

RS232 to WiFi CONVERTER

Model : RSW-923



Your purchase of this RS232 to WiFi CONVERTER marks a step forward for you into the field of precision measurement. Although this Meter is a complex and delicate instrument, its durable structure will allow many years of use if proper operating techniques are developed. Please read the following instructions carefully and always keep this manual within easy reach.

OPERATION MANUAL

2. SPECIFICATIONS.....	2
3. FRONT PANEL DESCRIPTION.....	3
3-1 DC 9V Power adapter input socket.....	3
3-2 DC 9V output socket.....	3
3-3 Isolate input socket.....	3
3-4 Antenna and antenna socket.....	3
3-5 Display.....	3
3-6 SETUP/ENTER KEY.....	3
3-7 EXIT(✱) key button.....	3
3-8 ▲ key button.....	3
3-9 ▼ key button.....	3
3-10 ◀ key button.....	3
3-11 ▶ key button.....	3
3-12 System reset button.....	3
3-13 Stand.....	3
3-14 Hanging holes.....	3
3-15 Hanging unit (with sticker).....	3
3-16 Power interface cable/plugs.....	3
4. MEASURING PROCEDURE.....	4
4-1.The initial startup screen.....	4
4-2.Measuring and setting screens.....	4
4-3.The summary description of keyboard.....	5
4-4.Setting Description.....	5
4-5.Set value storage.....	7
4-6.WiFi connection.....	7
4-7.Reply factory setting.....	7
4-8.AP Mode.....	8
4-9.Client Mode (internal network)	10
4-10.Client Mode(External network fixed IP).....	10
4-11.Client Mode(External network floating IP).....	12

1. FEATURES

- * You can Lutron meter with RS232 output interface connected to the RSW-923, to transfer data via WiFi to the desired device. However, the use of smart phones or tablet computers developed by the company's free software to do data collection record APP.
- * WiFi work mode: Access Point(AP) or Client mode
- * I/O terminal:
 - 1.DC 9V power input
 - 2.DC 9V power output(power supply for the connecting RS232 meter)
 - 3.Three RS232 input(photo isolate RS232 type)
- * Basic setting:
 - 1.NetMode, 2.SSID, 3.Password, 4.IP address, 5.Port,
 - 6.Gateway address,7.Meter CH. Setting
- * Maximum TCP connections to 20
- * Without going through the computer settings, can be used directly after the machine settings

2. SPECIFICATIONS

Circuit	Custom single-chip microprocessor LSI circuit
Display	LCD Size: 3.2 X 2.4" (60 X 44.4 mm) Dot Matrix backlit LCD (128 X 64 pixels)
Wireless	<ul style="list-style-type: none"> * Support IEEE 802.11b / g / n wireless standards * Support the range of frequency : 2.412 to 2.484 GHz. * Support two types of wireless networks: Access Point(AP) and Client * Support multiple security authentication mechanisms : 64/128/152 bit WEP encryption, WPA-PSK/ WPA2-PSK 、 、 WPA/WPA2 security mechanism.
Input signal	Three isolated RS232 signal input
Wireless mode setting	<ul style="list-style-type: none"> * Access Point (AP) Mode * Client Mode
Operating temperature	0 to 50°C (32 to 122°F).
Operating humidity	Less than 80% R.H..
Power supply	AC to DC adapter 9V.
Power consumption	DC 200 mA approximately.
Weight	204 g/0.45 LB.
Dimension	134 X 80 X 32 (5.3 X 3.1 X 1.3 inch). * Dimension is for the meter without antenna only.
Accessories included	<ul style="list-style-type: none"> * Instruction manual..... 1PCS * Data interface cable, UPCB-03..... 1PCS * Power interface cable, PWCB-06..... 1PCS * Hanging unit (with sticker)..... 1PCS * AC to DC 9V power adapter..... 1PCS
Optional Accessories	* Full line LUTRON RS232 meters.

