



September 1996

Interface Control Unit WJ-9128/TTI

Features

- ☐ Accepts existing *TIDY TIPS* receiver control interfaces
- ☐ Controls up to 6 WJ-9128 Tuners

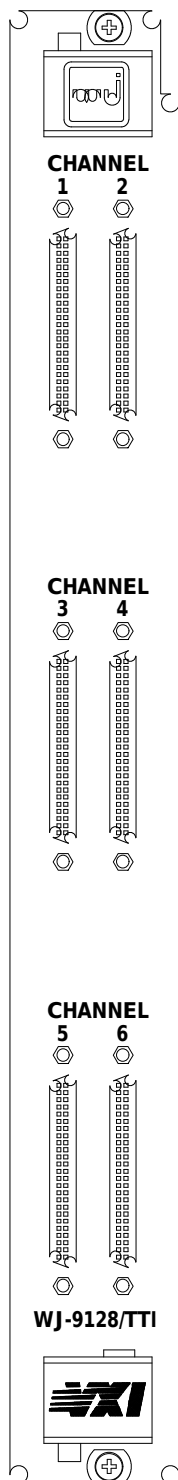
Description

The WJ-9128 TIDY TIPS Interface (TTI) Control Kit consists of two modules, the WJ-9128/TTI and the WJ-9128/SDB (Signal Distribution Board). The WJ-9128/TTI accepts existing TIDY TIPS control commands and translates them into the format required by the WJ-9128/RF (RF Converter Module) and the WJ-9128/LO (Local Oscillator Synthesizer Module). The WJ-9128/TTI is a one-slot VXI module that can provide independent control of up to six WJ-9128/LO and WJ-9128/RF pairs.

The WJ-9128/SDB provides the correct mating connectors between the TIDY TIPS system and the control ports of the WJ-9128/LO and WJ-9128/RF. The WJ-9128/SDB also provides a convenient interface for the Analog-to-Digital (A/D) clock and framing data connectors. See the TIDY TIPS system connection scheme.

The TIDY TIPS control interface consists of a 37-pin connector that allows an operator to set the gain and tuned frequency of the receiver. In addition, the TIDY TIPS interface monitors the operational state of the WJ-9128.

A dedicated gate array on the WJ-9128/TTI converts the TIDY TIPS control information into a usable format for the WJ-9128/RF and WJ-9128/LO. The WJ-9128/SDB provides a 15-pin control connector for each VXI module.



HEIGHT	9.2 in (23.36 cm)	DEPTH	1.2 in (3.04 cm)
WIDTH	13.4 in (34.03 cm)	WEIGHT	5 lbs (2.26 kg)

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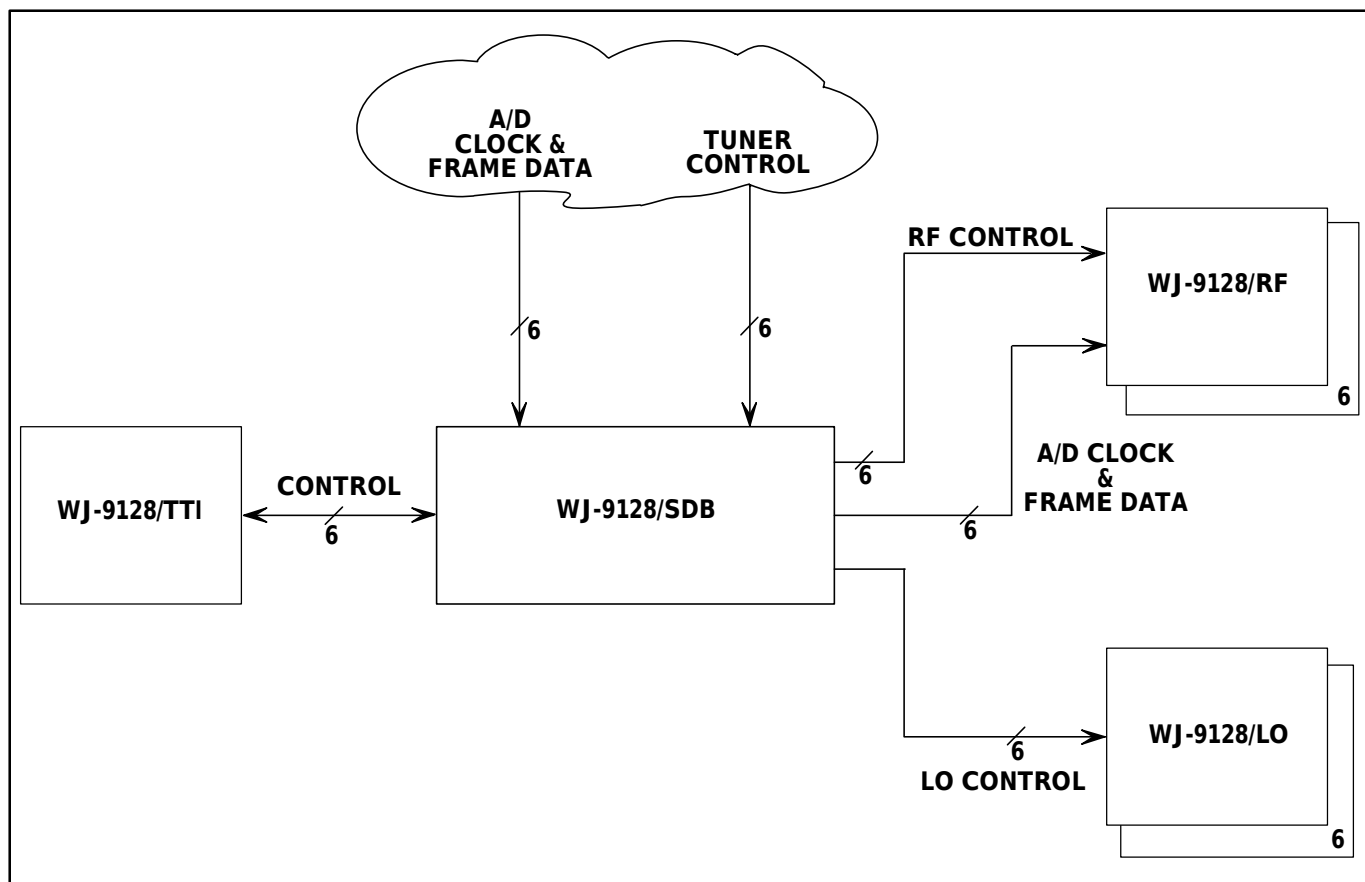
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All International sales of WJ equipment are subject to USA export license approval.

