10.4. Data Rate

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

Environr	nent	Wireless Br	idge
Status	Property	Encryptic	on mode
lick "Details" to	o open the dialo owever, usually	arious configurations og box for detail 1, detail configuration	
Operational Mode	Infrastructure	•	
SSID	Wavit		1
Channel	1 •	_	
Data Rate	Auto	\Box	
Roanling Hidden node	Auto 1Mbit/s 2Mbit/s 5.5Mbit/s	Details	
compensation	11Mbit/s		
Back to d	efault	Back 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.

Environme	ent	Wireless Br	idge
Status	Property	Encryptic	on mode
n this page, you o Click "Details" to configuration. How will not be necess	open the dialog b wever, usually, de	ox for detail	
Operational Mode	nfrastructure	•	
ssid 🕅	Vavit]
Channel 1	-		
Data Rate 🛛	uto 💌		
)isable 💌	Details	
Hidden node compensation	nable		
Back to det	fault	Back to previous	
	ОК	Cancel	Apply



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

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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
lick "Details" to onfiguration. Ho vill not be neces Operational	can change variou open the dialog bo owever, usually, det isary.	ox for detail
Mode		
SSID	Wavit	
Channel	1 💌	
Data Rate	Auto 💌	
Roaming	Disable 💌	Details
compensation i	Disable 💌 Disable Enable	$\overline{)}$
Back to d		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	lge
Status	Property		Encryption	-
n this page, you Click "Details" to configuration. Ho vill not be neces	o open the dialo owever, usually,	g box for (detail	
Operational Mode	Infrastructure	•		
SSID	Wavit			
Channel	1 💌			
Data Rate	Auto	•		
Roaming	Disable		Details)
Hidden node compensation	Disable	- -		
Back to d	efault	Back to	o previous	
		Car	1	Apply



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	×
	fault configurations can be used hange them by some reason, fully before doing so.
RTS threshold 12	28 byte [0 - 2347]
Fragment threshold 234	l6 byte [256 - 2346] (Even number only)
Short Retry Limit	7 byte [1 - 255]
Long Retry Limit	4 byte [1 - 255]
Beacon interval 10	⁰⁰ ms [20 - 1000]
SSID transmission Enabl	8
Authentication algorithm	System 🔽 Setting is impossible while the mode is set to "Disable".
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.

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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	×
Fragment threshold 25	
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	ps 💌
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	×
	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] (Even number only)
Short Retry Livit	te [1 - 255]
Long Retry Limit	4 byte [1 - 255]
Beacon interval 10	0 ms [20 - 1000]
SSID transmission Enable	
Authentication algorithm	System Y bystem Y to "Disable".
Basic Rate Set 2, 1Mb	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.

10.11. 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		×
	ed to cha	It configurations can be used nge them by some reason, y 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 [Enable	<u> </u>
Authentication algorithm	Open Sy	stem Setting is impossible while the mode is set to "Disable".
Basic Rate Set	2, 1Mbps	-
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		×
	d to cha	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.

etail configuration		×
	ed to cha	Ilt 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]
Authentiesticn	Enable Disable Enable 2, 1Mbps	Setting is impossible while the mode is set to "Disable".
ОК]	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 default configurations can be used as they are. If you need to change them by some reason, read the User's manual carefully before doing so.				
RTS threshold 234	47 byte [0 - 2347]			
Fragment threshold 234	46 byte [256 - 2346] (Even number only)			
Short Retry Limit	7 byte [1 - 255]			
Long Retry Limit	4 byte [1 - 255]			
Beacon interval 10	00 ms [20 - 1000]			
SSID transmission Enabl				
algonuryn	System Setting is impossible System Divide the mode is set System to 'Disable''.			
Basic Rate Set Share				
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".	
Basic Rate Set 2, 1Mbps	
0K Cancel	
	12

10.16. Encryption mode

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

pWavit11 Wirel	ess LAN		×
Environme	ent	Wireless Bridge	1
Status	Property	Encryption mode	1
	Disable S Original 40bit WEP 128bit WEP matically, inpu blank space n lick "Generate	when the her than Disable. merals(00-FF), tder to generate t five alphanumeric ext to "Generation string" ". Generate	
Key1 ×× ××	NX XX XX	In this page, all settings are not effective unless you click "Write".	
Key3 🔽			
Key4 👫 🔭	×× ×× ××		
Default Key 👖	7	Write	
	ОК	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.