3. FRONT PANEL DESCRIPTION

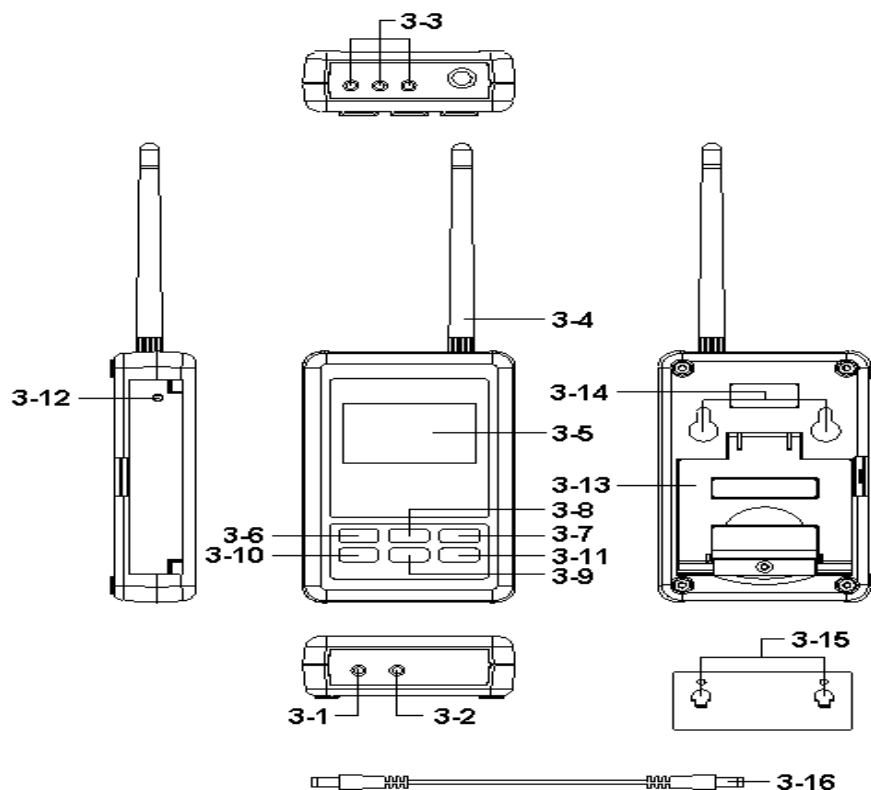


Fig. 1

3-1 DC 9V Power adapter input socket

3-2 DC 9V output socket

3-3 Isolate input socket

3-4 Antenna and antenna socket

3-5 Display

3-6 SETUP/ENTER KEY

3-7 EXIT(*) key button

3-8 ▲ key button

3-9 ▼ key button

3-10 ◀ key button

3-11 ▶ key button

3-12 System reset button

3-13 Stand

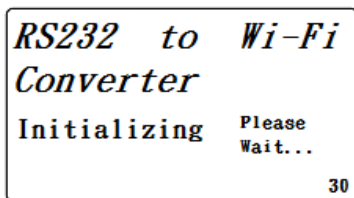
3-14 Hanging holes

3-15 Hanging unit (with sticker)

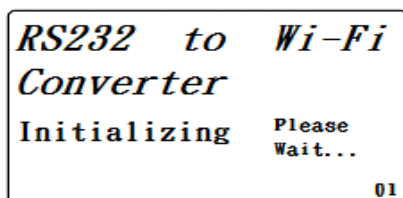
3-16 Power interface cable/plugs

4. MEASURING PROCEDURE

4-1.The initial startup screen



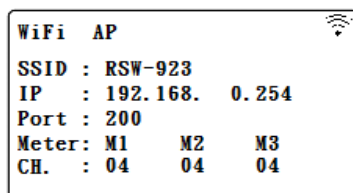
SCREEN4-1-1



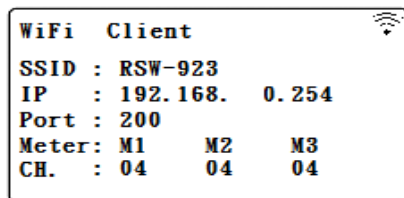
SCREEN4-1-2

4-2.Measuring and setting screens:

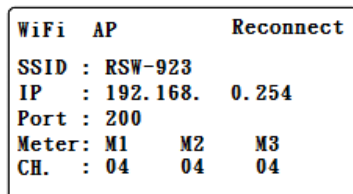
1.Measurement screen:



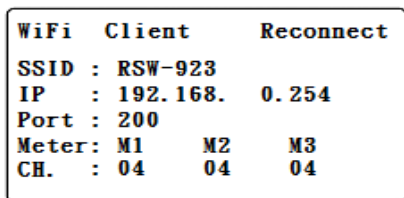
SCREEN4-2-1



SCREEN4-2-2

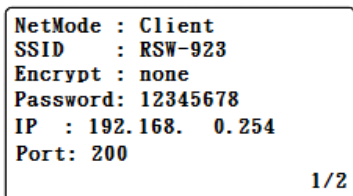


SCREEN4-2-3

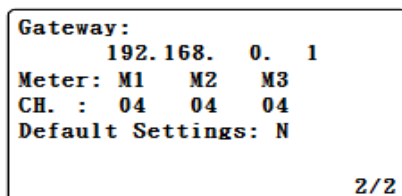


SCREEN4-2-4

2.Setting screen:



SCREEN4-2-5



SCREEN4-2-6

4-3.The summary description of keyboard:

- 1.SETUP(Enter) KEY: Setting screen into the select key
- 2.In the setting mode:
 - 2-1.Press ▲ or ▼ to select the field in the upper and lower beating
 - 2-2.▲ or ▼ > 2 SEC.: The selected field will rapidly beating
 - 2-3.▲ + ▼ > 2 SEC.: Then the entire column cleanup
 - 2-4.Press ▲ KEY hold short press ▼ KEY and the right of the text will be cleared
 - 2-5.◀、▶KEY: Left and right keys
 - 2-6.EXIT/SHIFT(※) KEY: Press key text input type selection or setting screen left
- 3.In the measurement mode:
 - 3-1.In Easy mode, press ▲ + ▼ > 2 SEC. Then turned into full mode
 - 3-2.In full mode, press ▲ + ▼ > 2 SEC. Then becomes easy mode
 - 3-3.EXIT/SHIFT(※) KEY: Backlight control key

4-4.Setting Description:

- 1.When the POWER ON, then enter the startup screen countdown 30 SEC. (SCREEN4-1-1 & SCREEN4-1-2) to 0 SEC. Then enter the measurement screen (SCREEN4-2-1 or SCREEN4-2-2).
- 2.Press SETUP KEY once you enter the setup screen as SCREEN4-2-5 or SCREEN4-2-6
- 3.In the function directory option Press ▲ or ▼ KEY, functional directory option will flash.
- 4.Press ◀ or ▶ KEY into the content selection function directory option (in this case will flash), After selecting the complete press SETUP KEY Then back to the function directory option to determine the setting options
- 5.Function directory:
 - 5-1.NetMode: Select AP or Client, the factory setting is Client.
 - 5-1-1.Enter this option, then press ◀ or ▶ KEY contents into the option, then press ▲ or ▼ KEY to select AP or Client, After determining Press SETUP KEY do confirm the contents, then will return to NetMode directory
 - 5-1-2.Press ▼ KEY into the SSID option from NetMode

5-2.SSID: The default setting is RSW-923

5-2-1.Enter up to 21 characters

5-2-2.Press ◀ or ▶ KEY then enter the option contents, then press ▲ or ▼ KEY to select the input text, press EXIT / SHIFT KEY select words in English case or numbers. Determined by SETUP KEY do confirm the contents, then will return to the SSID directory.

5-2-3.Press ▼ KEY into the Encrypt option from SSID

5-3.Encrypt: The default setting is none

5-3-1.none/wep_open/wep/wpa_tkip/wpa_aes/wpa2_tkip/wpa2_aes/wpa2_aes/wpa2_aes total of nine

5-3-2.After pressing ▲ or ▼ KEY select the option by the need, press SETUP KEY to confirm, then will return to Encrypt directory

5-3-3.Press ▼ KEY into the Password option from Encrypt

5-4.Password: The default setting is 12345678

5-4-1.Press ◀ or ▶ KEY then enter the option contents, then press ▲ or ▼ KEY to select the input text, press EXIT / SHIFT KEY select English words large, lowercase and numbers Press SETUP KEY do confirm the contents, then will return to Password directory

5-4-2.Press ▼ KEY into the IP option from Password

5-5.IP: The default setting is 192.168.0.254

5-5-1.Press ▶ or ◀ KEY then enter the option contents, then press ▲ or ▼ KEY to select the number, press the SETUP KEY The contents do confirm, then will return to the IP directory

