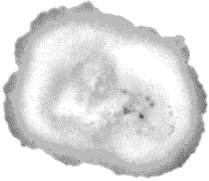


PORTAVIEW JUNIOR Model PV20



INSTRUCTIONS



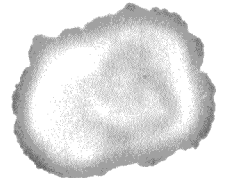
Krown
Research, Inc.

CONGRATULATIONS!

You have chosen the PortaView Junior/Model PV20, a state-of-the-art TDD utilizing the latest microprocessor technology. Care has been taken in its production to maintain Krown's high quality standards and to satisfy your needs as our customer.

We are pleased to provide you with a low cost unit with so many conveniences:

- Direct Connect
- Auto Answer
- Keyboard Dialing
- International Code



Your PortaView Junior can be upgraded at any time to include the following:

- ASCII
- Electronic Voice
- External Printer

For maximum benefit, please read this instruction booklet completely before operating your PortaView Junior.

Thank you for choosing Krown Research.



CONTENTS

PART		PAGE
	Introduction	1
1	Getting Started	3
2	How to Make a TDD Call	7
	A Acoustic Mode	7
	B Direct Connect Mode	8
3	How to Answer A TDD Call	9
	A Acoustic Mode	9
	B Direct Connect Mode	10
4	TDD Typing Abbreviations	11
5	Special Features	12
	A Auto Answer	12
	B International Code	14
	C ASCII (Optional)	14
	D Electronic Voice (Optional)	15
	E Printer (Optional)	16
	F Carrying Case (Optional)	16
6	Use and Care of Rechargeable Batteries	17
7	Service Information	19
	A Helpful Hints	19
	B What To Do If...	19
	C Repair	20
	D Warranty	20
8	FCC Required Information	21
9	Specifications	22

1 GETTING STARTED

It is important to choose which mode you wish to use to make or receive TDD calls. Acoustic Mode uses the rubber coupler, while Direct Connect Mode uses the modular jack in back of the machine.

ACOUSTIC MODE

PICTURE 1



DIRECT CONNECT MODE

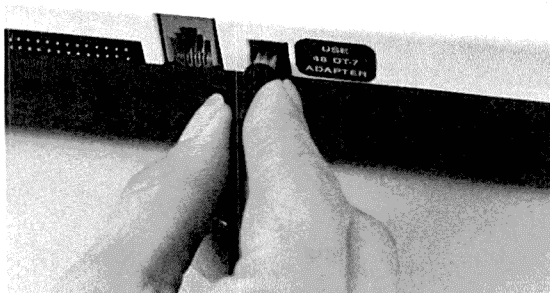
PICTURE 2



ACOUSTIC MODE

1. Set your PortaView Junior near your telephone and near an electrical outlet.
2. Plug the adapter/charger cord into the jack in back of the PortaView Junior.

PICTURE 3



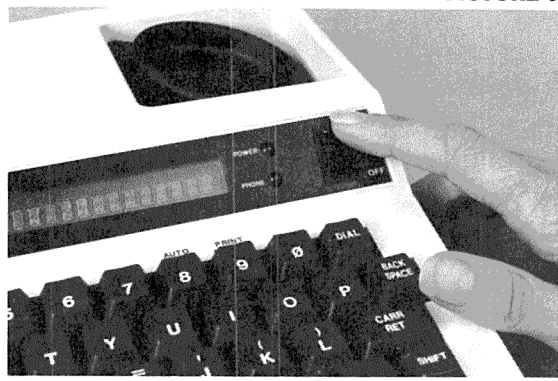
3. Plug the adapter/charger into the electrical outlet.

PICTURE 4



4. Turn on the PortaView Junior by pushing the on/off switch at the right of the display.
 - When you turn on the unit, it is automatically in Acoustic Mode.

PICTURE 5



5. The power light will glow red. You are ready to make or receive TDD calls in Acoustic Mode.

- The display will read, "PORTAVIEW 20".

