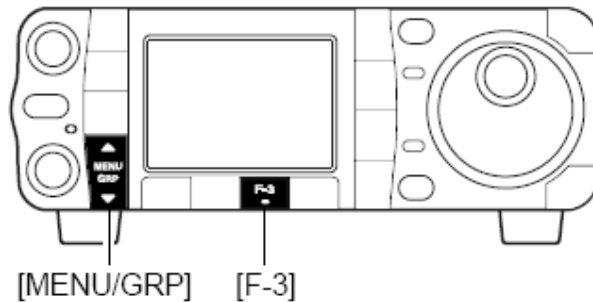


TRANSMIT METER FUNCTIONS

The transceiver has 4 transmit meter functions for your convenience. Select the desired meter with the [F-3 MET] in the S-1 display.



① Select S-1.

- Push and hold [MENU/GRP] for 1 sec. once or twice to select the menu group S.
- Push [MENU/GRP] momentarily one or more times to select the menu S-1.

② Push [F-3 MET] one or more times to select from RF power (Po), SWR, ALC or compression level (COM).

- The display indication changes as the table at the right.

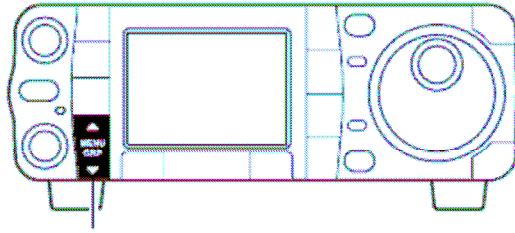
DISPLAY INDICATION	MEASUREMENT
Po	Indicates the relative RF output power in %.
SWR	Indicates the SWR on the transmission line.
ALC	Indicates the ALC level. When the meter movement shows the input signal level exceeds the allowable level, the ALC limits the RF power. In such cases, reduce the MIC gain setting (see p. 38) in the quick set mode.
COM	Indicates the compression level when the speech compressor is in use.



**SINGLE FUNCTIONS CAN BE SELECTED:
Rel. RF output pwr., SWR at radio, ALC, and
speech compression level.**

MULTIFUNCTION TRANSMIT METER

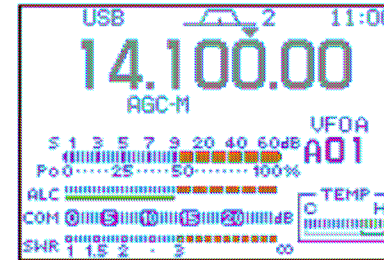
In addition, the transceiver can display the multi-function meter in the graphic display, which displays all transmit meters simultaneously.



[MENU/GRP]

➔ Select G-2 (Multi-meter).

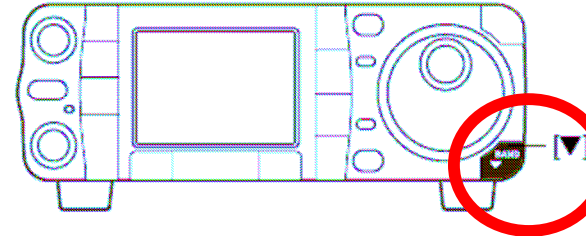
- Push and hold [MENU/GRP] for 1 sec. once or twice to select the menu group G.
- Push [MENU/GRP] momentarily one or more times to select the menu G-2 (Multi-meter).



▨ The multi-function meter also displays the internal temperature meter.

Quick entry

- ➔ Push and hold [▼(BAND)] for 1 sec. to turn the multi-function meter ON and OFF.
- Push [▼(MENU/GRP)] also to turn OFF.



“THE BIG PICTURE”: Rel. RF output pwr., SWR at radio, ALC, speech compression level, and radio internal temperature.