5-5-2.Press ▼ KEY into the Port option from IP

5-6.Port: The default setting is 200

5-6-1.Input Range:1-65535

5-6-2.Press ▶ or ◀ KEY then enter the option contents, then press ▲ or ▼ KEY to select the number, press the SETUP KEY The contents do confirm, then will return to the Port directory

5-6-3.Press ▼ KEY into the Gateway option from Port

5-8.Gateway: The default setting is 192.168.0.1

5-8-1.Press ▶ or ◀ KEY then enter the option contents, then press ▲ or ▼ KEY to select the number, press the SETUP KEY The contents do confirm, then will return to the Gateway directory

5-8-2.Press ▼ KEY into the Meter CH.option from Gateway

5-9.Meter CH.: The default setting is M1=04 、 M2=04 、 M3=04

5-9-1.Press ► KEY once, then select METER1 the open when the CH. Choice. At this point CH. Flashes when you press ▲ KEY will In polling mode to select 1,2,4,8,12 of CH. Number, press SETUP KEY value determined after storage and M1 Flashes. Press ► KEY once you enter METER2 (Press ▲ KEY to select CH. & Press SETUP KEY value Storage), press ► KEY once you enter METER3 (Press ▲ KEY to select CH. & Press SETUP KEY values Storage) Press the fourth time when the back METER CH. directory option

5-9-2.Press▼ KEY into the Default Settings option from Meter CH.

5-10.Default Settings: Reply factory setting (refer NO.4-7)

4-5.Set value storage:

Press EXIT / SHIFT KEY save settings, and return to the measurement screen, such as SCREEN4-2-3 or SCREEN4-2-4. This time to reconnect after about 25 SEC WiFi is doing set after, then back SCREEN4 -2-1 or SCREEN4-2-2 screen.

4-6. WiFi connection:

In SCREEN4-2-1 or SCREEN4-2-2 screen, symbol flashes when the upper right corner, said the WiFi connection has been properly

4-7.Reply factory setting

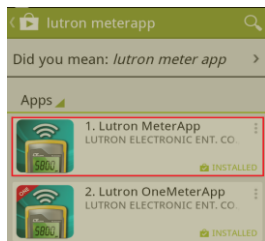
- 1.Press SETUP KEY once you enter the setup screen as SCREEN4-2-5 & SCREEN4-2-6
- 2.Press ▲ 、 ▼ KEY select the option to Default Settings item, press ► KEY once you enter N option, press ▲ or ▼ KEY select Y press Enter KEY ,will return to directory option then press EXIT / SHIFT KEY will return to factory default action to do its screen will SCREEN4-2-3 or SCREEN4-2-4, after about 25 SEC later. would return SCREEN4-2-1 or SCREEN4-2-2.

4-8.AP Mode:

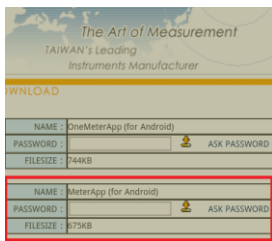
1.First, install lutron dedicated APP software

1-1.The use of smart phones in the APP Store download Lutron MeterApp software (SCREEN4-8-1) or on the Lutron official website MeterApp software (SCREEN4-8-2)

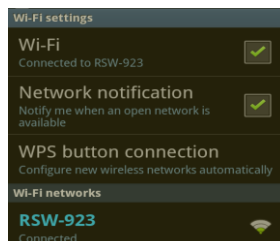
1-2.After the download is complete, install it.



SCREEN4-8-1



SCREEN4-8-2



SCREEN4-8-3

2.The RSW-923 boot into the measurement screen (SCREEN4-2-1).

2-1.Determine the following set parameters (such as SCREEN4-2-5 and SCREEN4-2-6)

2-1-1.NetMode: AP

2-1-2.SSID: RSW-923

2-1-3.IP: 192.168.0.254

2-1-4.Port: 200

M1 M2 M3

2-1-5.CH.: 04 04 04(According to users' needs, do adjust)

2-2.Start Smart Phone WiFi, make RSW-923 connection (SCREEN4-8-3).