Status Property Encryption mode Encryption mode Original Image: Comparison of the state of	Er	vironm	nent		Wireless Bridge		
this page, you can set security keys when the norpption mode is set to any mode other than Disable. esides direct input of hexadecimal numerals(00-FF), eneration string is also available. In order to generate sourity keys automatically, input five alphanumeric naracters to the blank space next to "Generation string" elow, and then click "Generate". Generation string abcde Generate Key1 ** ** ** *** In this page, all settings are not effective unless you click "Write". Key3 ** *** *** ***	Status			Proper	ty Encryption mode		
Acryption mode is set to any mode other than Disable. esides direct input of hexadecimal numerals(00-FF), eneration string is also available. In order to generate curity keys automatically, input five alphanumeric haracters to the blank space next to "Generation string" alow, and then click "Generate". Generation string abcde Generate Generate Key1 ** ** ** *** Key2 ** ** ** *** Key3 ** ** ** *** Key3 ** ** *** ***	ncryptio	n mod	e Ori	ginal	•		
Key1 *** *** *** In this page, all settings are not effective unless you click "Write". Key3 *** *** *** ***	esides di eneration ecurity ke naracters elow, ani	rect in string sys aut to the d then	put of is also comation blank click '	hexado availa cally, in space ' <u>Gener</u>	ecimal numerals(00-FF), able. In order to generate put five alphanumeric next to "Generation string" ate".		
Key2 ** ** ** ** you click "Write". Key3 ** ** ** **		× ×		** >	 In this page, all settings 		
	Key1				are not effective unless		
<ey4 td="" xx="" xx<=""><td></td><td>× ××</td><td>**</td><td>** ></td><td>you click "Write".</td></ey4>		× ××	**	** >	you click "Write".		
	Key2						
Default Key 1 🔄 Write	Key2 📑 Key3 📑	× ×		** >			

ncryption mode Original this page, you can set security keys when the cryption mode is set to any mode other than Disable. sides direct input of hexadecimal numerals(00-FF), meration string is also available. In order to generate curity keys automatically, input five alphanumeric aracters to the blank space next to "Generation string" slow, and then click "Generate". Generate this page, all settings are not effective unless you click "Write". ey3 2a 69 62 4a c8	Environ	ment	Wireless Bridge
this page, you can set security keys when the cryption mode is set to any mode other than Disable. esides direct input of hexadecimal numerals(00-FF), ineration string is also available. In order to generate curity keys automatically, input five alphanumeric aracters to the blank space next to "Generation string" slow, and then click "Generate". Generation string eneration string evaluation of the space and this page, all settings are not effective unless evaluation of the space and the space and effective unless evaluation of the space and the space and the space evaluation of the space and the space and the space evaluation of the space and the space and the space evaluation of the space and the space and the space evaluation of the space and the space and the space and the space evaluation of the space and the space and the space and the space evaluation of the space and the space and the space and the space evaluation of the space and t	Status	Property	Encryption mode
cryption mode is set to any mode other than Disable. sides direct input of hexadecimal numerals(00-FF), meration string is also available. In order to generate curity keys automatically, input five alphanumeric maracters to the blank space next to "Generation string" slow, and then click "Generate". Generate deneration string Generate Generate Leg 2 9 e8 0e 26 in this page, all settings are not effective unless ey2 e6 33 12 1f 0a you click "Write". Leg 2 26 69 62 4a c8 Leg 2 66 14 2d 63 02	Encryption mo	de Original	•
cer1 a2 29 e8 0e 26 no this page, all settings ale not effective unless you click "Write". cey2 e6 33 12 1f 0a you click "Write". cey3 2a 69 62 4a c8 cey4 0c 14 2d 63 02	ncryption mod esides direct i eneration strin ecurity keys an naracters to th	e is set to any mode nput of hexadecima g is also available. I utomatically, input fi ie blank space next	e other than Disable. I numerals(00-FF), n order to generate ve alphanumeric
ey2 e6 33 12 1f 0a not effective unless ey3 2a 69 62 4a c8 ey3 2a 69 62 4a c8 ey4 0c 14 2d 63 02	Generation str		Grenerate
ey2 e6 33 12 1f 0a you click "Write". ey3 2a 69 62 4a c8 ey4 0c 14 2d 63 02	Kep1 a2 2		
end Dc 14 20 63 02	.ey2 e6 3	3 12 1f Oa y	
	ey3 2a 6	9 62 4a c8)
	Kent Oc f	4 2d 63 02	/
Verault Key Write			(mar.)
	Derault Ney		Write
OK Cancel Ap			

