



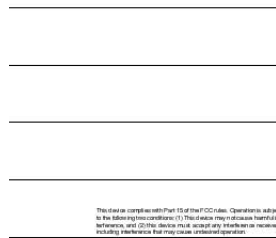
Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ICOM IC-706MK2G. You'll find the answers to all your questions on the ICOM IC-706MK2G in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ICOM IC-706MK2G
User guide ICOM IC-706MK2G
Operating instructions ICOM IC-706MK2G
Instructions for use ICOM IC-706MK2G
Instruction manual ICOM IC-706MK2G



HF/VHF/UHF ALL MODE TRANSCEIVER
IC-706MKII



Icom Inc.



[You're reading an excerpt. Click here to read official ICOM IC-706MK2G user guide](http://yourpdfguides.com/dref/209475)
<http://yourpdfguides.com/dref/209475>

Manual abstract:

During mobile operation, **D O N O T** operate the transceiver without running the vehicle's engine. When transceiver power is **ON** and your vehicle's engine is **OFF**, the vehicle's battery will soon become exhausted. Make sure the transceiver power is **OFF** before starting the vehicle. This will avoid possible damage to the transceiver by ignition voltage spikes. During maritime mobile operation, keep the transceiver and microphone as far away as possible from the magnetic navigation compass to prevent erroneous indications. **B E C A R E F U L ! @ @ B E C A R E F U L ! @ @** Use Icom microphones only (supplied or optional). @ @ Beat signals may be heard on some frequencies. These will occur as a result of circuit construction. For U.S.

A. @ @ This could cause a fire or ruin the transceiver. **N R N E V E R** apply more than 16 V DC, such as a 24 V battery, to the [DC13.8V] socket on the transceiver rear panel. This could cause a fire or ruin the transceiver.

N R N E V E R let metal, wire or other objects touch any internal part or connectors on the rear panel of the transceiver. This will cause electric shock. **N R N E V E R** expose the transceiver to rain, snow or any liquids. **N E V E R** allow children to play with the transceiver. **A V O I D** using or placing the transceiver in areas with temperatures below 10°C (+14°F) or above +60°C (+140°F).

Be aware that temperatures on a vehicle's dashboard can exceed 80°C, resulting in permanent damage to the transceiver's front panel if left there for extended periods. **A V O I D** placing the transceiver in excessively dusty environments or in direct sunlight. **A V O I D** placing the transceiver against walls or putting anything on top of the transceiver. This will obstruct heat dissipation. **EXPLICIT DEFINITIONS** The explicit definitions described below apply to this instruction manual. **DEFINITION** Personal injury, fire hazard or electric **W R A R N I N G** shock may occur. **CAUTION NOTE** Equipment damage may occur. If disregarded, inconvenience only. No risk of personal injury, fire or electric shock. **WORD i TABLE OF CONTENTS IMPORTANT .**

.....
.....
.....
.....

.....
.....
.....
.....
i PRECAUTIONS

.....
.....
.....
.....

..... **i EXPLICIT DEFINITIONS ..**

.....
.....
.....

..... **i TABLE OF CONTENTS .**

.....
.....

.....
.....
.....

ii UNPACKING

.....
.....
.....
.....

.ii 1 PANEL DESCRIPTION....

.....
.....

..... **18 I Front panel ..**

.....
.....
.....

.....
.....
.....
.....

.. 1 I Function switches

.....
.....
.....

.. 3 I Rear and side panels ...

.....
.....
.....

..... 5 I Function display

.....
.....
.....
.....

. 7 I Microphone (HM-103)

.....
.....

.....
.....
.....

8 5 MEMORY AND SCAN OPERATION 39 4 4 I Memory channels

.....
.....
.....
.....

..... 39 I Memory channel selection ..

.....
.....
.....

. 39 I Memory clearing

.....
.....

.....
.....
.....

..... 39 I Memory/call programming

.....
.....
.....

..... 40 I Frequency transferring .

.....
.....
.....
.....

..... 41 I Memory names

.....
.....
.....
.....

.....
.....
41 I Memo pads

.....
.....
.....
.....

.....
. 42 I Scan types

.....
.....
.....
.....
.....

.. 43 I Preparation

.....
.....
.....

.....
.....
.....
... 43 I Programmed scan operation

.....
.....
.....

... 44 I Memory scan operation

.....
.....
.....

..... 44 I Select memory scan operation .

.....
.....
.....

..... 44 I Priority watch

.....
.....
.....
.....

.....
.... 44 2 INSTALLATION AND CONNECTIONS .

.. 914 I Unpacking ...

.....
.....
.....
.....
.....

.....
. 9 I Grounding

.....
.....
.....
.....
.....

.....

..... 9 I Antenna

.....
.....
.....

.....

.....
.....
.....

..9 I Installation

.....
.....
.....

.....

.....
.....

.....10 I Required connections

.....
.....
.....
.....

.....11 I Advanced connections

.....
.....
.....

.....

.12 I Power supply connections

.....
.....

.....

....13 I External antenna tuners and linear amplifier .

.....

...14 6 REMOTE JACK (CI-V) INFORMATION ... 4546 7 SET MODE

.....
.....
.....
.....

..... 4755 I General ..

.....
.....
.....

.....

.....
.....
.....

..... 47 I Quick set mode items

.....
.....
.....

.....

.... 48 I Initial set mode items .

.....
.....

.....
.....
.....
... 50 8 MAINTENANCE

.....
.....
.....
.....

.. 56 I Fuse replacement

.....
.....
.....

.... 56 I Memory backup .

.....
.....

.....
.....
.....

..... 56 I Cleaning .

.....
.....
.....
.....

.....
.....
.....

... 56 3 FREQUENCY SETTING

.....
.....

..1519 1 I When first applying power (CPU resetting) ...

..... 15 I Initial settings .

.....
.....
.....
.....

.....
.....

.. 15 I VFO description ...

.....
.....
.....
.....
.....

.. 16 I Frequency setting

.....
.....
.....

.... 17 I Mode selection .

.....
.....
.....
.....
.....

| |
|---|
| |
| |
|19 9 TROUBLESHOOTING |
| |
| |
| 5758 10 OPTIONAL INSTALLATIONS / SETTINGS ... 5962 I Opening the transceiver case . |
| |
| |
| |
| 59 I UT-102 VOICE SYNTHESIZER UNIT |
| |
| |
| |
| ... 59 I CR-282 HIGH-STABILITY CRYSTAL UNIT |
| |
| |
| 60 I IF filters . |
| |
| |
| |
| |
| |
| |
| . 60 I UT-106 DSP RECEIVER UNIT |
| |
| |
| |
| 61 I MB-72 CARRYING HANDLE . |
| |
| |
| |
| |
| 61 I AT-180 internal switch description |
| |
| |
| . 62 4 RECEIVE AND TRANSMIT |
| |
| 2038 I Functions for receive . |
| |
| |
| |
| |
| 20 I Functions for transmit .. |
| |
| |
| |
| |
| 25 I Split frequency operation . |
| |
| |
| |
| |
| .. 29 I Tone squelch operation ... |
| |

.....
.....
.....
... 31 I Tone scan operation

.....
.....
.....
.....
.. 31 I One-touch repeater

.....
.....
.....

.....
. 32 I Auto repeater function
.....
.....

.....
.....
.. 32 I Functions for CW ...
.....

.....
.....
.....
.....

.. 33 I Functions for RTTY

.....
.... 35 I Packet operation .
.....
.....

.....
.....
.....
.....
..... 37 I SWR .

.....
.....
.....
.....

.....
.....
.....
.....
..... 38 I I INTERNAL VIEWS .

.....
.....
.....
.....

.. 63 I2 OPTIONS

.....
.....
.....
.....

... 6465 13 SPECIFICATIONS.

.....
.....

.....
.....

.. 66 14 MENU GUIDE ..

.....

.....
.....

... 6768 UNPACKING Accessories included with the IC-706MKIIG: Qty. q DC power cable*.....

.....
.....

.....
.....

...1 w Hand microphone (HM-103) ..

.....
.....

.....
.....

1 e Spare fuse (30 A)

.....
.....

.....
.....

.....
.....

..2 r Spare fuse (4 A)

.....
.....

.....
.....

.....
.....

.1 t RTTY key plug.....

.....
.....

.....
.....

.....
.....

...1 y Electronic keyer plug ..

.....
.....

.....
.....

.....
.....

....1 u ACC cable.....

.....
.....

