## ezTCP Technical Document

# **Upgrading Boot&Firmware**

Version 1.0 2009-12-08



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## **1** Overall

I/O Port of CIE-H10 can be monitored and controlled by Modbus/TCP, HTTP and Macro function. Especially, HTTP is the most familiar way for user using WEB browser like internet explorer. Users can make own web pages with the version of firmware from 1.3A and boot from 1.6. To use this, boot and firmware upgrade can be required. We have been offering the special firmware which allows users to upgrade CIE-H10's boot easily, because the upgrade procedure is too hard and complicate in users' site. This document describes in detail the processes.



Fig 1-1 a purpose of this document



## 2 Upgrade Procedure

## 2.1 A Flow Chart

For using the new added function, CIE-H10 has to download a new boot (ver. 1.6A) and a firmware (ver. 1.3C). This work is so complicate and you might be a little confused. Referring to below diagram in step by step work, it's not a big deal for anyone.



Fig 2-1 Diagram for upgrading boot and firmware

### 2.1.1 Supplying the Power

Connect CIE-H10 with your PC via Ethernet and supply the power.

### 2.1.2 Upgrading Boot

#### • Downloading the Burnboot Firmware

To upgrade the boot, a special firmware has to be downloaded at first. The special firmware is named as burnboot firmware. This is for only upgrade the CIE-H10's boot.

#### CIE-H10 Latest Firmware

#### • v1.3E [F/W History]

- H10R13E with BOOT1.7 : For users who need upgrade the boot to 1.7
- H10R13E with Examples : For users who need upgrade the boot to 1.7 and want examples of web pages

#### Fig 2-2

#### 1 H10R13E with BOOT1.7

This is a compressed file which contains new version of firmware and burn boot firmware.

|--|

File Name	Description	
H10R13E.BIN	CIE-H10's Firmware file with version 1.3E	
BURN BOOT17 AUTO EID10 BIN	CIE-H10's burnboot firmware file with	
BORN_BOOTT/_AUTO_FIDT0.BIN	version 1.7	

#### <sup>(2)</sup> H10R13E with Examples

This is a compressed file which contains firmware, burnboot firmware and sample codes of users homepage.

Table 2-2 contents of compressed f	file of ②
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File Name	Description
H10R13E_WITH_BOOT17	Folder which contains files of Table 2-1
Homenage examples	Folder which contains files of sample
Homepage_examples	homepages

#### • Entering ISP mode

Enter ISP mode to download firmware file to CIE-H10.

• Run a TFTP client and ready to send the F/W file

Run a TFTP client program. ezManager is equipped the client program. Click the [Change F/W/HTML] button.

Cha	nge F/W / HTML			×
	Cal IP Address	Change Firmwa <del>lt Con</del> Open Firmwart / HTML	nge fint Send	Close
Search All	Write			
🔽 Advanced Menu		<b>—</b> •1		
Change F/W / HTML Set Password	Debugging Nebbage Factory Reset	<b>—</b> •2		

- Fig 2-3 running TFTP client
- 1 Check the [Advanced Menu] check box
- 2 Click the [Change F/W / HTML] button to run TFTP client
- ③ Select the [Change Firmware] radio button
- ④ Input the IP address of CIE-H10 to the [Local IP Address] text box
- (5) Press the [Open Firmware / HTML] button and choose the firmware file
- Checking firmware file and Sending

nge F/W / HTML				×	
cal IP Address		← Change Firmwar( ⊂ C	henge HTML		-
10 . 1 . 0	. 1	Open Firmware / HTML	Send 👇 Close	•	2
:\Decuments and	l Setting:	<pre>s\mhyun\Desktop\BURN_B0</pre>	OT17_AUT0_FID10.BIN		
	Chang	e F/W / HTML			
1	Loci	al IP Address	🤨 Change Firmwar( 🔿 Cha	ange HTML	
0	1	0.1.0.1	Open Firmware / HTML	Send	Close
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	C: \	Document ezTCP Manager	v3.0F (2009/11/30)	×	BIN
		Down	oading firmware bas been susses	sofully completed	8
			odding niniware has been succes	si diy completed.	
					-

- Fig 2-4 sending firmware file
- ① Check if the name and path of the firmware file are correct
- (2) Click the [Send] button
- ③ Confirm the completed message
- Jump on the New Boot

When the Burn boot file is downloaded, to move to newly installed boot, just press the ISP switch one time. The LINK and PWR LED are only turned on again.

