

# xLogic & x-Messenger

## xLogicApp

Ver.1.0.0

## wireless monitoring & control!



## xLogic App from Easy Electronic-Overview

The free of charge xLogic App enables you to monitor actual process values of your xLogic & x-Messenger application with a Android smart phone via WLAN or Internet. It allows to switch digital signal(digital flag, outputs) and adjust analogue values (analog outputs, analog flags, REGs). Supported will be the WLAN connection to a Ethernet module via IP address typically or Dyn DNS-names which are used in the Internet.



xLogic App in android smart phone:

### With your xLogic App you can ...

... define customized names.

For fixed connections and pre-configured values you can define customized names. This helps if you want to connect to several xLogic/x-Messenger devices and monitor different values.



Device list with names

### ... read and change date and time settings.

Furthermore you can read, manually change or synchronous date and time settings with the actual date/time of your mobile device.



Date and time settings

## ... Monitoring IO status and kinds of register's value

IP 192.168.1.179:5001 xLogic App					
- IO Status Monitor					
Time/Tag	F1	F2	F3	F4	
22:31:12	1	0	0	0	
22:31:10	1	0	0	0	
22:31:08	1	0	0	0	
22:31:06	1	0	0	0	
22:31:04	1	0	0	0	
22:31:02	1	0	0	0	
22:31:00	1	0	0	0	
22:30:58	1	0	0	0	

The status of IOs, kinds of registers such as digital flag, analog flag, REGs are

## ... Switch ON/OFF the Bit type status, and change the

## WORD type register values.

Digital output, digital flag status can be switched ON/OFF by button, and some registers value also can be changed via smart phone.



IP 192.168.1.179:5001 xLogic App xLogic Control							App	
	AF2 💌  1234				1			
Current Value:0								
Set Read						d		
AC	2	Ţ	Ŷ	Ţ	Ŷ	Ţ	Ţ (	
1	2	3	4	5 6	5 7	7 8	3 9	0
!	@	#	\$	%	&	*	?	/
_	"	'	(	)	-	+	;	+
ę	1/2	÷	,	_	_	•	ABC	+

## xLogic App from Easy Electronic-Description

#### Features

■ Connection via IP-Address and DynDNS-name Supports connection via Internet without fixed IP-Address

■ User specific names for devices

■ Read and set date and time in xLogic/x-Messenger and synchronization with date and time of the mobile device

- Get firmware version of xLogic/x-Messenger
- Monitoring IO status, counter and analog values.

■ Control the Bit status in program, and change the values of registers in program.

### Step by step to success

#### 1 Download of the EASY xLogic App

for Android operating system now

# 2 select the CPU model and configure the registers for monitoring and controlling

1.Select "Model selection" menu



2. There are for series CPU are available, because they are all having the Ethernet function. In fact the Ethernet CPU or (Ethernet expansion module) need work in the server mode, because the xLogicApp only can work under client mode.



3.Input the PLC address, the default is 1, and then click the "Set.." button to select the registers.

xLogic Setting				
Outputs	$\sim$			
Selection D	etail Setting			
AF1-AF8				
AF9-AF16				
AF17-AF24				
AF25-AF32				
AF33-AF40				
Cancel	ОК			
REG				

#### **3 Device configuration**

■ The xLogic App supports connection via IP-Address and via DynDNS-name. If you want to use Internet then you have to enable Port forwarding as the same as the one set in the xLogic App.

■ In addition to the physical address you can give a user specific name for the target device for simple recognition.

■ A special configuration in the xLogic/x-Messenger program is not necessary.

#### Select kind of used connection

- 1. Select kind of used connection IP-Address or DynDNS-name.
- 2. Open the "Device IP List".



3. Press button "ADD" to add a new 2 device.



4. Configure user specific name and address of the device.



5. Listed devices in the "Device IP List".

#### Select a Target device

1. Open the sub menu by a long click on the device in the "Device IP List".



2. Select "Select as Target" in the sub menu.



- 3. Save button to save the changes.
- 4. Back to former menu.

