

CROSSTALK:

INTRODUCTION:

The test will evaluate signal crosstalk between neighboring channels. A very large signal will be sent into one channel while a neighboring channel is grounded. A measurement will be conducted at the grounded channel to determine if a signal is transmitted.

EQUIPMENT SETUP:

- FUNCTION GENERATOR-
 AMPLITUDE → 8V P-P
 FREQUENCY → 430Khz
 WAVEFORM → SQUARE
- SOFTWARE-
 Set filters on all channels to 0 (this yields a gain of 1)

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perl: setFilter(0)
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CROSSTALK FORMULA:

$$XTALK = DV(IN) / DV(OUT)$$

PROCEDURE:

- Using a shorted BNC connector, ground an input terminal on the breakout box (P1), (P2), (P3), (P4), (Qouter), or (Qinner).
- Connect the frequency generator (OUTPUT) terminal to one of the remaining inputs on the breakout box.
- Measure the voltage (Vp-p) of the RTF output terminal corresponding to the grounded input.
- Complete *TABLE 1* by changing the shorted BNC to different channels (P1, P2, P3, P4, Qouter and Qinner) and measuring this new channel at the RTF output terminal.

NOTE: At some point the frequency generator cable will need to be switched to a different breakout box input.

TABLE 1

	P1 (Vp-p)	P2 (Vp-p)	P3 (Vp-p)	P4 (Vp-p)	Qo (Vp-p)	Qi (Vp-p)
RTF BOARD OUTPUT						
FUNCTION GENERATOR						
<i>XTALK</i>						