5-Band Communications Receiver

DX-200

OWNER'S MANUAL

PLEASE READ BEFORE USING THIS EQUIPMENT

REALISTIC®

CAT. NO. 20-205

CUSTOM MANUFACTURED FOR RADIO SHACK A DIVISION OF TANDY CORPORATION

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A QUICK LOOK AT YOUR DX-200

The Front Panel

BFO PITCH – (Beat Frequency Oscillator) Use for adjusting CW (code) signal pitch or to achieve proper pitch of an SSB signal.

SIGNAL STRENGTH Meter – Shows relative strength of received signal.

ANTenna TRIMmer – Matches your antenna to the frequency band you're listening to.

AGC Switch – (Automatic Gain Control) Used to select the AGC rise time. Normally, leave it in SLOW. Use FAST for weak SSB signals.

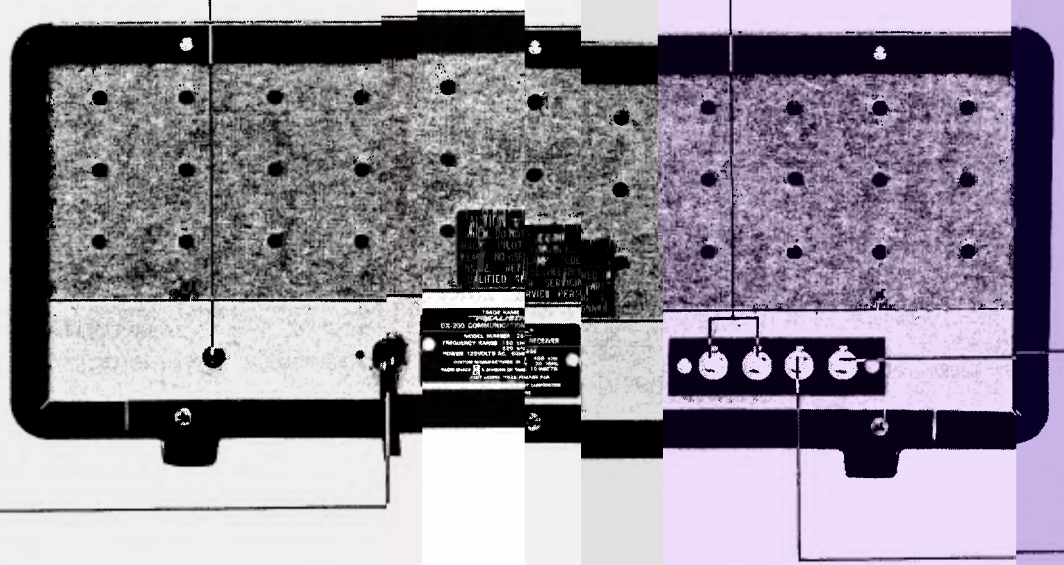
BAND Selector & Indicator – Set to appropriate band.

BAND SPREAD Tuning & Dial – Provides fine tuning for any of the bands of operation.

The Rear Panel

EXTernal SPeaKeR Jack – Connect an external speaker to this jack (automatically disconnects built-in speaker).

Antenna – Connect 1/2 LO-Z (long wire impedance



MUTE – Used for receiver Mode Se

Power Cord – Plug into a standard AC outlet.

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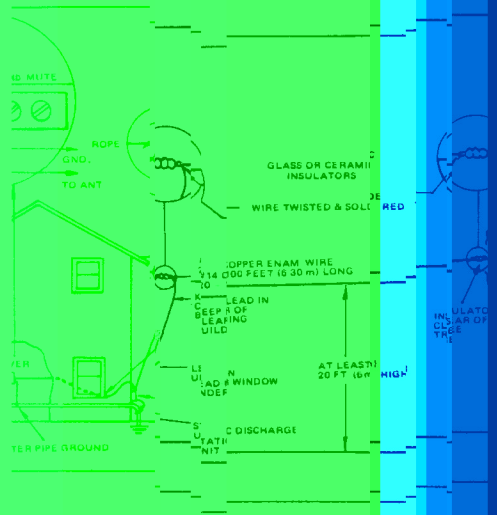

