

JLR-7500/7800  
NWZ-4740

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**GPS NAVIGATOR**  
**PROGRAM UPDATE PROCEDURE**

## 1.1 Updating


The display unit program can be updated with the aid of an externally connected PC. A PC and connection cable are necessary for updating the programs.

Before an update can be performed, the current setting values must be recorded.  
(Enter the values into the lists at the end of this manual.)

### ■ Time Required for Program Rewriting

Unit	Required Time	Notes
NWZ-4740 Display Unit	About 7 minutes	For 115200 bps setting
	About 13 minutes	For 57600 bps setting
	About 20 minutes	For 38400 bps setting



### ■ Version Check Procedure

<1> Press  to display the MAIN MENU.

<2> Select [7. VERSION] from the MAIN MENU.

<3> Hold down  and  together. The version details will be displayed.

Sample display of the JLR-7800

M VERSION		15:58:43 U1
1. SENSOR	JLR-4341	
SERIAL No.	: KE84541	
BARCODE	: 606200000000	
VERSION	: R40.0 *	
CONTROLLER	: KM-E37 * * *	
2. DISPLAY		
SERIAL No.	: KE84041	
BARCODE	: 607200000000	
VERSION	: R53.00 * * *	
IP	: 192.168. 60.163	
W84		

\*: Version information

VERSION INFO Menu

## 1.2 NWZ-4740 Display Unit Update Procedure

### 1. Preparation

1.1. Prepare the following:

- PC

OS: Windows95 / 98 / NT / 2000 / XP / VISTA(Home Premium)

Available hard disk space required: 10MB or more

COM port: If the PC does not have a COM port, prepare a USB serial conversion adapter.

- Dsub 9-pin straight cable (9-pin male connector - 9-pin female connector)
- Update PC program (NWZ4740 FLASH 1.exe)
- Update file (xxxxxx.bin)

1.2. Copy the update PC program (NWZ4740 FLASH 1.exe) and update file in the PC desktop.

1.3. Start the NWZ-4740.

1.4. Check the current software version of the NWZ-4740.

#### ◆ Version Check Procedure

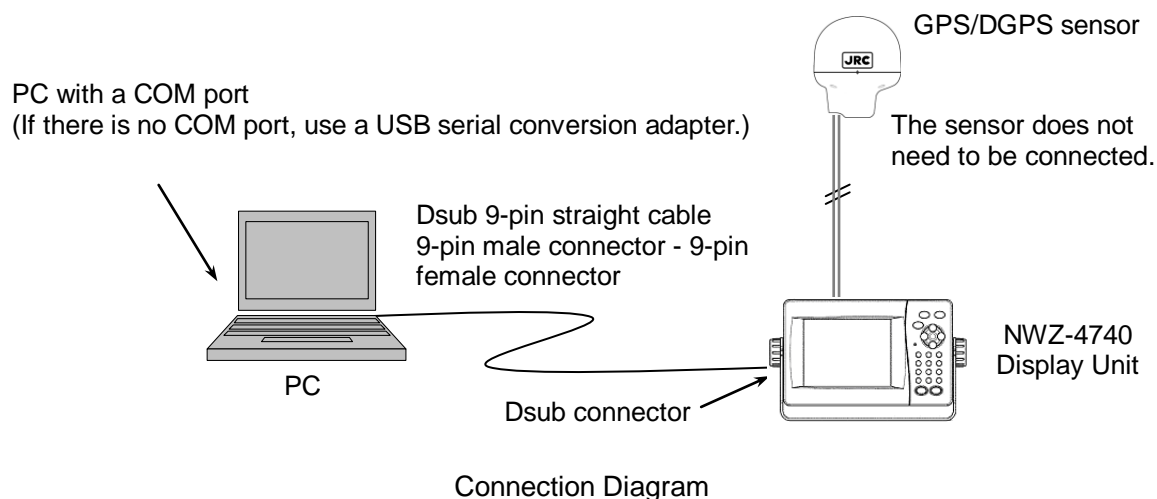
1. Press **MENU** to display the MAIN MENU.
2. Select [7. VERSION] in the MAIN MENU.
3. In the VERSION MENU, hold down **▼** and **0\*** together. The version details will be displayed following "R53.00."