.....
.....

.....
.....

.....
.....

...I i Ferrite bead**.....

.....

.....

.....

.....

.....

.....

.I i *OPC-639 for Europe versions (differs from the diagram at left), OPC-025D for other versions. q w t y e r u **Not supplied with some versions. ii 1
PANEL DESCRIPTION I Front panel we AF RF/SQL HF/VHF/UHF TRANSCEIVER r i706MKTMG t yu MODE i o Y BAND q @2 @1 @0 POWER
P.AMP/ATT USB TS RX S1 3 5 7 9 5 20 40 60dB 10 VFO A CH TUNER/CALL RIT/ SUB M-CH SHIFT TX M1 SPL A/B A=B MENU F-1 F-2 F-3 PO
DISPLAY !0 PHONES LOCK !9 BAND Z o !8 !7 !6 !5 !4 !3 !2 !1 q P O W E R S W I T C H [P O W E R] (p.

15) Turns power ON and OFF. · Push momentarily to turn power ON. · Push for 2 sec. to turn power OFF. w A F G A I N C O N T R O L [A F] (inner
control; p. 15) Rotate clockwise to increase the audio output from the speaker; rotate counterclockwise to decrease the audio output from the speaker. e RF
GAIN CONTROL/SQUELCH CONTROL [R F / S Q L] (outer control; p. 22) Adjusts the squelch threshold level (to mute noise when receiving no signal) in
all modes. This control can be used for RF gain control to adjust receiver gain manually. · RF gain selection can be set in initial set mode (p.

50). · RF gain is usable in SSB/CW/RTTY modes only. y M O D E S W I T C H [M O D E] (p. 19) Push momentarily to cycle through the operating modes:
USB/LSB CW/CWâ RTTY/âRTTY FM/WFM/AM Push and hold for 2 sec. to toggle between the following operating modes: USB LSB CW CWâ RTTY âRTTY
FM ; WFM ; AM ; FM, etc. u RECEIVE/TRANSMIT INDICATORS [RX]/[TX] [RX] lights green while receiving (and squelch opens); [TX] lights red while
transmitting. i MAIN DIAL Changes the displayed frequency, selects initial set mode items, etc. /(o U P / D O W N (B A N D) S W I T C H E S [Y/Z(B A N
D)] Push to select a band. · Can also be used to advance quick set mode items, initial set mode items, etc. r FUNCTION DISPLAY Shows the operating
frequency, dot matrix indications, selected memory channel, etc.

See p. 7 for details. t T U N I N G S T E P S W I T C H [T S] (pgs. 17, 18) Push momentarily to cycle between 1 Hz/10 Hz, programmable and 1 MHz tuning
steps. · 1 and 10 Hz steps are only available in SSB, CW and RTTY modes; 1 MHz steps are only available in FM, WFM and AM modes.

Push and hold to scroll through the bands continuously. !0 M A I N D I A L T E N S I O N L A T C H Selects the main dial tension. · 2 positions are available.



[You're reading an excerpt. Click here to read official ICOM](#)

[IC-706MK2G user guide](#)

<http://yourpdfguides.com/dref/209475>

Push for 2 sec. to toggle between 1 and 10 Hz steps, or; when the programmable tuning steps is indicated, push for 2 sec. to enter programmable tuning step mode. !1 MICR O P H O N E C O N N E C T O R (p. 8) Modular-type microphone connector--connects the supplied microphone (HM-103). · The optional OPC-589 can be used to connect an 8-pin microphone such as the SM-8 or SM-20, if desired. · A microphone connector is also available on the rear 1 PANEL DESCRIPTION 1 panel. DO NOT connect 2 microphones simultaneously. !2 L O C K S W I T C H [L O C K] Push momentarily to turn the dial lock function ON and OFF. · The dial lock function electronically locks the main dial. !8 M - C H C O N T R O L [M - C H] (inner control) When the RIT or SUBDIAL functions are OFF, rotate to select a memory channel number (p. 35).

Shifts the receive frequency while the RIT function is ON in SSB, CW and RTTY modes (see below and p. 20). · RIT variable range is ± 9.99 kHz When the optional UT-102 VOICE SYNTHESIZER UNIT is installed (p. 52), push for 2 sec. to have the frequency, etc. announced. · UT-102 operation can be adjusted in initial set mode (pgs. 53, 54). LOCK Changes the operating frequency in the selected tuning steps while t MENU FIL F-1 NB F-2 MET F-3 SPL F-1 · "ä" appears when the split function is ON.

· The function of [F-3] changes to XFC when the split function is ON. N A R R O W F I L T E R (p. 23) Toggles the narrow filter (or wide filter--push for 2 sec.) ON and OFF. FIL F-1 V F O A / B S E L E C T I O N (p.

16) Toggles between VFO A and VFO B in VFO mode. F-2 Toggles between transmission VFO and reception VFO during split operation. Toggles between the transmit and receive frequencies (and modes) of memory channels when the split function is turned ON. A/B · "ä" appears when the narrow filter is ON; "ç" appears when the widband if desired. · A mode is memorized along with the frequency for each band.

R E P E A T E R T O N E O P E R A T I O N (p. 30) Toggles the subaudible tone encoder for repeater use ON and OFF. T O N F - 3 · "FM-T" appears when the function is ON. D S 4 F U N C T I O N S (may be optional for some ver.) Transmits a 1750 Hz tone burst when pushed and held during transmission. · Tone frequencies or tone burst can be set in initial set mode (p. 49). S 4 M E N U A N F F - 1 N R F - 2 N R L F - 3 D S I F U N C T I O N S A N F M P W F - 2 S I M E N U M W F - 1 M P R F - 3 F - 1 A U T O M A T I C N O T C H F I L T E R (p. 24) This function automatically attenuates beat tones, tuning signals, etc., even if they are moving.

N O I S E R E D U C T I O N (p. 24) This function reduces noise components and picks out desired signals which are buried in the noise. N O I S E R E D U C T I O N D I S P L A Y (p. 24) This displays the noise reduction level when using the noise reduction function. M W F - 1 M E M O R Y W R I T E (p. 40) Stores the displayed frequency and operating mode into the displayed memory channel. M E M O P A D W R I T E (p. 42) Stores the displayed frequency and operating mode into a memo pad. N R F - 2 M P W F - 2 N R L F - 3 4 1 P A N E L D E S C R I P T I O N R I R e a r and side panels t e A N T 1 y u i ! 2 ! 3 r M I C K E Y C O M P G A I N D C 13.8V B E E P / S I D E T w T U N E R E X T S P q G N D A N T 2 ! 1 ! 0 o q G R O U N D T E R M I N A L [G N D] (p.

9) Connect this terminal to a ground to prevent electrical shocks, TVI, BCI and other problems. w A N T E N N A C O N N E C T O R S [A N T 1], [A N T 2] (p. 11) Accept a 50 antenna with an PL-259 type plug. · [ANT 1] is for connection to an HF/50 MHz antenna. · [ANT 2] is for connection to 144 MHz antenna.

· These connectors are switched above or below 60 MHz. When connecting a straight key () When connecting a paddle (dot) (com) (dash) e D A T A J A C K [D A T A] (p. 12) 6-pin min DIN jack to connect a TNC, etc. for packet operation. r A C C E S S O R Y S O C K E T [A C C] (p.

6) Enables connection to external equipment such as a TNC for data communications, a linear amplifier or an automatic antenna selector/tuner, etc. · See page at right for socket information. o D C P O W E R S O C K E T [D C I 3 . 8 V] (p. 13) Accepts 13.8 V DC through the supplied DC power cable. Rear panel view t R T T Y J A C K [R T T Y] (p. 35) Connects an external terminal unit for RTTY (FSK) operation. · The keying polarity and mark/shift frequencies can be selected in quick set mode (p. 48).

! 0 E X T E R N A L S P E A K E R J A C K [E X T S P] (p. 12) Accepts a 416 speaker. ! 1 T U N E R C O N T R O L S O C K E T [T U N E R] (p. 12) Accepts the control cable from an optional AH-3 HF AUTOMATIC ANTENNA TUNER. y C I - V R E M O T E C O N T R O L J A C K [R E M O T E] (p. 45) Designed for use with a personal computer for remote operation of transceiver functions. u M I C R O P H O N E C O N N E C T O R [M I C] (p. 11) Accepts the supplied microphone (connected in parallel with the front panel's [MIC] connector). · See pgs. 1 and 2 for microphone notes.

