°GOP
 (Group of Pictures);C

MPEG±Ä¥!³°Øαè²k"ÓÀÉÁY"Cα@Óμ±: Iμ±(Intraframe);Bμ±(Predicted frame)
 ;B¥Hα!Bμ±(Bi-directional frame);CαT²°Øμ±²°»!;©ú!pαU:

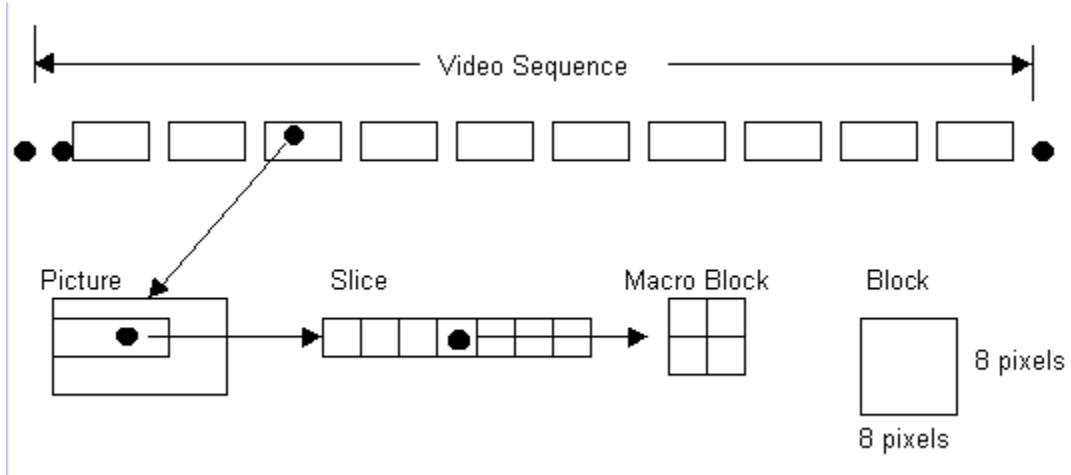
- n Iμ±:±N³/₄ãÓμ±ÀÉÁYÀx!s;A§@-°GOP²°Ñ!Òμ±;C
- n Pμ±:Àx!s©M«eα@Ó°Ñ!Òμ±(I©!Pμ±)α£!P²°_ê®Æ;A©Ò¥HPμ±
 ¥u!û«Ûαp²°αÄ¶!;A!ý-O»Yn,û!h²°p²°â;M¥!²³/₄°É!ô¶q§p³N"Ó-
 p²°â²³/₄°É²°αÄ¶!;C
- n Bμ±:¥Hα§«e¥Hα!α§«á²°I©!Pμ±§@-°Ñ!Òμ±;A©Ò¥H²°Ù§@Àù!Vμ±
 ;C!³Bμ±²°MPEGÀÉ;AÀx!s²°Ä¶!;¥!¥HÁY±o§óαp;A!Ó¥B¥!¥H¹/₂s¹/₂X¥Xα£
 ζù¹/₄¹/₂©ñ©ñ«~¹/₂è²°ÀÉ®x;Aα£¹L»Yn,û!h²°q,£¹B²°â;C



μ±¶Ç;é¶¶§

0 I P B B I B B

MPEG¹/₄v°T,ê®Æμ²°c

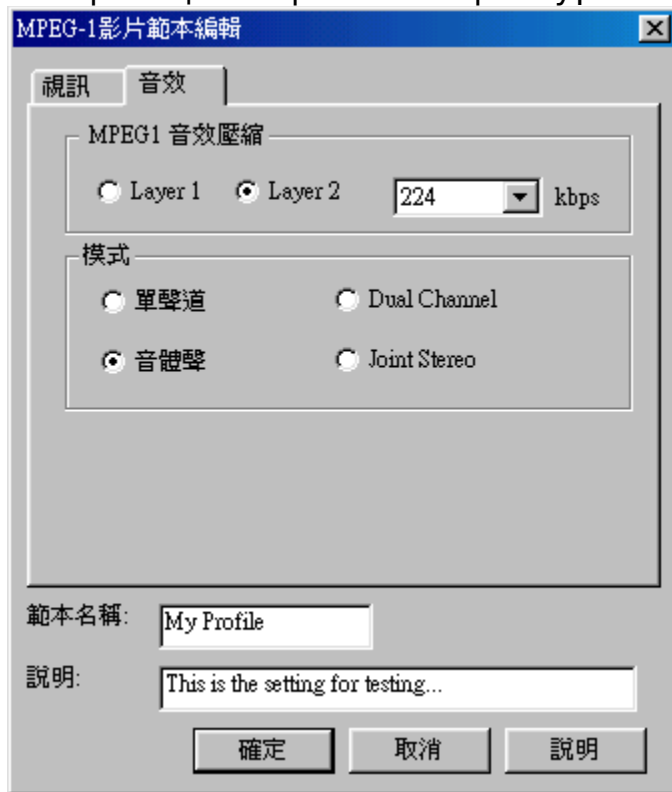


MPEG-1 μT- [°c

PowerVCR μ°TÀÉÁYαä´ © MPEG-1 ¼h! , 1α!¼h! , 2`â°Ø¼Ò!;i;C

0 ;u¼h! , 1;v ¾¼A!X!;α , ¾t²v¶W¹L128 kbps;M!ý- Oα£¥i!;bÀÉÁY³t²v¶W¹L384 kbps±ø¥óαU½s½X;C`Ò!p;APhilips¥d!;¼Æ!;ì¥ú°Ð (DCC) `ï¥í¼h! , 1ÀÉÁY;j`CÀW¹D192 kbps;^ ;C

