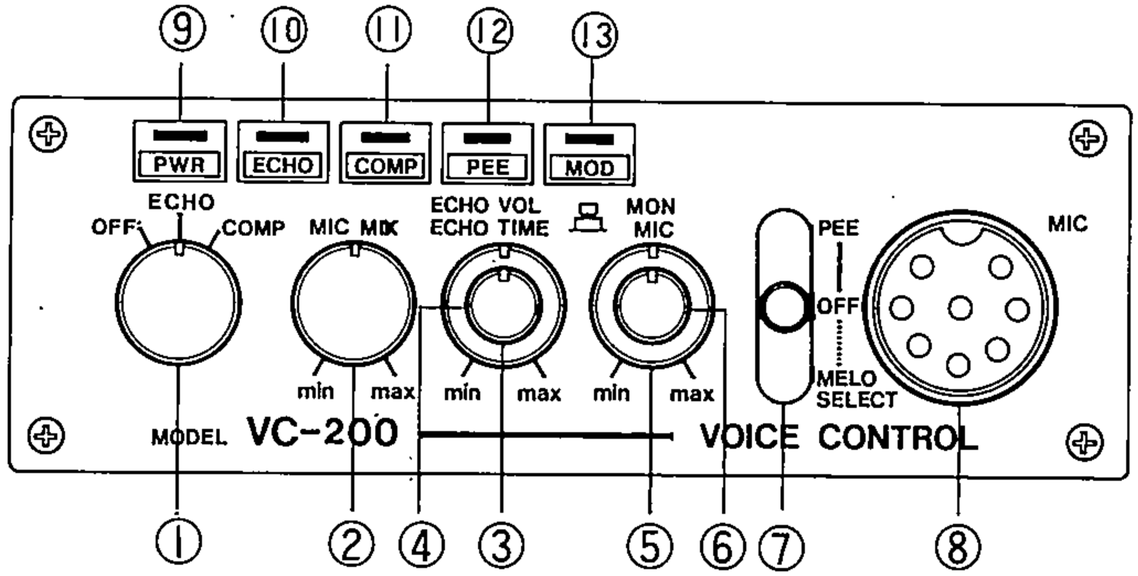
OWNERS MANUAL

VC-200

THE VOICE CONTROLER

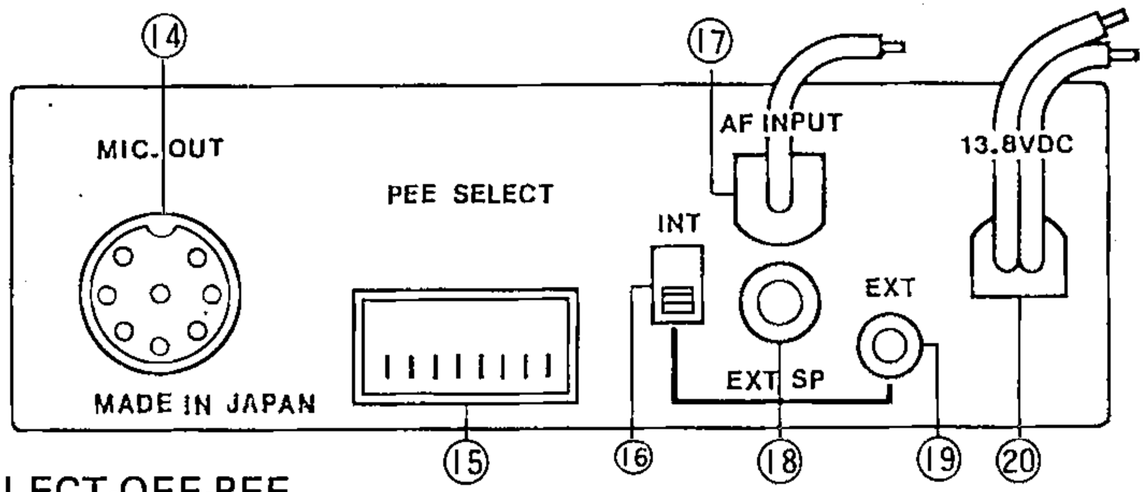
Description

1. The VC-200 has many features which let you enjoy clear communication.
2. The echo function (ECHO) can be adjusted its amount and delay time by monitoring with built-in monitor speaker for desirable echo level.
3. The speech compressor function (COMP) evens the voice level whether you speak close to or away from the microphone.
4. The melody function (MELO) let you identify your signal by adding musical signal when starting transmission. The signal can be selected from eight choices.
5. The end of transmission pilot signal function (PEE) is used to let your partner know the end of transmission. Tone of the signal can be selected from eight choices.
6. The mixing function (MIC MIX) can be adjusted the level of your signal and internal musical signal or the level of your signal and external signal.



