

[f%oFXf^ fvfŠf“f^ ftfHf“fg,lfCf“fXfg□[f<]

[f%oFXf^ fvfŠf“f^ ftfHf“fg,lfCf“fXfg□[f<] f\_fCfAf□fO f{fbfNfX,đŽg,Á,Ä□AHewlett-Packard  
LaserJet□ADeskJet□A,“,æ,ŃĀÉÝŠ·fvfŠf“f^,ì,½,ß,lf\ftfg

ftfHf“fg,đfCf“fXfg□[f<,μ,½,è□í□œ,μ,½,è,Å,«,Ü,·□BftfHf“fg,í PCL Ā`Ž®,Å,È,˘,ê,Î,È,è,Ü,<sup>1</sup>,ř□BŽg—p,μ,Ä,ç  
,éftfHf“fg,ìĀ`Ž®,đ’<sup>2</sup>,x,é,É,í□AftfHf“fg,lf}fjf...fAf<,đŽQ□Æ,μ,Ä,,¾,<sup>3</sup>,ç□B

,±,lf\_fCfAf□fO f{fbfNfX,ì□Ú□x,É,Å,ç,Ä,í□AŽÿ,ì,ç,,è,©,lf{f^f“,đfNfŠfbfN,μ,Ä,,¾,<sup>3</sup>,ç□B

■ [□V,μ,çftfHf“fg ftf@fCf<.lfffBfĀEfNfgfŠ]

■ [□V,μ,çf\ftfg ftfHf“fg]

■ [fCf“fXfg□[f<,<sup>3</sup>,è,Å,ç,é\ftfg ftfHf“fg]

■ [Š],]

■ [‘Ç%oÁ]

■ [í□œ]

Windows

,ì•¶ŽšfZfbfg,đ□AŽw'è,<sup>3</sup>,è,½fR□[fhfy□[fW,ì•¶ŽšfZfbfg,É•ĪŠ·,μ,Ä^ó□ù,μ,Ü,·□BŽw'è,<sup>3</sup>,è,½fR□[fhfy□[fW,ì•¶ŽšfZfbfg,ìfGfXfP□[fv fR□[fh,í•Ī□X,Å,«,Ü,<sup>1</sup>,ň□B

ffj%o[.lF],ÆfOfCE[fXfP[f<.iŠK'²",ðsCEä,.,é,Æ,«,ÉfNfŠfbfN,μ,Û,·BÅ,à,‘¬,É^óü,.,é,É,íA[8 F  
(fn[ftfg[f“])],ðfNfŠfbfN,μ,Û,·BfWfWfX fOf%ftfBfbfNfX,ð^óü,.,é,É,íA[256 F (fn[ftfg[f“])]  
,ðfNfŠfbfN,μ,Û,·BŽÉ^,È,Ç,ì%æ'æ,ð^óü,.,é,É,íA[True Color (24bpp)],ðfNfŠfbfN,μ,Û,·B  
^óü‘¬“x,Æ%æŽj,É,íA'¼Ú,ìŠÖEW,a, ,è,Û,·B[F],a'½,ç,Û,ÇAfhfLf...  
f[f“fg,ì^óü,É,©,©,éŽžŠÔ,à'.,,È,è,Û,·B

^óüfWf#fu,^óü'Ò,¿ó'Ô,ì,Æ,«,É^óüüî•ñ,đffBfXfN,ÉŠi"[.,éCE`Ž® ,đŽw'è,μ,Û,·B^è"É,ÉAEMF  
(f^ftj@fCf<) CE`Ž®,ì•ú,³,^óüffofCfX,ìŽí—p,É^È'¶,μ,È,ç,½,βAfvfOf%of€,ì%øð•ú,³,³,-  
,È,è,Û,·BRAW CE`Ž®,í^óüü'•'u,ÉCEÅ—L,Å, ,é,½,βA^óüüî•ñ,ì•İŠ·,É—]•³,ÉŽŽŠÓ,³,©,©,é%Å"\  
«,³, ,èA,»,ìŠÓ,íŽg—p't,lfvfOf%of€,Å,Û,©,ìì<Æ,đs,±,Æ,³,Å,«,È,,È,è,Û,·B  
[EMF] ,đŽg,±,Æ^óüü,É-â'è,³, ,éèè# ,íA[RAW] ,đŽŽ,μ,Ä,,¾,³,çB

