MegaNETIMPRESS C"arNETIMPRESS NETIMPRESS next

Startup Manual

DTS INSIGHT CORPORATION



Startup Manual

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1 Overview & Features

The MegaNETIMPRESS/C"arNETIMPRESS/NETIMPRESS next (hereafter called as "NETIMPRESS") is the in-circuit programmer that can perform high-speed on-board programming of an microcomputer with built-in flash ROM or flash ROM connected to external bus of a microcomputer.



The NETIMPRESS can support programming various devices by inserting the compact module (hereafter called as "Control Module"), which contains programming firm data for each microcomputer, into the programmer main unit.

The Control Module uses the Compact Flash (CF) card as its media.

You can add a target device to program by adding programming conditions to the Control Module in a form of a license.

The NETIMPRESS can be also used as a stand-alone since programming conditions are saved in the Control Module.

Also, you can control the programmer very flexibly from a PC, as it has the 100Base-Tx interface. You can build up an automatically-controlled production line system by using the Remote Package AZ491 that is available for an additional order.



2 Notes & Points

The Control Module is specifically designed and built for the NETIMPRESS programmer and cannot be used for any other purposes. (A CF card commercially available cannot be used as the Control Module.)

About this manual

This Startup Manual describes only the initial setup procedures required to perform programming.

For detailed specifications of the NETIMPRESS main unit, Control Module, probe, software, etc., see their relevant manuals.

This Startup Manual explains how to install the software, set up an IP address in the NETIMPRESS main unit, add a license to the Control Module and file operation steps. This Startup Manual describes the processes up to the step to control the programmer from a PC.

For the information on how to set up environments of each device and connection information, which vary depending on each device, see the manual of the relevant manual of the Control Module or probe.

Note:

The Control Module (CF card) is not added with the license when delivered. Be sure to add the license (extension: YLC), which is provided in CD-ROM.

PC Requirements

- The NETIMPRESS runs only on a Windows PC (Windows XP, and Windows7).
- An Ethernet cable (10BASE-T, and 100BASE-TX) to connect the programmer and a PC is a user-prepared item. (When you make one-to-one connection without using a hub, you need a cross cable.)
- The reader for the CF card (USB connection, for example) at the side of a PC is a user-prepared item.



3 Checking Hardware and Software (Standard Package)

This chapter explains the standard package of hardware and software that will be provided for the NETIMPRESS programmer. (The hardware and software to be provided may differ depending on your environments.)

3.1 Hardware

The following items are included in the hardware package of the NETIMPRESS.

- (1) NETIMPRESS main unit (AF320/AF420/AF520/AF620/AF430)
- (2) AC adapter specially built for the NETIMPRESS (/AC4P INPUT: 100V to 240V OUTPUT: 12V)
- (3) Control Module (Media: Compact Flash (CF) card)
- (4) CD-ROM: 1 to 2 pieces (License Pack, Utility) depending on a target device
- (5) Target probe, adapter, etc., which vary depending on a target device





3.2 Software

The following items are included in the software package of the NETIMPRESS.

- (1) AZ490 (Remote Controller to download the various files, execute the device functions and set up various parameters)
- (2) AZ482 (F/DF Sheet Generator to create a file to set up an IP address to the programmer main unit and download the files)
- (3) AZ481 (Key File Generator to create an ID code Key to communicate with a PC, and a SUM file)

SH70	55F.YIM					REMOTE
U TYPE FH809		MODEL CODE FH809	MICOM PACK No. FH809M00		Port No.	C REMOTE
Parameter Table 2 Host Interface Configuration	Applicat	ion-Read eration	F Param	ile Transf ieter Tabli	er e 1	Communication Check
File Operation Load File (FUNC F1) Save File (FUNC F2) Purge File (FUNC F3) Current File (FUNC F4)	Ovice Function (FUNC 0) First Address Last Address	00000000 0001FFFF P	ERASE ROGRAM	BLANK READ		10KEY Select Module Execute YMN
TEST128K.S File List V160N00H209.BTP	Verify Mode S Search Modified Bit EDIT Sym	Clear Buffer	Store Block	Buffer	SUM	Save to HD OK Cancel Exit
Purge All File Buffer Area (FUNC F5) First Address 00000000 Last Address 0001FFFF					-	Version Remote Control 5.40 Control Module 12.06 Hardware



4 Installing the Software

The software to make the various settings to the NETIMPRESS programmer is available at our website:

https://www.dts-insight.co.jp/en/support/support_netimpress/top/index.php?m=Software

Download the following software from the above mentioned web site:

- (1) AZ490 (Remote Controller)
- (2) AZ482 (F/DF Sheet Generator)
- (3) AZ481 (Key File Generator)

Since they are the self-expanding files, decompress them on a PC and install them.

Note:

When you complete installing them and if you choose the default setting, they will be registered in [DTS INSIGHT Tools], which you can open by selecting [Start] \rightarrow [Program].



5 Setting up IP Address to Programmer Main Unit

To set up an IP address to the programmer main unit so as to control it via Ethernet from a PC, follow the below steps.

* As a stand-alone, you can set IP address by using FUNC E2 to E4. For how to operate NETIMPRESS as a stand-alone, refer to a chapter "Setting Ethernet" of an instruction manual.

