# PRO-2030 80-Channel Direct Entry Programmable Scanner (200-0407)

# **FEATURES**

Your Realistic PRO-2030 80-Channel Direct Entry Programmable Scanner lets you in on all the action! This scanner gives you direct access to over 32,000 frequencies, including those used by the police department, fire department, ambulance services, amateur radio operators and transportation services. You can select up to 80 channels for your scanner to scan and you can change your selection at any time.

The secret to your scanner's ability to scan so many frequencies is its custom-designed microprocessor - a tiny, built-in computer. Your scanner also has these special features:

- Two-Second Scan Delay delays the scanning mode for 2 seconds before moving to another channel, so you can hear more replies.
- Memory Backup keeps the channel frequencies stored in your scanner's memory for up to three days without power.
- Lock-Out Function keeps channels you select from being scanned.
- Eight Channel Storage Banks lets you store 10 channels in each of 8 banks to group frequencies so you can easily identify calls
- Priority Channel helps keep you from missing important calls on a channel you specify.
- Direct Search scans for new and unlisted frequencies to find interesting broadcasts.
- Hyperscan scans and searches channels at 50 channels per second.
- Monitor Memories temporarily save up to ten frequencies you locate during a frequency search.
- Weather Band Key scans the preprogrammed weather frequencies to keep you informed of the most current weather conditions.
- Backlight lets you easily see the scanner's display at night

Your PRO-2030 covers all of these bands:

29-29.7 MHz	(ham radio 10 m)
29.7-50 MHz	(VHF Lo)
50-54 MHz	(ham radio 6 m)
108-136.975 MHz	(aircraft)
137-144 MHz	(government)
144-148 MHz	(ham radio 2 m)
148-174 MHz	(VHF Hi)
380-450 MHz	(ham radio and government)
450-470 MHz	(UHF Lo)
470-512 MHz	(UHF T)
806-823.9375 MHz	(UHF Hi)
851-868.9375 MHz	(UHF Hi)
896.1125-956 MHz	(UHF Hi)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions; (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC Notice

Your scanner might cause radio or TV interference, even when it is operating properly. To determine whether your scanner is causing the interference, turn off your scanner. If the interference goes away, your scanner is causing the interference. Try to eliminate the interference by:

- Moving your scanner away from the receiver.
- Connecting your scanner to an outlet that is on a different electrical circuit from the receiver.
- Contacting your local Radio Shack store for help.

If you cannot eliminate the interference, the FCC requires that you stop using your scanner.

For your records, please record your scanner's serial number in the space provided. The serial number is located on the back of the scanner.

Serial Number:	
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#### **PREPARATION**

## CONNECTING POWER

CAUTION: Use only the supplied AC adapter. Using a different adapter can damage your scanner and could present a safety hazard.

Follow these steps to power your scanner.

- 1. Plug the provided AC adapter's plug into the scanner's DC 12V jack.
- 2. Plug the adapter's power module into a standard AC outlet.

The memory backup circuit begins to function a few minutes after you plug in the scanner. If a power failure occurs or if the power cord is disconnected, this circuit stores information in the scanner's memory for up to three days.

#### CONNECTING THE ANTENNA

To attach the supplied telescoping antenna, screw it into the hole on the top of your scanner.

The antenna's length controls its sensitivity. Adjust the length of the telescoping antenna as follows for best reception.

29-54 MHz	Extend Fully (3 segments)
108-174 MHz	Extend 2 segments
380-512 MHz	
806-956 MHz	

## CONNECTING AN OPTIONAL ANTENNA

The telescoping antenna is adequate for strong local signals. For best results, attach a multi-band outdoor antenna (not supplied to the scanner.

Your local RadioShack store sells a complete line of outdoor antennas.

Follow these steps to install an outdoor antenna.

- 1. Select a location as high as possible.
- 2. Mount the antenna following the instructions that come with the antenna and its mounting hardware.
- 3. Plug the antenna into the scanner's ANT jack on the rear of the scanner using 50 Ohm coaxial cable (RG-58, RG-8/M or RG-8, not supplied). For lengths over 50 feet, use RG-8/M or RG-8 low loss, coaxial cable.