^óü'•'u,ÉĈÅ—L,ì%œ'œ\$Ĉä<@\,đŽw'è,μ,Û,·BÚ×,É,Â,ç,Ä,ÍA^óüffofCfX,ìf}fjf...  
fAf<,đŽQÆ,μ,Ä,,¾,³,çB

Žg—p,·,é—pŽt,ìŽí—p,đŽw'è,μ,Û,·□B•□'ÊŽt,É^ó□ù,·,é□ê□‡,í□A["š-¾ftfBf<f€] ,đfNfŠfbfN,μ,È,ç,Å,-  
,¾,¾,ç□BfCf“fN,ª~Q”i,¾,ê□A□o—íÇ<%oÊ,ª%o~ ,ê,é,±,Æ,ª, ,è,Û,·□B

^óü,μ,½fhfLf...f“fg,ÅŽg,πo—ígfCfC,đŽw’è,μ,Ü,·B

fy[]fW[]ă,Éfhfbfg,đ^ó[]ü,.,é,ì,ÉŽg,xfCf“fN,ì—Ê,đ[]\$Eä,μ,Û,·[]Bfhfbfg,â’â,«,†,Û,Ç[]A[]o—í”Z,,È,è,Û,·[]B



^óü,ì%đ'œ"x,đŽw'è,μ,Û,·B%đ'œ"x,đ,,·,é,ÆA×•",<sup>a</sup>,í,Á,«,è,μ,½"ü,μ,ϕOf%ftfBfbfN  
fCf[]fW,<sup>a</sup>^óü,<sup>3</sup>,ê,Û,·B

□...•½,Æ□,¼,ì□ü,ªŠÜ,Ü,è,Ä,ç,éfhfLf...f□f“fg,ì^ó□ü’-“x,ð□,,ß,é,Æ,«,ÉfNfŠfbfN,μ,Ü,·□BfvfŠf“f^,ª,±  
,ìfjfvfVf†f“,ðfTf|□[fg,μ,Ä,ç,é□é□#□AŠù’è,ì□Ý’è,Å,ÍÆr□ü,ª’-□,,³,è,Ü,·□B

fejLjXfg,ÆfOf%oftfBfbfNfX,ªd,È,Á,Ä,ç,éfhfLf...f“fg,ð^óü,·,éè,ÉfNfŠfbfN,μ,Û,·BfejLjXfg,ÆfOf  
%oftfBfbfNfX,ªd,È,Á,Ä,ç,éfhfLf...f“fg,ð^óü,·,é,Æ,«,ÉAfffofCfX ftfHf“fg,Û,½,ÍfEf“f[fh,μ,½  
TrueType ftfHf“fg,ðŽg,ª,ÆA□o—ÍĈ<%oÊ,ª³,μ,,È,ç,±,Æ,ª, ,è,Û,·B

fjflf...fj"fg,đ^óü,·,é,Æ,«,ÉŽg,xfefLfXfg•iŽž,đŽw'è,μ,Ü,·B^óü'•'u,ì»'čĚ³,âf,ff<,É,æ,Á,ÄA—~—  
p,Â,«,é'l'đŽ^,í^ù,È,è,Ü,·B

ff%o[[o—í,·,é,©A,Ü,½,Í,fmfNf[[o—í,·,é,©,đŽw'è,μ,Ü,·B

^óü, ,é•" ,đžw'è,μ,Û,·B,Û,½AfvfŠf"f^,Å'š,ç^óü,afTf|fg,<sup>3</sup>,ê,Ä,ç,éê,ÍA'š,ç,đ,Æ,é,©,Ç,κ  
,©,đžw'è,μ,Û,·B'š,ç,đ,Æ,éê,ÍA1 •",<sup>2</sup>,Æ,É~A'±,μ,½fy[fW,<sup>a</sup>^óü,<sup>3</sup>,ê,Û,·B'š,ç  
,đ,Æ,ç,È,çê,ÍAfy[fW,<sup>2</sup>,Æ,É•" •<sup>a</sup>, ,Å^óü,<sup>3</sup>,ê,Û,·B

