

NETIMPRESS

Network Compatible in-circuit Flash Micom Programmer for Embedded Smart Systems

G-NETIMPRESS

Instruction Manual

DTS INSIGHT CORPORATION

INSTRUCTION MANUAL

Publication History

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Compatibility with MegaNETIMPRESS/C"arNETIMPRESS-Series

This G-NETIMPRESS is compatible with the MegaNETIMPRESS/C"arNETIMPRESS series.

The control module for the MegaNETIMPRESS/C"arNETIMPRESS-series can be used for the G-NETIMPRESS as it is.

When using a CAN interface, it is necessary to prepare a programmer unit dedicated to the CAN (AF730) or an optional CAN adaptor (AZ450-S01/GI or AZ450-S11/GI) (sold separately) for the AF720.

- * The conventional products have been applicable to the TVpp output, but the G-NEIMPRESS is not applicable to it.

Important Notice about This Manual

This manual is the Instruction Manual for G-NETIMPRESS.

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Ensuring Safety Use of Flash Programmer

In order to ensure the proper and safety use of Flash Programmer, please be sure to follow the safety caution mentioned below as operating Flash Programmer. DTS INSIGHT CORPORATION has no responsibility nor guarantee for any injuries which occur as a result of the violation of these safety caution and warnings.

- Following safety-related symbols are used on Flash Programmer and its instruction manual for a safety use.



It indicates not only that there is a danger to humans as well as to the equipment, but also that it is necessary to refer to the instruction manual.



It indicates a safety ground terminal. As this terminal is on the main unit, please be sure to connect this terminal to the ground before operating.

WARNING In order to avoid the risk of death or serious injury which may occur as a result of an incorrect use.

CAUTION In order to avoid the risk of minor injury or material damage which may occur as a result of an incorrect use.

- To avoid the risk of death or serious injury to users, such as electrocution or any other accidents, as well as the risk of damage to Flash Programmer, please follow the warnings mentioned below.



WARNING

- Use in Chemical Gases
Do not use Flash Programmer in an environment where are combustibile or explosive gases or steam. Using Flash Programmer in such environment is extremely dangerous.
- Power cord and plug
To prevent electric shock or other hazard, be sure to use only the power cord for this machine supplied by DTS INSIGHT CORPORATION. Ground the power plug to only an power outlet with the protective grounding terminal. If an extension cord without the protective grounding line is used, the protective operation becomes invalid.
- Power Supply
Confirm that the supply-side voltage matches to the rated power supply voltage for this machine. Also ensure that the power supply switch (on the rear panel) of Flash Programmer is switched "OFF" before connecting to the power cord.
- Removing the Case
Only qualified service engineers should remove the case of Flash Programmer because of the high voltage.
- External connection
Connect Flash Programmer to the target system after the protective grounding has been performed securely.

Making the Most of Flash Programmer

The Flash Programmer is an electronic device which consists of high-precision electronic components. Please be sure to understand and follow the caution listed below in order to avoid any accidents and as well as to make the most of your Flash Programmer.

1. Switch ON / Switch OFF Sequence

CAUTION

- Refer to the Switch ON / Switch OFF sequence below regarding Switch ON and OFF of the host computer, Flash Programmer, and the target system.
- The Switch ON / Switch OFF sequence should be followed in order to avoid major damages to the target system and Flash Programmer itself. (especially between Flash Programmer and the target system.)
 - <Power Up Sequence>
 - (1) Host computer
 - (2) Flash Programmer
 - (3) Target system
 - <Power Down Sequence>
 - (1) Target system
 - (2) Flash Programmer
 - (3) Host computer

2. Connecting the Probe and Connector

CAUTION

- Switch OFF the power supply of Flash Programmer and the target system before plugging in or unplugging any probes or cables.
- Switch OFF the power supply of Flash Programmer and the target system before installing or removing the base unit (AF710) and programmer unit (AF720 or AF730).
- All connectors and cables are designed to prevent an incorrect connection. Never force them to plug in nor unplug. Confirm the position and direction.

3. Disassembling Flash Programmer

CAUTION

- Since Flash Programmer contains printed circuit boards with minute patterns, never remove screws or disassemble Flash Programmer.

IMPORTANT

Thank you for your purchasing of this Flash Programmer “G-NETIMPRESS”. To make the most of Flash Programmer, please read and understand this Instruction Manual before use. After reading the instruction manual, please keep it for the further reference whenever required. Please ensure that Flash Programmer should be used only by persons who have read and understood the instruction manual. We strongly recommend that the first-time users receive an proper instruction from those who have a good knowledge of Flash Programmer.

What is Flash Programmer?

The Flash Programmer refers to the Flash Programmer main unit, control modules, and other related products manufactured by DTS INSIGHT CORPORATION. The target system and the host computer are strictly excluded.

Flash Programmer is an electronic device which consists of the high-precision electronic components. In order to make the most of Flash Programmer and also to prevent any accidents, please follow the caution listed below.

A certain repair fee is required regarding the equipment damages resulted from an incorrect use or connection, etc. Please aware that it may require a few months for repairs. Regarding software products and manuals, DTS INSIGHT CORPORATION guarantees only if there are any damages of media provided by DTS INSIGHT CORPORATION, manual defects or trouble executing the program installation.

If proved that there are bugs or that there are problems apart from those listed above, the action will be taken based on the maintenance agreement.

WARNING

Be sure to Switch OFF the power supply of Flash Programmer and the target system before plugging in or unplugging any cables between Flash Programmer and the target system.

Be aware that plugging in or unplugging any cables while the power supply is ON, may result in an explosion or ignition of Flash Programmer or the target system.

Before Switching ON the power supply, be sure to confirm whether the direction of Pin 1 in the probe tip matches to Pin 1 Socket in the target system.

An incorrect connection may result in an explosion or ignition of Flash Programmer or the target system.

CAUTION

As particular parts of electronic circuits in the probe tip are exposed, Flash Programmer should be used only in environments where are protected from a static electricity.

Using Flash Programmer in such environment as without static electric protection, may result in destroying Flash Programmer or the target system.

The Switch ON / OFF sequence should be followed. Flash Programmer should be switched ON prior to the target system and remained ON while Switch ON / OFF of the target system power supply. An incorrect Switch ON / OFF sequence may result in a serious damage to Flash Programmer or the target system circuits.

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1. Overview and Features

This G-NETIMPRESS is a Flash Micom Programmer that supports the simultaneous writing of multiple units (up to eight units). The G-NETIMPRESS consists of two products, base unit (AF710) and programmer unit (AF720 or AF730).

Through using the microprocessor-specific control modules (optional compact flash (CF) cards) the G-NETIMPRESS can support programming specifications for different types of microprocessors with embedded flash ROMs.

CAUTION

This G-NETIMPRESS is not compatible with the conventional AF200 and NETIMPRESS. Therefore, you cannot use the control module (SRAM card) used for the conventional AF200 and NETIMPRESS.

Features

1. The G-NETIMPRESS can support the programming specifications for all types of microprocessors using the microprocessor-specific control modules (optional compact flash (CF) cards).
2. The user system can connect to the G-NETIMPRESS using microprocessor-specific target probes (option). The target microprocessors can be programmed while they are mounted and soldered on the user system.
3. Remote control from the host computer can be performed using an Ethernet interface. This enables file transfer and programming parameter changes.
4. As the G-NETIMPRESS can be connected using Ethernet it can be connected to a network and used to build a system. The G-NETIMPRESS can be easily used to remotely control application software created at customers' sites using remote control package AZ491 (optional software which uses Microsoft's COM). The user can upgrade the G-NETIMPRESS to handle automatic programming systems.
5. High speed flash memory programming.
6. High speed search for modified data.
7. Modification information can be saved on the compact flash (CF) cards in the form of modification files for the original programming information files.

2. General Precautions

- (1) Only use AC adapters that DTS INSIGHT CORPORATION has approved. When you connect the power cord to the outlet, make sure that the Power Switch has been turned off.
- (2) Do not use the G-NETIMPRESS in dusty areas, where there is direct sunlight, or where corrosive gas is generated.
- (3) Use the G-NETIMPRESS in an environment with a temperature between 5 and 40°C and between 20 and 80% humidity.
- (4) If there is noise in the AC current line then use a noise filter to eliminate the noise.
- (5) Turn off the G-NETIMPRESS power switch before replacing the control modules.
- (6) The procedure for turning the power on is to turn the G-NETIMPRESS on first and the user system second. The power should be turned off in the reverse order.
- (7) The G-NETIMPRESS can be operated with the compact flash (CF) cards connected to the specified compact flash (CF) card connector.
The G-NETIMPRESS can not be operated with the compact flash (CF) cards removed.
- (8) Be sure to switch OFF the power supply before installing or removing the programmer unit (AF720 or AF730) onto/from the base unit (AF710).

Visit our home page for information about how to use the this equipment and related products and for the latest information.

Flash Programmer home page:

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

3. Unpacking, Part Names, and Functions

3.1. Checking the Package Contents

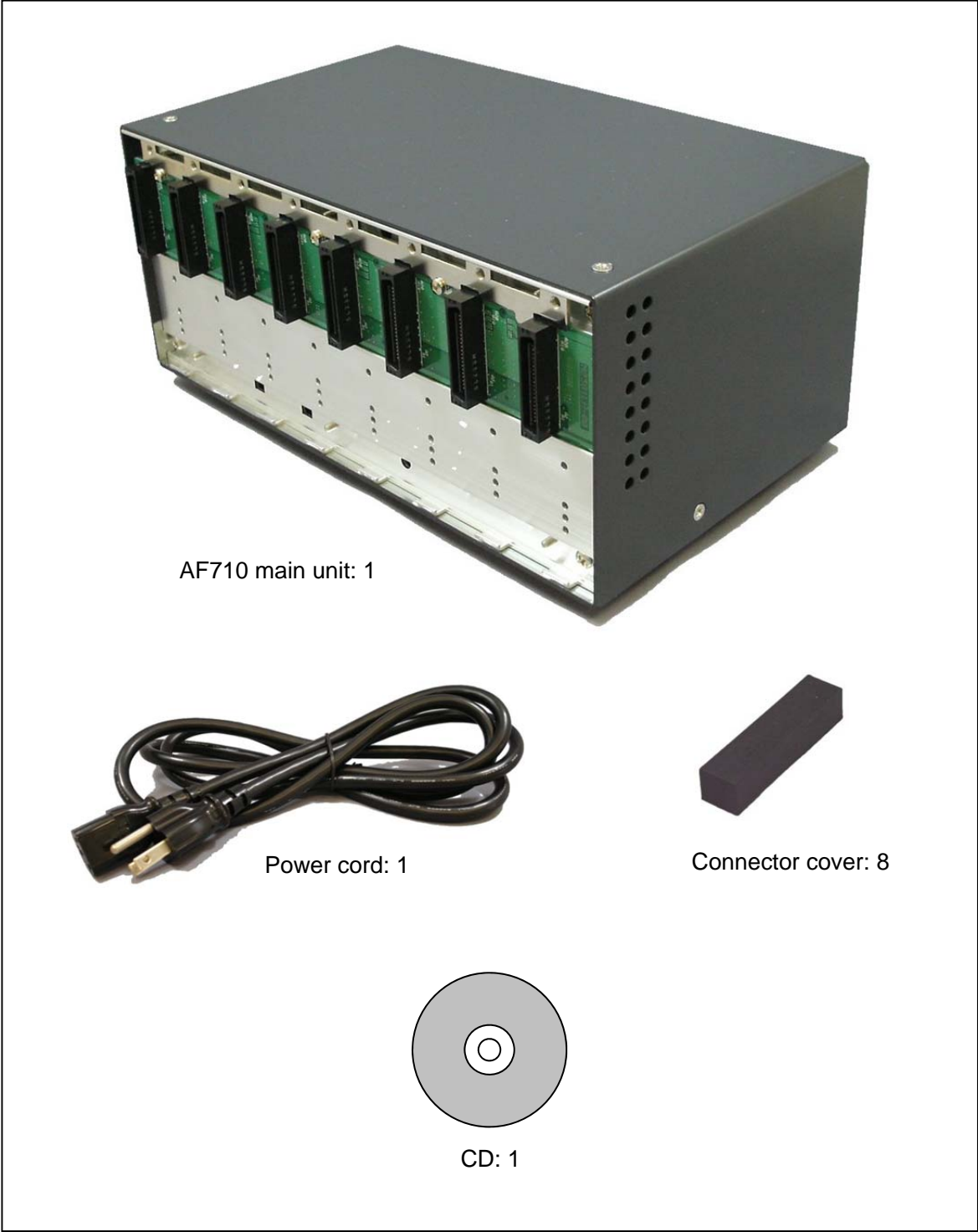
For details about the package contents, see the next page onward to check the contents.

The packing box will be reused for the maintenance service. So, store the box carefully.

The packing has been made with great care. However, if any trouble is found in the package contents, please contact a distributor or our Sales Department.

3.1.1. Checking the Package Contents of the Base Unit (AF710)

When you have purchased the base unit (AF710), the packing box contains the units shown in the figure below. Please check the contents.



3.1.2. Checking the Package Contents of the Programmer Unit (AF720)

When you have purchased the programmer unit (AF720), the packing box contains the units shown in the figure below. Please check the contents.



3.1.3. Checking the Package Contents of the Programmer Unit (AF730)

When you have purchased the programmer unit (AF730), the packing box contains the units shown in the figure below. Please check the contents.



4. Base Unit (AF710)

4.1. Basic Specifications

The basic specifications of the base unit (AF710) are as follows.

Please also refer to the section, Programmer Unit (AF720 or AF730).

Item	Specifications
Interface	[Host interface] ETHERNET (10BASE-T/100BASE-TX, Auto-Negotiation, Auto MDI/MDI-X) 9-port HUB is built-in.
Operating conditions	[Temperature] 5 to 40°C [Humidity] 20 to 80% (No dew condensation allowed.) [Others] There are no vibration and impact.
Electrical specifications	[Power supply] AC 100 to 240V [Power consumption] Max. 200 VA
Mechanical specifications	[Outside dimensions] 234 (W) × 140 (D) × 100 (H) [Weight] 2.8 kg



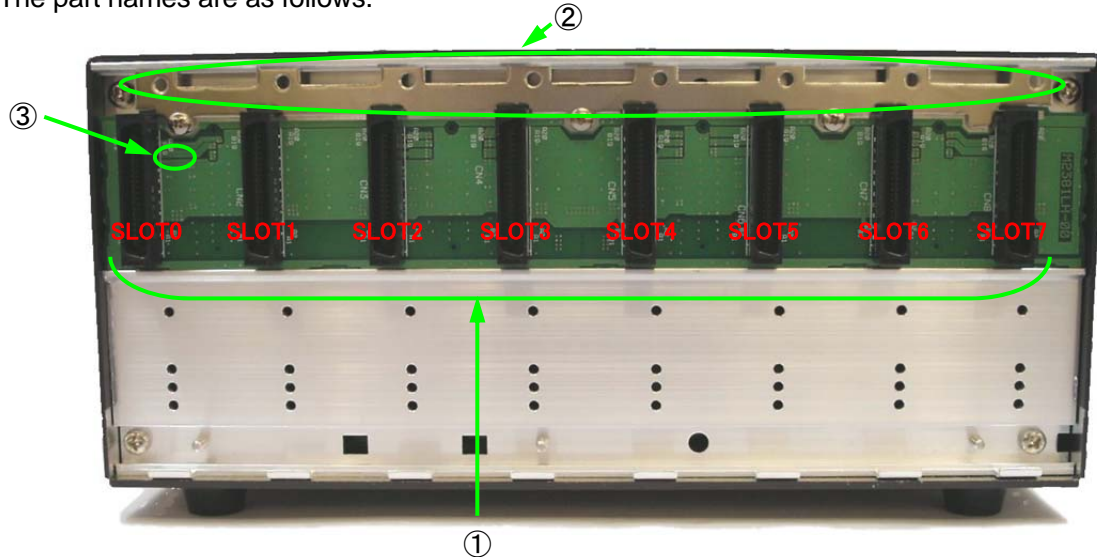
CAUTION

The power cable suitable for the power supply specifications of the sales country is supplied with the base unit.
If you use the base unit in a country other than the sales country, check the power voltage and outlet shape of the country where you want to use the base unit and purchase the power cable that conforms to the standards of the country.

4.2. Part Names and Functional Description

4.2.1. Front Panel

The part names are as follows.



- ① Programmer unit connector
Connect the programmer unit (AF720 or AF730) to this connector. There are slots, SLOT0 to 7.
Be sure to connect the programmer unit (AF720 or AF730) to SLOT0.
2nd or subsequent unit can be connected to any of SLOT1 to 7.
- ② Programmer unit fixing screw holes
Use the screws (M4 × 12) supplied with the programmer unit (AF720 or AF730) to secure the programmer unit (AF720 or AF730) to the base unit (AF710).
- ③ Power LED
This LED is lit while the power is supplied to the base unit (AF710)



CAUTION

Switch OFF the power supply of Flash Programmer and the target system before installing or removing the base unit (AF710) and programmer unit (AF720 or AF730).

Do not connect a unit other than the programmer unit (AF720 or AF730) to SLOT0 to 7.

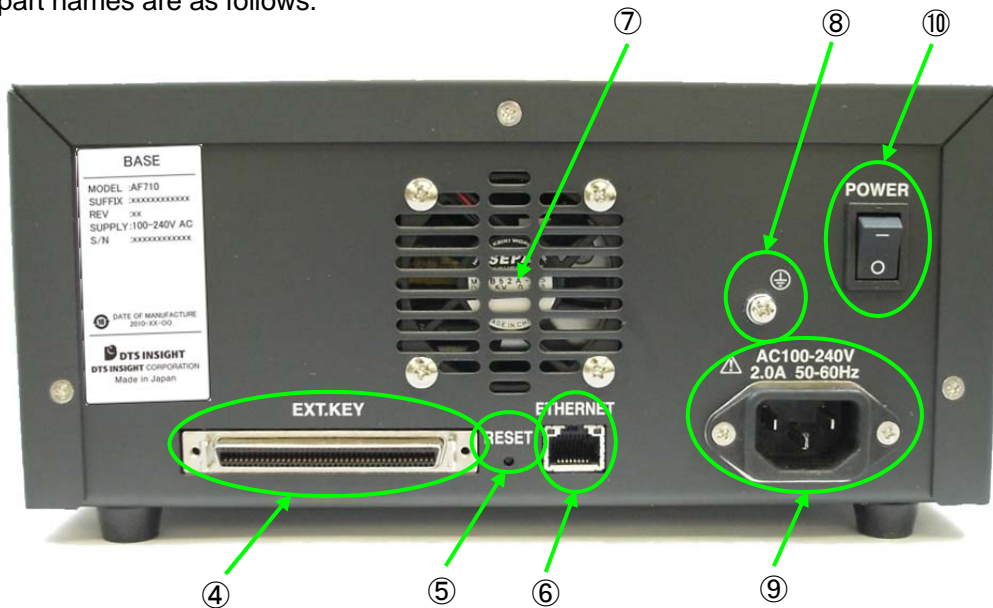
Be sure to attach the connector covers supplied with the programmer unit to SLOTS, to which the programmer unit (AF720 or AF730) is not connected.

