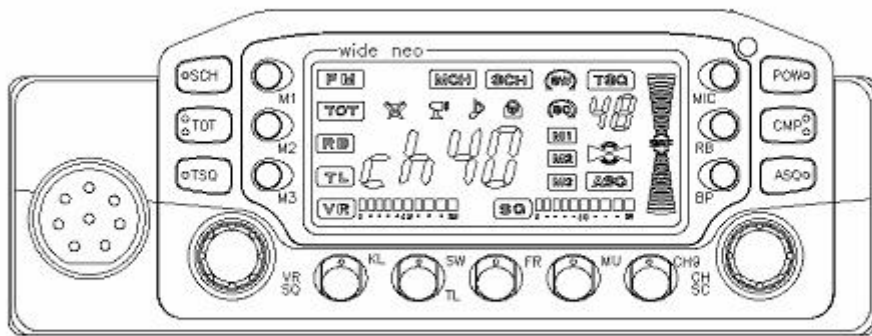


User's Manual

MegaJet - 900



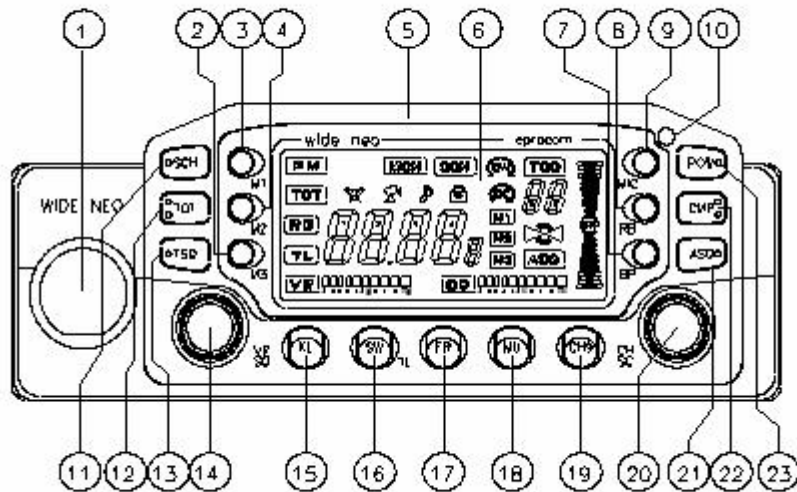
**Mobile CB Radio Station
FM CITIZENS BAND TRANSCEIVER**