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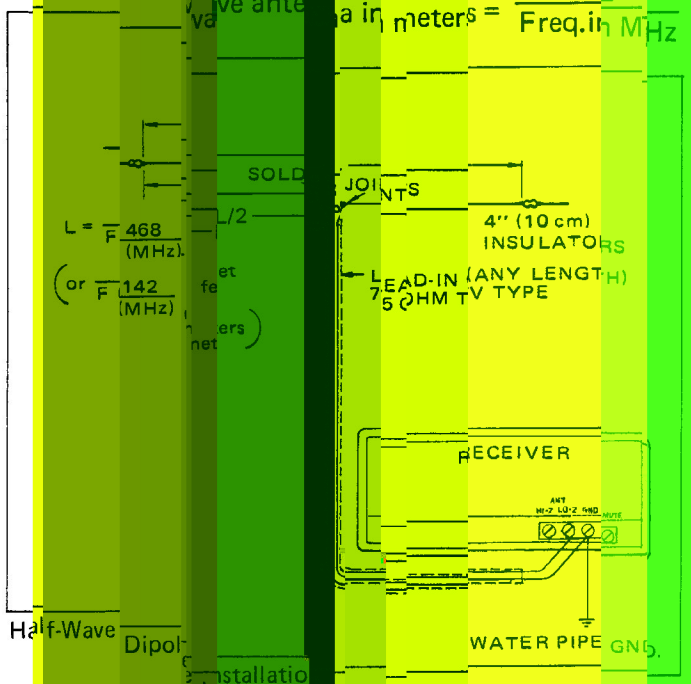
If you are interested in putting up an antenna for a specific frequency, you can use the following formula to determine the 1/2-wave length required:

Length of 1/2-wave antenna in feet = $\frac{468}{\text{Freq. in MHz}}$ = 26.51 (17.64)

Length of 1/2-wave antenna in meters = $\frac{142}{\text{Freq. in MHz}}$



Half-Wave Dipole Installation

For example, if you want to pick up International Short Wave signals specifically in the 19 meter band (15.1 to 15.45 MHz). Pick a frequency in that range, such as 15.35 MHz. Using the formula:

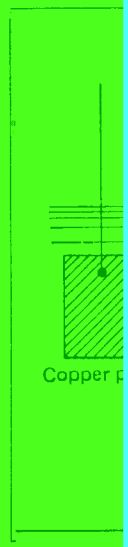
1/2-wave antenna in feet = $\frac{468}{15.35}$ = 30.5 feet $\frac{142}{15.35}$ = 9.3 meters

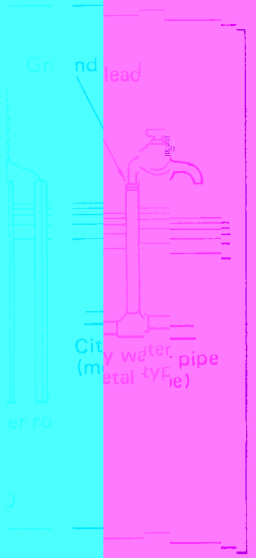
So, you would need an antenna 30½ (9.3 m) long to get the best reception out of the 19-meter band. (See the Installation Diagram above. A dipole antenna is made up of two pieces of wire, each half of the total length.)

For lots more information, obtain a copy of THE RADIO AMATEUR ...

Also, for lightning protection, you should ground your antenna to prevent damage from static discharge and may even protect your house from lightning strikes.

To insure best results, you should connect a Ground wire to the GND screw on the back of your receiver. Use a heavy gauge wire for this. Connect to a cold water pipe (not hot water) and make a metal rod driven into the ground. Or, you can connect to a copper screen in the ground and make ...





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SPECIAL OPERATING NOTES

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SSB signals take
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signal, adjust BFO PITCH for the

METERS	FREQUENCY
80	3.5 to 4.0
40	7.0 to 7.3
20	14.0 to 14.35
15	21.0 to 21.45
10	28.0 to 29.7

CALIBRATION OF THE DIAL SCALES

For serious DX'ing, it's important that dial scales be correctly calibrated to your calibration frequency. (You'll need exact frequency readouts [QSLs] from stations.) Check your calibration on frequency. If you hear a station you acknowledge it, the dial scales should be correct. If you hear a station in the "SET" position, the dial will read very closely anyway.)

MAIN TUNING Dial Scale

NOTE: Calibration of the MAIN TUNING Dial Scale for the lower bands (0.15 - 1.40 MHz and 0.52 - 1.6 MHz) is usually necessary.

Proceed as follows for the other bands:

1. Set BAND SPREAD Tuning to "SET".
2. Set BAND Selector to desired band.
3. Set RANGE Control to maximum (10).
4. Set VFO CAL PITCH to 12:00 o'clock (middle) position.
5. Set BOOST Switch to "500".
6. Set CAL Switch to kHz.
7. Switch MODE Selector to SSB/CW.
8. Set MAIN TUNING to desired calibration frequency (must be an even multiple of 50 kHz, such as 10 MHz, 15 MHz, etc.).