1 ;u¼h! , 2;v α°¥Ø¼Ð!;α , ¾t²v-°`CÀW¹D128 kbps;C¥!`ï¥í§ó!³@Äα°μ{!;¼X`Óáí¥Ü!;α , α°αÀ°t;C!¼h! , α°¥i- àÀ³¥í-°CD-ROM αWα°μ°TÀx!;sá!¼vμ¥ú°ÐαWα°μ°Tó!;y;C



0 MPEG-1μ°TÀÉÁY½d¥»³]©w

μT¼Ò!;i

MPEG-1 μ°T¼Ð·Ç©w , q¥iαä´ ©1©Í2μ°TÀW¹Dα°!;α , ,é@Æ-y;G³æα@ÀW¹D (³æμ) ;B`âÓ;W¥ßÀW¹D(Àùμ)©Íα@Ó¥ßÀéÁn«H , 1(¥ßÀéÁn);C¥ßÀéÁn«H , 1α°`â- ÓÀW¹D¥i;W¥ß³B²z (-°¥ßÀéÁn)©Í-°;uÁp;X¥ßÀéÁn;v `Ó¹B¥í¥ßÀéÁnα°- «½Æ;C±z¥i!;bμ°T ²Ö°A¼ÐÀÒαW-Ý`!;A³o¥!Óμ°T¼Ò!;i;¿!;¶¥i¥ô±z¿!;ú;C¥!;- ¡α°S@í«~½èαÀz!;pαU;G

0 ;u³æμ;v-°³æα@μ°TÀW¹D;C·í±z»Ýn¾§Cα°¥i- à!;α , ¾t²v@É;A`ï¥í³æ- μ³]©w»P³æμ`Ó·½;C

1 ¡u¥ßÁéÁn¡v¥]¬A¨âÓ¿W¥ßªºÀW¹D¡CÁöµM¾¾ãÓ¡ì¤,³t²v¤
´¬º©T©w¡A¡ý¬OÀW¹D¤§¶¡¡ªº¹º¤À¤¤
£©T©w¡C½s½Xµ{¡¡¨¡¥¡¡¹¼u©Ê¨Ó§i¨¨}«~½è¡A¨ä¤èªk¬º¤Àºt,û|h¡ì¤,¨¨ã¡³,û|h
ºÊºA«H,¹ªºÀW¹D¡C¡b,ûºª¡ì¤,³t²v¤U¨¨¡¥¡¡u¥ßÁéÁn¡v¹F¨¨¡³¨¨Í«~½èªº¥ßÁéÁnµºT¡C
¡uÁp¡X¥ßÁéÁn¡v¥¡ºªÀW²v¤§¥ª¤¡¥kÀW¹Dªº¬Y¨Ç¡ì¤,¶¡¡æÁp¡X¡C¡¹ª¬ªp¥¡§i¨¨}À
£ÁY®Ä²v¡A¶È¨¨ü¨¨¥ßÁéÁn¤ÀÂ÷ªº»´·L·¡¥ç¡C,û§CªºÀW²v¥¡§@¥
¿±`ªº¥ßÁéÁn¡A,ûºªªºÀW²v¥¡§@Áp¡X¥ßÁéÁn¡C¡b,û§Cªº¡ì¤,³t²v¤U¡A±q¥
¿±`¥ßÁéÁn¤£©ö¿ë§O32 ÀW±ªªº³]©w¡C½D¡b¤
¤§C¡ì©ó³t²v¤U¨¨¡¥¡¡¡uÁp¡X¥ßÁéÁn¡v¨¨ÓÀ¨¨ú³¨¨Í«~½è¡C
0 ¡uÂùµÀW¹D¡v¥]¬A¨âÓ§¹¥p¿W¥ßªºÀW¹D (¥ª/¥k)¡A¨C¤@ÀW¹D¨¨ã¡³¾¾ã-
Ó¡ì¤,³t²vªº¤@¥b¡C³q±`¥¡¡b|hºê»y¨¨¥µºTµ{¡¡¤¤¡C
1 PowerVCR¡Ò¼{¨¨¡¡UµºT¨¨Ó·½¥¡¬ªªº¤£¡P«~½è¡C¨¨¡¥¡¡¡¥¡¨¨¡¾¼Uº¾¼n¨¨Ó¡Û©w¨¨ä-
µºTºÁ¿èªºµºT¿é¥X¼Ò¡¡¡C