IP 192.168.1.179:5001	xLogic App
← Interface Configure	
By IP Address	
By DYN DNS	
192.168.1.179	Set
Address Port: 5001	

Note: xLogic App is work as client, so the Ethernet CPU or Ethernet expansion module must work as server.

Ethernet CPU configuration software print screen as below:

Config		×
Basic Setting		
Network	IPConfiguration	
Server	User Config	
H Channels		
Apply Setting	BOOTP Enable IP Address	192. 168. 0. 179
Log Out	DHCP Enable	
	Subnet	255.259.255.0
	Auto Ir Enable Gateway	192.168.0.1
	DHCP Host Name	
	Preferred DNS	Server
	Eac Address	192.168.0.1
	00. f0. 0a. 05. 65. 44	e
	Auto Negotiate	Server
		192. 168. 0. 1
	Speed 100Mbps	
	Duplex Full 🗸	PPP
	PPPoE	GPRS
	Refresh Make Exportable OK	
Config		
Config		
Config Basic Setting	Het Prot	ocol TCP 🗸
Config Basic Setting Network	Het Prot	ocol TCP 💌
Config Basic Setting Network Server Channels	HetProt	ocol TCP 💌
Config Basic Setting Network Server Channels Basic Setting	Worked As Server Active Connect	ocol TCP 💙
Config Basic Setting Network Server Channels Channel1 Hostlist1	HetProt Worked As Server Active Connect N Remote Host 0.0.0.0 Start Character 02	ocol TCP 💙
Config Basic Setting Network Server Channels Channels Hostlist1 Serial Sett	HetProt Worked As Server Active Connect N Remote Host 0.0.0.0 Start Character 02 Remote Port 0 M DNS Query Period 14	ocol TCP V
Config Basic Setting Network Server Channels Channels Channel1 Mostlist1 Serial Sett Connection1	HetProt Worked As Server Active Connect N Remote Host 0.0.0.0 Start Character 02 Remote Port 0 2 DNS Query Period 14	ocol TCP V Ione V ( 0 800 V
Config Basic Setting Network Server Channels Channels Hostlistl Serial Sett Connectionl Password Setting	Morked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       0x         Remote Port       0       DNS Query Period       14         Local Port       5001       Flush Input Buffer	ocol TCP v ione v ; 0 300 \$
Config Basic Setting Metwork Server Channels Channels Channel1 Mostlist1 Serial Setting ConnectionL Password Setting Apply Settings/Res Luc Occ	Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       0s         Remote Port       0       DNS Query Period       11         Local Port       5001       Flush Input Buffer         With Active Connect       With Active Connect	ocol TCP V fone V c 0 800 V Yes
Config Basic Setting Metwork Server Channels Channels Channel1 Apply Settings/Res Log Out	HetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       0x         Remote Fort       0       0       DNS Query Period       14         Local Fort       5001       Flush Input Buffer       With Active Connect         Worked Response       With Passive Connect       14	ocol TCP v fone v c 0 800 ¢ Yes t Yes
Config Basic Setting Network Server Channels Channels Channel1 Nostlist1 Serial Sett Connection1 Password Setting Apply Settings/Res Log Out	MetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       D         Remote Fort       D       DNS Query Period       14         Local Fort       5001       Flush Input Buffer         With Active Connect       With Passive Connect         UseHostlist       Yes       4t Timeef Disconnect	ocol TCP v Ione v c 0 800 ¢ t Yes t Yes
Config Basic Setting Network Server Channels Channels Channel1 Hostlist1 Serial Sett Connection1 Password Setting Apply Settings/Res Log Out	Met Prot         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       D         Remote Fort       0       DNS Query Period       14         Local Fort       5001       Flush Input Buffer         With Active Connect       With Passive Connect         UseHostlist       Yes         Value       Yes	ocol TCP V fone V c O 800 C t Yes t Yes
Config Basic Setting Network Server Channels Hostlistl Serial Sett Connection Password Setting Apply Settings/Res Log Out	MetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       Dx         Remote Port       0       DNS Query Period       II         Local Fort       5001       Flush Input Buffer       With Active Connect         Connect Response       With Passive Connect       With Passive Connect         UseHostlist       Yes       At Timeof Disconnect         On DSR Drop       Yes       Flush Output Buffer	ocol TCP V fone V c O BOO C t Yes t Yes t Yes
Config Basic Setting Metwork Server Channels Channels Mostlistl Serial Setti Connectionl Password Setting Apply Settings/Res Log Out	MetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       D         Remote Port       0       DNS Query Period       II         Local Port       5001       Flush Input Buffer         With Active Connect       With Active Connect         UseHostlist       Yes       At Timeof Disconnect         On DSR Drop       Yes       Flush Output Buffer         Check EOT       Yes       With Active Connect	ocol TCP V fone V c 0 300 V t Yes t Yes t Yes
Config Basic Setting Network Channels Channels Channels Channels Channels Channels Serial Sett Connection Password Setting Apply Settings/Res Log Out	HetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       O         Remote Fort       0       Image: Connect Server       NS Query Period       Image: Connect Server         Remote Fort       0       Image: Connect Server       Flush Input Buffer         Worked As       Yes       At Timeof Disconnect         UseHostlist       Yes       Flush Output Buffer         On DSR Drop       Yes       Flush Output Buffer         Check EOT       Yes       Flush Output Buffer         With Active Connect       Yes       With Active Connect	ocol TCP V fone V t 0 800 V t Yes t Yes t Yes t Yes