(1) Start up the AZ482 (F/DF Sheet Generator) that has been installed on your PC.

F/DF Sheet generator	The second s	×
File(E) Edit(E) Sequence(S) H	elp(<u>H</u>)	
File(E) Edit(E) Sequence(S) H F/DF Sheet List	elp(性) F/DF Sheet Name	Detail Parameter Execute
Delete Sheet		

(2) From the Menu bar, select [File] \rightarrow [New] \rightarrow [Communication].

F/DF Sheet gene	erator		×
F/DF Sheet cene File(D) Edit(E) See New(W) Open(Q) Save(S) Save(S) Save As(A) Configulation(Q) Exit(Q)	erator yuence(S) Help(H) Select Module(S) Device Function(D) File Operation(E) Communication(C)	et Name	Detail Execute
Del	lete Sheet		



(3) Enter IP address, port information, etc. to set up in the programmer main unit, and select [File] → [Save As] and enter a file name with extension ".ycm" to save. (This file name can be changed.)

le(E) Edit(E) Sequence(S) New(W) ▶	Help(H) F/DF Sheet Name				
Open_(Q) Save(S)				I Pai	Detail Execute
Save As(<u>A</u>) Configulation(C)					
Exit⊗	Interface 🤆 Eth	ernet C RS-2	232C		
	Ethernet			Dorthio Lo	
	Subpot Mack	10.20.159.82		-	00
	Subriet wask	255.255.255.0			
	Default Gateway	10.20.159.254			
	R8-232C		<u> </u>		
	Port No. 1	Ŧ	Baud	57600	📩 bps
			Bit	8	💌 bit
			Stop	1	💌 bit
			Parity	NONE	7
Delete Sheet	Comment				

Note:

[Default Gateway] does not have to be set up in most cases, just enter "0.0.0.0". When using the NETIMPRESS via a router, enter an address of the router.

- * Enter 1000 for Port No. if there is no problem on the network.
- (4) Copy the xxx.ycm file you created to right underneath the drive of the Control Module (CF card) by using the card reader of the CF card.



- (5) Insert the Control Module into the slot of the NETIMPRESS main unit and turn on the power.
- (6) The message "YCM DATA SET?" is displayed on the LCD of the NETIMPRESS main unit. Then, press either "EXE1" or "EXE2". (For Mega/C"arNETIMPRESS, press EXE1 and EXE2, both of them are the user-defined keys with no names.)



The IP address information is set up in the NETIMPRESS and displayed on the LCD. Then, the NETIMPRESS main unit is started.



6 Connecting with a PC (AZ490 Setting Remote Controller)

To set up environments to control the NETIMPRESS from the Remote Controller AZ490, follow the steps below.

- (1) Start the AZ490.
- (2) Enter IP address and port number of the NETIMPRESS main unit and press

TYPE	MODEL CODE	MICOM PACK No. Port No.	© REMOTE
Parameter Table 2	CF Card Infomation	File Transfer	Communicatio
Host Interface Configuration	Basic Operation	Parameter Table 1	
C Ethernet	Communication Check	Control Module Battery	Execute YM
Ethernet	thernet Address	10 20 150 92	Save to HE
a. L	alemet Address	10.20.139.02	OK
h P	ort Number	1000	
b. P	ort Number	1000	Cancel
b. P	ort Number	1000	Cancel Exit
Beep (FUNC 91)	Tone Control (FUNC 95)	Time Out	Cancel Exit Version Remote Control 5.81
Beep (FUNC 91) Time Settings (FUNC CA2)	Tone Control (FUNC 95) Log Settings (FUNC CA0)	Time Out Probe Select Settings (FUNC CD0)	Cancel Exit Version Remote Control 5.81 Control Module Firmware

When communication is established, the window as shown below ("File Transfer") appears. Then, communication between a PC and the NETIMPRESS main unit can be started.

CM UNDEFINED	MODEL CODE	MICOM PACK No. Port No.	C EDIT
Host Interface Configuration	Basic Operation	Parameter Table 1	Communica
Parameter Table 2	CF Card Infomation	File Transfer	Che
IMPRESS Folder	Object Data	Parameter Table	10KEY
Select YIM folder	Load Object Data	Load Parameter	EXECUTE Y
Create YIM folder	Save Object Data	Save Parameter	Save to H
Delete YIM folder	Clear Buffer		ОК
Copy YIM folder	Bundle File	Control Module	Cancel
Load YIM folder	Copy File (Load)	Load Definition Program	
Save YIM folder	Copy File (Save)	Save Definition Program	Exit
Log File	Purge File Purge All File		-Version
Save Log File	BufferRAM Buffer Area (FUNC F5)	RAM DISK Area (FUNC FB)	5.81
Save All Log Files	First Address 00000000	First Address 00000000	Control Modu
Purge Log File	Last Address 00000000	Ram Disk Size 00000000	Firmware
Purge Log File		Object Data Format (FUNC 5)	





7 Adding a Licence to the Control Module

To add a licence to the Control Module, follow the steps below.