Be sure to secure the programmer unit (AF720 or AF730) to the base unit (AF710) with the screws supplied with the programmer unit (AF720 or AF730).

When the programmer unit (AF720 or AF730) is connected, check the power supply status using the LED on the programmer unit (AF720 or AF730).

4.2.2. Rear Panel

The part names are as follows.



- ④ External contact input/output connector
This connector is intended to connect an optional (separately sold) external contact input/output cable (AZ723).
- ⑤ RESET switch
Pressing this switch will put the base unit in its initial status (status immediately after the POWER switch has been turned ON).
All connected programmer units (AF720 or AF730) are put in their initial statuses (status immediately after the POWER switch has been turned ON).
- ⑥ ETHERNET
This connector is intended to connect the base unit to the Ethernet.
- ⑦ Cooling fan blow port
This port is a cooling fan blow port. To prevent malfunction or trouble, never block this port during operation.
- ⑧ Grounding terminal
As the base unit is grounded with the host computer or target system, the noise-proof property may be improved.
- ⑨ Inlet
Connect the power cord supplied with the base unit to this inlet. Be sure to connect the power plug to a 3-pole type outlet with the grounding terminal.

⑩ POWER switch

This switch is intended to turn ON or OFF the power.

Enlarged drawing of POWER switch



ON



OFF



CAUTION

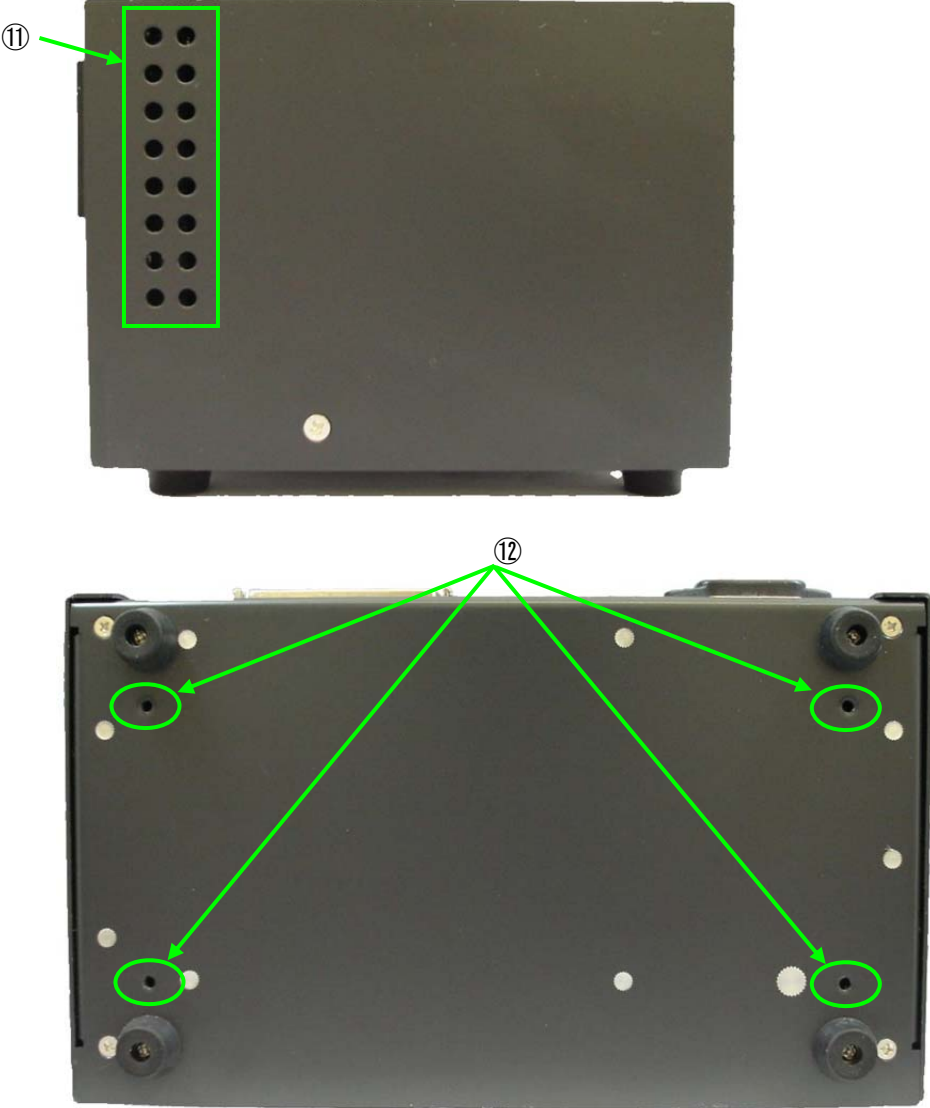
Be sure to operate the base unit under the specified power supply conditions. If the base unit is operated under the conditions other than those specified, this may cause damage to the G-NETIMPRESS.

If the power LED on the base unit (AF710) (or the LED on the programmer unit (AF720 or AF730)) is not lit, incorrect connection or short-circuit status may be the cause. Immediately turn OFF the POWER switch, check the connection of each cable, and that the power is supplied to the outlet properly. After that, turn ON the POWER switch again.

If any odor or smoke is found after the power has been turned ON, immediately turn OFF the POWER switch, disconnect the power cable, and contact our Maintenance Service Division.

4.2.3. Side Panel/Bottom Panel

The part names are as follows.



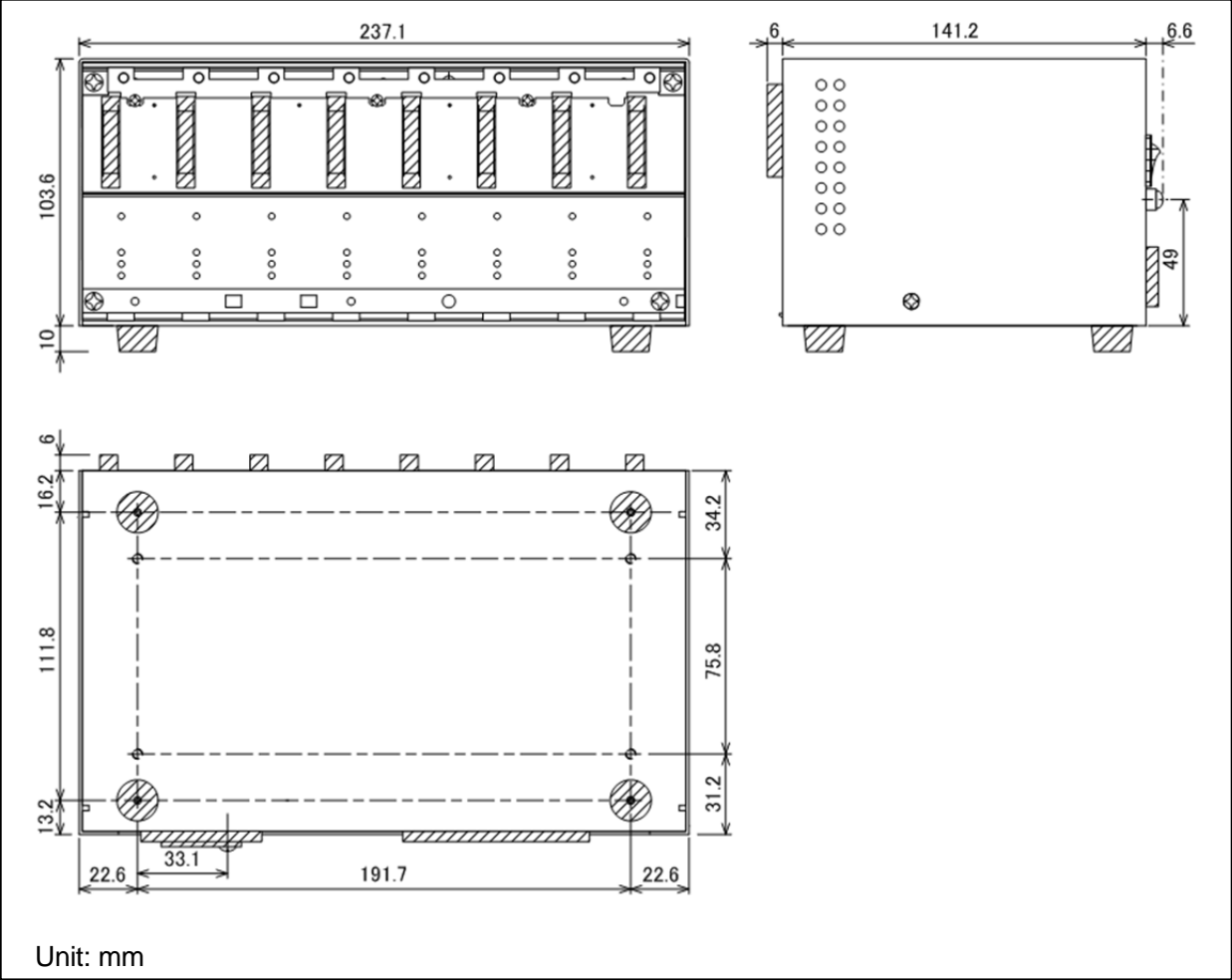
- ⑪ Air intake port
This port is an air intake port.
When installing the base unit, be careful not to block this air intake port.

- ⑫ Base unit (AF710) fixing screw holes (4 locations)
These screw holes are used to secure the base unit (AF710).
Use the M4 screws for these screw holes.

4.3. Mechanical Conditions

4.3.1. Outside Dimensions

Outside dimensions of base unit (AF710)



4.4. External Key Entry Interface

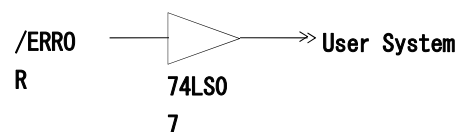
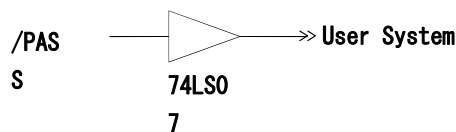
To use the external key entry interface, be sure to use the external contact input/output cable (AZ723).

4.4.1. Signal Table

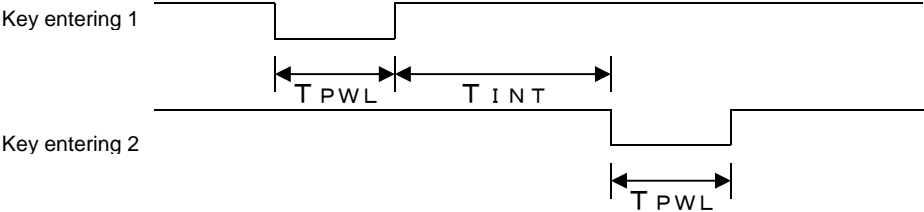
The signals shown below are common to SLOT0 to 7.

Signal Name	Definition	Rating
RST+ /USR_CLR	RESET KEY + terminal User clear signal	
RST- GND	RESET KEY - terminal SIGNAL GND	
EXE1+	EXE1 KEY + terminal	
EXE1-	EXE1 KEY - terminal	
EXE2+	EXE2 KEY + terminal	
EXE2-	EXE2 KEY - terminal	
/ERROR	PASS status output signal =LOW: Abnormal end =HIGH: Other than above	VOH=30V (max.) IOL=48mA (max.)
/PASS	ERROR status output signal =LOW: Normal end =HIGH: Other than above	VOH=30V (max.) IOL=48mA (max.)
Reserved	Spare signal	
Reserved	Spare signal	

- * The EXE1 is equivalent to the EXE key of the programmer unit (AF720 or AF730).
- * By shorting the positive terminal and negative terminal of each signal the applicable key on this equipment keyboard will go in a pressed state.
- * Do not connect any signal to the reserved terminals since they are controlled inside the Programmer.
- * The "/PASS" and "/ERROR" signals are open-collector outputs.
The following shows the output circuits.



4.4.2. Timing Specifications



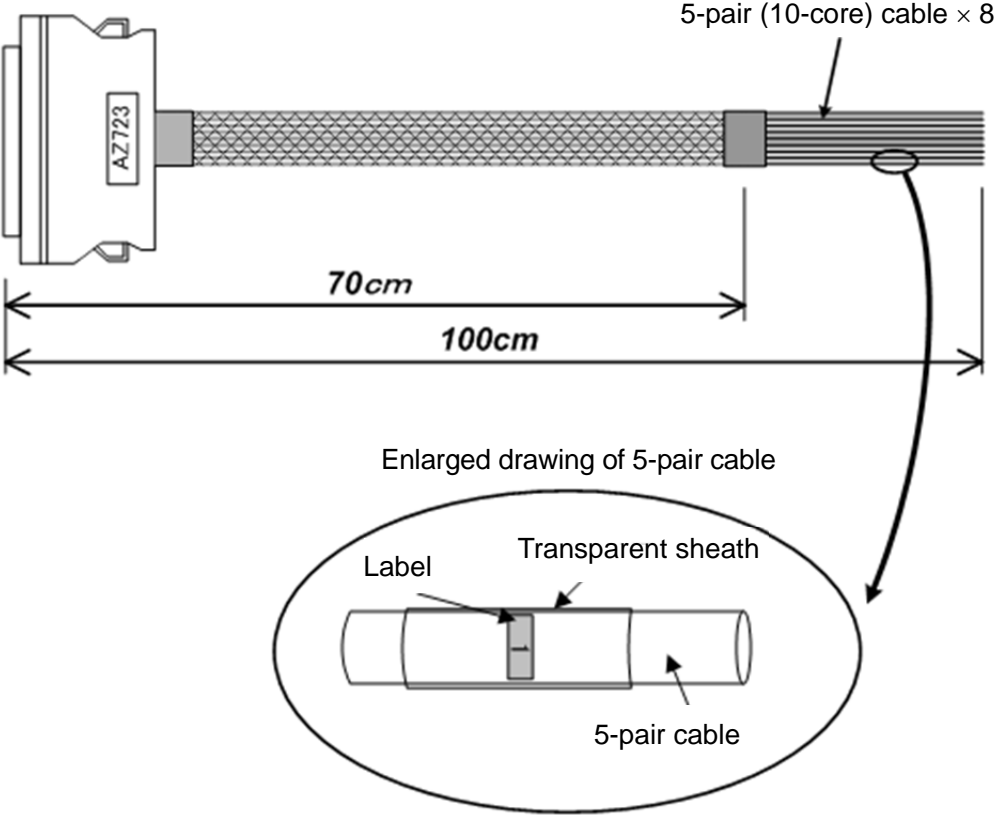
	Minimum	Maximum
T_{PWL}	30ms	200ms
T_{INT}	30ms	∞

4.4.3. External Contact Input/Output Cable (AZ723)

AZ723

G-NETIMPRESS - Side

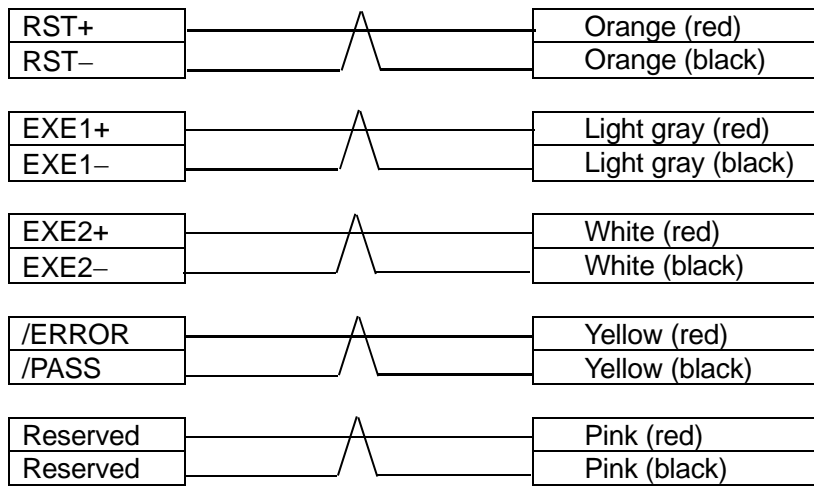
User System - Side



Labels 0 to 7 are adhered to 5-pair (10-core) cables.
The label number corresponds to relevant slot No.
Only the cable with the slot No. connected to the programmer unit (AF720 or AF730) is used.

Wiring diagram

The following diagram is common to all 5-pair (10-core) cables 0 to 7.



5. Programmer Unit (AF720 or AF730)

5.1. Basic Specifications

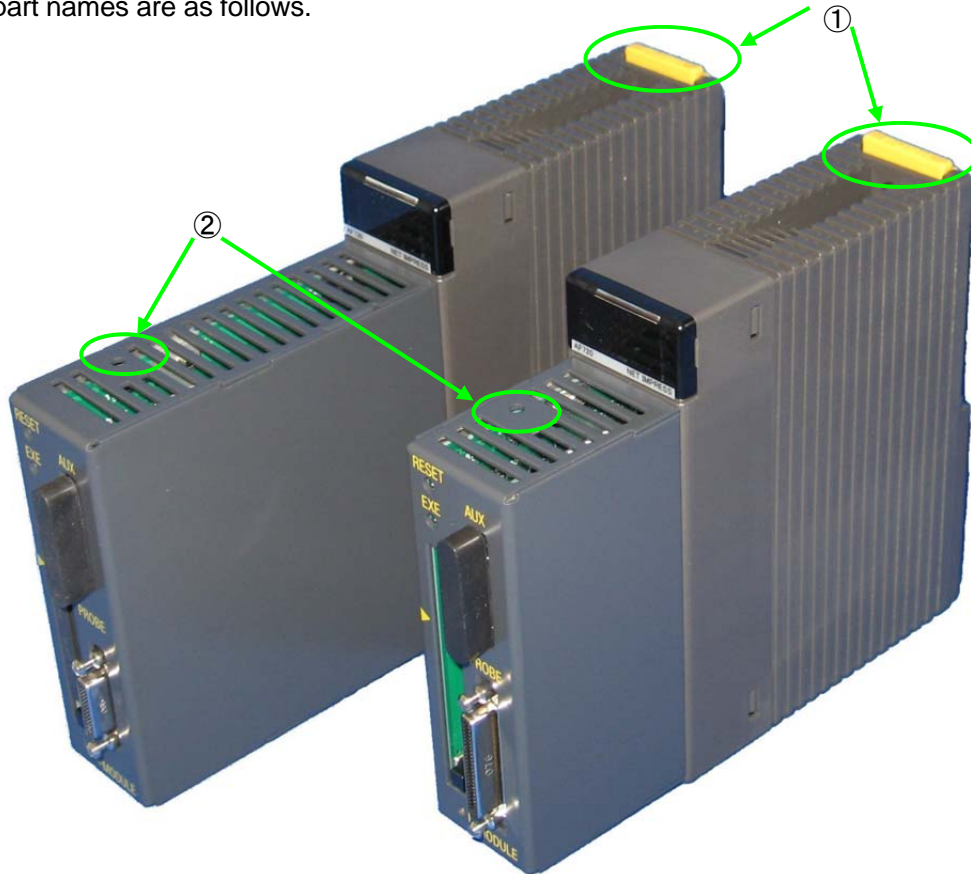
The basic specifications of the programmer unit (AF720 or AF 730) are as follows.
Please also refer to the section, Base Unit (AF710).