This material provides up-to-date general information on product performance and use. It is not contractual in nature, nor does it provide warranty of any kind.

Specifications

Operating Temperature	0° to 50°C
Storage Temperature	-40° to +70°C
Humidity	0 to 95%, non-condensing
Altitude	50,000 ft (1525 meters), non-operating 24,000 ft (730 meters), operating
Shock	Designed to MIL-STD-810D, bench handling
Power Consumption	35 W



TIDY TIPS System Connection Scheme

TIDY TIPS Control Interface Definition

Nomenclature	TT Control
Connector Designation	J1 through J6
Connector Type	MS27474E14B35P
Mating Connector	MS27473E14B35S
Connector Location	Rear Panel
Interface Standard	EIA RS-422, 120 Ohm Termination
Pin Number	Description
1	Signal Ground
2	Data 7 (+)
3	Data 7 (-)
4	Data 6 (+)
5	Data 6 (-)
6	Data 5 (+)
7	Data 5 (-)
8	Data 4 (+)
9	Data 4 (-)
10	Data 3 (+)
11	Data 3 (-)
12	Data 2 (+)
13	Data 2 (-)
14	Data 1 (+)
15	Data 1 (-)
16	Data 0 (+)
17	Data 0 (-)
18	Address 1 (+)
19	Address 1 (-)
20	Address 0 (+)
21	Address 0 (-)
22	Strobe (+)
23	Strobe (-)
24	Ack (+)
25	Ack (-)
26	A/D Temp (+)
27	A/D Temp (-)
28	Power Supply (+)
29	Power Supply (-)
30	Synthesizer Phase Lock (+)
31	Synthesizer Phase Lock (-)
32	2nd-LO Phase Lock (+)
33	2nd-LO Phase Lock (-)
34	Signal Ground
35	Shield/Chassis Ground
36	Not Used
37	Not Used

TIDY TIPS Control Word Definition

Address	Definition
Address 00	
Data 7	Not Used
Data 6	Not Used
Data 5	MSB of RF Attenuator value
Data 4	.
Data 3	.
Data 2	.
Data 1	.
Data 0	LSB of RF Attenuator value
Address 01	
Data 7	Not Used
Data 6	Not Used
Data 5	Not Used
Data 4	300-MHz bit
Data 3	10-MHz BCD digit of 1st LO
Data 2	10-MHz BCD digit of 1st LO
Data 1	10-MHz BCD digit of 1st LO
Data 0	10-MHz BCD digit of 1st LO
Address 11	
Data 7	1-MHz BCD digit of 1st LO
Data 6	1-MHz BCD digit of 1st LO
Data 5	1-MHz BCD digit of 1st LO
Data 4	1-MHz BCD digit of 1st LO
Data 3	0.1-MHz BCD digit of 1st LO
Data 2	0.1-MHz BCD digit of 1st LO
Data 1	0.1-MHz BCD digit of 1st LO
Data 0	0.1-MHz BCD digit of 1st LO

1st LO = Tuned Frequency + 219 MHz

WJ-9128/SDB Control Definition

Pin	Definition
WJ-9128/RF Module	
Pin 1	Clock
Pin 2	Strobe 1
Pin 3	Strobe 3
Pin 4	Strobe 5
Pin 5	Status Line
Pin 6	Status Line
Pin 7	LED 1
Pin 8	GND
Pin 9	Data
Pin 10	Strobe 2
Pin 11	Strobe 4
Pin 12	Status Line
Pin 13	Status Line
Pin 14	Status Line
Pin 15	LED 2
WJ-9128/LO Module	
Pin 1	Clock
Pin 2	Strobe 1
Pin 3	Strobe 3
Pin 4	Strobe 5
Pin 5	Status Line
Pin 6	Status Line
Pin 7	LED 1
Pin 8	GND
Pin 9	Data
Pin 10	Strobe 2
Pin 11	Strobe 4
Pin 12	Status Line
Pin 13	Status Line
Pin 14	Status Line
Pin 15	LED 2