



TRC 60
ISSUE 1

TELECOMMUNICATIONS
REGULATION CIRCULAR

TECHNICAL REQUIREMENTS
FOR RADIO APPARATUS
CAPABLE OF RECEIVING
BROADCASTING (DECODERS,
CLOSED-CAPTIONING DEVICES,
ETC.)

RELEASE DATE: MAY 1, 1981

CRT 60
1^{RE} ÉDITION

CIRCULAIRE DE LA
RÉGLEMENTATION DES
TÉLÉCOMMUNICATIONS

EXIGENCES TECHNIQUES
RELATIVES AUX APPAREILS
DE RADIOCOMMUNICATIONS
POUVANT CAPTER DES
ÉMISSIONS DE RADIODIFFUSION
(DÉCODEURS, APPAREILS
DE SOUS-TITRAGE CACHÉ ETC.)

DATE DE PUBLICATION: 1^{er} MAI 1981

TELECOMMUNICATIONS REGULATION CIRCULAR

TECHNICAL REQUIREMENTS FOR RADIO APPARATUS CAPABLE OF RECEIVING BROADCASTING

Introduction

Under Sections 6(1)(b)(ii) and 7(1)(h) of the Radio Act, the Department of Communications intends to introduce regulations concerning the sale of a certain class of radio apparatus capable of receiving television broadcasting. This class of radio apparatus which is currently not regulated under the General Radio Regulations includes descramblers (decoders), closed captioning adapters and other similar apparatus which are capable of receiving television broadcasting and which feed, by conduction, a modulated radio frequency carrier to the antenna terminals of a television receiver. This Telecommunications Regulation Circular (TRC) is intended to inform manufacturers, distributors, retailers, as well as the general public of the technical requirements and technical acceptance procedure which the Department intends to introduce for this class of radio apparatus.

Radio apparatus of the class described in this TRC shall conform to the following technical requirements:

Gain Characteristics

- (A) For apparatus having automatic gain control circuitry, the output signal level shall be not less than 1 millivolt (0 dBmV) and not more than 5 millivolts (14 dBmV) when measured across an impedance of 75 ohms, or
- (B) For apparatus not having automatic gain control circuitry, the conversion gain shall be not less than 0 dB nor more than 7 dB.

Carrier Frequency Stability

The frequency stability obtained with any line voltage in the range from 104 to 127 volts and measured, after twelve hours of warm-up operation, over a period of three hours shall be such that the visual carrier frequency of signals of an output channel shall,

- (A) if the apparatus is equipped with a fine tuning control, be maintained within 450 kHz of the nominal carrier frequency for the output channel, or

- (B) if the apparatus is not equipped with a fine tuning control, be maintained within 250 kHz of the nominal carrier frequency for the output channel.

Radiated Field Strength

The field strength of any emission emanating from the apparatus, when measured at a distance of 3 metres shall not exceed:

- (A) 70 $\mu\text{V/m}$ in the frequency range above 5 MHz and below 30 MHz,
- (B) 100 $\mu\text{V/m}$ in the frequency range from 30 MHz and below 88 MHz,
- (C) 150 $\mu\text{V/m}$ in the frequency range from 88 MHz and below 216 MHz,
- (D) 200 $\mu\text{V/m}$ in the frequency range from 216 MHz and below 1000 MHz.

Spurious Signals at the VHF Input Terminals

The level of any local oscillator signal and any signal of an undesired or spurious nature generated within the apparatus and arriving at the VHF input terminals, measured across 75 ohms,

- (A) in the frequency range above 5 MHz and below 30 MHz, shall not exceed -50 dBmV,
- (B) in the frequency range from 30 MHz to below 54 MHz, shall not exceed -35 dBmV,
- (C) in the frequency range from 54 MHz to 300 MHz, shall not exceed -26 dBmV, and
- (D) in the frequency range above 300 MHz and below 1000 MHz, shall not exceed -10 dBmV.

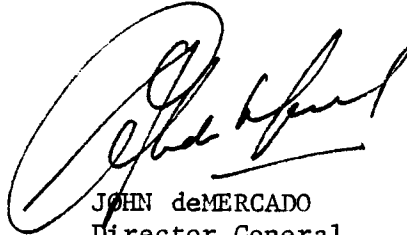
Technical Acceptance Procedure

Those seeking to establish the technical acceptability of radio apparatus of the class described in this TRC, shall ensure that the apparatus or a production sample or other representative unit of that type of apparatus is tested in accordance with accepted engineering practices to determine whether or not it conforms to the applicable technical requirements described herein.

For apparatus which are established to be technically acceptable for use in Canada, manufacturers or importers should ensure that each unit of a type offered for sale by him bears, in a location convenient for

inspection, a permanent label or marking containing, in both official languages, the statement, "DOC TRC 60" and "MDC CRT 60".

Comments on these proposed requirements would be welcomed by the Department.

A handwritten signature in black ink, appearing to read "John deMERCADO", written in a cursive style with a large initial "J".

JOHN deMERCADO
Director General
Telecommunication Regulatory
Service