1.5. Turn off the NWZ-4740.

1.6. Open the Dsub connector cover on the rear of the NWZ-4740.

(If a printer is connected, turn off the printer and disconnect the printer cable.)

1.7. Connect the NWZ-4740 and the PC COM port (RS-232C) with the Dsub 9-pin straight cable.



## 2. Running the Update Program

2.1. Switch the NWZ-4740 to the maintenance mode.

To switch to the maintenance mode:

1. Press **MENU** to display the MAIN MENU.
2. Hold down **MENU** and **0\*** together until [0. EQUIP SET] is displayed.

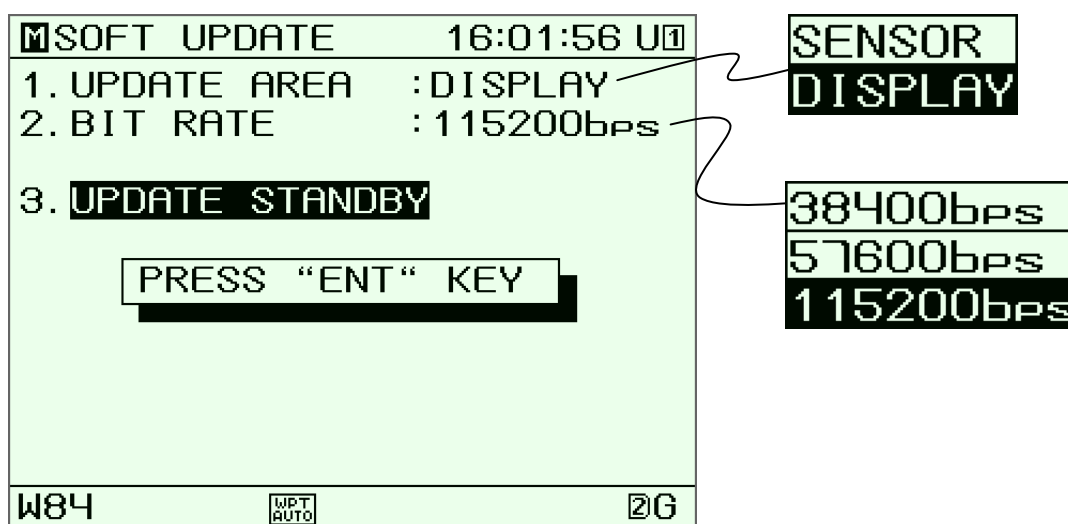
2.2. Select [8. SOFT UPDATE] in the EQUIP SET menu.

Select **DISPLAY** for [1. UPDATE AREA].

Specify a desired transfer speed for [2. BIT RATE].

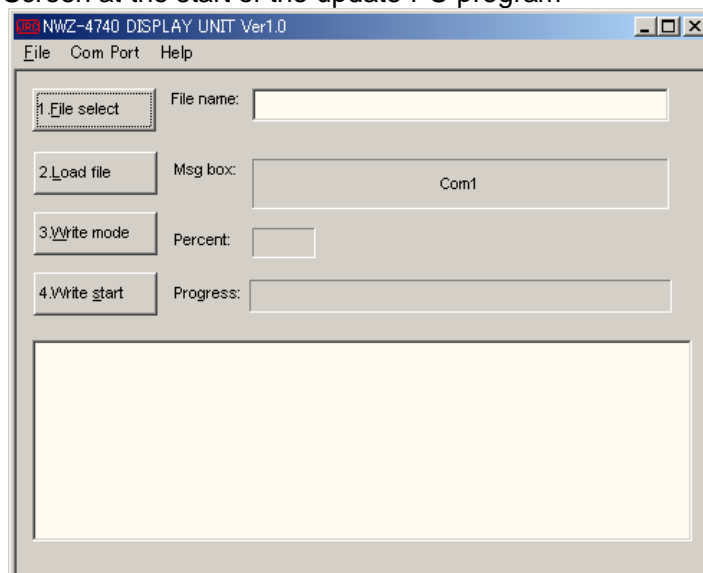
(The specified speed must be supported by the PC connected.)

