8. Encryption Setting

8.1. Encryption setting

[STEP1] Click the "Setup" in the "Wavit11 Wireless LAN" window.

👍 Wavit11 Wirel	ess LAN					- 🗆 ×
File(<u>F)</u> Edit(<u>E</u>) He	lp(H)					
Update IP addr	ess Password	Search Setup) Version			
MAC Address	SSID	IP Address Com	municate with W	/avit11	Mode	Firmware
00:a0:96:00:29:55	Wavit	172.16.40.128	Auto	1	Infrastructure	Rev.2.10.00
Communicate with W	avit11			Friday,	Dec. 7, 2001	8:34:49

[STEP2] Click the "Encryption mode" page.

Litwioninent	Wireless Bridge
Status Property	Encryption mode
Operational Infrastructure Mode 5 Channel 5 Data Rate 1 Mbit/s Update	Serial No. 10900019 Firmware Ver. Rev. 2.10.00 Search AP
MAC Address SSID	Status

Mitsumi Electric Co., Ltd.Wavit11 User's Manual[STEP3] The "encryption mode" page opens. Select an encryption mode; the encryption mode at the time of factory shipment is "Disable".

	Enviro	onme	nt	1	Wireless Bridge
Stat	us			Property	Encryption mode
Encryp	tion m	od	Dis	able	
n this p	age, y	ou c	an s	et securit	y keys when the
encrypti Besides	on ma direct	ide is t inpu	set t of l	to any m hexadeci	ode other than Disable. imal numerals(00-FF),
jenerati ecuritu	ion stri	ing is	also	availabl	e. In order to generate
charact	ers to	the b	lank	, space n	ext to "Generation string"
elow, a	and th	en cl	ick ''	Generate	e".
-			E I		
Gener	ations	string			Grenerate
Gener	ation s	string	×× [** **	In this page, all settings
Key1	ation s	string	 **	XX	In this page, all settings are not effective unless
Key1 Key2	ation :	string	×× [NN NN	Lienerate In this page, all settings are not effective unless you click "Write".
Key1 Key2 Key3	ation :	string ×× ××	×× ××	XX XX XX XX	Lienerate In this page, all settings are not effective unless you click "Write".
Key1 Key2 Key3 Key4	ation s	string	××	NN NN NN NN NN NN NN NN	Lienerate In this page, all settings are not effective unless you click "Write".
Key1 Key2 Key3 Key4 Defau	ation s ** [** [** [** [** [** [** [** [** [** ** **	×× ×× ××	NN NN NN NN NN NN NN NN	Lienerate In this page, all settings are not effective unless you click "Write".
Gener Key1 Key2 Key3 Key4 Defau	ation s ** [** [** [** [** [** [** [** [** [** [** [** [** [** [** [** [**]	×× ×× ××	102 188 102 189 102 189 100 100 100 100 100 100 100 100 100 100	Lienerate In this page, all settings are not effective unless you click "Write". Write

📅 Wavit11 Wi	reless l	LAN		×
Enviro	nment	1	Wireless Bridge	1
Status		Property	Encryption mode	
Encryption me In this page, encryption me Besides direct generation strii security keys a characters to t below, and the	ou c. Dis de is Ori nu 40t ng is 12t automatic he blank en click '	able ginal bit WEP Bbit WEP cally, input space n 'Generate	when the ner than Disable, marals(00-FF), it five alphanumeric ext to "Generation string" ".	
		XX XX	In this page, all settings	
Key2	×× ××	XX XX	are not effective unless you click "Write".	
Key3 🐨 🛛	** **	××		
Key4 🔤	**	** **		
Default Key	1	Ŧ	Write	
		OK	Cancel Apply	

66/108

Ŷ	
•	

There are 3 type of encryption mode.

- 1. Mitsumi proprietary Original Encryption.
- 2. 40bit WEP Encryption.
- 3. 128bit WEP Encryption.

"Original Encryption"	page68
"40bit WEP Encryption"	page71
"128bit WEP Encryption"	page74
"Encryption Disable"	page77

8.2. Original Encryption

[STEP1] At the "Encryption mode" page, select the "Original" as an Encryption mode, input a Generation string that generates encryption keys, and then click the "Generate" button.

Environr	ment	Wireless Bridge
Status	Property	Encryption mode
Encryption mod	Original	
ncryption mode esides direct in eneration string ecurity keys au haracters to the elow, and then	e is set to any m nput of hexadec g is also availabl itomatically, inpu e blank space n n click ''Generati	ode other than Disable. imal numerals(00-FF), ie. In order to generate it five alphanumeric iext to "Generation string" e".
Generation stri	ing abcde	Generate
Generation stri Key1 ×* ×	ing abcde	Generate
Generation stri Key1 🔭 🐄 Key2 🎫 🏁	abcde	In this page, all settings are not effective unless you click "Write".
Generation stri Key1 🐨 🏁 Key2 🔭 🏁 Key3 🐨 🕬	abcde	Generate In this page, all settings are not effective unless you click "Write".
Generation stri Key1 × × Key2 × × Key3 × × Key4 × ×	abcde * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * **	Generate In this page, all settings are not effective unless you click "Write".

[STEP2] Select the "Default Key".

Wavit11 Wire	eless LAN	
Environr	ment	Wireless Bridge
Status	Property	Encryption mode
ncryption mod	le Original	-
trins page, you nonyption mode esides direct in eneration string ecurity keys au haracters to the elow, and then Generation stri	a is set to any mode pit of hexadecima j is also available. I tomatically, input fir e blank space next click "Generate".	other than Disable. I numerals(00-FF), n order to generate ve alphanumeric to "Generation string" Generate
Key1 a2 29 Key2 e6 33 Key3 2a 69 Key4 0c 14	e8 0e 26 Ir a 12 1f 0a y 62 4a c8 2d 63 02	n this page, all settings re not effective unless ou click "Write".
Default Key		Write

[STEP3] Click the "Write" button.

📅 Wavit11 Wireless LAN	<u>×</u>
Environment	Wireless Bridge
Status Property	Encryption mode
Encryption mode Original	•
In this page, you can set securil encryption mode is set to any m Besides direct input of hexadec generation string is also availabl security keys automatically, inpu characters to the blank space n below, and then click "Generati	ty keys when the ode other than Disable. imal numerals(00-FF), le. In order to generate at five alphanumeric lext to "Generation string" e".
Generation string	Generate
Key1 a2 29 e8 0e 26 Key2 e6 33 12 1f 0a	In this page, all settings are not effective unless you click "Write".
Key3 2a 69 62 4a c8	
Key4 Oc f4 2d 63 02	
Default Key 1	Write
OK	Cancel Apply

[STEP4] Click the "OK" button.

Configuration setting change	×
Configuration setting change has comp	leted

Wavit11 User's Manual

[STEP5] The Encryption mode and the Encryption keys are written. Click the "OK" button.