Config Basic Setting Network Channels Channels Channels Channels Channel Apply Settings/Res Log Out	HetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       Dx         Remote Fort       0       Image: Connect Server       DxS Query Period       Image: Connect Server         Remote Fort       0       Image: Connect Server       Flush Input Buffer         Worked As       Server       With Active Connect         Worked As       Yes       Flush Output Buffer         With Passive Connect       Yes       Flush Output Buffer         With Active Connect       Yes       With Active Connect         Hard Disconnect       Yes       With Passive Connect         Inactivity Timeout       15       At Timeof Disconnect	ocol TCP v ione v c 0 BOO v t Yes t Yes t Yes t Yes
Config Basic Setting Network Server Channels Channels Channels Channels Channels ConnectionL Password Setting Apply Settings/Res Log Out	HetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       Dx         Remote Fort       O       DNS Query Period       14         tocal Fort       5001       Flush Input Buffer       With Active Connect         VseHostlist       Yes       Flush Output Buffer         Check EOT       Yes       Flush Output Buffer         With Passive Connect       Yes       With Active Connect         Hard Disconnect       Yes       With Passive Connect         Inactivity Timeout4       15       At Timeof Disconnect	ocol TCP v Ione v c 0 800 ¢ t Yes t Yes t Yes t Yes t Yes t Yes
Config Basic Setting Hetwork Server Channels Hostlistl Serial Sett Connection Password Setting Apply Settings/Re: Log Out	Het Prot         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       D         Remote Port       O       O       Start Character       D         Remote Port       O       Image: Connect Connect Connect Connect Connect Connect Connect Connect With Passive Connect With Passive Connect On DSR Drop       Yes       Flush Output Buffer         Check EOT       Yes       Flush Output Buffer       With Active Connect With Passive Connect With Passive Connect Inactivity Timeout 15 At Timeof Disconnect	ocol TCP v Ione v c O 800 ¢ t Yes t Yes t Yes t Yes t Yes t Yes
Config Basic Setting Network Server Channels Channels Hostlistl Serial Sett Connectionl Password Setting Apply Settings/Res Log Out	MetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       D         Remote Fort       0       DNS Query Period       I         Local Port       5001       Flush Input Buffer         With Active Connect       With Passive Connect         UseHostlist       Yes       At Timeof Disconnect         Check EOT       Yes       Flush Output Buffer         With Active Connect       Yes       Flush Output Buffer         With Active Connect       Yes       Flush Output Buffer         Check EOT       Yes       Flush Output Buffer         With Active Connect       Yes       With Active Connect         Hard Disconnect       Yes       With Passive Connect         Inactivity Timeout       15 \$ At Timeof Disconnect       At Timeof Disconnect	ocol TCP V fone V c O 800 C t Yes t Yes t Yes t Yes t Yes t Yes
Config Basic Setting Hetwork Server Channels Channels Hostlistl Serial Setti Connectionl Password Setting Apply Settings/Res Log Out	MetProt         Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       O         Remote Port       O       DNS Query Period       II         Local Port       5001       Flush Input Buffer         With Active Connect       With Passive Connect         UseHostlist       Yes       At Timeof Disconnect         On DSR Drop       Yes       Flush Output Buffer         With Active Connect       Yes         Hard Disconnect       Yes         Inactivity Timeout4       15         At Timeof Disconnect	ocol TCP V fone V c 0 300 V t Yes t Yes t Yes t Yes t Yes
Config Basic Setting Hetwork Server Channels Channels Hostlistl Serial Sett Connectionl Password Setting Apply Settings/Res Log Out	Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       Os         Remote Port       O       DNS Query Period       II         Local Fort       5001       Flush Input Buffer         With Active Connect       With Active Connect         UseHostlist       Yes       At Timeof Disconnect         On DSR Drop       Yes       Flush Output Buffer         With Active Connect       Yes         Hard Disconnect       Yes         Inactivity Timeout4       15         At Timeof Disconnect	ocol TCP V Ione V t 0 800 V t Yes t Yes t Yes t Yes t Yes
Config Basic Setting Metwork Server Channels Channels Channels Mostlistl Serial Setting Apply Settings/Res Log Out	Worked As       Server       Active Connect       N         Remote Host       0.0.0.0       Start Character       Dx         Remote Fort       O       DxS Query Period       II         Local Fort       5001       Flush Input Buffer         With Passive Connect       With Passive Connect         UseHostlist       Yes       Flush Output Buffer         On DSR Drop       Yes       Flush Output Buffer         With Active Connect       Yes       With Active Connect         Hard Disconnect       Yes       With Passive Connect         Inactivity Timeout4       15       At Timeof Disconnect         Refresh       Make Exportable       OK	ocol TCP v one v c 0 BOO c t Yes t Yes t Yes t Yes t Yes