Select [3. UPDATE STANDBY], and press **ENT**. (The unit will enter the program transfer standby mode.)



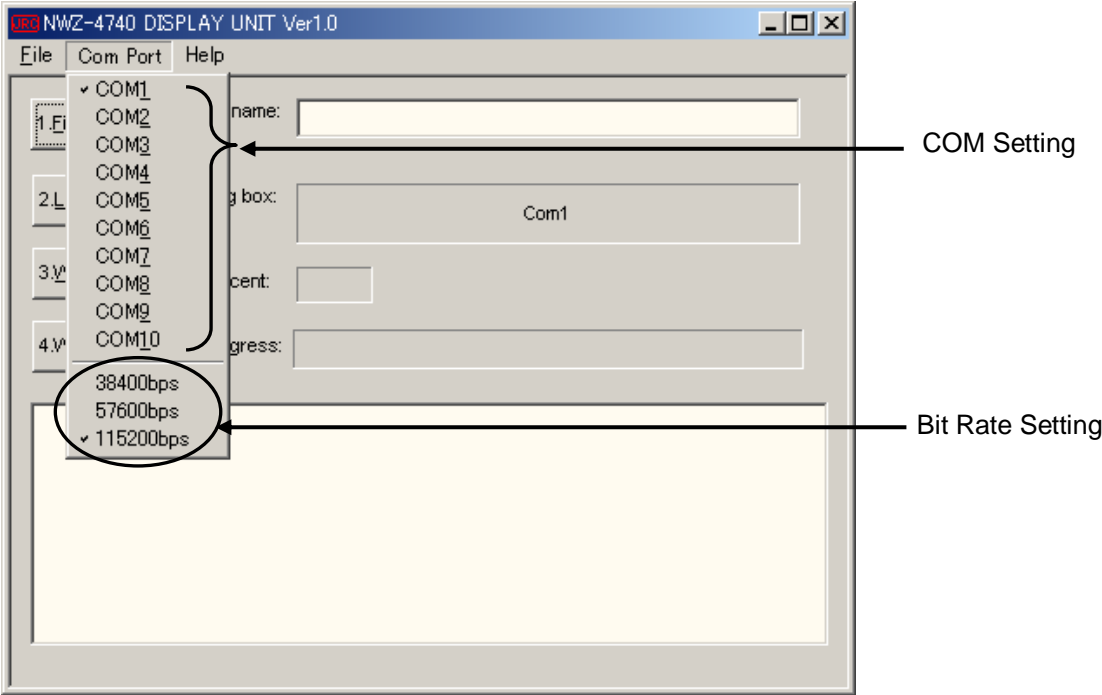
2.3. If any other applications are in use on the PC, shut them down, then run the update PC program (NWZ4740 FLASH1.exe).