2-3.Open MeterApp software (such as SCREEN4-8-4)

2-3-1.In SCREEN4-8-4 select Step1 (Meter1)

2-3-2.Is displayed SCREEN4-8-5, select Step2 tool button then into the SCREEN4-8-6

2-3-3.Enter the relevant information in SCREEN4-8-6

1) Meter name: Meter1 name can be changed to the desired user name

2) CH NO.: In accordance Meter CH NO. To enter

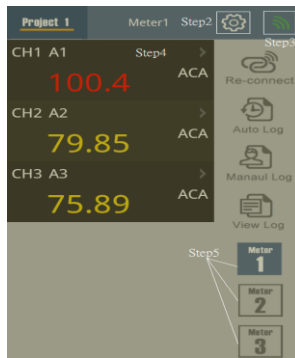
3) Sampling time: minutes as a reference, check after do Logger function (must be set)

4) IP: In accordance with RSW-923 IP as input and must tick (must be set)

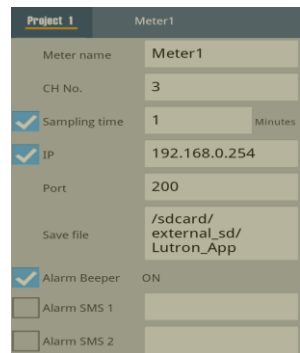
- 5) Port: In accordance with RSW-923 Port as input and must tick (must be set)
 - 6) Save file: Select the Logger path to be stored (must be set)
 - 7) Alarm Beeper: After checking the SCREEN4-8-9 to tie the set , when they meet the conditions have an effect
 - 8) Alarm SMS: After checking the SCREEN4-8-9 to tie the set, when meet the conditions will send SMS
- 2-3-4. In SCREEN4-8-8 the Save tool button, the value will be set according to Save the storage, and it will return to SCREEN4-8-5 screen when Step3 green and flashing that means the RSW-923 connection
- 2-3-5. In SCREEN4-8-5 of Step4 (CH1) click on the picture into the SCREEN4-8-9, then do High and Low Set and checked, when you press the Return smartphone screen will return to SCREEN4-8-5 When the measured value have reached the condition CH1-CH3 will show red numbers and have Beeper and send SMS.
- 2-3-6. In SCREEN4-8-5 of Step5 tool button to switch directly display the value of Meter1-Meter4



SCREEN4-8-4



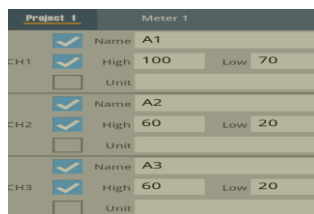
SCREEN4-8-5



SCREEN4-8-6



SCREEN4-8-8



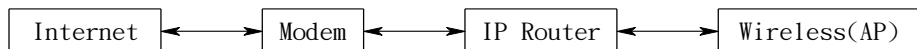
SCREEN4-8-9

4-9.Client Mode (internal network):

- 1.First, you must prepare a wireless device as AP.
 - 1-1.This device set SSID for RSW-923 (by the user to determine the SSID name)
 - 1-2.Password not set
- 2.The RSW-923 is set to Client mode, the relevant parameters are as follows:
 - 2-1.NetMode: Client
 - 2-2.SSID: RSW-923
 - 2-3.IP: 192.168.0.254
 - 2-4.Port: 200
M1 M2 M3
 - 2-5.CH.: 04 04 04(According to users' needs, do adjust)

4-10.Client Mode(External network fixed IP):

- 1.Simple schematic network:



2. The RSW-923 is set to Client mode, the relevant parameters are as follows:
 - 2-1.NetMode: Client
 - 2-2.SSID: RSW-923
 - 2-3.IP: 192.168.0.254
 - 2-4.Port: 200
 - 2-5.Gateway: 192.168.0.1(With a smart phone in the App Store to download IP Tools, after the installation and execution can be learned)
M1 M2 M3
 - 2-6.CH.: 04 04 04(According to users' needs, do adjust)

3. into the IP Router do parameter settings, the contents of the red box set you can do

D-Link®

DIR-632 ///	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
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VIRTUAL SERVER

PORT FORWARDING

APPLICATION RULES

QOS ENGINE

NETWORK FILTER

ACCESS CONTROL

WEBSITE FILTER

INBOUND FILTER

FIREWALL SETTINGS

ROUTING

ADVANCED WIRELESS

WI-FI PROTECTED

PORT FORWARDING RULES:

This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689).