Downloaded from www.cbradio.nl

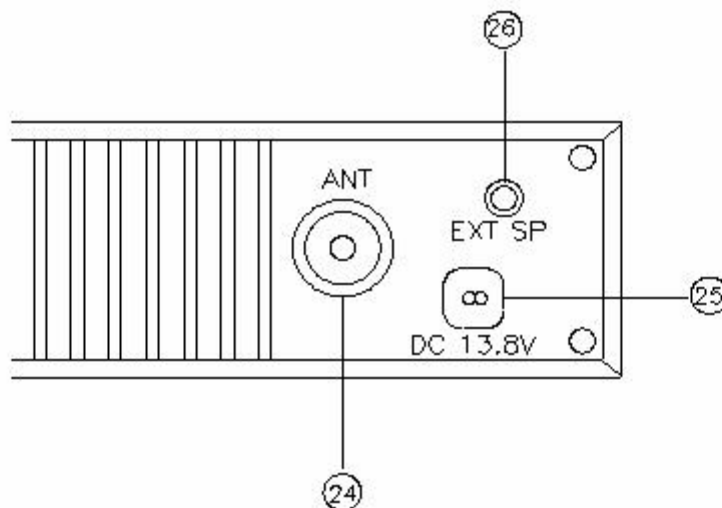
Feature List of MJ-900

1. It incorporate all functions of two-way radios being sold in the market and can be compatible with any local two-way radios.
2. LCD control panel can be embedded to radio front body or can be separated from the radio front panel.
3. After detaching panel, LCD control panel can be mounted at any place of the vehicle conveniently because of the compact size (110 X 50 X 27mm).
4. It adopts wide and cool LCD display.
5. It has a very superb & fine design matching to the car audio design.
6. It removes car noise perfectly by adopting strong filter.
7. It has on/off function of voice compression and increase, which enables you enjoy clear communication.
8. It minimizes the noise of internal / external space by using NDS circuit.
9. It has a function of transmission time limit(TOT) which prevents the longer transmission exceeding more than 3minutes physically.
10. It has a function to control microphone sensitivity by two levels.
11. It's designed to control most of functions by one touch.
Volume squelch enables digital control and volume & squelch volume level is displayed on the LCD.
12. It has a switch of speaker mute which can block the sound of two-way radio in the important conversation or telephone talks.
13. It has a function of Key Lock which prevents from unintentional release of function.
14. It adopts dynamic optical microphone.
15. It has a protection function against the over-voltage and reverse-voltage which can reduce the problem by the wrong connection of power.

How to control MJ-900



< Front panel Layout >



< Rear Panel Layout >

1). MIC CONNECTOR

It's connected to microphone.

MIC ASS'Y



- * It uses dynamic microphone.
- * 13.8V B+ power is supplied to microphone.
- * Microphone has a function of blue backlighting.
- * ① It is used by pressing mic. transmission button.
- * ② It can make channels up/down on mic.
- * ③ It can control AUTO SQUELCH on mic.

2). MEMORY button(②:M3,③:M1,④:M2)

(1) Memory method (M1 ~ M3) : has 3 memory channels.

(2)

(2) In saving to memory :

- * Select the channel to be memorized by channel switch. (ex.: 10CH)
- * Press memory button (M1~M3) to be memorized long.
(ex : In memorizing 10CH into M1, press M1 long for more than 1second and 10CH is saved into M1 with beef sound.
Do M2, M3 in the same way and you can use 3 pieces of memory channels.

(3) In calling from memory :

- * In calling channels memorized into M1~M3 as above, press M1~M3 buttons and the memorized channel is displayed on the window.
(ex : when you want to select 10CH memorized into M1 right away, press M1 button. you can select M2, M3 in this way.)



5). LCD CONTROL PANEL

LCD control panel can be embedded to radio front body or can be separated from the radio front panel. It can be connected by 9P D-SUB and it's easy to use the internal space of car.

6). LCD Display

It shows all functions in use and good to use due to wide window.

7). BEEP (BP) button

In pressing BP button, “**HOta**” letter is shown on the window and it becomes “beep on” and beef sound occurs in operating buttons.

To release this function, press BP button one more time and “**HOты**” letter disappears and beep is released.

8). ROGER BEEP (RB) button

In pressing RB button, “**RB**” letter is shown on the window and it becomes “RB on” and in pressing transmission button, termination beef sound is transmitted to the receiver party. To release it, press RB button one more tme and “**RB**” letter disappears and roger beep is released.

9). MIC Sense button

In pressing mic button, “**MIC**” is shown on the window and it becomes normal state of mic sense. In pressing it once more, it's released and becomes the low state of mic sense.

In case of using C-MIC or large mic voice, press mic button and use it in the state of no mic display on the window.

10). TX /RX LED Display function

It's displayed in green color in receiving and displayed in red color in transmitting.

11).SCH (SUB CHANNEL) button

(1) **Sub channel selection** : In pressing button, “**SCH**” is displayed on the window and in pressing button again, “**MCH**” is displayed and use it in the state of “**MCH**” as usual.

In pressing SCH button, CH14 appears at first and you can use one more memory like below no. (2) and you can search main channel and sub channel easily by cooperating the function of sub watch.

- (2) **Sub channel save:** To save sub channel, press SCH button and “SCH” is displayed on the window and press SCH button for more than one second and channel display is blinking. Then, press channel switch and match it the wanted channel(1~40channels) and press “SCH” button again and sub channel is saved.

12).TOT(TIME OF TIME) button

- * It limits the transmission time to 3 minutes.
In case of using transmission button as lock button voluntarily or exceeding 3minutes in transmitting, it limits the transmission compulsorily.
- * In setting “TOT” function and continuing to transmit, RF output is blocked after 3minutes and window is blinking.
- * In pressing TOT button, “TOT” is displayed on the window and function of transmission limit works. To release it, press button again and it disappears on the window.