Wavit11 Wire	eless LAN	
Environr	ment	Wireless Bridge
Status	Property	Encryption mode
Encryption mod	le Original	
ncryption mode esides direct in eneration string ecurity keys au haracters to the elow, and then	is set to any m put of hexadec is also availab tomatically, inp e blank space r click "Generat	ode other than Disable. imal numerals(00-FF), le. In order to generate ut five alphanumeric next to "Generation string" e".
Generation stri	ng	Generate
Key1 a2 29	e8 0e 26	In this page, all settings
Key2 e6 33	12 1f Oa	you click "Write".
Key3 2a 69	62 4a c8	
Key4 Oc f4	24 63 02	
Default Key	1 💌	Write

[STEP6] After returning to the "Wavit11 Wireless LAN" window, end the Wavit11 Configuration Utility.

👍 Wavit 1	1 Wireless	LAN						_1	
File(E) Edit(E) Help(H)									
Undata	B address	Ċ	#		Newigen				
		SID	Jeaich I IP	Address	Data Bate	ГСН	Mode	Firmware	1
00:a0:96:00	0:29:55 W	/avit	17	2.16.40.128	3 Auto	1	Infrastructure	Rev.2.10	.00
1.(suit1.1.)	iroloso I AN					Friday	Dec 7 2001	0.20.02	ļ
wavit i wi	ILEIESS LAIN					riiday,	Dec. 7,2001	0.00.02	

70/108

8.2. 40bit WEP Encryption

[STEP1] At the "Encryption mode" page, select the "40bit WEP" as an Encryption mode, input a Generation string that generates encryption keys, and then click the "Generate" button.

	Envir	onme	ent				Wireless	Bridge	
Stal	us			Prop	perty		Encry	ption mod	le
Encryp	tion n	nod	40	Ibit W	/EP	•	\mathbf{i}		
n this p	age,	you	can	set se	ecuri	y keys (when the		
ncrypti	on m	ode i	s set	to a	ny m	ode oth	er than Di	sable.	
esides	direction st	it inp	to tu	hexa	adec ailabl	imal nun e lin orc	herals(UU-l ler to gen	ttj, erate	
ecurity	kevs	auto	omati	cally.	indu	at five al	ohanume:	ric	
haract	ers to	the	blan	k spa	ice r	ext to "I	Generatio	n string"	
elow, a	and th	nen o	lick	"Ger	nerati	e".			
				-			-		
			1	_		\rightarrow			
Gener	ation	string		123	45	\rightarrow	Gene	erate)
Gener	ation	string		123	45	\rightarrow	Gene	erate)
Gener Key1	ation	string **		123	45	In this	Gene page, all	settings)
Gener Key1 Kev2	ation	string ××	• (**	123	45	In this are no you cl	Gene page, all t effective ck 'Write	settings unless	•
Gener Key1 Key2	ation	string **	×× ××	123	45	In this are no you cl	Gene page, all t effective ck "Write	settings e unless o''.	,
Gener Key1 Key2 Key3	ation	string ×× ××	• (** ** **	123 ** ** **	45	In this are no you cl	Gene page, all t effective ck "Write	settings e unless ".	1
Gener Key1 Key2 Key3 Kev4	ation	string ×× ××		123 ** ** **	45 ** **	In this are no you cl	Gene page, all t effective ck "Write	settings e unless ".	•
Gener Key1 Key2 Key3 Key4	ation	string ×× ×× ××		123 ** ** **	45 ** ** **	In this are no you cl	Gene page, all t effective ck ''Write	srate settings e unless ".	•
Gener Key1 Key2 Key3 Key4 Defau	ation xx xx xx xx xx xx xx	string ** **		123 ** ** **	45 ×× ×× ×× ××	In this are no you cl	Gene page, all t effective ck "Write	settings e unless ".	•
Gener Key1 Key2 Key3 Key4 Defau	ation ** ** ** ** ** ** **	string ×× ×× ××		123 ** ** **	45 *** *** **	In this are no you cl	Gene page, all t effective ck "Write Write	settings e unless o".	•
Gener Key1 Key2 Key3 Key4 Defau	ation	string xx xx xx xx 1		123 ** ** **	45 ** ** **	In this are no you cl	Gene page, all t effective ck "Write Write	settings a unless 2".	•

[STEP2] Select the "Default Key".

Environ	iment	Wireless Bridge
Status	Property	Encryption mode
Encryption mo	de 40bit WEP	-
i this page, yo noryption mod esides direct i eneration strin ecurity keys ar haracters to th elow, and ther	u can set security ke e is set to any mode nput of hexadecimal g is also available. In utomatically, input fiv e blank space next n click "Generate".	ys when the other than Disable. numerals(00-FF), order to generate e alphanumeric to "Generation string"
Generation str	ing	Generate
Keu1 98 1	d d4 f1 d0 In	this page, all settings
too I i		not offective unless
Key2 4c a	c 00 a9 ba yo	e not effective unless u click "Write".
Key2 4c a Key3 1e 5	c 00 a9 ba yo 7 dd 64 e6	e not effective unless u click "Write".
Key2 4c a Key3 1e 5 Key4 b4 c	c 00 a9 ba yo 7 dd 64 e6 a 1c d9 7e	e not effective unless u click "Write".
Key2 4c a Key3 1e 5 Key4 b4 c Default Key	c 00 a9 ba yo 7 dd 64 e6 a 1c d9 7e	e not effective unless u click "Write". Write
Key2 4c a Key3 1e 5 Key4 b4 c Default Key	c 00 a9 ba yo 7 dd 64 e6 a 1c d9 7e	e not effective unless u click "Write". Write

[STEP3] Click the "Write" button.

🍘 Wavit11 Wire	less LAN		×
Environm	nent	Wireless Bridge	1
Status	Property	Encryption mode	
Encryption mode	a 40bit WEP	•	
In this page, you encryption mode Besides direct inp generation string security keys aut characters to the below, and then	can set securit is set to any m out of hexadeci is also availabl omatically, inpu blank space n click "Generate	ty keys when the ode other than Disable. imal numerals(00-FF), e. In order to generate it five alphanumeric iext to "Generation string" e".	
Generation strin	ng 📃	Generate	
Key1 98 1d Key2 4c ac	d4 f1 d0 00 a9 ba	In this page, all settings are not effective unless you click "Write".	
Key4 b4 ca	1c d9 7e	\frown	
Default Key	1 💌	Write	
	OK	Cancel <u>Appl</u>	y

[STEP4] Click the "OK" button.



Wavit11 User's Manual

[STEP5] The Encryption mode and the Encryption keys are written. Click the "OK" button.

	HESS LAN	
Environr	nent	Wireless Bridge
Status	Property	Encryption mode
ncryption mod	le 40bit WEP	-
insplage, you incryption mode esides direct in eneration string curity keys au naracters to the slow, and then	is set to any mo put of hexadeci) is also available tomatically, inpu e blank space n click "Generate	ode other than Disable. mal numerals(00-FF), e. In order to generate it five alphanumeric ext to "Generation string" 9".
Generation stri	ng	Generate
Key1 98 1d	i d4 f1 d0	In this page, all settings
Key2 4c ac	00 a9 ba	you click "Write".
Key3 1e 57	dd 64 e6	
Key3 1e 57 Key4 b4 ca	dd 64 e6 1c d9 7e	

[STEP6] After returning to the "Wavit11 Wireless LAN" window, end the Wavit11 Configuration Utility.

