Appendix A
Console and Command User Guide

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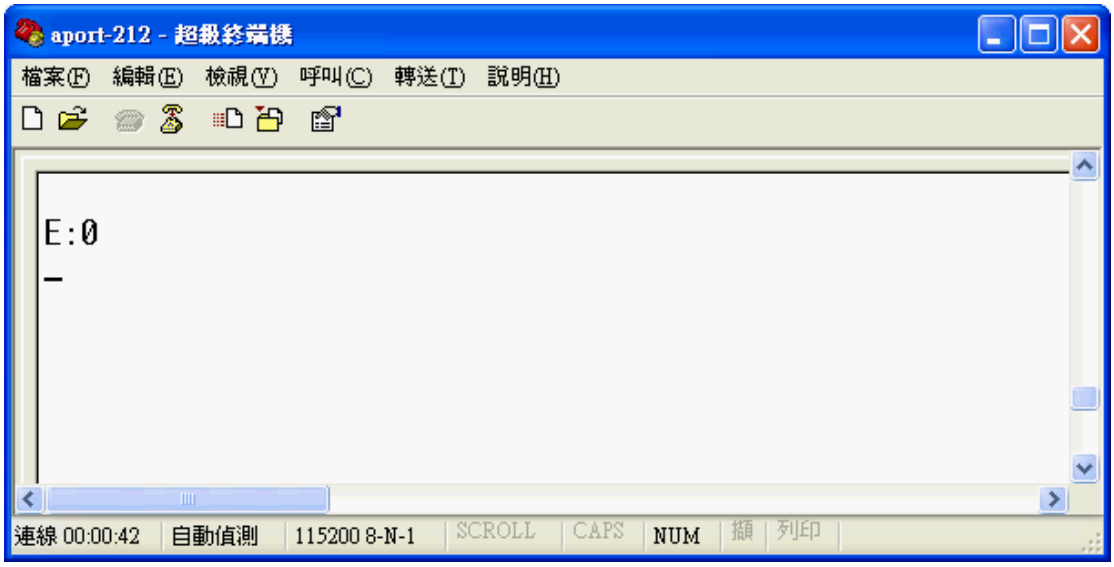
1 Console

1.1 Serial Console

1.1.1 Serial console setting

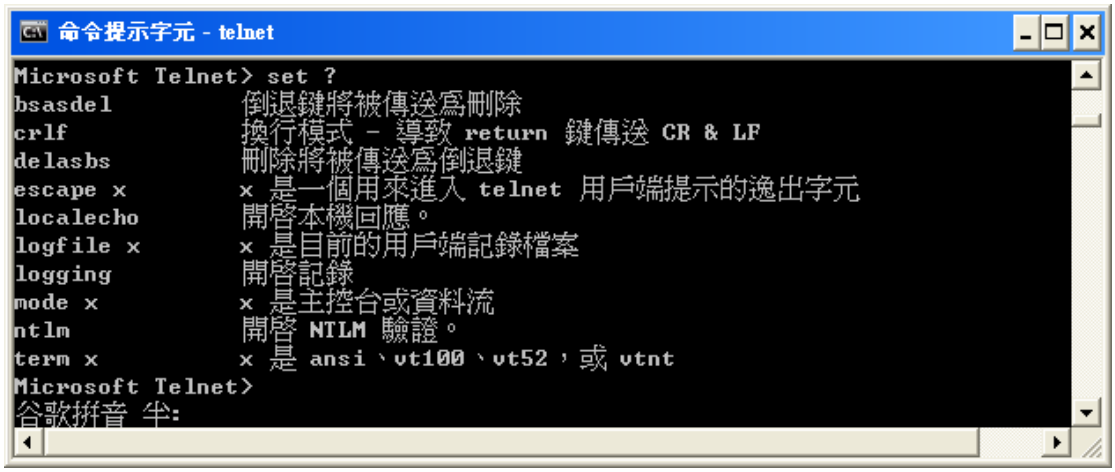
User terminal program (hyper terminal) and configure the setting as
Baud rate: 115200
Data size: 8 bits
Parity: None
Stop: 1 bit
Flow control: None
Terminal type: ANSI
ASCII setting: No CR+LF added at end of line

