

IC-746PRO



Digital Signal Processor



SPECIFICATIONS

GENERAL

- Frequency coverage (unit: MHz):

Receive	0.030- 60.000*	108.000-174.000*
Transmit	1.800- 2.000	3.500- 3.999
	7.000- 7.300	10.100- 10.150
	14.000- 14.350	18.068- 18.168
	21.000- 21.450	24.890- 24.990
	28.000- 29.700	50.000- 54.000
	144.000-148.000	

 *Some frequency ranges are not guaranteed.
- Mode: USB, LSB, CW, RTTY, AM, FM
- Number of memory Ch.: 102 (99 regular, 2 scan edges and 1 call)
- Antenna connector: SO-239×3 (2 for HF/50MHz and 1 for 144MHz bands; 50Ω)
- Temperature range: -10°C to +60°C; +14°F to +140°F
- Frequency stability:
 - Less than ±7ppm from 1 min. to 60 min. after power ON.
 - After that, rate of stability change is less than ±1ppm at 25°C (+77°F). Temperature fluctuations (0°C to +50°C; +32°F to +122°F) less than ±5ppm.
- Frequency resolution: 1Hz
- Power supply requirement: 13.8V DC ±15%
- Power consumption:

Tx	Max. power	23A
Rx	Standby	2.2A
	Max. audio	3.0A
- Dimensions: 287(W)×120(H)×316.5(D) mm; 11⁵/₁₆(W)×4⁷/₃₂(H)×12¹/₂(D) in
- Weight (approx.): 9.0kg; 19lb 13oz
- ACC 1 connector: 8-pin DIN connector
- ACC 2 connector: 7-pin DIN connector
- CI-V connector: 2-conductor 3.5 (d) mm (1/8")
- DATA connector: Mini DIN 6-pin

TRANSCEIVER

- Output power: SSB, CW, RTTY, FM 5-100W (continuously adjustable) AM 5-40W
- Modulation system: SSB PSN modulation
AM Low power modulation
FM Phase modulation
- Spurious emission: Less than -50dB (HF bands)
Less than -60dB (50/144MHz band)
- Carrier suppression: More than 40dB
- Unwanted sideband suppression: More than 55dB
- ΔTX variable range: ±9.99kHz
- Microphone connector: 8-pin connector (600Ω)
- ELE-KEY connector: 3-conductor 6.35(d) mm (1/4")
- KEY connector: 3-conductor 6.35(d) mm (1/4")
- SEND connector: Phono (RCA)
- ALC connector: Phono (RCA)

RECEIVER

- Receive system: Triple conversion superheterodyne system
- Intermediate frequencies: 1st 64.455MHz
2nd 455kHz
3rd 36kHz
- Sensitivity (typical):

Frequency Range (MHz)	SSB, CW, RTTY (at 2.4kHz BW)	AM (at 6kHz BW)	FM (at 15kHz BW)
0.50-1.799	—	13μV	—
1.80-27.99	0.16μV**	2μV**	—
28.0-29.99	0.16μV**	2μV**	0.5μV**
50.0-54.0	0.13μV**	1μV**	0.25μV**
144.0-148.0	0.11μV**	1μV**	0.18μV**

10dB S/N for SSB, CW, RTTY and AM, 12dB SINAD for FM

*Preamp 1 is ON, **Preamp 2 is ON, ***Preamp is ON

- Squelch sensitivity (Pre-amp: OFF): SSB, CW, RTTY Less than 5.6μV
FM Less than 1μV
- Selectivity (representative value): SSB (BW: 2.4kHz) More than 2.4kHz/-6dB
Less than 3.2kHz/-40dB
Less than 3.6kHz/-60dB
Less than 4.3kHz/-80dB
More than 500Hz/-6dB
Less than 700Hz/-60dB
More than 360Hz/-6dB
Less than 650Hz/-60dB
More than 6.0kHz/-6dB
Less than 15.0kHz/-60dB
More than 12.0kHz/-6dB
Less than 20.0kHz/-60dB
- CW (BW: 500Hz)
- RTTY (BW: 350Hz)
- AM (BW: 6kHz)
- FM (BW: 15kHz)
- Spurious and image rejection ratio: More than 70dB (HF, 50MHz)
More than 60dB (144MHz)
(except IF through on 50MHz)
- AF output power (at 13.8V DC): More than 2.0W at 10% distortion with an 8Ω load
- RIT variable range: ±9.99kHz
- PHONES connector: 3-conductor 6.35 (d) mm (1/4")
- EXT SP connector: 2-conductor 3.5 (d) mm (1/8")/8Ω

ANTENNA TUNER

- Matching impedance: 16.7-150Ω unbalanced** (HF bands)
range 20-125Ω unbalanced** (50MHz band)
Less than VSWR 3:1; *Less than VSWR 2.5:1
- Min. operating input power: 8W (HF bands)
15W (50MHz band)
- Tuning accuracy: VSWR 1.5:1 or less
- Insertion loss: Less than 1.0dB (after tuning)

Supplied accessories:

- Hand microphone
- DC power cable
- Spare fuses
- CW key plug

All stated specifications are subject to change without notice or obligation.

OPTIONS



IC-PW1 HF+50MHz 1kW LINEAR AMPLIFIER
Covers all HF and 50MHz bands, provides clean, stable 1kW output. Automatic antenna tuner and compact detachable controller are standard. 2 exciter inputs are available.



PS-125 DC POWER SUPPLY
Style and size are matched to the IC-746PRO.
13.8V DC, 25A max.



SM-20 DESKTOP MICROPHONE
Unidirectional, electret microphone for base station operation. [UP/DOWN] switches and a low cut function are available.



AH-4 HF+50MHz AUTOMATIC ANTENNA TUNER
Covers 3.5-54MHz with a 7m (23 ft) or longer wire antenna.



CT-17 CI-V LEVEL CONVERTER
For remote transceiver control using a personal computer equipped with an RS-232C port. You can change frequencies, operating mode, etc.



AH-2b ANTENNA ELEMENT
A 2.5m long antenna element for mobile operation with the AH-4. All amateur bands between 7-54 MHz can be matched.



UT-102 VOICE SYNTHESIZER UNIT
Announces operating frequency and mode.



SP-20 EXTERNAL SPEAKER
4 audio filters; headphone jack; can connect to 2 transceivers. Input impedance: 8Ω
Max. input power: 5W



SP-21 EXTERNAL SPEAKER
Style and size are matched to the IC-746PRO. Input impedance: 8Ω
Max. input power: 5W



HM-36 HAND MICROPHONE
Same as that supplied.



CR-338 HIGH STABILITY CRYSTAL UNIT
POC type crystal for improved frequency stability.
Frequency stability: ±0.5 ppm

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Certificate Number Q14190

Icom Inc. (Japan), is an ISO9001 certification acquired company.

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