👍 Wavit 1	1 Wireless L	AN						_	
File(E) Ed	lit(<u>E)</u> Help(<u>H</u>)								
		Ċ) d	M)	Solun	Version				
MAC Addre)		Address	Data Rate	Існ	Mode	Firmware	. 1
00:a0:96:00	0:29:55 Way	vit	17	2.16.40.12	3 Auto	1	Infrastructure	Rev.2.10	0.00
L. J. Sala C.P.	1 1 4 1 1						D 7 0001	0.41.07	1
Wavit11 Wi	ireless LAN					Friday,	Dec. 7,2001	8:41:27	

73/108

8.3. 128bit WEP Encryption

[STEP1] At the "Encryption mode" page, select the "128bit WEP" as an Encryption mode, input a Generation string that generates encryption key, and then click the "Generate" button.

En	vironmen	t	V	Vireless Bridg	e
Status		Property		Encryption r	mode
Encryption	n mod	128bit WEF			
In this pag	e, you ca mode is :	n set secur i set to any m	ty keys wh	en the than Disable	
Besides di	ect input	of hexadec	imal nume	rals(00-FF),	
generation security ke	string is a vs autom	also availab atically, inpi	le. In order ut five aloh	to generate anumeric	
characters	to the bl	ank space r	next to "Ge	neration strin	g"
below, and	I then clic	:k "Generat	e".	\sim	_
Generatio	on string	fghij		Generate	
		\geq	/~	\sim	
V . 4 V	× ×× :	**	In this pare not r	age, all setting effective unles]S SS
Keyl ["	and the state of t	** ** **	you click	"Write".	
Keyi [*	* **	N N 283			
Keyi [*	× ×× ·	*			
Keyi [*	× ×× 1	•			
Keyi [× × ×	a l			
Keyi [x xx 1	(X		Write	

[STEP2] Click the "Write" button.

Wavit11 Wirel	ess LAN		×
Environm	ent	Wireless Bridge	1
Status	Property	Encryption mode	2
Encryption mode	128bit WEF	• •	
In this page, you encryption mode i Besides direct inp generation string i security keys auto characters to the below, and then o	can set securit s set to any m ut of hexadeci s also availabl omatically, inpu blank space n slick "Generate	ty keys when the ode other than Disable. imal numerals(00-FF), le. In order to generate it five alphanumeric lext to "Generation string" e".	
Generation string		Generate	
Key1 12 6e 36 e4 28 9c	c4 01 34 55 6a ea 1c	In this page, all settings are not effective unless you click "Write".	
		Write	
	OK	Cancel Apply	į.

[STEP3] Click the "OK" button.



[STEP4] The Encryption mode and the Encryption key are written. Click the "OK" button.

Wavit11 Wire	less LAN			
Environn	nent	W	/ireless Bridge	
Status Encryption mod	Property 128bit WEP	-	Encryption mode	9
In this page, you encryption mode Besides direct in generation string security keys aut characters to the below, and then	can set security is set to any mo out of hexadeci is also available omatically, inpu blank space n click "Generate	y keys whe ode other t mal numera e. In order t five alpha ext to "Ger e".	en the han Disable. als(00-FF), to generate anumeric heration string''	
Generation strir	ng 🗌		Generate	
Key1 12 6e 36 e4 28 9c	c4 01 34 55 6a ea 1c	In this pa are not el you click	ge, all settings ffective unless "Write".	
			√rite	
\langle	OK)	Cano	cel App	y.

Mitsumi Electric Co., Ltd.Wavit11 User's Manual[STEP6] After returning to the "Wavit11 Wireless LAN" window, end the Wavit11 Configuration Utility.

👍 Wavit 1	1 Wirele	ess LAN						
File(<u>F</u>) Ec	lit(<u>E</u>) He	lp(<u>Η</u>)						
Update	IP addr	ess Password	AA Search	Setup	Version			
MAC Addre	ess	SSID		P Address	Data Rate	CH	Mode	Firmware
00:a0:96:0	0:29:55	Wavit		172.16.40.128	Auto	1	Infrastructure	Rev.2.10.00
Wavit11 W	ireless LAI	N				Friday,	Dec. 7,2001	8:45:00

8.4. Encryption Disable

[STEP1] Select the "Disable" as an Encryption mode, and then click the "Write" button.

Wavit	11 W	'irele	S S	LAN		
	Enviro	onmei	nt		1	Wireless Bridge
Stat	us			Prop	erty	Encryption mode
Encryp	tion m	node	Dis	able		
n this p	age, j	you ci	an s	et se	curiț	y keys when the
encrypti Besides	on mo direc	ode is t inpu	set t of l	to ar hexa	iy ma deci	ode other than Disable. mal numerals(00-FF),
generati securitu	on str	ing is	also	ava allu	ilabl	e. In order to generate
characti	ers to	the b	lank	spai	ce n	ext to "Generation string"
below, a	and th	ien cli	ick "	'Gen	erate	ı".
Gener	ation	string	I			Generate
Key1	**	**	××	**	××	In this page, all settings are not effective unless
Key2	**	**	××	**	××	you click "Write".
Key3		***	**	××	**	
Key4	**	***	**	**	14.50	
	n ninger Der sen	5				
n / 1	1.12				1000	
Defau	t Key					Write
Defaul	t Key			оv.		Canad

[STEP2] Click the "OK" button.



[STEP3] The Encryption mode is written. Click the "OK" button.

Environr	ment	1	Wireless Bridge
Status		Property	Encryption mode
Encryption mod	le Dis	able	-
eneration string curity keys au haracters to the) is also tomatic e blank	availabl ally, inpu	e. In order to generate at five alphanumeric lext to "Generation string"
elow, and then	click "	'Generati	e"
elow, and then Generation stri	ng	'Generati	e". Generate
elow, and then Generation stri Key1	ng ['Generati	e". Generate
elow, and then Generation stri Keyî 📪 🐄	ng	Generati	e". Generate In this page, all settings are not effective unless you click "Write".
elow, and then Generation stri Key1 ** ** Key2 ** ** Key3 ** **	click '' ng xx xx xx		e". Generate In this page, all settings are not effective unless you click "Write".
elow, and then Generation stri Key2 *** ** Key3 *** ** Key4 *** **	click '' ng 		e". Generate In this page, all settings are not effective unless you click "Write".

[STEP4] After returning to the "Wavit11 Wireless LAN" window, end the Wavit11 Configuration Utility.

👍 Wavit 1	1 Wirele	ess LAN						_ 0	X
File(<u>F</u>) Ed	lit(<u>E)</u> He	lp(<u>H</u>)							
Update	IP addr	s Č)	MA Search	Setup	Version				
MAC Addre	ess	SSID		^o Address	Data Rate	CH	Mode	Firmware	
00:a0:96:00	0:29:55	Wavit	1	72.16.40.128	Auto	1	Infrastructure	Rev.2.10.0	0
Wavit11 Wi	ireless LAI	N .				Friday,	Dec. 7,2001	8:46:51	_//.

78/108

9. Wavit11Setting up



"Connection to personal computer"	page80
"Connection to Printer"	page81
"Connection to Network Equipment"	page82

9.1. Connection to personal computer

[STEP1] Connect Wavit11 and the personal computer with a straight cable. [STEP2] Connect the DC plug of the AC adapter to the Wavit11 DC jack. [STEP3] Connect the AC adapter to the AC outlet.