24 -- PORT FORWARDING RULES

		Ports to Open	
<div style="border: 1px solid red; padding: 2px;"> Name RSW-923 </div>	<div style="border: 1px solid #ccc; padding: 2px;"> << Application Name >> </div>	<div style="border: 1px solid red; padding: 2px;"> TCP 200 </div>	<div style="border: 1px solid #ccc; padding: 2px;"> Schedule Always </div>
<div style="border: 1px solid red; padding: 2px;"> <input checked="" type="checkbox"/> IP Address 192.168.0.253 </div>	<div style="border: 1px solid #ccc; padding: 2px;"> << Computer Name >> </div>	<div style="border: 1px solid red; padding: 2px;"> UDP 200 </div>	<div style="border: 1px solid #ccc; padding: 2px;"> Inbound Filter Allow All </div>

Helpful Hints...

Check the **Application Name** drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop

4. Execution MeterApp, enter the need of parameters. IP item which required the use of IP Tools software to learn the input

Project 1	Meter1
Meter name	Meter1
CH No.	3
<input checked="" type="checkbox"/> Sampling time	1 Minutes
<input checked="" type="checkbox"/> IP	27.105.102.236
Port	101
Save file	/sdcard/ external_sd/ Lutron_App
<input checked="" type="checkbox"/> Alarm Beeper	ON
<input type="checkbox"/> Alarm SMS 1	
<input type="checkbox"/> Alarm SMS 2	

4-11.Client Mode(External network floating IP):

1.Simple schematic network:



2.The RSW-923 is set to Client mode, the relevant parameters are as follows:

- 2-1.NetMode: Client
- 2-2.SSID: RSW-923
- 2-3.IP: 192.168.0.254
- 2-4.Port: 200
- 2-5.Gateway:192.168.0.1(With a smart phone in the App Store to download IP Tools,after the installation and execution can be learned)

M1 M2 M3

- 2-6.CH.: 04 04 04(According to users' needs, do adjust)

3.into the IP Router do parameter settings, the contents of the red box set you can do

DIR-632

VIRTUAL SERVER

PORT FORWARDING

APPLICATION RULES

QOS ENGINE

NETWORK FILTER

ACCESS CONTROL

WEBSITE FILTER

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FIREWALL SETTINGS

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TOOLS

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This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689).

Save Settings

Don't Save Settings

24 -- PORT FORWARDING RULES

		Ports to Open	Schedule
<input type="checkbox"/>	Name RSW-923	TCP 200	Always
<input checked="" type="checkbox"/>	IP Address 192.168.0.253	UDP 200	Inbound Filter Allow All

Helpful Hints...

Check the **Application Name** drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop

12

4. Apply for free transfer to www.noip.com address, the name of the application will be transferred to the address input to the IP Router

DIR-632

ADMIN

TIME

SYSLOG

EMAIL SETTINGS

SYSTEM

FIRMWARE

DYNAMIC DNS

SYSTEM CHECK

SCHEDULES

SETUP

ADVANCED

TOOLS

STATUS

SUPPORT

DYNAMIC DNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.

Sign up for D-Link's Free DDNS service at www.dlinkddns.com

Save Settings

Don't Save Settings

DYNAMIC DNS

Enable Dynamic DNS : ☒

Server Address : << Select Dynamic DNS Server

Host Name :

Username or Key :

Password or Key :

Verify Password or Key :

Timeout : (hours)

Status : Connected

Helpful Hints...

To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.

More...

5. Execution MeterApp, enter the need of parameters. IP item which required the use of IP Tools software to learn the input

Project 1	Meter1
Meter name	Meter1
CH No.	3
<input checked="" type="checkbox"/> Sampling time	1 Minutes
<input checked="" type="checkbox"/> IP	27.105.102.236
Port	101
Save file	/sdcard/ external_sd/ Lutron_App
<input checked="" type="checkbox"/> Alarm Beeper	ON
<input type="checkbox"/> Alarm SMS 1	
<input type="checkbox"/> Alarm SMS 2	

13

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