Note: This scanner uses a BNC antenna connector. You may need an antenna adapter, such as Cat. No. 278-120 to use other antennas.

WARNING: When installing or removing an outdoor antenna, use extreme caution. If the antenna starts to fall, let it go! It could contact overhead power lines. IF THE ANTENNA TOUCHES THE POWER LINE, CONTACT WITH THE ANTENNA, MAST, CABLE, OR GUY WIRES CAN CAUSE ELECTROCUTION AND DEATH! Call the power company to remove the antenna. Do not attempt to do so yourself.

#### CONNECTING AN EXTERNAL SPEAKER

In a noisy area, an extension speaker, such as RadioShack Cat. No. 21-549, positioned in the right place, might provide more comfortable listening.

Plug the speaker cable's 1/8-inch (3.5 mm) mini plug into the EXT SP jack on the back of the scanner. This automatically disconnect the internal speaker.

#### RESETTING AND INITIALIZING THE SCANNER

If the scanner's display locks up or does not work properly after you connect the power source, you might have to reset the scanner's display or initialize the scanner.

Follow these steps to reset the display.

- 1. Press POWER to turn on the scanner.
- 2. Press RESET on the back of the scanner using a pointed object, such as a ball-point pen.
- 3. Press POWER to turn on the scanner.

If this is not effective, initialize the scanner as directed below.

CAUTION: Initialize the scanner only when you are sure it is not working properly. This procedure clears all information you have programmed into the scanner.

- 1. Press POWER to turn on the scanner.
- 2. Press and hold CLEAR and then press RESET on the back of the scanner using a pointed object, such as a ball-point pen.
- 3. Press POWER to turn on the scanner.

# UNDERSTANDING YOUR SCANNER

## A LOOK AT THE DISPLAY

The display has several indicators that show the scanner's current operating mode. A quick look at the display will help you understand how to operate your scanner.

- MON appears when you listen to a monitor memory.
- BANK appears with numbers (1-8) to the right to show which channel storage banks are turned on for the scan mode. See UNDERSTANDING CHANNEL-STORAGE BANKS.
- SCAN appears when you scan channels.
- MANUAL appears when you manually select a channel.
- PROGRAM appears while you program frequencies into the scanner's channels.
- P appears when you listen to the priority channel.
- CH digits that precede this indicator show which channel the scanner is currently tuned to.
- MHz digits that precede this indicator show which of the 32,000 possible frequencies the scanner is tuned to.
- Error appears when you make an incorrect entry.
- PRIORITY appears when you turn on the priority channel feature.
- LOCKOUT appears when you manually select a locked channel.
- DELAY appears when you program a channel for a two second delay before scanning or when you listen to a channel programmed with the delay feature.
- WX appears when the scanner is in the weather band mode.
- SEARCH appears during a limit search (when L also appears) or a direct frequency search (when d also appears).
- $\land$  and  $\lor$  indicates the search direction.

# A LOOK AT THE KEYBOARD

Your scanner's keys might seem confusing at first, but a quick glance at this section should help you understand each key's function.

- POWER turns the scanner on and off.
- SCAN scans through the programmed channels.
- L/O lets you lock out a selected channel.
- PRI sets and turns on and off priority for a particular channel.
- LIMIT used during frequency searches. See SEARCHING FOR AND TEMPORARILY STORING ACTIVE FREQUENCIES.
- $\wedge$  searches frequencies up from the currently displayed frequency.
- MAN stops scanning and lets you directly enter a channel number.
- DLY programs a two-second delay for the selected channel.
- MON accesses the 10 monitor memories.
- SPEED changes the scanning or search speed from low to high or high to low.
- V searches frequencies down from the currently displayed frequency.
- Number Keys each has a single digit followed by a range of numbers. The single digit is the number entered when you enter a channel number or frequency. The range of numbers (21-30, for example) indicates the channels that make up a channel storage bank. See UNDERSTANDING CHANNEL-STORAGE BANKS.
- CLEAR clears an incorrect entry.
- PGM programs frequencies into channels.
- WX scans through the 7 preprogrammed weather channels.
- ENTER enters program frequencies into channels.