Ethernet expansion module configuration software print screen as below:

	Firmware Version	V1.U6	^
	Name	ELC-Ethernet	
Ξ	Password Operation		
	Password		
	Modify Password	No	
	New Password		
	Confirm New Password		
Ξ	IP Information		
	IP	192.168.0.179	
	Mask	255. 255. 255. 0	
	Gateway	192.168.0.1	
	MAC	00:1E:32:04:66:DC	
	ІР Туре	Static	
Ξ	Network Settings		
	DNS Server	192. 168. 0. 1	
	Web Port	80	
	Command Port	3003	
	IP Filter 1		
	IP Filter 2		
	IP Filter 3		
	IP Filter 4		
	IP Filter 5		
	IP Filter 6		
	IP Filter 7		
	IP Filter 8		
Ξ	PPPOE		
	PPPOE	disable	
	Username		-
	Password		
	PPPOE IP	0.0.0.0	
Ξ	COM1 Settings		
	Set the other COM	vis same with this.	
	Work Type 🤇	TCP Server	
	Work Port	5001	
	Timeout to Disconnect	8	
	TCP Alive Check Time(s)	1	
	The First Byte of a Frame(HEX)		
	The Last Byte of a Frame(HEX)		
	Baudrate	9600	
	Data Bits	8	¥
-		4	_
I	r		

WIFI CPU configuration

Mode	Server 🗸
Protocol	
Port	5001
Server Address	192. 168. 0. 132
MAX TCP Num. (1~32)	32
TCP Time out (MAX 600 s)	0

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WAN Connection Type	STATIC(fixed IP) 🗸		
Static Mode			
IP Address	192. 168. 0. 179		
Subnet Mask	255. 255. 255. 0		
Default Gateway	192. 168. 0. 1		
App	Cancel		

5. Indicator of the selected target device.



#### **3** Check the connection

■ The simplest way to check the connection is to read the firmware version of the connected xLogic/x-Messenger.

