

1795-XX Service Channel Converter

EQUIPMENT DESCRIPTION - The 1795-XX Service Channel Converter is a complete single sideband modulator/demodulator. The baseband inputs are divided into three channels. Channels 1 and 2 are to be used for baseband frequencies between 300Hz and 12kHz. Channel 3 is designed for baseband frequencies between 16kHz and 108kHz typically used for 24 channel multiplex. The transmit output has four separate outputs for driving separate sources. Conversely, the receive input has four separate inputs for multiple source applications. frequencies are factory set and can be 5.4, 5.65, 7.045, 7.5, 8.3, 8.59, 8.85, 9.023, or 9.25 MHz. Line power can be specified as 115 VAC, 230 VAC, -24 VDC, or -48 VDC.



1795-XX Service Channel Converter

MODELS

TABLE 1.1 SERIES 1795 MODEL NUMBER AND FREQUENCY CHART							
MODEL - #		FREQUENCY INFORMATION					
- AC	- DC	Fosc	Flat ($\pm 0.5\text{dB}$)	BW(0.125M	Fc =Fo+O.C	3db BW	Fc $\pm 0.100M$
05	06	5.650	5.650	5.775	5.7125	5.6125	5.8125
09	10	7.045	7.045	7.170	7.1075	7.0075	7.2075
03	01	8.590	8.590	8.715	8.6525	8.5525	8.7525
07	08	8.850	8.850	8.975	8.9125	8.8125	9.0125
04	02	9.023	9.023	9.148	9.0855	8.9855	9.1855
11	12	9.250	9.250	9.375	9.3125	9.2125	9.4125
14	13	8.300	8.300	8.425	8.3625	8.2625	8.4625
15	16	5.400	5.400	5.525	5.4625	5.3625	5.5625
17	18	7.500	7.500	7.625	7.5625	7.4625	7.6625

Technical Specifications

TRANSMIT/RECEIVE LOOPED

Freq. Response CH1/CH2; CH3 $\pm 2\text{db}; \pm 0.5\text{db}/4\text{kHz}, \pm 2\text{db Total}$
 Signal to Noise CH1/CH2 60db
 Harmonic Distortion CH1/CH2 < 1%
 Frequency Stability
 Temp. (+10° to 40° C) $\pm 5 \times 10^{-7}$
 Aging Rate (First Year) $\pm 1 \times 10^{-8} / \text{Day Average}, \pm 1 \times 10^{-6} / \text{Year}$

TRANSIT INPUTS / RECEIVE OUTPUTS SPECIFICATIONS (CH1 and CH2/CH3)

Frequency 0.3 - 12kHz/16kHz -108kHz
 Impedance 600 ohms Balanced/75 ohms Unbalanced
 Levels -20 dbm Average -14dbm MAX/-20dbm MAX

TRANSIT END-OUTPUT / RECEIVE INPUT

Type Single Sideband Suppressed Carrier
 Frequency 5.4, 5.65, 7.045, 7.5, 8.30, 8.59, 8.85, 9.023, 9.25 MHz
 Bandwidth 110 kHz Nominal
 Number of Out, Inputs/Impedance Four each/75 ohms Unbalanced
 Level, TX Output/Total RX Input -16 dbm MAX / -10 dbm MAX
 Lower Sideband/ Carrier Rej. -30db MAX Tx and Rx/ -40dbC MAX
 Port to Port isolation -40 db MAX

POWER / MECHANICAL

Connectors (audio, subcarrier) Barrier Strip/BNC Female
 Power AC 105-130 or 210-260 VAC, 47-63Hz, 30 Watts
 Power DC -21 to -32 or -42 to -56 VDC, 375ma Typical 400ma MAX
 Size, Weight 1-3/4" x 19"W x 13"D, 8-3/4 lbs (4Kg)

*+10 to +40 degrees C; 2000 meters max elevation; 80% max humidity; Specifications subject to change without notice