# UNDERSTANDING CHANNEL-STORAGE BANKS

You can store up to 90 frequencies into your scanner's memory. You store each frequency into either a permanent memory, called a channel, or a temporary memory, called a monitor. There are 80 available channels and 10 available monitor memories.

## CHANNEL STORAGE BANKS

To make it easier to identify and select the channels you want to listen to, channels are divided into 8 channel-storage banks of 10 channels each. Use each channel-storage bank to group frequencies, such as the police department, fire department, ambulance services, or aircraft.

For example, the police might use four frequencies, one for each side of town. You can program the police frequencies starting with Channel 1 (Bank 1) and program the fire department on Channel 11 (Bank 2). When you want to listen to only police calls, you can turn off the other banks.

#### MONITOR MEMORIES

The scanner also has 10 monitor memories. You use these memories to temporarily store frequencies while you decide whether to save them in channels. This is handy for quickly storing an active frequency when you search through an entire band. You can manually select these memories, but you cannot scan them. See UNDERSTANDING CHANNEL-STORAGE BANKS.

When you are in the monitor mode, one of the memory numbers (1-10) appears to the right of the MON indicator. The number indicates the current monitor memory.

#### **OPERATION**

# SETTING THE VOLUME AND SQUELCH

Follow these steps to set VOLUME and SQUELCH.

- 1. Set VOLUME to about 2 and SQUELCH to 10.
- 2. Slowly turn SQUELCH counterclockwise until you hear a hissing sound.
- 3. Adjust VOLUME to a comfortable sound level.
- 4. Slowly rotate SQUELCH clockwise until the hissing stops.

Note: If the scanner picks up unwanted, partial, or very weak transmissions, rotate SQUELCH clockwise to decrease the scanner's sensitivity to these signals.

## STORING FREQUENCIES

Your scanner has 90 channels into which you can store frequencies.

Follow these steps to store a frequency into a channel.

- 1. Press MAN. Enter the channel number you want to program.
- 2. Press PGM. PROGRAM appears on the display to indicate that the scanner is in the programming mode.
- 3. Enter a frequency.
- 4. Press ENTER to store the frequency.

#### Notes:

- If you made a mistake in Step 3, Error appears on the display. Press CLEAR and repeat Step 3.
- Your scanner automatically rounds down the entered frequency to the nearest valid frequency. For example, if you try to enter a frequency of 151.4730, your scanner accepts it as 151.4750.
- 5. Repeat Steps 1-4 to program more channels.

Note: If you want to program the next channel in sequence, repeat Steps 2-4.

# SEARCHING FOR AND TEMPORARILY STORING ACTIVE FREQUENCIES

Good references for active frequencies are RadioShack's "Police Call Guide Including Fire and Emergency Services," "Official Aeronautical Frequency Directory" and "Maritime Frequency Directory." We update these directories every year, so be sure to get a current copy.

If you do not have a reference to frequencies in your area, use these procedures to search for a transmission.

Note: Press DLY if you want to make the scanner pause 2 seconds after a transmission ends before it proceeds to the next frequency.

## LIMIT SEARCH

Limit Search lets you search within a range of frequencies. -L- appears on the display during a limit search.

- 1. Press PGM, then LIMIT. Lo appears on the display.
- 2. Enter the lower limit of the frequency range you want to search.
- 3. Press ENTER, then LIMIT. Hi appears on the display.
- 4. Enter the upper limit of the frequency range you want to search.
- 5. Press ENTER.
- 6. Press  $\land$  to search up from the lower limit. Or press  $\lor$  to search down from the upper limit.
- 7. When the scanner stops on a transmission, press MON to store the frequency in the current monitor memory, or press  $\land$  or  $\lor$  to continue the search.

