

ICP LAN Configurator

User's Manual

1 Installation	
1.1 Software Installation	
1.1.1 Software	
1.1.2 ICP Family Standard Software (ICP for Windows).	
1.1.3 ICP LAN Configurator Installation	1
1.2 Hardware Installation	2
2 Quick Start (Local Connection)	2
2.1 Quick Start Step 1: Initial Actions	2
2.2 Quick Start Step 2: LAN Configuration	2
2.3 Quick Start Step 3: COM Port Redirection	4
2.4 Quick Start Step 4: Check Communication with the P	rogrammer5
3 Remote Connection	6
3.1 Step 1 - Remote Location - LAN Configuration	6
3.2 Step 2 - Remote Location - Port Forwarding	
3.3 Step 3 – My Location - COM Port Redirection	
4 Appendix A: Firewall	7
5 Appendix B: Router Configuration Example for Remote Co	nnection8
5.1 Enter Settings	8
5.2 Port Mapping	8
5.3 Optional: Dynamic DNS	8
6 Appendix C: Advanced Features	9
6.1 Selecting Network Adapter	9
6.2 Assigning IP by MAC Address	9
6.3 Advanced CPR Configuration	10
7 Revision History	12
8 Warranty	12
9 Contact	12
10 Copyright Notice	12

1 Installation

1.1 Software Installation

- 1.1.1 Software
- Visit our site and get the latest software: <u>http://www.softlog.com</u> → Support or contact us directly: <u>support@softlog.com</u>

1.1.2 ICP Family Standard Software (ICP for Windows)

The manual assumes that the ICP Family Windows software "ICP for Windows" is installed

1.1.3 ICP LAN Configurator Installation

- Run "IcpLan_setup_XXX.exe" and follow on-screen instructions
- "ICP LAN Configurator" application provides 3 configuration features:
 - "LAN Configuration" discovers a programmers and changes IP parameters
 - "COM Port Redirection" creates/removes a virtual COM (Lantronix CPR) port for ICP

programmer

- "Create Remote Port" quickly creates a virtual COM for remote connection

1.2 Hardware Installation

- Follow ICP Family User's Manual for hardware installation
- Supported programmers:
- ICP2-COMBO
 - ICP2-COMBO(G3)
 - ICP2-LAN(G3)

2 Quick Start (Local Connection)

2.1 Quick Start Step 1: Initial Actions

- Note: screenshots below are taken from the previous software version but they completely cover the latest version
- Connect ICP family programmer to the same Ethernet network as your PC: - use straight cable for connection via network hub or router
 - use crossover (with red mark) cable for direct connection to the PC
- Run "ICP-LAN" shortcut or "ICP LAN Configurator.exe" which is usually located in "C:\Softlog\lcpLan". An opening screen appears:



2.2 Quick Start Step 2: LAN Configuration

- Click "LAN Configuration" button
- The application automatically starts discovering programmers. You can retry later by clicking "Search" button

• The following screen appears:

IP Address	MAC Address	Status	Product Name	Serial Number	Friendly Name
10.0.0.26	00-80-a3-ab-44-93	Online	ICP2COMBO	19010615.105	
4					4
4					4

- Before you continue:
 - verify that detected "Serial Number" is the same as printed on the programmer sticker
 - if your programmer was not found refer to "Advanced IP Configuration" below (paragraph 6)
 - if status of discovered programmer is "Unreachable" reconnect the power to the programmer and retry search, otherwise refer to "Advanced IP Configuration".
- Select (highlight) the discovered programmer
- Double-click on selected programmer or click "Edit IP" button. The following screen appears:

ICP2-COMBO LAN Configurate	or : Edit IP								 2	2	J
Friendly na	ame (Optio	nal, N	1ax 33	2 char	acter	s)					
IP Configuration (Static IP i	s recomme	nded)								
Obtain an IP add	lress auton	natica	lly								
Use the following) IP configu	iratio	n (Sta	tic IP)						
IP Address:	10	•	0	1	0	1	26				
Subpet Marke	255		0		0		0				
Sublict Mask.											
Default Gateway:	0	•	0	÷	0	÷	0				
Ethernet Configuration											
🛛 Auto Negotiate											
Speed:	🔘 100 M	Bps	(0 10 1	ИBps						
Duplex:	🔿 Full		() Half							
				_							
Apply						Cance	el				
	ICP20	сом	во					_		_	

