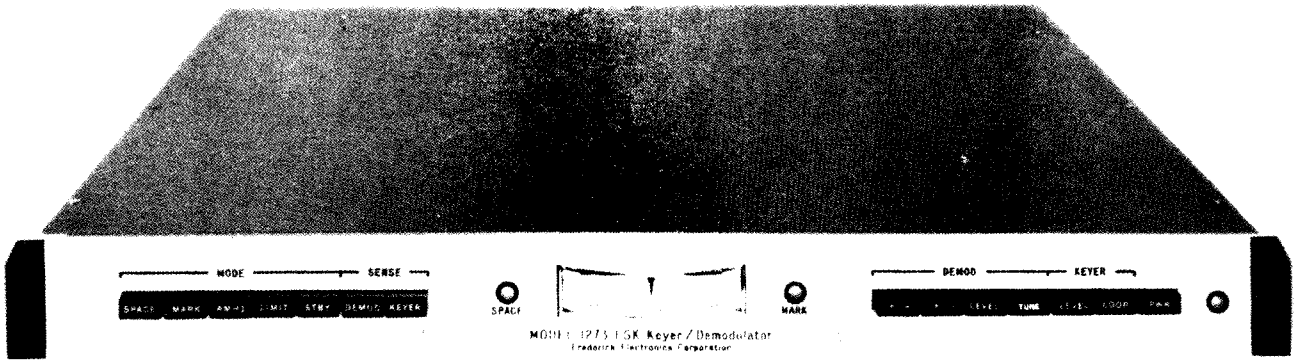


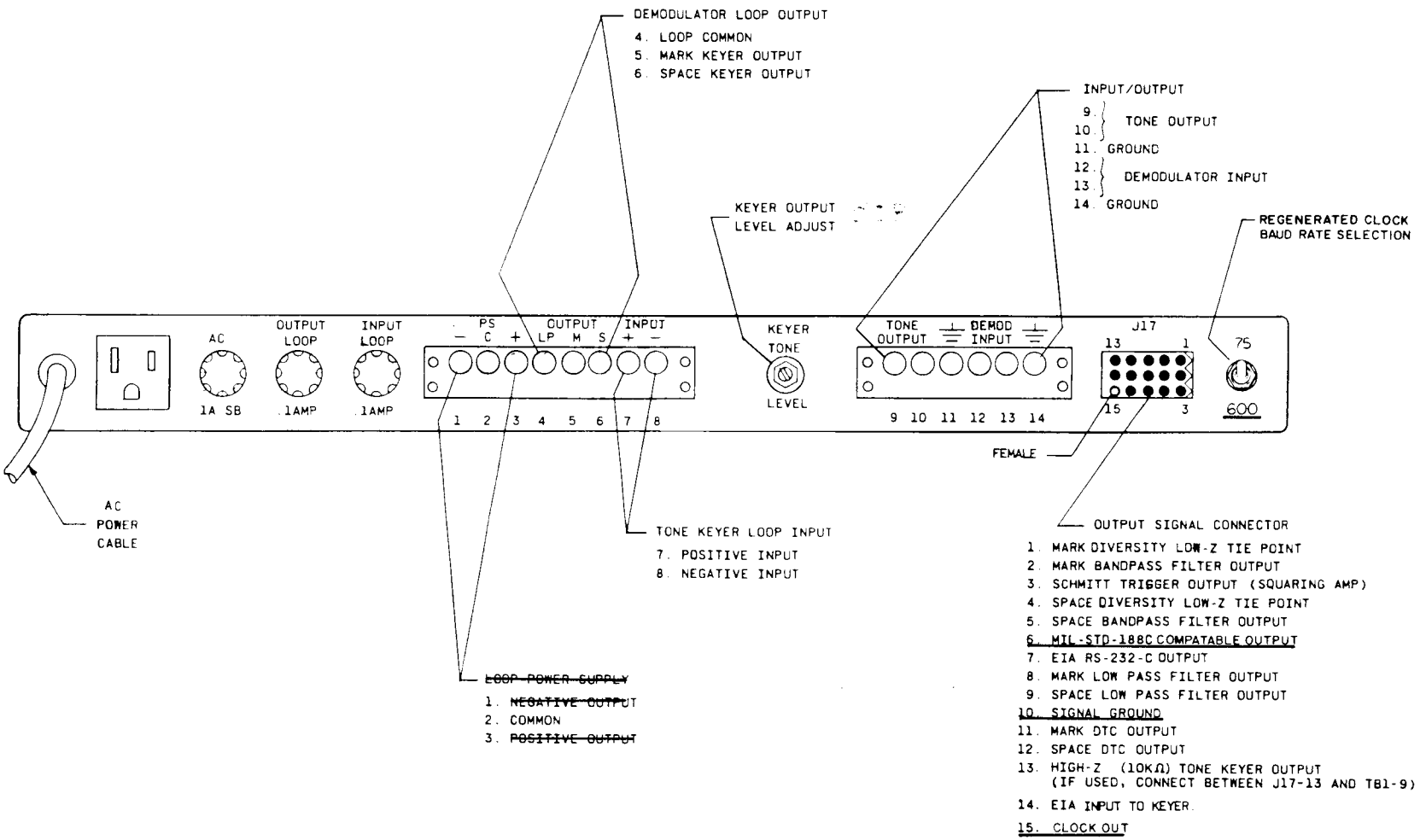
Model 1273/S-1 FSK Keyer/Demodulator

Modem Specifications

DEMODULATOR	SPECIFICATION
Input Impedance	Balanced 600 ohm (with 10K ohm selectable).
Input AFSK Tone	Center frequency of 2000 Hz.
Linear Operating Range	0 to -30 dBm
Input Sensitivity In Limiter Mode	To -60 dBm.
Operating Rate	75 or 600 baud.
Frequency Shift	850 Hz.
Mark-Space Filter Bandwidth	Approximately 700 Hz.
Mark Center Frequency	2425 Hz.
Space Center Frequency	1575 Hz.
Outputs	EIA RS-232-C polar logic level signals. MIL-STD-188C polar logic level signals.
~~Auto-Mark-Hold Threshold~~	Approximately -15 dBm ±10 dB in linear operation; approximately -65 dBm ±10 dB in limiter operation.
Clock Output (Sw Selectable)	Regenerated clock at 75 or 600 baud.
KEYER	
Input Options	Polar Logic Level Circuit - Detects EIA Standard RS-232-C or MIL-STD-188C logic level signals.
Output	Mark Tone = 2425 Hz Space Tone = 1575 Hz
Output Level	Adjustable up to +4 dBm. (Factory set at 0 dBm.)
Output Impedance	Balanced, 600 ohms.

Modem Specifications (cont.)

GENERAL	SPECIFICATION
Voltage Requirements	115 VAC ±10% 50-400 Hz. (230 Vac selectable.)
Power Consumption	10 watts (typical).
Temperature Range	0 to 50°C.
Outer Dimensions	Height: 1-3/4 inches (4.4 cm) Width: 19 inches (48.3 cm) Depth: 17 inches (43.2 cm)
Weight	Approximately: 7-1/2 pounds (3.4 kg)