The setup of Wavit11 must be completed in advance, or the setup can be done after [STEP3].



To connect to a personal computer, the following modes are recommended. Ad-Hoc mode 802.11Ad-Hoc mode Infrastructure mode



"Wavit11 Set Up"

9.2. Connection to Printer

[STEP1] Set the Wavit11 appropriately.

[STEP2] Connect Wavit11 and printer with a straight cable.

[STEP3] Connect the DC plug of the AC adapter to the Wavit11 DC jack.

[STEP4] Connect the AC adapter to the AC outlet.



The printer to connect to Wavit11 needs the Ethernet port.



The setup of Wavit11 must be completed in advance.



To connect to the printer, the following operational mode are recommended.

Ad-Hoc mode 802.11Ad-Hoc mode Infrastructure mode



"Wavit11 Set Up"

9.3. Connection to Network Equipment



Example of the Network equipment is as follows. HUB Cable Modem ADSL Modem Router

[STEP1] Set the Wavit11 appropriately.

[STEP2] Connect Wavit11 and personal computer with a straight cable.

[STEP3] Connect the DC plug of the AC adapter to the Wavit11 DC jack.

[STEP4] Connect the AC adapter to the AC outlet.



The setup of Wavit11 must be completed in advance.



To connect to network equipment, the "AP" mode is recommended.



"Wavit11 Set Up"

10. Items that can be set with Configuration Utility

Items	Choice			
Operational Mode	Ad-Hoc, Infrastructure, Both, AP, Wireless			
	Bridge, 802.11Ad-Hoc			
SS ID	Within 32 letters (ASCII code: 0x20 - 0x7e)			
Channel	1-11			
Data Rate	1M, 2M, 5.5M, 11M, Auto			
Roaming	Enable/Disable			
Hidden Node Compensation	Enable/Disable			
RTS Threshold	0-2347, Default 2347			
Fragmentation Threshold	256 –2346, Default 2346			
Short Retry Limit	1-255, Default 7			
Long Retry Limit	1-255, Default 4			
Beacon Interval	20-1000 ms, Default 100			
SSID Transmission	Enable/Disable			
Authentication Algorithm	Open system/Shared Key			
Basic Rate Set	1,2Mbps/1,2,5.5,11Mbps			
Encryption Mode	Disable/Original/40bit WEP/128bit WEP			
Encryption Key	5byte x 4, Default key			
Default Key	1-4			
Destination MAC Address	00-a0-96-xx-xx			

You can set the following items with the Wavit11 Configuration Utility.



Normally, it is not necessary to change the following item setting. Check each item in this manual when modifying the setting.

RTS Threshold
Fragmentation Threshold
Short Retry Limit
Long Retry Limit
Beacon Interval
SSID Transmission
Authentication Algorithm
Basic Rate Set

10.1. Operational Mode

Select the operational mode for the Wavit11.

Environ	ment	Wireless B	Iridge
Status	Property	Encryp	tion mode
n this page, you Click "Details" t configuration. H will not be nece Operational Mode	u can change vari o open the dialog owever, usually, o ssary AdHoc	ous configuration box for detail letail configuratio	s. n
SBID Channel Data Bate	AdHoc Infrastructure Both Access Point Wireless Bridge 802.11 AdHoc		
Roaming Hidden node compensation	Disable 💌	Details]
Back to d	default	Back to previou	s



"About Wireless LAN Network"

10.2. SS ID

It is a Network ID that indicates whole wireless LAN network. Set any ASCII string: 32 characters max.

Environr	nent	Wire	less Bridae
Status	Property	Er	noryption mode
this page, you lick "Details" to onfiguration. H vill not be nece: Operational	i can change va o open the dialo owever, usually, ssary. Infrastructure	arious configu g box for deta detail configu	rations. il ıration
S SID	Wavit		
Channel	1 •		
Data Rate	Auto	•	
Roaming	Disable	Det.	ails
Hidden node compensation	Disable		
Back to d	lefault	Back to pre	evious



It will be necessary to set the same SSID to all Wavi11 in case of Infrastructure LAN.



It will be necessary to set the same SSID to all Wavit11 in case of IBSS LAN.

10.3. Channel Set a channel Wavit11 uses.

	nent	Wireless Bridge
Status	Property	Encryption mode
h this page, you lick "Details" to onfiguration. Ho vill not be neces Operational Mode	can change various open the dialog bo: owever, usually, deta sary. Infrastructure	s configurations. k for detail ail configuration
Chaniel DataRate		
Relaming Hidden node compensation		Details
a constant and the second	11 Ba	ack to previous



Channel setting will be required in case of the following operational mode.

Ad-Hoc mode Both mode AP mode Wireless Bridge mode



To configure several wireless LAN groups within a same area, a unique channel should be set per each group, and it is necessary to set each channel at the place 5 channels apart in order to avoid the interference between the wireless LANs. In the case 3 groups of the wireless LAN are configured in the close area, it will be necessary to make the setting at 1CH, 6CH and 11CH to the respective group.

86/108

10.4. Data Rate

There are 5 choices: 1Mbps, 2Mbps, 5.5Mbps, 11Mbps and the automatic setting.

Environ	ment	1	Wireless Bri	dae
Status	Prope	arty]	Encryptic	on mode
n this page, you Click "Details" t configuration. H will not be nece	u can chang o open the d lowever, usu ssary.	e various ialog box ally, detail	configurations. for detail configuration	
Operational Mode	Infrastructu	re	•	
SSID	Wavit			1
Channel	1 -	_		
Data Rate	Auto		\mathbf{i}	
Roaming Hidden note compensation	Auto 1Mbit/s 2Mbit/s 5.5Mbit/s 11Mbit/s		Details	
Back to d	default	Bac	k to previous	



When the automatic setting is selected, Wavit11 makes communication in the fastest possible rate, and this depends on the equipment at the other end. If the communication environment is degraded and making communication in the present data rate becomes impractical, the data rate will be lowered and the wireless LAN communication will continue.

10.5. Roaming

This is a way to set whether the Wavit11does a roaming or not.

	2		
Environme	ent	Wireless B	ridge
Status	Property	Encrypti	on mode
n this page, you o Click "Details" to configuration. How will not be necess	can change vario open the dialog b wever, usually, de ary.	us configurations box for detail etail configuration). I
Operational Mode	nfrastructure	•	
ssid 🕅	Vavit		
Channel 1	-		
Data Rate 🛛	suto 💌		
Roaning)isable 💽	Details	
Hidden node compensation	nable		
Back to det	fault	Back to previous]
		1	



What is Roaming?

This function can be activated in an environment where multiple Access Points exist. If the wireless LAN under communication with a certain Access Point moves and fails in receiving the radio wave, the roaming function will enable Wavit11 to change the destination to the other nearby Access Point. If Wavit11 switches the Access Point successfully, it can send and receive the wireless LAN data without interruption, and that it can access the network without any interruption.



