SECTION 100-006-300
SYSTEM PROGRAMMING
DECEMBER 1982

Strata VI

SYSTEM PROGRAMMING

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01 INTRODUCTION

01.01 The STRATA VI operating system governing overall system operation and feature execution is stored in read-only-memory (ROM) and cannot be altered in the field. The data controlling the operation of the various options, both system and station, is stored in random-access-memory (RAM) and can easily be changed according to individual installation requirements.

01.02 All STRATA VI options are controlled by selections made in the system data tables. An initialization process is provided for verifying predetermined system assignments. The installer can then proceed with any necessary changes.

01.03 All system data changes are made via Ext. 17 (as the input-output device). Whenever the system is placed in the programming mode, the keys on Ext. 17 are used to enter data while its LEDs display the current data. While Ext. 17 is in the programming mode, the remainder of the system may still be used in the normal fashion.

01.04 Internal battery power is provided to prevent loss of system data memory in the event of a power failure.

NOTE:
Whenever a system is installed or the MCCU is changed, the system must be initialized. See Paragraph 02.20.

02 PROGRAMMING PROCEDURES

02.01 General

02.02 The STRATA VI system must be placed in the programming mode before system data can be verified or altered. With the exception of Ext. 17, normal system functions are not suspended while in the programming mode.

02.03 When the system is in the programming mode, Ext. 17 is used to enter the system data in one of two ways:

- In the majority of programs (Type 1), the INT and CO keys are used to change "bits" of system data. The LEDs associated with the INT and CO keys show the status of that "bit" before and after key operation. A particular key and LED will have a different meaning, depending upon the program number being used.

- In Type 2 programs, the dial pad is used to enter data. In this case, the system, using the INT and CO LEDs, verifies the entered data by displaying the number in Binary format.

02.04 The programming mode is activated by locking in the **SET** switch on the MCCU PCB and then operating the SPKR key on Ext. 17. After the station has been activated, a program number is dialed on the station dial pad, and the system will respond as follows:

- Type 1 programs—the LEDs of Ext. 17 will display the existing data in these categories.

- Type 2 programs—the CO 4 LED on Ext. 17 will flash continuously. Actual data can be reviewed without alteration by multiple operation of the # key.

02.05 Data can be altered while it is being displayed. To input new data, perform the following:

- Type 1 program—the state of an LED is altered by operating its associated key. Operating the key while the LED is "on" will turn it off and vice-versa.

- Type 2 program—data is entered via the dial pad. The LEDs on Ext. 17 will display the data and digit number in Binary format.

02.06 Once the desired data is entered and displayed it is written into memory by operating the [HOLD] key on Ext. 17.

- System and CO line options are written into temporary storage when the [HOLD] key is depressed. After **all** changes in these categories have been made, release the **SET** switch on the MCCU. Cycling (rocking) the MTOU power switch off and on will then transfer all data into the main data memory.

- Station option data (with the exception of CO line access assignments) are written into the main data memory; therefore, all changes are effective immediately after the [HOLD] key is depressed. However, it is recommended that the MTOU power switch be cycled for added programming protection.

02.10 Preparation

02.11 Before the STRATA VI system data can be programmed, option selections must be made and then indicated on the System Record Sheet (shown in Table 1). The Record Sheet will then serve as a programming guide and installation record.

02.12 Programming options are grouped according to the three categories listed below, with several program numbers associated with each category. A different program number is used for each option or group of options being selected.

- **Program**
  - **System Options**

01: System Assignments (Basic)
02: System Assignments (Options)
05: Automatic Recall From Hold Timing

- **CO Line Options**

06: Automatic Release From Hold (AROH) Assignment
07: Automatic Release From Hold Timing
10: PBX Backup
1X: PBX Access Codes
20: Toll Restriction Disable
2X: Toll Restriction Exception Codes

- **Station Options**

3XX: Station CO Line Access
5XX: Station Class of Service
6XX: Toll Restriction Classification
7XX: Station Outgoing Restriction
8XX: CO Ringing Assignment-Day
9XX: CO Ringing Assignment-Nite

02.13 The System Record Sheet is used to record the assignment of each key/LED for any given program number. For Type 1 programs an "X" placed in the record indicates that the associated LED should be turned on (lit) during the programming process. For Type 2 programs the actual data is recorded.

02.14 After making the system option selections per the following instructions, record the various choices in the System Record Sheet. Use the tables at the end of this section for detailed programming instructions.

02.15 System Options:

01 Program—System Assignments (Basic)

Six options are selected with this program, using [INT] and [CO] keys to change the status of their respective LEDs. For the options selected, mark an X as indicated.

- Extension 10—mark an X next to CO 6 if Ext. 10 is to be used as the message waiting center.

