

"STA-LEVEL" AUTOMATIC PROGRAM LEVEL AMPLIFIER



Perhaps no single equipment in all of broadcasting has done so much for so little cost as the Gates "Sta-Level." The basic function is to provide constant level output. "Sta-Level" brings up the low passages as well as holding down excessive output level. The result is always higher level of transmission, the equivalent of greater signal output.

"Sta-Level" automatically adjusts for different input levels, or it differs from a peak limiting amplifier by raising level, if it is too low, and reducing level if too high. Practical and very realistic results become obvious. A few are:

(1) Psychologically, to prevent excess level, the operator will very naturally maintain lower levels. This makes the softer passages very low indeed. When "Sta-Level" is in the circuit, two important things happen: (a) output levels may be higher as they are automatically protected, and (b) the low, soft passages are automatically raised in level.

(2) The effect of (1) above is identical to turning up the volume control of all the receiving sets, or — raising power. If you increase your average program level 3 db, you have the same effect as doubling transmitter power. The nice part is that "Sta-Level" in many instances has gone far beyond the minimum of 3 db increase.

(3) "Sta-Level" will automatically adjust for different levels. We all are acquainted with the varied output levels of records and transcriptions. Furthermore, in these busy music-news days of broadcasting, the operator cannot keep his eyes glued to the VU meter. "Sta-Level" automatically brings up the low turntable and holds down the high one without operator attention.

(4) Here is a use many are finding for "Sta-Level": In disc jockey shows, by setting the microphone level higher

than music level an automatic fade of music during the voice transmission is possible and excellently done. For example, if the microphone fader on the speech equipment is set 15 db above the turntable fader, when using the microphone, the music will fade 15 db. Music will return to normal level when microphone is no longer used. Recovery time is smooth, quite like a normal up fade.

GENERAL INFORMATION

RECOVERY SPEED: As supplied, "Sta-Level" recovers 2/3 level in 7 seconds and 90% level in about 28 seconds. This is considered typical. However, a kit of small fixed resistors is supplied. If the operator feels this is too slow or too fast, he may, by changing two resistors, increase recovery to as fast as 2 1/4 seconds for 2/3 level and 10 seconds for 90% level, or as slow as 11 1/4 second for 2/3 level and 45 seconds for 90% level.

ACCESSORIES: None needed. "Sta-Level" is a complete one-chassis unit, regulated power supply and all self-contained.

GAIN: As "Sta-Level" has up to 62 db gain, if your present system is short of gain, "Sta-Level" will pick it up. Of course, both input and output level controls are on the front panel to adjust for any gain you wish right down to unity or up to the full 62 db.

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SPECIFICATIONS

POWER SUPPLY: Regulated type, self-contained.

POWER INPUT: 105/115 volts, 50/60 cycles at 50 watts.

RECOVERY: Switch selects average or dual recovery time to accommodate operational mode best suited to engineering preference.
Chart provided as guide.

COMPRESSION: Special regulator circuit holds threshold of compression constant. Rated 0-30 db but excellent performance to 40 db.

DISTORTION: 1% or less 50-15,000 cycles 0-30 db of compression when using +20 dbm output threshold level.

RESPONSE: ± 1 db 30-15,000 cycles, 0-30 db compression.

NOISE: 65 db below output 0-30 db compression at +20 dbm threshold level.

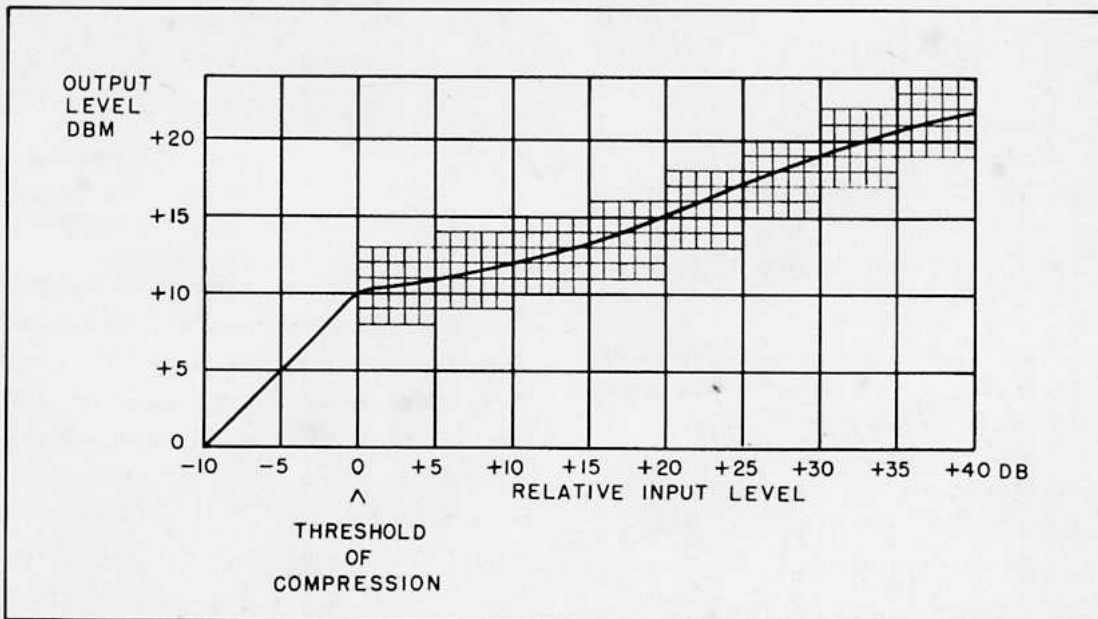
GAIN: 62 db ± 2 db.

IMPEDANCES: 600 ohms input and output.

SIZE AND CONSTRUCTION: 19" x 5 1/4" panel. 7" deep. Front panel drops down to service all internal parts.

TUBES: Two 6V6, one each 6386, 12AT7, 6AL5, OB2, 5Y3GT.

FINISH: Medium gloss gray with lettering in white.



ORDERING INFORMATION

"Sta-Level" complete with tubes and ready to operate M-5167
Spare 100% tube kit for above TK-243

Front panel drops down for complete inner servicing. Big advantage of this type of construction is ability to keep important inner workings clean by means of bellows or small suction type cleaner.