Name and function of each section

1. OFF-ECHO-COMP selector switch
   The switch is used to select echo (ECHO), speech compressor (COMP) or through (OFF) function.
2. MIC MIX
   To adjust output level of internal musical signal or external signal. By turning on the right, output level of internal musical signal or external signal is increased.
3. ECHO VOL
   To adjust amount of reverbration when the ECHO function is in operation. By turning this on the right, reverbration volume is increased.
4. ECHO TIME
   To adjust reverbration time when the ECHO function is in operation. By turning this on the right, reverbration time is shortened.
5. MIC
   To adjust microphone input level. Adjustment should be done by considering microphone gain, voice level and surrounding noise.
6. MONI
   To adjust output level of the built-in speaker. By turning this on the right, sound becomes louder.



7. MELO SELECT-OFF-PEE SWITCH
   This switch is used to select the internal musical signals (MELO), and to select end of transmission pilot signal (PEE) function or OFF.
8. MIC
   Microphone input. Since pin to pin connections of microphone connectors and receptacles are different in each transceiver manufacture, rewiring of those have to be made according to the schematic diagram.
9. POWER indicator
   Lit when the unit is in operation.
10. ECHO indicator
    Lit when the ECHO function is in operation.
11. COMP indicator
    Lit when the speech compressor is in operation.
12. PEE indicator
    Lit when the end of transmission pilot signal function is in operation.
13. MOD indicator
    Flashed depending on the level of the voice signal from the microphone.
14. MIC OUT
    AF output for microphone input of the transceiver. Since shape and pin to pin connections of microphone connectors and receptacles are different in each transceiver manufactures.
15. PEE SELECT SWITCH
    To select the end of transmission pilot sound from eight choices.
16. INT-EXT SELECT SWITCH
    This switch is used to select internal musical signal or external signals.
17. AF INPUT
    When the built-in speaker is used, connect this to the external speaker output of the transceiver.
18. EXT SP
    Audio output to connect the external speaker.
19. EXT JACK
    When the external signal is used, connect this to the external speaker output of the receiver, tape recorder and others.
20. POWER cable
    Connect this to the 13.8V DC (11 to 15V) power line. Red is positive and black is negative polarities.

Connections

1. Connect the microphone to the MIC receptacle at the front panel of the unit.

Note: Since shape and pin to pin connections of the microphone connectors and receptacles may be different, be sure to see them before connection.

2. Connect the MIC OUT at the rear of the unit and microphone receptacle of the transceiver.

3. Connect the AF INPUT cable to the external speaker output at the transceiver. The unit is being operated normally without this connection except when the built-in speaker of the unit is used. External speaker can be connected to the EXT SP output at the rear of the unit.
4. Connect power cable to a car battery or DC power supply. Line voltage is 13.8V DC (11 to 15V) and red is connected to the positive polarity and black is the negative.

Operation

1. Using the ECHO function.
a. Turn off the power switch of the transceiver.
b. Set the SWITCH 1 to the ECHO position.
c. While pressing the PTT button of the microphone and speaking to it, set the amount of reverbration and delay time by turning the ECHO VOL and ECHO TIME controls. At the same time, output level of the built-in speaker can be adjusted by the MON control.
d. Turn on the power switch of the transceiver.
e. While pressing the PTT button of the microphone and talking to it, set the MIC control to have adequate output level to the transceiver. Normally set it at the center position when conventional microphone is being used.
f. Then the unit is ready to be operated.
2. Using the MIC MIX function
a. Select the internal musical signal or the external signal by switch 16.
b. When used the internal musical signal, by turning on the right, output level of internal musical signal is increased and output level of voice from microphon is decreased. The internal musical signal can be selected from eight choices by switch 7.
c. When used the external signal, connect EXT jack to the external speaker output of the receiver, tape recorder and others.
By turning the MIC MIX on the right, output level of external signal is increased and output level of voice from microphone is decreased.
3. Using the COMP function.
a. Set the SWITCH 1 to the COMP position.
b. Then the speech compressor is in operation and output AF level becomes even whether you speak close to or away from the microphone. Note that surrounding noise may also be amplified by this function.
4. Using the end of transmission pilot signal.
a. Set the SWITCH 7 to the PEE position.-
b. Then the pilot signal is sent by releasing the PTT button and let your partner know that your transmission is ended. This function can be operated when the SWITCH 1 is set to either the ECHO and COMP position and can not be operated when it is set to the OFF position.