- (1) Click ... button in the Add Licence field located in the center of the CF Card Information tab.
- (2) File selection window is shown. Select the licence file (xxx.YLC) that is provided in the form of CD-ROM, and then click OK button.
- (3) Click Add Licence in the Add Licence filed. Then the licence is added into CF card.

PE CM UNDEFINED	MODEL CODE	MICOM PACK No.	Port No.	C CONTRACTOR			
Host Interface Configuration	9		TCP/IP	C EDIT			
Parameter Table 2	Basic Operation	Parameter T File Transfe	able 1	Communication Check 10KEY			
Read Licence	CF Serial No.			Execute YMN	📑 File name (Lic	ence File)	
Reau Literite	Add Licence			Save to HD OK Cancel	intest intest intest intest interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating interfeating in	UH	G24019FR_H809.YLC
	Compact Module	Add Licence		Exit Version Remote Control	File Name	UHG24019FR_H8	309.YLC
Save To Text File		FAT16 FAT32		5.81 Control Module Firmware			OK Cano

* The added licence information is written in the special area in CF card. The licence information will remain even if you format the CF card.



8 Creating Impress Module Folder (YIM)

With the Control Module, you can save and maintain a programming object and programming environments data in a folder called Impress Module folder (YIM). When you finish adding a license, create the YIM folder and set up programming environments.

How to create YIM folder

- (1) Click Create YIM folder in the IMPRESS Folder at the upper left of the File Transfer
 - tab. (As the Module Name dialog window appears, enter any name and click OK.

emote Control Mode Versio ent IMPRESS Module	n 5.81	_	
TYPE CM UNDEFINEI	MODEL CODE	MICOM PACK No. Port No.	© REMOTE
Host Interface Configuration	Basic Operation	Parameter Table 1	Communication
Parameter Table 2	CF Card Infomation	File Transfer	Check
IMPRESS Folder	Object Data To and From Buffer RAM	Parameter Table To and From Control Module	10KEY
Select YIM folder	Load Object Data	Load Parameter	Execute YMN
Create YIM folder	Save Object Data	Save Parameter	Save to HD
Delete YIM folder	🛃 Module Name	×	
Copy YIM folder	BL Create	rol Module d From Control Module	OK Cancel
Save YIM folder	- OK Canc	el	Exit
Log File			-Version Remote Control
Save Log File	Buffer Area NC F5)	RAM DISK Area (FUNC FB)	Control Module
Save All Log Files	First Address 00000000	First Address 00000000	
Purge Log File	Last Address 00000000	Ram Disk Size 00000000	Firmware
Purge All Log Files	Store Block	Object Data Format (FUNC 5)	Parameter

* In case that Create YIM folder button is dimmed, click [**Control Module**] which you can find at the top of tree view on Folder/File List window.





(2) The name of YIM folder you have created is displayed in the Folder/File List window. Then, right-click on the YIM folder you have created and select [Select] \rightarrow [OK].



- * You can select the folder by double-clicking the folder on the tree view of Folder/File List window, or clicking Select YIM Folder on the main window.
- (3) The YIM folder you have selected in Step 2 becomes the current folder and its name is displayed at the top of the AZ490.

in the so module			DELLOTE
SH70	055F.YIM		REMOTE
CU TYPE	MODEL CODE	MICOM PACK No. Port No.	· REMOTE
CM UNDEFINI		TCP/IP	C EDIT
Host Interface Configuration	Basic Operation	Parameter Table 1	Communicatio
Parameter Table 2	CF Card Infomation	File Transfer	Check
IMPRESS Folder	Object Data	Parameter Table	10KEY
Select YIM folder	Load Object Data	Load Parameter	Execute YMM
Create YIM folder	Save Object Data	Save Parameter	Save to HD
Delete YIM folder	Clear Buffer		
Copy YIM folder	Bundle File	Control Module	Concel
Load YIM folder	To and From DOS Area Copy File (Load)	To and From Control Module Load Definition Program	Gancer
Save YIM folder	Copy File (Save)	Save Definition Program	Exit
	Purge File Purge All File		- Version Remote Control
Coyrie	BufferRAM		5.81
Save Log File	Buffer Area (FUNC F5)	RAM DISK Area (FUNC FB)	Control Module
Save All Log Files	First Address 00000000	First Address 00000000	
Purge Log File	Last Address 00000000	Ram Disk Size 00000000	Firmware
Purge All Log Files	Store Block	Object Data Format (FUNC 5)	Parameter

What is the Current folder?:

The files are loaded and the device functions are executed using the current folder. When various setup files are loaded to the Control Module, they are copied to the current folder.



9 Downloading Files and Setting Programming Environments

This chapter explains the steps to download the various files to set up programming environments to the current YIM folder.

It also explains how to download the definition program (extension: CM), parameter (extension: PRM), and bundle files.

(1) Downloading the Definition Program

Click the Load Definition Program in the Control Module field to load the Definition Program file (with extension CM) that is provided in the form of a CD-ROM.

