

## TS-890S

[K] HF/50MHz TRANSCEIVER

[E] HF/50MHz/70MHz TRANSCEIVER

### Outstanding RX Performance for HF Enthusiasts

The hybrid configuration of Down-conversion RX and IF Direct Sampling Band Scope promises the best performance for your DX Life

Illustrated exteriors & displayed contents may have possibility varied from mass-productions'



MODEL	TYPE	FREQ. / PWR	MP	LAUNCH	SUPPLIED ACC
TS-890S	K	HF/50MHz [RF PWR: 100W(AM: 25W)]	Aug. 2018	Sep. 2018	Warranty card, Circuit diagram, DC Power Cord, Fuse(25A), Ext AT:4A, 7-pin DIN plug, 13-pin DIN plug, I/M ([K]:E,F / [E]:E,S,F,G,D,I) E:English, S:Spanish, F:French, G:German, D: Dutch, I: Italian
	E	HF/50/70MHz [RF PWR: 100W(AM: 25W) /70MHz: 50W(AM: 12.5W)]			

All contents may vary from mass-production

**PRODUCT HIGHLIGHTS**

- [NEW] News for KENWOOD
- [IMP] IMPROVED from TS-990S  
All contents may vary from mass-production
- [NEW] HF/50MHz & 70MHz (E-type)  
<Frequency range>
  - RX: 100kHz - 60MHz(- \*74.8 MHz) continuous (\*[E]-type)  
(VFO works from 30kHz)  
Spec. guaranteed in each amateur band only
  - TX: 1.8MHz - 50MHz(- \*70MHz) each amateur bands (\*[E]-type)  
(135kHz / 476kHz from drive out)
- TX Output Power (AM): 100W (25W)  
[E]-type: 70MHz 50W (12.5W)- 5W
- Emission types:  
SSB / CW / FSK / PSK / FM / AM
- Built-in High Stability Reference oscillator: ±0.1ppm
- [IMP] High dynamic characteristics
- Equipped 4 roofing filters:
  - 500Hz/ 2.7kHz/ 6kHz/ 15kHz
- Expansion slot for Optional filter (270Hz)
- [NEW] Two types of S-METER scales
- [IMP] 7" TFT color display w/Touch panel
- 32-bit Floating-point DSP: Two ICs
- Interference/Noise Reduction:
  - [NEW] AGC Quick Recovery from Pulse Noise
  - IF: LO CUT/HI CUT(SSB/AM), WIDTH/SHIFT(CW/FSK), Notch Filter, NB1, NB2(A & B Type)
  - AF: APF(CW w/t peak gain)/TPF(FSK), Beat Cancel 1/2, Noise Reduction 1/2

**GENERAL FEATURES**

- CW functions:
  - [New] CW Morse code Decoder, Decode Threshold Level, Decode Filter, USB Keyboard Encode
  - Break-in (Full / Semi), CW Pitch Control, CW tune, CW Side Tone, Electronic Keyer with 8-ch Message memory
  - [NEW] CW BFO Side Band select
- FSK / PSK(BPSK 31/ 63, QPSK 31) functions::
  - Decode / Encode, Message with USB key board
- FM functions:
  - Wide / Narrow, Sub-tone / CTCSS / Cross-tone (for repeater system)
- RX functions:
  - ATT(0-6-12-18dB), Pre Amp 1/2, RF Gain / AF Gain / SQL Level /

AGC function, RX Equalizer

- TX functions:
  - Built-in Antenna Tuner, IF Speech Processor, Power / Mic Gain / CAR Level Control, VOX, TX monitor, TX Equalizer, Independent Lo-cut / Hi-cut Filter
- Memory:
  - Memory(120CH), Quick Memory (Selectable 3/5/10CHs), Direct Entering CH Number, Memory Shift, Memory CH Lock-out (for Scan), Memory Name
- SCAN:
  - Memory scan, Group scan, Programmable scan, Slow scan, Busy stop, Quick memory CH scan etc.
- Others:
  - Two "M" (SO239) type ANT connectors
  - [IMP] Touch Tuning and other touch function of TFT color LCD
  - Fine Tuning Mode, MHz Step, F.Lock, Tuning Control Lock
  - Band Direct
  - Two USB-A port on the Front and Rear for Key board and USB memory.
  - USB-B port on the Rear for PC Control and sound interface
  - BNC Connector for External Reference Input (10MHz)
  - DVI terminal for external Display
  - Dimmer Function (TFT Display, LED indicators)
  - Programmable Function Key
  - Built-in Voice Functions (NOT requires optional VGS-1)
  - Voice Message memory 6 CHs built-in
  - Recording functions (Constant Recording / Normal Recording)
  - KENWOOD SKY COMMAND SYSTEM II (through TM-D710/G or TH-D72A)
  - Packet Cluster Tune (through TM-D710/G or TH-D72A)
  - Cross-band repeater function (through TM-D710/G or TM-V71)
  - Power-on Message
  - Firmware Upgradable
- Dimension & Weight:
  - W396.0 × H141.3 × D340.0 mm
  - (W15.6 x H5.6 x D13.4 in)
  - Weight: 17 kg (37.5 lb)

