ISHIDA AC-4000 Series Wireless Communications



YDI Client Bridge Quick Setup Procedure



Start the YDI Client Manager program.

The scan list will appear and list all active devices (AC-4000 scales with RF option).

9	CETIG	Juie i					
ł	🔥 Upd	ated EC List	:				×
ſ	Status	Direction	IP Address	MAC Address	EC Name	Network Type	Network Name
	Online	Wireless	128.1.1.100	00:06:11:01:2D:EE	Meat Handwrap	Infrastructure	WaveLAN Network
I							
I							
I							
I							
I							
I							
I							
l							F
		laar Liet			Advanced \\	Select	Cancel
			SOIL BY: TEC I	vame 📩	Advanced //		

Figure 1. List of all active RF devices

Highlight the device to be configured.

Click the **Select** button.

The program returns to the Main screen.

"Connected" and "Initialized" are displayed in the lower status bar.

Click the Wizard Manager button.

See Figure 2.

腿 Ethernet	Converter Client Manager				_ 🗆 ×
File Edit Vie	ew Commands Tools Help				
← Scan	General Information	Configuration		Utilities	
	General Informati	on V	Vizard Mana	ger	
Save settings	Current EC	Connection: Ass	ociated		
Reload	Network Name	WaveLAN Net	work		
settings	Channel ID:	3			
Sel 24	Encryption:	Disabled			
THE S	Network Type:	Infrastructure			
20111	AP Name:	YDI AP+			
1992	Signal Strengt	n:		-42	
20022					
11111	Serial Number: ZC04050011	Firmware \	/ersion:	3.11 09/09	/2003
	Model Name: EC II	Manufactu	uring Date: 1	/27/2004	— J
	は うがい ね さくび ひょうびん ぶ	しんりょう リントウト	1999-19	2 16 CAN	$ \rightarrow $
Host Comp	uter Name: RLWS-LAPTOP	Ethernet Convert	er Name: M	leat Handwrap	
Host Comp	uter IP: 128.1.1.204	Ethernet Convert	er IP: [1;	28.1.1.100	
General Inform	ation	Connected	Initialized	7/22/2004	10:56 AM

Figure 2. Main screen

Select Universal Configuration Wizard.

Click the Start button to begin configuration. See Figure 3.

1 Ethernet	Converter Client Manager	<u>- 🗆 ×</u>
File Edit Vie	ew Commands Tools Help	
←Scan	General Information Configuration Utilities	\supset
	General Information Wizard Manager	
Save settings	Please choose a Wizard	
Reload	O Universal Configuration Wizard	
settings	This Wizard will walk you through setting up the wireless, ethernet, and/or serial settings that apply to your wireless network configuration.	
1 12 44	Serial Configuration Wizard	
	This Wizard will help you set up the serial settings for either a serial-to-serial connection or a serial-to-ethernet configuration.	
1.1.1.1	O Wireless Bridge Wizard	
	This Wizard will help you set up a pair of ECs as a Wireless Bridge Network.	
12/2/2		
10.22	< Back Start > Cancel	
	ねちりゅうひょう ちょうちょう マンション・ション・ション・ション	
Host Comp	uter Name: RLWS-LAPTOP Ethernet Converter Name: Meat Handwrap	\equiv]
Host Compi	Converter IF: [128.1.1.204	
Wizard Manag	er Connected Initialized 7/22/2004	10:58 AM
	Figure 3 Select Universal Configuration Wizard	

Figure 3. Select Universal Configuration Wizard

Select Yes to join an 802.11b network via Access Point. Click the Next button. See Figure 4

> Bthernet Converter Client Manager General Information Configuration Utilities ← Scan General Information Wizard Manager Save settings Universal Configuration Wizard - Network Configuration Reload settings Will you be joining a wireless network via an 802.11b Access Point? 💿 Yes 🛛 🔿 No < Back Next> Cancel Ethernet Converter Name: Meat Handwrap Host Computer Name: RLWS-LAPTOP Host Computer IP: 128.1.1.204 Ethernet Converter IP: 128.1.1.100 Connected Initialized 7/22/2004 10:59 AM Wizard Manager

Figure 4. Joining an 802.11b network via Access Point

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Click the **Scan** button to see a list of the available wireless networks. See Figure 5.