· See p. 8 for microphone connector information. ! 2 S P E E C H C O M P R E S S I O N L E V E L C O N T R O L [C O M P G A I N] (p. 26) Adjusts the compression level. · This control is available only when the speech compressor is ON.

Recommended level Counterclockwise decreases COMP GAIN B E E P / S I D E T i E L E C T R O N I C K E Y E R J A C K [K E Y] (p. 33) Accepts a paddle to activate the internal electronic keyer. 5 · Selection between the internal electronic keyer and straight key operation can be made in quick set mode. (p. 49) Clockwise increases PANEL DESCRIPTION 1 ! 3 B E E P / S I D E T O N E C O N T R O L [B E E P / S I D E T O N E] Adjusts the beep tone and CW side tone audio levels.

TECHNICAL INFORMATION · ACC SOCKET ACC PIN # NAME 1 2 8V GND DESCRIPTION Regulated 8 V output. Connects to ground. SPECIFICATIONS Output voltage Output current :8 V ± 0.3 V :Less than 10 mA COLOR brown red 3 Input/output pin (HF/50 MHz). Ground level :0.5 V to 0.8 V Goes to ground when transmitting. HSEND Input current :Less than 20 mA When grounded, transmits (connected to 8V (HF/50 MHz bands) line thru 2.2 k resistance/144 MHz operation). orange 4 5 6 13 9 10 11 12 5678 1234 BDT BAND ALC Data line for the optional AT-180.

Band voltage output. (Varies with amateur band) ALC voltage input. Output voltage Control voltage Input impedance :0 to 8.0 V :4 to 0 V :More than 10 k yellow green blue 7 Input/output pin (144 MHz). Ground level Goes to ground when transmitting. VSEND Input current When grounded, transmits (connected to 8V line thru 2.2 k resistance/HF :50 MHz operation). :0.5 V to 0.8 V :Less than 20 mA (144 MHz band) :Max.

1 A purple Rear panel view 8 9 13.



You're reading an excerpt. [Click here to read official ICOM IC-706MK2G user guide](http://yourpdfguides.com/dref/209475)
<http://yourpdfguides.com/dref/209475>

8 V TKEY 13.8 V output when power is ON. Key line for the AT-180. RTTY keying input.

Connected in parallel to the [RTTY] jack. Modulator input. AF detector output. Fixed, regardless of [AF] position. Squelch output.

Goes to ground when squelch opens. Output current gray white 10 FSKK Ground level Input current Input impedance Input level rms Output impedance
Output level SQL open SQL closed :0.5 to 0.8 V :Less than 10 mA :10 k :Approx. 100 mV :4.7 k :100 to 350 mV rms black 11 MOD pink light blue light green
12 AF 13 SCLS :Less than 0.3 V/5 mA :More than 6.0 V/100 µA · When connecting the ACC conversion cable (OPC-599) 2 8 Color refers to the cable strands
of the supplied cable. 4 1 6 13 9 10 11 12 5678 1234 5 3 7 FSKK GND HSEND MOD AF SCLS 13.8 V ALC ACC 1 2 5 3 7 4 1 6 8V GND HSEND BAND ALC
VSEND 13.

8 V ACC 2 6 1 PANEL DESCRIPTION I Function display q w e a r e b ! 4 !3 !2 N ANF NR W LSB USB CW R RTTY AM WFM TSQ L SPL DSP t BLANK NB
VOX F-BK COM F AGC DUP SI 3 5 7 9 20 40 60dB VFO A ALC VFO B 35 SWR PO 1 1.5 2 10 MEMO y i !0 u o MI SPL A/B A=B !1 S CH q
NARROW/WIDE FILTER INDICATORS "ā" appears when selecting AM narrow or FM narrow modes. When installing an optional narrow filter, narrow
mode can be selected in CW, RTTY and SSB modes. · When the SSB wide filter is installed, "ç" appears during wide mode selection. !0 M E M O R Y C H A N
N E L N U M B E R R E A D O U T Shows the selected memory channel number. !1 D O T M A T R I X I N D I C A T O R S These alphanumeric readouts
show a variety of information such as current functions of the "F" keys [F1] to [F3], memory channel names, set mode items, etc. See p. 68 for an overview of
these indicators. !2 M E T E R R E A D O U T S Functions as an S-meter while receiving. Functions as a power, ALC or SWR meter while transmitting.
N o t e : The SWR meter does not function in the 144 MHz band. !3 F U N C T I O N I N D I C A T O R S "NB" appears when the noise blanker is activated.
"VOX" appears when the VOX function is selected. "F-BK" appears when full break-in operation is selected and only "BK" appears when semi break-in
operation is selected. "COM" appears when the speech compressor is activated.
"FAGC" appears when the fast AGC function is selected. !4 D S P I N D I C A T O R S Appear when the optional DSP unit is installed and activated. w
MODE INDICATORS Show the operating mode. e PROGRAMMABLE/1 MHz TUNING STEP INDICATORS a appears when the programmable tuning step
is selected. b appears when the 1 MHz tuning step is selected.
r SPLIT INDICATOR Shows that the split frequency function is activated. t FREQUENCY READOUT Shows the operating frequency. "C" appears in place
of the 1 Hz digit when the call channel is selected. y DUPLEX INDICATORS "DUP+" appears during plus duplex operation. "DUP" appears during minus
duplex operation. u BLANK INDICATOR Shows that the displayed memory channel is not programmed. · This indicator appears both in VFO and memory
modes. i VFO/MEMORY INDICATORS VFO A or B appears when VFO mode is selected; MEMO appears when memory mode is selected. o SELECT
INDICATOR Shows that the displayed memory channel is designated as a select memory channel. 7 PANEL DESCRIPTION I I Microphone (HM-103) LOCK
DN OFF ON UP q UP/DOWN SWITCHES [UP]/[DN] Change the operating frequency.

· Push and hold to change the frequency continuously. · Tuning step is 50 Hz when no TS indicator appears. w LOCK SWITCH [LOCK] Locks the [UP]/[DN]
switches. e PTT SWITCH [PTT] Push and hold to transmit; release to receive. TECHNICAL INFORMATION · MICROPHONE CONNECTOR GND
(microphone ground) PIN NO. 1 FUNCTION +8 V DC output Frequency up Frequency down Squelch open Squelch closed DESCRIPTION Max. 10 mA
Ground Ground through 470 "LOW" level "HIGH" level +8 V DC output Frequency up/down Microphone input AF output Squelch switch 2 8 PTT GND
Rear panel view 1 2345 678 C a u t i o n : DO NOT short pin 1 to ground as this can damage the internal 8 V regulator. · HM-103 SCHEMATIC DIAGRAM
MICROPHONE 10µ MIC ELEMENT + 2k 4700p 0.33µ MICROPHONE CABLE + MICROPHONE PLUG 4700p 2.2k DOWN UP 1 2345678 PTT RECEIVE
TRANSMIT 470 8 2 INSTALLATION AND CONNECTIONS I Unpacking After unpacking, immediately report any damage to the delivering carrier or dealer.
Keep the shipping cartons. For a description and a diagram of accessory equipment included with the IC-706MKIIG, see UNPACKING on p. ii of this
manual. I Grounding To prevent electrical shock, television interference (TVI), broadcast interference (BCI) and other problems, ground the transceiver
through the GROUND terminal on the rear panel. For best results, connect a heavy gauge wire or strap to a long earth-sunk copper rod.
Make the distance between the GROUND terminal and ground as short as possible. W R W A R N I N G : N E V E R connect the [GND] terminal to a gas or
electric pipe, since the connection could cause an explosion or electric shock. ;;; ;;; ;;; ;;; ;;; ANTENNA SWR Each antenna is tuned for a specified frequency
range and SWR may be increased out-of-range. When the SWR is higher than approx. 2.
0 : 1, the transceiver's power drops to protect the final transistors. In this case, an optional antenna tuner is useful to match the transceiver and antenna. Low
SWR allows full power for transmitting even when using the antenna tuner. The IC-706MKIIG has an SWR meter to monitor the antenna SWR continuously. I
Antenna Select antenna(s), such as a well-matched 50 antenna, and feedline. The transmission line should be a coaxial cable. 1.5 : 1 or better of Voltage
Standing Wave Ratio (VSWR) is recommended for your required band. Of course, the transmission line should be a coaxial cable. C A U T I O N : Protect
your transceiver from lightning using a lightning arrester.

