#### INSTRUCTIONS

# DSP RECEIVE UNIT

Thank you for purchasing an Icom UT-106 DSP UNIT.

For maximum performance of the DSP unit with the IC-706MKII or IC-PCR1000, please read these instructions thoroughly prior to operation.

# IC-706

## INSTALLATION (IC-706MKII)

- ① Remove the 10 screws from the top and bottom covers as shown below. Remove the covers.
- Remove the connection cable (P1) from J12 on the Main unit (top side). Connect the cable into J1 on the UT-106.
- ③ Plug the connection cable (P1) from the UT-106 to J12 on the Main unit.
- ④ Plug the flat cable into J3 on the UT-106 and to J3 on the PLL unit.
  - •Take care of the conductor direction.
- ⑤ Attach the Velcro tape as shown below. Attach the UT-106 to the PLL unit.
- 6 Replace the 10 screws and covers.



NOTE: The insulating case is not used with the IC-706MKII.

## OPERATION (IC-706MKII)

#### ♦ ANF (Automatic Notch Filter) function

The automatic notch filter automatically attenuates beat tones, tuning signals, etc., even if they are moving. The automatic notch filter functions in SSB, FM and AM modes.

- 1 Select 54 (D.S.P. menu).
  - •Push [DISPLAY] 1 or 2 times when M or ⊑ is displayed.
    •Push [MENU] one or more times to select 54.
- ② Push [(F-1)HHF] to toggle the automatic notch filter function ON and OFF.
  - "DSP" and "ANF" appear when the function is ON.

#### ♦ NR (Noise Reduction) function

The noise reduction function reduces noise components and picks out desired signals which are buried in noise. The received AF signals are converted to digital signals and then the desired signals are separated from the noise. The noise reduction functions in all modes.

- Select 54 (D.S.P. menu).
   Push [DISPLAY] 1 or 2 times when M or 6 is displayed.
   Push [MENU] one or more times to select 54.
- ② Push [(F-2) $\mathbb{NR}$ ] to toggle the noise reduction function ON and OFF.
  - "DSP" and "NR" appear when the function is ON.

- ③ Push [(F-3)NRL] to toggle the noise reduction level indication ON and OFF.
- ④ Rotate the [M-CH] control to set the noise reduction level.
   Set the control for maximum readability. Deep rotation results in audio signal masking or distortion.
- Pushing [(F-3)NRL] automatically turns the noise reduction function ON, however the transceiver only maintains
- the ON/OFF condition when pushing [(F-2) $\mathbb{NR}$ ].





# ■ IC-PCR1000

### **INSTALLATION (IC-PCR1000)**

- Remove the 8 screws from the cover as shown below. Remove the cover.
- ② Slide the insulating case onto the UT-106 as shown below.
- ③ Remove the connection cable (P1) from J4. Connect the cable to J1 on the UT-106.
- ④ Plug the connection cable (P1) from the UT-106 into J4.
- ⑤ Plug the flat cable into J3 on the UT-106 and J3 on the IC-PCR1000.
  - •Take care of the conductor direction.
- 6 Replace the 8 screws and cover.



NOTE: The Velcro tape is not used with the IC-PCR1000.

### **OPERATION** (IC-PCR1000)

#### ANF (Automatic Notch Filter) function

The automatic notch filter automatically attenuates beat tones, tuning signals, etc., even if they are moving. The automatic notch filter functions in SSB, FM and AM modes.

- Click the DSP (Digital Signal Processor) component button in on the tool bar to display the DSP component.
- ② Push the DSP button to toggle the DSP functions ON and OFF (the LED lights).
- ③ Push the automatic notch filter button to toggle the function ON and OFF (the LED lights).

#### ♦ NR (Noise Reduction) function

The noise reduction function reduces noise components and picks out desired signals which are buried in noise. The received AF signals are converted to digital signals and then the desired signals are separated from the noise. The noise reduction functions in all modes.

- Click the DSP (Digital Signal Processor) component button on the tool bar to display the DSP component.
- ② Push the DSP button to toggle the DSP functions ON and OFF (the LED lights).
- ③ Push the noise reduction button to toggle the function ON and OFF (the LED and knob readings light).
- ④ Set the noise reduction level for maximum readability. Right-click on the knob to increase the noise reduction level, left-click to decrease it.

•Deep rotation results in audio signal masking or distortion.