13). TSQ (CTCSS) button

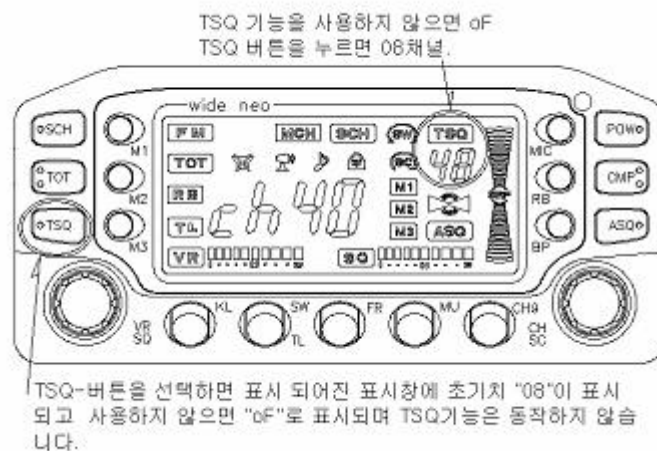
(1) **TSQ(CTCSS):** It’s a function to restrict unnecessary receiving and to make promised communication with the wanted party. It restricts DX signal from Japan or China in summer and it merits to communicate with the party silently without external noise and improve telephone quality.

- * To use TSQ, TSQ channel should be same as that of the party and check it with the party before communication.
- * Not to use TSQ, press TSQ button and make the letter of TSQ button “oF” on the window and it’s possible to communicate with different two-way radio if channel is same.
- * In the function of TSQ, ASQ is displayed on the window automatically and it’s transformed to the function of ASQ.

(3) **TSQ Operation:** At first, the letter of TSQ button is "oF" and the letter of TSQ button is changed from “oF” to “08” in pressing TSQ button.

In this state, TSQ works and TSQ channel becomes 8CH.

To change TSQ channels, press TSQ button long more than 1 second and “08” is blinking on the window. Then, turn channel switch to T-SQ channel(1~48channels) and press TSQ button again and T-SQ channel is saved.



14).VR / SQ ROTARY SWITCH

(1) VR (function of volume control): It's a function to control volume.

* **Operation of volume switch:** In turning rotary switch, "VR" letter is blinking on window. Then, volume is increased in turning to the right and volume is decreased in turning to the left and bar meter is displayed on window according to the volume position.

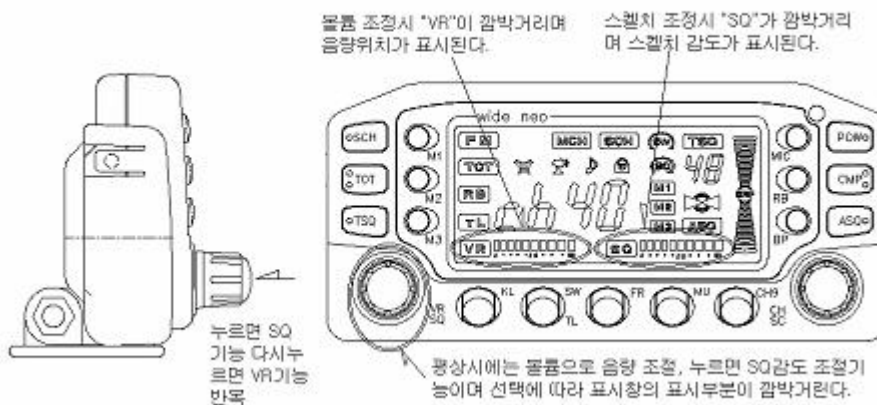
Use it after adjusting volume size appropriately.

(2) SQ (Control function of Squelch sense): It's a function to control squelch sense.

* Operation of squelch volume switch: To operate squelch volume, press VR/SQ switch one time and SQ letter is blinking on window and it's a mode of squelch control and squelch is closed in turning rotary switch clockwise and squelch is opened in turning it reverse-clockwise and 10 bar meter is displayed according to squelch position.

* **Switch control of squelch volume:** In turning to the left completely, a certain noise comes out and turn slowly clockwise and turn 5~10 angle more at the position of noise disappearance and use it.

(3) Switch change : Volume VR and squelch VR use one changeable rotary switch and to use squelch VR, press switch one time and SQ is blinking on window and press it again and VR is blinking.