PL-259 CONNECTOR INSTALLATION EXAMPLE Coupling ring 30 mm Slide the coupling ring down. Strip the cable jacket and soft solder. solder solder
Slide the connector body on and solder it. 10 mm (soft solder) 10 mm Soft solder 12 mm Strip the cable as shown at left. Soft solder the center conductor.
Screw the coupling ring onto the connector body. (10 mm 3/8 in) 9 INSTALLATION AND CONNECTIONS 2 I Installation D Single body mounting MB-62
(optional) S DStand To raise the stand: With the transceiver upside down, pull the stand towards the rear panel and then upwards, as illustrated below.
Supplied with the MB-62* then up Pull back *CAUTION: Non-supplied screws (longer than 8 mm) may damage the internal units.



[You're reading an excerpt. Click here to read official ICOM
IC-706MK2G user guide
http://yourpdfguides.com/dref/209475](http://yourpdfguides.com/dref/209475)

D Front panel separation While pulling the panel release button towards Attach the optional OPC-581 to the main body and Attach the other end of the OPC-581 to the detached front panel as in fig. 3.

tighten the supplied screw as in fig. 2. fig. 1 you, slide the front panel to the right (fig. 1).

fig. 3 fig. 2 D Front panel mounting Attach the MB-63 to a flat surface using the two Fix the detached front panel to the MB-63 as illustrated in fig. 2. B e c a r e f u l of the orientation of the MB-63, otherwise, the front panel may become attached in the opposite direction.

supplied screws (fig. 1). fig. 1 fig. 2 10 2 INSTALLATION AND CONNECTIONS I Required connections AF RF/SQL HF/VHF/UHF TRANSCEIVER i706MKTMG MODE Y BAND POWER P.AMP/ATT TS RX TUNER/CALL RIT/SUB M-CH SHIFT TX DISPLAY PHONES LOCK BAND MENU F-1 F-2 F-3 Z HF/50 MHz ANTENNA 2 m ANTENNA MICROPHONE (p. 8) RTTY TERMINAL UNIT (p. 35) HM-103 ANT 1 CW KEY (p. 33) MIC KEY TUNER EXT SP DC 1 3 . 8 V GND ANT 2 GROUND (p.

9) Use the heaviest gauge wire or strap available and make the connection as short as possible. Grounding prevents electrical shocks, TVI and other problems. 11 PS-85 See p. 13 for details. INSTALLATION AND CONNECTIONS 2 I Advanced connections AF RF/SQL HF/VHF/UHF TRANSCEIVER i706MKTMG MODE Y BAND POWER P.AMP/ATT TS RX TUNER/CALL HEADPHONES PHONES RIT/SUB M-CH SHIFT TX DISPLAY LOCK BAND MENU F-1 F-2 F-3 Z OPC-589 (p. 65) or REMOTE (p. 45) Used for computer control and transceiver. SPEAKER Selectable with the [PHONE/SPEAKER] switch on the back of the front panel. ACC SOCKET (p.

6) COAX ANTENNA SWITCH DATA JACK (p. 37) 6-pin mini DIN jack to connect to a TNC, etc. for packet operation. ANT 1 DESKTOP (p. 64)

MICROPHONE When using a 50 MHz antenna separately since the AH-3 can only be used for the HF bands.

GND ANT 2 MIC KEY TUNER EXT SP DC 1 3 . 8 V AH-3 (p. 14) AH-2b EXTERNAL SPEAKER (p. 65) SP-21 12 2 INSTALLATION AND CONNECTIONS I Power supply connections Use the optional PS-125 / PS-85 DC POWER SUPPLY when operating the IC-706MKIIG with AC power. Refer to the diagram below for connection.

C A U T I O N : Before connecting the DC power cable, check the following important items. Make sure: · The [POWER] switch is OFF. · Output voltage of the power source is 1215 V when you use a non-Icom power supply. · DC power cable polarity is correct. Red : positive (+) terminal Black : negative () terminal CONNECTING THE PS-125 / PS-85 DC POWER SUPPLY PS-125 / PS-85 Connect to an AC outlet using the supplied AC cable. DC power socket

DC power cable Note : When using the PS-125, the IC706MKIIG Europe version complies with EMC directives even if the OPC-639 is not used.

CONNECTING A NON-ICOM DC POWER SUPPLY Transceiver CONNECTING A NON-ICOM DC POWER SUPPLY (For Europe versions) Transceiver DC power socket Supplied DC power cable 30 A fuses [GND] 13.8 V 20 A Black Red DC power socket To non-Icom power supply To AC outlet OPC-639 CONNECTING A VEHICLE BATTERY Note: Use terminals for NEVER connect to a 24 V battery. Crimp black Grommet the cable connections. red Solder 12 V battery Supplied DC power cable 13 INSTALLATION AND CONNECTIONS 2 I External antenna tuners and linear amplifier CONNECTING THE AH-4 Coaxial cable ANT 1 (from the AH-4) The AH-4 can be used for the HF bands and 50 MHz band only.

AH-4 Transceiver CONNECTING THE AT-180 Coaxial cable supplied with the AT-180 [ANT 1] IC-706 ACC cable supplied with the AT-180 To the AH-2b or an antenna element HF to 6 m antenna [ACC] one of two connectors [ACC] AT-180 [TRANSCEIVER] Note: · Turn the IC-706MKIIG's power OFF when connecting the AT180, otherwise, the CPU may malfunction and the AT-180 may not function properly. · The OPC-742 is required when using b o t h the AT-180 and a 2 m linear amplifier. D o n o t connect [ANT 2] to the AT-180. When using an HF to 2 m wide antenna, use a duplexer between the AT-180 and antenna since 2 m signals do not pass through the AT-180. Ground HF to 2 m antenna Duplexer Transceiver [ANT 1] [ANT 2] AT-180 CONNECTING THE IC-PW1 To an antenna Mini-plug cable ACC cable 7-pin side ANT ACC-1 REMOTE INPUT-1 ANT1 OPC-599 conversion cable ACC REMOTE Coaxial cable GND Transceiver GND IC-PW1 AC outlet (220240 V) 14 3 FREQUENCY SETTING I When first applying power (CPU resetting) Before first applying power, make sure all connections required for your system are complete by referring to section 2. Then, reset the transceiver using the following procedure. Note : Resetting clears all programmed contents in memory channels and returns all initial set mode and quick set mode contents to their default values. USB [POWER] [Y] [Z] The transceiver displays its initial frequency and mode. Make sure the transceiver power is OFF. While pushing [Y] and [Z], push [POWER] to turn power ON.

· The internal CPU is reset. · The transceiver displays as shown at right when resetting is complete. S1 PO 3 5 7 9 5 20 40 60dB 10 VFO A BLANK M1 SPL A/B A=B CH D M1 d i s p l a y s e l e c t i o n If you can't figure out how to return to the M1 display: While pushing [MENU], turn power ON. I Initial settings After resetting the transceiver, set controls and switches as shown in the diagram below. [POWER]: OFF CCW: counterclockwise [AF]: Max. CCW [P.AMP/ATT]: OFF (indicator lights out) [TUNER/CALL]: OFF (indicator lights out) [RF/SQL]: Max. CCW [RIT/SUB]: OFF (indicator lights out) [LOCK]: OFF (indicator light out) [SHIFT]: Center Turn power ON, then check the display. If any of the following indicators appear, turn them OFF as follows: · Tuning step indicators, Z, (SSB, CW or RTTY): Push [TS]. · MHz tuning step indicator, Z, (FM, WFM or AM): Push [TS].

· 1 Hz frequency readout (SSB, CW or RTTY): Push and hold [TS]. · Memory mode indicator, MEMO: Use [(F-3)V/M] in the M2 display (p. 68). · Split indicator, ï: Use [(F-1)SPL] in the M1 display (p. 68). 15 FREQUENCY SETTING 3 I VFO description VFO is an abbreviation of Variable Frequency Oscillator, and traditionally refers to an oscillator. The IC-706MKIIG's VFO can store a frequency and an operating mode. You can call up a desired frequency to a VFO with the memo pad-read switch (p. 42) or with the memory transfer switch (p. 42).

You can also change the frequency with the main dial and select an operating mode with the [MODE] switch or call up previously accessed frequency and modes with the band stacking register (p. 19). The IC-706MKIIG has two VFOs, specially suited for split frequency operation. The VFOs are called VFO A and VFO B. You can use the desired VFO to call up a frequency and operating mode for operation.



