



IC-756PROII FEATURE FUNCTION BENEFIT ANALYSIS

FEATURE	FUNCTION	BENEFIT
RECEIVER SECTION		
Dual Watch	Receiver monitors two frequencies at the same time.	This feature of the IC-756PROII (PROII) allows the monitoring of two different frequencies in the same band. Have a QSO while keeping an ear on a DX net at the same time!
Balance	Splits audio output of the main and sub receiver.	Divides dual watch audio into two discreet channels. It emphasizes the main channel's audio, while still hearing the secondary interest channel's audio. Easy and user friendly.
Digital Filters	Built-in, user-selectable DSP based receiver filters.	There are no extra filters to buy. Up to 51 different digital filters provide the ultimate in receiver selectivity! Any filter selection can be changed easily via the user menu. A powerful, user-friendly feature – great for the contester, DXer, or ragchewer on today's crowded bands!
RTTY Selectable Filters	Enhanced RTTY receive selectivity.	The <i>NEW</i> PROII sports five filter settings; from 250Hz-to1 kHz giving a strong advantage to the RTTY user.
Manual Notch	Elimination of offending tones.	The PROII's Manual Notch will deeply attenuate or eliminate carriers, heterodynes, "tuner-uppers," and other annoying tones, clearing the way for reception of the target signal. Even useable in the CW mode!
Selectable IF Filter Shaping	Menu selection of sharp or soft filter skirts in SSB and CW modes.	This new feature assists with the reception of very strong signals, allowing the softening, or "rounding," of such a signals edge. The strongest CW signal sounds great when the filter is softened. Allows excellent tailoring of the receiver's audio to the users taste.

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Auto-Notch Filter	Automatic elimination of multiple received tones.	The PROII's Auto Notch Filter virtually eliminates multiple offending tones making it a great feature for the active SSB operator.
AGC	Automatic control of signal levels for constant volume.	Eliminates the need to constantly "ride the volume" as various signal strengths are encountered. Three settings (fast, medium, and slow) are assigned via a menu selection (one for FM). This reduces user fatigue and provides for nearly hands-free listening.
Noise Blanker	Reduces pulse type noise.	Pulse type noises, such as ignition and electric fence pulses, are minimized or eliminated, greatly enhancing weak signal copy. The PROII's Noise Blanker level is also adjustable for maximum noise reduction without target signal distortion.
Improved Third Order Intercept Point	Greater harmonic image rejection.	The PROII receiver's rejection of harmonic images from strong signals on other frequencies is improved, for enhanced receiver performance. It is wonderful for the weak signal listener.
Improved Sensitivity Without Preamp	Improved signal-to-noise ratio.	The PROII's receiver sensitivity has been improved, making it less necessary to rely on the preamplifier during weak signal reception. This means lower noise per a given signal level!
Noise Reduction	Reduces receiver's natural and man-made noise level.	The PROII's DSP-based noise reduction function has been improved. The result is a reduction in noise without degradation of the target signal. Plus, the level is adjustable from the front panel, insuring maximum DSP-based noise reduction without signal audio degradation.
Spectrum Scope	Visual display of signal activity.	The PROII's spectrum scope is an excellent tool for visually displaying activity on a band, in user selectable segments up to 200 kHz! It's great for spotting new activity on a band or for seeing when a band is opening. The PROII's spectrum scope noise floor has been improved for even greater visual performance, making it a fantastic feature for the DXer and six meter operator.
Enhanced Display Window	Visual display of important information.	The PROII's 5" TFT display window is the heart of the radio's operational information. It now features eight different display-background color schemes and four different font selections, offering the ultimate in user friendliness. Contesters, DXers, and others who spend long hours in front of a radio will appreciate the PROII's ability to change its colors and fonts. During those long operating stints, the Enhanced Display Window is great for changing the user's environment.
Preamplifier	Increases the received signal's gain.	The PROII features two preamps: one for a 10 db boost on all HF bands; and the other for 16 db preamplification of all bands between 15 and 6 meters. It is excellent at enhancing weak signal