15.KL(KEY LOCKING) button

It's a function to lock all button keys to protect mis-operation due to many buttons. In pressing KL button one time, lock is displayed on window and any buttons do not work and transmission button only works.

16.SW(SUB WATCH)/ TL(TONE LOW) button

(1)SUB WARCH(SW) function

It's a function to search two promised channels at the same time.

Making main channel(MCH) in operation and other promised channel sub channel(SCH), one receiver can search two channels at the same time.

In receiving either main channel or sub channel, it stops automatically.

In completing receiving, it resume search after 7 seconds.

In pressing SW button again, it stops SW mode.

* Operation method of sub watch

- (A). In pressing SW button, SW is displayed on window and it starts search repeating MCH and SCH in order.
- (B). In case there is receiving signal, either main channel or sub channel, it stops at the channel having signal and receiving start. Then, in pressing transmission button, it's possible to communicate with the receiving party.
- (C). When receiving stops, SW function resume search after 5~7 seconds.
- (D). During channel search, in pressing transmission button, it moves to main channel.
- (E). In pressing SW button, it's released.

(2).TONE LOW(TL) function

In pressing SW button long more than 1 second, TL letter is displayed on window and tone low function works. To release it, press SW button again long more than 1 second.

17). FR(FREQUENCY) button

It's a function to indicate channel by frequency. In pressing FR button, channel is displayed to frequency. To release it, press FR button again.

18). MU(MUTE) button

It's a function to block speaker sound. In pressing MU button, indication of speaker blocking is displayed on window and receiving sound is blocked regardless of signal. To release it, press MU button again.

19). CH9(Emergency channel) button

Use it in emergency (crime, fire, urgent patient, etc.).

* In pressing CH9 button, it changes to 9CH and emergency on-and-off is displayed on LCD. To release it, press CH9 button again.

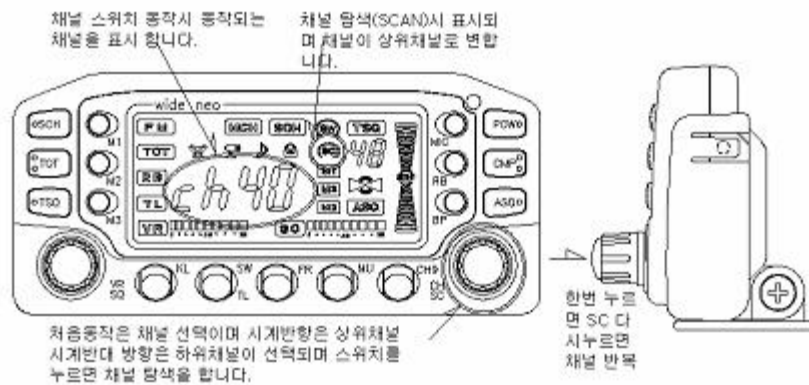
20). CH/SC(CHANNEL/SCAN) ROTARY SWITCH

(1) CHANNEL(channel) function

In turning switch to the left, channels go down and in turning it to the right, channels go up. Tune the channels by using channel switch. In case of TSQ function as well, tune TSQ channels by using TSQ channel UP/DOWN.

(2) SCAN (CHANNEL SEARCH) function

It's a function to search channels in communication. In pressing channel switch, SC letter is displayed on window and start search to up-ranking channels and receive the signal when there is strong receiving signal. When there is no receiving signal, it start search again after 7 seconds. To release it, press channel switch again.



21). ASQ(AUTO SQUELCH) button

It's a function to receive by the best sense by ON/OFF button of ASQ to remove a certain level of noise in order to release the inconvenience of squelch volume usage.

* In pressing ASQ button, ASQ letter is displayed on window and it's set to the level of auto squelch. To release it, press ASQ button again and it's set to the general squelch level.

* **Note) In case of TSQ function, it's set to ASQ function automatically.**

22). CMP(Companer) button

It's a function to remove unnecessary noise and receive voice only by compressing voice signal in transmitting and by increasing it in receiving.

* In pressing CMP button, CMP is displayed on window and it works as CMP function and it disappears in pressing it again.

23).POW(Power) SWITCH

(1) Insert Power

In connecting power cable, letter is displayed on window and the power is on.