Note: Do not make the microphone too close to the built-in speaker when monitoring transmission

voice with the unit. It may cause feedback oscilation.

Specifications

Supply voltage	11 to 15V DC
Current consumption	less than 1A
Microphone impedance	100 ohms to 50K ohms
Audio output	1.5W
Input level of MIC MIX EXT	0.3 to 1V
Microphone output	0 to 10mV
Echo delay time	50 to 250msec
Musical signals	8 melodies
Pilot signals	8 tones
Microphone plug	4 pins or others
Dimensions	120W x 40H x 137Dmm

Included accesaries	
Mounting bracket	1
Screws	4
Spare fuse	1
Operation manual	1

CRA16 RD XMIT - GND
BK REC - GND
WT — MIC
SH. GND

RD XMIT GND
PIN GND

SH GND
BK WT. MIC
NC

Q1 TA75558P
Q2 MN3008
Q3 MN3101
Q4 TA7504P
Q5 2SC1815
Q6 TA7504P
Q7 2SC1815
Q8 M51304L
Q9 2SC1815
Q10 TD62503P
Q11 2SC1815
Q12 uPC575-C2
Q13 2SC1815
Q14 SVM7942COT
Q15 2SC1815
Q16 2SA1015
Q17 2SA1015
Q18 2SC2236
Q19 2SC1815
Q20 2SC1815
Q21 TC4017BP
Q23 TA78L009AP

EXT. IN
MIC
MIX
EXT
INT
SWD
SWC
SWE
SWA
SWB
PEE
M.SEL
ECHO
COMP
OFF
ON
RL
RL1
RL2_A
RL2_B
RX
TX

MODEL A
FRONT MIC.J
REAR MIC.PLUG

RD - MIC
WT - GND TO XMIT
BK GND TO REC
S.H GND

FRONT MIC. JACK CONN.