Note: As you store frequencies in monitor memories, the flashing numbers to the right of MON indicates the current monitor memory. The new frequency will replace the previously stored frequency.

#### DIRECT SEARCH

When you are in program or manual mode, you can search up or down from the current displayed frequency. -d- appears on the display during a direct search.

- 1. Press MAN and the channel number to select a channel into which you have programmed a frequency. Then press MAN or PGM to enter the channel number from which you want to start your search.
- 2. Press  $\land$  or  $\lor$  to search up or down from the display frequency.
- 3. When the scanner stops on a transmission, press MON to store the frequency in the current monitor memory, or press  $\land$  or  $\lor$  to continue the search.

NOTE: Press DLY to make the scanner pause 2 seconds after a transmission before it proceeds to the next frequency.

## LISTENING TO MONITOR MEMORIES

You can listen to monitor memories by pressing MAN, MON, and then the number for the monitor memory you want to listen to.

Moving A Frequency From A Monitor Memory To A Channel

Follow these steps to move a frequency from a monitor memory to a channel.

- 1. Press MAN. Enter the channel number you want to store the monitor frequency into, then press PGM.
- 2. Press MON and enter the monitor memory number that has the frequency you want to store.
- 3. Press ENTER. The scanner stores the monitor frequency into the channel.

Note: If you want to return to a limit search after this procedure, press LIMIT and either  $\land$  or  $\lor$  to continue.

#### SCANNING THE CHANNELS

To begin scanning the channels in your scanner, press SCAN. The scanner scans through all non-locked channels (see "Locking Out Channels" in SPECIAL FEATURES). Set SQUELCH so you do not hear the hissing sound between transmissions.

## **SPECIAL FEATURES**

# **DELAY**

Many agencies use a two-way radio system that might have a period of several seconds between a query and a reply. To program a delay into that channel to keep from missing a reply, select the channel and press DLY so DELAY appears on the display. The scanner pauses for 2 seconds on a channel programmed with a delay.

When your scanner pauses at an active channel which has been programmed with a delay, it waits two seconds after the completion of each transmission on that channel before it resumes scanning.

## SCANNING AND SEARCH SPEEDS

Your Pro-2030 has 2 different scanning/search speeds:

Low - 12 channels/steps per second

High - 50 channels/steps per second

The scanner has a high/low selector for these speeds.

While you are in the scan or search mode, press SPEED to select the scanning/search speed.

Whenever the unit is turned on, the speed is automatically set to high.

## LOCKING OUT CHANNELS

You can increase the effective scanning speed by locking out specific channels that you have not yet programmed. To do so, manually select the channel and press L/O so LOCKOUT appears on the display.

This is also handy for locking out channels you have programmed that have a continuous transmission. You can still manually select locked-out channels.

To unlock a channel, manually select the channel and press L/O so LOCKOUT disappears from the display.

Note: There must be at least one active channel in each bank. You cannot lock out all channels.

## TURNING CHANNEL-STORAGE BANKS ON AND OFF

You can turn each channel-storage bank on and off. When you turn off a bank, the scanner does not scan any of the 10 channels in the bank.

While scanning, press the number key corresponding to the bank you want to turn on or off. If the memory bank indicator is on, the bank is turned on and the scanner scans all channels within that bank that are not locked out. If the indicator is off, the scanner does not scan any of the channels within that bank.

You can manually select any channel in a bank, even if the bank is turned off. You cannot turn off all banks. One bank is always active.

## **PRIORITY**

You can scan through the programmed channels and still not miss an important or interesting call on a specific channel. To program a stored channel as the priority channel, press PGM, the desired channel number and then PRI. You can only select one channel as the priority channel.

To turn on the priority feature, press PRI during scanning. PRIORITY appears on the display. The scanner now checks the priority channel every two seconds, and stays on the channel if there is activity there. P appears on the left side of the display whenever the scanner is set to the priority channel.

To turn off the priority feature, press PRI until PRIORITY disappears from the display.