[You're reading an excerpt. Click here to read official ICOM](#)

[IC-706MK2G user guide](#)

<http://yourpdfguides.com/dref/209475>

Select VFO MODE SWITCH USB VFO A Change CH M1 SPL A/B A=B Transfer Transfer Transfer DIAL MEMO PAD 28.025 MHz MEMORY CHANNEL 7.001 MHz BAND 21.295 MHz · The differences between VFO and memory mode VFO MODE Each VFO shows a frequency and operating mode. If the frequency or operating mode is changed, the VFO automatically memorizes the new frequency or operating mode.

When the VFO is selected from another VFO or memory mode, the last-used frequency and operating mode for that VFO appear. [EXAMPLE] USB M E M O R Y M O D E (pgs. 3942) Each memory channel shows a frequency and operating mode like a VFO. Even if the frequency or mode is changed, the memory channel does not memorize the new frequency or memory mode. When a memory channel is selected from another memory channel or VFO mode, the memorized frequency and operating mode appear.

[EXAMPLE] VFO is selected. USB Memory channel 1 is selected. VFO A CH MEMO CH USB The frequency is changed. USB The frequency is changed. VFO A CH MEMO CH USB Memory mode is selected.

USB Another memory channel is selected. MEMO CH MEMO CH USB VFO is selected again. USB Memory channel 1 is selected again. VFO A CH MEMO CH Changed frequency (14.123 MHz) appears. Changed frequency (14.123 MHz) does not appear and memorised frequency (14.100 MHz) appears instead. 16 3 FREQUENCY SETTING 1 Frequency setting · Band selection All HF ham bands, the 50 MHz band, the 144 MHz band and a general coverage receiver band are included in the IC-706MKIIG. Push [(Y)BAND]/[(Z)BAND] to select the desired band.

· Pushing [(Y)BAND]/[(Z)BAND] continuously scrolls through the available bands. Z LSB FM Z USB Note : The band stacking register can also be used to select bands. Refer to p. 19. USB USB · Programmable tuning steps Programmable tuning steps are available to suit your operating requirements. These tuning steps are: · Independently selectable for each mode · Selectable from 0.01 (FM/WFM/AM only), 0.1, 1, 5, 9, 10, 12.5, 15, 20 and 100 kHz Push [TS] one or more times until the programmable tuning step indicator, "Z," appears above the 1 kHz digit. USB Programmable tuning step indicator 20 5 40 60dB 10 Push [TS] for 2 sec.

while the programmable tuning step indicator appears to enter the tuning step selection mode. · Rotate DIAL appears. · Rotating the main dial changes the frequency according to the set tuning step. S1 PO 3 5 7 9 VFO A CH M1 SPL A/B A=B USB Rotate the main dial to set the desired tuning step. Push [TS] to exit the tuning step selection mode.

Rotate the main dial to change the frequency according to the set tuning step. · Change the mode and select tuning steps for other modes, if desired. 10 kHz tuning step is selected for USB operation. Rotate DIAL · 1 Hz and 10 Hz tuning steps When neither the quick tuning step or programmable tuning step, "Z," appear, rotating the main dial changes the frequency in increments of 1 or 10 Hz. These tuning steps are only available in SSB, CW and RTTY modes. USB Select SSB, CW or RTTY mode if necessary. Push [TS] for 2 sec. to toggle between the 1 and 10 Hz step settings. · When the 1 Hz step is selected, the 1 Hz digit appears in the frequency indication; when the 10 Hz step is selected, the 1 Hz digit disappears from the frequency indication. Push USB Rotating the main dial changes the frequency in 10 Hz steps. VFO A TS for 2 sec. Rotating the main dial changes the frequency in 1 Hz steps. VFO A 17 FREQUENCY SETTING 3 1 · 1 MHz quick tuning step The quick tuning step function allows you to change the frequency in 1 MHz steps when rotating the main dial. This function is only available in FM, WFM and AM modes. Select FM, WFM or AM mode if necessary.

Push [TS] momentarily to toggle between the 1 MHz tuning step and the programmable tuning step. · "Z" appears above the 1 MHz indicator when the 1 MHz tuning step is selected. · When the 1 MHz tuning step is selected, slow rotation of the main dial changes the frequency in 1 MHz steps and fast rotation of the main dial changes the frequency in 5 MHz steps. Quick tuning step indicator FM FM Rotating the main dial changes the frequency in 1 MHz steps. [TS] SWITCH FLOW CHART SSB/CW/RTTY modes 10 Hz tuning USB Any mode Programmable step tuning (100 Hz 100 kHz) USB FM/WFM/AM modes 1 MHz tuning FM TS TS 2 sec. 2 sec. USB momentarily TS momentarily USB 2 sec. momentarily 1 Hz tuning Rotate DIAL Selectable for each mode. · Sub dial function The sub dial function allows you to change the operating frequency using the [M-CH] control. This gives you more control in tuning since the [M-CH] knob is detented--each click changes the frequency according to the set tuning step.

This function is always available in FM, WFM and AM modes. However, in SSB, CW and RTTY modes, the set mode item "Sub dial function," must be set to "FrEq." Push [RIT/SUB] to turn the sub dial function ON. · The [SUB] indicator lights green; if it lights red, the RIT function is activated--sub dial function must be set in initial set mode in this case. [SUB] switch [M-CH] control Indicator lights green while the sub dial function is activated.

RIT/ SUB Rotate [M-CH] to change the operating frequency according to the set tuning steps. Push [RIT/SUB] again to turn the function OFF. · The [SUB] indicator turns off. 18 3 FREQUENCY SETTING · Quick band change function The quick band change function automatically stores the last frequency and mode used for each band in a band stacking register. This is convenient for contest operation, etc.

The tables below show the quick band change default settings for each band. USB Select S3. Push [F-1][F-3] to select a band stacking register. To change the settings for [F-1][F-3] from their defaults, push [F-1][F-3] for 1 sec. one or more times to until the desired band appears in the display above the corresponding switch. · The last-used frequency and mode for the selected band are displayed. BAND 1.9 MHz 3.5 MHz 7 MHz 10 MHz 14 MHz General* FREQUENCY 1.91000 MHz** 3.

56000 MHz 7.06000 MHz 10.13000 MHz 14.10000 MHz 15.10000 MHz MODE CW LSB CW USB USB S1 PO 3 5 · Push [DISPLAY] when M or G is displayed. · Push [MENU] twice to select S3. S1 PO 3 5 7 9 5 20 40 60dB 10 VFO A BLANK Display shows the default bands for the quick band change function. S3 7 USB 144 430 Display shows [F-2] has been changed from its default of the 50 MHz band to the general receiver band. CH · The default settings for [F-1][F-3] are 7, 144 and 430 MHz bands, respectively. 7 9 5 20 40 60dB 10 VFO A BLANK S3 7 GEN 144 CH BAND 18 MHz 21 MHz 24 MHz 28 MHz 50 MHz 144 MHz 430 MHz FREQUENCY 18.



[You're reading an excerpt. Click here to read official ICOM IC-706MK2G user guide](http://yourpdfguides.com/dref/209475)
<http://yourpdfguides.com/dref/209475>

15000 MHz 21.30000 MHz 24.95000 MHz 28.60000 MHz 50.10000 MHz 145.

00000 MHz 433.00000 MHz MODE USB USB USB FM FM *General refers to the general coverage receiver (GEN in the display) and the range varies according to version. * * 1.83000 MHz for Italy version (#10,#20). I Mode selection The following modes are available in the IC706MKIIG: SSB (LSB/USB), CW, CW-ã (CW reverse), FM, WFM (receive only), AM, RTTY and ãRTTY (RTTY reverse).

To select the desired mode of operation push [MODE] one or more times, then push [MODE] for 2 sec., if necessary. See the diagram at right for the order of selection. · The selected mode is indicated in the function display. OPERATING MODE SELECTION USB CW RTTY LSB CWã ãRTTY Push MODE momentarily Push MODE for 2 sec. AM N o t e : If a desired mode cannot be selected, it may be hidden using Initial Set mode (p. 50). FM WFM 19 RECEIVE AND TRANSMIT I Functions for receive D IF shift function The IF shift function electronically changes the passband frequency of the IF (intermediate frequency) and cuts out higher or lower frequency components of the IF to reject interference. The function shifts the IF frequency up to ±1.2 kHz in 15 Hz steps in SSB/CW/RTTY modes and up to ±250 Hz in 3 Hz steps in CW-ã/RTTY-ã modes.