PICTURE 6



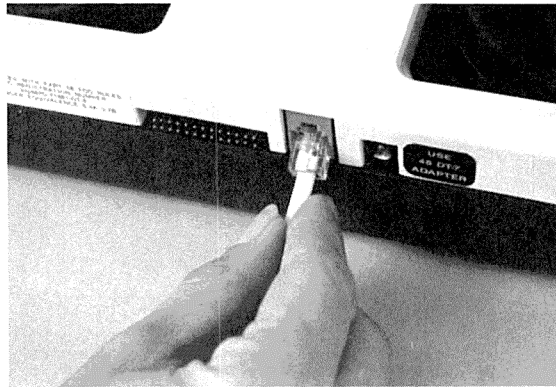
CAUTION

The adapter/charger is NOT interchangeable. You MUST use the adapter that comes with your unit.

DIRECT CONNECT MODE

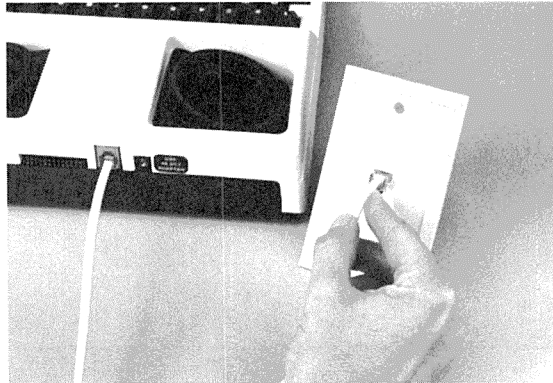
1. Set your PortaView Junior near your telephone and near an electrical outlet.
2. Plug the adapter/charger cord into the jack in back of the PortaView Junior.
3. Plug the adapter/charger into the electrical outlet.
4. Plug one end of the modular phone cord (provided) to the modular jack in back of your PortaView Junior.

PICTURE 7



5. Plug the other end into the telephone wall jack.

PICTURE 8



6. Turn on your PortaView Junior by pushing the on/off switch at the right of the display. The power light will glow red.
7. Hold down the CONTROL key and press the DIAL key.
 - The display will read, "DIRECT CONNECT".

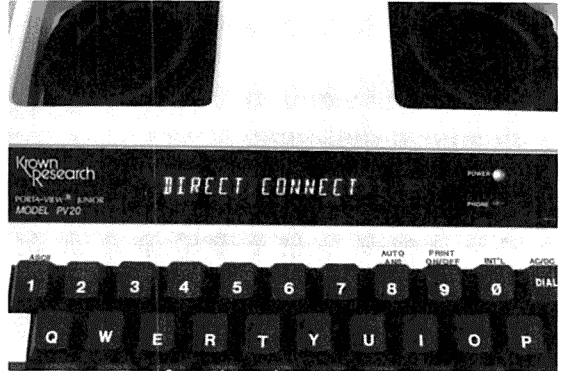
8. You are ready to make or receive calls in Direct Connect Mode.

NOTE: Any time you wish to change modes, simply hold down the CONTROL key and press the DIAL key. Repeat until the desired mode is displayed.

PICTURE 9



PICTURE 10



2. HOW TO MAKE A TDD CALL

A. ACOUSTIC MODE

1. Turn on your PortaView Junior.
2. Put the telephone handset into the rubber acoustic cups. The telephone cord must be on the left. (See Picture 1)
3. Watch the signal light to make sure it glows red steadily. A steady red glow indicates a dial tone.

If the signal light blinks, press your phone receiver button for a few seconds; then release and watch for a steady red light.

4. Dial the number you are calling.

The signal light lets you know what is happening on the phone line. If it blinks slowly, the phone is ringing. If it blinks fast the line is busy.

5. Wait for the other person to answer you and type GA [Go Ahead] which is your signal to start typing.

If the signal light flickers, it may be a hearing person answering by voice. Press the space bar to let the person know it is a TDD call. (See Section 5D Electronic Voice)

6. After you respond, type GA [Go Ahead] to show it is the other person's turn to type a response.
7. Continue typing back and forth with the other party remembering to use GA.
8. When the conversation is finished, type GA TO SK [Go Ahead if you have more to say; I'm finished].
9. When both parties type SKSK, the conversation is finished. You can hang up the telephone and turn off your PortaView Junior.