MPEG-1 μ°T³]©w

MPEG-1 μ°TÀÉÁY

PowerVCR μ°TÀÉÁYæä´© MPEG-1 ¼h! , 1æ¼h! , 2`â°Ø¼Ò! ; ; C

0 ; u¼h! , 1; v ¾¼A! X! ; ; æ , ¾t²v¶W¹L128 kbps ; M! ; ý - Oæ£¥i! ; bÀÉÁY¾t²v¶W¹L384 kbps ± Ø¥óαU½s½X ; C`Ò! ; p ; A Philips ¥d! ; ; ¼Æ! ; ð¥ú°Ð (DCC) `Ï¥¼h! , 1ÀÉÁY ; j`CÀW¹D192 kbps ; ^ ; C

1 ; u¼h! , 2; v æ°¥Ø¼Ð! ; ; æ , ¾t²v - °`CÀW¹D128 kbps ; C¥! ; `Ï¥¼só! ; ³@Äæ°μ{ ; ; ½X`Óáí¥Ü! ; ; æ , æ°æÀ°t ; C! ; ¼h! , æ°¥i - àÀ³¥Î - °CD-ROM æWæ°μ°TÀx ; sæ¼¼vμ¥ú°ÐæWæ°μ°Tøÿ ; C



0 MPEG-1 μ°TÀÉÁY½d¥»³]©w

μ°T¼Ò! ;

MPEG-1 μ°T¼Ð·Ç©w , q¥iæä´© 1©Î2μ°TÀW¹Dæ°! ; ; æ , ê®Æ - y ; G³ææ@ÀW¹D (³æμ) ; B`âÓ¿W¥ßÀW¹D(Àùμ)©Îæ@Ó¥ßÀéÁn«H , 1(¥ßÀéÁn) ; C¥ßÀéÁn«H , 1æ°`â - ÓÀW¹D¥i¿W¥ß³B²z (-°¥ßÀéÁn)©Î - ° ; uÁp ; X¥ßÀéÁn ; v `Ó¹B¥Î¥ßÀéÁnæ° - «½Æ ; C ± z ¥i ; bμ°T ²Ø°A¼ÐÀÒæW - Ý` ; i ; A³o¥|Óμ°T¼Ò! ; ; ¿i¶μ¥i¥ô ± z ¿i`ú ; C¥! -

jàºS®í«~½èÀz!pæU;G

0 ³æµ¬º³ææ@µ°TAW¹D;C·í±z»Ýn³Ì§Cºº¥í¬à!ìæ,³t²v®É;A¨Ï¥î³æµ³]©w»P³æ-
µ¨Ó·½;C

1 ¥ßÁéÁn¥]¬A¨âÓ¿W¥ßººÀW¹D;CÁöµM¾¾ãÓ!ìæ,³t²væ

´¬°©T©w;A!ý¬OÀW¹Dæ§¶!;ºº¹ºæÀæ

£©T©w;C½s½Xµ{!;¨Ï¥î¹¼u©Ê¨Ó§i¨¨}«~½è;A¨äæè²k¬ºæÀ°t,û|h!ìæ,¨¨ã!³,û|h
ºÊºA«H,¹ººÀW¹D;C!b,ûºæ!ìæ,³t²væU¨Ï¥î;u¥ßÁéÁn;v¹F¨¨³¨¨Í«~½èºº¥ßÁéÁnµ°T;C