Item	Specifications
Operating conditions	[Temperature] 5 to 40°C [Humidity] 20 to 80% (No dew condensation allowed.) [Others] There are no vibration and impact.
Electrical specifications	[Outside dimensions] AF720: 29(W) × 128(D) × 100(H) AF730 29(W) × 168(D) × 100(H) [Weight] AF720: 180g AF730: 220g

5.2. Part Names and Functional Description

5.2.1. Upper Panel/Front Panel

The part names are as follows.



① PUSH

Pressing this portion will release the lock.

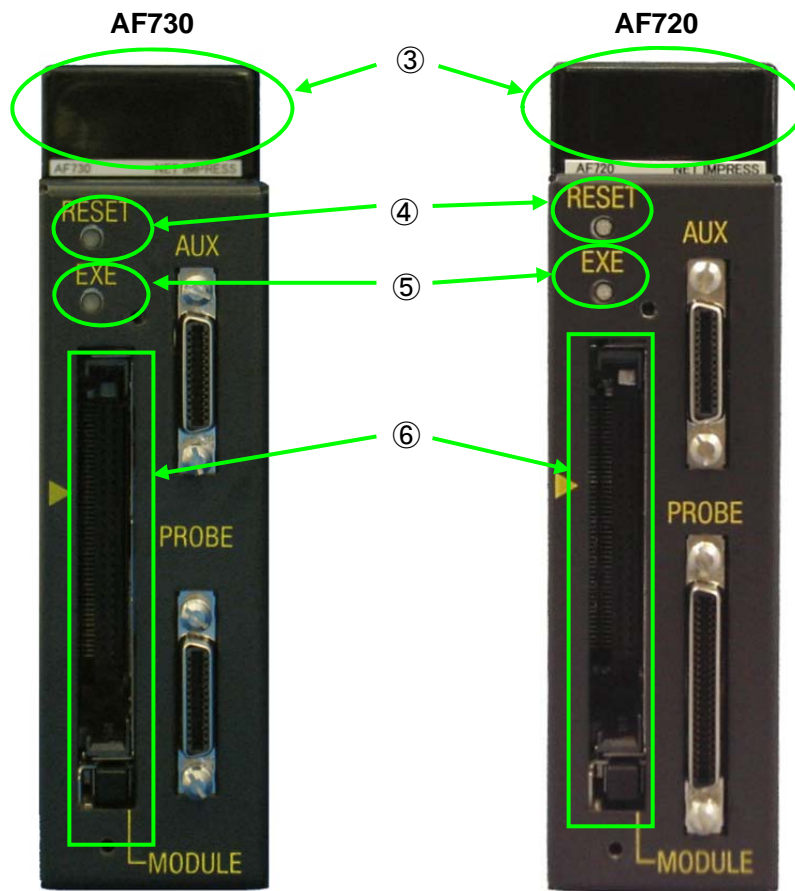
For details, see Chapter 6, “Assembling the Base Unit (AF710) and Programmer Unit (AF720 or AF730)”.

② Reset switch

Pressing this switch will put the programmer unit in its initial status (status immediately after the POWER switch has been turned ON).

Even when multiple programmer units (AF720 or AF730) are connected, only the programmer unit (AF720 or AF730) with this switch pressed enters its initial status (status immediately after the POWER switch has been turned ON).

Other programmer units (AF720 or AF730) without pressing this switch will continue the operation.



③ LED

This LED shows the status of the programmer unit (AF720 or AF730).
For details, see Section 5.3, “LED Display”.

④ RESET key

This RESET key is used to clear the operation interruption or error display. The remote operation is also cancelled at the same time.

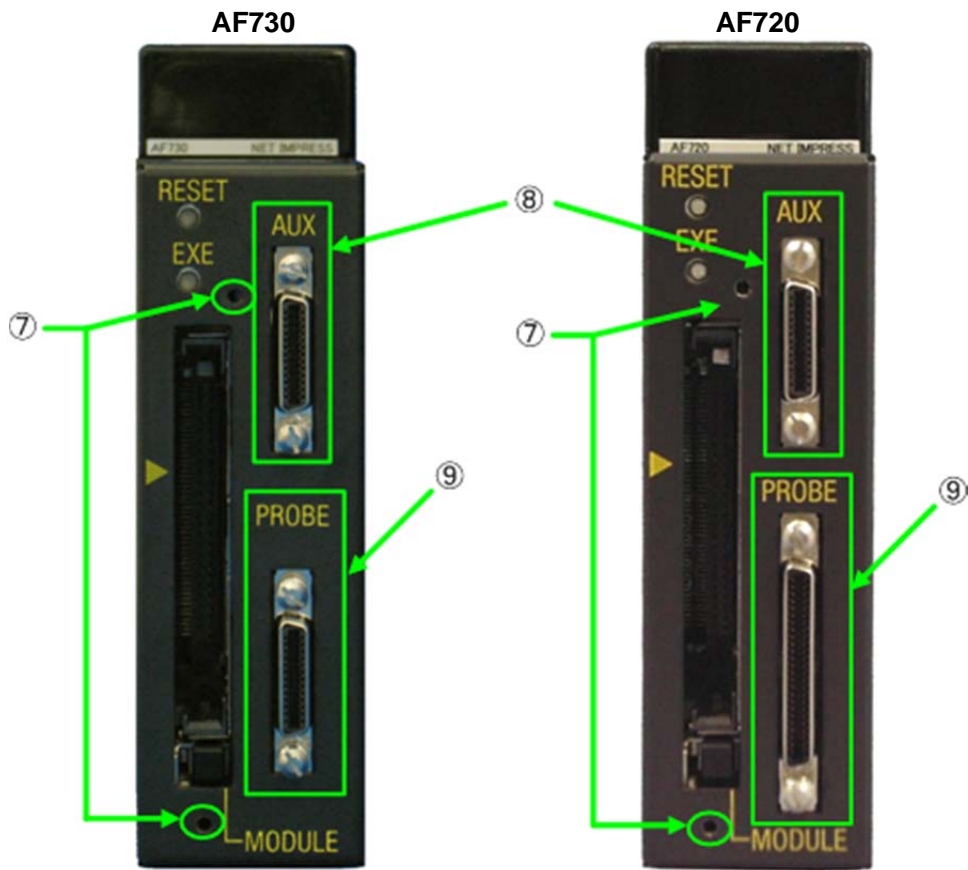
⑤ EXE key

Various commands can be assigned to the EXE key. For details, see Chapter 8, “Command Sequence Function”.

⑥ Module

The control module is inserted into this slot.

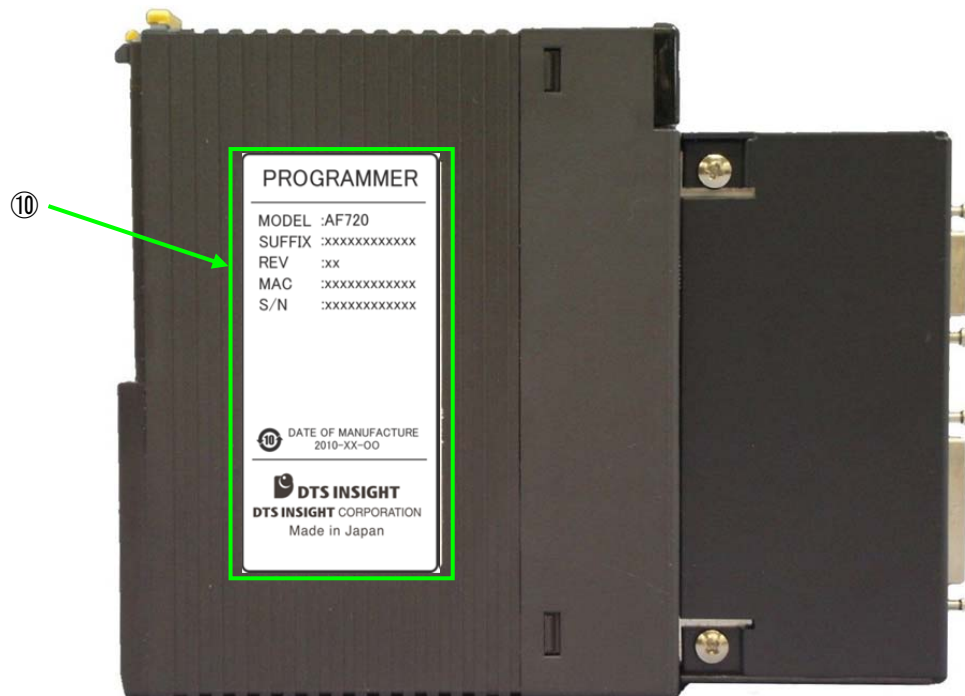
The control module does not operate correctly unless the compact flash (CF) card dedicated to Flash Programmer is used.



- ⑦ Module cover mounting screw holes
These screw holes are intended to mount the module cover supplied with the programmer unit. Use the screws (M2 × 4) supplied with the programmer unit to mount the module cover.
- ⑧ AUX connector
An optional maintenance unit (AZ700) (sold separately) is connected to this connector. Do not connect any unit other than the maintenance unit (AZ700).
- ⑨ Target probe connector
The probe necessary to connect the target system is connected to this connector.

5.2.2. Side Panel

The part names are as follows and common to the AF730.



⑩ Nameplate label

This label is a nameplate label.

The MAC address necessary to connect to the host computer is described.

For details, see Chapter 7, "Connecting with the Host Computer".

5.3. LED Display

5.3.1. Description of LED

The operation status of the programmer unit (AF720 or AF730) is displayed using four LEDs, “RDY”, “RUN”, “PAS”, and “ERR”.

Each LED has the meaning, but it also has other meaning depending on the LED combination. For details about the lighting status of LED combination, see Section 5.3.2, “LED Lighting Status during Operation” and section 5.3.3, “LED Lighting Status in Case of Error”.

All LEDs lighting status



LED name	Description
RDY	Lit when waiting for command or key entry.
RUN	Lit while the device function is running.
PAS	Lit when the device function is terminated successfully.
ERR	Lit when the device function is terminated with error.



Any or four LEDs or multiple LEDs are lit when the power is supplied to the programmer unit (AF720 or AF730). If the power is not supplied, all LEDs are off.

Switch OFF the power supply of Flash Programmer and the target system before installing or removing the base unit (AF710) and programmer unit (AF720 or AF730). Install or remove the control module with Flash Programmer powered OFF.

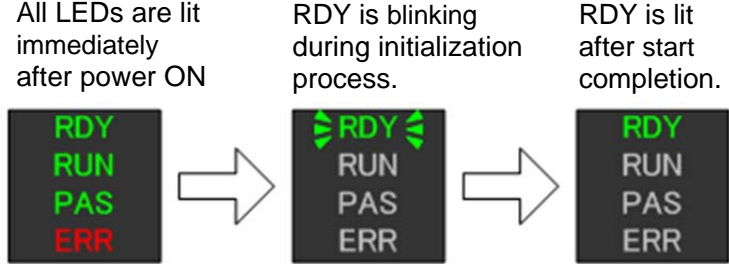
Switch OFF the power supply of Flash Programmer and the target system before connecting or disconnecting the cable to/from each connector.

Be sure to secure the programmer unit (AF720 or AF730) to the base unit (AF710) with the screws supplied with the programmer unit (AF720 or AF730).

5.3.2. LED Lighting Status during Operation

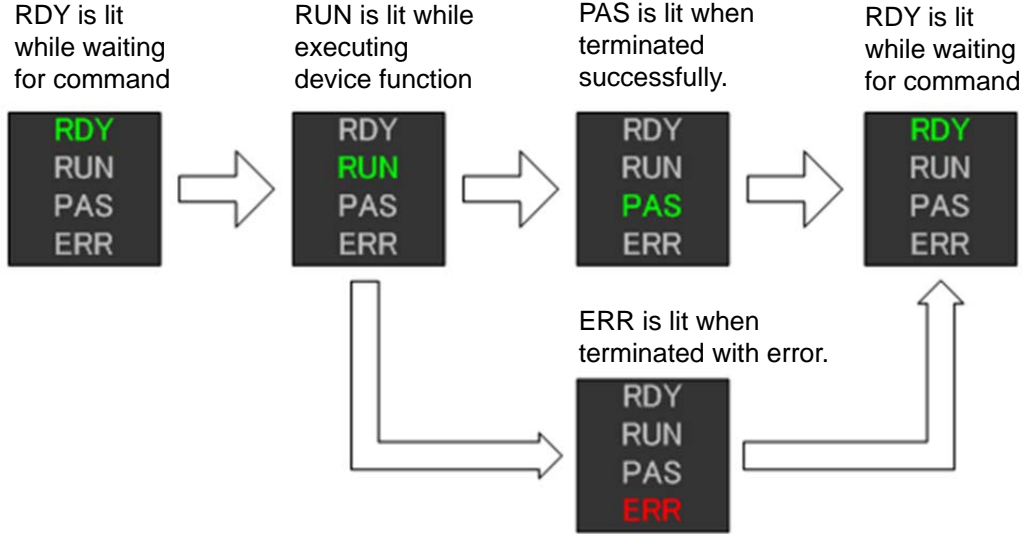
The following describes the LED lighting status during operation.

① From power ON to start completion



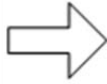
② Executing the device function or one-action key

After terminated successfully (terminated with error), the programmer unit enters the command wait status (RDY is lit) by the reset key entry or next command issue.

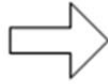


③ Changing the YIM folder

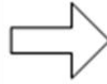
RDY is lit while waiting for command.



RUN is lit while the YIM folder is changing.



RDY is blinking when the YIM folder changing is completed.

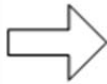


RDY is lit while waiting for command.

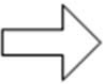


④ Executing other command

RDY is lit while waiting for command.



RUN is lit while the command is running









RDY is lit while waiting for command.



5.3.3. LED Lighting Status in Case of Error

The following describes the LED lighting status if an error occurs.

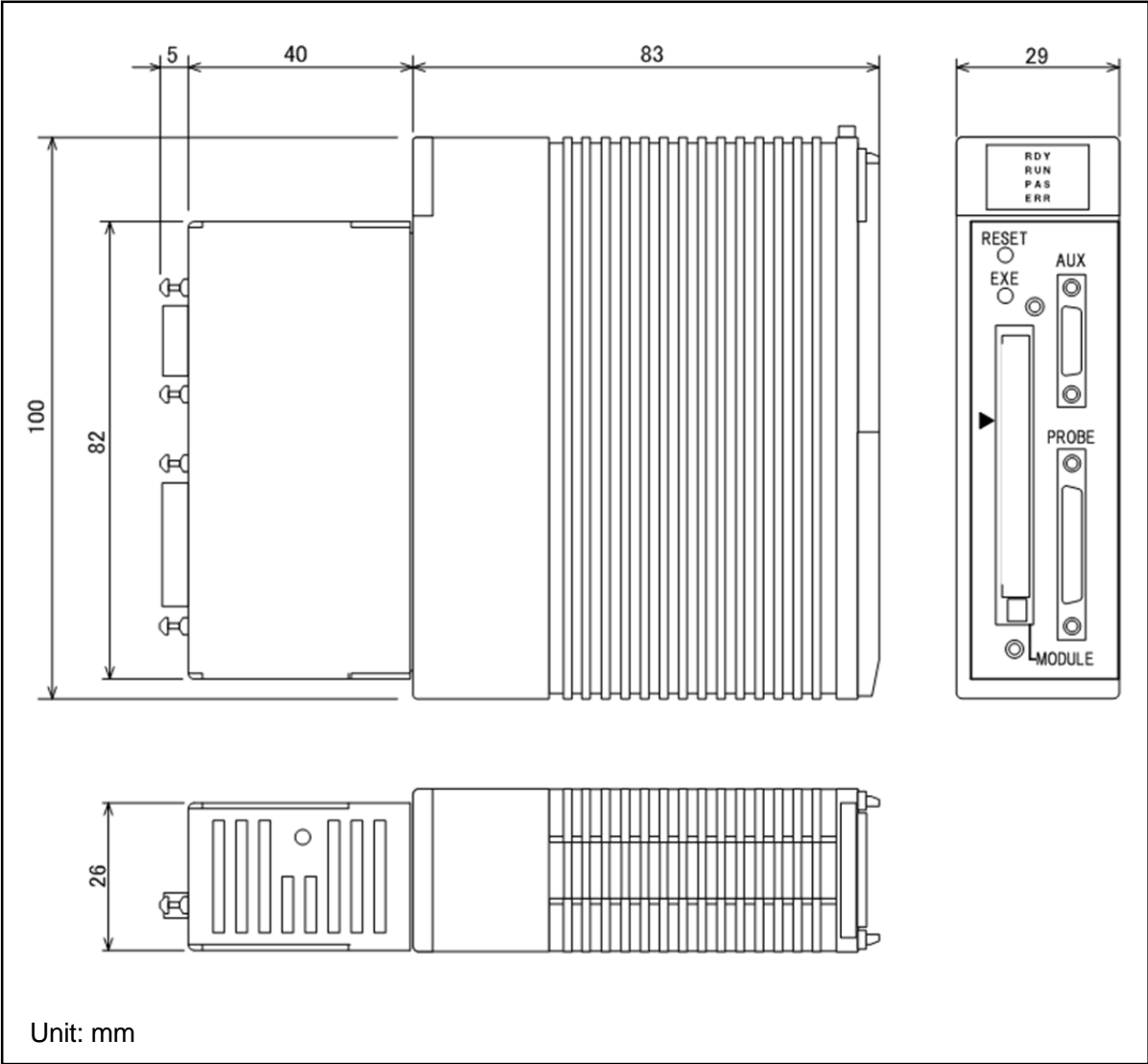
For details about error contents and corrective actions in case of an error, see “APPENDIX List of Error Codes”.