■ A special configuration in the xLogic/x-Messenger program is not necessary.

#### Firmware version

1. Select Menu "Show FW Version".

IP 192.168.1.179:5001	xLogic App
xLogic Setting	
Model selection	$\odot$
Interface Configure	
Set Clock	$\odot$
Show FW Version	$\odot$
Device Run Status Operate	$\odot$
Y	0

2. Firmware version of the connected xLogic/x-Messenger

IP 192.168.1.17	79:5001	xLogic App		
Model selection				
Interface (	Interface Configure			
Co	nnected FW Ve	rsion		
	Firmware V43 Hardware V10	02		
	ОК			
Y		0		

### 4 Read and Set date and time

■ A special configuration in the xLogicApp program is not necessary.

#### Read and Set date and time

1. Select the menu "Set Clock" in the main menu.



2. Select date or time for manual changes.

3. Button Read to read and show the actual date and time of the connected xLogic/x-M essenger.

4. Button "Current" to get the actual date and time information of your mobile device.

5. Depending on the selection the date or time information is shown and with the buttons " + " and "- " you can change date or time manually.

6. Button "Save" to set date and time in xLogic/x-Messenger to the selected values.

IP	192.168.1.179:5	001	xLogic App		
÷		Set Clock			
Wednesday, August 21, 2013					
10 : 25 pm					
Read					
	-				
		_	_	1	
	+	+	+	I	
	+ Aug	+ 21	+ 2013		
	+ Aug -	+ 21 -	+ 2013 -		
	+ Aug -	+ 21 -	+ 2013 -		

7. Note: Change RUN/STOP mode in xLogic /x-Messenger (xLogic/x-Messenger must be in STOP mode).

IP 192.168.1.179:5	IP 192.168.1.179:5001 xLogic App				
<del>&lt;</del>	Set Cloc	k	Ë		
Wednes	Wednesday, August 21, 2013				
	10 : 26 pm				
_		_	٩,		
The device is	The device is in RUN mode.Change to STOP?				
Cance		ОК			
Aug	21	2013			
-	-	_			

8. Note: Result of the transfer. And click OK to RUN the CPU.

IP 192.168.1.179:5	001	xLogic App		
<del>(</del>				
Wednesday, August 21, 2013				
	10 : 26 pm			
The device is in STOP mode.Change to RUN?				
ОК				
Aug	21	2013		
-		-		

#### 5 Set CPU RUN/STOP

1. Select the menu "Device Run Status Operate" in the main menu.



2.Device status: it is the current status of the connected xLogic/x-Messenger.



3. Click "Stop" and "Run" button to operate the CPU status.

#### 6 Show status information of the connected xLogic

- A special configuration in the xLogic/x-Messenger program is not necessary.
- 1. In the main menu select "Set Monitor Option "...



2. Select which type register to monitor.



3. Click enter to show status information and the update time

IP 192.168.1.179:5001			xLo	gic App	
←	IO Status Monitor				
Time/Tag	F1	F2	F3	F4	
22:31:12	1	0	0	0	٨
22:31:10	1	0	0	0	Ĺ
22:31:08	1	0	0	0	
22:31:06	1	0	0	0	
22:31:04	1	0	0	0	
22:31:02	1	0	0	0	
22:31:00	1	0	0	0	
22:30:58	1	0	0	0	V
<	[		^	>	

- 4. Scroll to see information outside of the screen.
- 5. Selection of the update time.