File Edit Vi	Converter Client Manager	
← Scan	General Information Configuration Utilities	
	General Information Wizard Manager	\square
Save settings Reload settings	Universal Configuration Wizard - Wireless Configuration Enter the name of the network you will be joining or scan for any networks that already exist.	
	< Back Next> Cancel	
Host Comp Host Comp	puter Name: RLWS-LAPTOP Ethernet Converter Name: Meat Handwrap puter IP: 128.1.1.204 Ethernet Converter IP: 128.1.1.100	
Wizard Manag	ger Connected Initialized 7/22/2004 11	1:01 AM

Figure 5. Scan for available wireless networks

Highlight the desired wireless network. Click the **Select** button. See Figure 6.

Belect Network						×
Network Name	Network Type	Channel ID	Encryption	SNR	Signal	Noise
WaveLAN Network	Infrastructure	3	No	59	-41	-100
, (
Clear List			Se	lect	Can	cel

Figure 6. Select an available wireless network

YDI Client Bridge Setup Procedure

Click the **Next** button after selecting the desired wireless network. See Figure 7.

Ethernet C File Edit View	Converter Client Manager	
←Scan	General Information Configuration Utilities	
	General Information Wizard Manager	\square
Save settings Reload settings	Universal Configuration Wizard - Wireless Configuration Enter the name of the network you will be joining or scan for any networks that already exist. Scan WaveLAN Network	
	< Back Next > Cancel	
Host Comput Host Comput	iter Name: RLWS-LAPTOP Ethernet Converter Name: Meat Handwrap iter IP: 128.1.1.204 Ethernet Converter IP: 128.1.1.100	
Wizard Manager	er Connected Initialized 7/22/2004 1	1:04 AM

Figure 7. Wireless network has been selected

Select **No** if WEP encryption is not necessary. Click the **Next** button. See Figure 8.

\rm Ethernet C	Converter Client Manag	jer				_ 🗆 >
File Edit Vie	w Commands Tools H	telp				
← Scan	General Information		Configuration) (Utilities	
	General	Informatio	on ۷	/izard Ma	nager	
Save settings	– Universal Configuration V	Vizard - Wir	eless Configuration	า		
Reload	Are you going to	use WEP e	ncryption for secu	re wireless	communication?	
settings	_	(🛛 Yes 💿 No			
		O Key	1			
		C Key	3 1	1		
		C Key	4			
1.6.6						
			< Back	Next >	Cancel	
	A ESTREPHICA	i he Spech	しんりゅう いうにっちん	1.9.1	a the Phan C	1.134
Host Compu Host Compu	iter Name: RLWS-LAPT0 iter IP: 128.1.1.204)P	Ethernet Convert Ethernet Convert	erName: erIP:	Meat Handwrap	
	, 	al fait at		mille.	A Carlanter	
Vizard Manage	er		Connected	Initialize	ed 7/22/2004]11:06 A

Figure 8. WEP encryption is not selected.

Select Yes if WEP encryption is required. Click the **Key 1** button. See Figure 9.

File Edit Vie	Converter Client Manager ew Commands Tools Help	<u> </u>
← Scan	General Information Configuration Utilities	
	General Information Wizard Manager	\square
Save settings	Universal Configuration Wizard - Wireless Configuration ————————————————————————————————————	
Reload settings	Are you going to use WEP encryption for secure wireless communication?	HUR W.
	Key 1 Key 2 Key 3 Key 4	
	< Back Next > Cancel	
Host Comp Host Comp	uter Name: RLWS-LAPTOP Ethernet Converter Name: Meat Handwrap uter IP: 128.1.1.204 Ethernet Converter IP: 128.1.1.100	
Wizard Manag	er Connected Initialized 7/22/2004	11:08 AM

Figure 9. Select WEP encryption.