SH705	5F.YIM			REMOTE
U TYPE	MODEL CODE	MICOM PACK No.	Port No.	· REMOTE
CM UNDEFINE	D		TCP/IP	C EDIT
Host Interface Configuration	Basic Operation	Parameter T	able 1	Communicatio
Parameter Table 2	CF Card Infomation	File Transfe	er 🔰	Check
IMPRESS Folder	Object Data To and From Buffer RAM	Parameter Table	dule	10KEY
ile name (Definition Program L	oad from HD) 📃 🗵	Load Parameter		Execute YMM
C .	•	Save Paramete	r.	Save to HD
ac:¥	V1206h809.CM			
fh809m00		and the second sec		OK
		Control Module	dule	Cancel
		Load Definition Prog	gram	-
1		Save Den Pro	gram	Exit
File Name				Version
V12001009.Ch	n			Remote Control
	OK Cancel	- RAM DISK Area (FUNC	FB)	Control Module
		First Address 0000	0000	
SAVE BILLOUTIES	Last Idress 0000000	Ram Disk Size 0000	0000	Firmware
Purce Log File				

(2) Downloading parameters

Select the Load Parameter in the Parameter Table filed to load the parameter file (with extension "PRM") that is provided in the form of a Micom pack download from our Website.





(3) Downloading the bundle files

Download the bundle files that are required for programming by pressing

the Copy File(Load) in the Bundle File field.

The KEY file, BTP file and AMK file are the major bundle files.

* Since the bundle files to be provided differ depending on each device, check with the manual of the Control Module you use.

Remote Control Mode Version	n 5.81		X
SH705	5F.YIM		REMOTE
MCU TYPE	MODEL CODE	MICOM PACK No. Port No.	© REMOTE
FH809	FH809	FH809M00 TCP/IP	C EDIT
Host Interface Configuration	Basic Operation	Parameter Table 1	Communication
Parameter Table 2	CF Card Infomation	File Transfer	Check
IMPRESS Folder	Object Data	Parameter Table	10KEY
Select YIM folder	Load Object Data	📑 File name (File Copy from HI) to DOS Area) 🔀
Create YIM folder	Save Object Data	() c:	•
Delete YIM folder	Clear Buffer	← c:¥ ← test ← fh809m00	FH809M00mnJ01.pdf Readmej.bt V1200M00H809 PRM
Copy YIM folder		FDF	V160M00H209.btp
Load YIM folder	To and From DOS Area Copy File (Load)		
Save YIM folder	Conver (Save)		V160M00H209btp
	Purge File Purge All File	Current Module	C Control Area
Log File	BufferRAM	_	
Save Log File	Buffer Area (FUNC F5)	File Name V160M00H2	09.btp
Save All Log Files	First Address 00000000 Last Address 0001FFFF	File Filter	OK Cancel
Purge Log File			13.02
Purge All Log Files	Store Block	Object Data Format (FUNC 5)	Parameter 12.00



(4) Setting up parameters

The parameters you have downloaded in Step 2 are the default values and you need to modify them according to your environments.

Open the Parameter Table 1 tab and make the settings. For details, see the Manuals for Control Module and Micom-Pack. The parameters you need to modify are operating voltage, clock, communication baud rate, etc.

* If you change the setting on this window, click OK button at the center of right side to reflect the settings.

SH7055F.	YIM			REMOTE	
U TYPE	M	ODEL CODE	MICOM PACK No.	Port No.	· REMOTE
FH809		FH809	FH809M00	TCP/IP	C EDIT
Parameter Table 2	CF Card Info	mation	File Trans	sfer	Communicatio
Host Interface Configuration	Basic Opera	tion	Parameter Ta	ble 1	Check
MCU Type (FUNC D8)					10KEY
TVcc Threshold (FUNC D3) 4.5 [Ŋ			-	Execute YMM
Flash ROM (FUNC D6)	MC	U Clock Frequer	ncy (FUNC DF) 20.	0 [MHz]	
First Address 00000000	MC	U Operation Mod	de (FUNC D4) 000	0	Save to HD
Last Address 0001FFFF	WD	T Clock Period	(FUNC D5) 20	[ms]	ОК
ROM Block Configuration Group No. Start Address Block	Size (byte)	ata Communicat nterface(FUNC D1)	ion		Cancel
Group 1 00000000 0000	8000	C UART C	CSI		
Group 2 00018000 0000	7000	Channel No. (FUNC	D7)		Exit
Group 4		CO @1 (2 0 3		
Group 5					Remote Control
Group 7		ART Baud Rate (FUNC D2) 76800	•	5.81
Group 8		Devel Data			Control Module
Group 9	C	Si Baud Rate (FUNC Da) 1200K		12.06
Group 11					Firmware
Group 12		(FU	NC 9A) KEEP	-	13.02
Group 13					Parameter



(5) Downloading a programming object

As you finish Step 1 to Step 4, most of programming environments are now set up. Then, the next step is to download a programming object by clicking Load Object Data on the Object Data field.

