

"NIXIE®" TUBES CONTAINING KRYPTON 85 STORAGE AND HANDLING

1. GENERAL

1.01 This section covers the handling of "NIXIE" tubes and the precautions which must be taken at the installation site.

1.02 "NIXIE" tubes contain a small amount (less than 0.5 mCi each) of krypton 85, a radioactive material. Although the radiation effect from these tubes in normal use is considered negligible, precautions should be exercised when a large number of tubes and lamps are installed in one location and when handling broken tubes.

1.03 The "NIXIE" tubes are manufactured under a United States Atomic Energy Commission (USAEC) license for distribution as exempt items.

2. STORAGE

Note: Do not store photographic film within 15 feet of these tubes. Prolonged radiation can penetrate the packaging and expose the film.

3. HANDLING

3.01 The tubes covered in this section represent no radiation hazard in normal use. However,

precautions should be observed when handling broken tubes and in the disposal of them.

3.02 *Accidental Breakage of a Large Number of "NIXIE" Tubes:* An accidental breakage of a large number (all normally within a room-approximately 750) would result in an average concentration of krypton 85 of less than 10 percent of the maximum permissible concentration in the air for occupational exposure for a 168-hour week.

3.03 Use a wet rag to pick up the broken parts and dispose of them in normal public trash disposal system. *To avoid injury, do not touch parts with bare hands. Avoid breathing the vapor from broken tubes.*

3.04 Where a defective tube is not broken, remove it in accordance with standard practices and dispose of it as covered in Part 4.

4. DISPOSAL

4.01 Return electron tubes to Western Electric (WE) for disposal. Pack tubes in original packaging or other suitable container for shipping.

4.02 *Do not destroy or mutilate glass envelopes or base pins of electron tubes.*