#### 2.1.3 Upgrading Firmware

Firmware is a type of software for operation of CIE-H10. If there are needs for adding

function or fixing bugs, the firmware is modified and released. We recommend that users keep use the latest released firmware. The procedure of upgrading firmware is the same with uploading burnboot firmware.

### 2.1.4 Searching and Factory Reset

Run ezManager and press the [Search All] button, then the CIE-H10's MAC address is listed on the result box. Select the product and press [Initialization] button to reset the CIE-H10 to its default status.

🔯 ezTCP Manager v3.0F (200	9/11/30)			_ 🗆 X		
Search ezTCP MAC IP Seria MAC Address 00 30 f9 07 81 04 Read Search Results 00:30:f9:00:00:05 00:30:f9:00:00:05 2 00:30:f9:00:00:05 2 View Comment	Network 0 Product Network: Local IP 10.1 Subnet M 255.0 Cateway 0.0 DNS IP A 0.0 Option Obtain PPPoE ID Obtain	CIE-HIO CIE-HIO Address Address Address O . 0 IP O . 0 Address O . 0 IP O . 0 Address O . 0 Port Disable Port DDNS ID Host Name A ddress A an IP From The First A an IP Automatically PPPOE Passw DDNS Server Address	ion Serial Port I/O Port CIE-H10 ddress 0.1 protocol Interval protocol Junerval Disable Port Data Type 0.0 Port Data Type 0.0 DDNS ID DDNS Password DDNS ID DDNS Password Host Name(custom) 0.0 Host Name(custom) 0.0 Host Name(custom) DDNS Port POPOE Password DNS Server Address Automatically			
Search All 1	Write	Status	Simple Test			
Advanced Menu						
Change F/W / HTML	Change F/W / HTML Debugging Message		Multi Write	Windows Firewall		
Set Password	Factory Reset 3	Export Variables	PING / ARP			
<u> </u>						

Fig 2-5 searching and factory reset

- 1 Press the [Search All] button
- ② Select the CIE-H10 in the [Search Results] box
- ③ Click the [Factory Reset] button



### 2.1.5 Uploading Homepage

• Making Users' homepage or Downloading sample files

Make your own homepage file or use a sample homepage files which we've been offering on our web site.

- Entering ISP mode Enter ISP mode to send HTML files to CIE-H10.
- Running a TFTP client and ready to send the HTML files

Run a TFTP client program. ezManager is equipped the client program. Click the [Change F/W / HTML] button.



Fig 2-6 running TFTP client

- ① Check the [Advanced Menu] check box
- 2 Click the [Change F/W / HTML] button to run TFTP client
- ③ Select the [Change HTML] radio button
- ④ Input the IP address of CIE-H10 to the [Local IP Address] text box
- (5) Press the [Open Firmware / HTML] button and choose the HTML file



<ul> <li>Checking firmware file and Sending</li> </ul>								
Change F/W / HTML								
Local IP Address C Change Firmwar: Change HTML 10 . 1 . 0 . 1 Open Firmware / HTML Send Close 2								
C:\Documents and Settings\mhyun\Desktop\New Folder\cie_h10.gif C:\Documents and Settings\mhyun\Desktop\New Folder\h10_g_off.gif C:\Documents and Settings\mhyun\Desktop\New Folder\h10_g_on.gif C:\Documents and Settings\mhyun\Desktop\New Folder\h10_y_off.gif C:\Documents and Set								
C:\Dobuments and Set Clouge Firmware Change HTML Local IP Address C Change Firmware Change HTML 10 . 1 . 0 . 1 Open Firmware / HTML Send Close								
C: \Document     C								

Fig 2-7 sending firmware file

- 1 Check if the name and path of the firmware file are correct
- 2 Click the [Send] button
- (3) Confirm the completed message

### 2.1.6 HTTP Test

After the uploading firmware is completed, CIE-H10 automatically operates in normal mode. Connect to the CIE-H10 with a web browser via HTTP and test it.



Fig 2-8 Connecting CIE-H10 (left) and CIE-M10 (right) through HTTP

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## **3** Revision History

Date	Version	Comment	Author
2009.12.08	1.0	• Initial Release	Roy LEE

