TM-V71A/E Modification Procedures (M4/E Type)

Modification Outline

(1) Expansion of the transmission and reception frequencies
After shipment of the product, expansion of the frequencies is possible by modifying the configuration of the chip jumpers.

Chip jumper configuration
Refer to the table below 【Table 1】

【Table 1】

Jumper location by type		5	4	3	1	0
Chip jumper		R974	R971	R967	R656	W601
TM-V71A M4 type	Factory default setting	×	×	○	○	○
	Reception expansion	×	×	○	○	×
	Transmission and reception expansion	×	×	○	×	×
Chip jumper		R974	R971	R967	R656	R658
TM-V71E E type	Factory default setting	×	○	×	×	○
	Transmission and reception expansion	×	○	×	×	×

* Receiving band in the TM-V71E for E type has already been expanded before factory.

○: With Chip jumper, ×: Without Chip jumper

TM-V71A(M4)

Modification 1 : By removing the W601 lead jumper, the reception frequencies are expanded and "High Power" is added to the transmission power. At this point, there is no expansion of the transmission frequencies.
Modification 2 : Moreover, removing the R656 chip jumper expands the transmission frequencies.

Note: It is not necessary to adjust the power to high power.

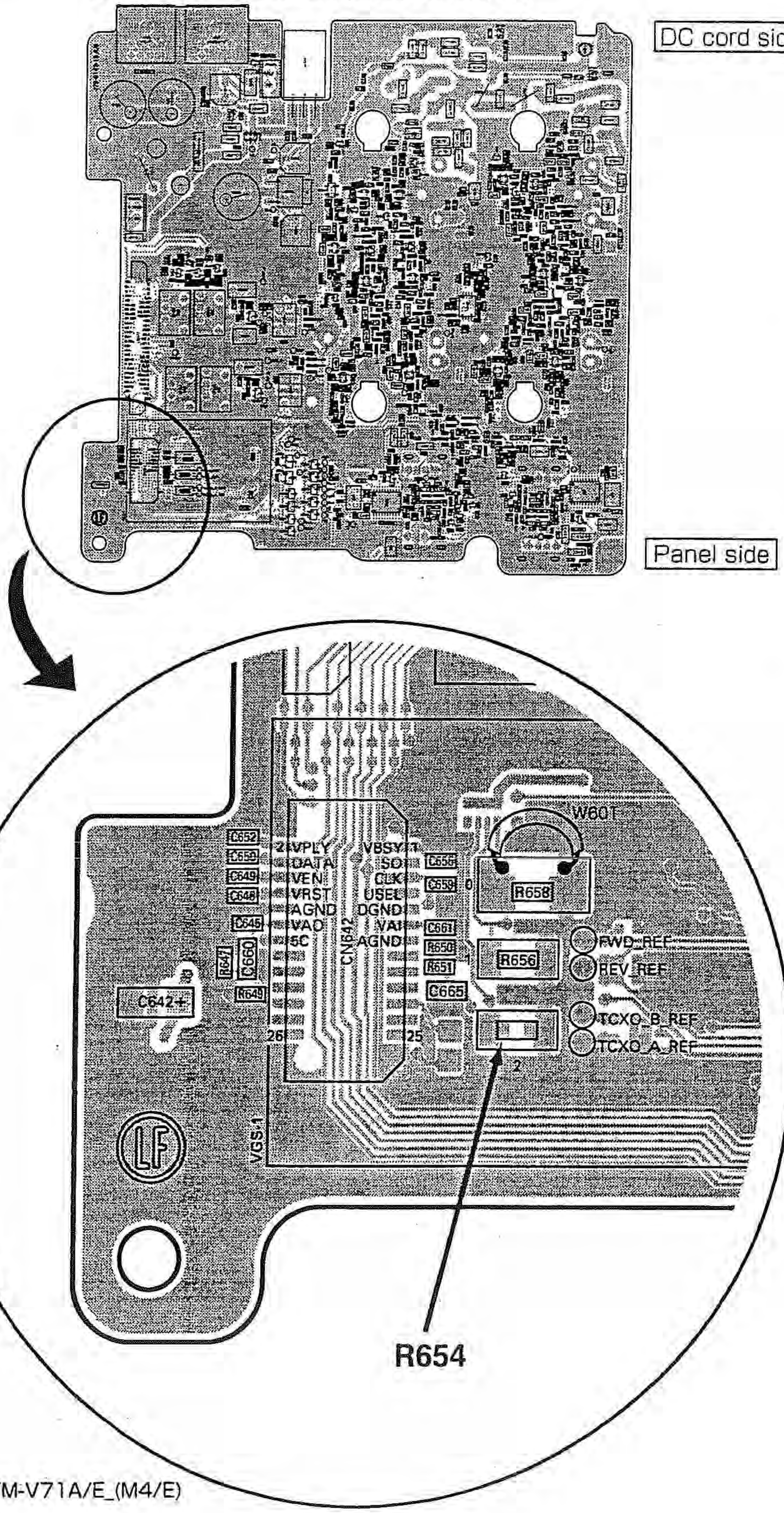
Modification Procedures

Unplug the unit's power cord and then remove the casing. Use a soldering iron to remove chip jumper resistor R656 : 0Ω (M4 type only), mounted close to CN642 on the component side of the TX-RX unit (X57-731 A/6), and lead jumper W601 (M4 type), chip jumper resistor R658 : 0Ω (E type). Be careful of pattern peeling when removing the resistors and make sure not to damage other parts.