LED display	Error No.	Error message
	1010	HPARAM CONST ERR
	10A4	ETHER ERR
	1060	FILE SYSTEM ERR (MBR)
	1061	FILE SYSTEM ERR (PREG)
	1062	FILE SYSTEM ERR (PBR)
	1063	ILLEGAL FILE SYSTEM
	102A	CM FORMAT ERR
	1016	ADDRESS WARNING
	1002	NO LICENCE
	-	NO COMPACT FLASH This error occurs if the compact flash (CF) card is not inserted into the Programmer. Insert the compact flash (CF) card into the Programmer.
	-	Other error 1 This error can be reset by pressing the RESET key. Press the RESET key.
	-	Other error 2 This error cannot be reset unless Flash Write is powered OFF. Power OFF Flash Programmer.

5.4. Mechanical Conditions

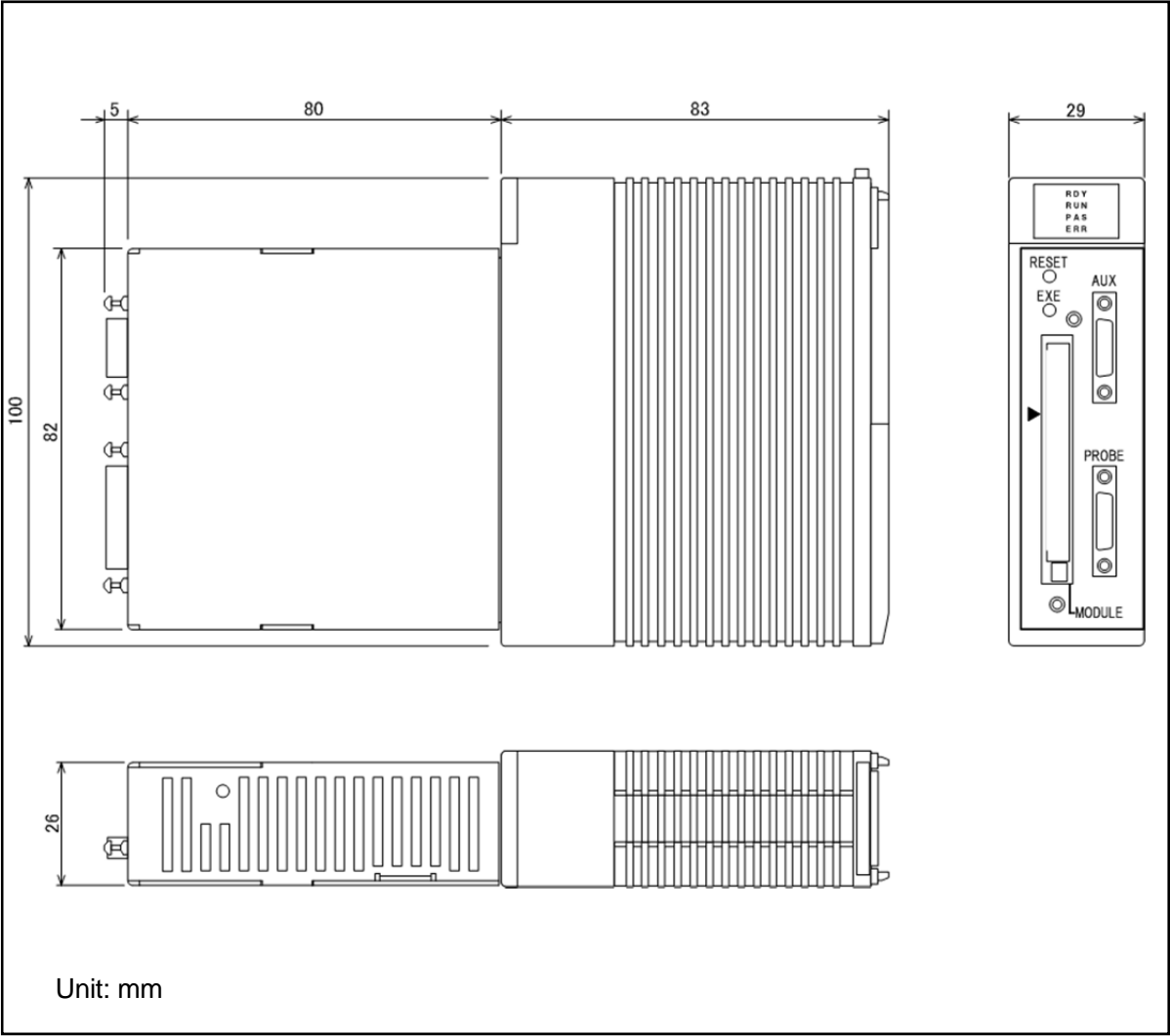
5.4.1. Outside Dimensions (AF720)

Outside dimensions of programmer unit (AF720)



5.4.2. Outside Dimensions (AF730)

Outside dimensions of programmer unit (AF730)



5.5. Target Interface (AF720)

5.5.1. Signal Table

The following Table shows the signals of the target interface connector.

G-NETIMPRESS Standard Signal Name	Definition	Circuit type
GND	GND	-
TVccs(TI1)	Not used (or user power monitor input when an optional adapter is installed)	1
TVccd	User system power input (or driver power for I/F when an optional adapter is installed)	1
Vcc	5 V output (max. 100 mA)	6
TRES	Reset signal (active high)	3
/TRES	Reset signal (active low) (Open collector output)	2
TCK	Clock output for synchronous communication	7
/TICS	Output terminal (Definition may vary depending the type of the Control Module)	3
TAUX5(/TOE)	Output terminal (Definition may vary depending the type of the Control Module)	3
TMODE	Output terminal (Definition may vary depending the type of the Control Module)	3
TBUSY	Busy input for synchronous communication	5
TIO	Input terminal (Definition may vary depending the type of the Control Module)	5
TTXD	Transmission data output terminal (also can be receive terminal for bi-directional transfer)	8
TRXD	Transmission data input terminal	9
WDT	Watchdog timer output (Open collector output)	2
TAUX	Auxiliary input/output terminal (Definition may vary depending the type of the Control Module)	4
TAUX2(TRW)	Output terminal (Definition may vary depending the type of the Control Module)	3
TAUX3	Auxiliary input/output terminal (Definition may vary depending the type of the Control Module)	4
TAUX4	Auxiliary input/output terminal (Definition may vary depending the type of the Control Module)	4
Reserved	Reserved terminal (Do not connect any signal to this terminal.)	-
N.C.	NC	-

(Notes)

1. For input signals to the user system, DTS INSIGHT CORPORATION recommends that pull-up resistors (about 10 K Ω) be attached considering malfunctions when the G-NETIMPRESS is not connected.

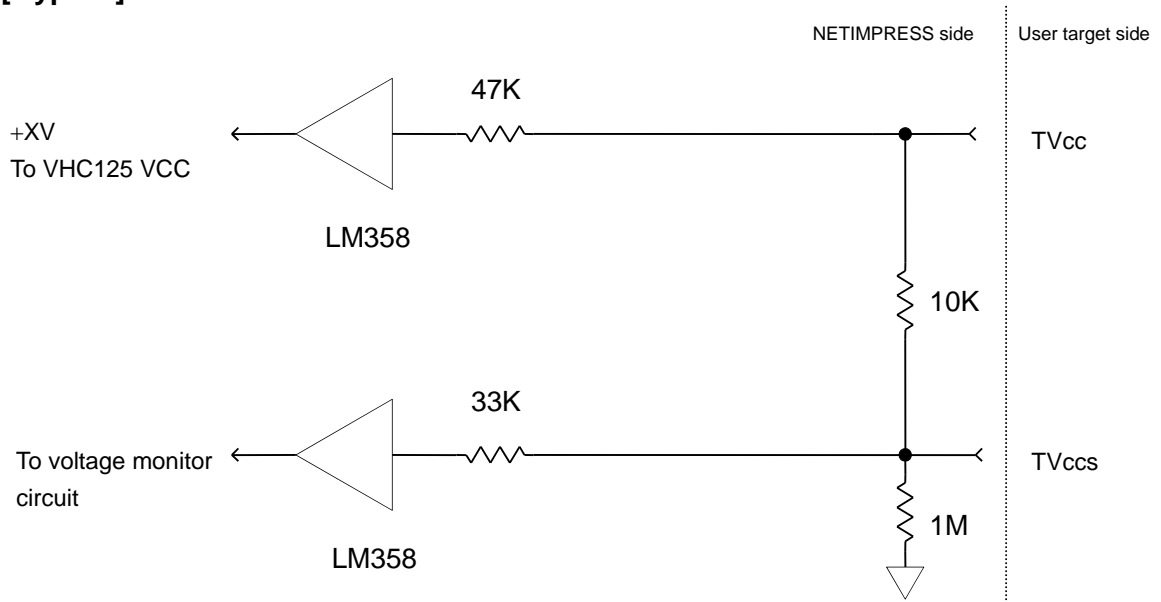
2. The definitions for specific signal lines vary for the control modules. For more information see the manual for your control module.
3. If you use /TRES or WDT terminal then use pull-up resistors (about 10 K Ω).

**CAUTION**

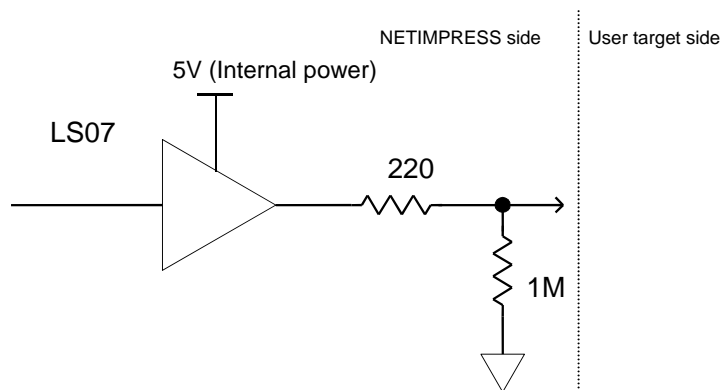
The conventional product was applicable to the TVpp output, but the G-NEIMPRESS is not applicable to it.

5.5.2. Interface Circuit Type

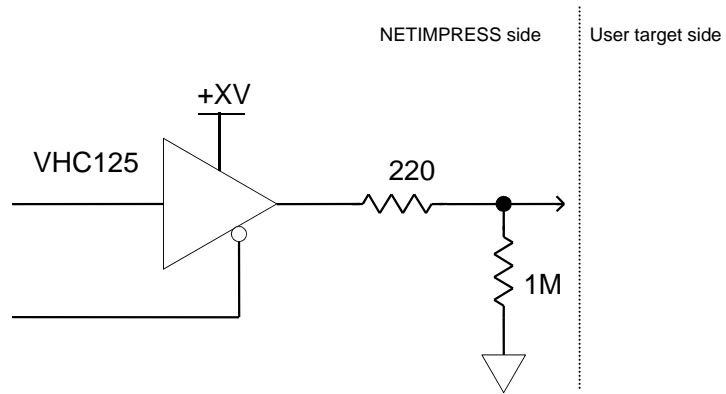
[Type 1]



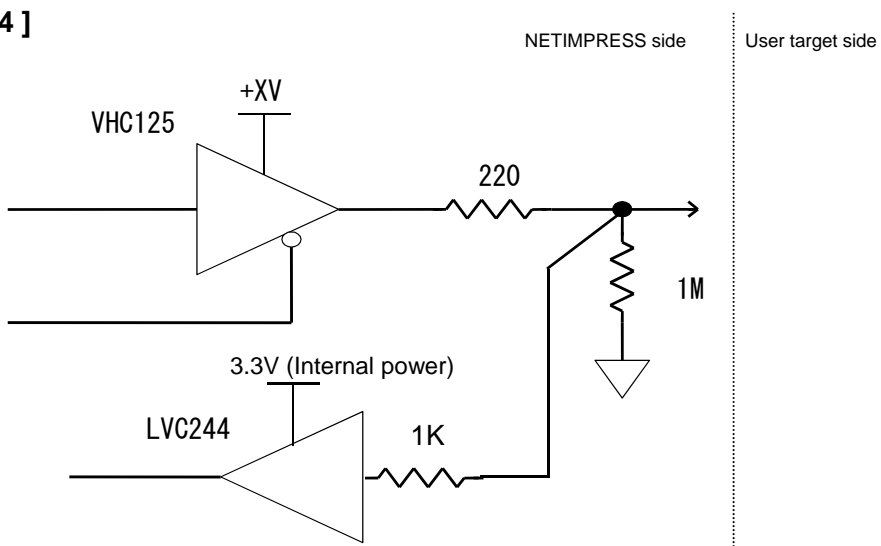
[Type 2]



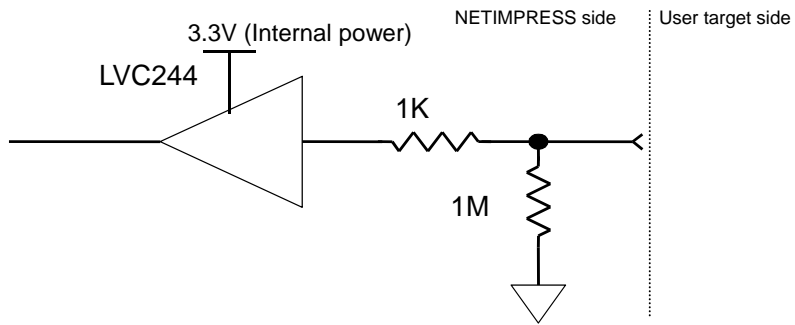
[Type 3]



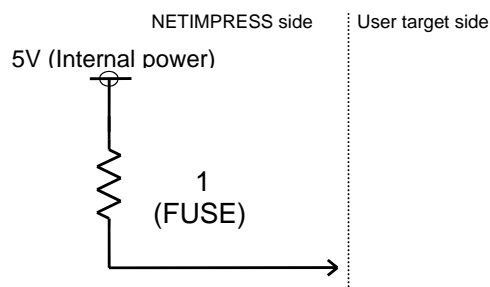
[Type 4]



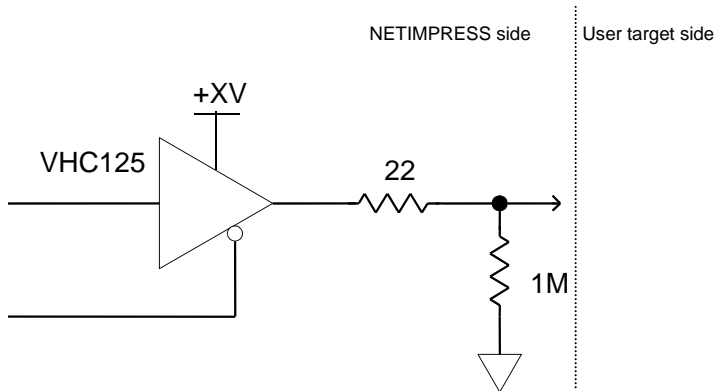
[Type 5]



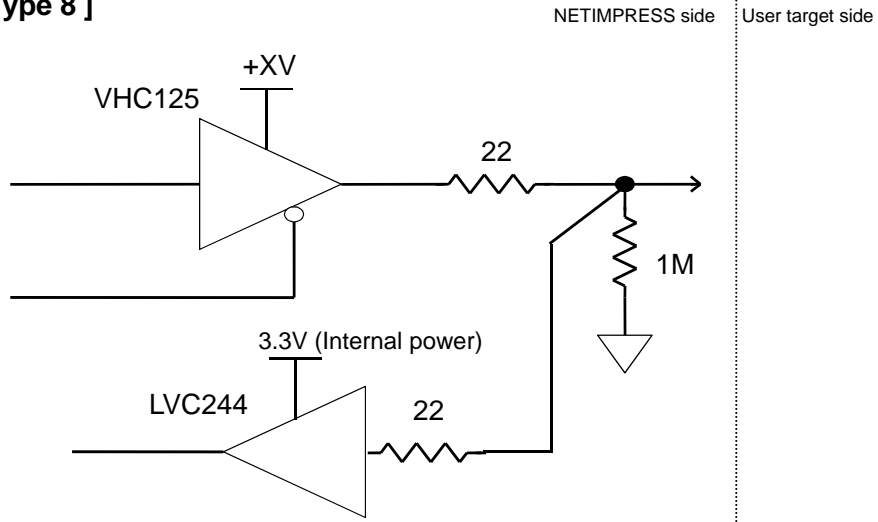
[Type 6]



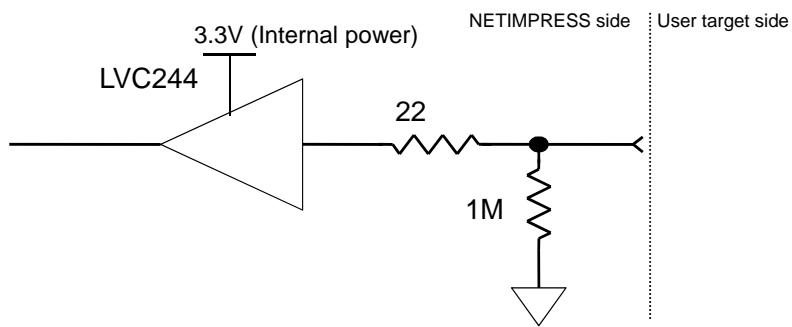
[Type 7]



[Type 8]



[Type 9]