SH705	5F.YIM		REMOT
U TYPE	MODEL CODE	MICOM PACK No. Port No.	
FH809	FH809	FH809M00 TCP/	P C EDIT
Host Interface Configuration	Basic Operation	Parameter Table 1	Communicati
Parameter Table 2	CF Card Infomation	File Transfer	Check
IMPRESS Folder	Object Data	Parameter Table	10KEY
Select YIM folder	Load Object Data	Load Parameter	Execute YM
Create YIM folder	Say Dect Data	Save Parameter	Save to H
	Clear Buffer		ОК
Copy YIM folder	name (Data Load from HD)	X	Cancel
Load YIM folder	С с.	•	Cancer
Save YIM folder	¥ Test	128k.s	Exit
	est Test fh809m00 Trial FDF Trial	128k.YSM _FDF_001.YFD _FDF_002.YFD	- Version Remote Contro
	Trial	FDF_01.YCM	5.81
Save Log File	Inal	FUF_02.TOM	Control Module
Save All Log Files	,		12.06
Purse Los File	Nama		Firmware
File File	Test128k.s		13.02
Purge All Log Files	Filler E		Parameter

(6) Executing the device function

As you complete setting up programming environments and downloading a programming object, all preparations for programming are done. You can now start programming by executing the device functions (E.P.R normally) on the Basic Operation tab.

Remote Control Mode Versio	n 5.81		>
SH705	5F.YIM		REMOTE
MCU TYPE FH809	MODEL CODE FH809	MICOM PACK No. Port No. FH809M00 TCP/IP	© REMOTE
Parameter Table 2 Host Interface Configuration File Operation Load File (FUNC F1) Save File (FUNC F2) Purge File (FUNC F3) Current File (FUNC F4) TEST128K.S File List V160M00H209.BTP Purge All File Buffer Area (FUNC F5)	CF Card Infomation Basic Operation Device Function First Address 00000000 Last Address Verify Mode Sum READ Search Modified Bit Clear Buffer EDIT Symbol Address	File Transfer Parameter Table 1 ERASE BLANK PROGRAM READ EPR COPY St Block Buffer SUM Data / SET +	C EDIT Communication Check 10KEY Execute YMN Save to HD OK Cancel Exit - Version Remote Control 5.81 Control Module 12.06 Firmware
First Address 00000000 Last Address 00001FFFF		+	13.02 Parameter 12.00

* E.P.R is a command to do a sequence of actions of delete, write, and read-check (verify) the flash memory.



10 Using the Remote Controller AZ490

By using the Remote Controller AZ490, you can download the various files, set up programming environments and execute the device functions.

The screen of the AZ490 consists of the following six tabs.

- Host Interface Configuration tab to connect with the programmer
- Basic Operation tab to execute the device functions
- Parameter Table 1 tab to set up parameters
- Parameter Table 2 tab to set up parameters, which is not user accessible.
- CF Card Information tab to display CF card information, add licenses, and to format.
- File Transfer tab to transfer the files

Among these six tabs, this chapter explains the three tabs mostly used:

- 1. Basic Operation--- Device function execution window
- 2. Parameter Table 1 --- Parameter setting window
- 3. File Transfer --- File transfer window



10.1 Basic Operation tab

Remote Control Mode Version	n 5.81				_ 🗆 🗙
(1) SH705	5F.YIM				REMOTE
MCU TYPE		MODEL CODE	MICOM PACK No.	Port No.	REMOTE
	v	FH009			C EDIT
Parameter Table 2	CF Car	rd Infomation	File Transf	fer	Communication Check
Host Interface Configuration	Basic	Operation	Parameter Tabl	e 1	101/57
File Operation	FUNC 0)	n			10KEY
Load File (FUNC F1)	First Address	00000000	ERASE BLANK		Execute YMN
Save File (FUNC F2)	Last Address	0001FFFF F	ROGRAM READ		
Current File (FUNC F4)			E PP COPY		Save to HD
(3) TEST128K.S	Verify Mode	SUM READ	EAR COIT		ОК
File List	Search Modified Bit	Clear Buffer	Store Block Buffe	r SUM	Cancel
(4)	EDIT	mbol			Exit
	END Ad	dress	Data 🔽 / 🔤 S	+	Version Remote Control
					5.81
Purge All File					Control Module
Buffer Area (FUNC F5)					Firmware
First Address 00000000					13.02
Last Address 0001FFFF				+	Parameter
					12.00

The Basic Operation tab is mainly used to execute the device functions.

(1) Current IMPRESS Module

The name of YIM folder currently selected is displayed. ("SH7058RED.YIM" is displayed in the above example.)

(2) Device Function

With this Device Function field, you can execute the various device functions.

(3) Current File

File name loaded by clicking Load Object Data in the **Object Data** of the File Transfer tab is shown.

(4) File List

The files placed in the YIM folder (DOS area) currently selected are listed in the File List field. The bundle files are listed. These are the files of objects that have been copied by clicking Copy File(Load) in the **Bundle File** of the File Transfer tab.



10.2 Parameter Table 1 tab

The Parameter Table 1 tab is used to make the programming settings according to your environments.