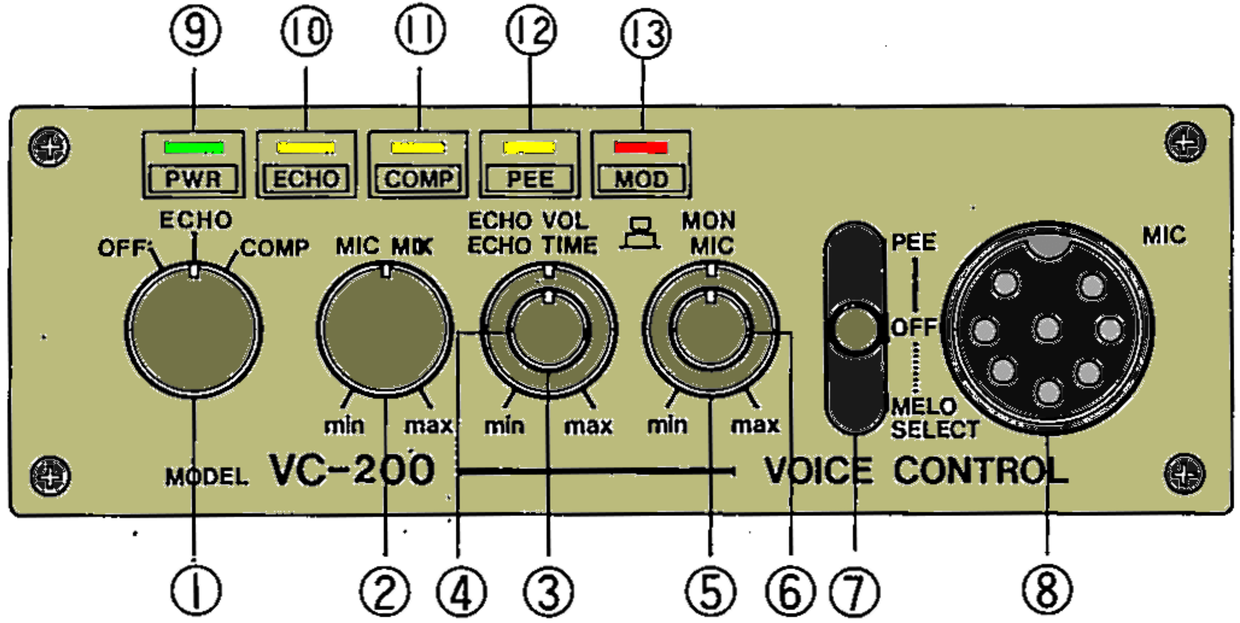
MODEL B
MODEL C
MODEL D
MODEL E,

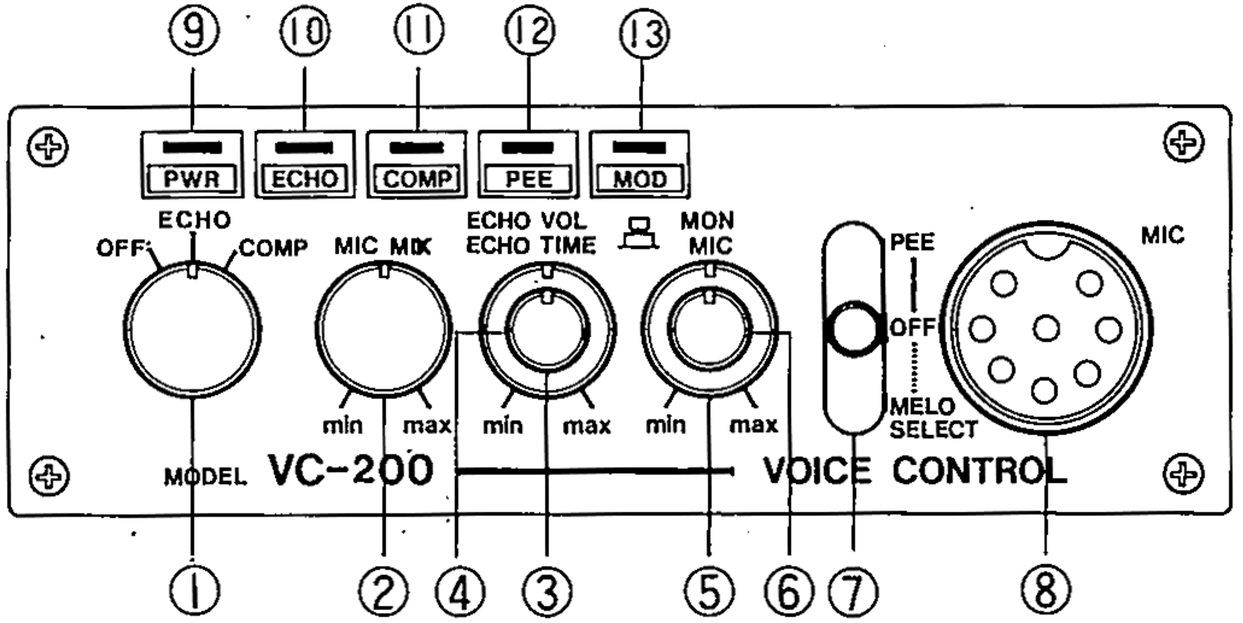
REAR MIC.PLUG CONN.