In pressing power SW long more than 2 seconds, BYE is displayed on window and power is off.

(2) Power ON

In pressing power switch, all indications are displayed on window and CH20 is shown and it works properly. Set channel, volume, squelch sense, etc. first before use.

24). ANT(Antenna) Connector

It's a M-type connector for antenna cable(50ohm). It's connector to be connected to antenna by using M-type plug.

25). Power Connector

It's a connector to connect 12V battery power.

For terminals, red is connected to plus and black is connected to minus and 24V power is prohibited.

26). EXT SP(External Speaker)JACK

It's a jack to be connected to external speaker.

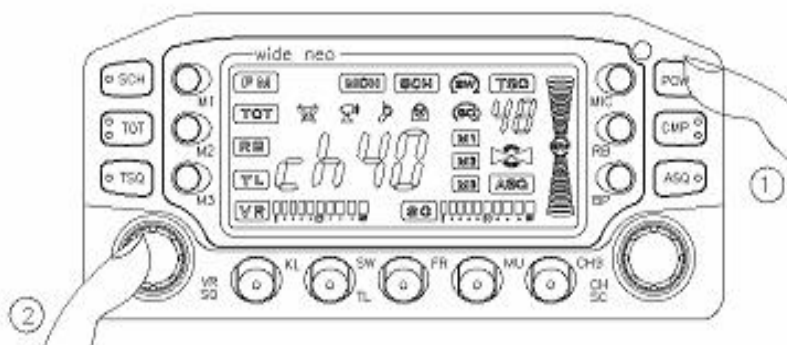
(Caution) SYSTEM RESET

In power error or error in first installation

- 1) In first installation, power error in use, or other problems, dismantle the connector of panel at the front of body and press reset switch at central hole of front body with ball-pen or something sharp.
- 2) Assemble panel or D-SUB connector again.
- 3) Turn off the power by pressing POW button for more than two seconds.
- 3) Continuing to press volume push button, when you press POW button for one second, RESET and CH20 is shown and is initialized and works normally.

In simple error

- 1) Turn of the power by pressing POW button for more than two seconds.
- 2) Continuing to press volume push button, when you press POW button for one second, RESET and CH20 is shown and is initialized and works normally.

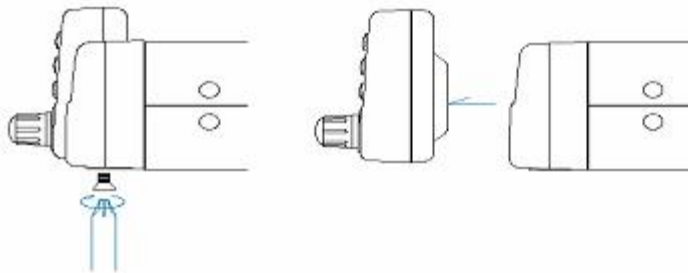


How to install the Radio

* In dismantling panel *

* **Caution** : Connect power cord to battery after connection of two-way radio.

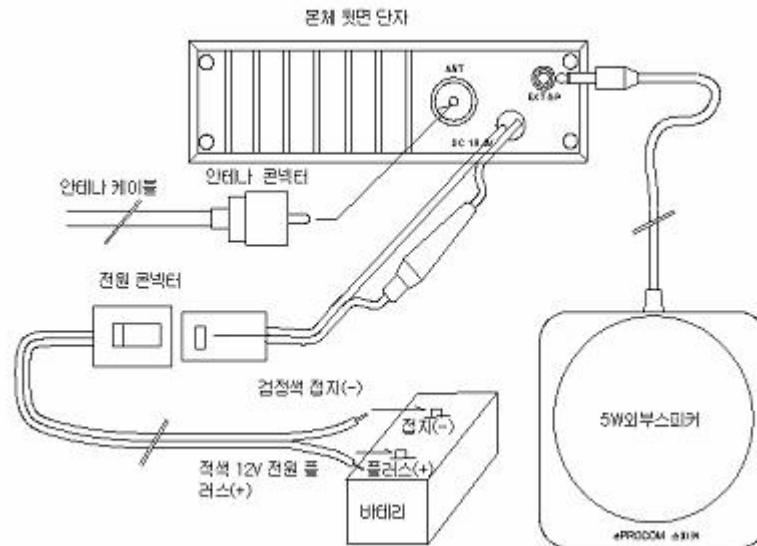
1. Unscrew 3x4 fan-head machine screw at the bottom of body with driver. <Picture 1-1>
2. Pull out panel to the front from body. <Picture 1-2>