Screen at the start of the update PC program



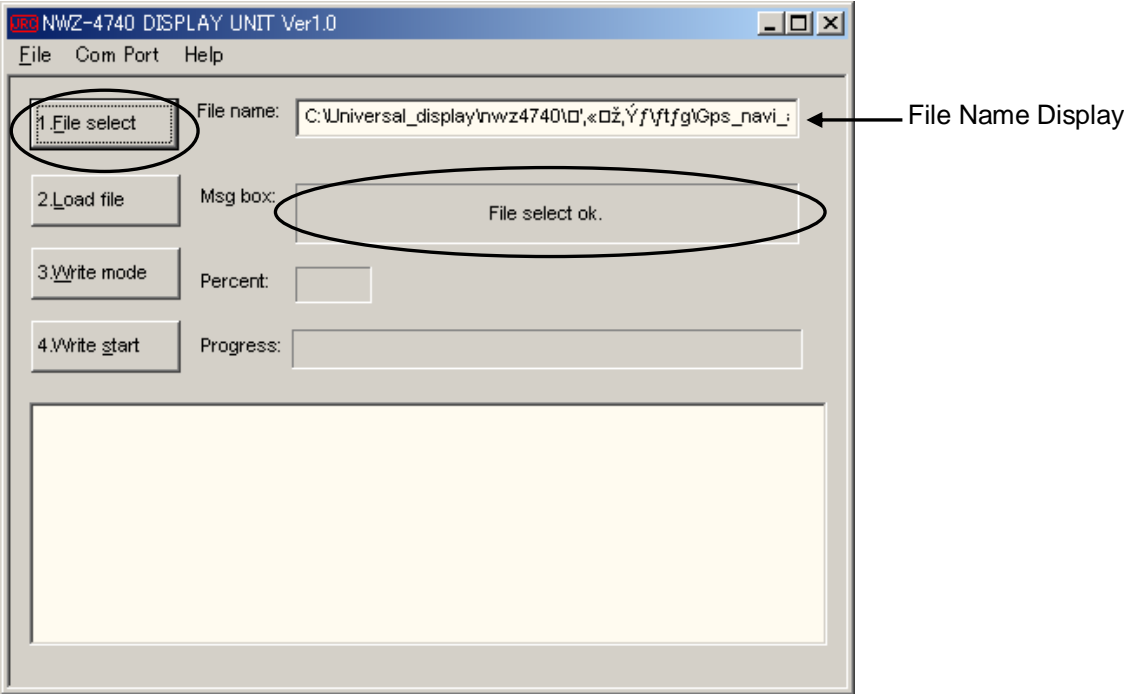
2.4. Select **Com Port**, and then the connected COM port number and bit rate.

The same bit rate as the NWZ-4740 must be selected.



2.5. Click the **1. File select** button and select the update file (xxxxxx.bin).

Check that the message "File select ok." is displayed in the Msg box.