NOTE: In multiples of 50 kHz, the 0 kHz is the 0 Hertz; a 50 kHz = 0.5 MHz. Megahertz (MHz) is a kilohertz (kHz) is 1,000,000 Hertz. So 100 kHz = 1 MHz.

9. Adjust MAIN TUNING for a zero beat in the vicinity of the calibration frequency. More on this later.
10. Move the BAND SPREAD Tuning slightly in either direction until you hear a second zero beat.
11. Set MAIN TUNING for a constant tone in the "beat" frequency.
12. Slide BAND SPREAD Tuning to the lower tone. This is the correct "mark-

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$$\frac{300}{7.1\ \text{MHz}} = 42.25$$

$$\text{MHz} = \frac{300}{\text{meters}}$$

$$\frac{300}{19.5\ \text{meters}} = 15.$$

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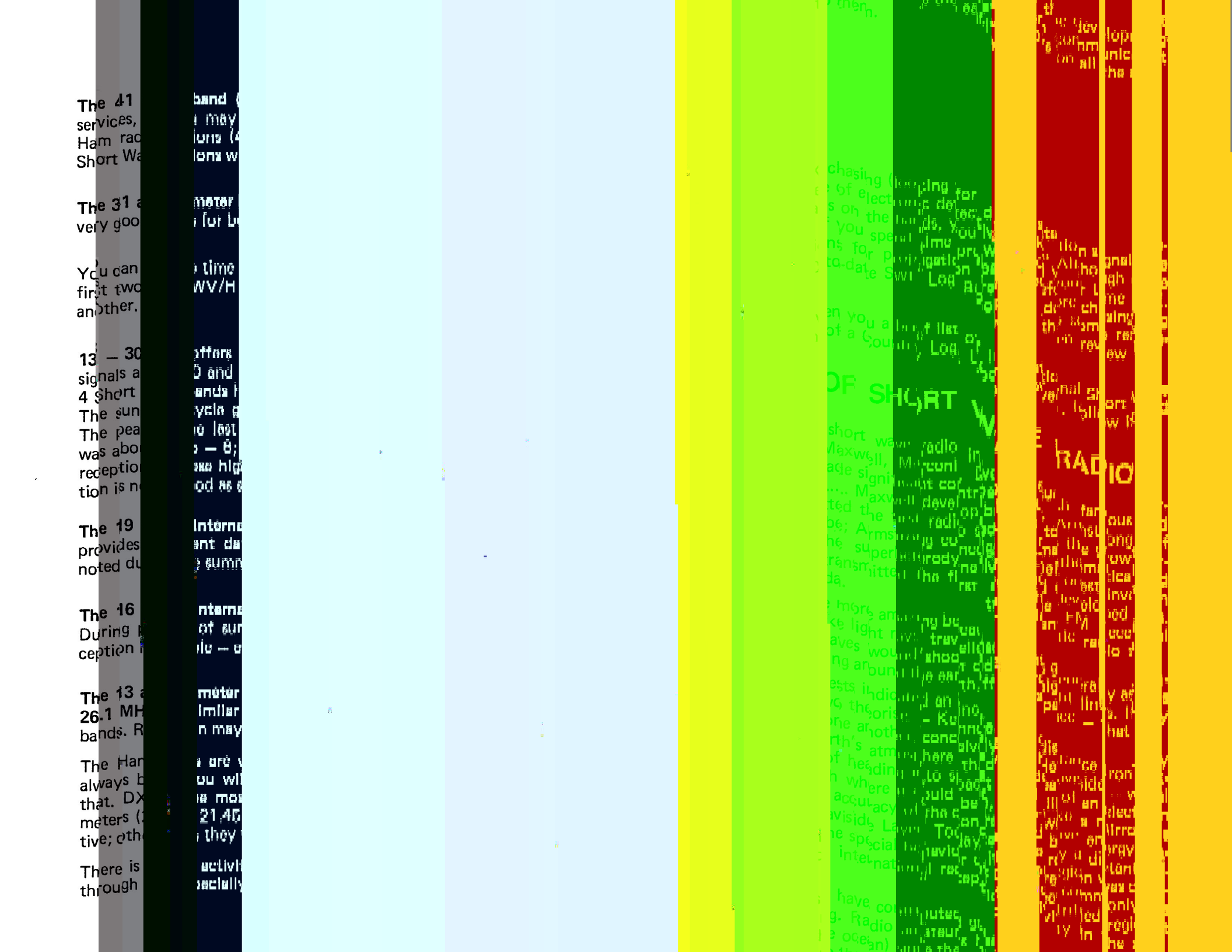