B. DIRECT CONNECT MODE

1. Plug one end of the modular phone cord into the modular jack in back of your PortaView Junior. Plug the other end into the telephone wall jack. (See Pictures 7 and 8)
2. Turn on your PortaView Junior.
3. Press the DIAL key.
 - This gives you a dial tone.
 - The display will read, “ENTER PHONE NUMBER”.
4. Dial the number using the number keys on the keyboard.
 - The number will be pulse dialed.
5. Wait for the other party to answer you and type GA [Go Ahead] which is your signal to start typing.
6. After you respond, type GA [Go Ahead] to show it is the other person’s turn to type a response.
7. Continue typing back and forth with the other party remembering to use GA.
8. When the conversation is finished, type GA TO SK [Go Ahead if you have more to say; I’m finished].
9. When both parties type SKSK, the conversation is finished. You can turn off your PortaView Junior. The call is then disconnected.

If you have more calls to make, you do not have to turn off your unit. You can disconnect a call by changing modes:

1. Hold down the CONTROL key and press the DIAL key.
 - The display will read, “USE ACOUSTIC CUPS”.
2. Repeat.
 - The display will read, “DIRECT CONNECT”.
 - You are ready to make another call.

3 HOW TO ANSWER A TDD CALL

A. ACOUSTIC MODE

1. When the telephone rings, turn on the PortaView Junior and place the telephone handset into the rubber acoustic cups. (See Picture 1)
2. Type your greeting followed by GA to signal the other person to begin typing.
3. Continue typing back and forth remembering to use GA.
4. When you are finished, type GA TO SK.
5. When both parties type SKSK, the conversation is finished. You can hang up the telephone and turn off your PortaView Junior.

NOTE TO HEARING PEOPLE:

You can recognize an incoming TDD call in two ways:

1. The caller will press the space bar and you will hear electronic beeps,

OR

2. There will be silence on the other end. Assume this could be a TDD call and follow the steps given above.

B. DIRECT CONNECT MODE

1. When the phone rings, turn on your PortaView Junior. Make sure the modular phone cord is plugged into the back of the PortaView Junior and to the wall jack. (See Pictures 7 and 8)
2. Hold the CONTROL key and press the DIAL key.
 - The display will read, "DIRECT CONNECT".
3. Type your greeting to the caller followed by GA to signal the other person to begin typing.
4. Continue typing back and forth remembering to use GA.
5. When you are finished, type GA TO SK.
6. When both parties type SKSK, the conversation is finished. You can turn off your PortaView Junior. The call is then disconnected.

IMPORTANT NOTE: It is necessary to use CONTROL and DIAL keys every time you wish to change the Direct Connect Mode. Otherwise, the machine will always operate in Acoustic Mode.