		strength.
Attenuator	Reduces the receiver's sensitivity.	The attenuator is easily selectable at 6, 12, and 18 db levels, via a front-panel button. This is very helpful for managing loud signals (on 40 meters in the evening, for example), and adjacent interfering signals.
RIT	Fine tuning of receiver.	The PROII's Receiver Incremental Tuning (RIT) offers offset tuning of up to +/- 9.9 kHz from the receiver's actual target frequency. It is excellent for fine-tuning stations that are not right-on frequency; a case often found during group (roundtable) operation.
RIT Clear	"Zeros" the RIT offset.	The PROII's RIT Clear function has been improved. Now, via a menu setting, the user can select "quick clear" for instant zeroing at the touch of the clear button. This is great for contesters, who need to clear the RIT instantly after a QSO, so that they can reset the RIT to the VFO's actual frequency, and move on to the next contact! Other users may prefer the Default Regular Clear function that requires a "push and hold" action to clear the RIT. This prevents accidental clearing if the RIT clear button is accidentally pushed.
Twin Pass Band Tuning (PBT)	Narrows the receiver's IF passband.	The PROII's DSP-based twin PBT feature easily narrows the window of the target signal. It rejects or reduces the effects of signals that are near the target signal's frequency. This is a very effective interference-fighting feature, particularly useful during contesting and DXing on crowded bands.
RTTY Decoder	In-radio decoding of RTTY signals.	The PROII decodes and displays standard signals directly on the radio's display screen. This is a great feature for monitoring the W1AW RTTY bulletins and for casual monitoring of RTTY activity, without the expense of an external terminal unit. Avid RTTY operators will appreciate this feature as well because they can check for RTTY activity before going to the trouble of turning on the station's terminal unit — it saves computer time and effort. Another user-friendly feature from ICOM!
RTTY Tuning	Visually "center-tunes" the RTTY signal.	RTTY signals are easily tuned in and "printed" on the screen. This handy tuning icon is great for the RTTY novice who hasn't yet developed an ear for tuning RTTY signals.
CW Pitch	Adjusts the pitch tone of the received CW signal.	Pitch tones from 300 to 900Hz can be selected from a front-panel knob that tailors the sidetone to each user's personal taste. It is excellent for reducing fatigue, and it enhances copying ability.
AF gain	Receiver volume control.	The PROII's AF gain control offers easy adjustment of the receiver's audio output level.
RF Gain	Controls receiver sensitivity level.	This front-panel control adjusts the receiver's RF

		sensitivity. It effectively manages strong, overpowering signals, as well as raising the gain for weak signal copy.
Squelch	Quiets receiver audio output.	The squelch can remove background audio on a band, allowing only an incoming signal to "open up" the receiver. It's great for monitoring 6 and 10 meter FM frequencies without the added fatigue of listening to noise between received transmissions.
Digital Voice Recorder	Records received signals for in-shack playback.	The PROII's digital voice recorder will record up to 15 seconds of received audio per slot, with 4 slots available. It's great for recording those memorable DX QSO's! Slots can be selected from a user-provided, external button system.
Receive Antenna	Connection for a low-noise receive antenna.	Receive-only antennas can be connected to the PROII's back-panel jack. Excellent for low-noise reception; often a requirement for low-band (160 and 80/75 meter) operation. When selected, it automatically switches the radio to the proper transmitting antenna chosen by the user.
_ Step Tuning For Digital Modes	Slow, accurate tuning of the radio's VFO.	The PROII's _ tuning rate allows for accurate, slow tuning which is needed when listening for PSK31, RTTY, and other digital modes. Another user-friendly feature!
SSB/CW Synchronous Tuning	Keeps frequency consistent when modes are switched.	This feature allows you to work in multiple modes without having to re-tune the frequency. It is very beneficial during a QSO. For example, if you are working a grid square in SSB and then switch to CW for a confirmed contact, the frequency will remain constant.
TRANSMITTER SECTION		
Digital Voice Recorder	Records outgoing voice messages for transmission.	The PROII's digital voice recorder holds up to four, 15-second messages. Playback is a natural reproduction of the operator's recorded voice. This is incredibly helpful for playback of frequently recorded messages, such as contest CQs and users' callsigns, which are frequently repeated while trying to crack a DX station's pileup. This function can be controlled from a user-supplied remote device which will provide easy access and positioning near a keyboard during a contest. Thoughtful engineering from ICOM!
CW Memory Keyer	Records outgoing CW messages for transmission.	The PROII's memory keyer records up to four, 55-character messages for replay. This is a great feature for CW contesters that rely on a memory keyer for frequently repeated messages. Contest serial numbers are also included in the memory's capabilities. After the first contest QSO, the memory automatically advanced to the next QSO

