



## Radio Telephone Interconnects

Midian Electronics' Radio-Telephone Interconnects (phone patches) connect between a telephone line and a base station radio or repeater to allow mobile or portable radio users to make and receive telephone calls.

Midian's interconnects are available in four models:

**DTI-1:** Deluxe Radio-Telephone Interconnect in a slim 19" rack mount configuration. Features a swinging hinge for easy installation and calibration.

**DTI-2:** Deluxe Radio-Telephone Interconnect in a desktop configuration.

**STI-1:** Standard Radio-Telephone Interconnect in a slim 19" rack mount configuration. Features a swinging hinge for easy installation and calibration.

**STI-2:** Standard Radio-Telephone Interconnect in a desktop configuration.

## Applications

**Radio-Telephone Interconnect (Phone Patch):** Enables radio users to make telephone calls or to receive a phone call on a two-way radio.

**Phone-Line Extender:** When used in conjunction with Midian's TRA, the interconnect and TRA can extend a phone line using two-way radios into areas without land-line or cellular coverage.

**Repeater Maker:** By connecting 2 two-way radios to the DTI series interconnect, the unit can serve as a repeater maker.



Shown: DTI-2

## Features

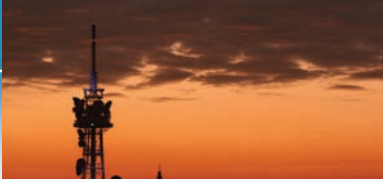
**Common Features:** The following features are common to the STI and DTI series interconnects:

- **Landline to Two-Way Radio Calls:** Two-way radios may receive phone calls from a landline. The caller may enter a radio's unit ID to speak with a specific user in a multi-user system. In a single user system the radio answers with multiple PTT clicks.
- **Two-Way Radio to Landline Calls:** Two-way radios without a DTMF keypad can have the interconnect dial a pre-programmed per-user telephone number by pressing the PTT switch multiple times. Two-way radios with a DTMF keypad can connect to the phone patch and then manually dial the desired telephone number.

**DTI Features:** The following features are exclusive to the DTI series interconnects:

- **Repeater Controller:** In addition to being a phone patch the DTI series can act as a repeater maker by connecting 2 two-way radios to the unit.
- **CTCSS/DCS Validation:** The phone patch can use CTCSS/DCS and DTMF to validate a user before allowing the user access to the interconnect or repeater.
- **Voice Scrambler Option:** Allows systems with radio encryption to talk over the air in secure mode with the telephone caller.

**STI Option A:** This option is available on the STI-1 or STI-2. It enables the phone patch to work in an HF system using an operator control box to connect and disconnect calls.



### DTI/STI: General Specifications

Operating Voltage	13-18 VDC
Operating Current	25 mA
Operating Temperature	-30 to +60 C
RX Input Level	150 - 2500 mV p-p
TX Output Level	2/3 System Deviation
Telephone Line Input Level	-14 to +4 dB (Adjustable)

Interconnect Features	DTI-1/2	STI-1/2
Full Duplex & Half Duplex	Yes	Yes
Simplex & Simplex with Sampling	Yes	Yes
Option Voice Scrambler	Yes	No
Pulse Tone or DTMF Dialing	Yes	Yes
Collect Tone for DTMF Trunking	Yes	No
Memory Dial Locations	350	100
ANI Digit Length	4 or 5	4
CTCSS/DCS Validation with Connect/Disconnect ANI	Yes	No
Programmable ANI Connect/Disconnect Codes	350	100
Repeater Maker	Yes	No
CTCSS/DCS Validation for Repeater Access	Yes	No
ANI Validation for Repeater Access	Yes	No
Common Wiretap Capability Activated by ANI	Yes	No
Delinquent Account Disable/Re-enable	Yes	Yes
Per User Call Limit Timers & Toll Restrictions	Yes	Yes
Programmable Morse Code Station ID	Yes	Yes
Toll Restrict Override Codes	10	10