PICTURE 11



PICTURE 12



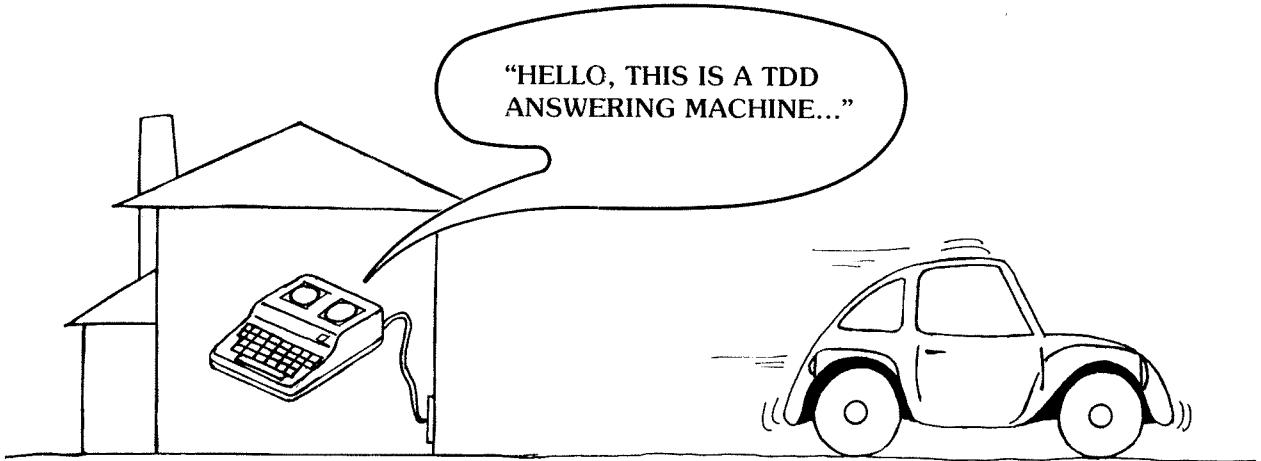
4. TDD TYPING ABBREVIATIONS

TDD users often abbreviate commonly used words or expressions to save time. Here are some common abbreviations used in TDD communication.

GA	Go Ahead (your signal to begin typing)
SK	Stop Keying (sign off)
QQ	Question - takes the place of (?)
PLS	Please
MIN	Minute
HD	Hold
UR	Your
THX	Thanks
XXXXXX	Mistake
GA TO SK	Go Ahead if you have more to say; I'm Finished
U	You
THRU	Through
XOX	Hugs and Kisses
MSG	Message

5. SPECIAL FEATURES

A. AUTO ANSWER



The Auto Answer feature of your PortaView Junior answers your phone and takes TDD messages when you are not available.

IMPORTANT: To use your Auto Answer feature, you **MUST** have an external printer attached to your PortaView Junior. (see note on opposite page)

To Operate:

1. **Make sure your PortaView Junior is plugged into an electrical outlet, and turned on.**
2. **Your external printer must be connected to the PortaView Junior. To connect the printer, follow the instructions provided with the printer.**
3. **Hold the CONTROL key and press the number "8" key.**
 - The display will read, "NO. OF RINGS (1-9)".
4. **Select the number of rings for the PortaView Junior to answer the phone from one to nine. Press that number.**
 - The Auto Answer feature is automatically on.

- The display will read, “AUTO ANSWER ON”.

The outgoing Auto Answer message will read as follows:

“HELLO, THIS IS A TDD ANSWERING MACHINE. PLEASE LEAVE YOUR NAME, NUMBER, AND MESSAGE, AND YOUR CALL WILL BE RETURNED. THANK YOU. GA.”

5. To review your messages, simply refer to the paper in the printer.

NOTE: You may purchase an external printer from Krown Research or an authorized Krown Research Distributor. Connect it to the PortaView Junior using the instructions provided with the printer.

If you already have a parallel [Centronics compatible] printer, the following connector cable is available from Radio Shack:

Model 100 Printer Cable [26-1409]

B. INTERNATIONAL CODE



If you want to place a call outside the United States or Canada, you may need to communicate in the International [50 Baud] TDD code.

To operate:

1. Hold down the CONTROL key and press the “0” [zero] key.
 - The display will read, “INTERNATIONAL ON”.
2. Place your international call.

To return to U.S./Canada TDD Code:

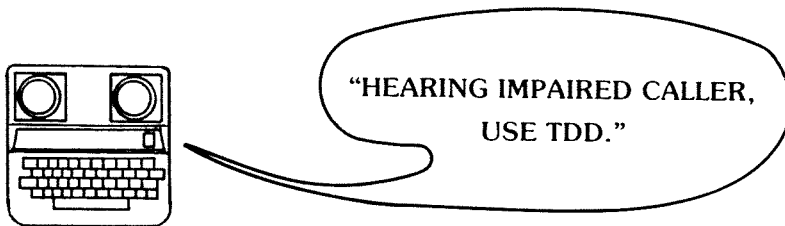
1. Hold down the CONTROL key and press the “0” [zero] key.
 - The display will read, “INTERNATIONAL OFF”.