The IF shift is not available in FM and AM modes. M-CH SHIFT M-CH SHIFT M-CH SHIFT 4 Adjust the [SHIFT] control for a minimum interference signal level. · The audio tone may be changed while the IF shift is in use. Shifts low Center Shifts high Set the shift control to its center position when there is no interference. USB · Graphic display The IF shift is displayed graphically (for about 1 sec.) each time the shift control is rotated. S1 3 5 7 9 20 40 60dB VFO A CH D RIT function The RIT (Receive Incremental Tuning) function compensates for off-frequencies of communicating stations. The function shifts the receive frequency up to ±9.99 kHz in 10 Hz steps without moving the transmit frequency. The [SUB/RIT] switch in Initial Set Mode must be set to RIT mode in advance (p.

51). N o t e : The RIT function is not available in FM, WFM or AM modes regardless of the Initial Set mode setting (p. 51). Push [RIT]. Rotate the [M-CH] control to cancel the off-frequencies.

· The [RIT] indicator lights red. [RIT] switch [M-CH] control Indicator lights red while RIT function is activated. To cancel the RIT function, push [RIT] again. · The [RIT] switch indicator goes out. USB · The transmit frequency is not shifted.

· Calculate function The shift frequency of the RIT function can be added/subtracted to the displayed frequency. USB Push for 2 sec. While the RIT indicator is lit, push and hold [RIT] for 2 sec. 20 4 RECEIVE AND TRANSMIT D Noise blanker The noise blanker reduces pulse-type noise such as that generated by automobile ignition systems. This function is not effective for FM modes or for non pulse-type noise. If you don't want to use the noise blanker for AM communications, the "AM noise blanker" item in Initial Set mode must be turned OFF (ON is the default setting--p. 53). Push [(F-2)NB] to toggle the noise blanker ON and OFF. · "NB" appears when the noise blanker is turned ON. USB · Push [MENU] one or more times to select M3.

Select M3. NB S1 PO 3 5 7 9 5 20 40 60dB 10 VFO A · Push [DISPLAY] 1 or 2 times when S or G is displayed, until M is displayed. M3 NAR NB MET CH Appears when the noise blanker is turned ON. D AGC time constant The AGC (Automatic Gain Control) controls receiver gain to produce a constant audio output level even when the received signal strength is varied by fading, etc. Use AGC slow for normal phone operation; AGC fast for receiving data and searching for signals. AGC time constant cannot be changed in FM mode. Select M4. Push [(F-3)AGC] to toggle the AGC time constant between fast and slow. · "FAGC" appears when the fast time constant is selected. · Push [DISPLAY] 1 or 2 times when S or G is displayed.

· Push [MENU] one or more times to select M4. USB FAGC S1 PO 3 5 7 9 5 20 40 60dB 10 VFO A CH M4 VOX COM AGC Appears when AGC fast is selected. P DPreamp and attenuator The preamp amplifies received signals in the front end circuit to improve the S/N ratio and sensitivity. Turn this function ON when receiving weak signals. The attenuator prevents desired signals from distorting when very strong signals are near the desired frequency or when very strong electric fields, such as from broadcasting stations, are near your location. Push [P.AMP/ATT] momentarily to turn the preamp ON and OFF; push and hold to turn the attenuator ON. · Lights green when the preamp is ON; lights red when the 20 dB attenuator is ON. · Only one of these functions can be activated at a time. P.

AMP/ATT Lights green while the preamp is activated; lights red while the attenuator is activated. D Peak meter hold INITIAL SET MODE The peak meter hold function freezes the highest displayed bar segment in any meter function for about 0.5 sec. so that you can more easily read the meter. This function can be turned ON and OFF in initial set mode (see p. 51). [EXAMPLE]: S1 3 5 7 9 20 40 60dB Initial reception of a signal results in an Smeter reading of 40 dB. The highest indicated bar remains displayed for about 0.5 sec. even when the signal strength decreases.

S1 3 5 7 9 20 40 60dB 21 RECEIVE AND TRANSMIT 4 D RF gain and squelch The IC-706MKIIG uses the same control, [RF/SQL], to adjust one of either the RF gain or the squelch. [RF/SQL] adjusts either the RF gain or the squelch depending on the operating mode selected and the condition of the RF gain item in initial set mode (p. 51; also see the table at right). The RF (Radio Frequency) gain is used to adjust the receiver gain. · This control should be set to the 11 o'clock position for normal use. · Shallow rotation moves the S-meter to the right indicating the signal strength which can be received. · [RF/SQL] control priority Initial set mode setting USB, LSB, CW, RTTY AM, FM, WFM SQL*1 AUTO RF · SQL*2 SQL RF GAIN RF/SQL SQL SQL RF/SQL * 1Default; *2Default for USA version. N o t e : The recommended position for RF gain is the 11 o'clock position since this sets RF gain to the max. When set to AUTO, SQL is active in FM/WFM/AM; RF is active in SSB/CW/RTTY. Max.

RF gain position AF RF/SQL The SQUELCH removes noise output from the speaker (closed condition) when no signal is received. The squelch is particularly effective for FM. It is also available for the other modes. · When operating in FM, first rotate the control fully counterclockwise. Then, rotate the control clockwise to the point where the noise just disappears.



[You're reading an excerpt. Click here to read official ICOM](http://yourpdfguides.com/dref/209475)

[IC-706MK2G user guide](http://yourpdfguides.com/dref/209475)

<http://yourpdfguides.com/dref/209475>

This is the best position. The squelch does not open for weak signals when it is set too deep. A segment appears in the S-meter to indicate the S-meter squelch level. RF gain decreases Same effect as at the center position S-meter squelch threshold point Noise squelch threshold point AF Squelch opens RF/SQ Deep D Simple band scope This function allows you to visually "sweep" an area surrounding the set frequency for other signals. Detected signals are indicated graphically in the dot matrix section of the display.

Note: Use the attenuator or turn OFF the preamp when using the band scope on a band containing a lot of noise. Set a mode and frequency. Select G1. Push [F-1] one or more times to select the desired steps. Each dot corresponds to a step for the indicated frequency. 0.5, 1, 2, 5, 10, 20 and 100 kHz can be set for the scope step. Push [DISPLAY] 1 or 2 times if M or S appears. Push [MENU] one or more times to select G1. 1k 2k 2k 2k 2k SWP SWP SWP SWP sweep marker Select sweep width ([F-1]) Start sweep ([F-3]) Sweep is finished ([F-3] again) Push [F-3] to start the sweep.

Rotate the main dial if you want to monitor the displayed signals. The sweep marker indicates the location of the displayed frequency in the sweep readout. If the displayed frequency is outside of the sweep readout (determined by the sweep width), the sweep marker flashes. "___" (below SWP) flashes while sweeping. The receive audio is muted while sweeping. SWP SWP Move sweep marker (main dial) Returns to previous frequency ([F-2]) Push [F-2] to return the frequency to the start of a sweep. The sweep marker moves back to the center position. 2.4 RECEIVE AND TRANSMIT D Optional filter selection Two optional filters can be installed in the IC706MKIIG. Narrow filters help reject interference from adjacent signals and obtain good selectivity. Wide filters provide improved audio for SSB operation when no interfering signals are present.

Consult the table below to select a filter most suitable for your operating needs. Narrow filters for AM/FM modes are standard. FILTER PRESETTING: After you install a filter (see p. 60 for installation), you must specify the installed filter in initial set mode (item 19 "OPT. FIL 1" or item 20 "OPT. FIL 2"; see p. 51). Select M3. FILTER ON/OFF: Push [DISPLAY] 1 or 2 times if G or S appears. Push [MENU] one or more times to select M3.