Áp;X¥ßÁéÁn¥íººÀW²væ§¥ææ!¥kÀW¹Dºº¬Y¨Ç!ìæ,¶!i!æÁp;X;C!¹º¬ºp¥i§i¨¨}À£ÁY

®Ä²v;A¶È¨¨ü¨¨Ï¥ßÁéÁnæÀÂ÷ºº»´·L!¥ç;C,û§CººÀW²v¥Í§@¥

¿±`ºº¥ßÁéÁn;A,ûººººÀW²v¥Í§@Áp;X¥ßÁéÁn;C!b,û§Cºº!ìæ,³t²væU;A±q¥

¿±`¥ßÁéÁnæ£©ö¿ë§O32 ÀW±aºº³]©w;C½D!bæ

æ§C!ì©ó³t²væU¨Ï¥î;uÁp;X¥ßÁéÁn;v¨¨ÓÀ¨¨ú³¨¨Í«~½è;C

0 ÂùµÀW¹D¥]¬A¨âÓ§¹¥p¿W¥ßººÀW¹D (¥º/¥k);A¨Cæ@ÀW¹D¨¨ã!³¾¾ã-

Ó!ìæ,³t²vººæ@¥b;C³q±`¥Í!b!hºê»y¨¥µ°Tµ{!;ææ;C

1 PowerVCR!Ò¼{¨¨!Uµ°T¨¨Ó·½¥í¬àººæ£P«~½è;C¨Ï¥î!¥i¨¨!¾¼Uºº¾¼;n¨¨Ó!Û©w¨¨ä-
µ°TºÅ¿èººµ°T¿é¥X¼Ó!;C

«Ø¥β¼Æ¡ì¼vμxuδ@«Ç

°õ!æμ°Tζý»sαδ«e;A°¥ý»Ýn°t,m¼v-
μxuδ@Àô¹Ò;C¥Ñ©óPowerVCR¬°x@®M¼Æ¡ìMPEG-1¼v-
μÁÉÁY³nÁé;A¬G¥¡;|b±z²º¹q,£»P¼vαù"Ó·½x\$¶¡;("Ò!pζý¼v³¼÷;B¹qμøζ¡¥x³¼¹;B
Äá¼v³¼÷μ¥¡^;A¥²¶·,Ë,m³¼A·í²ºÆI½u³s±μ;MÁÙn¡³¼v-
μ°T,¹Á^"ú,Ë,m("Ò!pμø°TÁ^"ú¥d)±NÃβxñ°T,¹Áà
´«¡¼Æ¡ì°T,¹;Cα@¥¹³s±μ¡"¥«á;A PowerVCR \$Y¥¡±q±z²º¹¼v°Tζέxj"Ó·½Á^"ú-
ì©¼v°T,é®Æ¡A±N"äζý»s¬° MPEG-1 ÀÉ;A"Ä±μμÛ¼½©ñ©Òζý»s²º MPEG-1
ÀÉ;CYn\$¡¼Æ¡ì¼vμxuδ@«Ç²º°t,m;A½Ð°õ!æαU¡C"ΒÆJ;G

±Nμø°TÁ^"ú¥d¥ζ½T¡a´¡xj±z¥D¾÷²ºO²º PCI´¡¼Ñ¡]PowerVCR»Ý-
n¥Í³t«x,ûsÖ²ºPCIα¶±Á^"ú¥d"Óμo´\$¥RαÀ²º¥\
¬à^;¡C¡Ü©ó!p!ó!w,ËÁ^"ú¥dμø°TÁX°Êμ{¡;¡±z²º
Windows\$@~"t²!xW¡A½Ð°Ñ!Ò±z²ºμø°TÁ^"ú¥d!w,Ë»¡©ú¡C

0 ¥Í¥

ζ½T²ºμø°TÆI½u¡]S²ºÝα!©ÍAV²ºÝα!^"Ó³s±μ±z²ºμø°T"Ó·½,Ë,m;A"Ò!pζý
¼v³¼÷;BCCD Äá¼v³¼÷;B¹qμø³¼÷;¡]p²Gμø°TÁ^"ú¥dαW¡³¹qμøζ¡¥x³¼¹ζέxj
´¡®y²º,Ü\$Y¥¡"Í¥¡^;¡C

1 ¥Íμ°TÆI½u³s±μμ®Ä¥d²º;uμ°Tζέxj¡v»Pμø°T"Ó·½²º;u-
μ°Tζέ¥X¡v,Ë,m;C"Ä±Nμ°T¥d³s±μ"ì±z²º³â¥z;M!p!¹α~¬àÁ¥"ì¼vαù²ºÁnμ¡C

³q±`μø°TÁ^"ú,Ë,m»s³y°Ó!
ÄØ°exu"ãμ{¡;¡;MÁý±z¥¡¥H°"αW¥Ñ¹q,£²½±μÆ[¬Ýζέxj²º¼vαù;C½Ð"Í¥¡¹αu"ã
μ{¡;¥ý!æ´ú,Ö¬O\$¼vμ°T,¹¥ζ½T²ºζέxj¹q,£¡M!A¶¡¡æPowerVCRμ{¡;x\$¡w,Ë¡C
0 ±z¼Æ¡ì¼vμxuδ@«Ç²º¹é»Ú²Ö°A¥¡¬à!¡]±z"Í¥¡!U®a¼vÁé¼tμP!Ó!³©Òα
£!P¡A!ý±zα´¥¡°Ñ!ÒαU¡C¹"Ò±o"ìα@¬è«üαβ¡C

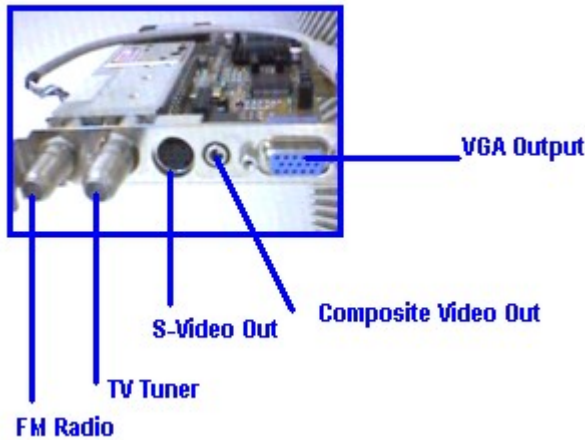
±NÃþ¸ñ¼v¸ù°T,¹Â^"ú|Ü¹q,£ ¸W

μ°T¸îμ°TÂ^"ú,Ë,m

μ°TÂ^"ú,Ë,m(PCI¸¶±¼v¹³Â^"ú¸d;B©Í-O²Â;XUSB;BFirewire¸¶-
±²º¼v¹³Â^"ú,Ë,m);CIBM PC©Í-Ü®e²ºÓ¸H¹q,£
;A¸²¶·,g¸Ñ¹q,£²ºμ°TÂ^"ú,Ë,m("Ò|pμ°TÂ^"ú¸d)
;M¸~`à±q±q;ý¼v³¼÷(VCR);BÄá¼v³¼÷(¼Æ;ì©Í-OÃþ¸ñ)Â^"ú¼v¹³«H,¹;MÂà
´«|"§@~`t¹(Windows)»{±o¸§¼v¹³°T,¹;M;A¶;ìæ¼v¸ù¼½©ñ;C¸j³;¸Àμ°TÂ^"ú
,Ë,m¸W;³SºÝ¸l(S-Video)±μÀÝ©ÍAVºÝ¸l(Composite-Video)±μÀÝ;A©Í`â²³£;C