Once setting is correct, press enter key will see
E:0 on the screen



1.2 TCP Command port

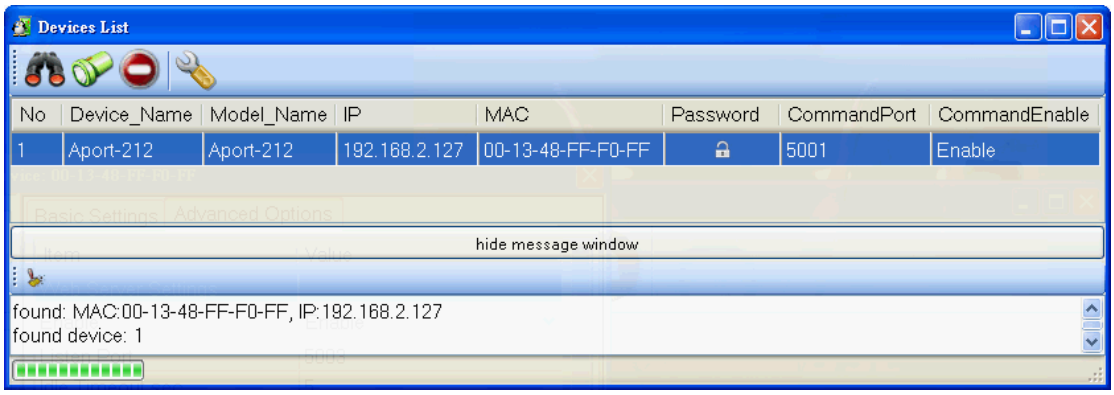
User can also use Telnet to configure Aport-212. First make sure Telnet setting uses CR&LF and localecho.



Use command

telnet 192.168.2.127 5001

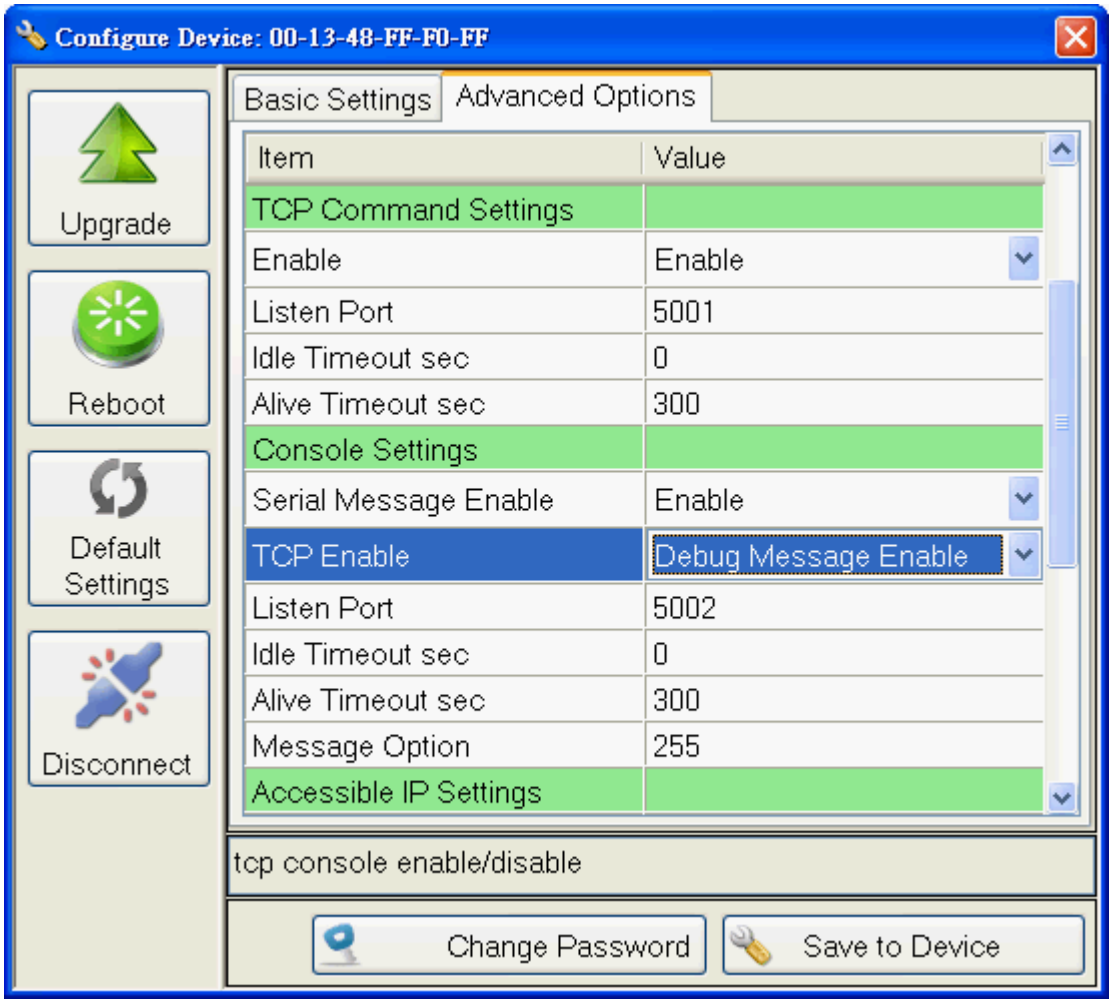
to enter TCP command port.