		number. Asked for a repeat of the just-sent serial number? The QSO numbers can be reviewed and immediately resent with the simple push of a button. And, the memory keyer contents can be sent from an external control connection. A truly useful feature from Icom!
Second Key Jack	Accommodates a second CW keying source.	External keyers or keying devices (such as a contest program's software keyer) can easily be plugged into the rear of the radio. And, the radio's internal keyer is still available for use via the front-panel key paddle jack! The ultimate in keying flexibility!
Microphone Gain	Adjusts microphone drive level.	Various microphones can be easily adjusted for maximum effect on SSB, AM, and FM voice modes.
RF Speech Compressor	Adjusts speech compressor levels.	The PROII's RF speech compression levels can easily be adjusted via the display screen controls and a knob on the front panel. The radio's transmitted audio can be tailored for the user with dramatic results!
Power Level	Adjusts the transmitter's RF output levels.	From QRP (5 watts) through a full 100 watts of RF power on all modes (40 watts on AM), the PROII's transmitter provides a complete range of stable, continuous-duty power. The output level is easily adjusted from the front panel.
CW Semi Break-in	Activates the transmitter during CW transmissions.	The break-in feature permits monitoring of the receive frequency between transmitted CW characters. Hang-timing (the time span between sending the last CW character, and when the radio switches from transmit back to receive) is easily adjustable by the user. It's great for conversational CW QSO's.
Full Break-In	Automatic, high-speed CW transmit/receive switching.	The full break-in (QSK) feature permits receiver activation between CW key closures (transmitting). It's great for timing calls during contesting or in a CW DX pileup— it's quick <i>and</i> quiet!
VOX	Automatic voice-keying of transmitter during voice transmissions.	The PROII's VOX provides smooth, hands-free operation during voice mode use. It reduces operator fatigue during any operation, especially when contesting and DXing!
"Delta TX"	Transmitter offset adjustment.	The PROII's "Delta TX" feature provides quick transmit-frequency offset tuning over a range of +/- 9.99 kHz from the selected user frequency. This is easily reset to zero, via the "clear" button. As with RIT, quick or regular clear-to-zero speeds can be selected via the menu.
Monitor	Audio monitoring of voice transmissions.	The PROII's monitor makes VOX, microphone audio, and compression level adjustments a snap via headphone monitoring of audio levels. The monitoring of audio volume level is adjustable by

		the user.
HM36 Microphone	Supplied, compact hand microphone.	This hand microphone is comfortable to hold and use. It features excellent audio and handy up/down buttons for easy frequency/memory changing.
GENERAL FEATURES		
Full HF and 6 Meter Coverage	160 to 10 HF, and 6 meter all-mode operation.	The PROII provides superior all-band, all-mode performance on all HF and six meter bands. Great for the HF user who also likes to play on the six meter "magic band!"
General Coverage Receiver	Full 300 kHz to 60 MHz coverage.	Excellent full-frequency coverage for hams that also enjoy short wave listening.
Auto Tuner	Automatic antenna matching.	The PROII's internal, automatic antenna tuner quickly and quietly matches various coax cable-fed antennas, providing full power output any place in a selected amateur band. The auto tuner memorizes settings for quick retuning during future operations.
Analog Multi-Function Meter	Analog display of SWR, ALC, compression, RF output, and signals (S) strength readings.	The PROII's multifunction meter is easily viewed with a multicolor scale. It measures: <ul style="list-style-type: none"> • SWR - measurement of the connected antenna; • ALC - microphone adjustment levels; • Compression - transmitter audio compression levels; • RF Power - transmitter power output levels; and • S Unit- received signal strength levels
Digital Multifunction Meter	Digital "bar graph" style display of multiple functions.	The PROII's digital meter shows the above measurements on the radio's display screen, offering simultaneous display of monitored conditions. For example, on SSB; microphone audio; and compression levels, the power output and antenna/auto-tuned antenna SWR measurements can all be displayed simultaneously on the screen's bar graph. Another example of ICOM's excellent, user-friendly engineering!
LCD Display	Multi-function display screen.	The PROII's display screen is the heart of the operator information system. Primary information (mode, frequency, etc.) is easily viewed, and secondary (menu) selections are thoughtfully located along the display's borders. This visual, screen approach to monitoring the radio's selections and status is a modern and exciting approach, designed for full hobby enjoyment.
Dual Antenna Ports	Two antenna inputs, both assignable by bands	The PROII offers two antenna inputs and the radio automatically memorizes which antenna port is assigned to which band. This allows quick, seamless operation during frequent band changes,