- 6. Selection of the status information shown in the status table.
- 7. Button "Save" to confirm the modifications and show the status table.



#### There are following items can be monitored

Items	Symbol in program
Inputs	I
Outputs	1 - <mark>Q</mark> - Q
Digital Flags	F1
Cursor Keys	С
M	M coil can show function block status B001[M1] B002[M2] B001[M1] B002[M2] Rem=off Rem=off

AM	AM shows the current value of the function block B005 [AM5] A B006 [AM6] += A A
Analog Inputs	
Analog Outputs	AQ001
Analog Flags	AF1
REG	$\begin{array}{c} \text{register} \\ \text{Ne.} \\ \text{Ne.} \\ \text{Boods} [M3] \\ \text{Rem} = 0 \text{ff} \\ 00:00 \text{s}^+ \\ 01 \text{f}^-0 \\ 0 \\ 0 \text{f}^-0 \\ 0 \text{f}^-0 \\ 0 \\ 0 \text{f}^-0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$
Sms message input	MsgI01 M.I -
Sms message output	- <mark>M.Q</mark> -

## 7 Control register

There are five kinds of registers can be controlled.

IP 192.168	.1.179:5001		xLogic App
	xLogic	Control	
Output	s		$\odot$
Digital	Flags		O
AF			
AQ			
REG			
<b>Y</b> Setting		Control	i About us

Bit type "Output", "Digital Flag" can be switched ON/OFF

	xLogic App	
	Control	
Outputs	$\odot$	
xLogic Control		
Q1 💌		
Set	Read	





Note:

1. Only one item can be switched ON or OFF, you can select via clicking

-

2. The input pin of output and the flag must be keep no connection in the program, otherwise it cannot be switched on/off via clicking the switch. For example, at below program, the F1,Q1,Q2 can be controlled, but the Q12 and the F2 cannot be switched ON/OFF directly in the xLogic App anymore, because they are separately controlled by the Q1, and B013 in the program.



Word type registers value can be changed by xLogic App.

IP 192.168.1.179:5001 xLogic App	
xLogic Control	AF1 🥥
Current Value:0	AF2
Set Read	AF3
AQ 1 2 3 4 5 6 7 8 9 0	AF4
! @ # \$ % & * ? / _ " ' ( ) - + ; ←	AF5
■ 1/2 : , ABC ←	AF6

They are AF, AQ, REG

You can select one AF from the table, and click "Set" button, after set successfully, xLogic App will read the value and display on the "Current value"

Set AQ value

c App			
9			
xLogic Control			
23			
D			

You can select one AQ from the table, and click "Set" button, after set successfully, xLogic App will read the value and display on the "Current value"

#### xLogic Control REG1 -500 Current Value:500 3 4 5 6 8 9 1 2 7 0 @ # % & \* ? \$ ! 1 п ı ( ) + ; - 1/2 : ABC C.



#### Set REG value

You can select one REG from the table, and click "Set" button, after set successfully, xLogic App will read the value and display on the "Current value"

#### Note:

1. Only one register value can be changed you can select via clicking



3. The input pin of AQ and the AF must be keep no connection in the program, otherwise its value cannot be changed. For example, at below program, the AF1,AQ12,AQ1,AQ2 can be controlled, but the AF3,AF4,AQ11 and AF2 cannot be changed directly in the xLogic App anymore, because they are separately controlled by the AF1, AQ12,B014 and B015 in the program.



4. The REG value is the current value of blocks, for example



If you change the REG0 value, the ON/OFF threshold of B001 cannot be changed; if you change the REG1 value, the ON/OFF threshold of B002 also cannot be

changed; But, because we have used the reference function for B003, The ON threshold is equal to B001 current value, and the OFF threshold is equal to B002 current value, so when you changed the REG0 and REG1 value, the ON and OFF threshold of B003 can be changed indirectly.

So if you want to change the set point value of some blocks, you can try to reference the "Up/Down counters" in the dialog box of the relative function blocks.