<<Žt•û-@,đŽw'è,μ,Û,·□B[Ž©“®'l'đ] ^ÈŠO,ì<<Žt•û-@,đ'l,ñ,¾□ê□†,í□A,»,ì<<Žt•û-@,É□³,μ,çftfH□[f€  
,ªŠ,,,è“-,Ä,ç,ê,Ä,ç,é,±,Æ,đŠm”F,μ,Ä,,¾,³,ç□B

—¼-Ê^óü,đŽw'è,μ,Û,·□B—pŽt,ì•Đ-Ê,¾,¯,É^óü,·,é,É,í□A[,È,μ] ,đ'í'đ,μ,Û,·□B—pŽt,ì—¼-  
Ê,É^óü,·,é,É,í□A['Z,ç•Ó] ,Û,½,í [·,ç•Ó] ,đfNfŠfbfN,μ,Û,·□B['Z,ç•Ó] ,đfNfŠfbfN,·,é,Æ□AfCEf]□[fg—  
pŽt,ì,æ,π,É— •Ô,μ,Ä“Ç,pfy□[fW,â^óü,³,ê,Û,·□B[·,ç•Ó] ,đfNfŠfbfN,·,é,Æ□A-{,ì,æ,π,É,β,-  
,Á,Ä“Ç,pfy□[fW,â^óü,³,ê,Û,·□B



—pŽt,žw'è,·,é,Æ,«,ÉfNfŠfbfN,μ,Ü,·□B

—pŽt,í□A—pŽtTfCfY,Æ—]””,ì•□,đ'è<` ,·,é,à,ì,Á,·□B'½,,ì^ó□ü'•'u,Á,í□A□ä'ifgfCEfC,Æ  
%°°'ifgfCEfC,È,Ç□A•;□””,ì<Žt•û-@,đfTf|□[fg,μ,Ä,ç,Ü,·□BŠe<<Žt•û-@,É,í□A—pŽt,đŠ,,,è“-,Ä,é,±  
,Æ,ª,Ä,«,·□B<<Žt•û-@,É—pŽt,đŠ,,,è“-,Ä,é,Æ□AfAfVfŠfP□[fVf†f”,©,ç^ó□ü,·,é,Æ,«,É□A—  
pŽt,đ'í'đ,Ä,«,é,æ,κ,É,È,è,Ü,·□B,±,ì□é□†□AWindows NT flfyfCE□[fefBf”fO fVfXfef€,í□A'í'đ,³,è,½—  
pŽt,ªŠ,,,è“-,Ä,ç,è,Ä,ç,é<<Žt•û-@,đŽg,Á,Ä^ó□ü,·,é,æ,κ,É□A^ó□ü'•'u,ÉŽwŽ!,đ—^,;Ü,·□B

fn[ftg[f“,ìF,ì²®•đ•ž!,μ,½,è•ïX,μ,½,è,·,é,Æ,«,ÉfNfŠfbfN,μ,Ü,·B

fhfLf...f[]"fg,đ^óü,·éĚü,«,đŽw'è,μ,Û,·B[[]c] ,đfNfŠfbfN,·,é,Æ[]A—pŽt,đ[]c,É,μ,Ä^óü,μ,Û,·B[%;j]  
,đfNfŠfbfN,·,é,Æ[]A—pŽt,đŽžĚv%ň,è,É 90 []<%ň"],μ,Ä^óü,μ,Û,·B[%ň"]],<sup>a</sup>Žg—p,Ä,«,éê[]‡,í[]A—  
pŽt,đ"½ŽžĚv%ň,è,É 90 []<%ň"],μ,Ä^óü,μ,Û,·B