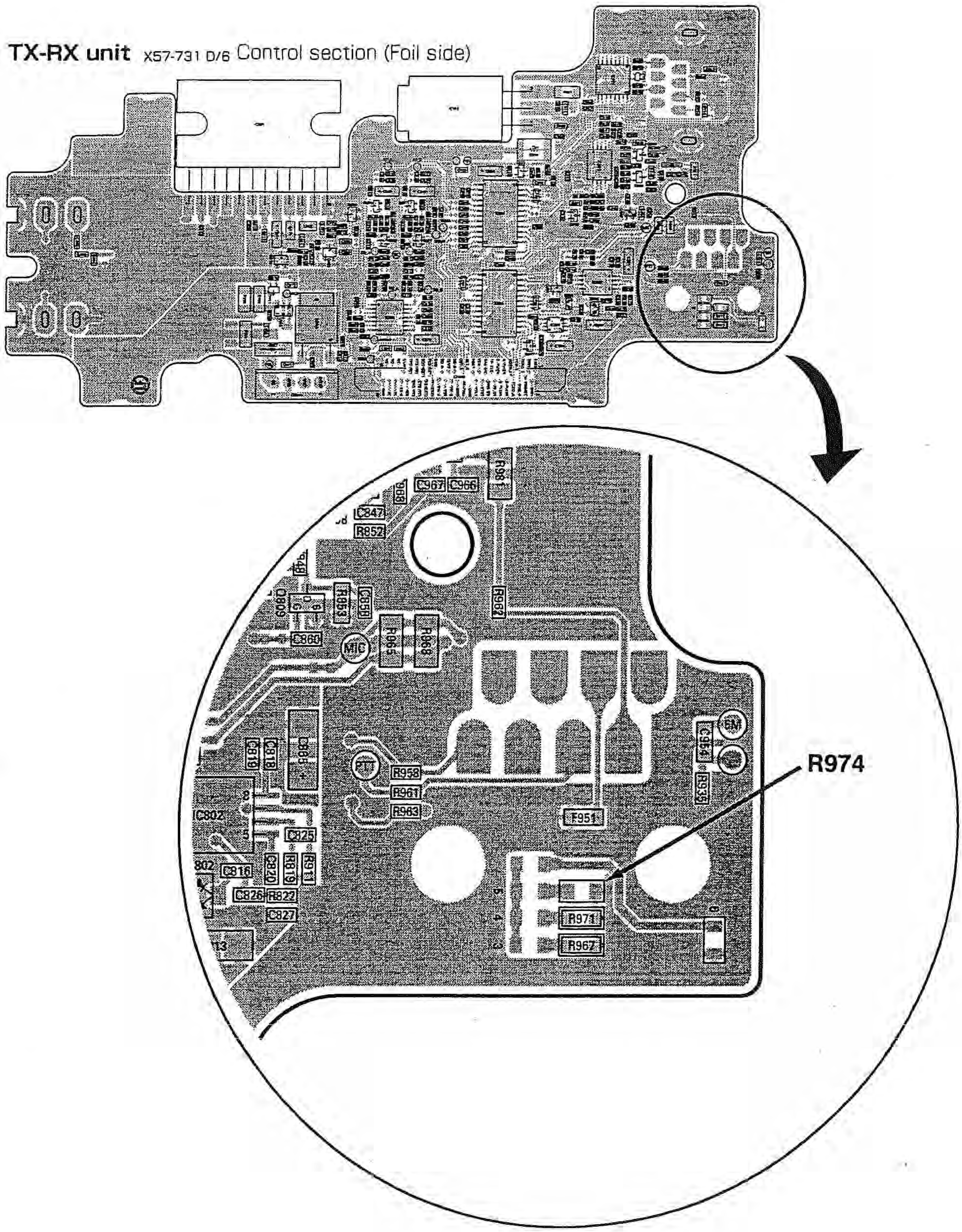
Caution:

After modification, the unit is fully reset when the power is turned on and the unit is in its default state. If you need to save the memory channel data, use the memory control program (MCP-2A) to save the data and import it after modification.

TX-RX unit X57-731 A/6 (Component side)



TX-RX unit X57-731 D/6 Control section (Foil side)



Repeater Modification

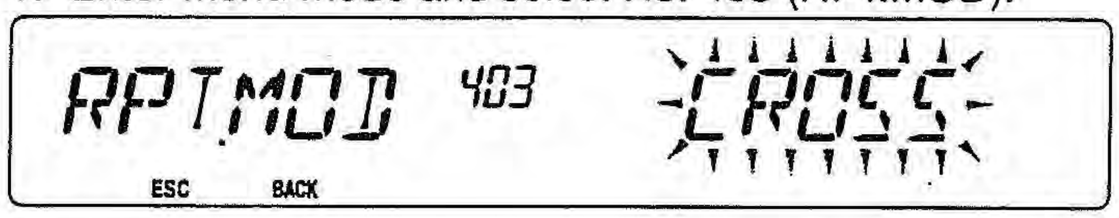
By adding a chip jumper (size 1608) to R654, the following functions are enabled.
- Cross-band/locked-band repeater function
- Repeater transmission hold
- Repeater ID transmission
- Repeater ID registration

See the sections below regarding how to operate the above functions. Refer to page 5 for information about menu mode operations.

Cross-Band/Locked-Band Repeater

Outline of functions
- When a busy signal is received on one band, this function changes the other band to transmission status and modulates the reception audio signal. When the busy signal disappears from the reception band, both bands are quickly changed to reception status.
- The cross-band receiver waits for a busy signal from both the A and B bands and then switches the opposite band from where the busy signal was received to the operation/transmission band.
- The locked-band repeater waits for a busy signal at the opposite band set on the menu and transmits with the band set on menu.

Operation
1. Enter menu mode and select No. 403 (RPT.MOD).

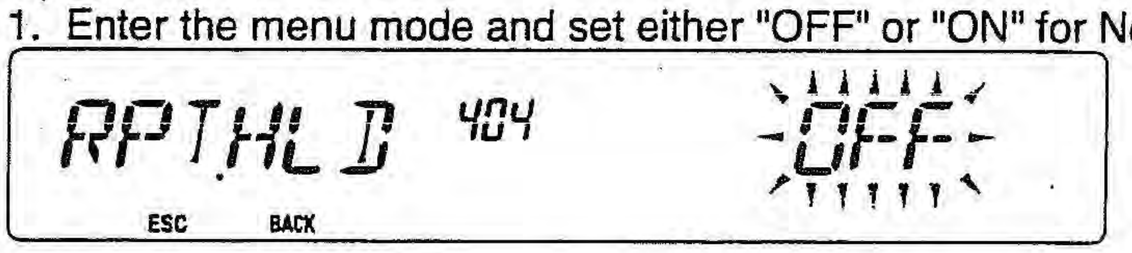


2. Set the repeater mode to "CROSS (cross-band)", "A-TX (A band)", or "B-TX (B band)" .
3. Turn the power OFF.
4. While holding down [TONE], turn the power ON.
   - When repeater mode is ON, the PTT and rO icons are shown on the display. When the repeater is ON, all transceiver operations are unavailable. (Microphone keys are also unavailable)
5. Once the power is OFF, repeat operation 4 to turn the repeater OFF.

Repeater Transmission hold

Outline of functions
- With the repeater ON, this function continues to transmit unconditionally for about 500 [ms] even if the busy signal has disappeared.

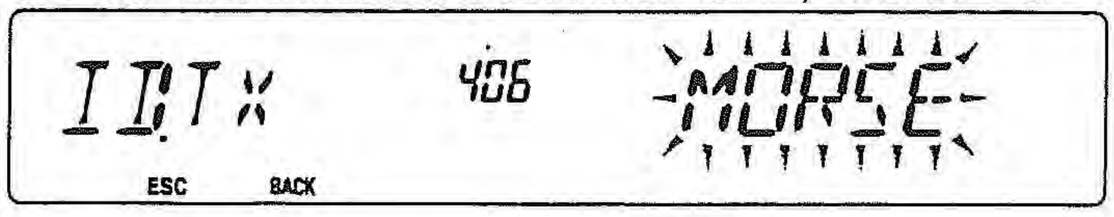
Operation
1. Enter the menu mode and set either "OFF" or "ON" for No. 404 (RPT.HLD).



