

## Quick Start Guide

The ProTalk Cv2 is a very flexible device capable of monitoring and reporting discrete or analog inputs and controlling multiple discrete outputs. To utilize the full capabilities of this device, consult the Instruction Manual as well as the ProTalk Cv2 Configuration program and Help files.

This document is a short description of the steps required to use this product as a basic discrete input Alarm Reporting Unit (ARU) including:

1. Before You Begin
2. Installing the ProTalk Cv2
3. Programming the Embedded Cellular Transceiver
4. Programming Telephone Numbers
5. Recording Alarm Messages
6. Testing the Installation
7. Product Support

## 1. Before You Begin

### What's Included

The Cv2 is an alarm reporting unit with an embedded CDMA transceiver for use on a CDMA network. Included with this device are the following:

- 16 pin terminal block for wiring alarm inputs
- 10 pin terminal block for wiring power and outputs
- Null-modem serial cable for programming using a PC
- Dual Band Antenna
- CD containing the programming software and manuals

### System Requirements

The Cv2 is designed to operate on cellular networks. It contains a CDMA transceiver that will work where there is 1900MHz PCS, 800MHz cellular or 800MHz AMPS services. To operate on a wireless network, an account with a local wireless service provider and a Mobile Identification Number (MIN) for the unit are required.

Additionally to program the Cv2 and the embedded transceiver, one of the following is required:

- Standard telephone set with DTMF keypad, or
- Personal Computer with CD Drive and RS232 serial port, running Windows 98/2000/XP

### Registering the Cellular Transceiver

To program the embedded cellular transceiver for use on a CDMA network, you need to have an account set up with your local wireless provider and obtain a Mobile Identification Number (MIN) for this unit. Request a MIN from a local wireless provider with the following pieces of information:

- Electronic Serial Number (ESN) - printed on the side of the Cv2
- The installed 'home' location - used to establish the local calling region
- A billing contact name and address

ESN (10 digits) \_\_\_\_\_

MIN (10 digits) \_\_\_\_\_

## 2. Installing The ProTalk Cv2

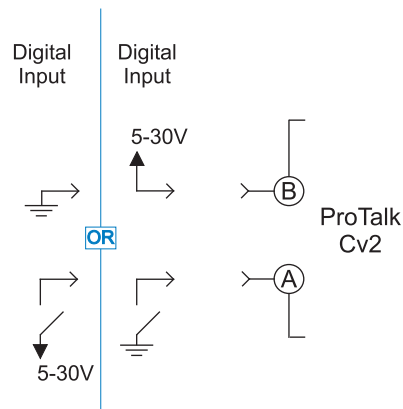
The Cv2 can be installed before or after the configuration has been transferred from the PC to the unit. If the Cv2 is configured in the shop before it is installed in the field, all of the programmed parameters and voices will remain unchanged in the unit's non-volatile flash memory.

Connect a DC power source to the terminals on TB2. The Cv2 requires a voltage of 12 to 24 VDC with current up to 1.25 Amps to operate; the supply voltage should be sized accordingly.

On power-up, the Cv2 will cycle through each LED and then flash the Hook indicator until it establishes contact with the cellular service. At any other time, the presence of power and correct operation are indicated by the brief flashing of the Voice LED every second.

### Wiring Inputs

Connect Inputs to Cv2 as pictured. If the input is normally open and goes to ground during an alarm condition, program the Alarm Format as "Normally High". If the opposite is true, set the Alarm Format to "Normally Low".



## 3. Programming the Embedded Cellular Transceiver

The ProTalk Cv2 contains an embedded CDMA transceiver that is capable of connection to a CDMA network. The configuration of this device can be done either with a standard telephone connected to the Program Jack, J1, or with the ProTalk Cv2 Configuration Software running on a PC. Refer to the Instruction Manual for details on using the PC software.

With power applied and the program telephone receiver taken off hook, the unit will announce the alarm status and then speak "Enter Control Code".

Approximately five seconds following this announcement, the unit will advance to the program mode and announce "Enter Program Code".

The following can be used as an outline of the procedure required to change the MIN (see Instruction Manual, Section 6 for further details on menu item 0). Note: the new MIN is entered and then terminated by the key sequence **00**. This sequence is used in this menu and most others to indicate the end of an entry. It is not part of the MIN.

Enter program mode

You: lift receiver  
Cv2: No alarms, Enter Command Code  
You: wait approximately five seconds  
Cv2: Enter Program Code

Select Menu 0, Cellphone Programming

You: **0** **\*** **\***  
Cv2: ESN is 069 point 12345678

Advance Menu

You: **\*** **\***  
Cv2: Mobile Number is 800 555 1212

Enter the new MIN

You: **8** **0** **0** **2** **6** **8** **2** **6** **4** **6** **\*** **\***  
Cv2: Mobile Number is 800 268 2646

Accept the new MIN

You: **\*** **\***  
Cv2: Enter Program Code

## 4. Programming Telephone Numbers

The ProTalk Cv2 is shipped with a default database that is configured so the unit will monitor all the inputs as normally low with the 'A' terminal tied to a positive voltage as an alarm condition. For any installation, the following items (as a minimum) remain to be configured:

1. Directory of contact telephone numbers
2. Voice messages for the site identifier and all alarm inputs

For additional program changes, refer to the Instruction Manual, Section 6.