^óü'•'u,ÉfCf"fxfg□[f<,³,ê,Ä,ç,éftfHf"fg fj□[fgfŠfbfW.đŽw'è,μ,Û,·□B

fgfCEfC,Ö,ì—pŽt,ìš,,,è“-,Ä,ð•\Ž!,,é,Æ,«,ÉfNfŠfbfN,μ,Û,·□B  
—pŽt,í□A—pŽtftfCfY,Æ—]””,ì•□,ð'è<` , ,é,à,ì,Ä,·□B'½,,ì^ó□ü'•'u,Á,í□A□ä'ifgfCEfC,Æ  
%°°'ifgfCEfC,È,Ç□A•;□””,ì<Žt•û-@,ðfTf|□[fg,μ,Ä,ç,Û,·□BŠe<<Žt•û-@,É,í□A—pŽt,ðš,,,è“-,Ä,é,±  
,Æ,ª,Ä,«,Û,·□B<<Žt•û-@,É—pŽt,ðš,,,è“-,Ä,é,Æ□AfAfvfŠfP□[fVf†f”,©,ç^ó□ü,·,é,Æ,«,É□A—  
pŽt,ð'ì'ð,Ä,«,é,æ,κ,É,È,è,Û,·□B,±,ì□é□†□AWindows NT flfyfCE□[fefBf”fO fVfXfef€,í□A'ì'ð,³,è,½—  
pŽt,ªš,,,è“-,Ä,ç,è,Ä,ç,é<<Žt•û-@,ðŽg,Á,Ä^ó□ü,·,é,æ,κ,É□A^ó□ü'•'u,ÉŽwŽ!,ð—^,;Û,·□B

fn[]ftfg[]f""²[]©,đ•Ž!,μ,½,è•Ī[]X,μ,½,è,:é,Æ,«,ÉfNfŠfbfN,μ,Û,·[]B

^óü'•'u,ÉfCf"fxfg[f<,³,ê,Ä,ç,éff,fŠ—e—Ê,ďŽw'è,μ,Û,·B

^óü'•'u,ª^óü,đŠŽn,·,é'O,ÉA^óü'•'u,ìf,f,š"à,É^óüfy[fW,đü,·,·,é,æ,π,ÉŽw'è,μ,Û,·B,±  
,ìf,fv,f,f" ,đ'l'đ,·,é,ÆA•;ŽG,Ëfy[fW,Å,àŠ@'S,É^óü,³,è,é,±,Æ,ª•ÛØ,³,è,Û,·B



<<Žt•û-@,đŽw'è,μ,Û,·□B[<<Žt•û-@] ^ÈŠO,ì<<Žt•û-@,đ'I,ñ,¾□ê□‡,í□A[□Ú□×]  
f^fu,đfNfŠfbfN,μ□A,»,<<Žt•û-@,É□³,μ,‡-pŽt,³Š,,,è“-,Ä,ç,ê,Ä,‡,é,±,Æ,đŠm”F,μ,Ä,,¾,³,‡□B

Hewlett-Packard LaserJet ADeskJet A, , æ, ÑŒÝŠ·fvfŠf“f^, ì, ½, ß, ìf\ftfg  
ftfHf“fg, ðfCf“fXfg[]f<, µ, ½, è[]í[]œ, µ, ½, è, ·, é, Æ, «, ÉfNfŠfbfN, µ, Û, ·[]BftfHf“fg, í PCL  
Œ`Ž®, Å, È, ¯, ê, î, È, è, Û, ¹, ñ[]BŽg—p, µ, Ä, ç, éftfHf“fg, ìŒ`Ž®, ð'², x, é, É, í[]AftfHf“fg, ìf}fjf...fAf<, ðŽQ[]Æ, µ, Ä, -  
, ¾, ¾, ç[]B

**[V,μ,çftfHf“fg ftf@fCf<,lfffBfCEfNfgfŠ]**

V,μ,çftfHf“fg ftf@fCf<,Ši”[,³,ê,Ä,ç,éfpfX,ÆfffBfCEfNfgfŠ,ðŽw’è,μ,Ü,·B

► [V,μ,çftfHf“fg ftf@fCf<,lfffBfCEfNfgfŠ] f{fbfNfX,ÉfpfX,ÆfffBfCEfNfgfŠ,ð“ü—í,μAŽŸ,É [Š],]  
,ðfNfŠfbfN,μ,Ü,·B