PROGRESS

- Radio setup – front panel display/controls, rear panel connections
- VFO behavior and selection
- Selecting the operating frequency band and modulation mode
- Frequency setting
- Audio volume, squelch, & receiver gain adjustment
- Multifunction meter
- Simple transmitter settings – RF Output power, microphone gain.
- SSB operation
- CW operation
- FM operation



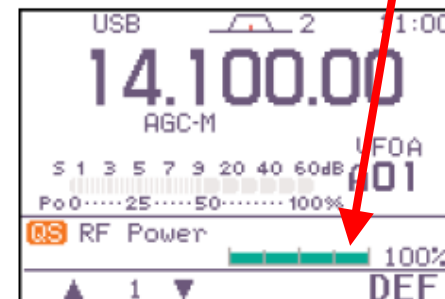
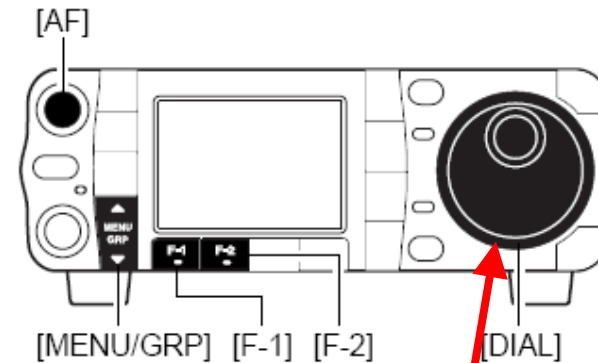
TRANSMIT RF OUTPUT POWER

- ① Push **[AF(SET)]** momentarily to enter the set mode menu.
- ② Push **[F-1 Q/S]** to enter the quick set mode.
- ③ Push **[F-1 ▲]** or **[F-2 ▼]** to select "RF Power."
- ④ Rotate **[DIAL]** to set the desired output setting.
 - Output power is displayed in 1% steps (0% to 100%).
- ⑤ Push **[▼(MENU/GRP)]** to exit quick set mode.

• Available power

BAND	SSB/CW RTTY/FM	AM*
HF	2-100 W	1-40 W
50 MHz	2-100 W	1-40 W
144 MHz	2-50 W	2-20 W
430 MHz	2-35 W	2-14 W

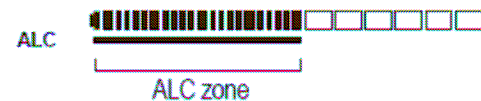
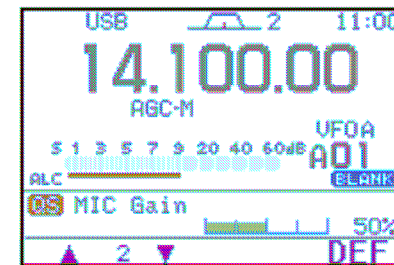
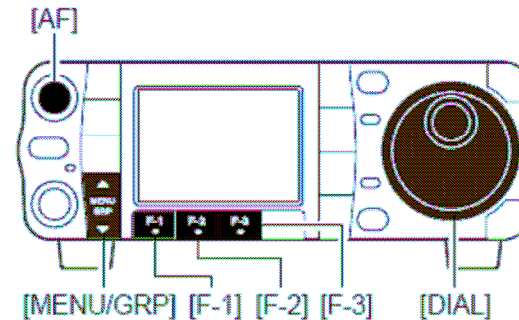
*Carrier power



TRANSMIT AUDIO LEVEL

Microphone gain must be adjusted properly so that your signal is not distorted when transmitted.

- ① Select SSB or another phone mode (AM or FM mode).
- ② Select S-1.
 - Push and hold [MENU/GRP] for 1 sec. once or twice to select the menu group S.
 - Push [MENU/GRP] momentarily one or more times to select the menu S-1.
- ③ Push [F-3 MET] one or more times to select the ALC meter.
 - "ALC" appears.
- ④ Push [AF(SET)] momentarily to enter the set mode menu.
- ⑤ Push [F-1 Q/S] to enter the quick set mode.
- ⑥ Push [F-1 ▲] or [F-2 ▼] to select "MIC Gain."
- ⑦ Push [PTT] (microphone) to transmit.
 - Speak into the microphone at your normal voice level.
- ⑧ While speaking into the microphone, rotate [DIAL] so that the ALC meter reading does not go outside the ALC zone.
 - Microphone gain is adjusted in 1% steps (0% to 100%).
- ⑨ Release [PTT] (microphone) to return to receive.
- ⑩ Push [▼(MENU/GRP)] to exit the quick set mode.
 - Push [▼(MENU/GRP)] again to return the normal operating mode.