Setting up of Roaming function will be possible only if the operational mode is as follows: Infrastructure mode AP mode

88/108

10.6. Hidden Node Compensation

Depended on the placement of multiple wireless LANs, there is a case that the wireless LAN communication disturbance caused by other wireless LANs takes place and the data rate may be fallen off. If the Hidden Node Compensation is set to Enable, the Wavit11 seizes the wireless LAN communication line prior to the actual data transmission, so it can mitigate the mutual disturbance of wireless LAN communication and the degradation of data rate.

Environn	nent	Wireless Bridge
Status	Property	Encryption mode
n this page, you lick "Details" to onfiguration. Ho vill not be neces Operational	can change variou open the dialog bo owever, usually, deta sary.	s configurations. x for detail ail configuration
Mode I	Infrastructure	
SSID	Wavit	
Channel	1 💌	
Data Rate	Auto 💌	
Roaming	Disable 💌	Details
Hidden node compensation	Disable	
Back to d	erault Ba	ack to previous



What is Hidden Node?

In the wireless LAN system, many wireless LANs communicate each other on the same frequency. Normally every wireless LAN senses whether or not another wireless LAN has already started the wireless LAN communication so as not to disturb the already started wireless LAN communication.

However, some wireless LANs disturb the already started wireless LAN communication transmitting the data without sensing the existence of another wireless LAN communication. Such a kind of wireless LAN that may disturb the other wireless LAN communication is called Hidden Node.

10.7. Details

Click the "Details" button to enable the Wavit11 detailed setting.

Environn	nent	V	Vireless Brid	ge
Status	Property		Encryption	n mode
n this page, you Click "Details" to configuration. Ho vill not be neces	can change va open the dialo owever, usually, sary.	arious con g box for o detail cor	figurations. detail nfiguration	
Operational Mode	Infrastructure	•		
SSID	Wavit			
Channel	1 💌			
Data Rate	Auto	•		
Roaming	Disable		Details)
Hidden node compensation	Disable	•		
Back to d	efault	Back to	previous	
		Č .	- 1	



Normally you do not need to change these items.

Check each item of this manual, when the setting should be modified.

10.8. RTS Threshold

In the case that the Hidden node compensation is set to Enable, setup of RTS threshold will be possible.

The Wavit11 seizes the wireless LAN communication line prior to actual data transmission if the data length is greater than RTS Threshold. When the Hidden node compensation is set to Enable, the initial value is 0, therefore, the Wavit11 seizes the wireless LAN communication line prior to every length of actual data transmission.

Detail configuration	×
In this page, normally, all de as they are. If you need to c read the User's ma <u>nual care</u>	fault configurations can be used hange them by some reason, fully before doing so.
RTS threshold 12	28 byte [0 - 2347]
Fragment threshold 234	6 byte [256 - 2346] (Even number only)
Short Retry Limit	7 byte [1 - 255]
Long Retry Limit	4 byte [1 - 255]
Beacon interval	⁾⁰ ms [20 - 1000]
SSID transmission Enabl	8
Authentication algorithm	System Subject System System Subject System System System Subject System System State Stat
Basic Rate Set 2, 1M	bps 💌
ОК	Cancel



The wireless LAN performance will improve when this RTS Threshold is enlarged, in the case that Hidden node disturbance is not so violent. Check the performance by modifying the RTS threshold, when you modify the value from the initial value, because the optimal RTS threshold depends on the placement and application of wireless LAN.

91/108

10.9. Fragmentation Threshold

In the case that the transmitted data do not correctly reach the wireless LAN on the partner side, the Wavit11 will retransmit the data predefined times. This retransmission occurs frequently by a communication error under poor communication condition and the performance of the wireless LAN network sometimes deteriorates.

There is a way to mitigate the performance deterioration, that is the retransmission of divided frame. Thus, the wireless LAN frame should be divided into small pieces, and here is a way to set the size of divided frame.

Detail configuration	×
In this page, normally, all def as they are. If you need to c read the User's manual care BTS threshold 234	ault configurations can be used hange them by some reason, fully before doing so. 7 bute 10 - 23471
Fragment threshold 25	6 byte [256 - 2346] (Even number only)
Short Retry Limit	7 byte [1 - 255]
Long Retry Limit	4 byte [1 - 255]
Beacon interval 10	0 ms [20 - 1000]
SSID transmission Enable	
Authentication Open	System 💌 Setting is impossible while the mode is set to "Disable".
Basic Rate Set 2, 1Mt	ops 💌
ОК	Cancel



All frames are sent without any data frame division in default setting.

10.10. Short Retry Limit

In the case that the transmitted data do not correctly reach the wireless LAN on the partner side, the Wavit11 will retransmit the data predefined times and the number of retransmission times is set here. In Short Retry Limit, the number of retransmission is set, for the data frame whose length is below RTS threshold.

Detail configuration	X
In this page, normally, all de as they are. If you need to read the User's manual car	efault configurations can be used change them by some reason, efully before doing so.
RTS threshold 23	47 byte [0 - 2347]
Fragment threshold 23	46 byte [256 - 2346] (Even number only)
Short Retry Livit	te [1 - 255]
Long Retry Limit	4 byte [1 - 255]
Beacon interval 1	00 ms [20 - 1000]
SSID transmission Enab	le 💌
Authentication Oper algorithm	System 🔽 Setting is impossible while the mode is set to "Disable".
Basic Rate Set 2, 1M	lbps 💌
ОК	Cancel



If a big value is set needlessly, the Wavit11 may try to retransmit data many times to the wireless LAN at which the radio wave cannot get, so the performance of the whole wireless LAN can be deteriorated. Closely examine the degree of performance required by the application, if you modify the setting.

10.11. Long Retry Limit

In the case that the transmitted data do not correctly reach the wireless LAN on the partner side, the Wavit11 will retransmit the data predefined times and the number of retransmission times is set here. In Long Retry Limit, the number of retransmission is set, for the data frame whose length is above RTS threshold.

Detail configuration	×
In this page, normally, all de as they are. If you need to c read the User's manual care	fault configurations can be used hange them by some reason, fully before doing so.
RTS threshold 23/	¹⁷ byte [0 - 2347]
Fragment threshold 234	l6 byte [256 - 2346] (Even number only)
Short Retry Limit	7 byte [1 - 255]
Long Retry Limit	byte [1 - 255]
Beacon interval 10	¹⁰ ms [20 - 1000]
SSID transmission Enable	
Authentication Open	System Y bystem Y bys
Basic Rate Set 2, 1M	ops 💌
ОК	Cancel



If a big value is set needlessly, the Wavit11 may try to retransmit data many times to the wireless LAN at which the radio wave cannot get, so the performance of the whole wireless LAN can be deteriorated. Closely examine the degree of performance required by the application, if you modify the setting. 10.12. Beacon Interval

The Wavit11 in AP mode periodically transmits special frame called Beacon to information about current setting to another Wavit11 that tries to join the wireless LAN network. Here, is a way to set the Beacon interval.