<Picture 1-1>

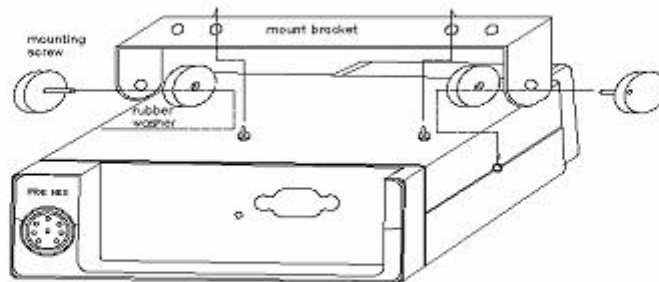
<Picture 1-2>

3. Connect power cable of body, coaxial cable of antenna.<Picture2>
4. To install body in the hidden place, connect the plug of 5 watts speaker packed separately to the jack of EXT SP at the rear of body. <Picture 2>



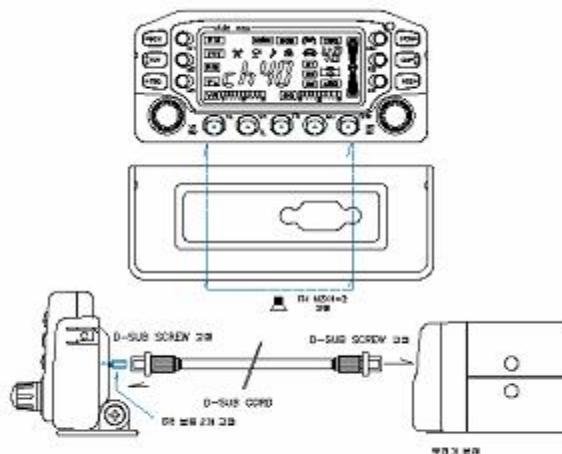
<Picture 2>

5. Fix body at the right place for installation by using bracket. <Picture 3>



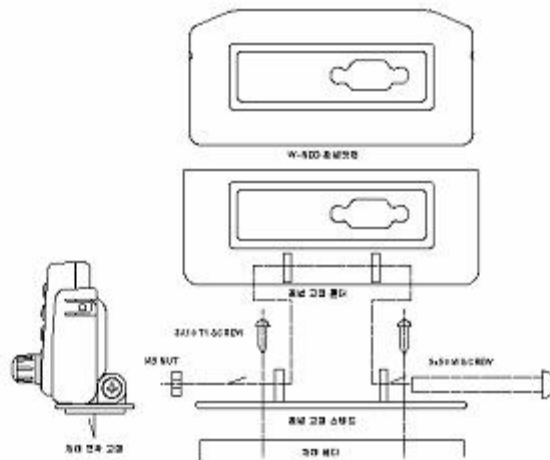
<Picture 3>

6. Connect 9P D-SUB CORD Connector to the body of two-way radio and fix it with D-SUB screw. <Picture 4>
7. Insert panel into bracket and fix fan-head machine screw 3 x4 at the bottom of bracket with driver. <Picture 4>
8. Fix 2pieces of 6 angle-bolt in accessory package to D-SUB connector at the rear of panel. <Picture 4>
9. Connect 9P D-SUB CORD connector to the connector at the rear of panel and fix it with D-SUB screw.

