Experience the Most Advanced DSP Ever Created for Amateur Radio
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ICOM’s IC-756 and IC-756PRO rocked the amateur radio world with the most advanced technology, innovative features, and ease of use available in amateur radio! Now ICOM raises the bar of excellence with the world’s most powerful DSP technology in amateur radio history in the IC-756PROII. From the box to heavy contest action, in a matter of seconds, the IC-756PROII offers over one hundred built-in IF filters, all easily selected from the front panel. Imagine the fun and excitement of creating your own filter width and shape while on the air ragchewing, or in the middle of a pile-up!

Sharp and Soft filter shape are selectable for SSB and CW mode

Select your favorite filter shape depending on your listening preference and band conditions. SSB and CW filters are independent.

HF/50MHz All Mode Transceiver
IC-756PROII

32-bit Floating Point DSP
Digital Signal Processor
24-bit AD/DA Converter
You no longer have to worry about losing a CW signal while tuning through the band. With the SSB/CW Synchronous Tuning feature, the frequency automatically shifts when you change modes.

The IC-756PROII utilizes two 2SC5125 transistors in the PA Unit. Along with superior IMD characteristics, these transistors have plenty of power to allow for 100W full duty cycle operation. Great for those long contest hours, or the demand of the data modes.

For those in search of “the Perfect Audio”, the Digital Phase Shift Network (DPSN) is used in the SSB modulator, providing clear and high quality transmit audio for voice and data mode operations.

Highly Stable Transmitter

The IC-756PROII incorporates a POC type crystal oscillator, providing ±0.5ppm (-10°C to +50°C). A must for digital or MARS (Military Affiliate Radio System) operation.

Related features:
- Hear your Tx audio with the Tx monitor function, great for headphone operation
- +50 frequency tone encoder for 10m and 6m repeater operation with Tone Scram
- Hands free operation with the VOX function
- Complete control of output RF power with the variable RF control
- Quick split function with split lock capability

High Stability Crystal Unit

The IC-756PROII provides real results by locking the target signal.

Manual Notch Function

An incredible 70dB of attenuation is at your command with the manual notch. Eliminate strong adjacent signals or beat tone noise, without reducing the performance of the AGC gain.

AGC Loop Management

All would be lost if not for the power of the multiple AGC loops. This AGC system is incredibly impressive with the rejection of unwanted signals or noise. Unlike rigs with a single AGC circuit, the AGC in the IC-756PROII will be able to copy weak signals without the pumping of the AGC from stronger adjacent signals.

In addition, the transmit bandwidth is selectable from 2.2, 2.4, and 2.8 kHz to suit operating band conditions. Go from ragchew to DX audio in a matter of seconds with a push of a button.

SSB Soft Filter – Providing Good Readability

The perfect filter shape factor when signal fidelity or pinpoint accuracy is needed! A sharp slope from the filter edges gives FULL audio response while eliminating any adjacent interference.

SSB Sharp Filter – Both for Sharp Selectivity and Signal Fidelity

The perfect filter shape factor when signal fidelity or pinpoint accuracy is needed! A sharp slope from the filter edges gives FULL audio response while eliminating any adjacent interference.

Digital TWIN PBT

By moving the IF pass band, the digital twin pass band tuning (PBT), allows the flexibility of both IF shift and narrowing of the IF passband. With the digital IF filters, the PBT performance allows you to cut away all the interference and noise to hear the actual signal.

In addition to the filter display, the LCD indicates the twin PBT conditions across the top of the screen, so you can still use the lower portion of the TFT display for other radio operations.

Tweak your transmit audio with the separate bass and treble adjustments for the perfect audio. This built-in audio equalizer has a total of 121 combinations, so you can get the warm, full audio you want.

The too good to be true CW filter! Mechanical or Crystal filters cannot give you the weak signal edge of the Sharp CW filter in the IC-756PROII. The steep filter form, only 200Hz – ±400dB, will allow you to pick out a weak signal that is buried by a stronger signal. DX hunters will have to try this one to really see the magic of the Sharp CW filter.

Sharp and Soft Filter Shapes are Selectable Each for SSB and CW Mode

Select an appropriate filter shape, depending on your operating style or band conditions. Independent SSB and CW Filters give you the flexibility you want while listening to the signal.

Sharp CW Filter

The perfect filter shape factor when signal fidelity or pinpoint accuracy is needed! A sharp slope from the filter edges gives FULL audio response while eliminating any adjacent interference.