C. ASCII [Optional]

The ASCII feature is an option which can be purchased for your PortaView Junior. This feature will enable you to access information from a computer.

If you ordered ASCII with your PortaView Junior, a separate instruction booklet is provided.

D. ELECTRONIC VOICE [Optional]



Your PortaView Junior can be equipped with an Electronic Voice feature which sends a voice message to alert hearing persons to incoming TDD calls. This can be especially helpful in an emergency when it is vital that the hearing person switches over to a TDD to respond to the hearing impaired caller.

The Electronic Voice begins when you turn on your PortaView Junior:

“HEARING IMPAIRED CALLER, USE TDD.”

- The display will read, “PV20-VOICE ON”.

The voice message continues until someone types back on a TDD.

To STOP the Electronic Voice:

1. You may press any key on the keyboard, or
 2. Hold down the CONTROL key and press the SPACE BAR.
- The display will read, “VOICE OFF”.

NOTE: If you stop the Electronic Voice by pressing a key, that character will appear on your printout [if you are using a printer].

To START the Electronic Voice

1. Hold down the CONTROL key and press the SPACE BAR.

The display will read, “VOICE ON”, and the voice message is sent.

This voice announcement will continue to be sent until someone responds with a TDD or until the caller stops the voice.

E. PRINTER [Optional]

If you wish to have a printed copy of your TDD conversations/messages, you may connect an external printer to the PortaView Junior. It is necessary to have a printer if you wish to use the Auto Answer feature on the Portaview Junior.

You may purchase an external printer from Krown Research or an authorized Krown Research Distributor. Connect it to the PortaView Junior using the instructions provided with the printer you choose.

If you already have a parallel (Centronics compatible printer, the following connector cable is available from Radio Shack:

Model 100 Printer Cable [26-1409]

When you turn on the PortaView Junior, the printer is automatically on.

To turn off the printer:

1. Hold down the CONTROL key and press the “9” key.
 - The display will read, “PRINTER OFF”.

To turn on the printer:

1. Hold down the CONTROL key and press the “9” key.
 - The display will read, “PRINTER ON”.

PICTURE 13

F. CARRYING CASE [Optional]

You may purchase a carrying case for your PortaView Junior for traveling convenience and extra protection for your unit. Feel free to contact Krown Research or an authorized Krown Research Distributor.



6. USE AND CARE OF RECHARGEABLE BATTERIES

The PortaView Junior comes with a rechargeable battery pack as a standard feature. The battery can supply up to three hours of power when the PortaView Junior is not plugged into an electrical outlet.

To **USE** the battery:

1. Disconnect the adapter/charger from the PortaView Junior.
2. Use the PortaView Junior as usual.

To **RECHARGE** the battery:

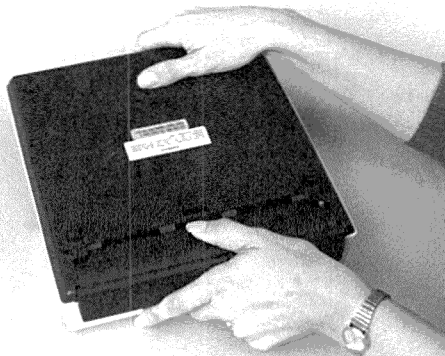
1. The Power Light will blink when the battery is weak.
2. Turn off the PortaView Junior.
3. Connect the adapter/charger to the PortaView Junior.
4. Plug the adapter/charger into an electrical outlet.
5. Leave the PortaView Junior plugged in and turned off for 12 to 15 hours.

You can use the PortaView Junior as the batteries recharge. Just remember to turn the unit off when you finish.