- Extension 11—mark an X next to CO 5 if Ext. 11 is to be used as the message waiting center.

NOTE:
Only one message center is permitted; if both extensions are chosen as message waiting centers, Ext. 10 will have priority.

- 3-second Pause Time—mark an X next to CO 2 if a 3-second pause (for dial tone delay) is required after a PBX CO access code is dialed by the Automatic Dialing feature. Leave blank if a 1.5-second pause is sufficient.

- Flash Time—mark an X next to CO 1 if the line-open interval produced by the MW/FL key is to be 0.5 seconds for behind PBX operation. Leave blank if the 2.0-second flash for dial tone recall is required.

- Ext. 10 DND/NITE Key—mark an X next to INT 2 if the DND/NITE key on Ext. 10 is to be used as a DND key. Leave blank if NITE is required.

- Tone First—mark an X next to INT 1 if Tone First intercom signalling is required. Leave blank if Voice First signalling is required.

NOTE:
CO 3 & 4 are not used.

02 Program—System Assignments (Options)

Four options are selected with this program, using INT and CO keys to change the status of their respective LEDs. For the options selected, mark an X as indicated.

- Automatic Dialing-Station--mark an X next to CO 6 if the Automatic Dialing-Station option (CRDU PCB) is installed in the system. Leave blank if the CRDU is not installed.

- Nite Ring over External Page—mark an X next to CO 1 if Nite Ringing over External Page is required.

- Background Music over External Page—mark an X next to INT 2 if BGM is to be heard over the External Page circuit.

- External Page with All Call—mark an X next to INT 1 if the External Page circuit is to be included in an All Call Page.

NOTE:
CO 2, 3, 4, & 5 are not used.

05 Program—Automatic Recall from Hold Timing

Sets the timing for the Automatic Recall from Hold feature.

- If a recall is desired, select a time period of 16-160 seconds and mark an X next to the appropriate key in the System Record Sheet. The times **are not** accumulative—only one key can be selected.

- If no recall is required, mark an X next to INT 1.

02.16 CO Line Options

06 Program—Automatic Release on Hold Assignment

Selects whether or not the Automatic Release on Hold (AROH) feature is to function on a given CO line; the CO line keys represent themselves.

- Mark an X next to each CO line that **requires** AROH.

07 Program—Automatic Release on Hold Timing

Selects Cross Bar (XB) or ESS timing for the AROH feature using each CO line key to represent itself.

- Mark an X next to each CO line that requires XB timing; leave blank if ESS timing is required.

NOTE:
This selection will have no meaning if the AROH feature was rejected in Program 06.

10 Program—PBX Backup

Informs the system if the CO line key is actually connected to a PBX extension line. The system will recognize PBX access codes on selected line(s).

- Mark an X next to each CO line that **is** to be **connected** to a PBX extension line.

1X Program—PBX Access Codes

Informs the system of the access codes used by the PBX that is connected to the lines selected in **Program 10.** The STRATA VI will recognize the access codes and react appropriately for Toll Restriction, Automatic Dialing and Repeat Last Number Dialed.

- Enter the actual access codes (maximum: 4).

NOTE:
If the access code is a single digit, enter "" in the second column. If all combinations following a particular 1st digit are to be considered access codes (eg. 91, 92, 93, etc.), enter "D" (do not care) in the second column.*

20 Program—Toll Restriction Disable

Selects whether or not the Toll Restriction feature is to function on a given CO line; the CO line keys represent themselves.

- Mark an X next to each CO line on which Toll Restriction **is not** to function.

2X Program—Toll Restriction Exception Codes

Informs the system of a maximum of five 4-digit codes (area codes or office codes) that **are allowed** to be dialed by Toll Restricted stations.

- Enter the actual 4-digit codes (maximum: 5).

02.17 Station Options

3XX Program—Station CO Line Access

The ability of an individual station to access any of the CO lines is determined by selections made using this program. A station denied access to a CO line by this program will have neither key nor LED functions for that CO line.

- Selections must be repeated for all stations—mark an X next to each CO line that **is** to be **accessed** by the station in question.

5XX Program—Station Class of Service

Seven options are selected with this program, using INT and CO keys to change the status of their respective LEDs. The selections listed below must be repeated for each station. In all cases, mark an X where indicated.

- Privacy Override—mark an X next to CO 6 if the station **is allowed** the Privacy Override feature.

NOTE:
A maximum of two stations are permitted to use the Privacy Override feature. If more than two are programmed, the two lowest numbered extensions will be allowed to use this feature and the others will be ignored.