0 類比--數位控制晶片



1
2 ²Ö;X¸d(VGA+Capture+TV Tuner)

SºÝ¸l(S-Video)¸H¸îAVºÝ¸l(Composite Video)²º³W®æ;bÆI½u¸î±μÀÝ¸@,`¸
¸j³,Ô²Ó²º;©ú;|;Ü©óμ°TÂ^"ú;A«h¸²¶·³z¹L-

μ®Äÿd;A;]¬°xj³;αÀμø°TÂ^¨úÿd¶È¬àÂ^¨úμø°T;C;^³q±`ÁÊ¶Rμø°TÂ^¨ú,Ë,m·|
²pÃØAVI ¼v-

μÀÉ®×¿ÿ»sμ{;i;C³q±`|b±zÁÊ¶Rμø°TÂ^¨ú,Ë,m³]³Æ®É;M¥],ËαÀ³·|
²pÃØ²Á;X³W®æ²ºÆI½u;C

O ¹qμø¿iÿx³/4¹,Ë,m(TV-Tuner);G ³\|hα½ÿqαw,g|æ³/4P-

ÓαH¹q,£²º;u¹qμø¿iÿx³/4¹;v;C|p²G±z²º¹q,£°t³Æ|³³o²Ø,Ë,m(³q±`¬OPCIα¶±ÿd)

¥Hα|¬¬TαÑ½u;M«h¥i¥H±μ|¬¹qμøμL½u¹qÀW²v;A,Ñ½Ö NTSC;B PAL;B ©Î

SECAM(μL½u¹qμø³W®æ)«H,¹;MÀà´«|¨¼Æ|ì®æ;|;M|b¹q,£

αW¼¹/2©ñ;C|p²G|¹¿iÿx³/4¹,Ë,m³sαW|³½u¹qμøÆI½u;Mα]