Detail configuration		×
In this page, normally, as they are. If you nee read the User's manua	all defau ed to cha al careful	Ilt configurations can be used inge them by some reason, ly before doing so.
RTS threshold	2347	byte [0 - 2347]
Fragment threshold	2346	byte [256 - 2346] (Even number only)
Short Retry Limit	7	byte [1 - 255]
Long Retry Limit	4	byte [1 - 255]
Beacon interval	100	m [20 - 1000]
SSID transmission	Enable	•
Authentication algorithm	Open Sy	stem 🔽 Setting is impossible while the mode is set to "Disable".
Basic Rate Set 🛛	2, 1Mbp:	3
ОК]	Cancel



This item can be set only if the operational mode is AP mode.

10.13. SSID transmission

This is a description to set SSID transmission. It is possible to select whether SS ID should be included in Beacon frame transmitted by Wavit11 in AP mode.

Detail configuration		x
In this page, normally, as they are. If you nee read the User's manua	all defau ed to cha al careful	It configurations can be used nge them by some reason, ly before doing so.
RTS threshold	2347	byte [0 - 2347]
Fragment threshold	2346	byte [256 - 2346] (Even number only)
Short Retry Limit	7	byte [1 - 255]
Long Retry Limit	4	byte [1 - 255]
Beacon interval	100	ms [20 - 1000]
SSID transmission Authentication algorithm Basic Rate Set	Enable Disable Enable 2, 1Mbps	Setting is impossible while the mode is set to "Disable".
OK]	Cancel



This item can be set only if the operational mode is AP mode.

10.14. Authentication Algorithm

The algorithm that is used for the Authentication between Wavit11 is selected. There are 2 kinds of Authentication Algorithm, Open System and Shared Key, and the checking of the encryption key is carried out mutually in Shared Key.

Detail configuration	×
In this page, normally, all def as they are. If you need to c read the User's manual care	ault configurations can be used hange them by some reason, fully before doing so.
RTS threshold 234	7 byte [0 - 2347]
Fragment threshold 234	6 byte [256 - 2346] (Eiven number only)
Short Retry Limit	7 byte [1 - 255]
Long Retry Limit	4 byte [1 - 255]
Beacon interval 10	0 ms [20 - 1000]
SSID transmission Enable	
Authentication algorithm Open 9	System Setting is impossible System Mule the mode is set to Disable".
Basic Rate Sat Shared	I Key
ОК	Cancel



You can set this item in the following operational mode. Infrastructure mode AP mode Both mode **802.11 Ad-Hoc mode**



You cannot set this item if the encryption mode is set to Disable.

10.15. Basic Rate Set

The sending speed of broadcast and multicast frame can be set.

Detail configuration	×
In this page, normally, all default configurations can be use as they are. If you need to change them by some reason, read the User's manual carefully before doing so.	Ь
RTS threshold 2347 byte [0 - 2347]	
Fragment threshold 2346 byte [256 - 2346] (Even number only)	
Short Retry Limit 7 byte [1 - 255]	
Long Retry Limit 4 byte [1 - 255]	
Beacon interval 100 ms [20 - 1000]	
SSID transmission Enable	
Authentication algorithm Open System 💌 Setting is impossi while the mode is to "Disable".	ole set
Basic Rate Set 2, 1Mbps	
OK Cancel	
	12

10.16. Encryption mode

The Encryption mode used for the wireless LAN communication between Wavit11 is selected.

Wavit11 Wireless LAN						
Environm	ent	Wireless Bridge	1			
Status	Property	Encryption mode	1			
Encryption model In this page, you a encryption model Besides direct to generation string security keys auto characters to the below, and then o	Disable Criginal Uniginal 40bit WEP 128bit WEP matically, inpublication blank space n click "Generate	when the he than Disable. merals(00-FF), rder to generate t five alphanumeric ext to "Generation string" s".				
Keyî 🔭 🐄 Keyî 🐄 🐄	xx xx xx	In this page, all settings are not effective unless you click "Write".				
Key3 ** **						
Key4 🔤	×× ×× **					
Default Key	7	Write				
	OK	Cancel Apply				



It is not possible to make communication between Wavit11 with different encryption mode.

10.17. Encryption Key

It is the Encryption key for the encryption of data transmission. Set the same encryption key to each Wavit11.

There are two ways to set encryption key:

- You set some string and the Wavit11 automatically generate encryption key from string.
- You set the encryption key directly.

Env	vironm	ent	1	Wireless Bridge			
Status Property				Encryption mode			
ncryption	i mode	Orig	ginal	•			
eryption esides din ecurity key haracters elow, and Generatio	node ect inp string ys auti to the then n strin	but of I but of I bis also blank blank	availab availab ally, inpi space r General	ioue other than Disable. simal numerals(00-FF), le. In order to generate ut five alphanumeric next to "Generation string" .e". 			
acherade							
	××		** **	In this page, all settings			
Key1 💌 Key2 💌	×× ××		×× ××	In this page, all settings are not effective unless you click "Write".			
Key1 👘 Key2 👘 Key3 👘	×× ××		×× ×× ×× ××	In this page, all settings are not effective unless you click "Write".			
Key1	×× ×× ××		×× ×× ×× ×× ×× ××	In this page, all settings are not effective unless you click "Write".			
Key1 [©] Key2 [©] Key3 [©] Key4 [©] Default Kr	×× ×× ×× ×× ××		×× ×× ×× ×× ×× ×× ×× ××	In this page, all settings are not effective unless you click "Write". Write			

Status Property noryption mode Original this page, you can set security key cryption mode is set to any mode of sides direct input of hexadecimal n neration string is also available. In urity keys automatically, input five aracters to the blank space next to low, and then click "Generate".	Encryption mode s when the ther than Disable. numerals(00-FF), order to generate alphanumeric ''Generation string''
ncryption mode Original this page, you can set security key cryption mode is set to any mode o sides direct input of hexadecimal n neration string is also available. In zurity keys automatically, input five aracters to the blank space next to low, and then click "Generate".	s when the ther than Disable. iumerals(00-FF), order to generate alphanumeric ''Generation string''
this page, you can set security key cryption mode is set to any mode o sides direct input of hexadecimal n neration string is also available. In zurity keys automatically, input five aracters to the blank space next to low, and then click "Generate".	is when the ither than Disable, iumerals(00-FF), order to generate alphanumeric ''Generation string''
ieneration string	Grenerate
en a2 29 e8 0e 26 0t	his page, all settings
ey2 e6 33 12 1f Oa you	click "Write".
ey3 2a 69 62 4a c8	
e d Oc f4 2d 63 02	
	·····
rerault Ney 1 🔄	Write
	Cancel Ann

100/108

10.18. Default Key

This is one of the encryption keys Wavit11 use for data transmission.

