HPT FMR

High Performance Translators Frequency Agile, 20 or 40 W

- Includes low pass/harmonic filter
- Up to 90 dB typical S/N ratio on transmitter section
- Fully protected, 20W or 40W, front-panel frequency agile 88-108 MHz FM output
- Receiver and transmitter section separated to allow local insertion
- Excellent RF immunity, designed to withstand the most hostile RF environments
- Sync port for booster synchronization
- Presettable RF foldback
- Meets or exceeds all FCC and CCIR requirements
- Option FSK: FSK pre-programmed automatic IDer
- Option HR: Higher Rejection of very strong adjacent channels on receivers
- Option 75: 75 kHz audio cutoff instead of standard 99 kHz, (will not pass 92 kHz SCA's)
- FM front end filter width available: 1 MHz tunable or 20 MHz broadband, specify w/ order

Inputs:
Composite (Transmitter section);
RF 87.5-108 MHz (Receiver section);
(Others in the 108-1000 MHz range available on request)

Input connectors:
Transmitter section: 3 BNC unbal for MPX and SCA's
Receiver section: "N" type female, 50 ohm for RF

Receiver section:
Carrier detector: BNC connector
Sensitivity, mono (demodulated, de-emphasized):
5 µV for S/N > 50 dB
15 µV for S/N > 60 dB (typ 9 µV)
50 µV for S/N > 65 dB
150 µV for S/N > 70 dB
1.5 mV for S/N > 80 dB (typ 88 dB)
Composite (left or right channel, demodulated, decoded, de-emphasized):
5 µV for S/N > 30 dB
15 µV for S/N > 40 dB
50 µV for S/N > 55 dB
150 µV for S/N > 60 dB (typ 85 µV)
1.5 mV for S/N > 75 dB (typ 80 dB)
Selectivity (static), with IF on "narrow":
5 dB IF bandwidth ±100 kHz
20 dB IF bandwidth ±200 kHz
50 dB IF bandwidth ± 300 kHz
Over 80 dB IF bandwidth ±400 kHz

Selectivity (static), with IF on "medium":
3 dB IF bandwidth ±100 kHz
12 dB IF bandwidth ±200 kHz
30 dB IF bandwidth ±300 kHz
60 dB IF bandwidth ±500 kHz
Over 80 dB IF bandwidth ± 600 kHz
Selectivity (dynamic) with IF on "narrow" and 75 kHz audio cutoff (admissible proximity/ratios of adjacent signals for unaffected performance):

At:	Unwanted signal must be:
0 kHz	<-43 dB below desired signal
±100 kHz	<-22 dB below desired signal
±200 kHz	<+12 dB above desired signal
±300 kHz	<+35 dB above desired signal
±400 kHz	<+36 dB above desired signal

With IF on "narrow" and 97 kHz audio cutoff:

At:	Unwanted signal must be:
0 kHz	<-43 dB below desired signal
±100 kHz	<-30 dB below desired signal
±200 kHz	<+9 dB above desired signal
±300 kHz	<+32 dB above desired signal
±400 kHz	<+34 dB above desired signal

With IF on "medium" and 75 kHz audio cutoff:

At:	Unwanted signal must be:
0 kHz	<-46 dB below desired signal
±100 kHz	<-30 dB below desired signal
±200 kHz	<-3 dB below desired signal
±300 kHz	<+16 dB above desired signal
±400 kHz	<+23 dB above desired signal

[***cont. next page***]