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ANT – Antenna
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BFO (Beat Frequenc
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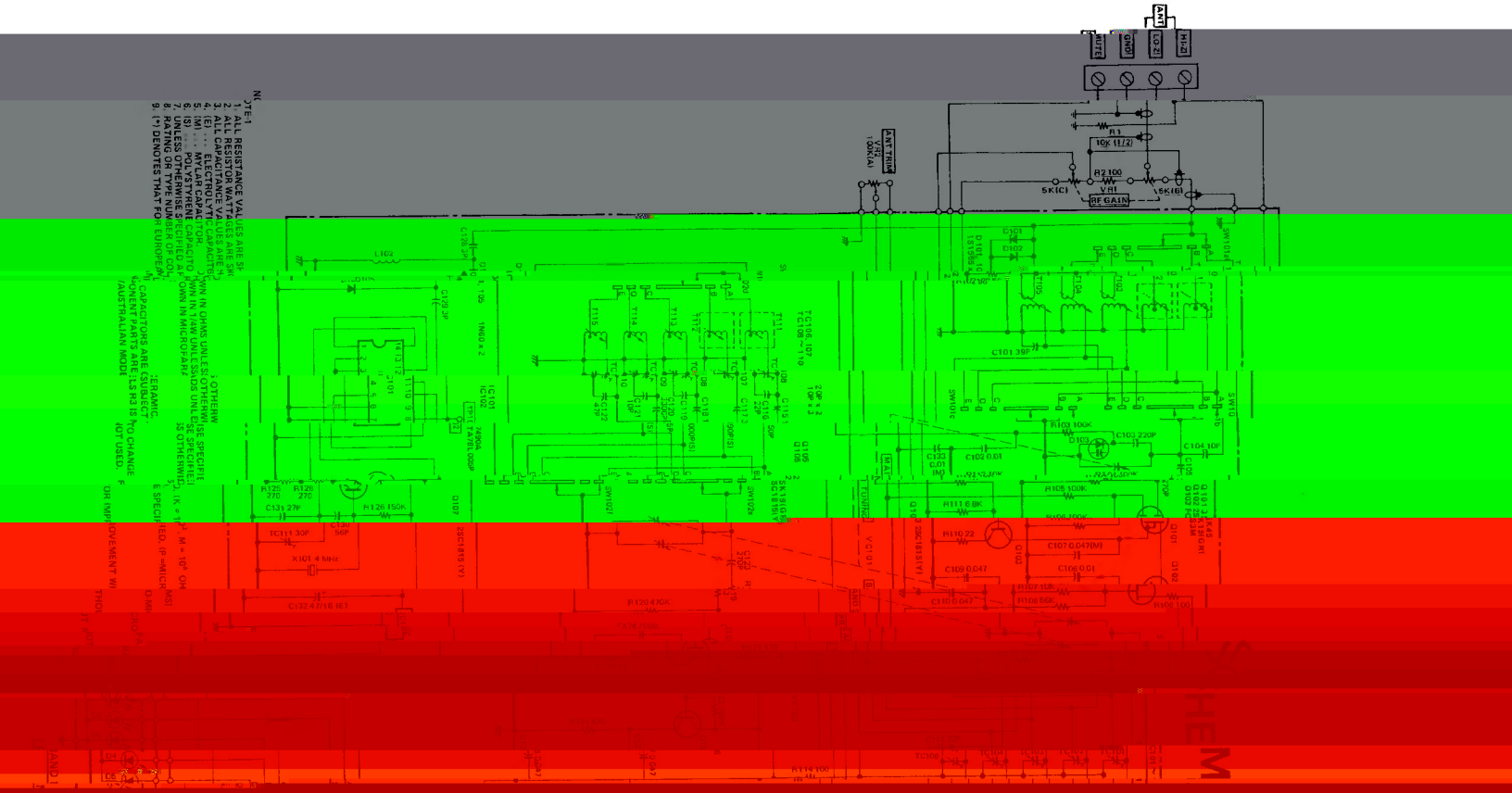
Wellingto	Switzerland			
Prague	New Zealand			
St. Georg	Czechoslovakia	ZL2		
Bucharest's	Windward Islands			
Rorna	Romania	WIB		
Montreal	Italy			
Lourenco	Canada	RAI		
Marque	Mozambique	CBC		
Stockholm		CR7		
Buenos An	Sweden	B1		
Cuidad ires	Argentina	Radio Sweden		
	Dominican Republic	LRA		