Repeater ID Transmission

Outline of functions
- When the cross-band or locked-band repeater is ON, this function transmits the repeater ID (call sign) once every 10 minutes. It is possible to transmit registered repeater IDs by Morse code.

Operation
1. Enter menu mode and set either "OFF", "MORSE" or "VOICE" for No. 406 (ID.TX).



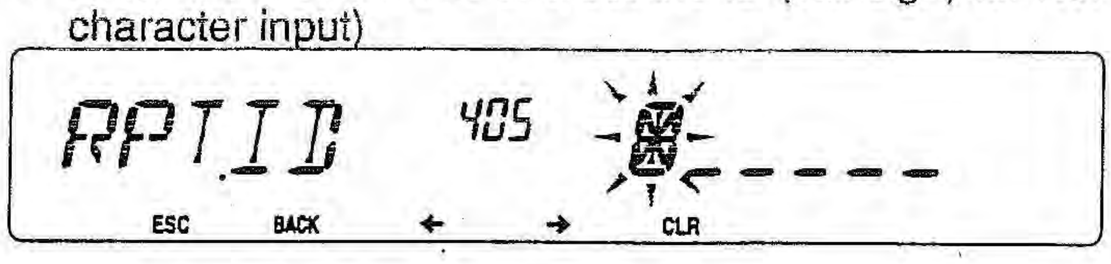
Repeater ID registration

Outline of functions

- Configure the repeater ID (call sign) for Morse code transmission.

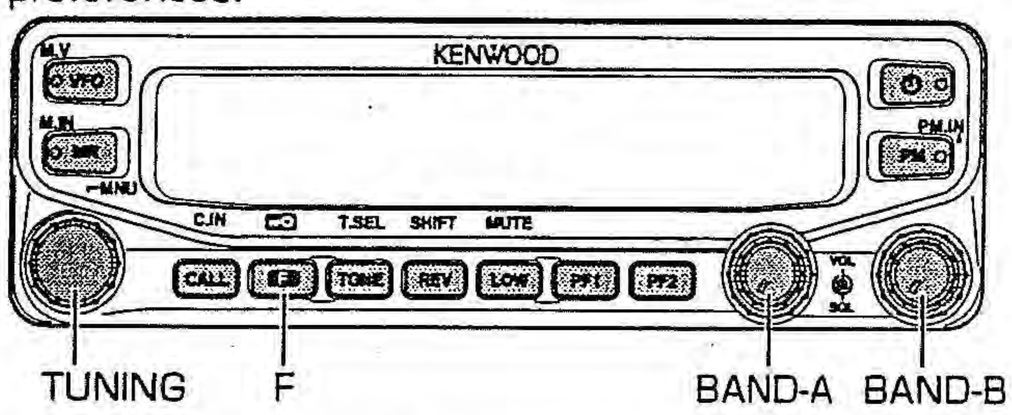
Operation

1. Enter the menu mode and set the ID (call sign) for No. 405 (RPT.ID). (Refer to page 6 for information on character input)



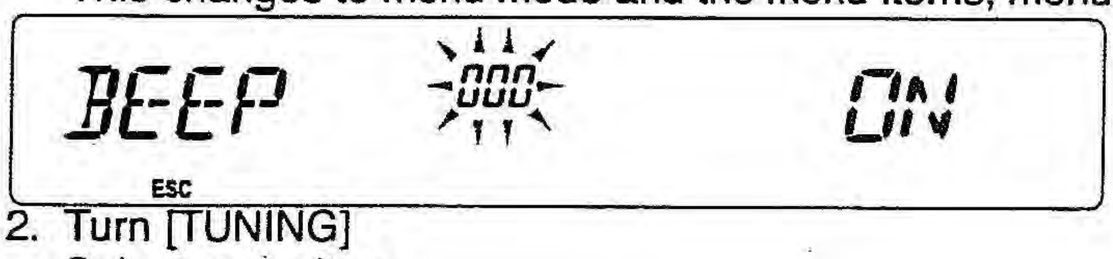
Menu Mode

Various functions can be set in this mode by using menus. You can configure and change settings to fit your preferences.

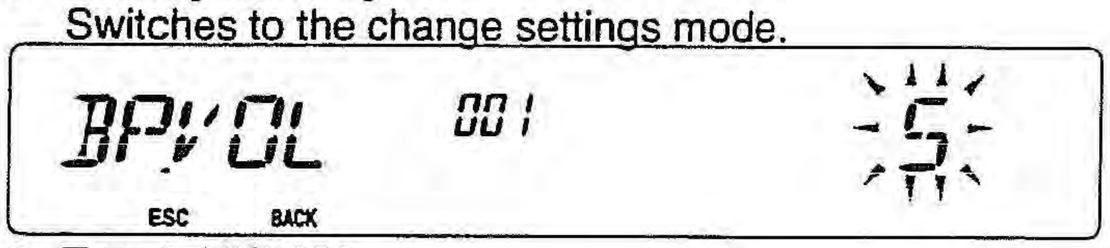


Menu function operations

1. Press [F], and then press [TUNING]
   This changes to menu mode and the menu items, menu numbers, and current settings are displayed.



2. Turn [TUNING]
   Select menu items.
3. Press [TUNING]
   Switches to the change settings mode.



4. Turn [TUNING]
   Switches the settings.
5. Press [TUNING]
   Changes the settings and you are returned to operation 2 above. Repeat operations 2 through 5 to set each menu.
6. Press [F] (ESC)
   This exits menu mode.

Listing of Menu Functions (Selections)

Menu No.	Display	Description	Setting Values	Default setting
000	BEEP	Beep sound	OFF/ ON	ON
⋮	⋮	⋮	⋮	⋮
403	RPT.MOD	Repeater mode	CROSS/ A-TX/ B-TX	CROSS
404	RPT.HLD	Repeater transmission hold	ON/ OFF	OFF
405	RPT.ID	Repeater ID registration	Up to 6 characters	–
406	ID.TX	Repeater ID transmission	OFF/ MORSE/ VOICE	OFF
⋮	⋮	⋮	⋮	⋮
999	RESET	Reset	VFO/ PART/ PM/ FULL	VFO

Character Input

Used when items, such as the repeater ID registration, require the input of characters. When character input is necessary, the cursor blinks.

1 Press [TUNING]
The cursor blinks and character input mode is entered.

2 Turn [TUNING] and select characters
- When entering the repeater ID (call sign), select from the following:
  0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ-/@

3 Press [TUNING]
Moves the cursor to the next position
- Pressing [REV] (←) moves the cursor to the left and pressing [LOW] (→) moves the cursor to the right. (Unavailable at the start and end positions)

4 Repeat operations 2 and 3 to input a maximum of 6 characters
- Pressing [PF1] (CLR) erases the character at the selected cursor position. If there is no character at the cursor position, the operation functions as a backspace.

