## Table 1-1. Specifications

# VOICE FREQUENCY LEVEL MEASUREMENTS (20Hz to 20kHz)

Range: -80dBm to +31dBm

Level accuracy: 20Hz to 20kHz: ±0.5dB (all levels) 40Hz to 15kHz: ±0.2dB (levels > -60dBm)

Note: For levels greater than +1dBm, level accuracy specification applies only for frequencies above 100Hz.

Input: will terminate or bridge 600 ohms or 900 ohms balanced.

Bridging loss: less than 0.3dB at 1kHz.

Return loss: 30dB min. (50Hz to 20kHz) TERM

Balance:

greater than 80dB at 60Hz greater than 70dB to 6kHz greater than 50dB to 20kHz

Holding circuit: 700 ohms dc resistance, 60mA max. loop current at 300Hz. With holding circuit in, above specs apply from 300Hz to 4kHz.

### NOISE MEASUREMENTS

Range: +10dBrn to +121dBrn

Weighting filters: 3kHz flat, 15kHz flat, C-message, and program. Meets joint requirements of Edison Electric Institute and Bell Telephone System.

Input: same as for level measurements.

Noise to ground:

80 kilohms across line 100 kilohms to ground -40dB relative to 600 ohms noise metallic at 1kHz.

## CARRIER FREQUENCY LEVEL MEASUREMENTS (30Hz to 3MHz)

Range: -61dBm to +11dBm

Level accuracy:

600 ohms balanced 1kHz to 150kHz: ±0.5dB 10kHz to 100kHz: ±0.2dB

(135 ohms balanced (or 150 ohms balanced)

IkHz to 600kHz: ±0.5dB 10kHz to 300kHz: ±0.2dB\*

75 ohms unbalanced

100Hz to 600kHz: ±0.2dB 30Hz to 1MHz: ±0.5dB

1MHz to 3MHz: ±0.5dB ±10% of meter reading

\*Increase specification by ±0.3dB on 135 ohms (or 150 ohms) when not battery powered.

Input: will terminate or bridge 600 ohms or 135 ohms

balanced and 75 ohms unbalanced.

Return loss: TERM ONLY

600 ohms: 26dB min 3kHz to 150kHz 135 ohms: 26dB min to 600kHz 75 ohms: 30dB min to 3MHz Bridging loss: less than 0.05dB at 10kHz

Balance:

greater than 70dB to 10kHz greater than 60dB to 100kHz greater than 40dB to 600kHz

#### GENERAL

Temperature range: 0° F to 120° F 0 to 95% relative humidity

The 3555B will operate at -40° F under reduced specifications. At this temperature, attention should be given to noting condition of battery as indicated on Battery Test (DIAL/BAT).

Meter: linear dB scale indicates rms value of input signal. 12dB range.

Meter response

Normal: 200ms to indicate a reading to 0dBm on meter.

Damp: 500ms to indicate a reading to 0dBm on meter.

## Maximum input voltage

Tip to ring: 150V peak

Tip or ring to ground: 500V peak

(This is maximum instantaneous voltage. Input circuit will withstand 48V dc CO battery with superimposed 90V rms 20Hz ringing voltage or ±130V carrier supply.)

Maximum longitudinal voltage: 200V rms at 60Hz

AC Monitor: 0.27V rms for 0dBm on meter.

Rout = 8 kilohms. Available at DIAL/AC MON jacks. Sufficient to drive WE 1011B or 52 type headset.

DC Monitor: 1 volt for 0dBm on meter. Rout = 2 kilohms. Jack accepts 310 plug (tip negative).

Input jacks: will accept Western Electric (WE) 241, 309, 310, 358 plugs. Binding posts accept banana plugs, spade lugs, phone tips or bare wires. Removable shorting bar between sleeve and ground binding posts.

Dial/AC Monitor jacks: will accept WE 289, 310, 347 plugs. Accepts WE 1011B lineman's handset or 52 type headset.

Power requirements:

Internal battery: single NEDA 202 45V "B" battery included. Expected battery life - 180 hours at 4 hours per day at 70° F.

AC: 115V or 230V, 48-440Hz, <1W

External battery: 24V or 48V office battery; jack accepts 310 plug (tip negative) less than 15mA.