

NEW

IT'S NEW... IT'S UNIQUE... AND IT'S TRULY USEFUL. IT'S KENWOOD'S SM-220 STATION MONITOR. THE SM-220'S UNEXCELLED VERSATILITY ALLOWS YOU TO MONITOR YOUR TRANSMISSIONS, MONITOR INCOMING SIGNALS, AND MONITOR THE AMOUNT AND STRENGTH OF BAND ACTIVITY* AND PERFORMS AS A GENERAL-PURPOSE 10 MHz OSCILLOSCOPE, AS WELL.

Kenwood offers this totally unique unit as a perfect compliment to your TS-820S or TS-520S station.** The SM-220, based on a wideband oscilloscope (2 Hz to 10 MHz), permits you to monitor your transmitted signals, thus assuring optimum linearity and maximum performance. With the addition of the BS-5 or BS-8 Pan Display option you will be able to determine visually the location and strength of adjacent signals without tuning your receiver off frequency. The choice of options allows you to adapt the SM-220 to either the TS-820S or TS-520S.

The SM-220 has a built-in two-tone audio generator with full provisions for tuning your exciter and linear amplifier (160 m through 2 m).

All this costs little more than a general-purpose oscilloscope. And, of course, it's pure Kenwood quality.

*With BS-5 or BS-8 option

**For other models check with appropriate manufacturer for compatibility.

SM-220



Function: Selects operation mode; OSC/RTTY: General testing of station equipment, experimental design of new equipment, or troubleshooting; display of receiver IF output allows you to give "signal quality reports".

Power ON indicator.
Power switch.

Intensity: Controls brightness of "scope display".

Band Scope: (Pan Display) With BS-5 or BS-8 option, allows you to "see" the signals on both sides of your operating frequency without tuning your receiver off frequency. Useful for determining "band conditions", band crowding, source of interference from adjacent stations... a visual display of what you would hear if you tuned across the band, without having to touch your receiver's dial.

Focus: Controls sharpness of "scope display".

Vertical Attenuator: Precision step attenuator (gain control) switch adjusts vertical input level.

Vertical Input: Accepts IF input, RTTY input or oscilloscope input.

Vertical Gain: Potentiometer to fine-adjust vertical input level.

▲: Adjusts display along vertical axis.



◀▶: Adjusts display along horizontal axis.

Sweep Range: Step switch controls sweep bandwidth or switches horizontal input/external sync terminal "ON".

RF Attenuator: Level control used in MONI/TRAP mode.

Tone: Step switch selects Wien bridge tone generators; 1000 Hz, 1575 Hz or both tones simultaneously.

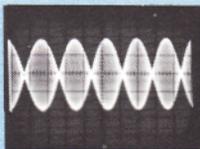
Out: Output of the audio generator can be connected to the transceiver's microphone input for "two-tone test"; Also for trapezoidal test of transceiver linear amplifier.

Synchronization Marker: Selects internal or external sync (similar to horizontal hold on TV. Turns On or Off the built-in marker which shows operator where his receiver is actually tuned.

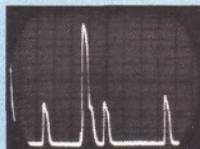
Scan Width: Selects width of "window" or receive band display when using the Pan Display option. (100 kHz or 20 kHz)

Variable sweep control/External gain: Controls (1) sweep speed of display in any sweep range, (2) optional Pan Display (Band Scope) speed of display, (3) level of horizontal input/external synchronization input when sweep range is in RTTY /Ext or Trap.

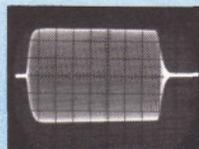
Horizontal Input/External Sync: Accepts either (1) RTTY input for tuning, (2) external sync input for test (oscilloscope functions), (3) external oscillator for Lissajous display.



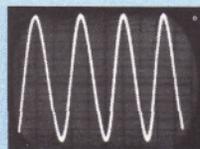
Two-Tone Wave Envelope
For "performance" tune-ups or checking proper transceiver operation.



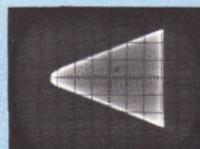
Pan Display Use to check source of interference during "QSO" without moving off-frequency. Also determines location and strength of adjacent frequencies. (Requires BS-5 or BS-8 option)



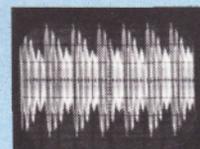
Keyed Waveform Shows detail of CW keying. Use to monitor the quality of your CW note. (Photo shows ideal waveform produced by TS-820S.)



Oscilloscope Operation (1 kHz) Oscillator function allows Sine, square wave, Lissajous patterns for testing or design work.



Trapezoid (TS-820S w/ TL-922) Shows linearity of power amplifier. Used primarily for testing.



Wave Envelope shows full SSB voice modulation, with processor on (full compression), and "clean signal" at full power.