5 When the cursor is at the far right, press [TUNING]
The characters are registered and you are returned to the status in operation 1.
- By pressing [TONE] (BACK), the characters are not registered and you are returned to the status in operation 1.

6 Press [F] (ESC) to exit menu mode

Type list

118MHz band (A band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		-	-	118	136	118	±0.0	×	AM	12.5	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		-	-	118	136	118	±0.0	×	AM	12.5	MARS
×××	××	MK3		-	-	118	136	118	±0.0	×	AM	12.5	Expanded reception/ Transmission
○××	○○	MM1		-	-	-	-	-	-	-	-	-	General Market
○××	×○/○×	MM2		-	-	118	136	118	±0.0	×	AM	12.5	Australia/Expanded Reception
○××	××	MM3		-	-	118	136	118	±0.0	×	AM	12.5	Expanded reception/ Transmission
××○	○○	MM4	M4	-	-	-	-	-	-	-	-	-	Taiwan
××○	×○/○×	MM5		-	-	118	136	118	±0.0	×	AM	12.5	Expanded Reception for Taiwan
××○	××	MM6		-	-	118	136	118	±0.0	×	AM	12.5	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		-	-	-	-	-	-	-	-	-	Europe General (E,T)
×○×	×○/○×	ME2	E	-	-	118	136	118	±0.0	×	AM	12.5	Expanded Reception for Europe
×○×	××	ME3		-	-	118	136	118	±0.0	×	AM	12.5	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		-	-	-	-	-	-	-	-	-	Denmark
○×○	○○	MC1		-	-	-	-	-	-	-	-	-	China

144MHz band (A band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		144	148	136	200	144	±0.6	○	FM	5	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		142	152	136	200	144	±0.6	○	FM	5	MARS
×××	××	MK3		136	174	136	200	144	±0.6	○	FM	5	Expanded reception/ Transmission
○××	○○	MM1		144	148	144	148	144	±0.6	×	FM	12.5	General Market
○××	×○/○×	MM2		144	148	136	200	144	±0.6	×	FM	12.5	Australia/Expanded Reception
○××	××	MM3		136	174	136	200	144	±0.6	×	FM	12.5	Expanded reception/ Transmission
××○	○○	MM4	M4	144	146	144	146	144	±0.6	×	FM	10	Taiwan
××○	×○/○×	MM5		144	146	136	200	144	±0.6	×	FM	10	Expanded Reception for Taiwan
××○	××	MM6		136	174	136	200	144	±0.6	×	FM	10	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		144	146	144	146	144	±0.6	○	FM	12.5	Europe General (E,T)
×○×	×○/○×	ME2	E	144	146	136	200	144	±0.6	○	FM	12.5	Expanded Reception for Europe
×○×	××	ME3		136	174	136	200	144	±0.6	○	FM	12.5	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		144	146	144	146	144	±0.6	○	FM	12.5	Denmark
○×○	○○	MC1		136	174	136	200	144	±5.7	×	FM	12.5	China

○: With jumper, ×: Without jumper ARO (Automatic repeater offset) ○ : available, × : unavailable

220MHz band (A band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	OO	MK1		-	-	200	300	223	±0.0	×	FM	20	U.S.A.(K), Canada(P)
×××	×O/O×	MK2		-	-	200	300	223	±0.0	×	FM	20	MARS
×××	××	MK3		-	-	200	300	223	±0.0	×	FM	20	Expanded reception/ Transmission
O××	OO	MM1		-	-	-	-	-	-	-	-	-	General Market
O××	×O/O×	MM2		-	-	200	300	223	±0.0	×	FM	12.5	Australia/Expanded Reception
O××	××	MM3		-	-	200	300	223	±0.0	×	FM	12.5	Expanded reception/ Transmission
××O	OO	MM4	M4	-	-	-	-	-	-	-	-	-	Taiwan
××O	×O/O×	MM5		-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception for Taiwan
××O	××	MM6		-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Taiwan
×O×	OO	ME1		-	-	-	-	-	-	-	-	-	Europe General (E,T)
×O×	×O/O×	ME2	E	-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception for Europe
×O×	××	ME3		-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Europe
×OO	OO	ME4		-	-	-	-	-	-	-	-	-	Denmark
O×O	OO	MC1		-	-	-	-	-	-	-	-	-	China

300MHz band (A band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	OO	MK1		-	-	300	400	340	±0.0	×	FM	12.5	U.S.A.(K), Canada(P)
×××	×O/O×	MK2		-	-	300	400	340	±0.0	×	FM	12.5	MARS
×××	××	MK3		-	-	300	400	340	±0.0	×	FM	12.5	Expanded reception/ Transmission
O××	OO	MM1		-	-	-	-	-	-	-	-	-	General Market
O××	×O/O×	MM2		-	-	300	400	340	±0.0	×	FM	12.5	Australia/Expanded Reception
O××	××	MM3		-	-	300	400	340	±0.0	×	FM	12.5	Expanded reception/ Transmission
××O	OO	MM4	M4	-	-	-	-	-	-	-	-	-	Taiwan
××O	×O/O×	MM5		-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception for Taiwan
××O	××	MM6		-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Taiwan
×O×	OO	ME1		-	-	-	-	-	-	-	-	-	Europe General (E,T)
×O×	×O/O×	ME2	E	-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception for Europe
×O×	××	ME3		-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Europe
×OO	OO	ME4		-	-	-	-	-	-	-	-	-	Denmark
O×O	OO	MC1		-	-	-	-	-	-	-	-	-	China

O : With jumper, × : Without jumper ARO (Automatic repeater offset) O : available, × : unavailable

430MHz band (A band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		430	450	400	524	440	±5.0	×	FM	25	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		420	450	400	524	440	±5.0	×	FM	25	MARS
×××	××	MK3		400	470	400	524	440	±5.0	×	FM	25	Expanded reception/ Transmission
○××	○○	MM1		430	440	430	440	430	±5.0	×	FM	25	General Market
○××	×○/○×	MM2		430	440	400	524	430	±5.0	×	FM	25	Australia/Expanded Reception
○××	××	MM3		400	470	400	524	430	±5.0	×	FM	25	Expanded reception/ Transmission
××○	○○	MM4	M4	430	440	430	440	430	±5.0	×	FM	10	Taiwan
××○	×○/○×	MM5		430	440	400	524	430	±5.0	×	FM	10	Expanded Reception for Taiwan
××○	××	MM6		400	470	400	524	430	±5.0	×	FM	10	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		430	440	430	440	430	±1.6 −7.6	×	FM	25	Europe General (E,T)
×○×	×○/○×	ME2	E	430	440	400	524	430	±1.6 −7.6	×	FM	25	Expanded Reception for Europe
×○×	××	ME3		400	470	400	524	430	±1.6 −7.6	×	FM	25	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		432	438	432	438	432	±1.6	×	FM	25	Denmark
○×○	○○	MC1		400	470	400	524	430	±10.0	×	FM	25	China