- DND Override—mark an X next to CO 5 if the station **is allowed** the DND Override feature.
- 20-key EKT—mark an X next to CO 3 if the station **is equipped** with a 20-key EKT.
- Speakerphone—mark an X next to CO 2 if the station **is allowed** to use the Speakerphone feature.
- Automatic Dialing—mark an X next to CO 1 if the station **is allowed** the Automatic Dialing feature.
- Automatic Line Preference—mark an X next to INT 2 if the station **is allowed** the Automatic Line Preference feature.
- All Call—mark an X next to INT 1 if the station **is included** in an All Call page.

6XX Program—Toll Restriction Class

Defines **type** of Toll Restriction that will be functional on individual stations.

- Selections must be made for each station (see Table 2):
  a) Mark an X next to CO 6 if the station **will be allowed** to dial **411.**
  b) Mark an X next to CO 5 if the station **will be allowed** to dial 1 plus 7-digit numbers.
  c) Mark an X next to CO 4 if the station **will be** toll **restricted.**

7XX Program—Station Outgoing Restriction

Restricts a station from outgoing access to any number of CO lines (1-6) while leaving it free to answer these lines when they are ringing or on hold.

- Selections must be made for each station—mark an X next to the CO line that **is** to have **restricted** access by the station in question.

8XX Program—CO Ringing Assignments-Day

Selects which CO lines will ring at a given station when the system is in the "DAY" mode.

- Selections must be made for each station—mark an X next to each CO line that **is to ring** at the station in question.

NOTE:
Each line can ring on only eight stations. If more than eight are programmed, the stations with the lowest extension numbers will ring.

9XX Program—CO Ringing Assignment-Night

Selects which CO line will ring at a given station when the system is in the "NITE" mode.

- Selections must be made for each station—mark an X next to each CO line that **is to ring** at the station in question.

NOTE:
Each line can ring on only eight stations. If more than eight are programmed, the stations with the lowest extension numbers will ring.

TAB[illegible]

SYSTEM RECORD SHEET

PROGRAM 01—SYSTEM ASSIGNMENTS (BASIC)

KEY/LED		LED ON	LED OFF
CO 6		M.W.* Ext. 10	Not Equipped
CO 5		M.W.* Ext. 11	Not Equipped
CO 4		—	—
CO 3		—	—
CO 2		3 sec. Pause	1.5-sec. Pause
CO 1		0.5-second Flash	2-sec. Flash
INT 2		Ext. 10 DND Key	NITE
INT 1		Tone First	Voice First

*Message Waiting Center
X = Select (LED on)
Initialized Data: CO 6 LED on; all other LEDs off

NOTE:
Only one message center is permitted; if both Ext's 10 and 11 are chosen as Message Waiting Centers, Ext. 10 will have priority.

PROGRAM 02—SYSTEM ASSIGNMENTS (OPTION)

KEY/LED		LED ON	LED OFF
CO 6		Auto Dial (Station)	Not Equipped
CO 5		—	—
CO 4		—	—
CO 3		—	—
CO 2		—	—
CO 1		Nite Ring/Ext. Page	Not Equipped
INT 2		BGM/Ext. Page	Not Equipped
INT 1		Ext. Page W/All Call	Ext. Page Not Included

X = Select (LED on)
Initialized Data: CO 6 LED on; all other LEDs off

PROGRAM 05—AUTOMATIC RECALL FROM HOLD TIMING

KEY/LED		TIME
CO 6		160 Seconds
CO 5		128 Seconds
CO 4		96 Seconds
CO 3		64 Seconds
CO 2		48 Seconds
CO 1		32 Seconds
INT 2		16 Seconds
INT 1		No Recall

X = Select (LED on)
Initialized Data: 32 seconds

PROGRAM 06
AUTO RELEASE
ON HOLD ENABLE

CO 6	
CO 5	
CO 4	
CO 3	
CO 2	
CO 1	

X = enable (LED on)
Initialized Data:
All LEDs off

PROGRAM 07
AUTO RELEASE
ON HOLD TIMING

CO 6	
CO 5	
CO 4	
CO 3	
CO 2	
CO 1	

X = XB (LED on)
Blank = ESS
Initialized Data:
All LEDs off

PROGRAM 10
PBX BACKUP

CO 6	
CO 5	
CO 4	
CO 3	
CO 2	
CO 1	

X = Connected to PBX Line (LED on)
Init. Data: All LEDs off

PROGRAM 1X—PBX ACCESS CODES

Code	1st Digit	2nd Digit
#1 (11)		
#2 (12)		
#3 (13)		
#4 (14)		

Enter Access Codes (Max: 4)
Initialized Data: None

NOTE:
If the access code is a single digit, enter "" in the second column. If all combinations following a particular 1st digit are to be considered access codes (e.g., 91, 92, 93, etc.), enter "D" (do not care) in the 2nd column.*

