

DR 33C Professional Receiver



www.radiopharos.it

McKay Dymek's DR 33C is the full general coverage international receiver that delivers solid-state instrumentation sophisticated enough for the professional, yet easily operated by any radio enthusiast.

Specifically designed by McKay engineers for extremely low distortion and easy, drift-free tuning, the DR 33C also features an original noise limiter which effectively combats interference from power lines and automobiles on both AM and SSB-CW reception.

Any existing hi fi system can be aesthetically enhanced and transformed into an international communications center with the DR 33C.

Your Professional receiver tunes you in to such contrasting international transmissions as foreign ships at sea in the Indian Ocean and international aircraft in flight, to the latest-breaking news direct from many world capitals. The DR 33C receives these and other fascinating international messages.

Because many countries broadcast in both their native language and English, the world is drawing closer together. Now, with the DR 33C, you can experience the varied cultures and opinions of the world in the comfort of your home.

MK McKay Dymek

Your HF Headquarters

DR 33C Professional Receiver

Features

- The DR 33C fills the need for a high quality modestly priced receiver with professional performance and specifications.
- Class D AM envelope detection is used giving much lower distortion levels than the conventional AM diode detector
- A unique automatically adjusting threshold noise limiter provides greatly enhanced reception of CW RTTY and SSB signals during conditions of extreme impulse noise interference.
- Crystal filters in first and second IF amplifiers mechanical filters in third IF
- A high level RF front end, using CATV RF power transistors and a double balanced diode ring mixer provides freedom from inter modulation interference and overload while eliminating the need for a manually adjusted antenna pre-selector in many installations.
- Quartz crystal phase locked loop digital synthesis tuning provides excellent frequency accuracy stability and ease of tuning
- Independent selection of reception mode and IF filter
- Performance and specifications unmatched under \$3000.

Specifications

Frequency Coverage:

50 kHz to 29.7 MHz, continuous

Reception Modes:

AM, Upper Sideband, Lower Sideband, CW, RTTY (with external converter)

Sensitivity 10 dB (S+N)/N

| RF Bandwidth | 100 kHz | 200 kHz | 400 kHz | 20 MHz | 20 MHz | 29.7 MHz |
|--------------|---------|---------|---------|--------|--------|----------|
| 4 kHz AM* | 10 uV | 3 uV | 1.0 uV | 1.5 uV | | |
| 2.2 kHz SSB | 2 uV | 1.0 uV | .5 uV | .75 uV | | |
| 400 Hz CW | 1 uV | .5 uV | .25 uV | .35 uV | | |

*30% Modulation

Frequency Readout:

6 Digit Red .5 inch (1.2 cm) LED to 100 Hz

Frequency Selection:

10, 1 1 .005 MHz steps 5 kHz Fine Tune

Frequency Stability

at constant ambient of 25°C in any 8 hour period after ½ hour warm up

± 40 Hz

Image Rejection:

70 dB

RF Blocking

Desired signal 60 dB above 1 uV with blocking signal removed 20 kHz and its amplitude adjusted to reduce desired signal by 3 dB

100 dB to 1 uV

Cross Modulation

Desired signal at 60 dB above 1 uV with undesired signal removed 20 kHz and its amplitude adjusted for cross modulation products 30 dB lower than desired signal

65 dB to 1 uV

Intermodulation

Level of 2 undesired signals 30 kHz from the desired signal to produce the equivalent audio output as desired signal 30 dB above 1 uV

65 dB to 1 uV

RF Bandwidth:

| | | |
|-----------------|----------------------|--------------------------|
| 4 kHz | 4 kHz -6 dB | 10 kHz -60 dB |
| 8 kHz | 8 kHz -6 dB | 28 kHz -60 dB |
| LSB or USB | 300 to 2500 Hz -3 dB | -700 Hz, +3800 Hz -60 dB |
| (Optional) CW | 375 Hz -3 dB | 3.5 kHz -60 dB |
| (Optional) RTTY | 1200 Hz -3 dB | 8.0 kHz -60 dB |

Audio Notch Filter:

5000 Hz greater than 25 dB

Noise Limiter:

Automatic threshold peak limiters for AM/SSB-CW-RTTY

Hum and Noise Below Full Output

AM, 1 MHz, 1 m V antenna input, 8 kHz bandwidth, 90% 1 kHz modulation

55 dB

Harmonic Distortion

at tuner output, AM, 1 MHz, 1 kHz modulation, 1 m V antenna input, 8 kHz RF bandwidth

| Percent Modulation | Percent T.H.D. |
|--------------------|----------------|
| 50% | 0.6% |
| 80% | 1.0% |
| 90% | 1.5% |

Audio Output:

2 watts at 4 ohms, 1 Vrms at 5000 ohms, internal 4 inch monitor speaker with external speaker connectors

Power Required:

110-120/220-240 VAC, 50-60 Hz Switch Selectable 30 watts

Dimensions:

17.5" (43 cm) wide x 5.1" (13 cm) high x 15" (37 cm) deep

Net Weight: Shipping Weight

16 lbs. (7.3 Kg) 22 lbs. (10 Kg)

Circuit Complement:

56 Integrated Circuits, 31 FETs, 20 Transistors, 66 Diodes

Available Options

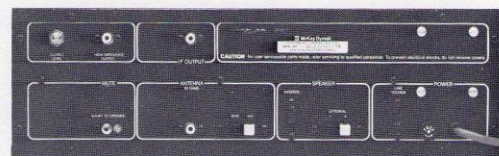
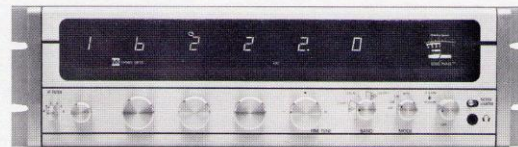
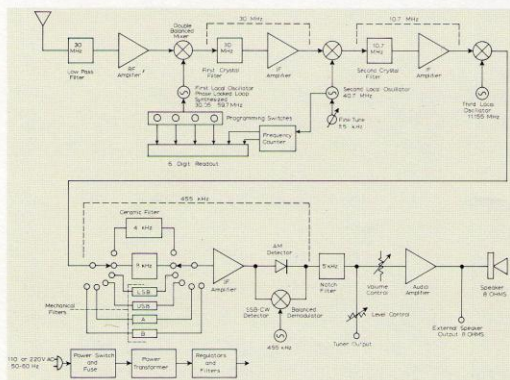
DP 40 RF Pre-Selector

600 Ohm 0 dBm Balanced Audio Output

400 Hz Bandwidth CW Mechanical Filter

1200 Hz Bandwidth RTTY Mechanical Filter

Equipment Rack Mount Hardware



Note: Specifications and design subject to possible modification without notice. Copyright © 1975 McKay Dymek Co. Printed in U.S.A.
Limited warranty 1 year parts and labor

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