5.5.3. DC Characteristics

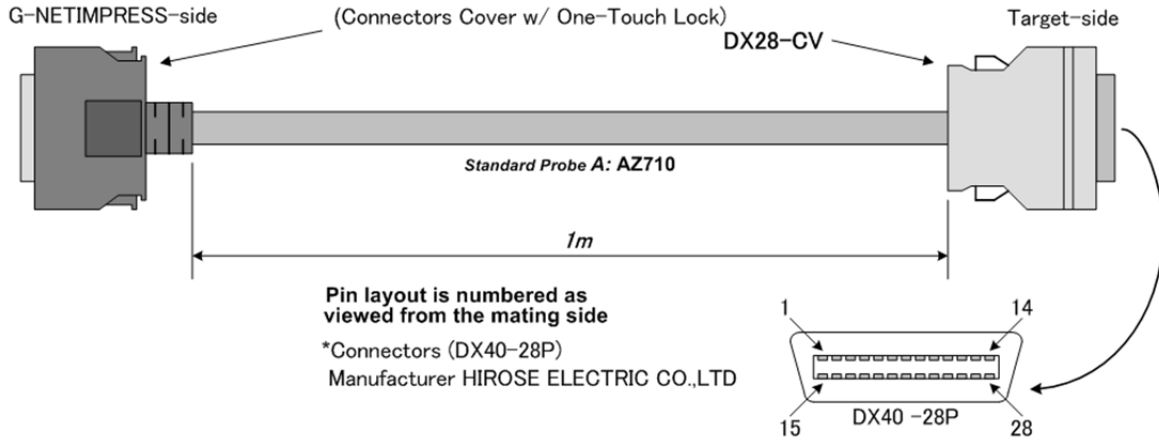
List of target interface DC characteristics

Name	Terminal name	Parameter	Abbreviation			Unit	Conditions
Supply MCU power	Vcc	Supply voltage	Vcc		5.0 ±5%	V	
		Supply current (Icc)	Icc	max	100	mA	
				min	0	mA	
User power input 1	TVccd	Allowable input voltage	TVccd	max	5.25	V	
				min	1.8	V	
		Current consumption	TIccd	max	500	μA	
User power input 2	TVccs	Input range	TVccs		1.8 to 5.25	V	
		Current consumption	TIccs	max	500	μA	
TVcc threshold	TVccs	Detection accuracy			4.9	mV	
		Setting range			0.1 to 4.5	V	
		Setting unit			0.1	V	
Target IF input port	TIO, TRXD, TBUSY	Allowable input voltage	TIF1IV	max	5.5	V	
			TIF1IV_VIH	min	2	V	
		Output "L" level	TIF1IV_VIL	max	0.8	V	
			TIF1IV_II	max	±1	μA	
	TTXD, TAUX, TAUX3, TAUX4	Allowable input voltage	TIF2IV	max	5.5	V	
			TIF2IV_VIH	min	2	V	
		Output "L" level	TIF2IV_VIL	max	0.8	V	
			TIF2IV_II	max	±1	μA	
Target IF output port	TRES, TCK, TAUX2, /TICS, /TOE, TMODE	Output voltage	TIF3OV	max	TVccd	V	
		Output "H"	TIF3OV_VOH	min	3.8	V	
		Output "L" level	TIF3OV_VOL	max	0.5	V	
			TIF3OI	max	±8	mA	
	TTXD, TAUX, TAUX3, TAUX4	Output voltage	TIF2OV	max	TVccd	V	
		Output "H"	TIF2OV_VOH	min	3.8	V	
		Output "L" level	TIF2OV_VOL	max	0.5	V	
			TIF2OI	max	±8	mA	
	/TRES, WDT	Output "H"	TIF4OV_VOH	max	30	V	
		Output "L" level	TIF4OV_VOL	max	0.4	V	IOL=16mA
					0.7	V	IOL=40mA
Allowable output current		TIF4OI	max	40	mA		

5.5.4. Interface Cable (AZ710)

This probe is specially designed for the G-NETIMPRESS.

This is used for the DX10-28S (HRS) or equivalent connector mounted on the target board.



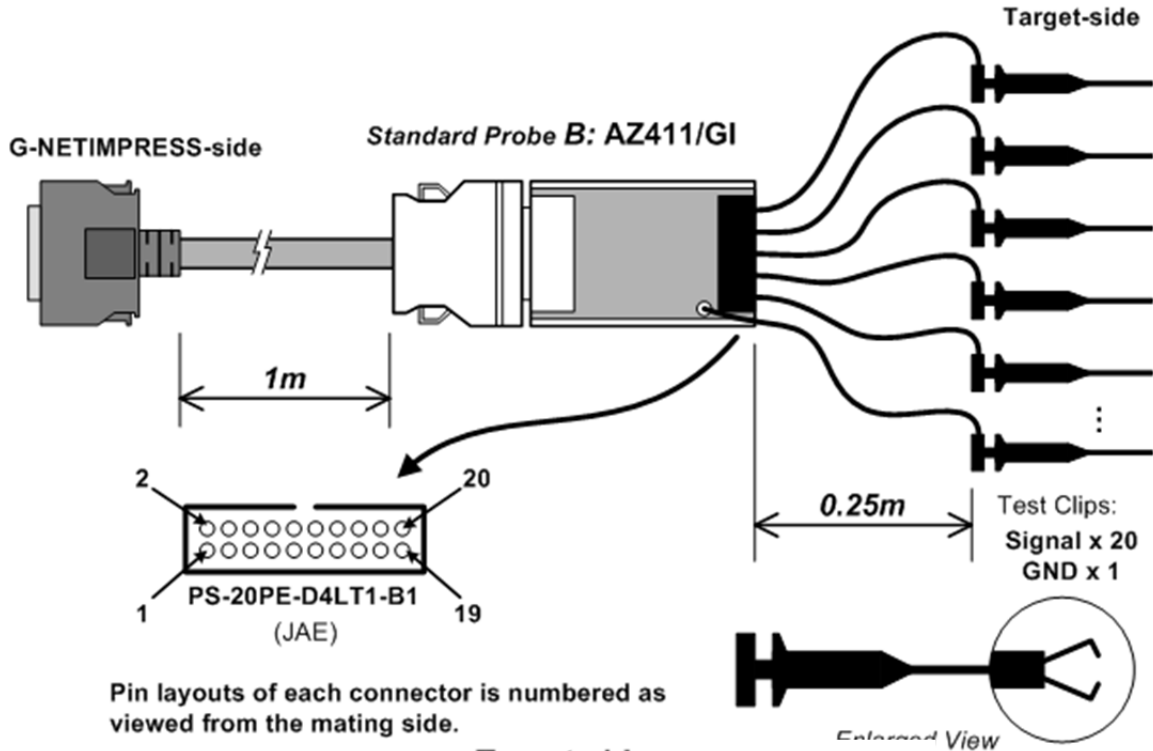
**Target - side
Standard Signal Pin Assign**

Pin No.	G-NETIMPRESS Standard Signal Name
1	GND
2	TVccd
3	Vcc
4	TRES
5	/TRES
6	TCK
7	Reserved
8	GND
9	TAUX2(TR/W)
10	/TICS
11	TAUX5(/TOE)
12	TMODE
13	TTXD
14	GND
15	GND
16	N.C.
17	N.C.
18	WDT
19	TAUX3
20	TAUX4
21	GND
22	Reserved
23	TAUX
24	TBUSY
25	TI0
26	TVccs(TI1)
27	TRXD
28	GND

5.5.5. Interface Cable (AZ411/GI, AZ413/GI)

If the connector can not be mounted on the target board then use this cable to connect test clips to test pins or others.

The AZ413/GI does not have any IC test clip and its tip is not processed.



Pin layouts of each connector is numbered as viewed from the mating side.

**Target-side
Test Clips Signal Pin Assign**

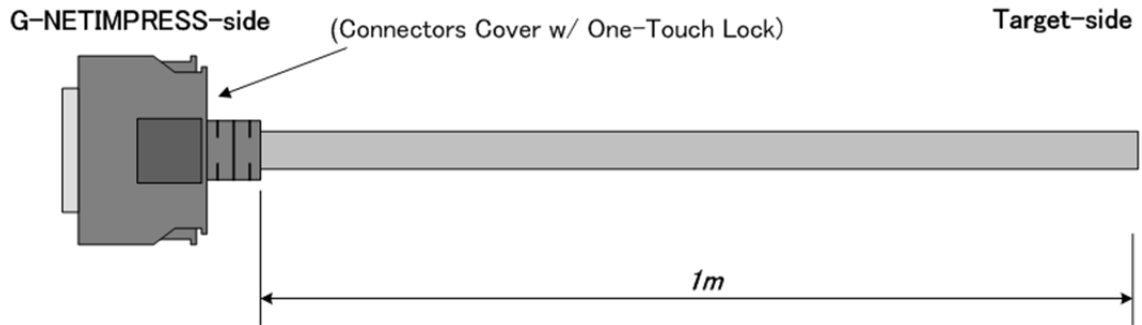
Pin No.	Lead Color	G-NETIMPRESS Standard Signal Name	I/O
1	Brown	TRXD	I
2	Red	TTXD	O
3	Orange	TVccs(TI1)	I
4	Yellow	TMODE	O
5	Green	TIO	I
6	Blue	TAUX5(/TOE)	O
7	Violet	TBUSY	I
8	Grey	/TICS	O
9	White	TAUX	O
10	White & Black	TAUX2(TR/W)	O
11	White & Brown	TAUX4	O
12	White & Red	TCK	O
13	White & Orange	TAUX3	O
14	White & Yellow	/TRES	O
15	White & Green	WDT	O
16	White & Blue	TRES	O
17	White & Violet	N.C.	-
18	White & Grey	Vcc	O
19	Yellow & Green	N.C.	-
20	Light-Blue	TVccd	I

GND (Black) : Directly Soldered to PWB.

5.5.6. Interface Cable (AZ712)

This probe is specially designed for the G-NETIMPRESS.

You can customize the connector and wiring.



Target-side Wiring Specification

Pin No.	G-NETIMPRESS Standard Signal Name	Insulator Color	Dot Mark
1	GND	Pink	Black ■
2	TVccd	Yellow	Red ■■
3	Vcc	Gray	Black ■■
4	TRES	Pink	Red ■
5	/TRES	Yellow	Red ■
6	TCK	Orange	Red ■
7	Reserved	Yellow	Red ■■■
8	GND	Orange	Black ■
9	TAUX2 (TR/W)	Pink	Black ■■
10	/TICS	Gray	Red ■■
11	TAUX5 (/TOE)	Gray	Red ■■■
12	TMODE	Gray	Black ■■■
13	TTXD	Gray	Red ■
14	GND	Gray	Black ■
15	GND	Orange	Black ■■
16	N.C.	White	Red ■■
17	N.C.	White	Black ■■
18	WDT	Orange	Red ■■
19	TAUX3	Orange	Red ■■■
20	TAUX4	Orange	Black ■■■
21	GND	Yellow	Black ■
22	Reserved	Yellow	Black ■■■
23	TAUX	Pink	Red ■■
24	TBUSY	White	Red ■■■
25	TI0	White	Black ■■■
26	TVccs (TI1)	Yellow	Black ■■
27	TRXD	White	Red ■
28	GND	White	Black ■
29	N.C.	-	-
30	N.C.	-	-

5.6. Target Interface (AF730)

5.6.1. Signal Table

The following Table shows the signals of the target interface connector.

G-NETIMPRESS Standard Signal Name	Definition	Circuit type
GND	GND	-
TVccs (*1)	User power input (For monitoring of user power)	A
Reserved	Reserved terminal (*4)	-
/TRES	Negative logic reset output (Open collector output)	B
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
CANH_High (*2)(*3)	CAN_High for CAN communication (High Speed CAN)	C
CANL_High (*2) (*3)	CAN_Low for CAN communication (High Speed CAN)	C
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
WDT	Watchdog timer output	B
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-
reserved	Reserved terminal (*4)	-

(*1) This signal is used only when the target power is monitored inside the Programmer.

Maximum lead-in current, Icc (max) = 500uA

(*2) Input/output voltage range: CAN communication voltage level

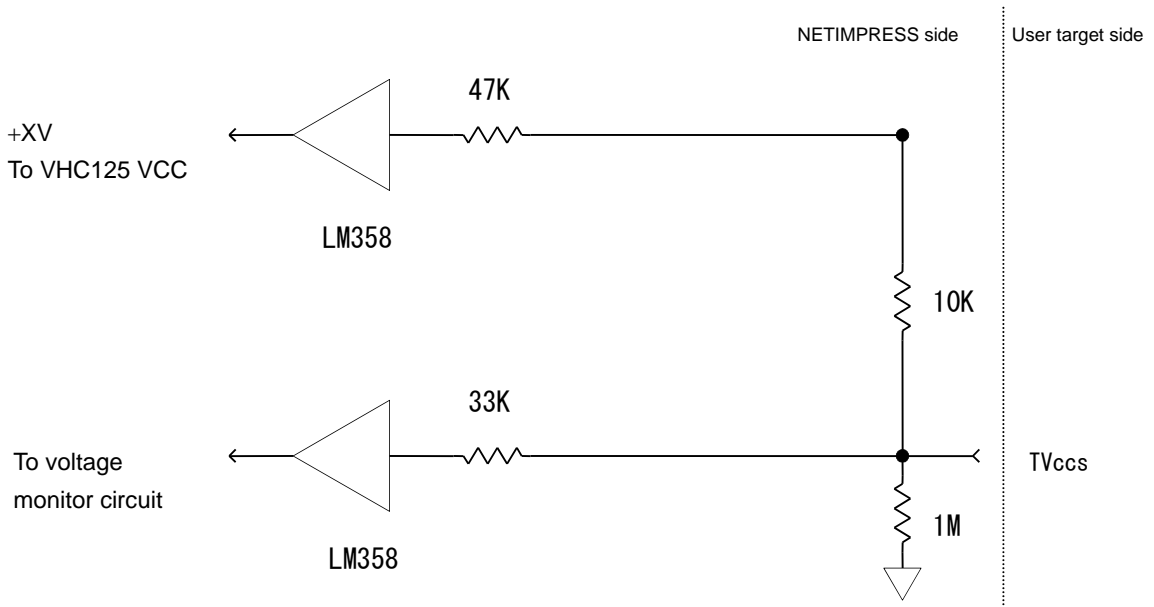
(*3) The default value of the terminating resistor is “open”. The terminating resistor can be changed to “open”, “60Ω”, or “120Ω” using each control module.
For further information, see the manual for control module.

(*4) This terminal is reserved. Do not connect any signal to it.

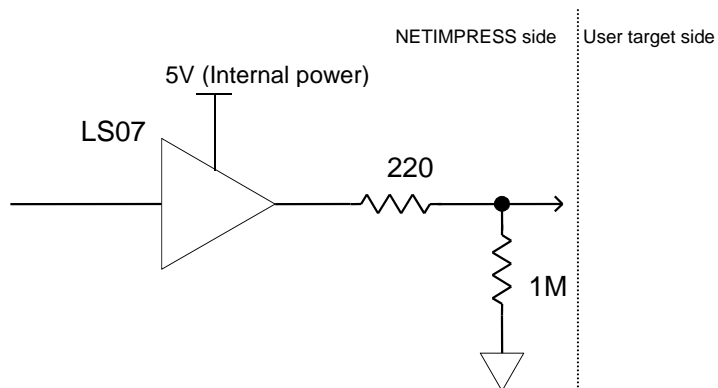
For further information on signal definitions by control module, see the manual for relevant control module.

5.6.2. Interface Circuit Type

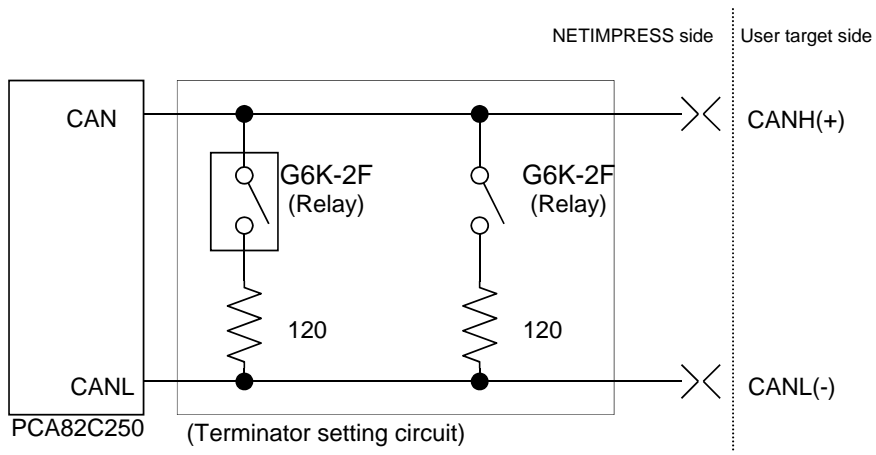
[Type A]



[Type B]



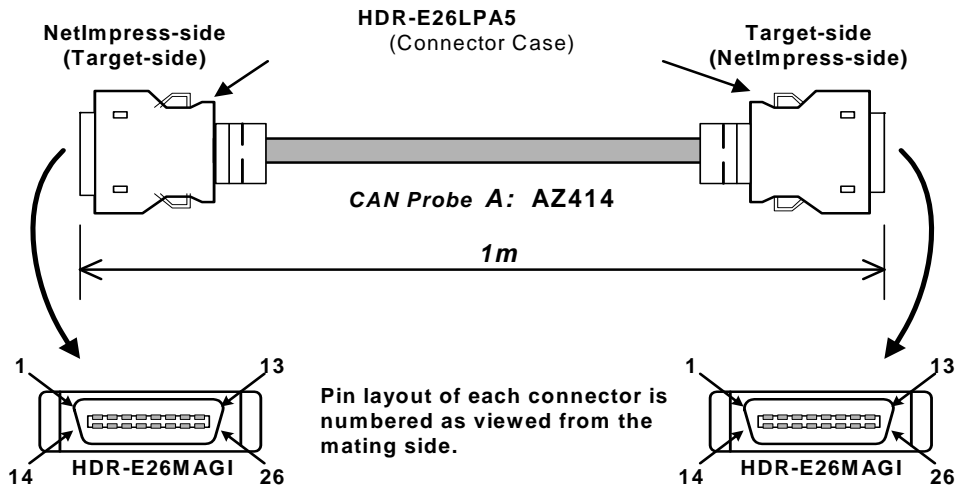
[Type C]



The initial status of Relay is "OFF", in other words, an OPEN status without a terminator.

5.6.3. CAN Interface Cable (AZ414)

This interface cable is used for the connector HDR-EA26LFYPG1-SLE or its equivalent mounted on the target board.



*Connectors
Manufacturer: HONDA TUSHIN KOGYO CO., LTD.