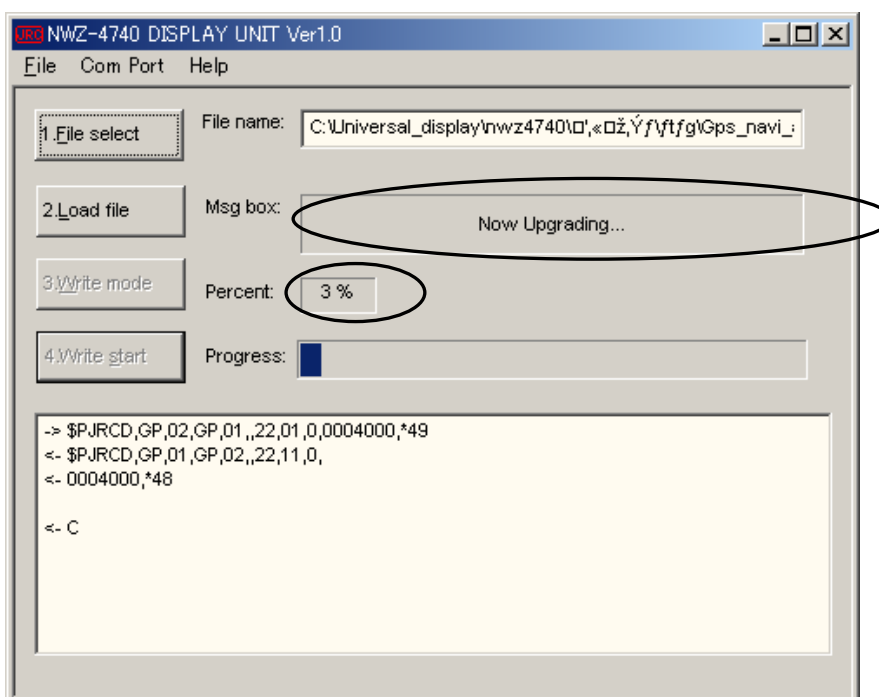
- 2.6. Click the **2. Load file** button, and check that the message "The BIN file loading ok." is displayed.
- 2.7. Click the **3. Write mode** button, and check that the following is displayed instantly on the NWZ4740 FLASH 1 screen.

```

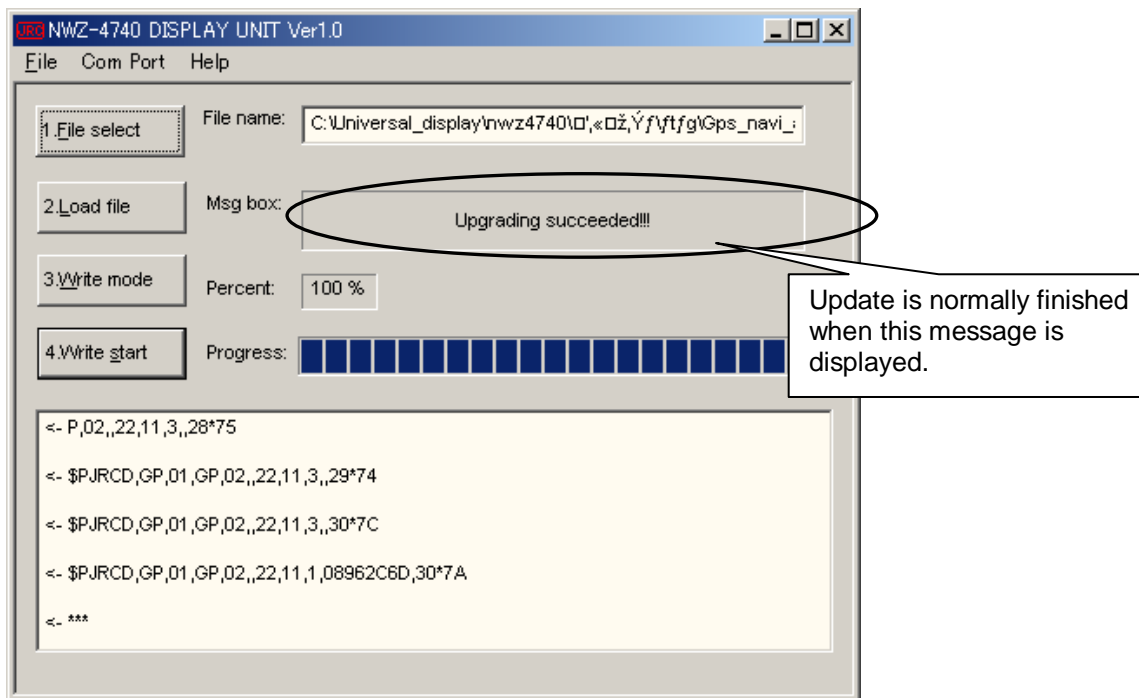
-> $PJRCB,GP,02,GP,01,,22,01,0,0004000,*49
<- $PJRCB,GP,01,GP,02,,22,11,0,0004000,*48
<- C
    
```

**Caution**  
 After clicking **3. Write mode**, "**<- C**" is displayed, and then click **4. Write start**.

- 2.8. Click the **4. Write start** button to start updating the software.  
 The message "Now Upgrading..." will be displayed in the Msg box.  
 After about 5 seconds, check that the progress bar runs and the value displayed for "Percent" increases from 0%.



- 2.9. Check that the progress bar reaches the end and 100% is displayed for "Percent," and that the message "Upgrading succeeded" is displayed in the Msg box.



- 2.10. If "Upgrading succeeded" is not displayed or another message is displayed in the Msg box, the update has failed, so try the update again.
- 2.11. Exit the update PC program (NWZ4740 FLASH 1.exe).
- 2.12. Turn off the NWZ-4740.

### 3. Performing Master Reset

- 3.1. Start the NWZ-4740, and activate the maintenance mode.
- 3.2. Select **DISPLAY** for [5. RESET] in the EQUIP SET menu, press **ENT**.
- 3.3. The reset sector selection screen will be displayed. Select either of the options and **YES**, and press **ENT**.