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10.18. Default Key

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

Environn	nent	Wireless Bridge
Status	Property	Encryption mode
Encryption mod	e Original	•
ncryption mode esides direct in eneration string ecurity keys aut naracters to the	is set to any mo put of hexadeci is also available tomatically, inpu	y keys when the ode other than Disable. mal numerals(00-FF), e. In order to generate t five alphanumeric ext to "Generation string" a"
Generation strir	ng	Generate
	ng e8 0e 26	In this page, all settings
(ey1 a2 29	- ,	
<ey1 29<br="" a2=""><ey2 33<="" e6="" td=""><td>e8 0e 26</td><td>In this page, all settings are not effective unless</td></ey2></ey1>	e8 0e 26	In this page, all settings are not effective unless
Key1 a2 29 Key2 e6 33 Key3 2a 69	e8 0e 26 12 1f 0a 62 4a c8	In this page, all settings are not effective unless
Key1 a2 29 Key2 e6 33 Key3 2a 69 Key4 0c f4	e8 0e 26 12 1f 0a 62 4a c8	In this page, all settings are not effective unless you click "Write".
	e8 0e 26 12 1f 0a 62 4a c8	In this page, all settings are not effective unless



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			
Status	Property	1	Encryption mode	
Environ	ment		Wireless Bridge	
First, please in sent over the before you clic	ou can configure \ put MAC address I wireless below. Th k "OK". It is impos vrong MAC addres	to whic en che ssible fi	h the frame is ck it carefully	
	o communicate w	1	0 : 12	
		_		
	ок (Ca	incel	



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				
X 7 1			AdHoc		802.1	1AdHoc(1	BSS)	Ir	frastructu	re
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	OK	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

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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.

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MILSUMI Electric CO., LIG	•	waviti 1 User's Manual
	Are the encryption keys	You need to set same
	appropriately set?	encryption keys. Open the
		configuration tool, and write
It does not communicate in	Is the channel set appropriately?	in encryption keys again. In Wireless Bridge mode, you
Wireless Bridge mode.	is the channel set appropriately :	need to set the same channel.
Wheless Bridge mode.		Open the configuration tool,
		and confirm the channel.
	Was the MAC address properly	You need to set the target
	set?	MAC address correctly. Open
		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?	Defende the Oremet's Cont
	Does it communicate properly	Refer to the Operating System
	when personal computers are connected to each other with	User's manual and configure the networks.
	10BASE-T cross cable?	the networks.
	Can Wavit11s make	The distance is too far.
	communication when they are	Change the Wavit11 position
	installed in the neighborhood?	to enable the communication.
The configuration tool does not	What is your operating system?	For configuration tool, you
start.		need Windows95+IE4.01 or
Sotting is not foosible with the	Con you find Wavit11a on the	above.
Setting is not feasible with the configuration tool.	Can you find Wavit11s on the screen in the top window of	Connect personal computer
configuration tool.	configuration tool?	and Wavit11 using 10BASE-T straight cable.
	Is the TCP/IP protocol installed	Refer to User's manual of the
	to your personal computer?	personal computer to install
	to your personal compater.	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?		and perform initialization.
		After initialization, you need
		to set up all configurations
I have forgetter the second 1		again.
I have forgotten the password.		Open the configuration tool
		and perform the initialization. After initialization, you need
		to set up all configurations
		again.
		ugum.

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.