Environn	oent Ì	Wireless Bridge
Status	Property	Encryption mode
Encryption mod	e Original	
this page, you icryption mode esides direct in eneration string curity keys au haracters to the slow, and then	i can set security is set to any mo put of hexadecii is also available tomatically, inpu s blank space ni click ''Generate	y keys when the ode other than Disable. mal numerals(00-FF), e. In order to generate t five alphanumeric ext to "Generation string" ".
	· · · · · · · · · · · · · · · · · · ·	
Generation strir	ng	Generate
ieneration strir	ng e8 De 26	Generate
ieneration strir iey1 a2 29 iey2 e6 33	ng e8 Oe 26 12 1f Oa	Generate In this page, all settings are not effective unless you click "Write".
Generation strir (ey1 a2 29 (ey2 e6 33 (ey3 2a 69	ng 68 0e 26 12 1f 0a 62 4a c8	Generate In this page, all settings are not effective unless you click "Write".
Generation strir (ey1 a2 29 (ey2 e6 33 (ey3 2a 69 (ey4 0c f4	ng e8 Oe 26 12 1f Oa 62 4a c8 2d 63 02	Generate In this page, all settings are not effective unless you click "Write".
Generation strir Key1 a2 29 Key2 e6 33 Key3 2a 69 Key4 Oc f4 Defaut Key	ng e8 De 26 12 1f Da 62 4a c8 2d 63 02 1	Generate In this page, all settings are not effective unless you click "Write".
Generation strir Key1 a2 29 Key2 e6 33 Key3 2a 69 Key4 0c f4 Defarat Key	ng e8 De 26 12 1f Da 62 4a c8 2d 63 02 1	Generate In this page, all settings are not effective unless you click "Write". Write



You can set this item if the Encryption Mode is either "Original" or "40bit WEP".



When the different Default Key is set to each Wavit11, the security against the illegal wiretapping is strengthened.

10.19. Destination Address

Set the MAC address of the Wavit11 on the other side for Wireless Bridge operation. The MAC address is indicated at the label put at the back of the Wavit11.

Wavit11 Win	eless LAN			1			
Status	Property	1	Encryption mode				
Environ	ment		Wireless Bridge				
In this page, ye First, please in sent over the o before you clic if you input a v	ou can configure \ put MAC address wireless below. Th k "OK". It is impo: wrong MAC addres	Wireles to whic en che ssible fi s.	s Bridge mode. In the frame is In the carefully or you to access				
MAC address I	MAC address to communicate with						
	ок	Ca	ancel Apply				



Make sure to satisfy the following condition to set the MAC address correctly for the successful Wireless Bridge operation:

- Wavit11 should be in Wireless Bridge mode
- Channel should be the same

11. Interoperability with third vendor wireless LAN

Wavit11 has interoperability with third vendor wireless LAN under certain conditions. If you install intermixed wireless network of third vendor Wireless LAN and Wavit11, refer to User's Manual enclosed in the package of third vendor wireless LAN. However, Mitsumi does not guarantee that Wavit11 can communicate with non-Wavit11 wireless LAN.

11.1. Confirmed wireless LAN card

Table 1.1 Wireless LAN Card information

Vendor	Product	Model#	Firmware Version	Driver Version	
3Com	3ComAirConnect Wireless LAN PC Card	3CRWE737A	V2.20-01	2.2.5.10	
Apple	AirMac Card	M7600J/B	1.3.1		
Cisco	Cisco Aironet 340 Series Wireless PC Card	AIR-PCM-342	4.23	6.64	
COMPAQ	WL-100 Wireless LAN PC Card	WL-100	00.08.00.00	0.29.4	
Corega	corega Wireless LAN PCC11	CG-WLPCC11		0.29.4	
Corega	corega Wireless LAN PCCA11	CG-WLPCCA11		0.29.4	
Elecom	Laneed Wireless PC Card	LD-W11/PCC	0.7.5	1.0.4	
Linksys	Instant Wireless Network PC Card	WPC11	00.08.00.00	0.29.10a	
Lucent	ORINOCO PC Card Gold	PC24E-H-FC	4.04/6.16	6.28	
Melco	AirStation Wireless LAN Card	WLI-PCM-L11		1.21	
Melco	AirStation Wireless LAN Card	WLI-PCM-L11G		1.21	
Melco	AirStation Wireless LAN Card	WLI-PCM-S11		1.01.00.0	
NEC	WarpStar Aterm WL11C	PC-WL/11C		1.0.0.0	
NTT-ME	MN128 SS-LAN CARD11	WLC010-D53	00.07.05.00	0.29.4	
Samsung	SWL-2000N 11Mbps Wireless LAN PC Card	SWL-2000N	0.75	3.65	
Symbol	Spectrum24 PC Card 11Mbps	LA4121-1020	V2.20.01	2.2.5.10	

Table 1.2 Test results

		Results								
		AdHoc		802.11AdHoc(IBSS)			Infrastructure			
Vendor	Model #	WEP	WEP	WEP	WEP	WEP	WEP	WEP	WEP	WEP
		Disable	40bit	128bit	Disable	40bit	128bit	Disable	40bit	128bit
3Com	3CRWE737A	OK	OK	OK	OK	OK	OK	OK	OK	OK
Apple		-	-	-	OK	-	-	OK	-	-
Cisco	AIR-PCM-342	-	-	-	OK	OK	OK	OK	OK	OK
COMPA Q	WL-100	ОК	ОК	ОК	ОК	ОК	ОК	ОК	ОК	ОК
Corega	CG-WLPCC11	OK	OK	-	-	-	-	OK	OK	-
Corega	CG-WLPCCA11	OK	OK	-	-	-	-	OK	OK	-
Elecom	LD-W11/PCC	OK	OK	-	-	-	-	OK	OK	-
Linksys	WPC11	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lucent	PC24E-H-FC	-	-	-	OK	NG(2)	NG(2)	OK	OK	OK
Melco	WLI-PCM-L11	OK(1)	OK(1)	-	-	-	-	OK(1)	OK(1)	-
Melco	WLI-PCM-L11G	OK	OK	OK	-	-	-	OK	OK	OK
Melco	WLI-PCM-S11	OK	OK	-	-	-	-	OK	OK	_
NEC	PC-WL/11C	NG	NG	-	-	_	-	OK	OK	_
NTT-ME	WLC010-D53	OK	OK	OK	OK	OK	OK	OK	OK	OK

103/108

Wavit11 User's Manual

Samsung	SWL-2000N	OK	OK	OK(1)	-	-	-	OK	OK	OK(1)
Symbol	LA4121-1020	OK	OK	OK	OK	OK	OK	OK	OK	OK

(1) This product does not receive fragmented frame.

(2) This product does not support hexagonal encryption key setting.

11.2. Confirmed Access Point

Table 2.1 Wireless LAN Access Point Information

Vendor	Product	Model #	Firmware Version
3Com	3ComAirConnect Wireless LAN Access Point	3CRWE747A	01.50.10
Apple	AirMac Base Station	M7601J/B	
Cisco	Cisco Aironet 340 Series Access Point	AIR-AP342E2C	4.25.08
COMPAQ	WL-400 Wireless LAN Hardware Access Point	WL-400	2.5.3
corega	corega Wireless LAN AP-11	CG-WLAP11	4.5.5G
Elecom	Laneed Airhawk	LD-W11/AP	2.0.0
IO-DATA	Wireless LAN Access Point	WN-B11/AXP	3.0.39
Lucent	ORINOCO WavePOINT2 Access Point	WavePOINT2	3.71
Melco	AirStation Access Point WLA-T1-L11	WLA-T1-L11	v100
Melco	AirStation Access Point WLA-L11	WLA-L11	6.08
Melco	AirStation Access Point WLA-L11G	WLA-L11G	6.08
NEC	WarpStar Aterm WL50T	PC-WL50T1	
NTT-ME	MN128 SOHO SLOT IN AirPack11		1.70
Symbol	Spectrum24 Access Point 11Mbps	AP4121-1050	02.20.04
YAMAHA	Net Volante RT60w	RT60w	5.0010