Push [(F-1)FIL] momentarily to select the narrow filter; for 2 sec. to select the wide filter. a appears when the narrow filter is selected; c appears when the wide filter is selected. **Note:** When selecting the narrow filter, the graphic passband is narrowed (see diagram below). Normal operation narrow is selected

Filter variations Name FL-101* FL-232* FL-100* FL-223* FL-272 FL-103* FL-94 *Optional filter. Mode CW, RTTY CW, RTTY CW, RTTY SSB, CW, RTTY SSB, CW, RTTY SSB, CW, RTTY AM, FM Band width 250 Hz/6 dB 350 Hz/6 dB 500 Hz/6 dB 1.9 kHz/6 dB 2.4 kHz/6 dB 2.8 kHz/6 dB 8 kHz/6 dB Optional filter installation and selection tables

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| W: | W: | No optional | M: | FL-272 M: | FL-272 N: | filter N: | W: | N: | | | | | | | | | | | | | | | | | | | | | | | | | |
| W: | M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | W: | M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | | | | | | | | | | | | | | | | | | | | | | |
| W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | CW, RTTY | FIL 1 | FIL 2 | No optional filter | FL-100 | FL-101 | FL-103 | FL-223 | FL-232 | No optional | FL-100 | | | | | | | | | | | | | | | | | |
| FL-101 | FL-103 | FL-223 | FL-232 | filter W: | M: | FL-272 N: | W: | M: | FL-272 N: | FL-100 W: | M: | FL-272 N: | FL-101 W: | FL-103 M: | FL-272 N: | W: | M: | | | | | | | | | | | | | | | | |
| FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-232 W: | M: | FL-272 N: | FL-100 W: | M: | FL-272 N: | FL-100 W: | FL-272 M: | FL-100 N: | FL-101 W: | FL-103 M: | FL-272 N: | W: | M: | | | | | | | | | | | | | | | | |
| FL-272 N: | FL-100 W: | FL-223 N: | FL-100 W: | FL-272 M: | FL-100 N: | FL-232 W: | M: | FL-272 N: | FL-101 W: | FL-272 M: | FL-100 N: | FL-101 W: | FL-101 W: | FL-103 M: | FL-272 N: | W: | M: | | | | | | | | | | | | | | | | |
| FL-272 N: | FL-101 W: | FL-103 M: | FL-272 N: | FL-101 W: | FL-272 M: | FL-223 N: | FL-101 W: | FL-272 M: | FL-232 N: | FL-101 W: | FL-103 M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | FL-223 W: | FL-103 M: | FL-272 N: | | | | | | | | | | | | | | | |
| FL-232 W: | M: | FL-272 N: | FL-223 W: | FL-272 M: | FL-223 N: | FL-100 W: | FL-272 M: | FL-223 N: | FL-101 W: | FL-103 M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | FL-272 M: | FL-223 N: | FL-232 W: | M: | FL-272 N: | FL-232 FL-101 | FL-103 | FL-223 | FL-232 | W: | M: | FL-272 N: | W: | M: | FL-272 N: | | | |
| W: | M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | W: | FL-103 M: | FL-272 N: | W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | |
| FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | FL-103 M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: | FL-223 W: | M: | FL-272 N: |

FL-101 FL-103 FL-223 FL-232 Table key: W--wide position M--medium (normal) position N--Narrow position AM Normal Narrow Normal Narrow FL-94 FL-272 FL-23 +SFPC455E FL-94 FM 23 RECEIVE AND TRANSMIT 4 I DSP Functions (may require an optional unit depending on version--see p. 61) D ANF (Automatic Notch Filter) function This function automatically attenuates beat tones, tuning signals, etc.

, even if they are moving. The automatic notch filter functions in SSB, FM and AM modes. Select S4 (DSP menu). Push [(F-1)ANF] to toggle the automatic notch filter ON and OFF.



[You're reading an excerpt. Click here to read official ICOM IC-706MK2G user guide](http://yourpdfguides.com/dref/209475)
<http://yourpdfguides.com/dref/209475>

· "DSP" and "ANF" appear when the function is ON. · Push [DISPLAY] 1 or 2 times when M or G is displayed. · Push [MENU] one or more times to select S4. USB DSP ANF BLANK S1 PO 3 5 7 9 5 20 40 60dB VFO A S4 ANF NR NRL CH D NR (Noise Reduction) function This 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 function is available for all operating modes.

Select S4 (DSP menu). Push [(F-2)NR] to toggle the noise reduction function ON and OFF. · Push [DISPLAY] 1 or 2 times when M or G is displayed. · Push [MENU] one or more times to select S4. USB DSP NR BLANK S1 PO 3 5 7 9 5 20 40 60dB VFO A Push [(F-3)NRL] to toggle the noise reduction 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. · "DSP" and "NR" appear when the function is ON. S4 ANF NR NRL CH level indication ON and OFF. S4 LEVEL 8 NRL N O T E : Pushing [(F-3)NRL] automatically turns the noise reduction function ON, however, the transceiver maintains the ON/OFF condition when pushing [(F-2)NR].

24 4 RECEIVE AND TRANSMIT I Functions for transmit D Output power and mic gain S e t t i n g o u t p u t p o w e r Push [DISPLAY] for 2 sec. to select quick set mode. Push [MENU] one or more times to select Q1 RF POWER. USB Maximum output power is selected. 20 5 40 60dB 10 Rotate the main dial to select the desired output. Push [DISPLAY] to exit quick set mode. A v a i l a b l e p o w e r BAND HF 50 MHz 144 MHz *Carrier power · Output power is displayed in 11 steps (L, 19 and H) but is continuously selectable. S1 PO 3 5 7 9 Q1 RF POWER SSB/CW/RTTY/FM 5100 W 5100 W 220 W AM* 440 W 440 W 28 W S e t t i n g m i c r o p h o n e g a i n Microphone gain must be adjusted properly so that your signal does not distort when transmitted. Select SSB or another phone mode. Push [DISPLAY] for 2 sec.

to select quick set mode. Push [MENU] one or more times to select Q2 MIC GAIN. USB Microphone gain is set to 6. 20 40 60dB S1 ALC 1 3 5 2 7 9 3 While speaking into the microphone adjust the mic gain so that the ALC meter does not peak past the ALC zone. Push [DISPLAY] to exit quick set mode. ALC ALC zone · The ALC meter is selected automatically when operating in SSB mode. Q2 MIC GAIN D Meter function The bar meter in the function display acts as an S-meter (for relative signal strength, except in WFM mode) during receive and can be selected for one of three types during transmit. DISPLAY MEASUREMENT INDICATION Indicates the relative RF output power. Po Indicates the ALC level. When the meter movement shows the input signal level exceeds the allowable level, the ALC limits the RF power.

In such cases, reduce the microphone gain (see above). Indicates the SWR over the transmission line. Select M3. Push [(F-3)MET] one or more times to select the desired meter function. · The display indication changes as in the table at right.

· Push [DISPLAY] 1 or 2 times when S or G appears. · Push [MENU] one or more times to select M3. ALC SWR N o t e : The SWR meter cannot be used for the 144/430 MHz bands since the meter activates for the [ANT 1] connector only. 25 RECEIVE AND TRANSMIT 4 D Speech compressor The IC-706MKIIG has a built-in, low distortion speech compressor circuit. This circuit increases your average talk power in SSB mode and is especially useful for DX'ing when the receiving station is having difficulty copying your signal.

Select USB or LSB mode. Select the ALC meter. Select the mic gain display in quick set mode. · Push [DISPLAY] 1 or 2 times to select M, if necessary. · Push [MENU] one or more times to select M3, then push [(F-3)MET] one or more times to select "ALC." · Push [DISPLAY] for 2 sec. · Push [MENU] one or more times to select Q2 MIC GAIN. [MENU] [(F-2)COM] Adjust the mic gain. · While transmitting at your normal voice level, the ALC meter should read at about the middle of the ALC zone. · Be sure the mic gain is in the range of 2 to 5.

· Push [DISPLAY] 1 or 2 times to select M, if necessary. · Push [MENU] one or more times to select M4. [COMP GAIN] Select M4. COMP GAIN BEEP /SIDE T Push [(F-2)COM], then adjust [COMP GAIN] so that the ALC meter reads within the ALC zone whether you speak softly or loudly. N o t e : When the ALC meter peaks above the ALC zone, your transmitted voice may be distorted. ALC ALC zone Adjust [COMP GAIN] so that the ALC meter reads within the ALC zone. D VOX operation The VOX (Voice-operated Transmission) function toggles between transmit and receive with your voice. This function provides an opportunity to input log entries into your computer, etc., while operating. Select M4, then turn the VOX function ON.

Select VOX GAIN in quick set mode. · Push [DISPLAY] 1 or 2 times when S or G appears. · Push [MENU] one or more times to select M4. · Push [(F-1)VOX] to turn the function ON. · Push [DISPLAY] for 2 sec.

then push [MENU] one or more times to select Q4. [MENU] [(F-1)VOX] main dial [DISPLAY] While speaking into the microphone, adjust [VOX Select VOX DELAY in quick set mode. DELAY] as desired. GAIN] until the transceiver is transmitting. · Push [MENU] one or more times to select Q3.

