



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

KIERTRON, INC.
P. O. BOX 3003
BLUE BELL PA 19422

Ann Gallagher
Senior Engineer
Audio Division
Media Bureau

Grant Date: May 28, 2010

Facility Id: 34587

Call Sign: KCBC

This license expires 3:00 a.m.
local time, December 01, 2013.

License File Number: BMML-20100322AES

This authorization re-issued to add special operating condition permitting use of modulation-dependent carrier level technology.

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

Jan.	7:15 AM	5:15 PM	Jul.	4:45 AM	7:30 PM
Feb.	7:00 AM	5:45 PM	Aug.	5:15 AM	7:00 PM
Mar.	6:15 AM	6:15 PM	Sep.	5:45 AM	6:15 PM
Apr.	5:30 AM	6:45 PM	Oct.	6:15 AM	5:30 PM
May	5:00 AM	7:00 PM	Nov.	6:45 AM	4:45 PM
Jun	4:45 AM	7:30 PM	Dec	7:15 AM	4:45 PM

Name of Licensee: KIERTRON, INC.

Station Location: MANTECA, CA

Frequency (kHz): 770

Station Class: B

Antenna Coordinates:

Day

Latitude: N 37 Deg 47 Min 51 Sec
Longitude: W 120 Deg 53 Min 01 Sec

Night

Latitude: N 37 Deg 47 Min 51 Sec
Longitude: W 120 Deg 53 Min 01 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 4.1

Antenna Input Power (kW): Day: 52.7 Night: 4.4

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 32.44 Night: 9.41

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Table with 3 columns: Tower No., ASRN, Overall Height (m). Rows: 1 1012846, 2 1012847, 3 1012848

Night:

Table with 3 columns: Tower No., ASRN, Overall Height (m). Rows: 1 1012846, 2 1012847, 3 1012848

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2229 Night: 664.24

Standard RMS (mV/m/km): Day: 2341.62 Night: 695.85

Augmented RMS (mV/m/km):

Q Factor: Day: 70.71 Night: 25.184

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	81.7
2	1.2000	104.000	90.0000	68.000	0	81.7
3	0.3600	208.000	180.0000	68.000	0	81.7

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.6950	-136.000	0.0000	0.000	0	81.7
2	1.0000	0.000	90.0000	68.000	0	81.7
3	0.6400	150.000	180.0000	68.000	0	81.7

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-99.4	0.235
2	0	1
3	101.5	0.879

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-135.7	0.658
2	0	1
3	149.9	0.662

Antenna Monitor: POTOMAC INSTRUMENTS 1901

Sampling System Approved Under Section 73.68 of the Rules.

Special operating conditions or restrictions:

- 1 The licensee shall perform the measurements described in Section 73.155 at least once within each 24-month period.

- 2 Ground system consists of 120 320-ft. buried copper radials spaced about the base of each tower, plus 120 50-ft. buried radials interspersed with the longer radials. Radials are shortened to property limitations and bonded at intersections to a copper strap.

- 3 Waiver of Section 73.1560(a) is granted to permit the licensee to operate with modulation-dependent carrier level control, which reduces transmitter power at certain modulation levels.

*** END OF AUTHORIZATION ***