To **REPLACE** the battery:

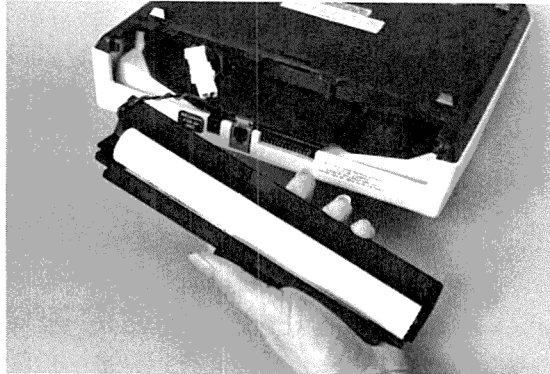
1. Turn the PortaView Junior upside down and place in your lap.
2. Find the battery door.
3. Press the door latch marked "PRESS" with your thumb.
4. Slide the door out.
5. With a firm grip on the white connector, carefully separate the two halves of the connector.

PICTURE 14



4. Slide the door out.

PICTURE 15



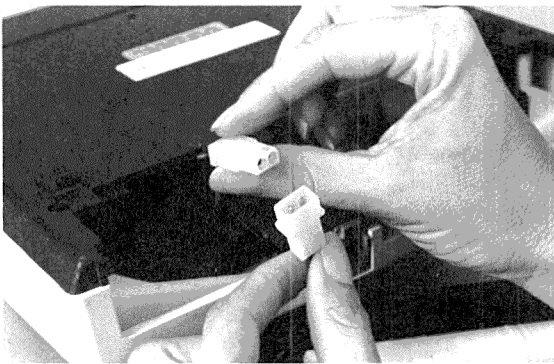
5. With a firm grip on the white connector, carefully separate the two halves of the connector.

Gently wiggle and pull at the connector until it disconnects.

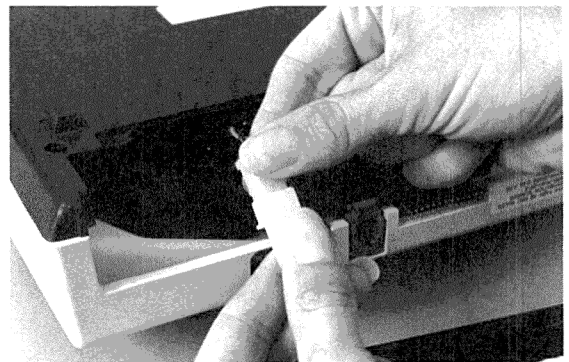
6. Connect the replacement battery by attaching the two halves of the white connector.

The battery has been built so that it is impossible to connect it the wrong way.

PICTURE 16



PICTURE 17



7. Place the battery back in the compartment.
8. Snap the door back in place.

IMPORTANT NOTE:

It is important to “exercise” the battery regularly to lengthen the overall life of the battery. From time to time (once per month), allow the battery to run down until the power light flashes. Recharge using the procedure given on previous page.

7. SERVICE INFORMATION

A. HELPFUL HINTS

- ★ Be sure to turn off your PortaView Junior when not in use.
- ★ Avoid exposing your unit to extreme temperatures - hot or cold.
- ★ Avoid dropping the unit - it is a delicate electronic instrument.
- ★ If you are having trouble sending or receiving messages, make sure your phone cord is to the left (acoustic mode).
- ★ When travelling by air, carry your PortaView Junior on as hand luggage. At the security station, do not allow the unit to be X-rayed. Ask for a hand inspection instead. **DO NOT** check in the unit as baggage.
- ★ Be careful not to spill liquids onto the PortaView Junior. Also, protect it from dust and dirt. (Dust Covers are available from Krown Research or authorized distributor).
- ★ Exercise the battery often to ensure years of service.

B. WHAT TO DO IF...

- ★ The PortaView Junior won't send or receive.
 1. Check to make sure the phone cord is to the left (acoustic mode).
 2. Check to see which mode you are in by using **CONTROL** and **DIAL**.
 3. If the battery is weak, begin using your adapter charger.
- ★ The battery runs down very quickly.
 1. Exercise the battery often by allowing it to run down completely. Then recharge it overnight.
- ★ The unit receives only numbers and figures.
 1. Press your "X" key several times to change to letters mode. Then proceed.