PROGRAM 20—TOLL RESTRICTION DISABLE

CO 6	
CO 5	
CO 4	
CO 3	
CO 2	
CO 1	

X = disable (LED on)
Init. Data: All LEDs off

PROGRAM 2X—TOLL RESTRICTION EXCEPTION CODES

Code	1st	2nd	3rd	4th
#1 (21)				
#2 (22)				
#3 (23)				
#4 (24)				
#5 (25)				

Enter Actual Exception Codes (Max: 5)
Initialized Data: None

NOTE:
If codes are less than four digits, enter "" in the remaining spaces.*

PROGRAM 3XX-STATION CO LINE ACCESS

KEY/LED	Feature	Ext. No.															
		10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CO 6	Allow Access																
CO 5	Allow Access																
CO 4	Allow Access																
CO 3	Allow Access																
CO 2	Allow Access																
CO 1	Allow Access																

X=select (LED on)
Initialized Data: All LEDs on

PROGRAM 5XX-STATION CLASS OF SERVICE

KEY/LED	Feature	Ext. No.															
		10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CO 6	Privacy Override Allowed																
CO 5	DND Override Allowed																
CO 4	—																
CO 3	20-key EKT																
CO 2	Speakerphone Enable																
CO 1	Auto Dial Allowed																
INT 2	Auto Line Pref. Allowed																
INT 1	Include in All Call																

X=select (LED on)
Initialized Data: CO 1 & 2, INT 1 & 2 LED on; all others off

PROGRAM 6XX-TOLL RESTRICTION CLASSIFICATION

KEY/LED	Feature	Ext. No. 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CO 6	Allow 411																
CO 5	Allow 1 + 7 digits																
CO 4	Restrict: 1, 0 1st digit 1, 0 2nd digit More than 7 digits Allow: 911, 800 Exception Codes (Prog 2X)																
CO 3	—																
CO 2	—																
CO 1	—																

X=select (LED on) Init. Data: No Restriction

PROGRAM 7XX—STATION OUTGOING RESTRICTION

KEY/LED	Feature	Ext. No. 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CO 6	Restricted																
CO 5	Restricted																
CO 4	Restricted																
CO 3	Restricted																
CO 2	Restricted																
CO 1	Restricted																

X=select (LED on) Initialized Data: All LEDs off

PROGRAM 8XX—CO RINGING ASSIGNMENTS—DAY

KEY/LED	Feature	Ext. No. 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CO 6	Ring in Day																
CO 5	Ring in Day																
CO 4	Ring in Day																
CO 3	Ring in Day																
CO 2	Ring in Day																
CO 1	Ring in Day																

X=select (LED on) Initialized Data: Ext 10-all on; all others off

PROGRAM 9XX—CO RINGING ASSIGNMENTS—NIGHT

KEY/LED	Feature	Ext. No. 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CO 6	Ring in Nite																
CO 5	Ring in Nite																
CO 4	Ring in Nite																
CO 3	Ring in Nite																
CO 2	Ring in Nite																
CO 1	Ring in Nite																

X=select (LED on) Init. Data: Ext 11-all on; all others off

TABLE 2

TOLL RESTRICTION DEFINITIONS (PROGRAM 6XX)

CLASS/FUNCTIONS		Coding CO Keys 4	5	6
CLASS 1: No Restriction				
CLASS 2:		X	X	X
Restrict:	[0] in 1st **or** 2nd digit			
	[1] in 2nd digit			
	More than 7 digits total			
Allow:	911 and 800			
	Exception Codes—Program 2X*			
	[1] + 7 digits			
	411			
CLASS 3:		X	X	
Restrict:	[0] in 1st **or** 2nd digit			
	[1] in 2nd digit			
	More than 7 digits total			
Allow:	911 and 800			
	Exception Codes—Program 2X*			
	[1] + 7 digits			
CLASS 4:		X		X
Restrict:	[0] in 1st **or** 2nd digit			
	[1] in 1st **or** 2nd digit			
	More than 7 digits total			
Allow:	911 and 800			
	Exception Codes—Program 2X*			
	411			
CLASS 5:		X		
Restrict:	[0] in 1st **or** 2nd digit			
	[1] in 1st **or** 2nd digit			
	More than 7 digits total			
Allow:	911 and 800			
	Exception Codes—Program 2X*			

NOTE:
The Exception Codes (4 digits) may be programmed using Program 2X. These codes can be any combination of digits, and will cause Toll Restriction to be bypassed just as with 911 and 800. Toll Restriction may be disabled on a system-wide per-CO line basis using Program 20.