**OPTION:**

- SP-890 EXTERNAL SPEAKER
  - D:77mm Full-range speaker unit
  - Honeycomb baffle front panel
  - HIGH CUT(1kHz)/LOW CUT(400Hz) Filter w/ Front SW
  - 2-input(D:3.5mm Jack) Rear & Front SW
  - D:6.3mm (1/4in) Phone Jack
  - Rated Input Power: 5W
  - Max Input Power: 10W
  - Imp.: 8ohms
  - Size: W171.3 x H141.3 x D300.0 mm
  - (w/projections W171.3 x H158.3 x D303.4 mm)
  - Inch: W6.74 x H5.56 x D11.81 in
  - (w/projections W6.74 x H6.23 x D11.94 in)
  - Weight: Approx.2.4kg(5.29lb)
- YG-82CN-1 270Hz CW FILTER
  - CW and wanted narrow band filter to eliminate un-wanted signal
  - Plug & play installation
  - Freq.(fo): 8.248MHz
  - Imp: 50ohms
  - Operation temperature range: -20 - +70 °C (-4 - 150 °F)
  - Bandwidth @6dB: More than BW 270Hz
  - Bandwidth @60dB: Within BW 800Hz
  - Attenuation: More than 70dB at fo±48kHz
  - Size: W62.0 x H23.0 x D16.5mm
  - Inch:W2.44 x H0.91 x D0.65in
  - Weight: Approx.18g(0.63oz)
- ARCP-890 (Amateur Radio Control Program)
- ARHP-890 (Radio Host Program)
  - ARCP / ARHP-890 – Freeware downloadable from JVCKENWOOD WEB site / OS: Windows Win7, 8.1, 10 (32/64-bit)
  - [NEW] IP Remote Control as TS-990 series, and addition to Direct mode without ARHP

### Applicable Accessories

#### NEW OP ACC.

MODEL	NOTE
SP-890	EXTERNAL SPEAKER
YG-82CN-1	270HZ CW FILTER
ARCP-890	RADIO CONTROL PROGRAM (Freeware)
ARHP-890	RADIO HOST PROGRAM (Freeware)