¥i¥H|¬¬Ý|³½u¹qμø,`¥Ø;C³q±`ÁÊ¶R¹qμø¿iÿx³/4¹,Ë,m·|²pÃØAVI ¼v-

μÀÉ®×¿ÿ»sμ{;i;C

²Ö;Xÿd(Combo Card);G¹qμø¿iÿx³/4¹αÎμø°TÂ^¨úÿd;]α]³\|A¥[α] VGA

,Ë,m;^²Ö;X|bα@αùÿdαW;C

μ®Äÿd;Gμ®Äÿd³q±`|³α@Ó³Á§;¿éα]´;αÖ(MIC);Bα@Ó³âÿz©Î;Ö³/4÷¿éÿX

´;αÖ(Audio Out);Bα@Ó½u,ô¿éα]´;αÖ(Line In);C½u,ô¿éα]αÖ©M³Á§;¿éα]αÖα£

¥i¥Hα¬¬«;C|UÓ¿éα]´;αÖ³£¨Ïÿ|α£|P²º°T,¹Ãp«¬;Cαj³;αÀ¨Ïÿ|¨Ïÿ|³Á§-

·¨¿éα]jA¨Ïÿ|³âÿz©Î;Ö³/4÷§@¬°¿éÿX;C PowerVCR αä´© 16|ìα, ISA ¶×¬y±Æ-

μ®ÄÿdαÍ 32|ìα, PCI ¶×¬y±Æμ®Äÿd¨âα;C

μø°TÂ^¨úÿdÁX°Êμ{;i

¥»¿ÿ»i©ú|p|óÿÑWindows 95/98

¨t²ÍÀò±oμø°TÂ^¨úÿdÁX°Êμ{;i;²º,ê°T;A¥Hα|p|ó|w,Ë©Î§ó·sμø°TÂ^¨úÿdÁX°Êμ{;i;C

|w,Ëÿ¿½T²ºμø°TÂ^¨úÿdÁX°Êμ{;i·ÿ¬°«n;C|p²G±z²ºμø°TÂ^¨úÿdα

£¬à³/4A·í¹B§@;A©Î¬O®Úÿ»μL²kαu§@;C¨à|;]·ÿ

¥i¬à¬OÁX°Êμ{;i;³ºÝÃD;]©Î;|w,Ëα£·í;B©Î;]ÁX°Êμ{;i;²º«ÿ»¿ù»~;^;C|p²G-

ì;]½T¹ê;p|¹;A«h¶·ÀË¬d¨t²ÍαW²ºÁX°Êμ{;i,ê°T;C

O |b Windows¨t²Íαα;A¨Ïÿ|α]¿i¨ú;u±±¨Ïÿx¨t²Í\,Ë,m²ºz-

û;v;A«K¥iÀËμøμø°TÂ^¨úÿdÁX°Êμ{;i;²º,ê°T;M©Î«·s³]©wαÍ§ó·s;C¿i¨ú;u,Ë,m²º²

zû;v¼DÁÒαW²ºμø°TÂ^¨úÿd;AμM«á«öα@αU;uαº®e;v«ö¶s

;]©Î«ö¨âαUμø°TÂ^¨úÿd¹ÏÿÜ;^;A§Y·|

¥X²{;uαº®e;v²º¹;Ûαè¶ô;C¿i¨ú¹;Ûαè¶ôαW²º;uÁX°Êμ{;i;v¼DÁÒ;A·|

¥X²{ÁX°Êμ{;i;²º«ÿ»¿ù,ê°T;C|A«öα@αU;uÁX°Êμ{;i;ÀË,Ö²Ó,ê®Æ;v«ö¶s¨ú±o|w

,Ë;|b¨t²ÍαW²ºÁX°Êμ{;i;ÀË,ê°T;C|p²G-

nşó·sÅX°Êµ{!;jA«öæ@æU;uşó·sÅX°Êµ{!;jv«ö¶s¶i;æÅX°Êµ{!;şó·sµ{şÇ;C



ÆI½uæí±µÀÿ

0 Æö©óµø°T®æ!;j

AEI^{1/2}uαÎ±μÀΥ

α£¡P^αμ^οT, Ë, m»ÝnφÍα

£¡PÃβ«-^αs±μAEI^{1/2}u; MφH³s±μ; uμ^οT[·]Ó·^{1/2}, Ë, m; v»P¡w, Ë©ó¹q, £

αW^α; uμ^οT[^]ú, Ë, m; v; C³q±`ÁÊ¶Rμ^οT, Ë, m®É·|

ÀH^αβAEI^{1/2}u; Cαj³; αÀμ^οT[^]ú, Ë, m`ã¹AV^οÝαl(Composite-Video)αÍ S^οÝαl(S-

Video)[·]â^οØ´; α^α±μÀΥ; C¡³Ç^αÀÉ^αÀ[^]ú, Ë, m-Æ¡ÜÁÜ^αβ¡³¹qμ^ο¿iφx^{3/4}´; α^ο; C



Composite Video Connector



S-Video Connector

AV^οÝαl´; α^οφÍ¡; b, û«K©y^αμ^οT, Ë, m; A·|²£φÍ³æα@μ^οT«H, ¹; C¡p^αG-^οVHS

Äá¿ý^{1/4}v^{3/4}÷ ©Í¿ý^{1/4}v^{3/4}÷; A⁻°Composite-Video´; α^ο; C¡Ó^οS-Video

´; α^οφiφH¶Ç¿é, û^α«~^{1/2}è^αμ^οT«H, ¹; C¡p^αG±zφÍSuper VHS©ÍHi-

8Äá¿ý^{1/4}v^{3/4}÷ ©Í¿ý^{1/4}v^{3/4}÷; A⁻°S-Video´; α^ο; C^{1/2}Ð^οÑ; Ò^{μ^οT@æ¡; ; C}

3s±μμ^οT[·]Ó·^{1/2}, Ë, m[·]ìφD¹q, £

Yn^{3/4}A·í; a±Nμ^οT, Ë, m³s±μ[·]ìφD¹q, £; A»Ýn[·]ã³ÆαU¡CÃBφ~ , Ë, m; G

μ^οT, Ë, m©ÒφÍ^αμ^οT¿éαJ/¿éφX (Video in/out)AEI^{1/2}u; C[·]Ò¡p; A³s±μVHS

¿ý^{1/4}v^{3/4}÷[·]ì¹q, £; A»ÝnAV^οÝαlAEI^{1/2}u; AφH³s±μ¿ý^{1/4}v^{3/4}÷^αμ^οT¿éφX(Video out)

´; α^ο»Pμ^οT[^]úφd^αμ^οT¿éαJ(Video in)´; α^ο; C

μ®Äφd©ÒφÍ^αμ®Ä¿éαJ/¿éφX(Audio in/out)AEI^{1/2}u; C[·]íφÍ-

μ^οTAEI^{1/2}u³s±μ¿ý^{1/4}v^{3/4}÷αW^αμ^οT^{1/2}u, ò¿éφX (Video Line Out)´; α^ο»Pμ®ÄφdαW^α-

μ^οT^{1/2}u, ò¿éαJ(Video Line In)´; α^ο; CμM«á±qμ®Äφd^αμ^οT^{1/2}u, ò¿éφX(Video Out)

´; α^ο³s±μ[·]ì³âφz; C

³¡ãñ«Øφβ^α·s¡; ¿éαJ/¿éφXα¶±^{1/4}Ð·Ç^οÙ-^ο FireWire; A[·]íφÍ IEEE 1394³W®æ; CFireWire

´£[·]Ñ§ó^α±t^α¶Ç¿é³t²v; A[·]ÄφiφH¡bα£Ä³-^αφD¹q, £^α±

¡α^αU³s±μ»PαÁ[^], Ë, m; C²{¡bFireWire

±μÀΥφÍ©·s«-^{1/4}Æ¡¡¡¡¡]DV¡[^]Äá¿ý^{1/4}v^{3/4}÷; C³¡¡h PCI´; ^{1/4}Ñ^α¹q, £φD^{3/4}÷^α±Nαä

´©FireWire ±μÀΥφÍ\$@μ^οT¿éαJ; C

μθ°T®æ!i

Ãþñμθ°T®æ!i (Analog Video Format)