Table 2.2 Test Results

		Results			
Vendor	Modem #	WEP	WEP	WEP	
		Disable	40bit	128bit	
3Com	3CRWE747A	OK	OK	-	
Apple		OK	-	-	
Cisco	AIR-AP342E2C	OK	OK	OK	
COMPAQ	WL-400	OK	OK	OK	
corega	CG-WLAP11	OK	OK	OK	
Elecom	LD-W11/AP	OK	OK	-	
IO-DATA	WN-B11/AXP	OK	OK	-	
Lucent		OK	OK	OK	
Melco	WLA-T1-L11	OK	-	-	
Melco	WLA-L11	OK	OK	-	
Melco	WLA-L11G	OK	OK	-	
NEC	PC-WL50T1	OK	OK	-	
NTT-ME	AirPack11	OK	OK(1)	OK(1)	
Symbol	AP4121-1050	OK	OK	-	
YAMAHA	RT60w	OK	OK	-	

11.3. Setting

The general setup method to connect with third vendor wireless LAN is as follows, for each communication mode.

(Ad-Hoc mode)

In Ad-Hoc mode, set same channel to both Wavitr11 and third vendor Wireless LAN.

(802.11 Ad-Hoc mode)

In 802.11 Ad-Hoc mode, set same SSID to both Wavit11 and third vendor wireless LAN.

(Infrastructure mode)

In Infrastructure mode, set same SSID to both Wavit11 and third vendor Access Point.

(AP mode)

In AP mode, set same SSID to Wavit11 and third vendor Wireless LAN.

(Wireless Bridge mode)

In Wireless Bridge mode connection to the third vendor wireless LAN is not possible. You need to use two Wavit11s when you set up a wireless bridge.

Wavit11 mode	Wavit11 setting	Wireless LAN	Access Point setting
		setting	
Ad-Hoc	Channel	Channel	
802.11Ad-Hoc	SS ID	SS ID	
Infrastructure	SS ID		SS ID (ESS ID)
Both	SS ID	SSID	SS ID (ESS ID)
	Channel	Channel	Channel
AP	SS ID	SS ID (ESS ID)	
Wireless Bridge			

12. Troubleshooting

Situations Verifying Measures It does not work Does Power LED light up? Connect AC Adapter to Wavit11. Connect AC Adapter to the outlet. Does LINK LED light up? Connect 10BASE-T cable properly. Check 10BASE-T cable polarity. Install Wavit11 near the target Does TX/RX LED light up? Wirebss LAN, and confirm the communication. By using configuration tool, Are the configuration settings meet check configuration. appropriate to the condition of the target Wavit11? It does not communicate in Is the channel settings In Ad-Hoc mode, the same Ad-Hoc mode. should be set. Open the appropriately? configuration tool. and confirm channel settings. Are the encryption keys You need to set the same appropriately set? encryption keys. Open the configuration tool, and write in encryption keys again. It does not communicate in Is the appropriate SSID set? You need to set the same SSID 802.11 Ad-Hoc mode. with that of other Wavit11.Open the configuration tool, and confirm the SSID. the encryption You need to set the same Are keys appropriately set? encryption keys. Open the configuration tool, and write in encryption keys again Is the appropriate SSID set? You need to set the same SSID It does not communicate in Infrastructure mode. with that of Access Point. Open the configuration tool, and confirm the SSID. You need to set the same the encryption Are keys appropriately set? encryption keys. Open the configuration tool, and write in encryption keys again It does not communicate in Is the channel set appropriately? You need to set the same channel in Both mode. Open Both mode. the configuration tool, and confirm channel settings. You need to set the same the Are encryption keys appropriately set? encryption keys. Open the configuration tool, and write in encryption keys again. Does the SSID fit to the client You need to set the same SSID It does not communicate in with that of the client. Access Point mode. SSID? Open the configuration tool, and confirm the SSID.

106/108

Wavit11 User's Manual

	Are the encryption keys	You need to set same
	appropriately set?	encryption keys. Open the
		configuration tool, and write
T. 1		in encryption keys again.
It does not communicate in	Is the channel set appropriately?	In Wireless Bridge mode, you
Wireless Bridge mode.		need to set the same channel.
		Open the configuration tool,
	Was the MAC address properly	and commit the channel.
	was the MAC address property	MAC address correctly Open
	501:	the configuration tool and
		confirm the MAC address
	Are the encryption keys	You need to set the same
	appropriately set?	encryption keys. Open the
		configuration tool, and write
		in encryption keys again.
It does not communicate in all	Was the network configuration	Refer to Operating System
modes.	of Personal computer set	User's Manual.
	properly?	
	Does it communicate properly	Refer to the Operating System
	when personal computers are	User's manual and configure
	connected to each other with	the networks.
	10BASE-T cross cable?	
	Can Wavit11s make	The distance is too far.
	communication when they are	Change the Wavill position
The configuration to al does not	installed in the neighborhood?	to enable the communication.
start	what is your operating system?	rol configuration tool, you
start.		above
Setting is not feasible with the	Can you find Wavit11s on the	Connect personal computer
configuration tool.	screen in the top window of	and Wavit11 using 10BASE-T
C	configuration tool?	straight cable.
	Is the TCP/IP protocol installed	Refer to User's manual of the
	to your personal computer?	personal computer to install
		the TCP/IP protocol to your
		personal computer.
	Is the network address of	Open the configuration tool,
	Wavit11 IP address the same	and change the IP address so
	with that of the personal	as to match the network
	computer?	address.
Was the unusable IP address		Open the configuration tool
set?		After initialization you need
		to set up all configurations
		again
I have forgotten the password		Open the configuration tool
i have torgotten the password.		and perform the initialization
		After initialization, you need
		to set up all configurations
		again

13. Specifications

Item	Specification
Frequency	2,400 -2,483.5MHz
Channel	11
Modulation	CCK (Complementary Code Keying)
Interface	10BASE-T
Data Rate	11Mbps/5.5Mbps/2Mbps/1Mbps
Receive Sensitivity	-83dBm(11Mbps, FER=8x10 ⁻²)
Output Power	15dBm
Temperature Range	0-40 Celsius
Standards	ARIB STD-T66
	IEEE 802.11b
Supply Voltage	5.0V
Consumption Current	TX: 600mA
	RX: 330mA
Size	65(W) x88(D) x 29.9(H) mm, Antenna is excluded
Weight	110g

Range

Data Rate	Indoor	Outdoor
11Mbps	30m	60m
5.5Mbps	40m	80m
2Mbps	50m	100m
1Mbps	60m	120m

These ranges are estimated from the general environment. For Wavit11 installation, refer to the above and confirm the communication.

Performance

The performance is measured on the application. The performance varies according to PC power, network interface card power, installation environment, wireless network traffic and external noise. On condition that setting is made in the following environment: Ad-Hoc, Windows SE and TCP/IP protocol, the highest performance of the Wavit11 will be given at around 5Mbps.