02.20 Initialization

02.21 The STRATA VI has a list of standard system data assignments stored in ROM that can be entered at any time by activating the **SET** switch on the MCCU PCB. The system must be initialized when it is first installed or whenever the MCCU PCB is changed. This will allow the system to be tested and any faults to be corrected before time is spent on programming. Standard data assignments are listed in Table 3.

02.22 To initialize the STRATA VI system:

a) Make sure the power switch on the MTOU PCB is in the **ON** position.

b) Verify that the battery is connected on the MCCU (and CRDU if equipped) to ensure that data entered after the system is initialized will not be lost due to power failure. The MCCU SET LED will not function if the battery on the MCCU is not connected.

c) Depress the **INT** switch on the MCCU, and hold it in.

d) Depress the **SET** switch and allow it to lock.

e) Depress and release the **SET** switch again.

f) Release the **INT** switch.

g) Cycle the MTOU power switch **OFF** and **ON.**

02.23 The Automatic Dialing memory will contain random numbers when the system is powered up initially. To clear the memory; preventing, therefore, meaningless numbers from being dialed, proceed as follows:

02.24 To clear the basic Automatic Dial-System memory (24 numbers):

- Operate the **SET** switch on the MCCU—the MCCU LED and MW/FL LED on Ext. 17 will be on.
- Operate the [SPKR] key on Ext. 17— SPKR LED will be on steadily.
- Dial [#] [*] [*] on the dial pad—the SPKR LED will flash steadily.
- Operate the following keys: [INT 1] [CO 1] [CO 3] [CO 5]—the corresponding LEDs will light steadily.
- Operate the [HOLD] key—all Ext. 17 LEDs (except MW/FL) will go off.
- Operate the **SET** switch on the MCCU—the MCCU LED and MW/FL LED on Ext. 17 will go off.

02.25 To clear the optional Automatic Dial-Station memory:

- Operate the **SET** switch on the MCCU—the MCCU LED and MW/FL LED on Ext. 17 will be on.
- Operate the [SPKR] key on Ext. 17— SPKR LED will be on steadily.
- Dial [#] [*] [#] on the dial pad—SPKR LED will flash steadily.
- Operate the following keys: [INT 2] [CO 2] [CO 4] [CO 6]—the corresponding LEDs will light.
- Operate the [HOLD] key—all Ext. 17 LEDs (except MW/FL) will go off.
- Operate the **SET** switch on the MCCU—the MCCU LED and MW/FL LED on Ext. 17 will go off.

02.30 System Data Entry

02.31 System Data is entered via Ext. 17 while the system is in the "Programming Mode".

02.32 The system is placed in the Programming Mode by operating the **SET** switch on the MCCU. The LED on the MCCU and the MW/FL LED on Ext. 17 will light when the system is in the programming mode.

02.33 Once the system is in the programming mode, refer to the System Record Sheet for the changes that must be made and select the required program number. Refer to the proper table for detailed instructions for using each different program. Each program

should be accomplished sequentially until all necessary changes are made.

TABLE 3

INITIALIZED DATA

SYSTEM OPTIONS

System Assignments (Basic)—01 Program
- Message Waiting Center Ext. 10= Equipped
- Message Waiting Center Ext. 11=Not Equipped
- Pause Timing=1.5 seconds
- Flash Key Timing=2 seconds
- Ext. 10 DND/Nite Key=Nite key
- Intercom Signalling=Voice first

System Assignments (Options)—02 Program
- Automatic Dialing-Station=equipped
- Night Ringing=excluded from External Page
- Background Music=excluded from External Page
- External Page=excluded from All Call Page

Automatic Recall From Hold Timing—05 Program
- 32 Seconds

CO LINE OPTIONS

Automatic Release On Hold Assignment--06 Program
- Disabled—all CO lines

Automatic Release On Hold Timing—07 Program
- ESS Timing—all CO lines

PBX Backup—10 Program
- CO Operation—all CO lines

PBX Access Codes—1X Program
- No Codes Assigned

Toll Restriction Disable—20 Program
- Toll Restriction—all CO lines (ineffective if Program 6XX not utilized)

Toll Restriction Exception Codes—2X Program
- No Codes Assigned

STATION OPTIONS

Station CO Line Access—3XX Program
- Access Allowed—all lines, all stations

Station Class of Service—5XX Program
- Privacy Override=not allowed all stations
- DND Override=not allowed all stations
- 20-key EKT=not installed
- Speakerphones=allowed all stations
- Automatic Dialing=allowed all stations
- Automatic Line Preference=enable all stations
- All Call=include all stations