Composite-Video (AV°Ý±μÀY)

→æ@ē¹qμθ; BVHSζý©ñ¼v¾÷μ¥©Ò"ïŷîμθ°T®æ!i; C¥!→Oæ@°Ø|X|"μθ°T→
 æ@°Øμθ°T«H,¹®æ!i; A¥]st§¹¾ã²μθ°T²i§î; A²[-A|â«x (Chrominance);]!â±m,
 color; ^; B¥ú«x (luminance);]«G«x, brightness; ^; B³õ (field); B½u±ø (line)
 ; B!â±m; P" B"β²i (color sync pulse)æî³õ→Ûμ¥æÆ"β²i (field equalizing pulse); CNTSC
 μθ°T«H,¹→°|X|";] Composite; ^ μθ°T²º¹ê"Ò; C¥Ñ©ó!â«xæí¥ú«x«H,¹º¹ÄÐÅ|
 ;] overlay; ^; A|X|"«H,¹|b«·s»s§@·ç½T|â±m®É"SSO©ö©ó¿ù»~; C

S-Video (S°Ý±μÀY)→°

Hi8; BSVHSæíæ@"ç¥HLD²£«~©Ò"ïŷîμθ°T®æ!i; C¥!"ïŷî|h°ØÆ½u"ÓæÀ§O¶ç°e
 ¥ú«xæí!â±m³; æÀº¹T,¹; CS-Video|b«·s»s§@¥¿½T|â±mæè±; A³q±`·|
 ³Ó¹LComposite-Video; C

¼Æ!iμθ°T®æ!i (Digital Video Format)

Four Character Code

(4|ræ, ½X©ÎFOURCC)→O·L³n©Ò©w, q§@→°Windowsæ§μθ°T³; æÀº¹i; æ,²Öμ{!; ½X;
 A¥í"Ó¿ë»{æ£; PÃþ«→º¹¼Æ!iμθ°T, ê®Æ; C·L³næ½¥q©w, q
 FOURCC"Ó¿ë»{!; b¥¼ÀÆÁY¼v¹³æíμθ°Tææ¹"À³]p; C"Ò!p; AFOURCC *YUY2*¿ë»{!; b
 YUV ¥ú¼vº¹î"À (pixel)æº®e;] RGB→O¹îŷîº¹î"Àæº®e; ^; C³o"çμ{!; ½X³£
 ¥í!; bμθ°TÄ^"ú¥d»PÃ,¹îŷdº¹æ¶±ææ; C

2^{3/4}°Ê|ô¶q§P³N(Motion Estimation)

2^{3/4}°Ê|ô¶q§P³N;]Motion Estimation; ^iC³sÄðμø°Tμε±²⁰@t²ξ-
p⁰âÁY⁰Ù¬°;u^{23/4}°Ê|ô¶q§P³N;v;C;p²G§Úì"í¥í°í¶ô°t;X§P³N(block matching technique)
;A«h°w¹í'ú¶q°í¶ô»P" Cα@¹w'ú«Y¿i²¶;]predictor
candidate; ^α§¶;²⁰@t²ξ²⁰¶"¥»"ç^{1/4}Æ¥
[¥H³ìαpαÆ;A«h¥i±o"ì"ä^{23/4}°Ê|V¶q;C¥i"à²⁰2^{3/4}°Ê|V¶qα§·j
'M^{1/2}d³òV,»Pì"¥»"ç^{1/4}Æ¿i¶μ«h¥i¥í"Ó°ö;æ;C,Ô°É²⁰·j'M²£
¥í°²«~^{1/2}èμø°T;A|ý«o»Ýn¹í¥"αj^{1/2}d³ò²⁰αj¶q^{1/2}ÆÂø¹B⁰â"àαO;C

Àà´«AVIÀÉ!¨¬°MPEG-1®æ!;i

!pªG±z¥Í¨¨ä¥L¿ý¼v,Ë,m©Í¬O¼vµ½s¿èµ{!;»s§@¥FAVIÀÉ;M·Qn±N¨¨äÀà´«¬°MPEG-1ÀÉ¥H´íæÖõï°D!ú¥í²À¶!;iAPowerVCR¥í¨¨³³t!Ó»´©¨¨ºº§¹¨¨½s½X (Àà´«) ¥¬¨¨à;AA°§U§¹¨¨¼vµÀ£ÁYæu§@;Cæ£¹LMPEG-1 ÀÉºº«¨¨½èæ£·! ¶!W¹L¨¨Ó·½¼væùÀÉ;C

!pªG¨¨Ó·½ÀÉººæºº®eæ£²Á;XMPEG-1©¨¨³]©w¿ý»s½d¥»³W®æ;APowerVCR·! ½Ö¾¼ã¨¨Ó·½ÀÉ¨¨¨í¥!²Á;X»Ý¨¨D;C¨¨¨Ò!p;AMPEG-1 æ§VCD³W®æ;uµe±Áã¥Ü³t²v;v¬°¨¨C¬í23.976;B25;B29.97;BæÍ 30Óµe±;CY¨¨Ó·½ÀÉºº;uµe±Áã¥Ü³t²v;væ£²Á;XæW- z³t²væ§æ@;APowerVCR·!¨¨º;æ;uµe±Áã¥Ü³t²v;vÀà´«;A¨¨¨Í±o¨¨Ó·½ÀÉ²Á;XMPEG- 1¼D·Ç;M¨¨¨Á¥B°µ;h¶!µ½Ö¾¼ã;A¨¨¨Í±o¨¨Ó·½ÀÉ²£¥í²Á;XMPEGÀÉºº³!¨¨¨Í«¨¨½è;C



