

CAN Talk Utility Instructions

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The CANTALK program allows ASCII CAN messages to be exchanged between CAN cards on two computers (each running CANTALK) or between two CAN cards on the same computer.

NOTE: On exiting the program, the current configuration is saved in a text file named *cantalk.cfg*. But the first time the program runs, “Error reading cantalk.cfg” is reported because the *cantalk.cfg* file has not yet been created. Each time the program starts, *cantalk.cfg* values are used to replicate the configuration last used.

When first executed, CANTALK presents the following screen—with default data shown in blue:



The above screen is used to configure the local CAN card and to specify the MAC ID of the other CAN card which will receive the Transmitted Messages from the local card. The TAB key moves the cursor between editable fields (boxes), including the Transmitted Messages field—but not the read-only fields for Received Messages and Error Messages. The fields on the left are used to configure the:

- I/O address in the hex range: 0-3FF
- IRQ value in the decimal range: 0-15 (but not 1, 8 or 13)
- Baudrate value in the range: 1-3, where:
 - 1 = 125 kbps
 - 2 = 250 kbps
 - 3 = 500 kbps
- RX MAC ID (local CAN card) in the decimal range: 0-63
- TX MAC ID (other CAN card) in the decimal range: 0-63

To transmit a message from the local card, type the message in the Transmitted Messages field and press the ENTER (CR) key. It will be received and displayed in the Received Messages field of the other CANTALK screen, but only if the other card's RX MAC ID matches the TX MAC ID specified in the CANTALK screen of the local card.

For the local card to receive messages from the other CAN card, the other card's configuration screen must specify a TX MAC ID which matches the RX MAC ID of the local card. Messages will be displayed in the Received Messages field as they are received.

Error conditions are reported in the Error Messages window and must be corrected before the cursor can advance to the next field.

CANTALK will operate between two boards installed on the same computer with RX MAC ID and TX MAC ID of the second board assigned automatically by the program. In this mode, Transmitted Messages are echoed in the Received Messages field. When CANTALK is invoked in the DOS command line, the second card's I/O address and IRQ must be defined on the command line using the form:

cantalk ioaddress2 irq2

CANTALK uses DeviceNet Group 3 messages for sending and receiving—with a fixed Group 3 Message ID of '100'. The RX MAC ID is encoded in the lower 6 bits of the identifier, and the TX MAC ID is stored in the first data byte of the packet. Up to 7 ASCII characters can be sent in each packet. If the message contains more than 7 characters, multiple packets will be sent until the entire message is transmitted.

CAUTION: CANTALK could interfere with communication on an existing DeviceNet installation if any other device expects to use the Group 3 message ID '100'.