#### MANUALLY SELECTING A CHANNEL

You can continuously monitor a specific channel without scanning. This is useful if you hear an emergency broadcast on a channel and do not want to miss any details - even though there might be periods of silence - or if you want to monitor only a locked-out channel.

To select a channel, press MAN. Enter the channel number, and press MAN again. Or, if the scanner is scanning and stops at the desired channel, just press MAN one time. Pressing MAN additional times makes the scanner step through the channels.

## LISTENING TO THE WEATHER BAND

The FCC (Federal Communications Commission) has allocated some channels for use by the National Oceanic and Atmospheric Administration (NOAA). We have preprogrammed your scanner with all of the frequencies available to NOAA. To hear your local forecast and regional weather information, simply press WX. Your scanner scans through the weather band.

Your scanner should stop within a few seconds, and you hear the local weather broadcast. If the broadcast is weak, you can press WX again to scan through the rest of the weather band.

## **BIRDIES**

Birdies are frequencies your scanner uses when it operates. These operating frequencies might interfere with broadcasts on the same frequencies. If you program one of these frequencies, you hear only noise on that frequency.

If the interference is not severe, you might be able to turn SQUELCH clockwise to cut out the birdie. The most common birdies to watch for are listed below.

## Birdie Frequencies:

124.20 MHz
134.55 MHz
144.90 MHz
155.25 MHz

# TROUBLESHOOTING

We hope you don't have any problems with your scanner, but if you do, the following suggestions might help.

Problem	Possible Cause	Remedy
The scanner does not function.	No power.	Check to see that you plugged the scanner into a working AC outlet.
Scanner is on but will not scan.	The SQUELCH control is not correctly adjusted.	Rotate the SQUELCH control clockwise.
In the scan mode the scanner locks on frequencies that have an unclear transmission.	"Birdies"	Avoid programming frequencies listed in BIRDIES, or only listen to them manually.
The keys are inoperative or the LCD display is random.	The CPU is locked up.	Reset or initialize the scanner referring to RESETTING AND INITIALIZING THE SCANNER.

If none of these suggested remedies solves the problem, take your scanner to your local RadioShack store for assistance.

# **CARE AND MAINTENANCE**

Your Realistic PRO-2030 80-Channel Direct Entry Programmable Scanner is an example of superior design and craftsmanship. The following suggestions will help you care for the PRO-2030 so you can enjoy it for years.

- Keep the scanner dry. If it does get wet, wipe it dry immediately. Liquids can contain minerals that can corrode the electronic circuits.
- Handle the scanner gently and carefully. Dropping it can damage circuit boards and cases and can cause the scanner to work improperly.
- Use and store the scanner only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, and distort or melt plastic parts.
- Keep the scanner away from dust and dirt, which can cause premature wear of parts.
- Wipe the scanner with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the scanner.

Modifying or tampering with the scanner's internal components can invalidate the scanner's warranty and void your FCC authorization to operate it. If your scanner is not operating as it should, take it to your local RadioShack store for assistance.

# **SPECIFICATIONS**

Frequency Coverage:
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VHF-Lo:       29-50 MHz (in 5 kHz steps)         Ham:       50-54 MHz (in 5 kHz steps)         Aircraft:       108-136.975 MHz (in 12.5 kHz steps)         Government:       137-144 MHz (in 5 kHz steps)         Ham:       144-148 MHz (in 5 kHz steps)         VHF-Hi:       148-174 MHz (in 5 kHz steps)         Ham/Government:       380-450 MHz (in 12.5 kHz steps)         UHF-Lo:       450-470 MHz (in 12.5 kHz steps)         UHF-Hi (TV):       470-512 MHz (in 12.5 kHz steps)         UHF-Hi:       806.0000-823.9375 MHz (in 12.5 kHz steps)         851.0000-868.9375 MHz (in 12.5 kHz steps)         896.1125-956 MHz (in 12.5 kHz steps)
Channels of Operation: Any 80 channels in any band combinations
Sensitivity:
AM: 20 dB Signal-to-Noise Ratio at 60% modulation 108-136.975 MHz:
FM: 20 dB Signal-to-Noise Ratio at 3 kHz deviation 29-54 MHz:
Scanning Rate:
High:
Search Speed:
High:
Delay Time:
IF Frequencies: 10.8 MHz and 450 kHz
Antenna Impedance:

Audio Power: ...... 1.3 watts maximum

Power Requirements: ...... AC 120 Volts, 60 Hz (with AC Adapter)

Current Drain: ...... DC 300 mA (squelched)

DC 500 mA (full volume unsquelched)

Dimensions (HWD): ...... 2.75 x 7.875 x 7.75 inches

70 x 200 x 195 mm

Weight: ..... 1.4 lbs (640 g)

(RLR/tc 4/9/98)

PARTS LIST

To order parts call 1-800-843-7422 or visit your local RadioShack store.

Reference #	Cat.No.	Description	NP Part #
	11318540	BLACK CER/GRAY BAND	1N4003A
	11318615	ORANGE GLASS BLACK BAND	1N4148
Q015 Q016 Q018 Q201	10511491	XSTR DTC114EK PRE BIASED	1TD0068
Q707	10511491		1TD0068
Q002 Q802 Q803 Q804	10511608	XSTR 2SC3704 CHIP	1TD0100
	10511608		1TD0100
Q013 Q021 Q701 Q708	10511673	USE 1TD0760	1TD0120
	10511673		1TD0120
Q801	10511707	XSTR 2SC3356-R24 SI BIPOL	1TD0127
	10511707		1TD0127
Q017	10513000	XSTR 2SD1777-C1 S0T23 SI	1TD0410
	10513000		1TD0410
Q007 Q008 Q009 Q011	10513174	XSTR SC DTA114YK	1TD0452
Q012 Q202 Q203	10513174		1TD0452
Q706	10514065	XSTR BIPOLAR NPN	1TD0549
	10514065		1TD0549
Q014	10515575	XSTR 2SB1133-R	1TD0704
	10515575		1TD0704
Q001	10515583	XSTR 2SC3127-ID	1TD0705
	10515583		1TD0705
Q013 Q021 Q701 Q708	10516136	XSTR 2SA1162-Y SI LOW PWR	1TD0760
	10516136		1TD0760
Q005 Q004 Q006	10516458	XSTR 2SC2712-Y SI LOW PWR	1TD0793
	10516458		1TD0793
AT951	10539120	ANTENNA,ROD TELESCOPIC	A0269
	10539120	3 SECT 20" THREADING	A0269
		CAP,TRIMMER CT-064 20PF	C2012
CT001 CT002 CT003	10555951	CAP,TRIMMER 35PF	C2013
CT701	10555969	CAP,TRIMMER CT-065 50PF	C2014
L016	10560258	COIL,LB539 CAN TYPE	CA1752
	10560258	CAN/GREEN SLUG	CA1752
L018	10561660	COIL,LF-149	CA2686
FT001	10569929	FILTER,CRYSTAL FL-177	CB0550
X701	10592418	CRYSTAL,10.35MHZ	CX0590
*****	10592418		CX0590
X201	10594208	CRYSTAL,QX-299 3.579545M	CX0801
D000 D004 = 00 = 00	11655909	DIODE SI LLL4148	DD00005
D003 D004 D006 D008	10617546	DIODE VARACTOR ISV201-4	DD0103
D017 D702 D803	10617546		DD0103
D013 D023 D701 D705	10617587	DIODE 1SS184-TE85R SI	DD0111
	10617587		DD0111
	10621795	REPLACED BY 1N4148	DX0022
	10622306	REPLACED BY 1N4003A	DX0207