Make sure CommandEnable is Enabled

1.3 Debug port

Debug port is used to dump debug message. The function is only used for system debug. When abnormal operation occurs, user can dump the message for Artila R&D's analysis.



2 Command

2.1 Command format

2.1.1 Command start with : “G” or ”S” + “:”

2.1.1.1 “G:” means to get value from Aport

2.1.1.2 “S:” means to set value to Aport

2.1.1.3 The response of command begins with “A” or “E”

2.1.1.3.1“A:” means answer

2.1.1.3.2“E:” means error

2.1.2 command

2.1.2.1 command ends with a “=” e.g. S:ip_ip=192.168.2.127

2.1.2.2 multiple command can link with a “&” e.g.

S:ip_ip=192.168.2.127&ip_nm=255.255.255.0

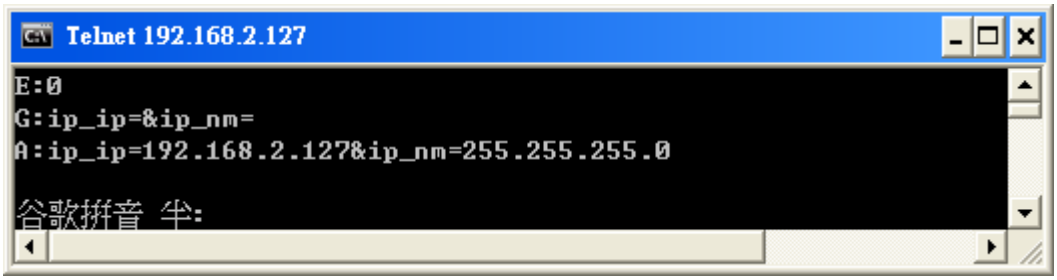
2.1.3 delimiter

2.1.3.1 the delimiter for serial command is 0x0d

2.1.3.2 the delimiter for telnet console is 0x0d 0x0a

2.1.4 Save configuration

2.1.4.1 S:save=1 save the configuration to Aport-212



2.2 Command set

Command	Description	Access	Parameter	Default Value
Basic Settings				
txt_dn	Device name	G/S	15 bytes most	Aport-212
txt_pw	password	S only	7 bytes most	0
Lan Settings				
cmb_ipcfg	IP Configure	G/S	0: Static 1: by DHCP	0
ip_ip	IP Address	G/S		192.168.2.127
ip_nm	Netmask	G/S		255.255.255.0
ip_gw	Gateway	G/S		0.0.0.0
UART Settings				
cmb_u1if cmb_u2if	interface	G/S	0: RS-232 1: RS-485 2: RS-422(UART1 only)	0
br_u1 br_u2	baudrate	G/S	921600 ~ 1200	115200
cmb_u1pt cmb_u2pt	parity	G/S	0: NONE 1: EVEN 2: ODD 3: SPACE 4: MARK	0
db_u1 db_u2	databits	G/S	5 ~ 8	8
sb_u1 sb_u2	stopbits	G/S	1 ~ 2	1
cmb_u1fc cmb_u2fc	Flow control	G/S	0: NONE 1: RTS/CTS 2: XON/XOFF	0
UART Operation Mode				
cmb_u1op cmb_u2op	Operation mode	G/S	0: Slave RTU 1: Slave ASCII 2: Master RTU 3: Master ASCII 4: TCP Server 5: TCP Client	0
Slave RTU/ Slave ASCII				