AZ414 Wiring Table

AZ414 : NetImpress-side(Target-side)
Standard Signal Pin Assign

Pin No.	NetImpress Standard Signal Name
1	GND
2	/TRES
3	Reserved
4	TTxD
5	TRxD
6	Reserved
7	Reserved
8	TAUX
9	TAUX3
10	/TICS
11	CANH_high *1
12	Reserved
13	Reserved
14	TCK
15	TRES
16	TVccs
17	Reserved
18	Reserved
19	WDT
20	TBUSY
21	TAUX2
22	TAUX4
23	TMODE
24	CANL_high *1
25	Reserved
26	GND

AZ414 : Target-side(NetImpress-side)
Standard Signal Pin Assign

Pin No.	NetImpress Standard Signal Name
1	GND
2	/TRES
3	Reserved
4	TTxD
5	TRxD
6	Reserved
7	Reserved
8	TAUX
9	TAUX3
10	/TICS
11	CANH_high *1
12	Reserved
13	Reserved
14	TCK
15	TRES
16	TVccs
17	Reserved
18	Reserved
19	WDT
20	TBUSY
21	TAUX2
22	TAUX4
23	TMODE
24	CANL_high *1
25	Reserved
26	GND

*1 _high = High Speed CAN

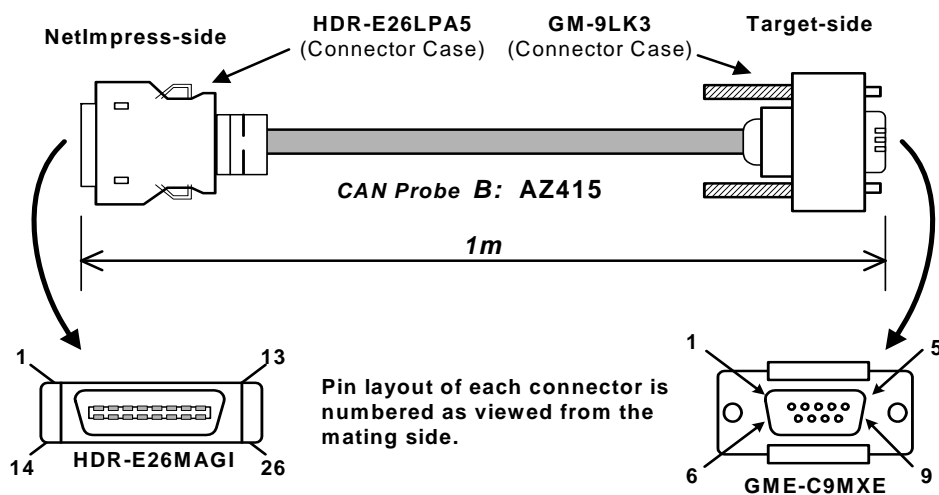
Full 26 pin-to-pin wired.

5.6.4. CAN Interface Cable (AZ415)

This probe is specially designed for the High speed CAN.

This interface cable is used for the D-Sub 9-Pin (female) connector mounted on the target board.

AZ415 Wiring Table



*Connectors
Manufacturer: HONDA TUSHIN KOGYO CO., LTD.

**AZ415 : NetImpress-side
Standard Signal Pin Assign**

Pin No.	NetImpress Standard Signal Name
1	GND
2	/TRES
3	Reserved
4	TTxD
5	TRxD
6	Reserved
7	Reserved
8	TAUX
9	TAUX3
10	/TICS
11	CANH_high *1
12	Reserved
13	Reserved
14	TCK
15	TRES
16	TVccs
17	Reserved
18	Reserved
19	WDT
20	TBUSY
21	TAUX2
22	TAUX4
23	TMODE
24	CANL_high *1
25	Reserved
26	GND

**AZ415 : Target-side
Standard Signal Pin Assign**

Pin No.	NetImpress Standard Signal Name
1	TVccs
2	CANL_high *1
3	GND
4	Reserved
5	Reserved
6	TIO
7	CANH_high *1
8	TMODE
9	Reserved

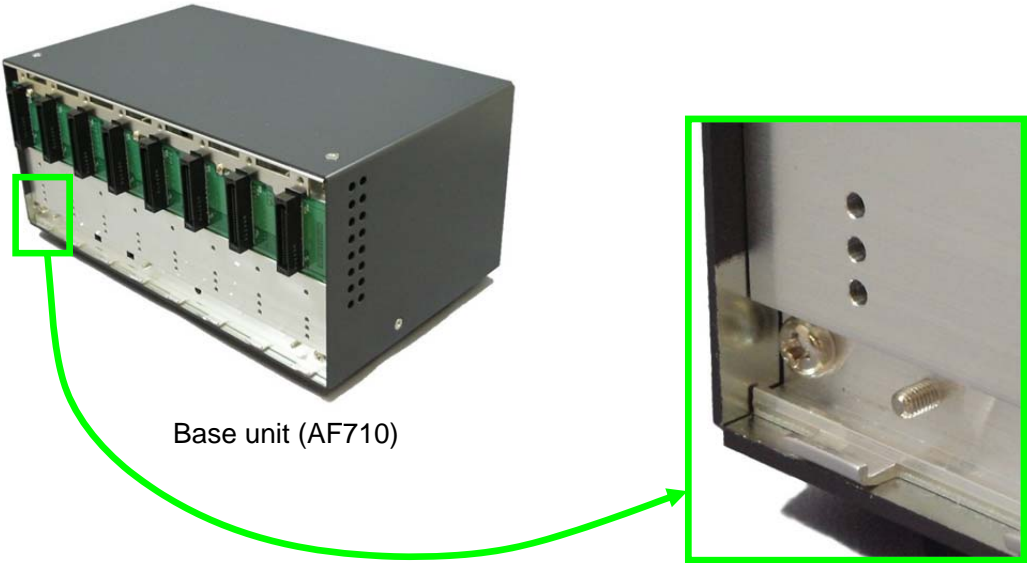
*1 _high = High Speed CAN

6. Assembling the Base Unit (AF710) and Programmer Unit (AF720 or AF730)

6.1. Mounting the Programmer Unit (AF720 or AF730)

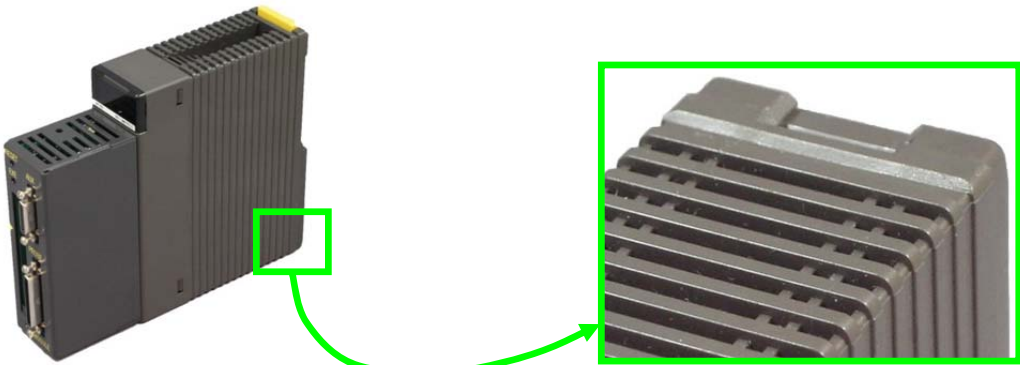
* The Photo shows the AF720 as an example

- ① Hang the concave portion of the programmer unit (AF720 or AF730) on the hook of the base unit (AF710).



Base unit (AF710)

Enlarged Photo of hook



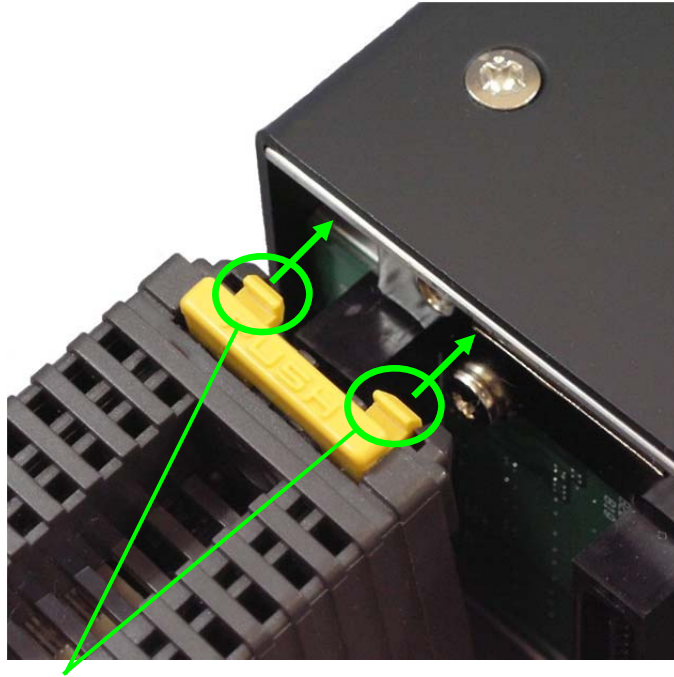
Programmer unit (AF720 or AF730)

Enlarged Photo of concave portion (bottom)

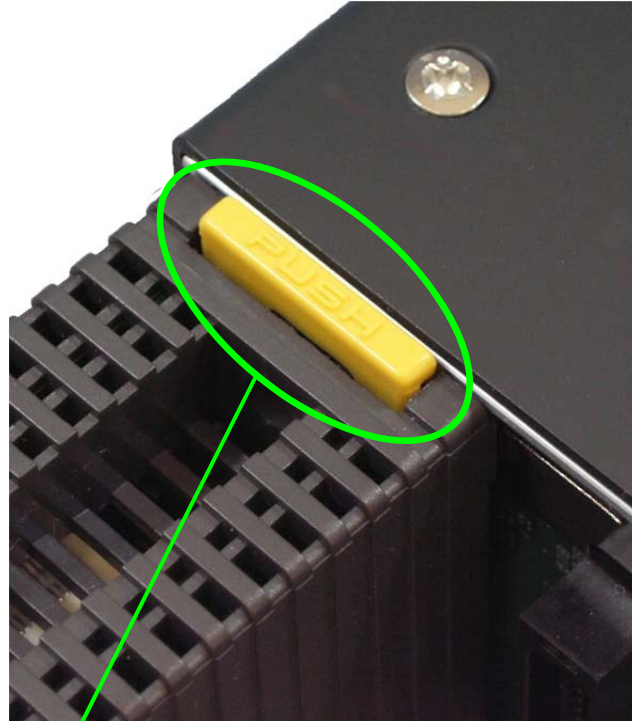


The Photo above shows that the concave portion of the programmer unit is hanged on the hook of the base unit (AF710).

② Insert the locks of the programmer unit (AF720 or AF730) until a click sounds.



Insert these portions until they are locked.



This shows the locked status.

- ③ Secure the programmer unit (AF720 or AF730) to the base unit (AF710) with the accessory screw (M4 × 12).

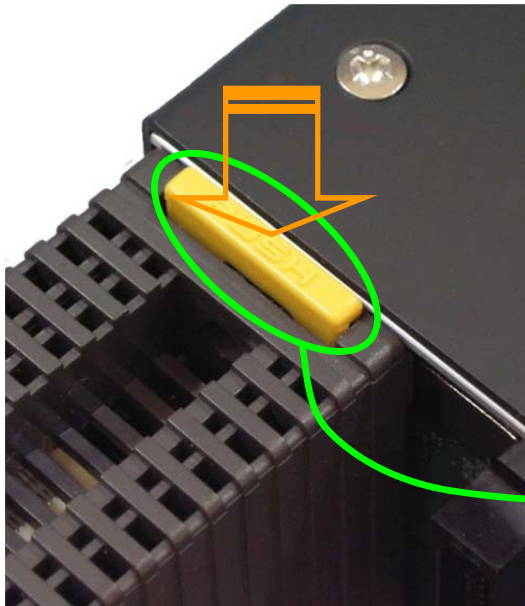


6.2. Removing the Programmer Unit (AF720 or AF730)

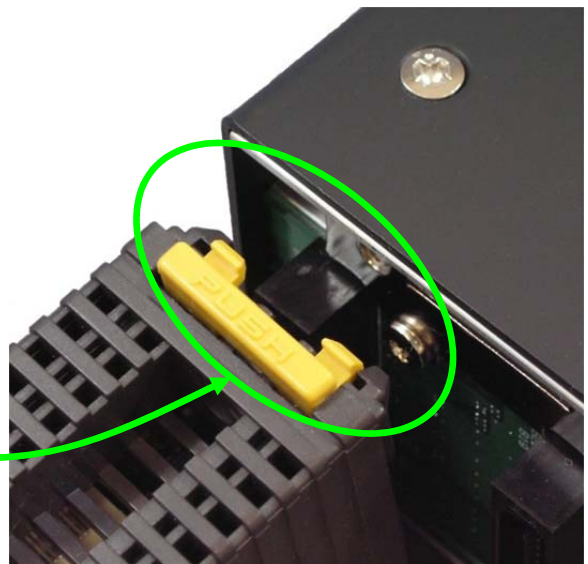
- ① Remove the screw that secures the programmer unit (AF720 or AF730) to the base unit (AF710).



- ② Pressing the PUSH portion from above will release the lock.



Press the PUSH portion from above.



The lock is then released.

7. Connecting with the Host Computer

7.1. Preparations for the Host Computer

The following describes how to connect the G-NETIMPRESS with the host computer. Ethernet is used for the connection with the host computer.

Additionally, it is necessary to install the following software into the host computer.

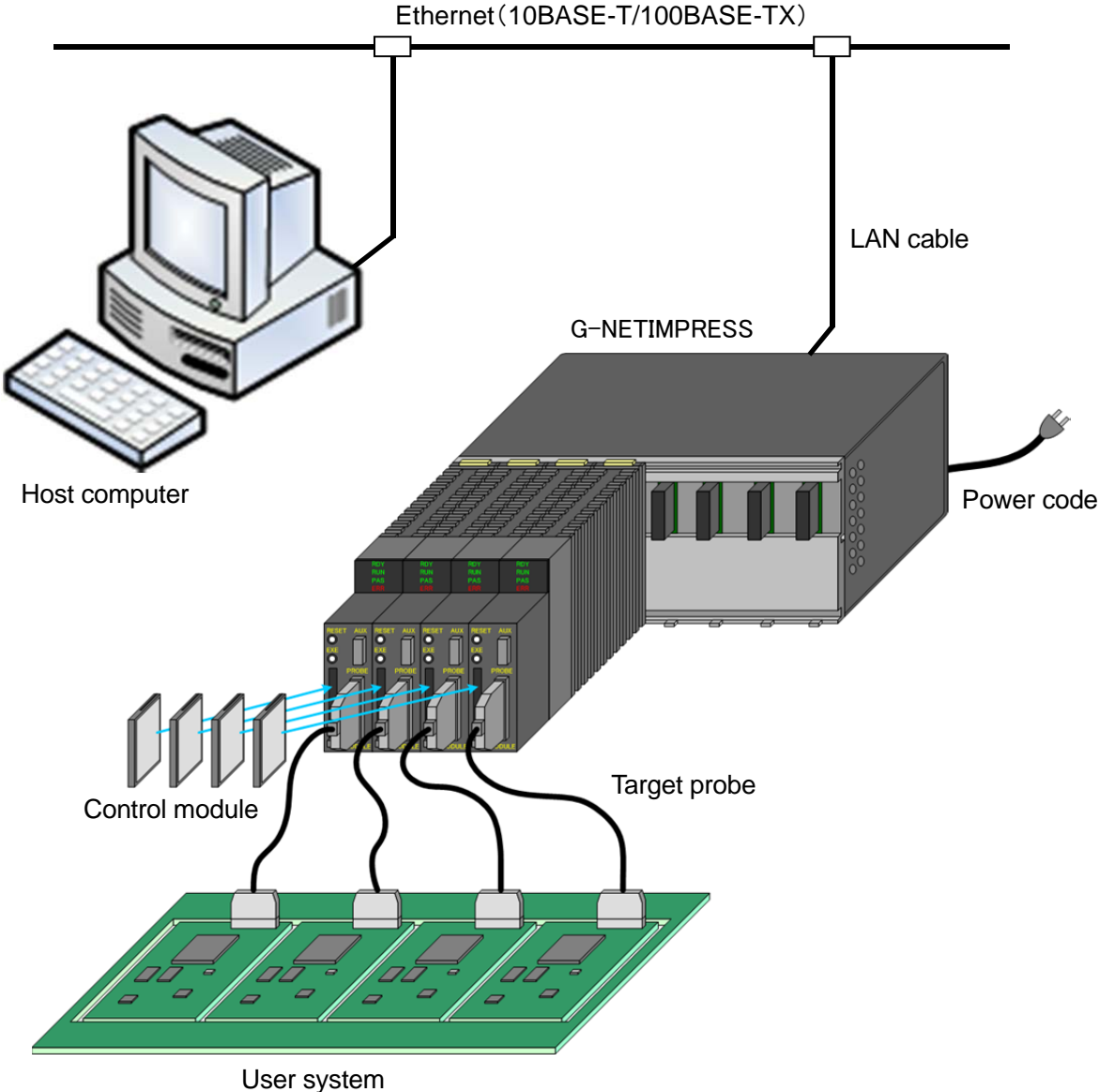
- IP Editor2 (AZ780)
- Remote controller (AZ490 Ver. 5.72 or higher)

The following shows the specifications of the connectable host computer.