○: With jumper, ×: Without jumper ARO (Automatic repeater offset) ○ : available, × : unavailable

144MHz band (B band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		144	148	136	200	144	±0.6	○	FM	5	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		142	152	136	200	144	±0.6	○	FM	5	MARS
×××	××	MK3		136	174	136	200	144	±0.6	○	FM	5	Expanded reception/ Transmission
○××	○○	MM1		144	148	144	148	144	±0.6	×	FM	12.5	General Market
○××	×○/○×	MM2		144	148	136	200	144	±0.6	×	FM	12.5	Australia/Expanded Reception
○××	××	MM3		136	174	136	200	144	±0.6	×	FM	12.5	Expanded reception/ Transmission
××○	○○	MM4	M4	144	146	144	146	144	±0.6	×	FM	10	Taiwan
××○	×○/○×	MM5		144	146	136	200	144	±0.6	×	FM	10	Expanded Reception for Taiwan
××○	××	MM6		136	174	136	200	144	±0.6	×	FM	10	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		144	146	144	146	144	±0.6	○	FM	12.5	Europe General (E,T)
×○×	×○/○×	ME2	E	144	146	136	200	144	±0.6	○	FM	12.5	Expanded Reception for Europe
×○×	××	ME3		136	174	136	200	144	±0.6	○	FM	12.5	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		144	146	144	146	144	±0.6	○	FM	12.5	Denmark
○×○	○○	MC1		136	174	136	200	144	±5.7	×	FM	12.5	China

220MHz band (B band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		-	-	200	300	223	±0.0	×	FM	20	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		-	-	200	300	223	±0.0	×	FM	20	MARS
×××	××	MK3		-	-	200	300	223	±0.0	×	FM	20	Expanded reception/ Transmission
○××	○○	MM1		-	-	-	-	-	-	-	-	-	General Market
○××	×○/○×	MM2		-	-	200	300	223	±0.0	×	FM	12.5	Australia/Expanded Reception
○××	××	MM3		-	-	200	300	223	±0.0	×	FM	12.5	Expanded reception/ Transmission
××○	○○	MM4	M4	-	-	-	-	-	-	-	-	-	Taiwan
××○	×○/○×	MM5		-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception for Taiwan
××○	××	MM6		-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		-	-	-	-	-	-	-	-	-	Europe General (E,T)
×○×	×○/○×	ME2	E	-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception for Europe
×○×	××	ME3		-	-	200	300	223	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		-	-	-	-	-	-	-	-	-	Denmark
○×○	○○	MC1		-	-	-	-	-	-	-	-	-	China

○: With jumper, ×: Without jumper ARO (Automatic repeater offset) ○ : available, × : unavailable

300MHz band (B band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		-	-	300	400	340	±0.0	×	FM	12.5	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		-	-	300	400	340	±0.0	×	FM	12.5	MARS
×××	××	MK3		-	-	300	400	340	±0.0	×	FM	12.5	Expanded reception/ Transmission
○××	○○	MM1		-	-	-	-	-	-	-	-	-	General Market
○××	×○/○×	MM2		-	-	300	400	340	±0.0	×	FM	12.5	Australia/Expanded Reception
○××	××	MM3		-	-	300	400	340	±0.0	×	FM	12.5	Expanded reception/ Transmission
××○	○○	MM4	M4	-	-	-	-	-	-	-	-	-	Taiwan
××○	×○/○×	MM5		-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception for Taiwan
××○	××	MM6		-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		-	-	-	-	-	-	-	-	-	Europe General (E,T)
×○×	×○/○×	ME2	E	-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception for Europe
×○×	××	ME3		-	-	300	400	340	±0.0	×	FM	12.5	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		-	-	-	-	-	-	-	-	-	Denmark
○×○	○○	MC1		-	-	-	-	-	-	-	-	-	China

430MHz band (B band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		430	450	400	524	440	±5.0	×	FM	25	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		420	450	400	524	440	±5.0	×	FM	25	MARS
×××	××	MK3		400	470	400	524	440	±5.0	×	FM	25	Expanded reception/ Transmission
○××	○○	MM1		430	440	430	440	430	±5.0	×	FM	25	General Market
○××	×○/○×	MM2		430	440	400	524	430	±5.0	×	FM	25	Australia/Expanded Reception
○××	××	MM3		400	470	400	524	430	±5.0	×	FM	25	Expanded reception/ Transmission
××○	○○	MM4	M4	430	440	430	440	430	±5.0	×	FM	10	Taiwan
××○	×○/○×	MM5		430	440	400	524	430	±5.0	×	FM	10	Expanded Reception for Taiwan
××○	××	MM6		400	470	400	524	430	±5.0	×	FM	10	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		430	440	430	440	430	±1.6 −7.6	×	FM	25	Europe General (E,T)
×○×	×○/○×	ME2	E	430	440	400	524	430	±1.6 −7.6	×	FM	25	Expanded Reception for Europe
×○×	××	ME3		400	470	400	524	430	±1.6 −7.6	×	FM	25	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		432	438	432	438	432	±1.6	×	FM	25	Denmark
○×○	○○	MC1		400	470	400	524	430	±10.0	×	FM	25	China

○: With jumper, ×: Without jumper ARO (Automatic repeater offset) ○ : available, × : unavailable

1.2GHz band (B band)

Jumper location by type 543	Expanded Jumper 10	CPU type	Market code	Transmission freq. (MHz)		Reception freq. (MHz)		Default value					Remarks
				MIN	MAX	MIN	MAX	VFO (MHz)	Offset (MHz)	ARO	Demodulation mode	STEP (kHz)	
×××	○○	MK1		-	-	800	1300	1240	±0.0	×	FM	25	U.S.A.(K), Canada(P)
×××	×○/○×	MK2		-	-	800	1300	1240	±0.0	×	FM	25	MARS
×××	××	MK3		-	-	800	1300	1240	±0.0	×	FM	25	Expanded reception/ Transmission
○××	○○	MM1		-	-	-	-	-	-	-	-	-	General Market
○××	×○/○×	MM2		-	-	800	1300	1240	±0.0	×	FM	25	Australia/Expanded Reception
○××	××	MM3		-	-	800	1300	1240	±0.0	×	FM	25	Expanded reception/ Transmission
××○	○○	MM4	M4	-	-	-	-	-	-	-	-	-	Taiwan
××○	×○/○×	MM5		-	-	800	1300	1240	±0.0	×	FM	25	Expanded Reception for Taiwan
××○	××	MM6		-	-	800	1300	1240	±0.0	×	FM	25	Expanded Reception/ Transmission for Taiwan
×○×	○○	ME1		-	-	-	-	-	-	-	-	-	Europe General (E,T)
×○×	×○/○×	ME2	E	-	-	800	1300	1240	±0.0	×	FM	25	Expanded Reception for Europe
×○×	××	ME3		-	-	800	1300	1240	±0.0	×	FM	25	Expanded Reception/ Transmission for Europe
×○○	○○	ME4		-	-	-	-	-	-	-	-	-	Denmark
○×○	○○	MC1		-	-	-	-	-	-	-	-	-	China