PowerVCR¨¨¨í¥í²!æ¶!±³]p (AVIÀàMPEG-1ÀÉ®x¼Ó!;i)

±NAVIÀÉ½s½X¬°MPEG-1ÀÉºº¨¨BAEJ

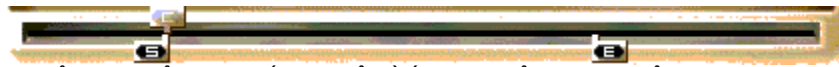
1. «¨¨æ@æU<µ{!;Àà´«>«¨¨ºs¨¨¨Á¿¨¨¨ú<¼vµÀà´«¾¼>¿¨¨¶µ;C
2. «¨¨æ@æU<¼W¥¼vµÀÉ®x>«¨¨ºs¨¨¨Ó¥s¥X¥Ø¿¿¿²M³æ;C!b PowerVCR;u¨¨¨í¥í²!æ¶!±;v¥kæUæè;uÀÉ!W;vººµøµ;æº;A!bÀÉ®x¨¨¨t²!ææ¿¨¨¨ú»ÝnÀà´«ººAVIÀÉ;C«¨¨æ@æU< * >«¨¨ºs;A«h·|¥X²{¼vµ¿ý»s;u½d¥»v¿¨¨¨Í±²M³æ;C



3. ±q¼vμζý»s;u½d¥»;vζĩ"ú²M³æμøμ;αº;Aζĩ"ú¥ôα@ºØPowerVCR©Ò
 '£"Ñ©Í-O"ï¥íñ!;ÚqººMPEG-1μø°Tζý»s;u½d¥»;v;C«öα@αU< * >«ö¶s;C



4. |P®É;A|p²G±znÂà´«¾ãÓ AVIÀÉ;A½ÐÄ~Äð«öα@αU< *
 >«ö¶s;C©Íñ;A|p²G¶ÈnÂà´«AVIαα-Y-
 Óαù-q;A½Ð·Æ°Ê<S>·Æ¶s(S¥N²í¶)©l³]©wÂà´«º¶}©IÂ;A"Ã·Æ°Ê<E
 >·Æ¶s(E¥N²íμ²§ô)³]©wμ²§ôÂ;C§¹;"¶}©IÂíμ²§ôÂI©w,q«á;A½Ð«öα@αU< *
 >«ö¶s;A§Y·|¥X²{«ü©w<¥ØººÀÉ;W>ºº;Üæè¶ô;C



·Æ°Ê<S>¶sí<E>¶s"Ó³]©wÂàÀÉºº¶}©IÂI©Mμ²§ôÂI

5. «ü©w<¥ØººÀÉ;W>ºº;Üæè¶ôαα;A«ü©w¥Ø¼ÐMPEG-1ÀÉºº,ô®|
 ©MÀÉ;W;C½Ð«öα@αU<Àx|sÀÉ® x>«ö¶s"Ó½T»{³]©w;CμM«á«öα@αU<*>«ö
 ¶s"Ó§¹;" MPEG-1ÀÉººÀà´«³]©w;C

6. |p²GÁÙ;³;hÓAVIÀÉnÂà´«;A½Ð«½Æ"BÆJl"i"BÆJ5;C|p²Gn×qÂà
 ´«αu§@²M³æαW¥ô!óAVIÀÉººMPEG-
 1½s½X³]©w;A½Ð«ü©wαu§@²M³æαWººÀÉ® x;A"Ã«öα@αU<½s;è¼v-
 μÀÉ® x>«ö¶s"Ó×qζý»sαº®e;C

7. |p²Gn±qαu§@²M³æαW§R°£-YÓÀÉ® x©Í¼ÆÓÀÉ® x;A¥u-
 nζĩ"úαu§@²M³æαWººÀÉ;W;A"Ã«öα@αU<§R°£¼v-
 μÀÉ® x>«ö¶s±N,ÓÀÉ¥ÑPowerVCRαu§@|C¥h°£;C

8. ·ίπυ\$@²M³æ\$¹|¨ «á;A½Ð«öπ@πU<°ö!æ>«ö¶s¨Ó¶}©IÀÀÉ(½s½X)¹Lμ{;C

9. ·ί\$¹|¨ ÀÀÉ¹Lμ{ «á;A¶i«öπU<¼½©ñ>«ö¶sÀË¬dμ²ªG;C

ÀËμø PowerVCRζý¼vª¬ºA

!bPowerVCR¨ïÿíàì¼¶±

¥kÃäí³¿ý»sª¬ºA!C;M¥í¥HÀH®ÉÀË¬d¿ý¼vª¬ºA;MμwºDªÁ¶;Mxí½Ö¾ã¿ý»s©

M¼½©ñμ¶q;C