Machine	Specifications
Host computer	Windows2000 , XP or 7 CD-ROM drive Ethernet interface (10BASE-T/100BASE-TX)

7.2. Connecting with the Host Computer (Ethernet)

[Example of connection through Ethernet]

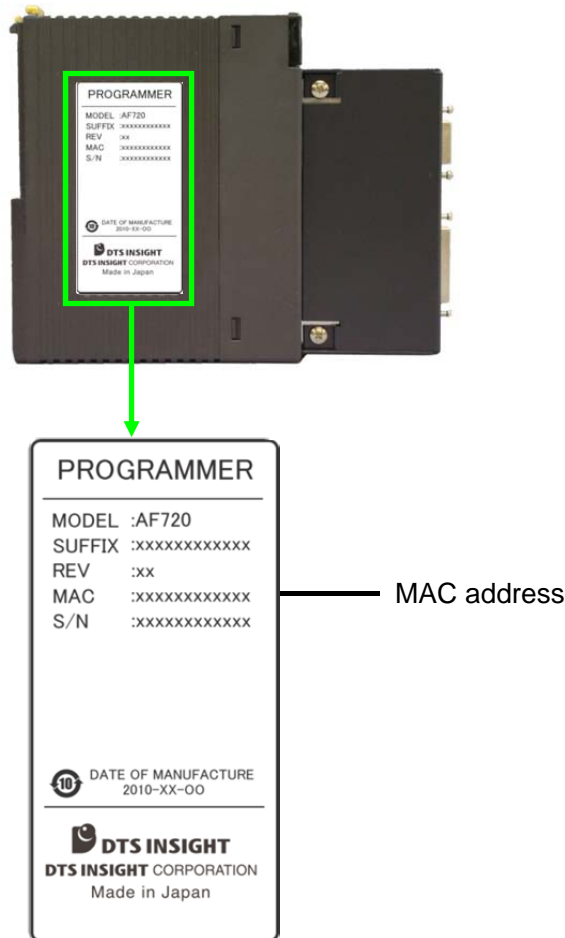


7.2.1. Preparations for the Connection

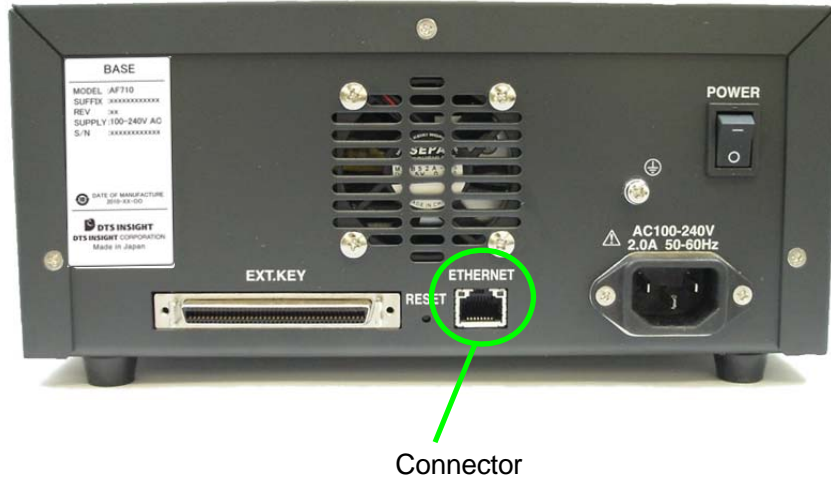
When using the G-NETIMPRESS for the first time, it is necessary to set the network environment for the G-NETIMPRESS.

The IP address is set using the IP Editor2 (AZ780) supplied with Flash Programmer. For details about operation, see the User's Manual for IP Editor2 (AZ780).

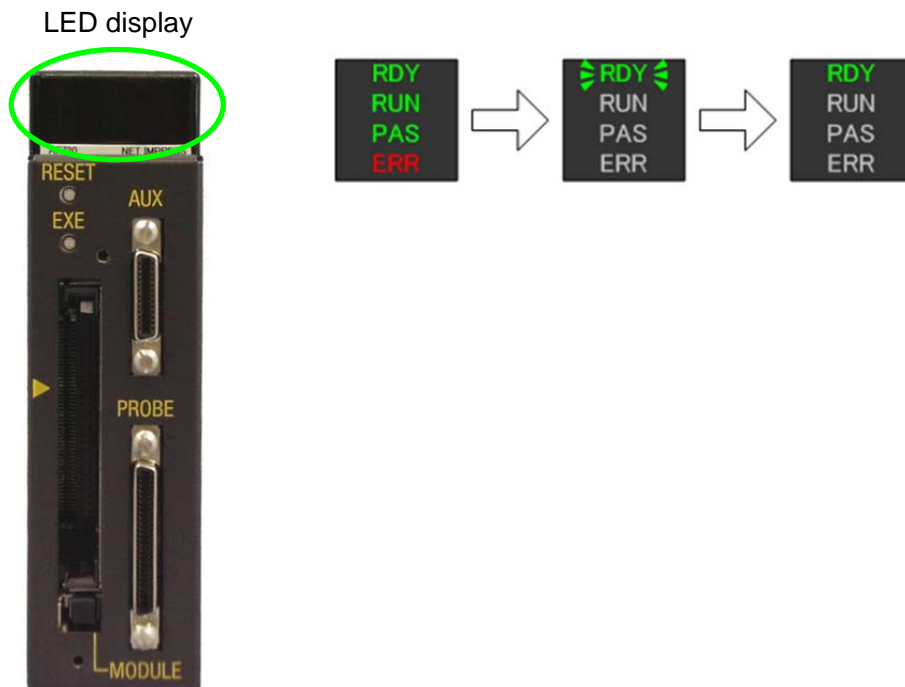
- (1) Apply for the IP address to be set for the G-NETIMPRESS with the network administrator to assign it.
 - The address to be set is an address in the same subnet as the host computer, for which the setting is made.
 - The setting is possible within only the same subnet. The setting over the router cannot be performed.
- (2) Record MAC address listed in the side of the programmer unit.



- (3) Connect the G-NETIMPRESS to the network.
Connect the Ethernet cable to the connector on the rear of the G-NETIMPRESS.



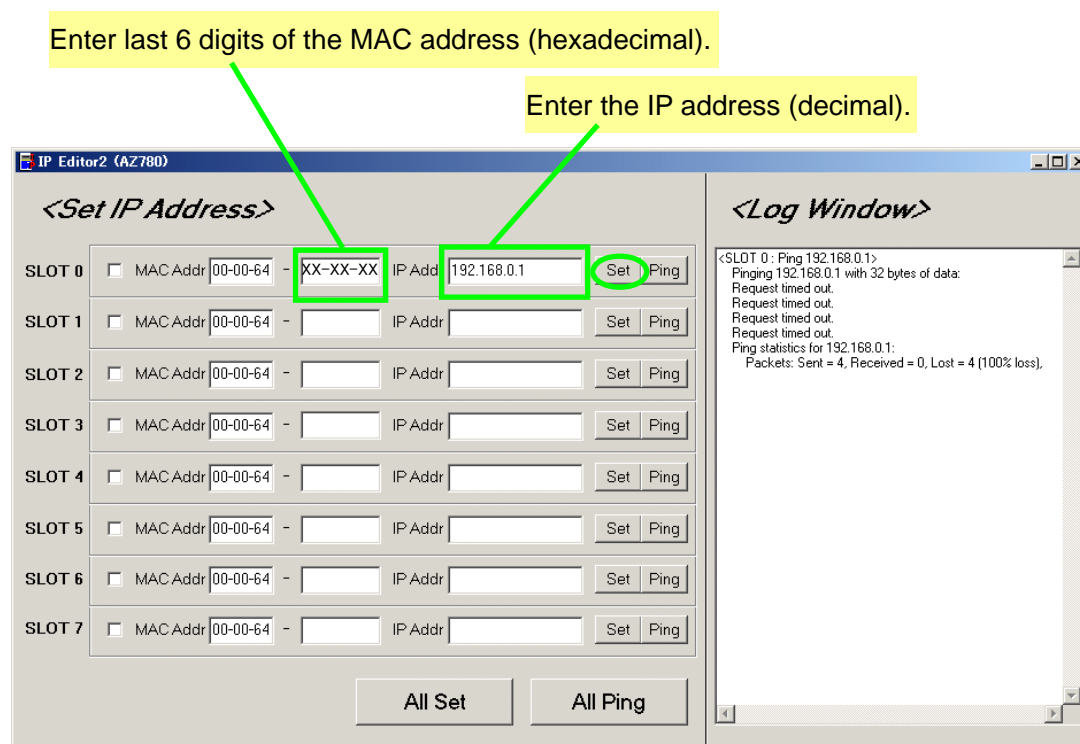
- (4) Power ON the G-NETIMPRESS.
Check that four LEDs on the programmer unit change as follows.
All LEDs are lit. → RDY blinks. → RDY is lit.
(For details about LED lighting status, see Section 5.3.2, “LED Lighting Status during Operation”.)
This status shows that the G-NETIMPRESS is ready to connect.



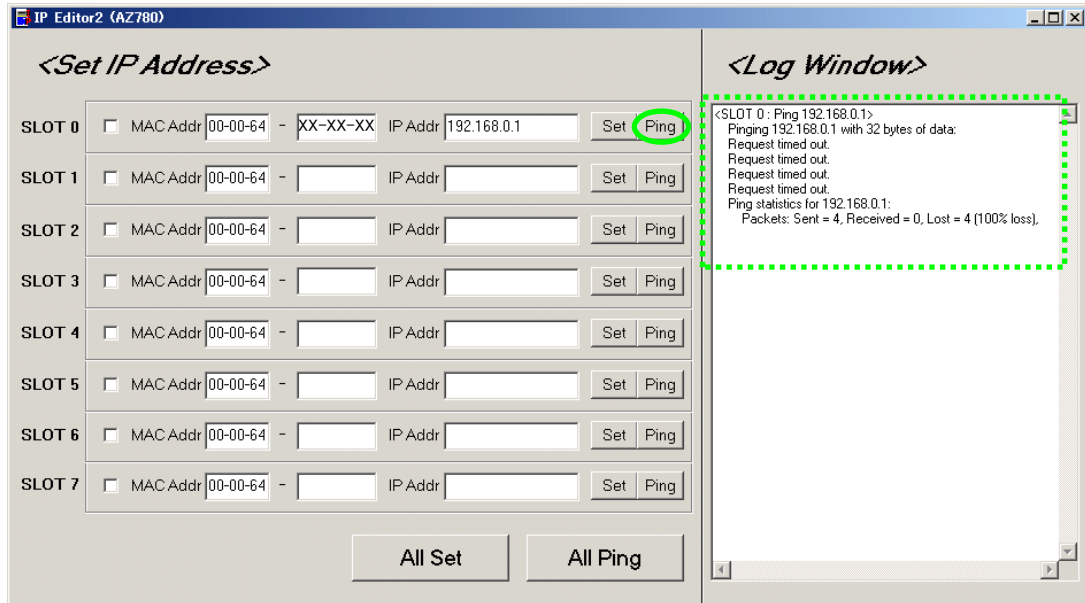
7.2.2. Setting the IP Address

When the preparations have been completed, set the IP address.

- (1) Enter last 6 digits of the MAC address you have recorded in the “MAC Addr” entry area in the <SET IP Address> window of the IP Editor2 (AZ780).
- (2) Enter the IP address to be set in the “IP Addr” entry area.
- (3) When the contents you have entered are correct, click the [Set] button.



- (4) Click the [Ping] button.
Check the response of the Ping.



When the response is received successfully, the IP address setting is then completed. If the response is not received (Time Out), check the network environment (within the same subnet) again.

8. Command Sequence Function

8.1. Command Sequence Overview

Control modules that support command sequence functions can execute device functions with one-action key entries.

The EXE key in the figure below can be assigned for this function.



8.2. EXE Key Setting

8.2.1. Command Sequence File (*.CSB)

The command sequence file (extension: CSB) is used for EXE key setting.

Only one CSB file can exist on the root directory of the control module.

The command that is set for EXE1 using the command sequence file (extension: CSB) is then assigned to the EXE key.



CAUTION

The G-NETIMPRESS has only one EXE key. That is, there is no key, to which the command that is set for EXE2 using the command sequence file (extension: CSB) is assigned.

8.2.2. Command Sequence File (*.CSB) Format

The command sequence file is a text file and stores the information on which device functions (command sequence) are assigned to the EXE keys.

L	K	1	,	CNT1	CNT2	,	C1	,	C2	,	...	,	C16	;	Comment
L	K	2	,	CNT1	CNT2	,	C1	,	C2	,	...	,	C16	;	Comment

- ① Key No. code (3 bytes)
OAK1: EXE1/ OAK2: EXE2
- ② ‘,’ (1 byte)
Shows the command delimiter.
- ③ CNT1 and CNT2 (2 bytes)
Shows the number of device commands.
Decimal notation (after “09” is “10”)
Maximum: “16”
For unused keys use “00”.
- ④ Cn
Device commands ... See Section 8.3, “Device Command Definitions”.
- ⑤ ‘;’ (1 byte)
Shows the comment delimiter.
- ⑥ Comment (any number of bytes + CRLF)
Describes the comment.

- Example of CSB file creation (Text file) - (Test.csb)

```

LK1, 01, DF; E. P. R
LK2, 01, DD; Program

```

8.2.3. Error Messages

Error messages can be checked through the LED display status.
For details, see Section 5.3, “LED Display”.

8.3. Device Command Definitions

The following Table shows the command definitions when creating CSB file and YMN file.

Table 1. Key definitions

Cn	Contents of definition
F0(XXXXXXXX□YYYYYYYY)	Device function area setting (XXXXXXXX: First address, YYYYYYYY: Last address) *1
F1(XXXXXXXX□YYYYYYYY□ZZ)	Block store (XXXXXXXX: First address, YYYYYYYY: Last address, ZZ: Data) *2
F2	Buffer memory clear
FF1(XXXXXXXX. XXX)	File load (XXXXXXXX. XXX: Load file name) *3
FF5(XXXXXXXX□YYYYYYYY)	Transfer address setting (XXXXXXXX: First address, YYYYYYYY: Last address) *1
D9	Blank (Device function)
DC	Erase (Device function)
DD	Program (Device function)
DE	Read (Device function)
DF	E. P. R (Device function)
FB0(XXXXXXXX. YIM)	Changing of current IMPRESS module folder (xxx.YIM) (XXXXXXXX. YIM: YIM folder name) *4
FBD(XXXXXXXX. YMN)	Execution of current YMN file (XXXXXXXX. YMN: YMN file name to be executed.) *5

- *1 These settings can be omitted. When omitted, the address becomes the entire flash ROM area.
- *2 These settings can be omitted. When omitted, the address becomes the entire flash ROM area and the data becomes "00".
- *3 This setting cannot be omitted.
- *4 This setting can be omitted. When omitted, YIM folder in the compact flash is searched for.
- *5 This setting can be omitted. When omitted, the YMN file, which is selected with [FUNC] [B] [C], is executed.

9. Sum Check Function

9.1. Sum Check Overview

This function checks the checksum values and data at specified addresses for every device function execution. As this check is done for every device function execution it is possible to prevent incorrect object data from being written.

9.2. Sum Check Function Setting

9.2.1. YSM Files (*.YSM)

The YSM file (extension: YSM) is used for the sum check function settings.

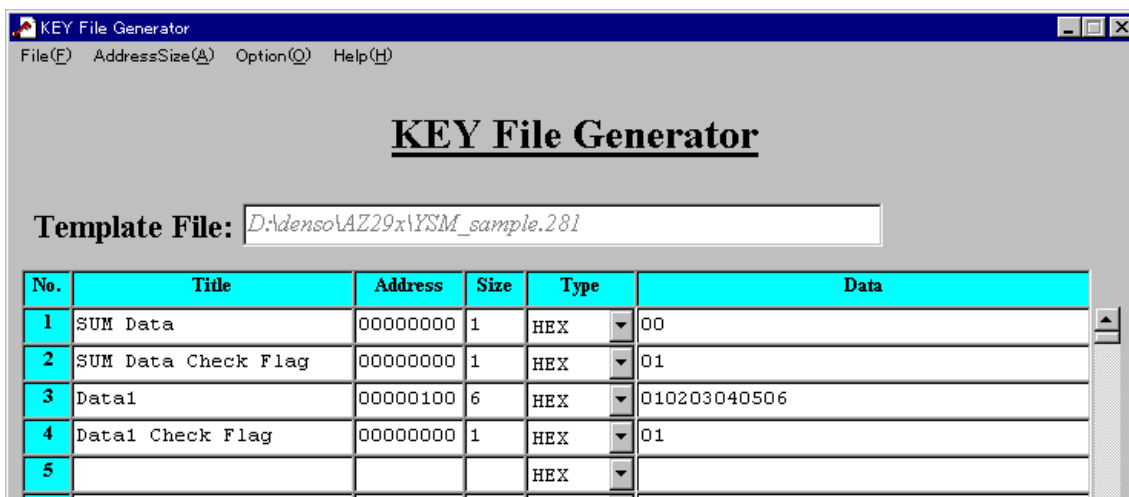
If the YSM file (example: abc.YSM) having the same file name as that of the current file (example: abc.S) exists in the current YIM folder of the control module, the sum check function is executed.

Before executing the device function the YSM file data is compared with the buffer memory data. If it passes the check then the device function is executed.

After verifying in the device function, a comparison between SUM value described in the YSM file and SUM value which is calculated in verifying is performed.

9.2.2. YSM File Format

The YSM file is in the Motorola S format.
Use the AZ481 (option) to create this file.



Line 1 SUM Data
Set the checksum value for the object data.
Address: 00000000, Size: 1, Type: HEX
Data: Checksum value for the object data

Line 2 SUM Data Check Flag
Set whether Line 1 will be checked or not.
Address: 00000000, Size: 1, Type: HEX
Data: Checked (1), Not checked (0)

Line 3 Data1
Set the data address and other information for the check.
Address: Data top address
Size: Data size
Type: HEX or ASCII
Data: Data

Line 4 Data1 Check Flag
Set whether Line 3 will be checked or not.
Address: 00000000, Size: 1, Type: HEX
Data: Checked (1), Not checked (0)

These settings will generate the file below. (Motorola S format file)

```

1 S3060000000000F9      ← SUM Data
2 S3060000000001F8      ← SUM Data Check Flag
3 S30B00000100010203040506DE ← Data1
4 S3060000000001F8      ← Data1 Check Flag
5 S705000000000FA
  
```

From Line 3, you can add as many data and check flag pairs as you want up to a maximum of 10 items.

10. Maintenance Service

10.1. Maintenance Service Contract Recommendation

DTS INSIGHT CORPORATION offers preventive and quick repair services which allow our customers to always use their equipment in excellent running condition and to produce great results.

Our maintenance service period is set to support you for the lifetime of your specified machine. The lifetime maintenance service system is available by contract when you buy your equipment.

Our maintenance service include:

- 1) Taking care of repairs when failures occur
- 2) System software revision service
- 3) Loaning backup equipment during the repair period

In addition DTS INSIGHT CORPORATION also offers our Engineering Service (ES) as an optional service contract. With this service contract and with our customer's cooperation we will propose a solution to the customer by determining and analyzing the problems when the customer connects the equipment to the user system.

Through these services we believe that our customers can use the equipment effectively for various purposes with a high up rate and increase their productivity.

Please see our "Maintenance Service Information" and make good use of it.

DTS INSIGHT CORPORATION offers product maintenance and repair parts for a period which lasts five years after DTS INSIGHT CORPORATION stops production for that product.

10.2. Maintenance Service

DTS INSIGHT CORPORATION offers both maintenance service and optional ES service. Our maintenance service menu and, for your reference, our on-call service menu which is available after your contract expires, are displayed below.