Peking		Radio Caribe		
Moscow	China			
Barbados	U.S.S.R.			
Moscow	Windward Islands	Radio Moscow		
Cairo	U.S.S.R.	2NX		
Bangkok	Egypt	50		
Karachi	Thailand	Radio Moscow		
Stockholm	Pakistan	HSK		
New Delhn	Sweden	9		
Melbourni	India	Radio Sweden		
Hilversum	Australia			
St. George	Holland	VLA		
Rabat e's	Windward Islands			
	Morocco			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5K(C)
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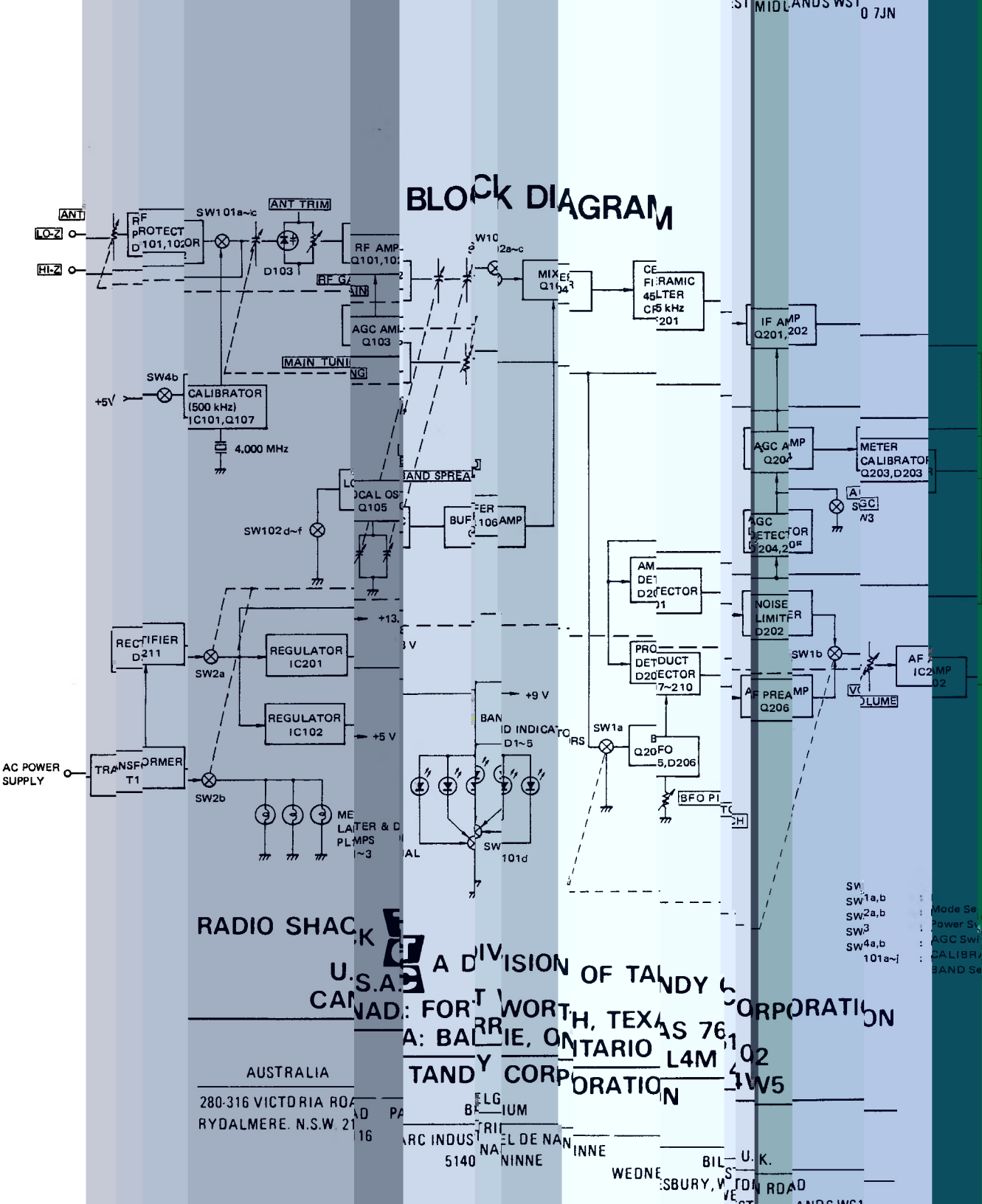

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