○: With jumper, ×: Without jumper ARO (Automatic repeater offset) ○ : available, × : unavailable

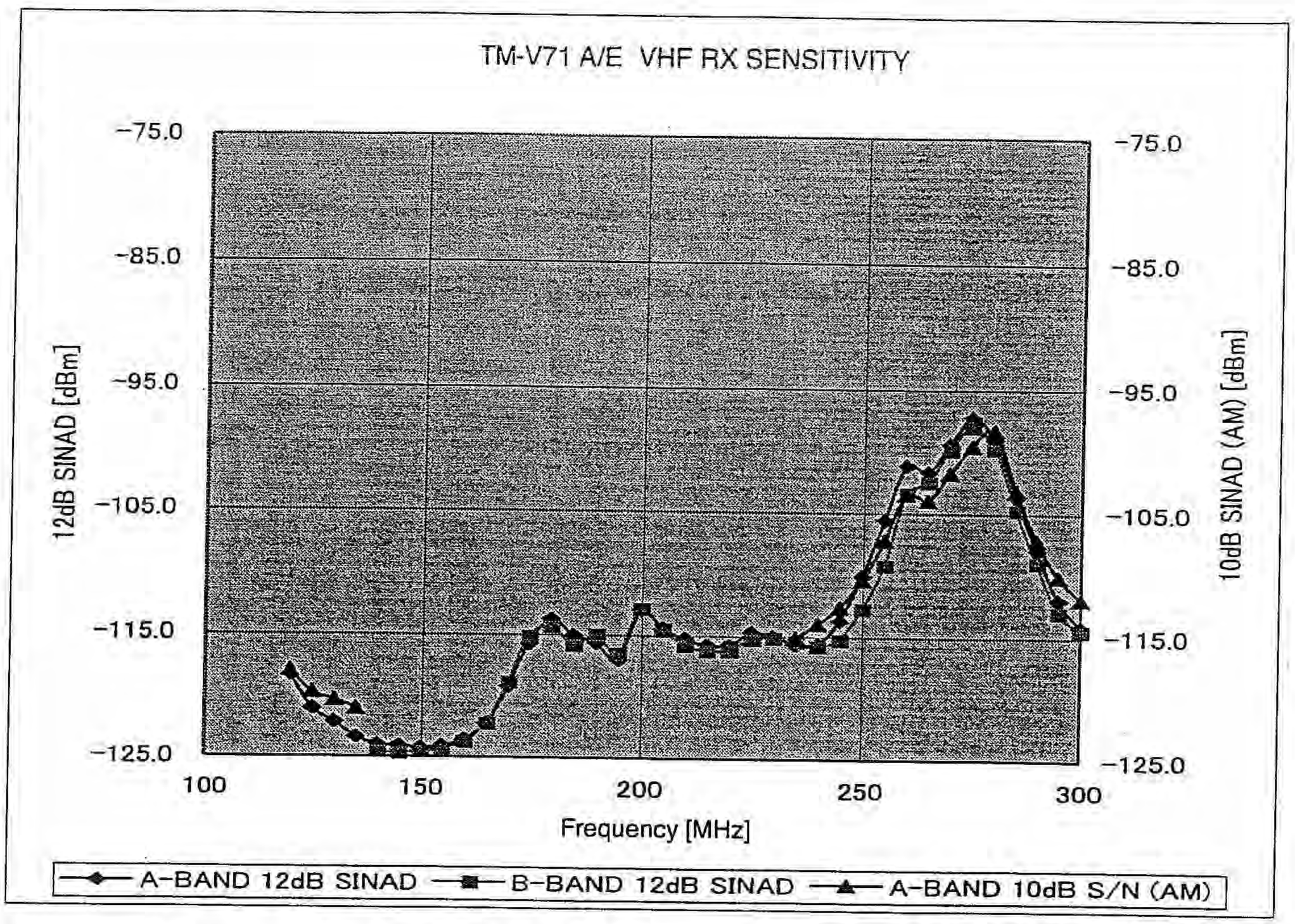
*Setting the destination jumper other than described above makes all operations the same as the "MM1" CPU type.
*The frequency ranges of the Type list are shown in the following table.