Toll Restriction Class—6XX Program
- No Restrictions—all lines, all stations

Station Outgoing Restrictions—7XX Program
- No Restrictions—all stations

CO Ringing Assignments-Day—8XX Program
- All lines ring Ext. 10

CO Ringing Assignments-Nite—9XX Program
- All lines ring Ext. 11

02.34 The table numbers for the various programs are listed below:

TABLE LIST

TABLE 4

PROGRAM 01—SYSTEM ASSIGNMENTS (BASIC)

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [0] [1] on the dial pad	SPKR LED flashes continuously INT & CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [INT] and [CO] keys, turn the associated LEDs on or off, as required. The detailed meaning of each key/LED is shown below.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set

Feature	Key/LED	Data Meaning	
		LED on	**LED off**
Message Waiting Ext. 10	CO 6	Yes	No
Message Waiting Ext. 11	CO 5	Yes	No
Not Used	CO 4	—	—
Not Used	CO 3	—	—
Pause Timing	CO 2	3.0 sec.	1.5 sec.
Flash Key Timing	CO 1	0.5 sec.	2.0 sec.
Ext 10 DND/Nite Key	INT 2	DND	Nite
INT Signalling	INT 1	Tone First	Voice First

NOTE:
Only one message center is permitted; if both Extension 10 and 11 are chosen as Message Waiting Centers, Ext. 10 will have priority.

5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 5

PROGRAM 02—SYSTEM ASSIGNMENTS (OPTIONS)

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [0] [2] on the dial pad	SPKR LED flashes continuously INT & CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [INT] and [CO] keys, turn the associated LEDs on or off, as required. The detailed meaning of each key/LED is shown below.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set

Feature	Key/LED	Data Meaning	
		LED on	**LED off**
Auto Dial-Station	CO 6	Equipped	Not equipped
Not Used	CO 5	—	—
Not Used	CO 4	—	—
Not Used	CO 3	—	—
Not Used	CO 2	—	—
Nite Ring over Ext Page	CO 1	Yes	No
BGM over Ext Page	INT 2	Yes	No
Ext Page w/All Call	INT 1	Yes	No

5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 6

PROGRAM 05—AUTOMATIC RECALL FROM HOLD TIMING

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [0] [5] on the dial pad	SPKR LED flashes continuously INT & CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using an INT or CO key, turn the associated LED on, as required. The detailed meaning of each key/LED is shown below.	An X on the record sheet means the LED should be on Only one LED is permitted to be on, pushing another key will turn on that LED and turn off the previous LED

KEY/LED	TIME
CO 6	160 seconds
CO 5	128 seconds
CO 4	96 seconds
CO 3	64 seconds
CO 2	48 seconds
CO 1	32 seconds
INT 2	16 seconds
INT 1	No Recall

5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 7

PROGRAM 06—AUTOMATIC RELEASE ON HOLD ASSIGNMENT

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [0] [6] on the dial pad	SPKR LED flashes continuously CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. Each CO key/LED represents itself—that is, if CO 1 LED is on, CO 1 will have the AROH function during normal operation. If CO 1 LED is off, AROH will not function on that line.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 8

PROGRAM 07—AUTOMATIC RELEASE ON HOLD (AROH) TIMING

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [0] [7] on the dial pad	SPKR LED flashes continuously CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. Each CO key/LED represents itself—that is, if CO 1 LED is on, CO 1 will use XB (crossbar) timing for AROH. If CO 1 LED is off, ESS timing will be used on that line.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	 LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

NOTE:
This program will have no meaning unless AROH is enabled via Program 06.

TABLE 9

PROGRAM 10—PBX BACK-UP

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [1] [0] on the dial pad	SPKR LED flashes continuously CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. Each CO key/LED represents itself—that is, if CO 1 LED is on, the system assumes that CO 1 line is connected to a PBX line and will cause features such as Toll Restriction and Automatic Dialing to function accordingly.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	 LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 10

PROGRAM 1X—PBX ACCESS CODES

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [1] [X] on the dial pad X=1, 2, 3, 4, etc.—the system will store a maximum of 8 access codes. Dial [1] [1] (X=1) to program first access code; [1] [2] (X=2) to program 2nd access code, etc.	SPKR LED flashes continuously CO 4 LED will flash
4. Refer to the System Record Sheet. Using the dial pad, enter the required access code (two digits **must** be entered). • If access code is a single digit, enter [*] as the second digit. • If all combinations following a particular 1st digit are to be considered access codes (e.g., 91,92,93, etc.), operate the [DND] (do not care) key for the 2nd digit.	INT 1 & 2, CO 1 & 2 LEDs will light to display data in Binary format CO 4 & 5 LEDs will light steadily to indicate which digit is being displayed

	Start	1st Digit	2nd Digit
CO 6			
CO 5			Steady
CO 4	Flash	Steady	
CO 3			
CO 2		↑	↑
CO 1		Binary	Binary
INT 2		Data	Data
INT 1		↓	↓

NOTE:
a) To review data without changing it, depress [#] twice. The first [#] will display the 1st digit; the second [#] will display the 2nd digit.
b) To clear existing data without entering a new number, depress [*] two times.