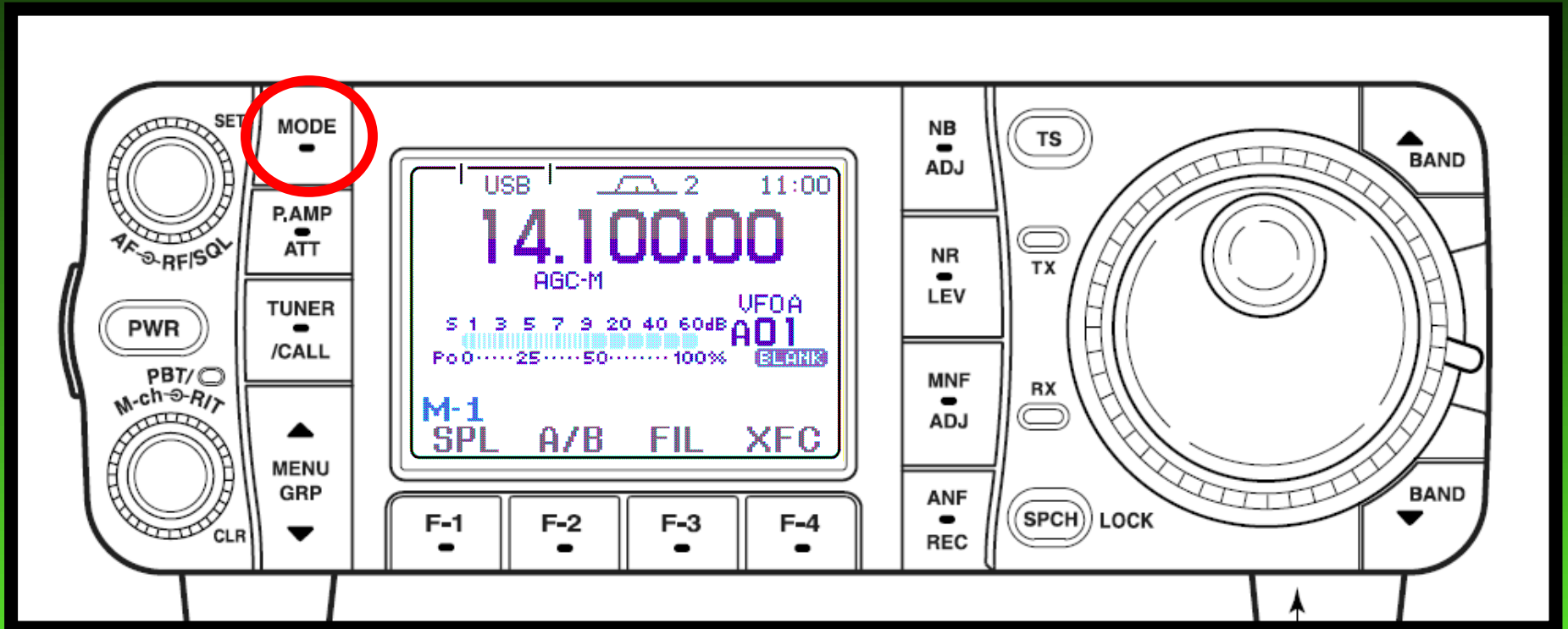
Simultaneous Mic. Gain adjustment and ALC readout.

PROGRESS

- **Radio setup – front panel display/controls, rear panel connections**
- **VFO behavior and selection**
- **Selecting the operating frequency band and modulation mode**
- **Frequency setting**
- **Audio volume, squelch, & receiver gain adjustment**
- **Multifunction meter**
- **Simple transmitter settings – RF Output power, microphone gain.**
- **SSB operation**
- **CW operation**
- **FM operation**



Single Sideband Phone Operation



Selecting SSB.

Single Sideband – Receive Functions

• Preamp and attenuator (p. 72)

- ➔ Push [P.AMP/ATT] momentarily to turn the preamp ON or OFF.
 - “**P.AMP**” appears when the preamp is set to ON.
- ➔ Push [P.AMP/ATT] for 1 sec. to turn the attenuator ON.
 - Push [P.AMP/ATT] momentarily to turn the attenuator OFF.
 - “**ATT**” appears when the attenuator is set to ON.

• Twin PBT (passband tuning) (p. 77)

- ➔ Push [PBT/M-ch/RIT] (switch) momentarily once or twice to select the twin PBT ON or OFF (M-ch RIT).
 - PBT indicator lights green when the twin PBT is selected.
- ➔ Rotate [PBT/M-ch/RIT] (controls–inner/outer).
 - Push [PBT/M-ch/RIT(CLR)] to clear the settings.