Model 1273/S-1 Input/Output Connections

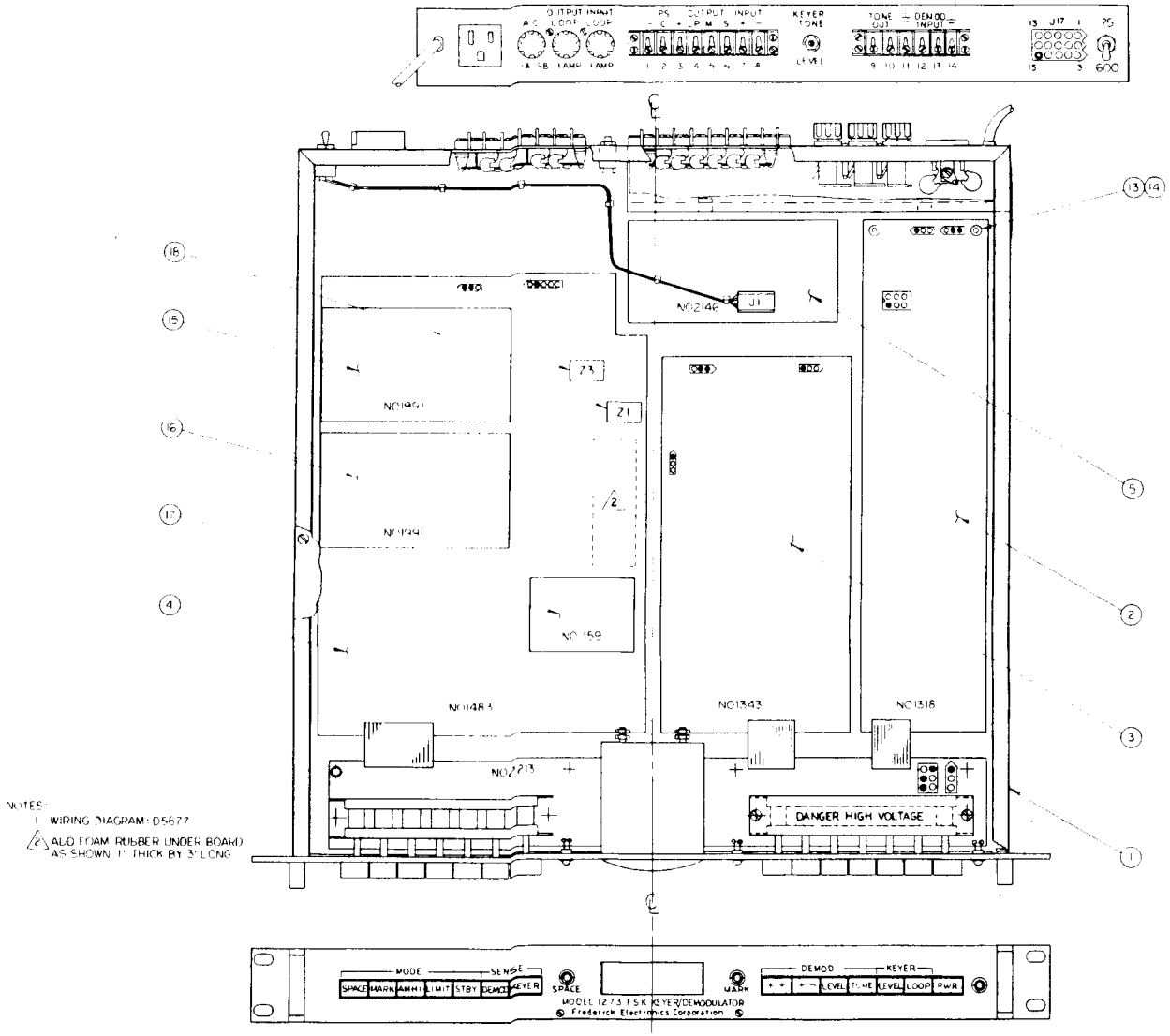
CONTROL/INDICATOR	REF	FUNCTION
MODE SWITCHES		
SPACE	S1	Inhibits mark detector output when switch is depressed.
MARK	S2	Inhibits space detector output when switch is depressed.
AMH1	S3	Commands Mark-Hold circuit to place data output in mark state when either mark or space channel (or both) has signal loss.
LIMIT	S4	In depressed position activates the limiter circuit and provides 30 db minimum of additional gain. In released position linear operation is obtained.
STBY	S5	Places Demodulator outputs in a steady mark state when switch is depressed.

Controls and Indicators (cont.)

CONTROL/INDICATOR	REF	FUNCTION
SENSE SWITCHES		
DEMOD	S6	Reverses mark-space polarity at Demodulator output.
KEYER	S7	Reverses mark-space polarity at Tone Keyer input.
DEMOD SWITCHES		
++	S8	Used to tune Receiver to an FSK signal. Receiver is properly tuned when maximum meter deflection to the right occurs with minimum oscillations.
+-	S9	Indicates input signals by deflecting to the right for mark and left for space.
LEVEL	S10	Monitors level of demodulator input signal. Normal level is 0 dBm.
TUNE	S11	Allows fine tuning of receiver. Receiver is properly tuned when maximum meter deflection to the right occurs with minimum oscillations.
KEYER SWITCHES		
LEVEL	S12	Monitors output signal level from Tone Keyer. Meter is calibrated at 0 dBm.
~~LOOP~~	S13	~~Not used in Model 1273/S-1 configuration~~.
PWR (power)	S14	Turns unit on or off.