Remote Control Mode Version 5.81	
Current IMPRESS Module	
SH7055F.YIM	REMOTE
MCU TYPE MODEL CODE MICOM I	PACK No. Port No. @ REMOTE
(5) FH809 FH809 FH8	CEDIT
Parameter Lable 2 CF Card Infomation	File Transfer Communication
Host Interface Configuration Basic Operation Pa	rameter Table 1 Check
	10KEY
MCU Type (FUNC D8 FH809 (5)	
TVcc Threshold (FUNC D3) 4.5 [V] (6)	Execute YMN
Flash ROM (FUNC D6) (7) MCU Clock Frequency (FUN	C DF) 20.0 [MHz]
First Address 00000000 MCU Operation Mode (FUN	C D4) 0000 Save to HD
Last Address 0001FFFF WDT Clock Period (FUN	C D5) 20 [ms]
	ОК
Group No Start Address Block Size (byte)	Cannal
Group 1 00000000 00008000 C UART © CSI	Cancer
Group 2 00018000 00007000	Exit
Group 3 0001F000 00000400 C0 0 1 C2 C	3
Group 5	- Version
Group 6	Remote Control
Group 7	5.81
Group 9 CSI Baud Rate (FUNC D9	500K Control Module
Group 10	12.06
Group 11 BufferRAM Initialize Mode	(EEP
Group 12 (FUNC 9A) I	
Group 14 SUM Check Mode	8/8bit
(FUNC 9C) I	

(5) MCU Type

The default device name is displayed, which can be changed.

The name set up here will be displayed in the LCD of the NETIMPRESS main unit. ("FH809" is displayed in the above example.)

(6) TVcc Threshold

This is used to check whether the power of a target is turned on when the device functions are executed. Enter a value of about 90% of a target power supply voltage.

(7) MCU Clock Frequency

Enter operation clock of a target.

(8) Data Communication

This field is used to set up communication between a device and the NETIMPRESS programmer. Specify communication interface (UART or CSI) and set up baud rate.



10.3 File Transfer tab

The File Transfer tab is used to add a license, transfer a file required to set up programming and a programming object, and work with a YIM folder (create/select/copy/delete).

(9)				
Ender / File Liet	Remote Control Mode Versio	n 5.81		X
Find All View	Current IMPRESS Module SH705	5F.YIM		REMOTE
View : All Files and Folders	MCU TYPE FH809	MODEL CODE FH809	MICOM PACK No. Port No. FH809M00 TCP/IP	REMOTE C EDIT
• • • • • • • • • • • • • • • • • • •	Host Interface Configuration Parameter Table 2	Basic Operation CF Card Infomation	Parameter Table 1	Communication Check
	- IMPRESS Folder (10) Select YIM folder	Object Data To and From Buffer RAM (11) Load Object Data	Parameter Table To and From Control Module Load Parameter	10KEY Execute YMN
	Create YIM folder	Save Object Data	Save Parameter	Save to HD
	Copy YIM folder	Clear Buffer	Control Module	ОК
	Load YIM folder	To and From DOS Area Copy File (Load)	To and From Control Module Load Definition Program	Exit
	Save YIM folder	Copy File (Save) Purge File Purge All File	Save Definition Program	Version
	Save Log File	BufferRAM BufferArea (FUNC F5)	RAM DISK Area (FUNC FB)	5.81 Control Module
	Save All Log Files	First Address 00000000 Last Address 0001FFFF	First Address 00000000 Ram Disk Size 00000000	12.06 Firmware
	Purge All Log Files	Store Block	Object Data Format (FUNC 5)	13.02 Parameter 12.00

(9) Folder/File List Window

This field is used to display YIM folder and other files to create, select, copy or delete them.

YIM folders you have created are listed. ("SH7055F.YIM" is displayed in the above example.)

(10) IMPRESS Folder

This field is used to operate YIM folder and other files selected in Folder/File List Window.

For NETIMPRESS next, YIM folder of programmer can be saved on PC, or also you can transfer YIM folder in PC by clicking a button on this field.

(11) File Transfer

- **Object Data:** This field is used to transfer an object to program to buffer memory and save contents of buffer memory to a PC.
- **Bundle File:** This field is used to transfer the bundle files to the programmer and save them in a PC.
- Parameter Table: This field is used to transfer a parameter file (PRM) to the programmer and save it in a PC.
- **Control Module:** This field is used to transfer the definition program (CM) to the programmer and save it in a PC.

11 Impress Module Folder (YIM)

11.1 Folder Management

With the Control Module, you can save and maintain a programming object and programming environments data in a folder called Impress Module folder (YIM). The YIM folder created in the Control Module can be saved in a PC using the card reader, for example. You can build up exact same programming environments by sending the YIM folder to other work site to provide work instructions.

Note:

To share information by sending the YIM folder, the license for the same definition program has to be registered with the programmer.



YIM folder:

For details about the YIM folder, see Instruction Manual, Section 5.5 "Impress Module Folder Related".

.csb file:

For details, see Instruction Manual, Section 6.1.2 "EXE Key Setting".

By just sending the above two files to other work site, exact same programming environments can be built up.



11.2 Folder Configuration

- You can create more than one YIM folder in the compact flash and switch them with the function key. For details, see Chapter 8 "Creating Impress Module Folder (YIM)", Step (2).
- (2) BTP(* .BTP) file and a user OJB such as *.KEY, *.YSM, etc. are saved in the DOS area.
- (3) The buffer file (BUF.SYS) and the definition file (CM.SYS) of each one type are saved for YIM folder you have created.
- (4) Since CSB file is placed right under the control module as shown below, only one CSB file can be used for one control module.
- *For a file you have downloaded by pressing the Object Data button, you can switch it between keeping and clearing of Buffer RAM with [FUNC 9A]. For details, see the Instruction Manual.
- *You can view the file configuration on the window of the Remote Controller just as you work with Windows File Explorer.