• AGC (auto gain control) (p. 74)

- ➔ While “M-3” is selected, push [F-3 AGC] momentarily one or more times to select AGC fast, AGC middle and AGC slow.
 - Push and hold [MENU/GRP] for 1 sec. once or twice to select the menu group M.
 - Push [MENU/GRP] momentarily one or more times to select the menu M-3.
 - “AGC-F,” “AGC-M” and “AGC-S” appears when the fast time constant, middle time constant and slow time constant is selected, respectively.
- ➔ While “M-3” is selected, push and hold [F-3 AGC] for 1 sec. to enter the AGC set mode.
 - Push [F-2 FAST], [F-3 MID] or [F-4 SLOW] to select the time constant, then rotate [DIAL] to adjust the time constant.



Single Sideband – Receive Functions

- **Manual notch filter** (pgs. 80, 81)
 - ➔ Push **[MNF/ADJ]** to turn the manual notch filter ON and OFF.
 - “**MF**” appears when the manual notch filter is set to ON.
 - ➔ Push and hold **[MNF/ADJ]** for 1 sec. to enter the manual notch filter set mode.
 - Push **[F-2 NF1]**, **[F-3 NF2]** to select the notch filter, push **[F-4 NW]** to set the filter width, rotate **[DIAL]** to set the notch frequency.
- **Auto notch filter** (p. 80)
 - ➔ Push **[ANF/•REC]** to turn the auto notch filter ON and OFF.
 - “**AR**” appears when the auto notch filter is set to ON.
- **VSC (voice squelch control)** (p. 82)
 - ➔ While “**S-1**” is selected, push **[F-4 VSC]** to turn the VSC function ON and OFF.
 - “**VSC**” appears when VSC function is set to ON.

- **Noise blanker** (p. 78)
 - ➔ Push **[NB/ADJ]** to turn the noise blanker ON and OFF.
 - “**NB**” appears when the noise blanker is set to ON.
 - ➔ Push and hold **[NB/ADJ]** for 1 sec. to enter the noise blanker set mode, then rotate **[DIAL]** to adjust the threshold level, or noise pulse width.
- **DSP noise reduction** (p. 79)
 - ➔ Push **[NR/LEV]** to turn the DSP noise reduction ON and OFF.
 - “**NR**” appears when the DSP noise reduction is ON.
 - ➔ Push and hold **[NR/LEV]** for 1 sec. to enter the DSP noise reduction level set mode, then rotate **[DIAL]** to adjust the DSP noise reduction level.



Single Sideband – Transmit Functions

• Transmit quality monitor (p. 87)

- ➔ Push **[AF(SET)]**, then **[F-4 DTH]** to enter the miscellaneous (others) set mode. Select an item with **[F-1 ▲]/[F-2 ▼]**, then rotate **[DIAL]** to turn the monitor function ON and OFF.

• VOX (voice operated transmit) (p. 83)

- ➔ While "M-3" is selected, push **[F-1 VOX]** to turn the VOX function ON and OFF.

- Push and hold **[MENU/GRP]** for 1 sec. once or twice to select the menu group M.

- Push **[MENU/GRP]** momentarily one or more times to select the menu M-3.

- "VOX" appears when the VOX function is set to ON.

- ➔ While "M-3" is selected, push and hold **[F-1 VOX]** for 1 sec. to enter the VOX set mode.

- Push **[F-1 ▲]/[F-2 ▼]** to select an item.

- Rotate **[DIAL]** to set the value/conditions.

• Speech compressor (p. 87)

- ➔ While "M-3" is selected, push **[F-2 COM]** to turn the speech compressor ON and OFF.

- "COM" appears when the speech compressor is set to ON.

- ➔ While "M-3" is selected, push and hold **[F-2 COM]** for 1 sec. to enter the compression level set mode.

- Rotate **[DIAL]** to adjust the compression level.

• Transmit filter width (p. 84)

- ➔ While "M-3" is selected, push **[F-4 TBW]** momentarily to display the selected transmit filter width.

- ➔ While "M-3" is selected, push and hold **[F-4 TBW]** for 1 sec. to select the transmit filter width from narrow, middle and width.

- The transmit filter width window appears for showing the selected transmit filter width each time **[F-4 TBW]** is pushed.