pt_u1mslp pt_u2mslp	Listen port	G/S	1 ~ 65535	502
u8_u1msids u8_u2msids	TCP Unit ID start	G/S	1~247	1 (UART1) 124(UART2)
u8_u1mside u8_u2mside	TCP Unit ID stop	G/S	1~247	123 (UART1) 247(UART2)
u8_u1msido u8_u2msido	Offset	G/S	Unit ID + offset = serial address	0
Master RTU/ Master ASCII				
ip_u1m0~ ip_u1m31 ip_u2m0~ ip_u2m31	TCP Slave IP Address	G/S		0.0.0.0
pt_u1m0~ pt_u1m31 pt_u2m0~ pt_u2m31	TCP Slave listen port	G/S		0
u8_u1mmids0~ u8_u1mmids31 u8_u2mmids0~ u8_u2mmids31	TCP Unit ID start	G/S		0
u8_u1mmide0~ u8_u1mmide31 u8_u2mmide0~ u8_u2mmide31	TCP Unit ID stop	G/S		0
Modbus				
br_u1m br_u2m	Serial response timeout ms	G/S		5000
cmb_u1mep cmb_u2mep	TCP exception	G/S	0: No TCP exception 1: Send TCP exception	0
TCP Server				
pt_u1lp pt_u2lp	S2e listen port	G/S	1~65535	4001(UART1) 4002(UART2)
TCP Client				
ip_u1rip ip_u2rip	Remote IP Address	G/S		0.0.0.0
pt_u1rp	Remote port	G/S	1~65535	4003(UART1)

pt_u2rp				4004(UART2)
cmb_u1tccw cmb_u2tccw	Connect when	G/S	0: start up 1: serial data in	0
tm_u1idle tm_u2idle	Idle timeout	G/S	1~65535 sec	0
tm_u1alv tm_u2alv	Alive check	G/S	1~65535 sec	300
UART Data Packing				
ck_u1dpcfg ck_u2dpcfg	configure	G/S	bit0:interval timeout ms bit1:length bit2:delimiter char	0
tm_u1dpms tm_u2dpms	interval timeout ms	G/S		0
fl_u1dp fl_u2dp	length	G/S		0
dc_u1dp dc_u2dp	delimiter char	G/S	2 bytes most	0
Accessible control				
ip_ft_ip0~ ip_ft_ip2	Accessible IP	G/S	Three IP sets allowed 0.0.0.0 will disable this function	0.0.0.0
ip_ft_nm0~ ip_ft_nm2	Accessible netmask	G/S	Three netmask sets allowed 0.0.0.0 will disable this function	0.0.0.0
Console				
cmb_tcns_en	Console enable/disable	G/S	bit0: serial console bit1: tcp console bit2: tcp print message	1
pt_db_msg	Message type	G/S	0x01: fail 0x02: connect status 0x04: modbus trance 0x08: tcp app trance 0x10: dhcp trance	0x01
tm_tcns_idle	Idle timeout	G/S	0~65535 sec	0

tm_ tcns _alv	Alive check	G/S	0~65535 sec	300
Web server				
cmb_web_en	Enable/disable	G/S	0: disable 1: enable	0
pt_web	Listen port	G/S		5003
tm_web_idle	Idle timeout	G/S	0~65535 sec	5
tm_web_alv	Alive check	G/S	0~65535 sec	0
TCP Command				
cmb_tcmd_en	Enable/disable	G/S	0: disable 1: enable	1
pt_cmd	Listen port	G/S		5001
tm_tcmd_idle	Idle timeout	G/S	0~65535 sec	5
tm_tcmd_alv	Alive check	G/S	0~65535 sec	300
Debug and reboot				
all_app	Dump app settings	G only		
all_opt	Dump opt settings	G only		
all_mb0~all_mb6	Dump modbus master settings	G only		
save	Save to eeprom	S only	1: save changes to user eeprom 2: reset to default	
reboot	Reboot condition	S only	1: reboot device 2: enter net upgrade	
cmd_close	Disable console	S only	0: UART1 1: UART2 2: Web Console 3: TCP Command 4: TCP Console	
dbgt_info	Debug message	S only	0: cpu info 1: eeprom dump(serial only)	