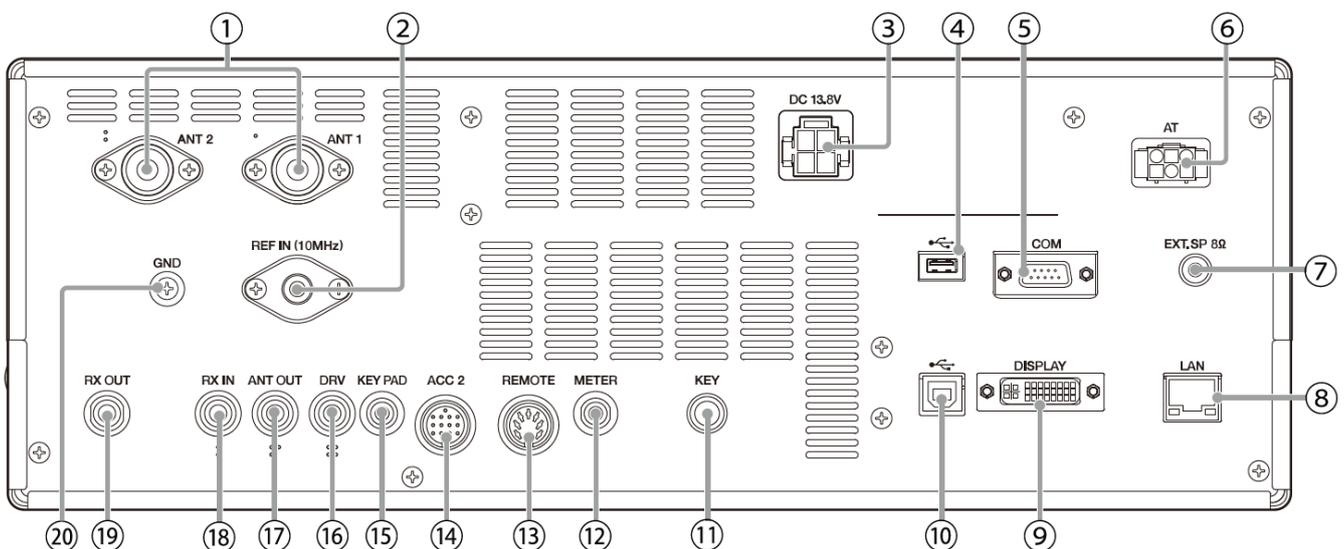
#### CURRENT OP ACC

MODEL	NOTE
HS-5/6	HEADPHONE
MC-43/47	HAND MICROPHONE
MC-60S8/60A	DESKTOP MICROPHONE

MODEL	NOTE
MC-90	DESKTOP MICROPHONE
PS-60	DC POWER SUPPLY
SP-23	EXTERNAL SPEAKER
SP-990	EXTERNAL SPEAKER
ARUA-10*	USB AUDIO CONTROLLER
ARVP-10*	KENWOOD VOIP PROGRAM
TL-922**	LINEAR AMPLIFIER
TL-933**	LINEAR AMPLIFIER
KAT-1**	AUTOMATIC ANTENNA TUNER

\*Update \*\*Operation Confirmation Only

FRONT PANEL		REAR PAANEL	
<MIC> Metal 8-pin	① <ANT1/2> M (SO239) type ANT1/2	⑦ <EXT.SP> $\phi$ 3.5 mm	⑭ <ACC2> DIN 13-pin
<PHONES> $\phi$ 6.3 mm	② <REF I/O(10MHz)> BNC (10MHz)	⑧ <LAN> RJ45	⑮ <KEYPAD> $\phi$ 3.5 mm
<PADDLE> $\phi$ 6.3 mm	③ <DC13.8V> 4-pin	⑨ <DISPLAY> DVI-I	⑯ <DRV> RCA
<USB-A> x 1	④ <USB-A> x 1	⑩ <USB-B> x 1	⑰ <ANT OUT> RCA
	⑤ <COM> DB9	⑪ <KEY> $\phi$ 6.3 mm	⑱ <RX IN> RCA
	⑥ <AT> 6-pin	⑫ <METER> $\phi$ 3.5 mm	⑲ <RX OUT> RCA
		⑬ <REMOTE> DIN 7-pin	⑳ <GND> SCREW Type



## NEW OPTIONAL ACCESSORIES

### SP-890 [W] EXTERNAL SPEAKER

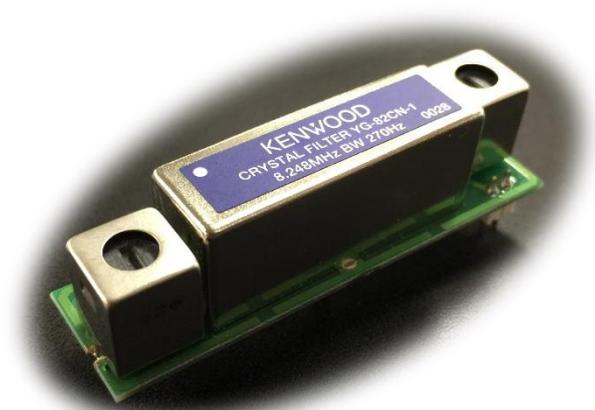


#### KEY FEATURES:

- D:77mm Full-range speaker unit
- Honeycomb baffle front panel
- HIGH CUT(1kHz)/LOW CUT(400Hz) Filter w/ Front SW
- 2-input (D:3.5mm Jack) Rear & Front SW
- D:6.3mm (1/4in) Phone Jack
- Rated Input Power: 5W
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- Imp.: 8ohms
- Dimensions:
  - ◇ W171.3 x H141.3 x D300.0 mm (w/projections: W171.3 x H158.3 x D303.4 mm)
  - ◇ Inch: W6.74 x H5.56 x D11.81 in
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- Weight: Approx.2.4kg(5.29lb)

MODEL	TYPE	FREQ. / PWR	MP	LAUNCH	SUPPLIED ITEMS
SP-890	W	EXTERNAL SPEAKER	Aug. 2018	Sep. 2018	- SP connection Cable (D: 3.5mm plug both side) - I/M (English, Spanish, French, German, Dutch, Italy & Japan)

### YG-82CN-1 [W] 270Hz CW FILTER



#### KEY FEATURES:

- CW and wanted narrow band filter to eliminate un-wanted signal
- Plug & play installation (No soldering Required)
- Freq.(fo): 8.248MHz
- Imp: 50ohms
- Operation temperature range: -20 - +70 °C (-4 - 150 °F)
- Bandwidth @6dB: More than BW 270Hz
- Bandwidth @60dB: Within BW 800Hz
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- Dimensions:
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