(You cannot see the read-only area from REMOTE window.)



12 Key File

The security function is built in the firmware of a flash microcomputer to prevent a third person from reading and writing ROM illegally.

As the mechanism of the security function, a specific area of flash memory is set as an area to store an ID code, and whenever access is tried from a serial programmer, the same data with ID data written to the microcomputer is sent to the microcomputer as an ID code, and if they are found not matching, the access is not allowed. Therefore, access can be made only when you know what ID data is written to the microcomputer.

1. KEY file

The Key file is used to automatically issue an ID code to a microcomputer and unlock the security when the programmer executes the device functions. Address where ID data is stored, ID data size and value are saved in the Key file.

Download the Key file using the Copy File(Load) on the **Bundle File** field on the File Transfer tab and place it in the **YIM folder**.

2. Security methods (Common)

You can execute the standard security function in the following two ways:

- Specify security ID address and ID size.
- Specify only a range of security ID and select any address within a specified address range, and if data value of several bytes are matching, the security function is unlocked.
- * Since specifications of the security function differ depending on a microcomputer of each type, see the manual of the Micom Pack you use.

Creating a Key file

You can create a Key file using the Key File Generator AZ481.

To create a Key file, perform the following steps.

(1) Start up the AZ481.

File(F)	File Gener AddressSiz	ator e(<u>A</u>) O	lption(<u>O</u>)	Hel	þ(H)																	
			Fil	le:			K	E	Y	Fil	e	<u>Ge</u>	ne	ra	to	r					i	
No.	Address	Size	Тур	е	00	01	02	03	04	05	06	D : 07	ata 08	09	0A	0B	0C	0D	0E	0F	Title	-
1			HEX	-	Γ	Γ	Γ	Γ		Γ	Γ			Γ	Γ							_
2			HEX	*			Ĺ	Î	Î	Ē	Î	ĺ		Ì	Î				Ē	Î		
3			HEX	-				Î			ĺ				Î							
4			HEX	•																		
5			HEX	*																		
6			HEX	•																		
7			HEX	•							Γ											
8			HEX	*						Γ												
9			HEX	-																		
10			HEX	-																		1
	Address Sort	Off			•															•		



(2) Enter address where ID is stored, ID size and ID data value.

File(F)	/ File Genera AddressSize	ator [M e(<u>A</u>) (C	lodified))ption(<u>()</u>)	He	lp(Ӈ)																	
					_		K	E	YI	Fil	e	Ge	ne	ra	to	r					_	
			Fil	e:																		
No.	Address	Size	Тур	e	00	01	02	03	04	05	06	D 07	ata 08	09	0A	0B	0C	0D	0E	0F	Title	
1	0000608B	8	HEX	•	1E	C2	13	97	1A	15	B4	43										_
2			HEX	٠							Γ											
3			HEX	•																		
4			HEX	•][
5			HEX	•							Γ			Γ		Γ						
6			HEX	٠						\square				Γ								
7			HEX	•							Γ											
8			HEX	•						Г	Γ			Γ		Γ			Γ			
9			HEX	-																		
10			HEX	•																		-
					•															•]	

In the above example, 0000608B is entered as security address, 8byte as ID size and IEC213971A15B443 as data value respectively.

(3) Save KEY file

Select [File] \rightarrow [File Save]. Then, save the KEY file.

* Note that a Key file name has to be the same name with an object.

Example: Object file name: For TEST128K.MOT, set TEST128K.KEY for KEY file.



13 SUM Check Function of YSM file

This function is used to check a SUM value of data whenever executing the device functions so as to prevent programming illegal object data. This function is very useful in case data of an object to program is garbled all of a sudden.

By saving a SUM value of an object in YSM file, data is automatically checked by the NETIMPRESS.

When execution of the device functions is completed, a SUM value in YSM file is compared with a SUM value at a time of execution of the device functions. In case they are not matching, it results in an error with the message "YSM CHECK ERROR".

Download YSM file using the Copy File (Load) of **Bundle File** on the File Transfer tab and place it in the **YIM folder**.

■ Creating a YSM file

To create YSM file, perform the following steps.

- (1) Start up the Key File Generator AZ481.
- (2) Create YSM file Select [Address Sort Off] from Option on the menu bar, and enter the data. (Basically, enter only No. 1 and No. 2 lines.)
- No.1: Enter SUM value
- No.2: Flag to Check SUM/Do not check SUM

No. 1: data

Address = 00000000 (Fixed)

Size=1 (Size of SUM. For 1byte, enter "1", for 2byte, enter "2".)