Transmission and Reception frequency (MHz)	
MIN	MAX
144	146
144	146

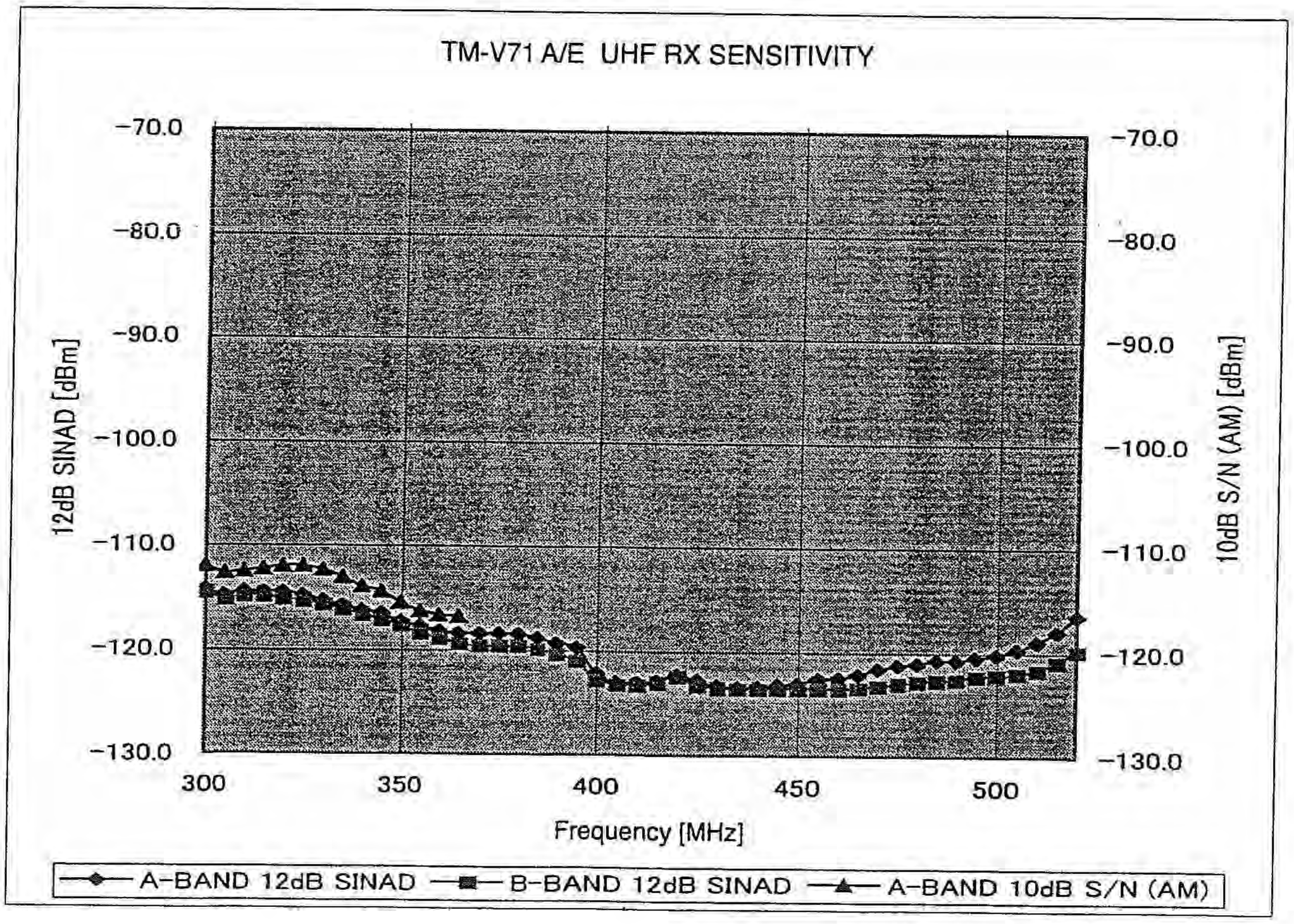
144MHz ≤ Possible Frequencies < 146MHz

Reception Sensitivity Example

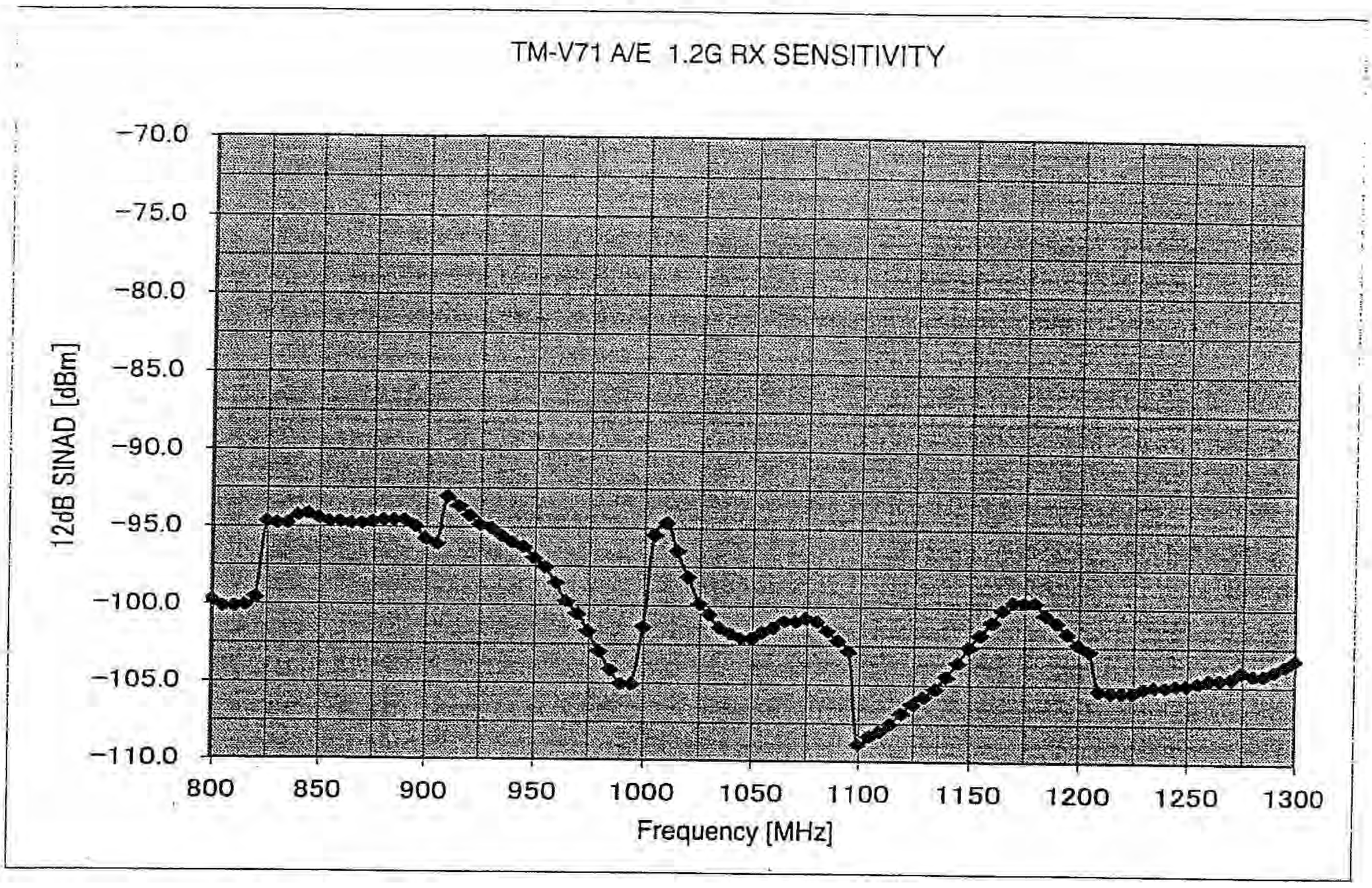