- Change your settings as follows:
 - strongly recommended: use static IP for reliable operation with a virtual CPR COM port
 - optional: assign a friendly name to the programmer, for example "COMBO-12 for tester 4"

ICP2-COMBO LAN Configurat	or : Edit IP							_ X	2
	<i>i</i>								
Friendly n	iame (Optioi	nai, r	nax 32	2 chai	racter	s)			
COMBO-	12 for tester	-							
IP Configuration (Static IP	is recomme	nded)						
Obtain an IP ad	dress autor	natica	ally						
 Use the following 	ıg IP configu	Iratio	n (Sta	tic IP))				
IP Address:	10		0		0	÷	26		
	255	-	0	-	•	-	0		
Subnet Mask:	235	1	0		0		0		
Default Gateway	10		0		0		138		
,.									
Ethernet Configuration									
Auto Negotiate									
Speed:	🔘 100 M	Bps	0) 10	MBps				
Duplex:	🔿 Full		0) Hal	f				
Apply				ſ		Canc	el		
	ICP20	ON	BO					_	

- Press "Apply". Wait until operation is complete (may take till 1 minute)
- Press "Exit"

2.3 Quick Start Step 3: COM Port Redirection

• Click "COM Port Redirection" button (from the opening screen) and select the discovered programmer on the bottom list

OM Ports	 Show Show Show 	CPR and free ports used CPR ports all ports						
COM Port	Status	Туре	Service 1	Service 2	Service 3	Service 4	Service 5	Service (
42	Free							
46	Free							
47	Free							
48	Free							
49	Free							
50	Free							
51	Free							
52	Free							
•								÷.
vailable Produ	icts		Double click to crea	te COM port for sp	ecific product			
IP Address		MAC Address	Status		Product Name	Serial Number	Friendly	Name
10.0.0.3		00-80-a3-92-05-89	Online		ICP2COMBO	19011412.291	Lantroni	x evaluation
10.0.0.26		00-80-a3-ab-44-93	Online		ICP2COMBO	19010615.105	COMBO	-12 for tester 4
•)
Search Pro	oducts	Add COM	Remove COM	Advanced	Settings		lelp	Exit

• Double-click on selected programmer or click "Add COM" button. The following screen appears:



• Select desired COM port number (for example COM42) and press "Apply". COM Port list on "COM Port" window will refresh automatically → COM42 was successfully created:

COM Ports	 Show Show Show 	CPR and free ports used CPR ports all ports			_			
COM Port	Status	Туре	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6
42	In Use	CPR Port	10.0.0.26:10001					
•			m					۴
Available Produ	ıcts		Double dick to crea	ite COM port for specifi	: product			•
Available Produ IP Address	ıcts	MAC Address	III Double dick to crea Status	ite COM port for specifi	: product oduct Name	Serial Number	Friendly	• Name
 IP Address 10.0.3 10.0.26 	icts	MAC Address 00-80-a3-92-05-85 00-80-a3-ab-44-93	Double click to crea Status 9 Online 3 Online	ite COM port for specifi Pro IC IC	product oduct Name P2COMBO P2COMBO	Serial Number 19011412.291 19010615.105	Friendly Lantron COMBO	Name ix evaluation -12 for tester 4

- Press "Exit"
- Exit ICP LAN Configurator

2.4 Quick Start Step 4: Check Communication with the Programmer

- Run ICP for Windows
- Run Menu \rightarrow Programmer \rightarrow Quick Start Wizard:
 - select ICP2-COMBO or ICP2-ISO/LAN
 - select number of boxes/channels according to connected programmer
 - select COM42 (as in example)
 - press "Connect" \rightarrow connection with the programmer should be established



- press "Cancel" to exit the Wizard
- Exit ICP for Windows

3 Remote Connection

IMPORTANT:

- Remote location: use static IP see LAN configuration in paragraph 2.2
- Remote location:

Option 1: use static Public IP for your router - contact your Internet provider Option 2: use dynamic DNS for your router - see example 5.3



3.1 Step 1 - Remote Location - LAN Configuration

- Connect a programmer to the router
- Execute LAN configuration as described in paragraph 2.2

3.2 Step 2 - Remote Location - Port Forwarding

- Forward ports 10001 (TCP and UDP) and 30718 (TCP and UDP) on your router
- Get static Public IP for the router from your Internet provider or use dynamic DNS. In case of "No-IP" service make additional router configurations as shown in Appendix B (paragraph 5)
- Write down Public IP of the router