Select the Encryption Type and Format desired. Enter the encryption key. Click the **OK** button. See Figures 10a through 10d.

!

Use extreme care when entering the encryption key. An incorrect key will prevent the device **NOTE** from communicating and requires a direct hard wired connection to repair.

💹 Configure Key 1							
Attached PC Card is	128-bit						
Encryption Type	Format						
64 Bit Encryption	ASCII						
C 128 Bit Encryption	C Hex						
Specify the 5 character alphanumeric (any printable character) key.							
12345							
OK Cancel							
Figure 10a. 64-bit, A	SCII key						

腸 Configure Key 1								
Attached PC Card is 128-bit								
Encryption Type	- Format							
C 64 Bit Encryption	ASCII							
128 Bit Encryption	C Hex							
Specify the 13 character alph (any printable character) key.	nanumeric							
ABCDEFGHIJKLM								
OK	Cancel							

Figure 10b. 128-bit, ASCII key





The program returns to the WEP encryption screen. Click the **Next** button.

See Figures 11.

Ethernet	Converter Client Manager ew Commands Tools Help	<u> </u>
← Scan	General Information Configuration Utilities	
	General Information Wizard Manager	
Save settings	Universal Configuration Wizard - Wireless Configuration	
Reload settings	Are you going to use WEP encryption for secure wireless communication?	
	Image: Second	
	< Back Next > Cancel	
Host Comp Host Comp	uter Name: RLWS-LAPTOP Ethernet Converter Name: Meat Handwrap uter IP: 128.1.1.204 Ethernet Converter IP: 128.1.1.100	
Wizard Manag	jer Connected Initialized 7/22/2004	11:21 AM

Figure 11. WEP encryption selected and key entered

Enter a unique name to identify the device, for example "Meat Handwrap". Click the **Next** button when finished. See Figure 12.

1 Ethernet	Converter Client Manager							
File Edit Vi	ew Commands Tools Help							
← Scan	General Information	Configuration		Utilities				
	General Informati	on ທ	zard Manage	er)				
Save settings Reload settings	Universal Configuration Wizard - Et	hernet Configuration						
	can be no greater than 31 c	e Ethernet Converte Haracters.	r. I ne length or	the name				
Ethernet Converter Name: Meat Handwrap								
		< Back	Next >	Cancel				
Host Computer Name: RLWS-LAPTOP Ethernet Converter Name: Meat Handwrat Host Computer IP: 128.1.1.204 Ethernet Converter IP: 128.1.1.100								
Wizard Manag	jer	Connected	Initialized	7/22/2004 11:26 AM				

Figure 12. Ethernet converter renamed.

Enter a unique IP Address and a Subnet Mask that are on the same system as the scales. **DO NOT** use the same IP Address as the scale or any other device – it must be unique. A static IP Address is needed in case the RF card must be reconfigured by a hard-wired connection. Click the **Next** button when finished.

See Figure 13.

膼 Ethernet (Converter Client Manager				
File Edit Vie	iew Commands Tools Help				
←Scan	General Information Configuration	Utilities			
	General Information Wizard Manage	er 📄			
Save settings Reload	Universal Configuration Wizard - Ethernet Configuration Please enter the required IP information for the Ethernet Conve If your network supports DHCP, you may want to have the EC	erter. obtain an IP			
settings	address automatically. All units will still need static IP information in case of a failed DHCP request. © Obtain an IP address from the wireless interface © Obtain an IP address from the Ethernet interface				
	Use static IP address IP Address: I28.1.1.100 Subnet Mask: 255.255.0.0 Gateway: 0.0.0				
	< Back (Next>)	Cancel			
Host Comp Host Comp	puter Name: RLWS-LAPTOP Ethernet Converter Name: Mea puter IP: 128.1.1.204 Ethernet Converter IP: 128	at Handwrap			
Wizard Manag	ger Connected Initialized	7/22/2004 11:27 AM			

Figure 13. Setting a static IP Address and Subnet Mask

Configuration is complete.