Data = SUM (Calculate SUM value by using "BufferSUM" of Basic Operation of AZ490)



No.2: flag

Address = 00000000 (Fixed)

Size = 1 (Fixed)

Enter Data = " 01 " or " 00 " (Check SUM = 01, Do not check SUM=00)

File(F)	AddressSize	ator [N e(<u>A</u>) (lodified] Option(())	Hel	þ(H)															X	l	
							K	E	<u>Y</u>]	Fil	e	Ge	ne	ra	to	r							
			File	:	[Í		
No.	Address	Size	Туре		00	01	02	03	04	05	06	D 07	ata 08	09	0A	0B	0C	0D	0E	0F	Title	Ι.	
1	00000000	1	HEX	•	47	┢	E	E													<u> </u>	Н	NO 1
2	00000000	1	HEX	•	01	Ļ		L				Ļ			Ļ		L	Ļ	L				NO.1
3			HEX	-	Ļ,	Ļ	Ļ	Ļ	Ļ	Ļ	L	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ		11	
4	<u> </u>		HEX	_	H	┢	Ļ	Ļ	┢	Ļ	L	Ļ	Ļ	Ļ	Ļ	L	Ļ	Ļ	Ļ	Ļ			
2	<u> </u>	<u> </u>	HEX	-	┡	┢	┢	┡	┢	Ļ	L	Ļ	Ļ	Ļ	Ļ	L	Ļ	Ļ	L	Ļ			
0		<u> </u>	HEX	-	┝	┢	┢	⊢	┢	L	L	┢	<u> </u>	Ļ	┢	<u> </u>	Ļ	L	L	Ļ			
/	<u> </u>	<u> </u>	HEX	-	ļ.	╞	Ļ	Ļ	┢	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	<u> </u>	<u> </u>	Ļ	Ļ	Ļ			
8			HEX	•	Ļ,	Ļ	Ļ	Ļ	Ļ	Ļ	L	Ļ	Ļ	L	Ļ		L	Ļ	Ļ	Ļ			
9			HEX	•	Ц	Ļ	Ļ	Ļ		Ļ	L	Ļ			Ļ		Ļ	L	Ļ	Ļ			
10			HEX	•	L,			L															
	Address Sort	Off			4															F			
					+																		
			[NC	D.2																	

* For SUM check of YSM file, there is also a function to check the data in the certain area of buffer memory. It is useful to check the version of file. For details, see a manual of NET IIMPRESS main unit.

(3) Save YSM file

Select [File] \rightarrow [File Save]. Then, save the YSM file.

Select YSM File(*.YSM) for the file type.

* Note that YSM file name has to be the same name with an object.



14 CSB File

A CSB file is used to execute command sequence. Execution sequence of a CSB file is assigned to the two EXE keys on the upper part of the NETIMPRESS main unit.



• About the specifications of a CSB file

A CSB file can be edited with a text editor. After editing, specify any name and save it with extension "csb".

Only one CSB file can be placed in the root directory of the Control Module. Up to 16 commands can be assigned.

About the format of a CSB file

The table below lists the format to set up a CSB file.

(1)	(2)	(3)		(4)						(5)	(6)
LK1	,	CNT	,	C1	,	C2	,	 ,	C16	;	Comment
LK2	,	CNT	,	C1	,	C2	,	 ,	C16	;	Comment

- (1) KEY No: LK1 = EXE1, LK2 = EXE2
- (2) ", "(1byte): Command delimiter
- (3) CNT: the number of commands executed (in decimal)
- (4) Command
- (5) "; " (1byte): Comment delimiter
- (6) Comment: Describe comment (Any byte size + CRLF)
- * Break is necessary at the end of line of LK2.
- * If you cannot allocate the function to neither EXE1 nor EXE2, set 00 the number of execution command (CNT). You cannot omit the whole line starting with LK1 or LK2.



About CSB file

(1) Sample 1 (the standard sample: Test.csb)

The standard CSB file named "Test.csb" is provided, which contains the following.

• Sequence to be executed:

EXE1= Execute ERP

EXE2= Execute PR

* To execute the above command sequence, a YIM folder has to be selected in advance.

LK1,01,DF;EPR

LK2,01,DD;Program

(2) Sample 2

• Sequence to be executed:

EXE1 = Load a specified YIM folder

EXE2 = Execute ERP

LK1,01,FB0 (SH7058RED.yim);CHANGE YIM

LK2,01,DF;E.P.R

When "EXE1" is pressed, SH7058RED.YIM is loaded as a current IMPRESS Module.

When "EXE2" is pressed, EPR is executed on contents of SH7058RED.YIM to a target.

(3) Sample 3:

• Sequence to be executed:

EXE1 = Program the two YIMs continuously

EXE2 = Execute Erase

- This command sequence can be used in the following two cases:
 - To program external flash memory dividing in two parts of the first half and second half
 - To program both of internal flash memory and external flash memory on a board connected with external flash memory connected to a microcomputer

LK1,04,FB0(SH7750R01.yim),DF,FB0(SH7750R02.yim),DF;2file sequence EPR LK2.01.DC;Erase



• When "EXE1" is pressed:

SH7750R01.YIM (the first half of external flash memory) is loaded as the current IMPRESS Module.

EPR is executed on contents of SH7750R01.YIM to a target.

SH7750R02.YIM (the second half of external flash memory) is loaded as the current IMPRESSS Module.

EPR is executed on contents of SH7750R02.YIM to a target.

• When "EXE2" is pressed:

Flash memory of a target is erased.