Controls and Indicators (cont.)

CONTROL/INDICATOR	REF	FUNCTION
KEYER SWITCHES (cont.)		
MARK Indicator	CR1	Illuminates when Demodulator detects a mark signal above Mark-Hold threshold.
SPACE Indicator	CR2	Illuminates when Demodulator detects a space signal above Mark-Hold threshold.
POWER Indicator	CR3	Illuminates when unit is ON.
KEYER TONE LEVEL (Rear Apron)	R1	Permits adjustment of Tone Keyer output level.
BAUD RATE SELECTOR (75 or 600 baud)	S15	MID BIT Clock selection.



NO 1318 Power Supply

NO 1343 KeyeR

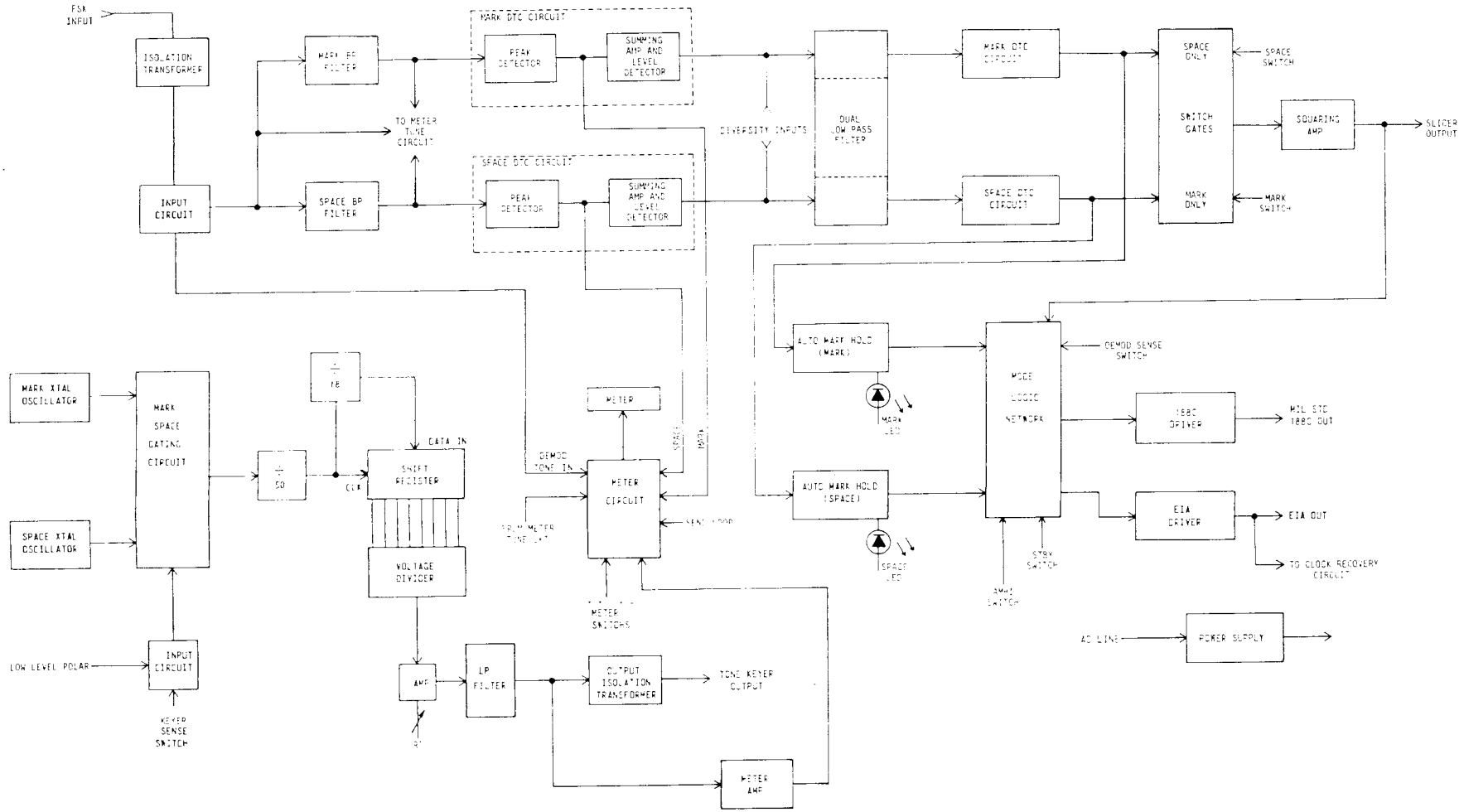
NO 1483 ConveRTER

NO 2146 Clock Recovery

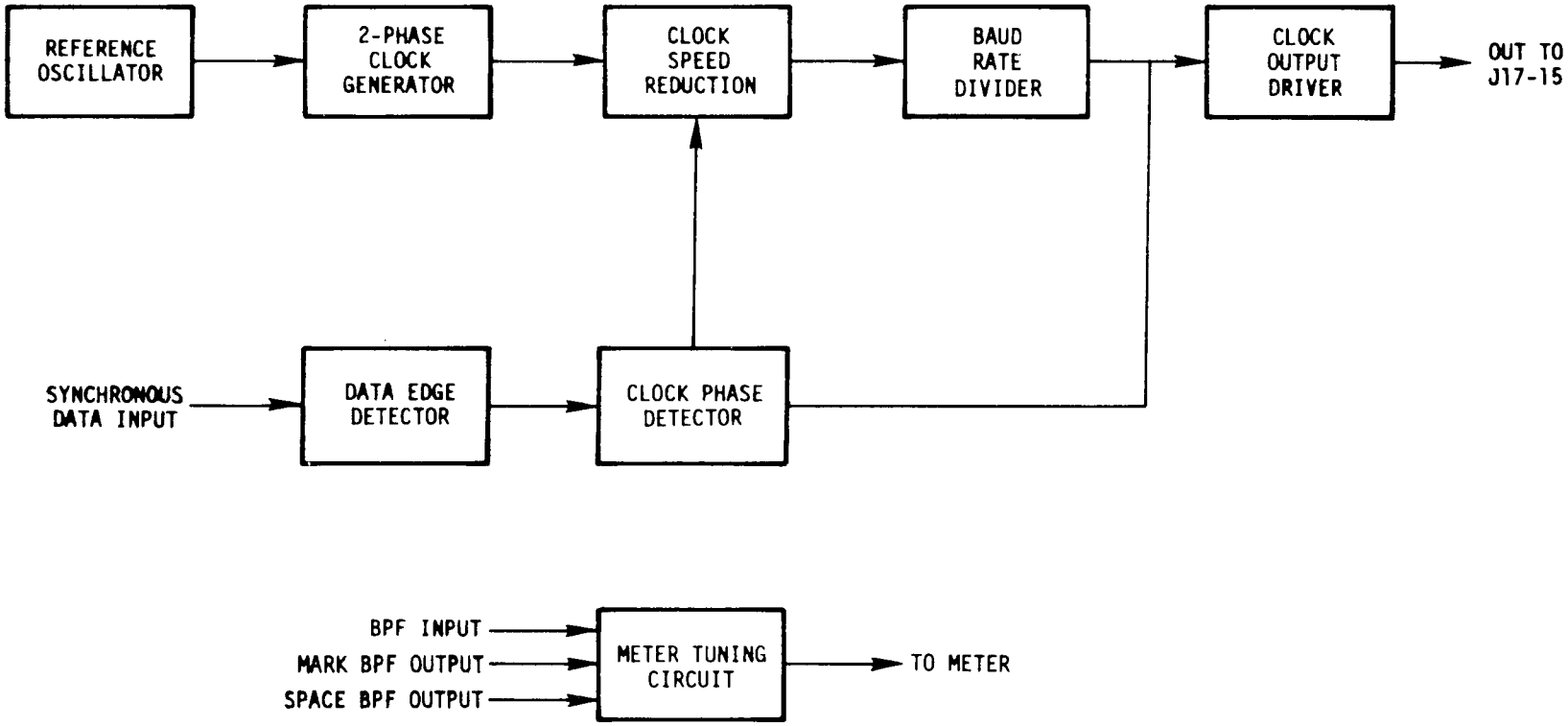
NO 2213 meter

Figure 7-1. Model 1273/S-1 Assembly

D5870



Modem Block Diagram



Clock Recovery Block Diagram