		such as during contesting and DXing operation.
Temperature- Controlled Crystal Oscillator (TXCO)	Solid frequency stability.	The PROII's TXCO is built into the radio and is included in its base cost. It provides excellent frequency stability, which is especially important in digital modes such as PSK31 and RTTY!
Internal Fan	Radio ventilation.	The PROII's fan system provides quiet, efficient cooling of the radio's internal components, assuring long life even under heavy use (e.g., "key down" modes like RTTY, SSTV, and AM modes, as well as during the rigors of long hours of contest use).
Lock	Freezes the selected frequency.	Prevents accidental frequency changes if the main tuning knob should be bumped. Never lose that important DX frequency once it is found!
Clock	24-Hour time display.	The 24-hour clock is displayed on the radio's screen. Never forget a sked time again! A nice touch for the busy user.
Power-On Timer	Automatic power-on timer selection	An easy, user-interruptible, power-on timer feature that can be used to turn the radio on just prior to a preset scheduled QSO or net operation.
Memo Write/ Memo Read	Ten "quick memory" slots for instant recall.	While tuning through a frequency spectrum, the user can easily "memorize" up to ten different frequency/mode combinations for quick recall. While DXing, this provides the ability to quickly memorize DX station frequencies while tuning, come back to them, and call that now-available DX station. A quick and efficient feature for the DXer and contesteer!
Triple Band Stacking Register (BSR)	Three last-used frequency memories per amateur band.	The PROII provides the ultimate in multi-mode flexibility. For example, on the 20 meter (14 MHz) band, the band key can be pushed three different times for the last used, 20 meter CW, RTTY, or SSB frequencies. Flexible ICOM design for the busy amateur!
Keypad	Push-button selection of frequency.	The PROII's front-panel keypad provides large, easily viewed, numbered keys for effortless, direct frequency input. This is helpful for easy selection of a specific frequency, and makes memory loading a snap.
Memory Operation	101 memory channel capability.	Up to 101 memories are available on the PROII. Each memory slot stores frequency, mode data, and can be "tagged" with a name containing up to ten alphanumeric characters. Each memory is tunable once selected and it can be tuned above or below the selected frequency, giving maximum operator capability. It's like having 101 additional tunable VFO's!
Memory Scan	Quick checking of programmed frequencies.	All of the PROII's memories can be scanned. Memories can be designated for skipping if the user chooses. Any portion of a band can be scanned for activity by scanning between selected

		memory boundaries, making it great for spotting band openings.
Tone Scan	Checks for sub-audible tones	The PROII can search for, and identify, sub-audible tones like those commonly found on 6 and 10 meter repeaters. Tone Scan gives users quick and easy access.
Split	Display and use of two frequencies.	The PROII's Split function allows reception of a signal on one frequency, and transmission on another. It is highly effective for working DX stations that often operate on a split frequency.
Quick Split	Instant recall of pre-programmed split.	DX stations often listen for calls "up 2" (kHz) or "up 5." Through the quick split feature, the operator is right on top of the DX stations receive frequency at the touch of a button. This operator is ready to make a call and "bag the DX" while other operators are still tuning! The ICOM DXer advantage.
TS	Quick tuning step function.	The radio's tuning rate can be changed by selecting from eight different tuning rates in 0.1 to 25.0 kHz increments. TS adjusts tuning rates to the individual's needs.
XFC	Transmit frequency control.	When operating a split, a push of the XFC button quickly checks the received signal activity of the PROII's transmit frequency. It's particularly useful for checking on competing stations trying to work the DX station you're calling. This feature also helps in checking for the frequency of the last station that worked the DX station operating split. This greatly increases the chance of being on the frequency that the DX station last listened on. A powerful feature for the Icom DXer!
Repeater Operation	Memorizes repeater receive and transmit frequencies.	Six and ten meter FM repeater users will find the PROII's frequency offset and tone selections can easily be chosen and memorized for quick recall.
REC/PLAY Switch	Plays back recorded audio.	The REC/PLAY Switch function allows the user to instantly record on-air audio for up to 15 seconds for <i>instant</i> off-air playback. It's great for double-checking calls and other information you've just monitored, making it another truly user-friendly ICOM feature!



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