MODEL B
MODEL C
MODEL D
MOEL E

VC-200

YELLOW - GR





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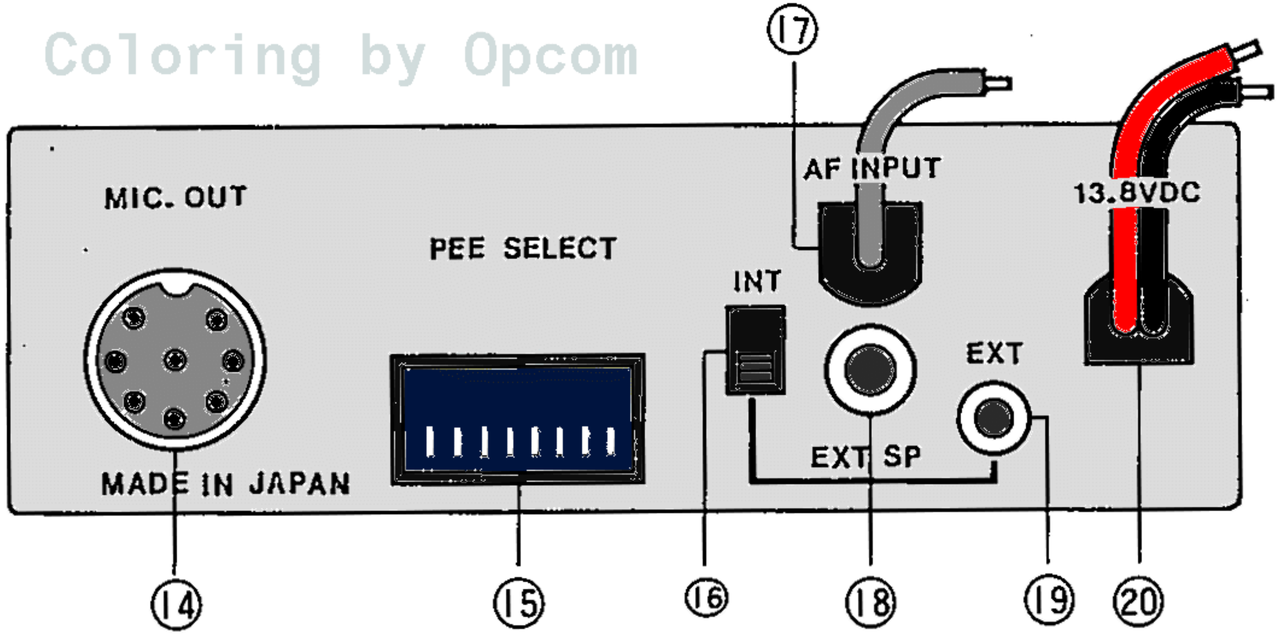
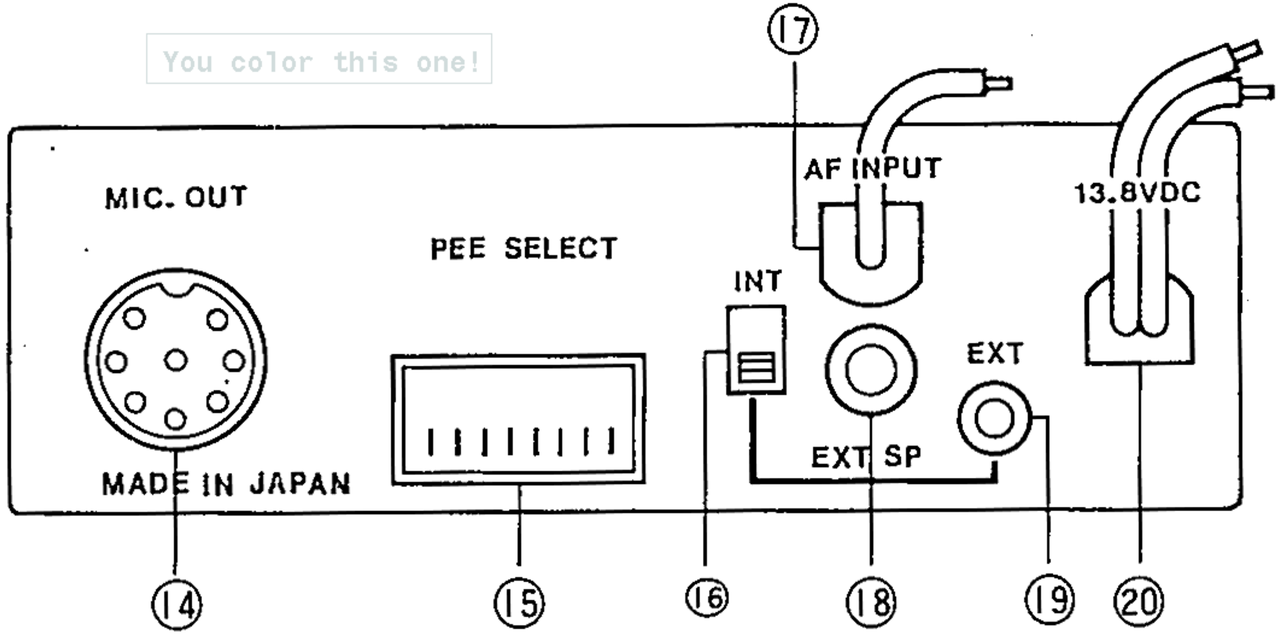
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