(Continued)

4 | DTE & DCE Explained - DB9/DTE to DB9/DCE Straight Modem Cable

DTE DEVICE (COMPUTER) DB9			CONNECTIONS	DCE DEVICE (MODEM) DB9		
Pin#	RS-232 Signal Names	Signal	Signal Direction	Pin#	DB9 - RS-232 Signal Names	Signal
1	Carrier Detector (DCD)	CD	←	1	Carrier Detector (DCD)	CD
2	Received Data (RX)	RD	←	2	Received Data (RX)	RD
3	Transmit Data (TX)	TD	→	3	Transmit Data (TX)	TD
4	Data Terminal Ready	DTR	→	4	Data Terminal Ready	DTR
5	Signal Ground/Common (SG)	GND	—	5	Signal Ground/Common (SG)	GND
6	Data Set Ready	DSR	←	6	Data Set Ready	DSR
7	Request to Send	RTS	→	7	Request to Send	RTS
8	Clear to Send	CTS	←	8	Clear to Send	CTS
9	Ring Indicator	RI	←	9	Ring Indicator	RI
	Soldered to DB9 Metal - Shield	FGND	—		Soldered to DB9 Metal - Shield	FGND

+ Recommended Accessories

DB9F to DB25M Serial Cable, 1.8m
Model BB-232CAM

DB25M to DB25F Serial Cable, 1.8m
Model BB-232AMF5

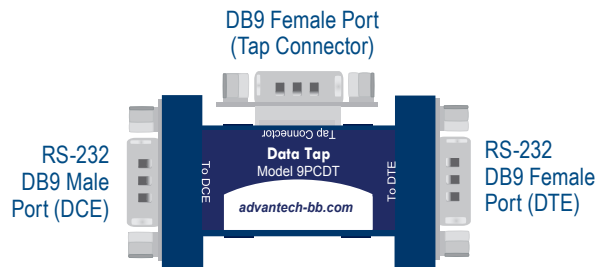**ADVANTECH**

+ QUICK START GUIDE

BB-9PCDT

RS-232 9-Pin Data Tap

Before you begin, be sure you have the following:

+ BB-9PCDT RS-232 Data Tap
+ Serial cable (not included)

ADVANTECH

Fast and easy on the web: **www.advantech.com**

Product Overview

DB9 Female Port
(Tap Connector)

RS-232
DB9 Male
Port (DCE)

RS-232
DB9 Female
Port (DTE)

Data Tap
Model 9PCDT
advantech-bb.com

**Mode BB-9PCDT
RS-232 9-Pin Data Tap**

ALL DIODES 1N4148
REV1—ADDED R1 FOR HIGHER BAUDRATE
SUPPORT (UP TO 115.2K) NEWER PC HAD
PROBLEM PULLING LINE DOWN OR TO −10V
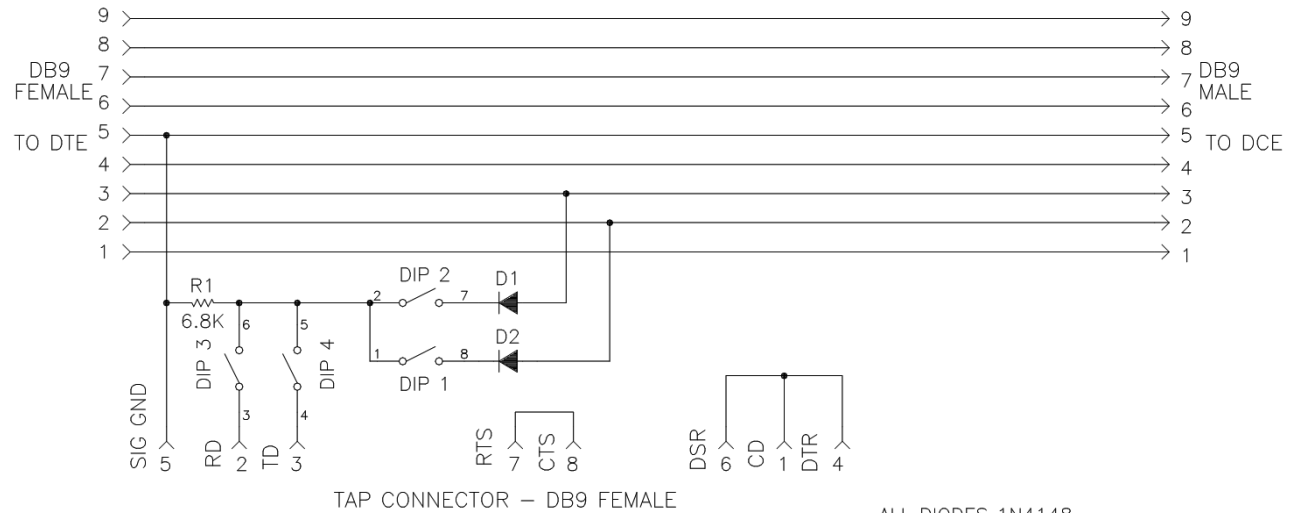
TAP CONNECTOR — DB9 FEMALE

1 | Inserting Into Your RS-232 Line

Model BB-9PCDT allows an RS-232 port to tap into and check the data being transmitted between two other RS-232 ports. Switches make it simple to choose between monitoring the DCE or DTE port. Model BB-9PCDT also allows the monitoring port to be either DTE or DCE.

- All nine lines are run straight through from the DCE to the DTE connectors.
- On the Tap Connector, RTS (Pin 7) is tied to CTS (Pin 8), and DSR (Pin 6) is tied to CD (Pin 1) and DTR (Pin 4).
- Signal Ground (Pin 5) is tied into the Signal Ground for the DCE and DTE connectors.

2 | DIP Switch Settings

1. Pin 2
2. Pin 3
Main
3. Pin 2
4. Pin 3
Tap
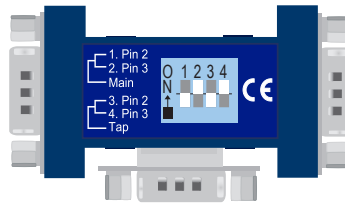
SWITCH	DESCRIPTION
1	Monitor RD (Pin 2)
2	Monitor TD (Pin 3)
3	Tap Receives Data on Pin 2
4	Tap Receives Data on Pin 3

3 | RS-232 Connections

TD (INPUT)

SG

RD (OUTPUT)

RTS (INPUT)

CTS (OUTPUT)

DTE (Male)

TD (OUTPUT)

RD (INPUT)

SG

RTS (OUTPUT)

CTS (INPUT)

DCE (Female)