C. REPAIRS

If your PortaView Junior needs repair, pack it in the original shipping box along with the adapter/charger. PLEASE enclose a note describing the problem you are having.

You may send the unit to an authorized repair center or to:

Krown Research, Inc.
10371 West Jefferson Blvd.
Culver City, CA 90232
213-839-0181 (V/TDD) inside CA
800-833-4968 (V/TDD) outside CA

D. WARRANTY

Your PortaView Junior is covered for one full year from the date of purchase against all defects in materials or workmanship. Please fill out and send in the warranty card as soon as possible. Extended warranty information is included with your unit.

8. FCC REQUIRED INFORMATION

Your PortaView Junior Model PV20 has been granted a registration number by the Federal Communications Commission under Part 68 Rules and Regulations for direct connection to the telephone lines. The FCC requires that you be advised of the requirements involved with owning a telecommunication device.

1. Connect your PortaView Junior to the nationwide telephone network through a telephone company provided registered jack.

Your PortaView Junior cannot be plugged into a party line or directly connected to coin telephone service. You must use the acoustic coupler in these instances.

2. Before connecting your PortaView Junior, the FCC requires that you notify your local phone company Business Office. Call or write your TDD operator. The phone number and address is in the front of your phone book.

Your phone company will want to know:

- Your phone number
- Product Name: Krown Research PortaView Junior
- FCC registration number: BG487D-71481-DT-E
- Ringer equivalence: 0.4A 0.7B
- Jack: RJ11 RJ13

The FCC requires that you notify your local telephone company when you move your phone permanently.

3. Repairs may be made only by Krown Research or authorized Krown service agencies. This applies at any time during or after warranty. If such unauthorized repair is performed, registration, connection to the telephone lines and the remainder of warranty period all become null and void.
4. If your PortaView Junior causes harm to the telephone network, the telephone company may temporarily discontinue your service. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be given the opportunity to correct the situation, and

you will be informed of your right to file a complaint with the FCC.

5. Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your PortaView Junior. If changes occur, you will be notified in advance to give you an opportunity to maintain uninterrupted service.

9. SPECIFICATIONS

- Keyboard
45 key, 4-row keyboard
- Display
20 character
Blue/Green vacuum fluorescent
5.5mm character height
- Direct Connect/Auto Answer
Connects the PortaView Junior PV20 directly to the telephone line. Automatically answers calls and prints incoming message on external printer [Printer not included).
Fixed Auto Answer Message
Modular RJ-11 jack
Keyboard Pulse [rotary] Dialing.
- Printer Port
Standard Parallel Centronics Compatible Printer Port.
Uses standard Radio Shack cable.
- Communications
Baudot code, 45.5 Baud.
1 start bit, 5 data bits, 1.5 stop bits.
International [50 Baud] speed selectable.
Acoustically coupled to round and rectangular handsets.
- Power
AC charger/adaptor: Model 48DT-7
Heavy duty: 6VDC, 7.5VA
UL listed
Canadian Units Use:
AC charger/adaptor: Model 48-C
Heavy duty: 9VAC, 13.5VA
UL/CSA listed
Ni-Cad rechargeable 1.2AH, 5 cell battery pack
Customer replaceable, sealed pack
- Physical Dimensions
Size: W 10" [25.4cm] L 10" [25.4cm] H 2.5" [6.5cm]
Weight: 3 lbs. [1.36 kg] with batteries
- ASCII Code Modem Option
Computer Code - Bell 103 Modem [CCITT Modem optional]
110 and 300 Baud
Half/Full Duplex
Answer/Originate
- Electronic Voice Option
Signals hearing caller with synthesized voice
Automatic reset with incoming TDD tones

CAUTION

The adapter/charger is **NOT** interchangeable. You **MUST** use the adapter that comes with your unit.

Krown Research, Inc.

10371 W. Jefferson Blvd.

Culver City, CA 90232

(213) 839-0181 V/TDD Inside CA

(800) 833-4968 V/TDD Outside CA



"THE PORTA-PRINTER COMPANY"