SSB Soft Filter – Providing Good Readability

The perfect filter shape factor when trying to pick out a weak signal! The rounded filter shape resembles a traditional analog filter, by rolling off the high and low ends of the band pass. Although maintaining the steep filter skirt characteristics of a digital filter, the soft filter increases the signal to noise ratio of the intended signal.

CW Sharp Filter – Ultimate Sharpness

The too good to be true CW filter! Mechanical or Crystal filters cannot give you the weak signal edge of the Sharp CW filter in the IC-756PROII. The steep filter form, only 200Hz – ±400dB, will allow you to pick out a weak signal that is buried by a stronger signal. DX hunters will have to try this one to really see the magic of the Sharp CW filter.

SSB Soft Filter – Digital Filter, Analog Operation

Running a pile-up has become easier with the soft CW filter. By broadening the filter skirt, the characteristics of the soft filter perform much like a mechanical filter without the ringing.
Twin Peak Audio Filter

The 32-bit DSP improves RTTY reception with the Twin Peak audio filter by automatically peaking the areas of the mark and space frequencies. This function removes interfering QRM giving you a more error free decoded message.

50Hz passband width for PSK31 mode

The PSK31 uses only 31Hz of passband width. The IC-756PROII makes it possible to narrow a passband to 50Hz in SSB mode, so that only intended signals can be heard clearly. In addition, a POC type crystal unit delivers superior frequency stability, with 1Hz step tuning, that is ideal for delicate digital mode operation.
### SPECIFICATIONS

**GENERAL**
- Frequency coverage: 0.030–60.000MHz
- Tx: 1.80–1.9999MHz
- 3.000–3.9999MHz
- 7.000–7.300MHz
- 10.100–10.150MHz
- 14.000–14.350MHz
- 18.068–18.168MHz
- 21.000–21.450MHz
- 24.890–24.990MHz
- 28.000–29.700MHz
- 50.000–54.000MHz

**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 exciters inputs are available. (Not available for EU countries.)

- **PS-125 DC POWER SUPPLY**
  - Style and size are matched to the IC-756PROII. 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.

- **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.

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

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

- **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.

- **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-756PROII. Input impedance: 8Ω Max. input power: 5W

### OPTIONS

- **HF/50MHz ALL MODE TRANSCEIVER**
  - Icom Inc.
  - Icom America Inc.
  - Icom (Europe) GmbH
  - Icom (Australia) Pty. Ltd.
  - Icom New Zealand

### TRANSMITTER
- Output power: SSB, CW, RTTY, FM
- Continuously adjustable: AM
- Modulation system: SSB
- DPSN modulation
- Digital low power modulation
- FM
- Digital phase modulation
- Spurious emission: More than 50dB
- Carrier suppression: More than 40dB
- Unwanted sideband suppression: More than 55dB
- JTX variable range: ±9.999kHz
- Microphone connector: 8-pin DIN connector
- ELE-KEY connector: 3-conductor 6.35 (d) mm
- SEND connector: Phono (RCA)
- ALC connector: Phono (RCA)

### RECEIVER
- Receive system: Triple conversion superheterodyne system
- Intermediate frequencies: 1st 64.455MHz (for all modes)
- 2nd 36kHz (for all modes)
- 3rd 36kHz (for all modes)
- Sensitivity (typical):
  - SSB, CW, RTTY, FM: More than 55dB
  - AM: More than 90dB
  - FM: More than 70dB
- AF output power: 3W
- TX variable range: ±9.999kHz
- RIT variable range: ±10kHz
- Insertion loss: Less than 1dB (after tuning)

### ANTENNA TUNER
- Matching impedance range: 50–145Ω unbalanced (HF bands)
- 20–125Ω unbalanced (50MHz band)
- Less than VSWR 3:1; *2 Less than VSWR 2.5:1
- “*2” is not guaranteed.
- Less than VSWR 1.5:1 or less
- “*2” is not guaranteed.
- Insertion loss: Less than 1dB (after tuning)

### SUPPLIED ACCESSORIES
- Hand microphone
- Spare fuses
- CW key plug
- DC power cable

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### URL
- [http://www.icomamerica.com](http://www.icomamerica.com)
- [http://www.icom.net.au](http://www.icom.net.au)
- [http://www.icom.co.nz](http://www.icom.co.nz)
- [http://www.icom-france.com](http://www.icom-france.com)
- [http://www.icomspain.com](http://www.icomspain.com)
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**Icom Inc. (Japan)**

Is an ISO9001 certification acquired company.