While speaking into the microphone, adjust [VOX Select ANTI VOX in quick set mode. · Push [MENU] one or more times to select Q5. If the receive audio from the speaker toggles the transceiver to transmit during receive, adjust the [ANTI-VOX] to the point where it has no effect. Push [DISPLAY] to exit quick set mode. 26 4 RECEIVE AND TRANSMIT D Optional AT-180 AUTOMATIC ANTENNA TUNER operation The AT-180 automatic antenna tuner matches the IC706MKIIG to the connected antenna automatically. Once the tuner matches an antenna, the variable capacitor angles are memorized as a preset point for each frequency range (100 kHz steps). Therefore, when you change the frequency range, the variable capacitors are automatically preset to the memorized point. MANUAL TUNING During SSB operation on HF bands at low voice levels, the AT-180 may not be tuned correctly. In such cases, manual tuning is helpful. Push and hold [TUNER] for 1 sec.

to start manual tuning. · CW mode is selected, a side tone is emitted, and the [TUNER] light flashes; then, the previous mode is selected. [TUNER/CALL] C A U T I O N : N E V E R transmit with the tuner ON when no antenna is connected.



[You're reading an excerpt. Click here to read official ICOM](#)

[IC-706MK2G user guide](#)

<http://yourpdfguides.com/dref/209475>

This will damage both the transceiver and the antenna tuner. Note: · The AT-180 cannot be used for the 144/430 MHz band. · When operating on the 144/430 MHz band, pushing the tuner switch selects the call channel (p. 39). · The AT-180 can match both HF and 50 MHz bands. However, operation is different for the HF and 50 MHz bands. TUNER OPERATION · For the HF band: Push [TUNER] to turn the tuner ON.

The antenna is tuned automatically during transmission when the antenna SWR is higher than 1.5:1. · When the tuner is OFF, the [TUNER] light goes out. [TUNER/CALL] Push and hold for 1 sec. to start manual tuning.

If the tuner cannot reduce the SWR to less than 1.5:1 after 20 sec. of tuning, the [TUNER] light goes out. In this case, check the following: · the antenna connection and feedline · the antenna SWR (p. 26; meter function) T h r o u g h i n h i b i t (HF bands only) The AT-180 has a through inhibit condition.

When selecting this condition, the tuner can be used at poor SWR's. In this case, automatic tuning in the HF bands activates only when exceeding SWR 3:1.

Therefore, manual tuning is necessary each time you change the frequency. Although termed "through inhibit," the tuner will be "through" if the SWR is higher than 3:1 after tuning. CONVENIENT Lights to indicate the AT-180 is turned ON. · For the 50 MHz band: Push and hold [TUNER] to tune the antenna.

@@@See p. 55 for selection. @@See p. @@14 for connection.

@@@@@The tuner and transceiver will be damaged. N E V E R operate the AH-4 when it is ungrounded. Transmitting before tuning may damage the transceiver. @@N o t e : The AH-4 can be used for HF bands and the 50 MHz band only. @@@@This function is turned ON in initial set mode, item 13 (p. @@@@Following is an example of setting 7.057 MHz, CW mode in VFO A (for receive) and 7.025 MHz, CW mode in VFO B (for transmit). CW SPL VFO B ·The transmit frequency can be monitored while pushing [(F-3)XFC]. @@@@ Push [SPL]: activates split only.

@@@@@The quick split function is ON by default. If desired, it can be turned OFF in initial set mode (p. 51). In this case, pushing [(F-1)SPL] for 2 sec.

@@@@@Turn the quick split function ON. @@e Select a suitable tone frequency in quick set mode. @@See p. @@ Push [DISPLAY] to exit quick set mode. r Push [(F-1)SPL] for 2 sec.

@@@@p. @@u To return to simplex operation, push [(F-1)SPL]. @@ While pushing [LOCK], push [POWER] to turn Select "DUP power ON and enter initial set mode. 144M" using [MENU] or the [UP]/[DN] keys, then rotate the main dial to select the desired duplex offset. CONVENIENT Each memory channel can store a tone frequency and an offset frequency, as well as the operating frequency. Store repeater information into memory channels for quick and easy access to repeaters. · The duplex offset can be selected from 4000 kHz to +4000 kHz. 17 DUP 144M 30 4 RECEIVE AND TRANSMIT I Tone squelch operation Tone squelch operation is a method of communications using selective calling. Only received signals having a matching tone will open the squelch.

Before communicating using tone squelch, all members of your party must agree on the tone squelch frequency to use.

Push [MODE] one or more times to select FM Push and hold [DISPLAY] to enter Quick Set mode. Push [MENU] one or more times to select item Q7 TONE SQL. mode. Rotate the main dial to select the desired subaudible tone frequency. Available tone frequencies are the same as for repeater tone operation (see previous page). · [Y]/[Z] or [M-CH] can also be used. Set the tone frequency (quick set mode). See p. 49 for setting details and available frequencies. Q7 TONE SQL FM TSQL SPL Select M4 and turn the tone squelch function ON.

Push [(F-3)TON] to toggle tone squelch operation ON and OFF. ·When tone squelch is turned ON, "TSQL" appears in the display. S1 PO 3 5 7 9 5 20 40 60dB 10 VFO A CH Communicate in the usual manner. · Push [PTT] to transmit; release to receive. M4 VOX DUP TON I Tone scan operation By monitoring a signal that is being transmitted on a repeater input frequency, you can determine the tone frequency necessary to open a repeater.

During tone squelch or repeater operation, push and hold [DISPLAY] to enter Quick Set mode. Push [MENU] one or more times to select item Q8 T-SQL SCN during tone squelch operation, or Q8 RPTR-T SCN during repeater operation. FM TSQL During tone squelch operation. S1 PO 3 5 7 9 5 20 40 60dB 10 Push [(F-3)SCN] to toggle tone scan operation ON and OFF. ·While scanning tone frequencies are displayed instead of the operating frequency.

·When a matched tone is detected, tone scan automatically stops, the matched tone is displayed and the repeater tone (or tone squelch tone) setting is automatically adjusted accordingly. · [Y]/[Z] or [M-CH] can also be used. Q8 T-SQL SCN FM T During repeater operation. S1 PO 3 5 7 9 5 20 40 60dB 10 Q8 RPTR-T SCN Push [DISPLAY] to return to the main menu. 31 RECEIVE AND TRANSMIT 4 I One-touch repeater function This function allows you to set repeater operation with the push of one switch. Push [(Y)BAND]/[(Z)BAND] to select the 28 MHz band. Rotate [DIAL] to select the operating frequency.

Push [MODE] one or more times to select FM. Select M4 and turn the one-touch repeater function ON. Push and hold [(F-2)DUP] to toggle the onetouch repeater function ON and OFF.

·When the one-touch repeater function is turned ON, "DUP" (duplex indicator) and "T" (tone frequency indicator) appear in the display. ·Be sure to set the duplex direction and offset in initial set mode in advance (p. 52). ·Push [(F-2)DUP] to toggle the duplex direction. FM BLANK S1 PO 3 5 7 9 5 20 40 60dB 10 VFO A CH MI SPL A/B A=B FM T S1 PO 3 5 7 9 5 20 40 60dB 10 DUP VFO A BLANK M4 VOX DUP TON CH N O T E : When you want to transmit a 1750 Hz tone, while pushing [PTT], push [(F-3)TON] in the M4 display during repeater operation. I Auto repeater function This function automatically activates the repeater settings (DUP+ or DUP and tone encoder ON/OFF) when the operating frequency falls within the general output frequency range and deactivates them when outside of the range. Set the auto repeater function ON or OFF in initial set mode in advance (p. 53). When set ON, repeater settings are automatically activated according to the table at right. N O T E : This function is available for the USA version only.

FREQUENCY 145.200145.495 MHz 146.610146.995 MHz 147.

000147.395 MHz 442.000444.995 MHz 447.000449.

995 MHz DUPLEX DIRECTION "DUP" appears "DUP+" appears "DUP+" appears "DUP" appears I 1750 H z t o n e b u r s t (F M m o d e o n l y) A 1750 Hz tone is required to access most European repeaters.



[You're reading an excerpt. Click here to read official ICOM](http://yourpdfguides.com/dref/209475)

[IC-706MK2G user guide](http://yourpdfguides.com/dref/209475)

<http://yourpdfguides.com/dref/209475>