X=LED on
All LEDs off=No data

Binary Numbers:	1	2	3	4	5	6	7	8	9	0	DND
CO 2								X	X	X	X
CO 1				X	X	X	X				X
INT 2		X	X			X	X			X	
INT 1	X		X		X		X		X		X

5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Return to Step 2 in order to advance to next 1X code ...or... 6B. Go to another program table ...or... 6C. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 11

PROGRAM 20—TOLL RESTRICTION DISABLE

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [2] [0] on the dial pad	SPKR LED flashes continuously CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. Each CO key/LED represents itself—that is, if CO 1 LED is on, Toll Restriction will not function on CO 1. If CO 1 LED is off, Toll Restriction will function on CO line #1.	An X on the record sheet means the LED should be on If the LED is already off, pushing the associated key will turn it on and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 12

PROGRAM 2X—TOLL RESTRICTION EXCEPTION CODES

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [2] [X] on the dial pad X=1, 2, 3, 4 or 5—system will store a maximum of 5 exception codes. Dial [2] [1] (X=1) to program 1st exception code; [2] [2] (X=2) to program 2nd exception code, etc.	SPKR LED flashes continuously CO 4 LED will flash
4. Refer to the System Record Sheet. Using the dial pad, enter the 4-digit exception code.	INT 1 & 2, CO 1 & 2 LEDs will light to display data in Binary format CO 4, 5 & 6 LEDs will light steadily to indicate which digit is being displayed

	Start	1st Digit	2nd Digit	3rd Digit	4th Digit
CO 6					Steady
CO 5			Steady	Steady	
CO 4	Flash	Steady		Steady	
CO 3					
CO 2		Binary data	Binary data	Binary data	Binary data
CO 1		Binary data	Binary data	Binary data	Binary data
INT 2		Binary data	Binary data	Binary data	Binary data
INT 1		Binary data	Binary data	Binary data	Binary data

Binary Numbers:

	1	2	3	4	5	6	7	8	9	0	DND
CO 2								X	X	X	X
CO 1				X	X	X	X				X
INT 2		X	X			X	X			X	
INT 1	X		X		X		X		X		X

X=LED on All LEDs off=No data

NOTE:
a) To review data without changing it, depress [#] four times. The 1st [#] will display the 1st digit; the 2nd [#] will display the 2nd digit, etc.
b) To clear existing data without entering a new number, depress [*] four times.

5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Return to Step 2 in order to advance to next 2X code ...or... 6B. Go to another program table ...or... 6C. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, previous data is erased

TABLE 13

PROGRAM 3XX—STATION CO LINE ACCESS

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [3] [X] [X] on dial pad. XX=the extension number of the station to be programmed. • Enter [0] [0] if all stations are to be programmed simultaneously • Enter [0] [1] if the eight lower numbered (10-17) stations are to be programmed simultaneously • Enter [0] [2] if the eight higher numbered (18-25) stations are to be programmed simultaneously	SPKR LED flashes continuously CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off as required. • LED on=Access allowed • Each CO key/LED represents itself—that is, if CO 1 LED is on, station being programmed (XX) is allowed access to CO 1	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in temporary memory	All Ext. 17 LEDs (except MW/FL) go off
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off New data is stored, old data is erased

TABLE 14

PROGRAM 5XX—STATION CLASS OF SERVICE

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [5] [X] [X] on dial pad. XX=the extension number of the station to be programmed. • Enter [0] [0] if all stations are to be programmed simultaneously • Enter [0] [1] if the eight lower numbered (10-17) stations are to be programmed simultaneously • Enter [0] [2] if the eight higher numbered (18-25) stations are to be programmed simultaneously	SPKR LED flashes continuously INT & CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [INT] and [CO] keys, turn the associated LEDs on or off, as required. The detailed meaning of each key is shown below.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set

Feature	Key/LED	Data Meaning	
		LED On	LED Off
Privacy Override Allowed	CO 6	Yes	No
DND Override Allowed	CO 5	Yes	No
Not Used	CO 4	—	—
20-key EKT	CO 3	Yes	No
Speakerphone	CO 2	Allowed	Not Allowed
Automatic Dialing	CO 1	Allowed	Not Allowed
Auto Line Preference	INT 2	Allowed	Not Allowed
All Call	INT 1	Included	Excluded

5. Operate [HOLD] key to place new data in memory	All Ext. 17 LEDs (except MW/FL) go off New data is stored, old data is erased
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off