3.3 Step 3 – My Location - COM Port Redirection

- Validate that the programmer is powered and connected on the remote location
- Run ICP LAN Configurator
- Press "Create Remote Port"
- Select desired COM number, for example COM100
- Enter Public IP or domain name of the remote router, for example "tnuothanoarslava.ddns.net" or/and its public IP "89.139.93.253"

ICP2-COMBO LAN Cor	figurator : COM Port Advanced Setting	gs	×
Free CPR Ports	СОМ50	•	
Public IP Address	141 . 226 . 218 . 43		
COM Services			
	Host Name or IP Address	TCP Port	Test Status / MAC
Service 1	tnuothanoarslava.ddns.net	10001	
Service 2	89.139.93.253	10001	
Service 3			
Service 4			
Service 5			
Service 6			
Service 7			
Service 8			
	Test COM		
	Apply		Cancel
	CPR COM 50		

- Press "Apply"
- Press "Test COM"

Free CPR Ports	COM50	-	
Public IP Address	141 . 226 . 218 . 43		
COM Services			
	Host Name or IP Address	TCP Port	Test Status / MAC
Service 1	tnuothanoarslava.ddns.net	10001	00-80-A3-92-05-C8
Service 2	89.139.93.253	10001	00-80-A3-92-05-C8
Service 3			
Service 4			
Service 5			
Service 6			
Service 7			
Service 8		1	
	Test COM Serial COM was succ	essfully opene	d and closed
	Apply		Cancel

- Press "Cancel" to close the dialog
- Exit ICP LAN Configurator
- Run ICP for Windows and check connection via COM50 as in example 2.4

4 Appendix A: Firewall

Warning: UDP/TCP ports 30718 and 10001 may need to be added to the firewall's exclusion list. You may experience trouble opening a COM port if those ports are not excluded

5 Appendix B: Router Configuration Example for Remote Connection

The example below shows required steps for port forwarding. Your settings will depend on your particular router

5.1 Enter Settings



5.2 Port Mapping

- Enter NAT and Port Mapping
- Execute forwarding for ports 10001 and 30718:
 - ICP2-COMBO local IP address is 10.100.102.8 in this example
 see result screen below:

Port Mappi	ng									
L,	Se Se	ttings applied successfully								
	Description	Traffic Corning from	External Port		Internal Port	Local Host		Enabled	Status	
	COMBO- port- 10001	Any Host PPP - Ethernet over ATM, 8/48	TCP 10001-10001 UDP 10001-10001	•	Same Port	C9205C8 (10.100.102.8)	×		Enabled	P
	COMBO- port- 20718	Any Host PPP - Ethernet over ATM, 8/48	UDP 30718-30718 TCP 30718-30718	•	Same Port	C9205C8 (10.100.102.8)	٠		Enabled	2

5.3 Optional: Dynamic DNS

You can use a dynamic DNS account instead of a static IP – see example below

@ Home >> Set	rings >> Dynamic DNS >> Modiry	
Dynamic DNS		
	Provider Settings	
	Dynamic DNS Enabled:	● Yes ○ No
	Status:	Up
	Last Error:	None
	Hostname:	tnuothanoarslava.ddns.ne
	Username:	<your username=""></your>
	Password:	•••••• Show password
	Select a Provider:	no-ip.com ▼
	Offline Mode:	O Yes No
	Interface Setting	PPP - Ethernet over ATM, 8/48 (109.186.218.249)
l		

6 Appendix C: Advanced Features

6.1 Selecting Network Adapter

If your programmer is not found or unreachable, perform the following steps:

• If your PC has several network adapters, select the adapter which the programmer is connected to by Tools → Options → Select Network:

	LAN Configurat	ion
	COM Port Redired	ction
	Create Remote	Port
153		

• The following screen appears:

Name	Description	IP Address	
Wireless network interface	Intel(R) Dual Band Wireless-AC 7260	10.0.0.27	
Ethernet network interface	Intel(R) Ethernet Connection I217-LM	10.0.0.15	
•			+

• Select desired network adapter and press Select

6.2 Assigning IP by MAC Address

Click "LAN Configuration" button

IP Address	MAC Address	Status	Product Name	Serial Number	Friendly Name
10.0.0.3	00-80-a3-92-05-89	Online	ICP2COMBO	19011412.291	Evaluation board
10.100.102.10	00-80-a3-ab-44-93	Unreachable			
4					

• Click "Assign IP by MAC" button:



- Validate that MAC address fits the sticker or enter MAC address manually (as printed on the programmer sticker)
- Press "Apply" button. Wait until the procedure is finished (it may take about one minute)
- Once done, "LAN Configuration" window refreshes its list

6.3 Advanced CPR Configuration

There is a possibility to apply additional services to the created CPR port or to change parameters of the existing service. For example, you can add service with host address equal to public (external) IP address of your Ethernet network to access the programmer remotely. Up to 8 services can be applied to a CPR port.