The telephone numbers may be configured using a local telephone set or by downloading a new database using a PC. For details on creating or modifying a database using a PC, refer to the Instruction Manual, Section 4.

This sequence indicates how to enter contact telephone numbers into a directory so when an alarm is detected, the unit will dial a given number and announce the voice messages associated with each active alarm. If more complicated reporting sequences are desired, consult the Instruction Manual, Section 6.

Enter program mode

You: lift receiver  
Cv2: No Alarms, Enter Command Code  
You: wait approximately five seconds  
Cv2: Enter Program Code

Select Menu 2, Directories

You: 2 \*\*\*  
Cv2: Enter Directory

Select Submenu 1, Directory A

You: 1 \*\*\*  
Cv2: Directory A Line 1 is dial 2559544 Voice

Change the number

You: 2 \*\*\*  
Cv2: beep  
You: 2682646 \*\*\*  
Cv2: Directory A Line 1 is dial 2682646 Voice

Accept the number

You: \*\*  
Cv2: Directory A Line 2 is empty

Add a number

You: 2 \*\*\*  
Cv2: beep  
You: 1234567 \*\*\*  
Cv2: Directory A Line 2 is dial 1234567 Voice

## 5. Recording Alarm Voices

The ProTalk Cv2 is shipped without alarm voice messages stored in it. The Site ID and Alarm messages must be recorded.

The voice messages are recorded using a standard telephone set plugged into the program port or by entering the programming section when calling into the unit. For further details on recording these and other voice messages, consult the Instruction Manual, Section 6.

Enter program mode

Cv2: Enter Program Code

Select Menu 1, Voices

You: 1 \*\*\*  
Cv2: Enter Voice Code

Select Submenu 1, Site ID

You: 1 \*\*\*  
Cv2: Site is

Record the Site ID

You: 2 \*\*\*  
Cv2: beep  
You: "Ajax Compressor Station"  
Cv2: Site is "Ajax Compressor Station"

Return to Voices Menu

You: # \*\*\*  
Cv2: Enter Voice Code

Select Submenu 2, Alarms

You: 2 \*\*\*  
Cv2: Alarm one is

Record Alarm 1

You: 2 \*\*\*  
Cv2: beep  
You: "Power Failure"  
Cv2: Alarm one is "Power Failure"

Record Alarm 2

You: \*\*  
Cv2: Alarm 2 is  
You: 2 \*\*\*  
Cv2: beep  
You: "Emergency Shutdown"  
Cv2: Alarm 2 is "Emergency Shutdown"

## 6. Testing the Installation

It is advisable to test the signal strength of the cellular network as well as the operation of the directories when installing the Cv2. If the signal strength is low, additional measures may be required to ensure reliable operation.

### Checking the Received Signal Strength (RSSI)

Using a standard telephone plugged into the program jack, J1:

Enter program mode

You: lift receiver  
Cv2: No Alarms, Enter Control Code  
You: wait approximately five seconds  
Cv2: Enter Program Code

Select Menu 9, Cellphone Configuration

You: 9 \* \*  
Cv2: Code one is 8, 8, 8, ...(this is the RSSI)  
(The Cv2 speaks a numerical value between 0 and 13 representing the signal strength. A signal strength near 8 is typical with larger values indicating a stronger signal. A value of 2 or less is considered poor.)  
You: \* \*  
Cv2: Code two is 82  
(This and the remaining configuration parameters reflect additional details of the transceiver operation. See the Instruction Manual, Section 9 for further details.)

### Telephone Number Precautions

All of the telephone numbers that are entered into a directory should be carefully checked to guarantee that they are valid numbers and that local or long distance dialing is appropriate. After the Cv2 has been programmed, a test should be performed to confirm that these numbers are called correctly.

The Cv2 is programmed to prevent excessive unanswered or invalid calls on the cellular network by counting the number of unacknowledged or unsuccessful calls that have been made sequentially. If this count is greater than fifty, the phrase "Directory X Error" is added to the alarm announcements (where X indicates the directory). If the Cv2 continues to place unacknowledged calls, it will eventually stop calling. It will always still answer incoming calls but no further outgoing calls will be attempted until the acknowledge code is received, clearing all counters.

## 7. Product Support

Thank you for choosing the ProTalk Cv2 from Barnett Engineering Ltd.

### Technical Support

Technical Support for your ProTalk Cv2 is available as follows:

#### Network & Billing Support

If you have any questions related to network connectivity or your wireless account, please contact your local service representative.

#### Product Support

For questions related to activation, performance, service, repair, or other technical or product support concerns, please contact Barnett Engineering Ltd. at 1-800-268-2646 or email [support@barnett-engg.com](mailto:support@barnett-engg.com)

### Product Repairs

For all your repair needs, please contact Barnett Engineering Ltd.

Barnett Engineering Ltd. commits to a 'Repair Turnaround Time' of thirty (30) business days on all units under warranty. 'Repair turnaround Time' is defined as the time elapsed from the day the defected product arrives at Barnett Engineering Ltd.'s facility located in Calgary, Alberta to the day the repaired product is returned and received by you.

For non-warranty units, please call Barnett Engineering Ltd. and ask for a repair estimate.

### Shipping

Customers are responsible for all shipping costs, to and from Barnett Engineering Ltd.