TABLE 15

PROGRAM 6XX—TOLL RESTRICTION CLASSIFICATION

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [6] [X] [X] on dial pad. XX=the extension number of the station to be programmed. • Enter [0] [0] if all stations are to be programmed simultaneously • Enter [0] [1] if the eight lower numbered (10-17) stations are to be programmed simultaneously • Enter [0] [2] if the eight higher numbered (18-25) stations are to be programmed simultaneously	SPKR LED flashes continuously CO 4, 5 & 6 LEDs will be on according to present data
4. Refer to the System Record Sheet. Using CO 4, 5 and 6 keys, turn the associated LEDs on or off, as required. The detailed meaning of each key is shown below.	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set

Key/LED	Data Meaning (LED on)	
CO 6	Allow:	411
CO 5	Allow:	1 + 7 digits
CO 4	Restrict:	1 or 0 in 1st digit 1 or 0 in 2nd digit More that 7 digits
	Allow:	911 800 Exception Codes per Program 2X

5. Operate [HOLD] key to place new data in memory	All Ext. 17 LEDs (except MW/FL) go off New data is stored, old data is erased
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off

TABLE 16

PROGRAM 7XX—STATION OUTGOING RESTRICTION

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [7] [X] [X] on dial pad. XX=the extension number of the station to be programmed. • Enter [0] [0] if all stations are to be programmed simultaneously • Enter [0] [1] if the eight lower numbered (10-17) stations are to be programmed simultaneously • Enter [0] [2] if the eight higher numbered (18-25) stations are to be programmed simultaneously	SPKR LED flashes continuously CO LEDs will be on according to present data
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. • LED on=Restricted outgoing calls • Each CO key/LED represents itself—that is, if CO 1 LED is on, the station being programmed (XX) is restricted from outgoing calls on CO 1	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in memory	All Ext. 17 LEDs (except MW/FL) go off New data is stored, old data is erased
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off

TABLE 17

PROGRAM 8XX—CO RINGING ASSIGNMENTS-DAY

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [8] [X] [X] on dial pad. XX=the extension number of the station to be programmed. • Enter [0] [0] if all stations are to be programmed simultaneously • Enter [0] [1] if the eight lower numbered (10-17) stations are to be programmed simultaneously • Enter [0] [2] if the eight higher numbered (18-25) stations are to be programmed simultaneously	SPKR LED flashes continuously CO LEDs will be on according to present data
NOTE: ***a) Extension designated to ring must be allowed access by Program 3XX.*** ***b) A maximum of 8 stations may be assigned to ring for any given CO line. If more are assigned, the lowest 8 extension numbers will ring--others will be ignored.***	
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. • LED on=Ring in DAY mode • Each CO key/LED represents itself—that is, if CO 1 LED is on, the station being programmed (XX) will ring when a call comes in on CO 1 in the DAY mode	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in memory	All Ext. 17 LEDs (except MW/FL) go off New data is stored, old data is erased
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off

TABLE 18

PROGRAM 9XX—CO RINGING ASSIGNMENTS-NITE

1. Operate **SET** switch on MCCU	LED on MCCU on Ext. 17 MW/FL LED on System is in program mode Normal functions halt on Ext. 17
2. Operate [SPKR] key on Ext. 17	SPKR LED steady on
3. Dial [9] [X] [X] on dial pad. XX=the extension number of the station to be programmed. • Enter [0] [0] if all stations are to be programmed simultaneously • Enter [0] [1] if the eight lower numbered (10-17) stations are to be programmed simultaneously • Enter [0] [2] if the eight higher numbered (18-25) stations are to be programmed simultaneously	SPKR LED flashes continuously CO LEDs will be on according to present data
NOTE: ***a) Extension designated to ring must be allowed access by Program 3XX.*** ***b) A maximum of 8 stations may be assigned to ring for any given CO line. If more are assigned, the lowest 8 extension numbers will ring--others will be ignored.***	
4. Refer to the System Record Sheet. Using the [CO] keys, turn the associated LEDs on or off, as required. • LED on=Ring in NITE mode • Each CO key/LED represents itself—that is, if CO 1 LED is on, the station being programmed (XX) will ring when a call comes in on CO 1 in the NITE mode	An X on the record sheet means the LED should be on If the LED is already on, pushing the associated key will turn it off and vice-versa LEDs may be turned off and on until the desired pattern is set
5. Operate [HOLD] key to place new data in memory	All Ext. 17 LEDs (except MW/FL) go off New data is stored, old data is erased
6A. Go to another program table ...or... 6B. Operate **SET** switch on the MCCU and cycle the power switch on the MTOU off and on	LED on MCCU goes off Ext. 17 MW/FL LED goes off