• Select (highlight) the COM on the upper list

	 Show Show Show 	CPR and free ports used CPR ports all ports						
COM Port	Status	Туре	Service 1	Service 2	Service 3	Service 4	Service 5	5 Service 6
42	In Use	CPR Port	10.0.0.26:10001					
•			III					
•			m					
<	ıcts		TT Double click to creat	e COM port for specific j	product			
 vailable Produ IP Address 	icts	MAC Address	III Double click to creat Status	e COM port for specific p	product	Serial Number		Friendly Name
 vailable Produ IP Address 10.0.0.26 	ıcts	MAC Address 00-80-a3-ab-44-9	Double click to creat Status 3 Online	e COM port for specific p Proc LCP:	product luct Name 2COMBO	Serial Number 19010615.105	F (Friendly Name COMBO-12 for tester 4
 vailable Produ IP Address 10.0.0.26 10.0.0.3 	ıcts	MAC Address 00-80-a3-ab-44-9 00-80-a3-92-05-8	Double click to creat Status 3 Online 9 Online	te COM port for specific j Proc ICP; ICP;	oroduct luct Name 2COMBO 2COMBO	Serial Number 19010615.105 19011412.291	((Friendly Name COMBO-12 for tester 4 Evaluation board
vailable Produ IP Address 10.0.0.26 10.0.0.3	ıcts	MAC Address 00-80-a3-ab-44-9 00-80-a3-92-05-8	Double click to creat Status 3 Online 9 Online	te COM port for specific (Proc ICP) ICP	aroduct luct Name 2COMBO 2COMBO	Serial Number 19010615.105 19011412.291	1	Friendly Name COMBO-12 for tester 4 Evaluation board
 Vailable Produ IP Address 10.0.0.26 10.0.0.3 	icts	MAC Address 00-80-a3-ab-44-9 00-80-a3-92-05-8	Double click to creat Status 3 Online 9 Online	te COM port for specific Proc ICP; ICP:	oroduct luct Name 2COMBO 2COMBO	Serial Number 19010615.105 19011412.291	1	Friendly Name COMBO-12 for teste Evaluation board

• Double-click on selected COM or click "Advanced Settings". The following screen appears:

ICP2-COMBO LAN Co	nfigurator : COM Port Advanced Settings	×
Public IP Address	141 . 226 . 218 . 43	
COM Services	Host Name or IP Address TCP Port Test Status / MAC	
Service 1	10.0.0.26	
Service 2	♥	
Service 3		
Service 4		
Service 5		
Service 6		
Service 7		
Service 8		
	Test COM	
	Apply Cancel	
	CPR COM 42	

Copy public IP address

Public IP Address	141 . 226 . 218 .	43	
COM Services			
	Host Name or IP Address	TCP Port	Test Status / MAC
Service 1	10.0.0.26	10001	
Service 2	141.226.218.43	10001	
Service 3			
Service 4			
Service 5			
Service 6			
Service 7		ĺ	
Service 8			
	Test COM		

• Press "Apply"

Press "Test COM"

Public IP Address	141 . 226 . 218 . 43		
COM Services			
	Host Name or IP Address	TCP Port	Test Status / MAC
Service 1	10.0.26	10001	00-80-A3-AB-44-93
Service 2	141.226.218.43	10001	Device is not reachable
Service 3			
Service 4			
Service 5			
Service 6			
Service 7			
Service 8			
	Test COM Serial COM was succe	ssfully opene	d and closed
	Apply		Cancel

• Press "Exit"

7 Revision History

- Revision 1.1.2 (Mar-2024): added support for ICP2-LAN(G3) programmer
- Revision 1.0.7 (Jan-2019): initial version of this document

8 Warranty

Softlog Systems (2006) Ltd. warrants this product against defects in materials and workmanship for a period of 1 (one) year. This warranty will not cover programmers that, in the opinion of Softlog Systems, have been damaged due to abuse, improper use, disassembly, replacement of parts or attempted repair by anyone other than an authorized Softlog Systems service technician.

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