#### Caution

If the reset sector is performed with "All" selected, all the data is reset to the factory setting.

### 4. Checking the Version

- 4.1. Check the software version according to the procedure in Section 1.4, and confirm that the update is finished successfully.
- 4.2. Turn off the NWZ-4740.
- 4.3. Disconnect the Dsub cable from the NWZ-4740 maintenance port and the PC.
- 4.4. Put the cover on the maintenance port of the NWZ-4740.  
(Connect the printer cable if necessary.)

## Appendix MEMO

MENU		SETTING	
1. DISPLAY	CONTRAST	1 2 3 4 5 6 7 8 9 10 11 12 13	
	DIMMER	MAXIMUM	1 2 3 4 5 6 7 8 9 10
		TYPICAL	1 2 3 4 5 6 7 8 9 10
		MINIMUM	1 2 3 4 5 6 7 8 9 10
	CLICK SOUND	ON OFF	
	REVERSING MODE	NORMAL REVERSE1 REVERSE2	
	INPUT ASSIST	ON OFF	
	DISPLAY SELECT	NAV	ON START OFF
		PLOT1	ON START OFF
		PLOT2	ON START OFF
		PLOT3	ON START OFF
		CDI	ON START OFF
		GPS INFO	ON START OFF
		WPT INFO	ON OFF
BEACON INFO		ON OFF	
NAV ASSIST	ON OFF		
2. PLOT	WPT		
	MARK		
	EVENT		
	TRACK PERIOD	TIME : [min] [sec] / DIST : [NM]	
	TRACK	Dot Solid line Dotted line	
	LINE	Solid line Dotted line Broken line	
	VISIBLE / INVISIBLE	WPT	ON OFF
		WPT No.	ON OFF
		MARK	ON OFF
		EVENT	ON OFF
		EVENT/MARK NO.	ON OFF
		TRACK	ON OFF
		LINE	ON OFF
		ARRIVAL CIRCLE	OFF ON LEG
		XTD	OFF ON LEG
		SCALE BAR	ON OFF
		SYMBOL INFO	ON OFF
		CURSOR INFO	ON OFF
		GRID LINE	ON OFF
	GRID LAT	ON OFF	
	GRID LON	ON OFF	
	CURSOR	LARGE MIDDLE SMALL	
	OWN CIRCLE	OFF / [NM]	
OWN VECTOR	OFF / [min]		



MENU				SETTING				
3. WPT / ROUTE	TRANSFER WPT / ROUTE (LAN)	OUT	CONNECT	MULTICAST	UNICAST	BROADCAST		
			TO IP					
			PORT No.					
			FORMAT	SHARE	Ver1.5	Ver2.1	Ver2.3	JRC
				OUT	ALL WPT	ALL ROUTE	ALL WPT+ROUTE	
				TYPE	ROUTE	ROUTE+WPT	TRACK	EVENT/MARK
	DEFAULT SETTINGS			IN	FROM IP			
				WIDTH PORT	OFF /	[NM]		
				WIDTH STBD	OFF /	[NM]		
				ARRIVAL RAD	OFF /	[NM]		
SPEED				OFF /	[kn]			
SAIL				GC	RL			
4. ALARM	ARRIVAL / ANCHOR		OFF	ARV	ANC			
	XTD / BOUNDARY		OFF	XTD	BOUNDARY			
	DGPS		OFF	ON→OFF	OFF→ON	ON⇄OFF		
	HDOP		OFF	/				
	TEMP		OFF	OVER	UNDER			
			IN RANGE	OUT RANGE		[°C]		
	DPTH		OFF	OVER	UNDER			
			IN RANGE	OUT RANGE		[m]		
	TRIP		OFF	OVER		[NM]		
	SPD		OFF	OVER	UNDER			
			IN RANGE	OUT RANGE		[kn]		
	ALARM SOUND	SYSTEM			1	2	3	
		ARRIVAL / ANCHOR		OFF	1	2	3	
		XTD / BOUNDARY		OFF	1	2	3	
DGPS		OFF			4 5 6			
HDOP		OFF	1	2	3 4 5 6			
TEMP		OFF	1	2	3 4 5 6			
DPTH		OFF	1	2	3 4 5 6			
TRIP		OFF	1	2	3 4 5 6			
SPEED		OFF	1	2	3 4 5 6			
5. SYSTEM	TIME DIFF							
	DATE DISP		'YY-MM-DD	DD MM,'YY	MM DD,'YY			
	TIME DISP		24hr	12hr				
	DATUM							
	UNIT	DIST / SPEED		NM,kn	km,km/h	mi,mi/h		
		HIGHT / DEPTH		m	ft	fm		
		TEMPERATURE		°C	°F			
	MAG CORR		OFF	MANUAL	AUTO			
SPEED METER						[kn]		