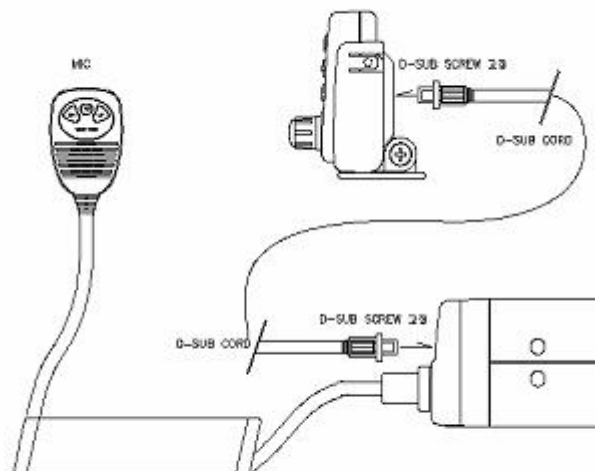


<Picture 4>

10. Fix panel to where to operate easily. <Picture 5>



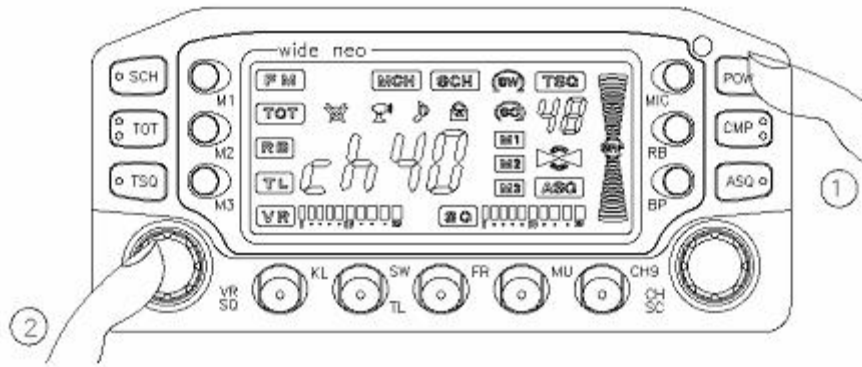
<Picture 5-1>



<Picture 5-2>

11. Fix external speaker to where to hear well after detaching tape.
12. After completion of installation, connect power connector and check whether power is on the panel of two-way radio and letters are shown on window properly.
13. In pressing power switch (① at below picture) for more than two seconds, "BYE" letter is shown and broken on window. In pressing volume switch(② at below picture) and pressing power switch(① at below picture) and taking away volume switch(② at below picture), "RESET"

letter is shown on window and works at initial stage.<Picture 6>



<Picture 6>

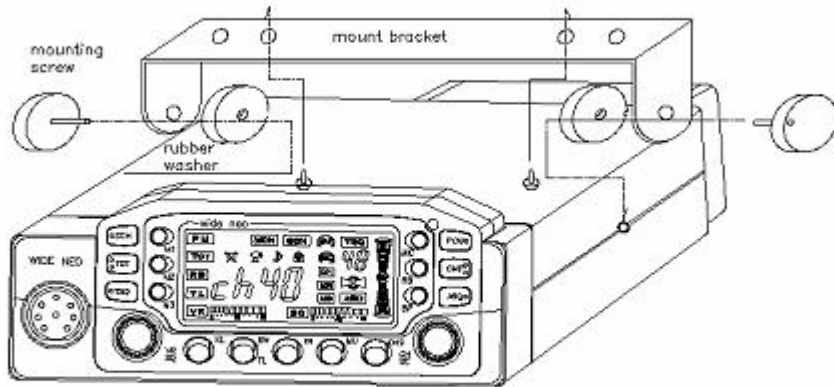
14. Antenna installation is same as the installation of existing CB transceiver and refer to the antenna installation of technical support at our website.
15. Insert mic. Into mic. terminal of body and fix it.
16. When noise like “Chi~ik” comes out of speaker, press ② volume button and SQ letter is blinking on window and it’s a adjusting mode of squelch and turn the volume clockwise and turn more around 5 angles at the place where noise disappears and fix it.
17. Press button of mic. transmission button and check whether green LED of panel is changed to red.
18. Check the operation of each button and test communication.
For communication test, fit channel at close distance and note the status of device and how to operate it at that time.
After communication test, contact us if there is a product error or question.