Click the **Finish** button to send the changes to the RF card. See Figure 14.

Ethernet (File Edit Vie	Converter Client Manager ew Commands Tools Help			<u> </u>	
← Scan	General Information	Configuration	Utilities		
	General Informat	ion 🗰	izard Manager		
Save settings Universal Configuration Wizard - Finishing Reload settings All information has been gathered in order to configure your Ethemet Converter. Please press 'Finish' to complete the process.					
		< Back	Finish Cance		
Host Compu Host Compu	uter Name: RLWS-LAPTOP uter IP: 128.1.1.204	Ethernet Converte Ethernet Converte	er Name: Meat Handwra er IP: 128.1.1.100		
Wizard Manag	er	Connected	Initialized 7/22/200	4 11:29 AM	

Figure 14. Configuration is ready to be sent to the RF card

The RF card configuration is erased, reprogrammed, and rebooted. See Figure 15.

The program will return to the main scan screen (figure 1) when the update is completed. **NOTE:** Do not exit the program or turn off the scale during the configuration update.

Save settings Reload settings	Ger Please choose a W C Universal Co This Wizard serial setting C Serial Confi This Wizar C Wireless B This Wizar	izard nfiguration Wizard will walk you through setting up s that apply to your wireless netw workers to format rogress ✓ Checking for connection ✓ Erasing parameter blocks → Programing parameters	Wizard Manag the wireless, ether work configuration Status Complete Active	net, and/or Tial-to-serial ge Network.
Host Compu Host Compu	uter Name: RLWS-L uter IP: 128.1.1.2	APTOP Ethernet Conv 204	verter Name: Me verter IP: 128	Cancel at Handwrap 3.1.1.100

Figure 15. Sending new configuration to the RF card

TROUBLESHOOTING

1. Why is the wireless communication intermittent?

To simplify setup, the Client Bridge's default connection is to <u>any</u> Access Point. During final installation this must be changed to scan only the customer's wireless network. Refer to figures 5 through 7.

2. Why won't the Client Bridge(s) communicate?

Recheck the IP Address assigned to each Client Bridge (RF Card). Be sure that the IP Address is not the same as the host scale or any other device on the network. Duplicate addresses prevent or disrupt communications. Refer to figure 13.

3. Why does a device selected from the Updated EC List (see figure 1), fail to show the connection information (see figure 2) and instead returns to the List?

Check for and disable any firewall, anti-virus, or other security feature that is preventing a full connection to the Client Bridge.

4. Why is the Updated EC List (see figure 1) blank – no scales are listed?

Confirm that the Access Point is "broadcasting" its SSID. If the AP is not sending out a signal identifying itself then the AC-4000's wireless card cannot make a connection to the PC in order to be configured. There are two solutions to this situation.

- Change the Access Point's settings to broadcast the SSID.
- Hard wire in to the RJ-45 connection on the AC-4000's internal wireless card. The Client Manager configuration program will then see the RF card as "local". Follow the normal steps to configure the RF card. The only difference is that the Access Point's SSID cannot be scanned – it must be entered manually.
- 5. Why is the Updated EC List (see figure 1) blank even when the Access Point is "broadcasting" its SSID?

Confirm that the Access Point is not encrypted. If encryption is to be used, the Client Bridge(s) must be encrypted before the AP. After setting encryption in the Client Bridge(s) set the AP's encryption.

6. Why do I lose my WEP keys?

Previously stored WEP keys will be lost when re-configuring a Client Bridge (via any wizard).