MENU		SETTING			
6. GPS / BEACON / SBAS	GPS MODE		AUTO	GPS ALONE	SBAS
			BEACON		
	FIX MODE		AUTO	2D	3D
	SAT ELV MASK		[ ° ]		
	HDOP		4	10	20
	SMOOTHING	POSITION	[sec]		
		SPEED	[sec]		
		COURSE	[sec]		
	RAIM ACCURACY LEVEL		OFF	10	30 50 100
	GPS INITIALIZATION	LATITUDE			
		LONGITUDE			
		ANT HEIGHT	[m]		
	BEACON / SBAS	STATION SELECT	AUTO	MANUAL	
		FREQUENCY	[kHz]		
		BIT RATE	50	100	200
		BEACON INFORMATION	OFF	ON	
		SBAS SEARCH	AUTO	MANUAL	
		TYPE 0 INFORMATION	OFF	ON	
		RANGING	OFF	ON	
		LORAN	LORAN A / C	OFF	LORAN C
LORAN C	GRI CHAIN :				
	TD1 :		CORR :	[us]	
	TD2 :		CORR :	[us]	
LORAN A	STN1 :		CORR :	[us]	
	STN2 :		CORR :	[us]	
7. VERSION	SENSOR	SERIAL No.			
		BARCODE			
		VERSION			
		CONTROLLER			
	DISPLAY	SERIAL No.			
		BARCODE			
		VERSION			
	IP				

EQUIP MENU		SETTING				
DISPLAY TYPE		MAIN SUB				
SENSOR No.		1 2 3 4 5 6 7 8 9				
CCRP	SHIP	ENABLE DISABLE				
		BEAM [m] / LENGTH [m]				
	SENSOR	ENABLE DISABLE				
		X [m] / Y [m]				
CCRP	ENABLE DISABLE					
	X [m] / Y [m]					
DATA I/O	DATA IN/OUT1	SETTING	NMEA JRC IEC ROUTE PRINTER SWITCH			
		VERSION	Ver1.5 Ver2.1 Ver2.3			
		BITRATE	4800 9600 19200 38400			
		SENTENCE	GGA :	RMC :	GLL :	
			VTG :	GSA :	GSV :	
			DTM :	GBS :	GRS :	
			GST :	ZDA :	GNS :	
			MSS :			
			APB :	BOD :	BWC :	
			BWR :	RMB :	XTE :	
			ZTG :	AAM :		
			RTE :	WPL :	ALR :	
			ACK :	CD,GP,0 :		
			CD,GP,1 :	CD,GP,2 :		
			CD,GP,3 :	CD,GP,8 :		
			CF,GP,0 :	CF,GP,2 :		
		CCRP :	RMS :			
	SUB DISPLAY :					
	INTERVAL	OFF 1 3 5 10 20 30 60 [min]				
	DATA OUT2	SETTING	NMEA JRC IEC ROUTE SWITCH			
		VERSION	Ver1.5 Ver2.1 Ver2.3			
		BITRATE	4800 9600 19200 38400			
		SENTENCE	GGA :	RMC :	GLL :	
			VTG :	GSA :	GSV :	
			DTM :	GBS :	GRS :	
			GST :	ZDA :	GNS :	
			MSS :			
APB :			BOD :	BWC :		
BWR :			RMB :	XTE :		
ZTG :			AAM :			
RTE :			WPL :	ALR :		
ACK :			CD,GP,0 :			
CD,GP,1 :			CD,GP,2 :			
CD,GP,3 :			CD,GP,8 :			
CF,GP,0 :			CF,GP,2 :			
CCRP :		RMS :				
SUB DISPLAY :						