VHF RX SENSITIVITY



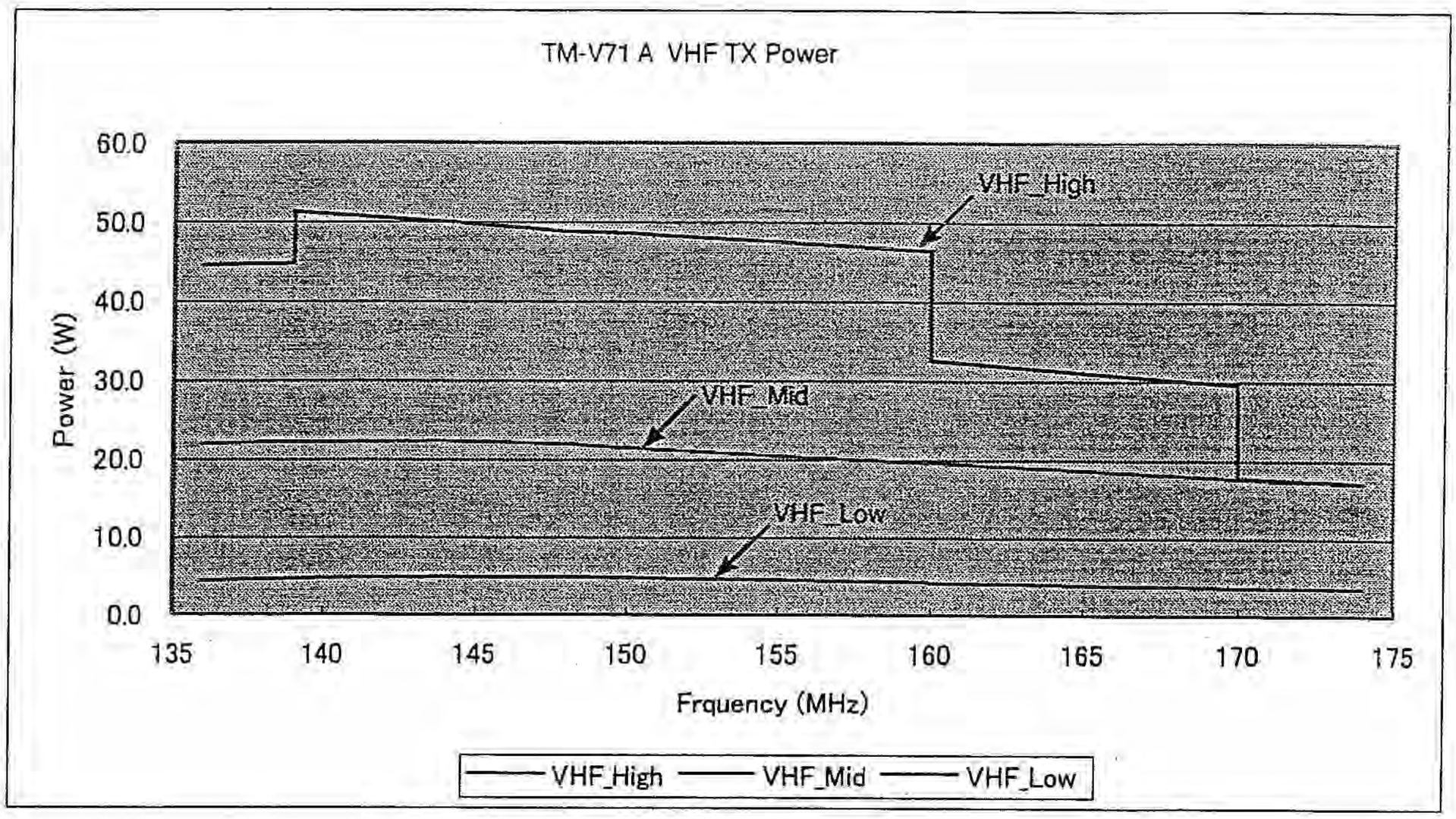
UHF RX SENSITIVITY

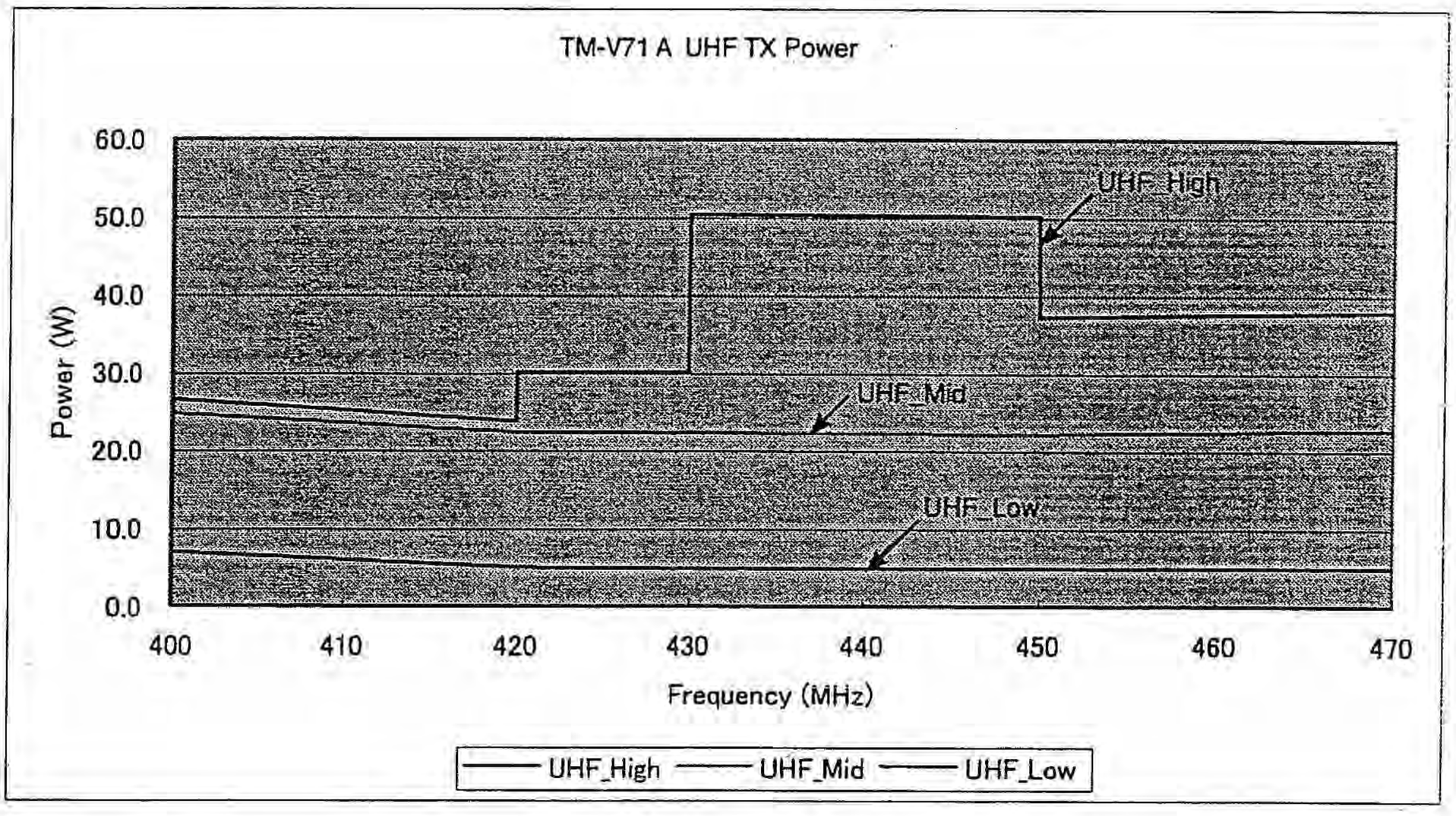


1.2G RX SENSITIVITY



Transmission power (M4 Type)





Transmission power (E Type)