HOW TO SET UP THE RADIO

* In not dismantling panel *

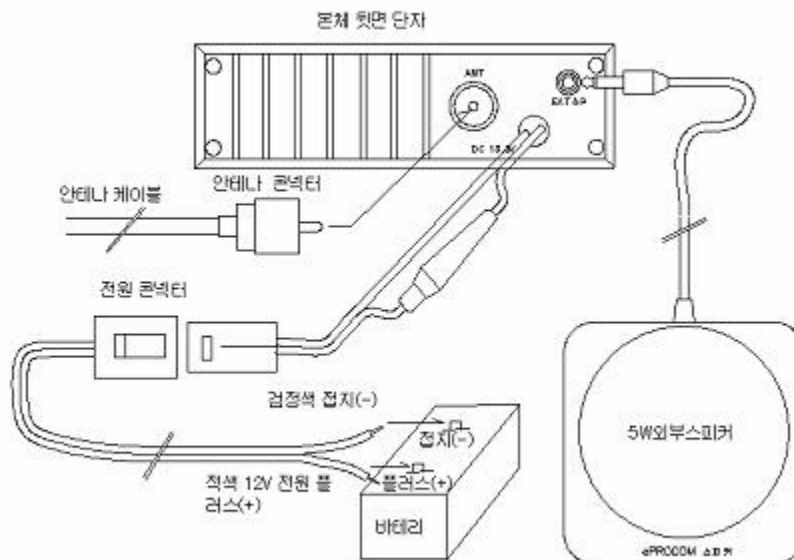
* **Caution** : Connect power cord to battery last after the completion of transceiver connection.

1. Fix the transceiver with bracket as it packs. <Picture 1>



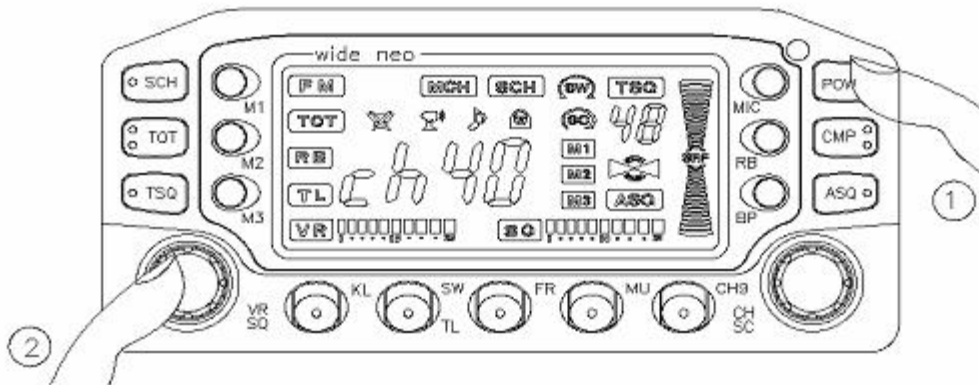
<Picture 1>

2. In case of connecting antenna connector, power cord to body and using external speaker, insert the packed external speaker to the jack of EXT SP. <Picture 2>



<Picture 2>

3. When you connect power connector, two-way radio works and in pressing power switch long, “BYE” is displayed on window and power is off. In pressing volume switch and pressing power switch again, “RESET” letter is displayed and it works at initial stage. <Picture 3>



<Picture 3>

4. Installation of antenna is same as the installation of existing CB transceiver and refer to the antenna installation of technical support at our website.
5. Insert mic. into mic. terminal of body and fix it.
When noise like “Chi~ik” comes out of speaker, press ② volume button and SQ letter is blinking on window and it's a adjusting mode of squelch and turn the volume clockwise and turn more around 5 angles at the place where noise disappears and fix it.
6. Press button of mic. transmission button and check whether green LED of panel is changed to red.
7. Check the operation of each button and test communication.
For communication test, fit channel at close distance and note the status of device and how to operate it at that time.
8. After communication test, contact us if there is a product error or question.

*** Cautions in installing the body of two-way radio ***

- 1. Put it long away PDA, navigation, other digital devices.
Digital clock can affect the receiving sensibility of two-way radio.**
- 2. Put it long away audio device or other equipment.
It can affect each other.**
- 3. Do not use controlling devices making noise-cause inverter, pulse, etc. in using two-way radio.**
- 4. Connect power cable to battery shortly if possible.**
- 5. Use RG58 for coaxial cable and don't use extension cable and don't use pressed or damaged cable.**
- 6. Protect coaxial cable from water or humidity.**
- 7. Be sure to fold antenna.**
- 8. Install antenna at higher place if possible and use more than 1.5m length.**
- 9. After installing antenna, be sure to check SWR and fit it less than 1:1.5.**