	Work contents	Lifetime maintenance contract	On call service
Standard service	Taking care of repairs	○ Parts included in the lifetime maintenance contract are free of charge for repairs.* ¹	○ Fee based repairs (rates for your reference) 70k yen
	Loaning a backup equipment during repairs	○ Loaning a backup equipment during repairs is free of charge.	○ Fee based loan equipment (rates for your reference) 40k yen
	Software revision up	○ Offering revision up information To meet your needs, DTS INSIGHT CORPORATION will ship the latest software without any charge.	△ Revision up is fee based.
Option	Engineering Support optional service ^{*2} (ES optional service)	○ Optional contract This service provides technical supports for problems when the Programmer and target system are connected as shown on the separate ES Optional Service list.	×

*1 Cable, probe, and battery replacements are not included. In addition repairs that are the responsibility of the customer will require additional payment.

*2 In addition to the standard service, the Engineering Support service contract is required.

10.3. ES Optional Service

10.3.1. Purpose

The smooth connection of the target system and the Programmer.

10.3.2. Service Contents

- DTS INSIGHT CORPORATION offers the examination of problems when your target system and Programmer are connected and then presents measures to solve those problems.
- ES optional service is available from 9:00 AM to 5:00 PM (Monday to Friday). ES optional service is closed on Saturday, Sunday, national holidays, and DTS INSIGHT CORPORATION's holidays, such as year end and new year period.

<On Carrying Out ES Optional Service>

- You shall provide the equipment we need for our maintenance service. In addition, you shall provide effective information on your target system when we need the information during our investigation.
- After investigation, DTS INSIGHT CORPORATION can provide additional hardware and/or software which is needed to fix the problem. This service is not covered by this service contact regardless of the cause of the problem. There are extra charges for these services.
- DTS INSIGHT CORPORATION provides a special order model name for the above added hardware and software and manages it.
- For services outside of the above time DTS INSIGHT CORPORATION also charges an extra fee.
- If our service engineer travels to provide services, our hourly rates during normal hours are within the range in the contract, but DTS INSIGHT CORPORATION does charge for travel expenses such as transportation and lodging. DTS INSIGHT CORPORATION also charges extra for services outside of our normal 9:00 AM to 5:00 PM hours.

10.3.3. Others

- ES optional service supplements the maintenance support for the control modules (Fx-xxx).
- In order to obtain ES optional service you must have the ES optional service contract for the attached control module and the lifetime maintenance service for the control module and the NETIMPRESS.

10.4. Lifetime Maintenance Service

The first six months after you purchase your NETIMPRESS is our period of free maintenance service.

During this period you can obtain our standard service free of charge.

The warranty card is not supplied with the product. When you obtain our standard service free of charge, the warranty card is not needed.

If the customer needs the warranty card, please inform our Support Center of First Business Headquarters of "Model" and "No." stated on the bottom of the equipment through E-mail. (support-impress@dts-insight.co.jp)

(Contact address: See below.)

<Maintenance Service Conditions>

Our lifetime maintenance service is a maintenance support option for the flash programmer (NETIMPRESS) and control module. After six months of the period of use (lifetime) of your flash programmer a new maintenance contract agreement is necessary if you would like a maintenance agreement. The contents of this agreement may vary depending on the lifetime of your flash programmer.

We are currently conducting a six month extension campaign, so if you enter into a lifetime maintenance contract when you purchase your flash programmer, then DTS INSIGHT CORPORATION will extend the above free maintenance contract period to one year.

Please complete the information on the maintenance contract application form on the next page and sign up at our First Business Headquarters.

Furthermore, concerning the maintenance service rates please see the list price which is on a separate sheet.

If anything is not clear please contact our First Business Headquarters or a distributor.

Send your registration and lifetime maintenance contract to:

NETIMPRESS Support Center:

First Business Headquarters
Second Business Div.
Automotive Product Dept.
Development Section

TEL: +81-3-6756-9413

FAX: +81-3-6756-9404

First Business Headquarters Second Business Div.
 Automotive Product Dept. Sales Section
 DTS INSIGHT CORPORATION

User Registration and Lifetime Maintenance Contract Application Form

The flash programmer lifetime maintenance contract can be concluded by applying as shown below.

<<How to contact you>>				
Company name (Office name)				
Section :		TEL		
Name:		FAX		
<<System configuration>>				
(A) Flash Programmer NETIMPRESS • NETIMPRESS serial number (Write the serial number which is on the nameplate seal on the back of the NETIMPRESS)				
(B) Control module • Control module model name: • Control module serial number: (Write the serial number which is on the nameplate seal on the front of the control module PC card)				
<<Contract service type and period>>				
Check the box and fill in the contents for the service contract				
<input type="checkbox"/> 1 Standard service *1				
Contract coverage	Purchase date	Maintenance contract starting date	Contract period	Contract completion scheduled date
(A) Programmer				
(B) Control module				
<input type="checkbox"/> 2 ES option (to be contracted for during the control module standard service contract period)				
Contract contents	Maintenance contract starting date	Contract period	Contract completion scheduled date	
(C) ES optional service		One year *2		

*1 DTS INSIGHT CORPORATION is currently conducting a six month extension campaign for customers who enter into maintenance contracts at the time of purchase.

*2 DTS INSIGHT CORPORATION believes that our one year service period after purchase is appropriate for almost all of our customers.

10.5. Maintenance Contracts for Rental Machines

The company which handles rental machines offers the following two types:

(1) Flash Programmer covered by maintenance service

This is the product that DTS INSIGHT CORPORATION has entered into a standard service contract with the rental company for.

Customers using our flash programmer covered by the maintenance contract can automatically use the standard services shown in our list of maintenance services.

In addition customers using our flash programmer maintenance contract can use ES optional services that they would like. (There are additional fees.)

ES optional service is conducted by contracts between customers and our company.

Enter the information in the attached lifetime maintenance contract application form and fax it to us.

DTS INSIGHT CORPORATION also offers an ES Optional Service for shorter periods for customers who will be using our NETIMPRESS for a shorter period of time.

(2) Flash Programmer not covered by maintenance contract

The rental company is in charge of Flash Programmer maintenance service.

When DTS INSIGHT CORPORATION provides maintenance services, DTS INSIGHT CORPORATION will ask you for reimbursement for our on-call service fees. After confirming whether or not the maintenance contract applies to rental products, please contact the department in charge of the maintenance.

In addition to the flash programmer rental product, the dummy target (DUB) for the self-test function is added to the product for your use.

If there are any problems with your NETIMPRESS after carrying out self-diagnostics with the dummy target, please contact our support center.

10.6. Maintenance Service System

The Support Center of First Business Headquarters below is in charge of the flash programmer maintenance service.

① NETIMPRESS Support Center of First Business Headquarters

Contact the Support Center of First Business Headquarters below with any maintenance service inquiries you have.

NETIMPRESS Support Center:

First Business Headquarters

Second Business Div.

Automotive Product Dept.

Development Section

TEL: +81-3-6756-9413

FAX:+81-3-6756-9404

Email: support-impress@dts-insight.co.jp

For technical inquiries please send them by fax or Email.

② Maintenance service hours

9:00 AM to 5:00 PM (Monday to Friday) *

* Maintenance service is not available in a time zone other than that shown on the left, and on Saturday, Sunday, and national holidays.

Fax to +81-3-6756-9404
 First Business Headquarters NETIMPRESS Support Center
 DTS INSIGHT CORPORATION

Q&A FAX SHEET

If there are any abnormalities generated while using the product please consult your user manual first.

If the situation does not return to normal, then fill out the Q&A Fax Sheet items below and send the Fax Sheet to the Embedded Products Business Headquarters NETIMPRESS Support Center. (Please fill out each item.)

<<How to contact you>>		
Company name (Office name)		
Section:	TEL	
Name:	FAX	
<<System configuration>>		
(A) Flash Programmer NETIMPRESS • NETIMPRESS serial number: (Write the serial number which is on the nameplate seal on the back of the NETIMPRESS)		
(B) Control module • Control module model name: • Control module serial number: (Write the serial number which is on the nameplate seal on the front of the control module PC card)		
<<Problem contents and those conditions>>		
(The frequency of the problems, operation procedures, and other things at that time)		
Embedded Products Business Headquarters NETIMPRESS Support Center (9:00 AM to 5:00 PM) TEL: +81-3- 6756-9413 FAX: +81-3-6756-9404		

APPENDIX List of Error Codes

Error No.	Error message	Contents	Corrective action
1001	SYSTEM PROGRAM ROM ERR	NETIMPRESS main unit is faulty.	Contact DTS INSIGHT support center.
1002	NO LICENSE	No license is found.	You must purchase the license.
1003	GROUP CODE ERR	Group code is different.	Use parameters suitable for the control module.
1004	CM FILE NOT FOUND	CM file does not exist.	Store the control module into the compact flash.
1005	MORE 2 CM FILES	Two or more CM files exist.	Make the setting so that only one control module is stored into the compact flash.
1006	COM ID VER UNEXPECTED ERR	Version of the common part is old.	Contact DTS INSIGHT support center.
1007	CM ID VER UNEXPECTED ERR	Version of the specific part is old.	
1008	FUNCTION NOT SUPPORT	Function is not supported.	No function is assigned to the specified function.
1009	DEVICE FUNCTION NOT SUPPORT	Device function is not supported.	
1010	HPARAM CONST ERR	Hardware parameter cannot be constructed.	Contact DTS INSIGHT support center.
1015	PARAMETER ERR xxxx	Software parameter is corrupted.	Parameters are corrupted. Download the parameter file again.
1016	ADDRESS WARNING	Address of FUNC-0 and FUNC-F5 is different from that of FUNC-D6.	
1020	S FILE FORMAT ERR	S format error	Object file is corrupted. Check the object file.
1021	HEX FILE FORMAT ERR	HEX format error	
1022	FORMAT ERR (REC TYPE)	Record type error	
1023	FORMAT ERR (ADDRESS)	Address field error	
1024	FORMAT ERR (CHECK SUM)	Checksum error	
1025	FORMAT ERR (CRLF)	CRLF code error	
1026	FORMAT ERR (SIZE)	Record size error	
1027	FORMAT ERR (S5)	S5 record check error	
1028	FORMAT ERR (ASCII)	Binary conversion disabled data error	
1029	DATA FORMAT ERR	Communication data format error	Since the communication error occurs, check the communication path.
102A	CM FORMAT ERR	CM file format error	Since the control module is corrupted, download the control module.
102B	ADDRESS WARNING	Data other than FLASH-ROM address is recognized.	This error message appears if data to be assigned to a device other than the target flash ROM is downloaded. To shut-down this output, turn OFF this warning using FUNC-9E.
1030	FROM PARAMETER ERR	Parameter error when accessing to the FLASH-ROM inside the programmer.	Contact DTS INSIGHT support center.
1031	FROM HARDWARE ERASE ERR	Erase error of the FLASH-ROM inside the programmer	
1032	FROM SOFTWARE ERASE ERR	Blank check error of the FLASH-ROM inside the programmer	
1033	FROM HARDWARE PROGRAM ERR	Write error of the FLASH-ROM inside the programmer	
1034	FROM SOFTWARE PROGRAM ERR	Verify error of the FLASH-ROM inside the programmer	
1035	FROM DATA ERR	Initial data error when writing to the FLASH-ROM inside the programmer	

Error No.	Error message	Contents	Corrective action	
1041	PCIC WRITE CMD TIMEOUT	CF write error	Compact flash may be defective. Contact DTS INSIGHT support center.	
1042	PCIC WRITE STAT TIMEOUT			
1043	PCIC WRITE BAD ERR			
1044	PCIC WRITE SECTOR ERR			
1045	PCIC WRITE ERR			
1046	PCIC WRITE ECC ERR			
1047	PCIC CMD ABORT			
1048	PCIC WRITE NORMAL ERR			
1049	PCIC WRITE UNKNOWN ERR			
104A	PCIC READ CMD TIMEOUT	CF read error		
104B	PCIC READ STAT TIMEOUT			
104C	PCIC READ BAD ERR			
104D	PCIC READ SECTOR ERR			
104E	PCIC READ ECC ERR			
104F	PCIC READ CMD ERR			
1050	PCIC READ NORMAL ERR			
1051	PCIC READ UNKNOWN ERR	File system error of compact flash	Since the compact flash is not formatted in the FAT format, the card cannot be recognized. Format the compact flash in the FAT format.	
1060	FILE SYSTEM ERR (MBR)			
1061	FILE SYSTEM ERR (PREG)			
1062	FILE SYSTEM ERR (PBR)			
1063	ILLEGAL FILE SYSTEM			
1064	FILE SYSTEM ERR (FAT CNT)			
1065	UNC ERR			It is prohibited to use the network path.
1066	FULL PATH ERR			Shorten the file and folder names.
1067	PATH LENGTH ERR			Short file name cannot be created any further.
1068	SHORT NAME ERR			Free area of the root is insufficient. Delete the file or folder in the root.
1069	CF DISK FULL (DIR)	Free data area of the compact flash is insufficient. Delete the file or folder.		
106A	CF DISK FULL (DAT)	File system of the compact flash may be corrupted. Format the compact flash in the FAT format.		
106D	DOS FILE SIZE ERR	Write-access is made to the read-only file.	Since the specified file is a read-only file, this error is output. Change the file destination or change the file attribute of the specified file.	
106E	FILE SYSTEM ERR (FAT)			
1070	FILE READ ONLY ERR	File is not found.	Since the specified file is not found, this error is output. Change the file destination or store the specified file.	
1072	FILE NOT EXIST			
1073	FILE EXIST	File already exists.	Since the specified file already exists, the error is output. Change the file designation or delete the specified file.	

Error No.	Error message	Contents	Corrective action
1074	FOLDER NOT EXIST	Folder is not found.	Since the specified folder is not found, the error is output. Change the folder destination or store the specified folder.
1075	FOLDER EXIST	Folder already exists.	Since the specified folder is already exists, the error is output. Change the folder destination or delete the specified folder.
1090	YSM CHECK ERR	YSM checksum error	Check the sum data of the YSM or sum value of the buffer.
1091	YSM CHECK ERR	YSM check buffer error	Check the buffer data of the YSM or data of the buffer.
1092	YSM FILE FORMAT ERR	YSM file format error	Check the YSM file format.
1093	YSM NOT FOUND	YSM file is not found.	Store the YSM file.
10A0	ETHER SEND CUT ERR	Line is cut-off when sending ETHER.	Check the ETHERNET line.
10A1	ETHER SEND TIMEOUT	Time-out occurs when sending ETHER.	
10A2	ETHER RECV CUT ERR	Line is cut-off when receiving ETHER.	
10A3	ETHER RECV TIMEOUT	Time-out occurs when receiving ETHER.	
10A4	ETHER ERR	ETHER communication cannot be made.	
10A5	NEXT COMMAND NOT RECV	ETHER communication error	
10B0	COM OUT ERR	RS232C send error	Check the RS232C line.
10B1	COM IN ERR	RS232C receive error	
10C0	DEVICE SEND TIMEOUT xx	Target communication send time-out	Error occurs in the communication with the target. Check the target connection or parameter setup.
10C1	DEVICE RECV TIMEOUT xx	Target communication receive time-out	
10C2	DEVICE OVERRUN ERR xx	Target communication receive over-run	
10C3	DEVICE FRAMING ERR xx	Target communication framing error	
10C4	DEVICE PARITY ERR xx	Target communication parity error	
10D0	CSB NOT FOUND	CSB file is not found.	Store the CSB file.
10D1	MORE 2 CSB FILES	Two or more CSB files exist.	Delete the CSB files so that one CSB file exists.
10D2	CSB FILE FORMAT ERR xxx	CSB file format error	Check the CSB file format.
10D3	FUNCTION DATA ERR	CSB or YMN function parameter error	Check the CSB and YMN function parameters.
10D4	YMN FILE FORMAT ERR	YMN file format error	Check the YMN file format.
10D5	YMN NOT REGIST	YMN file undefined error	Set the YMN file to be executed with the FUNC-DC.
10E0	TSIG VPP SETUP ERR	TVPP setup error	Since the TVPP is not calibrated, TVPP cannot be applied. Contact DTS INSIGHT support center.
1100	DEVICE CLEN ERR	Over-current detection	Device may be short-circuited with the target. Check the connection with the target.
1101	TVCC TOO LOW	Target voltage is low.	Target power needs to be connected to the TVCC.
1102	TVCC TOO HIGH	Target voltage is high.	Target power needs to be turned OFF.
1103	TVPP1 TOO LOW	TVPP1 voltage is low.	Check the connection of TVPP.
1104	TVPP2 TOO LOW	TVPP2 voltage is low.	
1105	TVPP1 TOO HIGH	TVPP1 voltage is high.	
1106	TVPP2 TOO HIGH	TVPP2 voltage is high.	
1107	DEVICE TRXD LOW ERR xx	TRXD outputs "Low" when it is attempted to start the UART communication.	Target may not be transitioned to the operation mode. Check the connection with the target.
1108	DEVICE INITIALIZE COM ERR	Initial communication error	

Error No.	Error message	Contents	Corrective action
1109	DEVICE ERR xx	Device error	Target may be corrupted. Check the target.
110A	DEVICE SCI SUM ERR xx	SCI communication sum error	Check the communication connection status with the target.
110B	DEVICE ILLEGAL REPLY xx	Unexpected data received by SCI communication	
110C	SUM VERIFY ERR xx	Sum verify error	
110E	BTP NOT FOUND	BTP file is not found.	Store the BTP file.
110F	MORE 2 BTP FILES	Two or more BTP files exist.	Delete BTP so that only one BTP exists.
1110	BTP FORMAT ERR	BTP file format error	Check the BTP file format.
1111	KEY NOT FOUND	KEY file is not found.	Store the KEY file.
1112	MORE 2 KEY FILES	Two or more KEY files exist.	Delete KEY so that only one KEY exists.
1113	KEY FORMAT ERR	KEY file format error	Check the KEY file format.
1114	KEY ERR	KEY error	
1120-113F	xxxxx	Error occurs in the definition of the specific part.	See the manual for control module.
1150	YIM MAX	YIM folder is not created any further.	
1151	YIM PROTECTED	YIM folder is protected.	
1160	YLC NOT FOUND	YLC file is not found.	Contact DTS INSIGHT support center.
1161	MORE 2 YLC FILES	Two or more YLC files exist.	
1162	YLC FORMAT ERR	YLC file format error	
1170	YCM FORMAT ERR	YCM file format error	Check the YCM file.
1180	YIM NOT REGIST	YIM undefined error	Set the YIM folder.
1181	CM NOT REGIST	Control module undefined error	Download the control module.
1182	BUF NOT REGIST	Buffer memory undefined error	Keep a sufficient free area size of the DOS area and start up the programmer.