EQUIP MENU		SETTING						
DATA I/O	DATA OUT3	SETTING	NMEA	JRC	IEC	ROUTE	SWITCH	
		VERSION	Ver1.5	Ver2.1	Ver2.3			
		BITRATE	4800	9600	19200	38400		
		SENTENCE	GGA :		RMC :		GLL :	
			VTG :		GSA :		GSV :	
			DTM :		GBS :		GRS :	
			GST :		ZDA :		GNS :	
			MSS :					
			APB :		BOD :		BWC :	
			BWR :		RMB :		XTE :	
			ZTG :		AAM :			
			RTE :		WPL :		ALR :	
			ACK :				CD,GP,0 :	
			CD,GP,1 :				CD,GP,2 :	
			CD,GP,3 :				CD,GP,8 :	
	CF,GP,0 :					CF,GP,2 :		
	CCRP :				RMS :			
	SUB DISPLAY :							
	DATA OUT4	SETTING	NMEA	JRC	IEC	ROUTE	SWITCH	EXT
		VERSION	Ver1.5	Ver2.1	Ver2.3			
		BITRATE	4800	9600	19200	38400		
		SENTENCE	GGA :		RMC :		GLL :	
			VTG :		GSA :		GSV :	
			DTM :		GBS :		GRS :	
			GST :		ZDA :		GNS :	
			MSS :					
			APB :		BOD :		BWC :	
BWR :				RMB :		XTE :		
ZTG :				AAM :				
RTE :				WPL :		ALR :		
ACK :					CD,GP,0 :			
CD,GP,1 :				CD,GP,2 :				
CD,GP,3 :				CD,GP,8 :				
CF,GP,0 :				CF,GP,2 :				
CCRP :				RMS :				
SUB DISPLAY :								
CURRENT	LAYER-A				DATA			
	LAYER-B				DATA			
	LAYER-C				DATA			
CONTACT OUT 1		SYSTEM		SYS+XTD+ARV				
		LOG(200p)	LOG(400p)	ALARM	ACK			
CONTACT OUT 2		SYSTEM		SYS+XTD+ARV				
		LOG(200p)	LOG(400p)	ALARM	ACK			

EQUIP MENU			SETTING			
DATA I/O	LAN	DATA OUT	MULTICAST	UNICAST	BROADCAST	
			TO IP			
			PORT NO			
			FORMAT : Ver1.5    Ver2.1    Ver2.3    IEC			
			GGA :	RMC :	GLL :	
			VTG :	GSA :	GSV :	
			DTM :	GBS :	GRS :	
			GST :	ZDA :	GNS :	
			MSS :			
			APB :	BOD :	BWC :	
			BWR :	RMB :	XTE :	
			ZTG :	AAM :		
			RTE :	WPL :	ALR :	
			ACK :		CD,GP,0 :	
			CD,GP,1 :		CD,GP,2 :	
			CD,GP,3 :		CD,GP,8 :	
			CF,GP,0 :		CF,GP,2 :	
		CCRP :		RMS :		
		SUB DISPLAY :				
		ACTIVE ROUTE	SHARE1	SHARE2	SHARE3	SHARE4
		DATA ROUTE	SHARE	OFF		
MUTUAL	ON	OFF				
RMS	ON	OFF				
IP	IP ADDR					
	SUBNET MASK					
	DEFAULT GATEWAY					
	MAC ADDR					