**[V,μ,ϕ]ftfg ftfHf“fg]**

fCf“fXfg [f<,Å,«,é]ftfg ftfHf“fg,î^ê—,ª•\Ž!,³,ê,Ü,·B  
► ftfHf“fg,đfCf“fXfg [f<,.é,É, [A[V,μ,ϕ]ftfg ftfHf“fg] f{fbfNfX,Å-Ú“l,]ftfHf“fg,đ'!‘đ,μAŽŸ,É [‘Ç  
%oÁ] ,đfNfŠfbfN,μ,Ü,·B

**[fCf“fXfg□[f<,³,ê,Ä,ç,é\ftfg ftfHf“fg]**

fCf“fXfg□[f<,³,ê,Ä,ç,é\ftfg ftfHf“fg,î^ê——,ª•\Ž|,³,ê,Û,·□B  
► fCf“fXfg□[f<,³,ê,Ä,ç,é\ftfHf“fg,đ□í□œ,·,é,É,í□A[fCf“fXfg□[f<,³,ê,Ä,ç,é\ftfg ftfHf“fg] f{fbfNfX,Å-  
Ú“í,íftfHf“fg,đ'í'đ,μ□AŽŸ,É [□í□œ] ,đfNfŠfbfN,μ,Û,·□B

**[Š,]**

[□V,μ,çftfHf“fg ftf@fCf<,lfffBfÇEfNfgfŠ] f{fbfNfX,ÅŽw’è,μ,½fffBfÇEfNfgfŠ,Å□AftfHf“fg  
ftf@fCf<,ð’T,μ,Ü,·□B

► ftfHf“fg ftf@fCf<,lfpfX,ÆfffBfÇEfNfgfŠ,ð [□V,μ,çftfHf“fg ftf@fCf<,lfffBfÇEfNfgfŠ] f{fbfNfX,É“ü—  
í,μ□AŽÿ,É [Š,] ,ðfNfŠfbfN,μ,Ü,·□B

## ['Ç%Á]

□V,μ,ϕ∫ftfg ftfHf“fg,δfCf“fXfg□[f<,μ,Ü,·□B  
▶ ftfHf“fg,δfCf“fXfg□[f<,·,é,É,í□A[□V,μ,ϕ∫ftfg ftfHf“fg] f{fbfNfX,Å-Ú“l,ìftfHf“fg,δ'l'δ,μ□AZÿ,É ['Ç  
%Á] ,δfNfSfbfN,μ,Ü,·□B

**[íœ]**

fCf“fXfg [f<,³,ê,Ä,ç,éftfHf“fg,ðíœ,μ,Û,·B  
▶ fCf“fXfg [f<,³,ê,Ä,ç,éftfHf“fg,ðíœ,·,é,É,íA[fCf“fXfg [f<,³,ê,Ä,ç,é\ftfg ftfHf“fg] f{fbfNfX,Å-  
Ú“l,iftfHf“fg,ð‘δ,μAZÿ,É [íœ] ,ðfNfSfbfN,μ,Û,·B



,±,lfwf<fv ftf@fCf<,lî•ñ,ð•Ž!,•,é,É,í

1 ,±,lf{f^f“ 1 ,ðfNfŠfbfN,μ□A[fvfŠf“f^] ftfHf<f\_ðŠ],ç,Ä,,¾,¾,ç□B

2 Žg—p,μ,Ä,ç,éfvfŠf“f^,ðfNfŠfbfN,μ,Ü,•□B

3 [ftf@fCf<] f□fj...□[,ì [fvf□fpfefB] ,ðfNfŠfbfN,μ,Ü,•□B

4 [fffofCfX,ì□Ý’è] f^fu,ðfNfŠfbfN,μ,Ü,•□B

5 Še□€-Ú,lfwf<fv,ð•Ž!,•,é,É,í□Af\_fCfAf□fO f{fbfNfX,ì%□E□ã,ì ? ,ðfNfŠfbfN,μ□A-Ú“l,ì□€-  
Ú,ðfNfŠfbfN,μ,Ä,,¾,¾,ç□B