Reference #	Cat.No.	Description	NP Part #
D010 D804	10623312	DIODE VR 1SV188-9	DX0622
	10623312		DX0622
D002 D011 D022 D026	10626216	USE DD00005	DX1673
D027 D203	10626216	TUBULAR NO LEAD	DX1673
	10626216	ORANGE/YELLOW/BLUE BAND	DX1673
	10627305	CLEAR GREEN/BLUE BAND	DX2014
D001 D005 D007 D009	10633600	DIODE RLS135 TE11	DX3442
D012 D014 D016 D018	10633600		DX3442
D019 D021 D024 D025	10633600		DX3442
D703 D704 D802	10633600		DX3442
14	10639821	FOOT, 1.6T	F0418
13	10643823	WINDOW C/R	G0371
	10643823	FOR FRONT PANEL	G0371
	10715191	QTY 4	HW2000407
J501	10725372	JACK,ANTENNA	J0772
J002	10729838	JACK,DC POWER 3.5MM	J1389
J001	10730711	JACK,EARPHONE 3.5MM	J1545
	10730711	EXTERNAL SP	J1545
5	10783884	KNOB,DARK GRAY	K4599
	10783884	VOLUME/SQUELCH	K4599
DP201	10790350	DISPLAY,LIQUID CRYSTAL	L0060
	10790350	DLC-3137P	L0060
P001	10791416	LAMP,PILOT 8V 0.2A	L0200
	11390929	9 PIN SIP	LA1186N
	10898146	) 1 11 ( <del>)</del> 1	LA1600
	10823268	MANUAL SERVICE 20-407	MS2000407
	10845279	XEROX COPY	MU2000407
IC006	10877256	IC,L78M05CV REGULATOR	MX1452
	10877256		MX1452
IC003	10880680	IC,NJM3359D-A LINEAR 18P	MX1880
	10880680		MX1880
	10880698		MX1881
IC703	10880854	IC,TC4S66F BIPOLAR SO 5 (	MX1899
10,00	10880854		MX1899
	10894764	REPLACED BY LA1186N	MX4041
	10898146	REPLACED BY LA1600	MX4637
	10904381	REPLACED BY TBA820M	MX6047
IC201	10907590	IC,UC1516A	MX6744
10201	10907590	W/DATE CODE 1A4	MX6744
IC008	10909497	IC,IRE3M03AN DC-DC	MX7194
	10909497	, <del></del>	MX7194
IC010	10909950	NJM2904S	MX7294
	10909950	2 0 10	MX7294
IC701	10911592	IC, PLL2002A1	MX7622
J. 4-	10911592	-,	MX7622
IC702	10912491	IC, TLC271CP OP	MX7811
10,00	10912491		MX7811
	10/14/1		14177 / 011

Reference #	Cat.No.	Description	NP Part #
IC001 IC801	10915940	IC,UPC1675G-T1	MX8178
	10915940		MX8178
IC009	10922870	IC,HD74HC138P 16 PIN DIP	MX8904
	10922870		MX8904
IC201	10922888	IC,HD404818H 80 PFP	MX8905
VR001	10973832	POT SEMI-FIXED 100KB	P6685
	10973832		P6685
SP501	11084209	SPEAKER,SP-242	SP0336
SP501	11085511	SPEAKER,SP-329	SP0477
	11085511	W/ISSUE DATE 11-29-93	SP0477
	11393147	8 PIN SIP	TBA820M
AD951	11125655	ADAPTOR,AC INPUT 120 VOLT	WE0255
	11125655	OUT 12VDC 500MA	WE0255
		REPAIR BOARD	XB0000X
	11161056	PCB ASSY,VOLUME	XB4830
	11161064	PCB ASSY,PLL	XB4831
	11161072	PCB ASSY,800MHZ	XB4832
	11161098	INCLUDES RUBBER KEYPAD	XB4834
	11888369	PCB ASSY,MICROCOMPUTER	XB90231
	11213063	CASE,BOTTOM ABS BLACK	Z5988
	11213071	CASE,TOP ABS BLACK	Z5989
	11213089	PANEL,FRONT ABS BLK SILK	Z5990

(This list was generated on 07/08/2005)

PRO-2030 80 CHANNEL DIRECT ENTRY PROGRAMMABLE SCANNER (20-407) FAXBACK DOC # 10093

