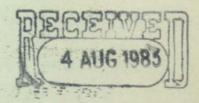
SUPERSWITCH

SX-200





0

\$X-200<sup>TM</sup> equipment cabinet and console



## **Features**

Superswitch features are implemented in software packages (202 through 205) for ease of application.

The feature content of each package is shown below.

	202	203	204	205
Alphanumeric Display for Attendant Position				
Attendant Camp-On		•	•	
Attendant CCSA Access				
Attendant Console (Maximum 2)				
Attendant Control of Trunk Group Access				
Attendant Controlled Conference				
Attendant Flash Over Trunks			•	
Attendant Lockout				
Attendant Position (2 Max.)				
Attendant Transfer - All Calls				
Automatic Callback Busy/Don't Answer (Station to Station Calls)				
Automatic Callback - Busy (Station to Trunk)				
Automatic Night Service Switching				
Automatic Queuing To Attendant Position				
Brokers Call				
Busy Lamp Field				
Busy Verification of Station Lines				
Call Forwarding - All Calls				•
Call Forwarding - Busy And Don't Answer				
Call Forwarding - Busy Line (DID)				
Call Forwarding - Don't Answer (DID)				•
Call Hold		:		•
Call Pickup	•		•	-
Call Waiting Service		÷	-	_
Attendant Call Waiting				•
Terminating Call Waiting	•			
Distinctive Tone Signals				
Calling Number Display to Attendant	•	•		
Calls Waiting Indication at Attendant Position	•			
CCSA Access		•		
Class of Service Display to Attendant				
Code Calling Access				
Code Restriction				
Conference Calling	•			
Contact Monitor		•		
Controlled Outward Restriction				
Controlled Station-To-Station Restriction				
Controlled Termination Restriction				
Controlled Total Restriction				
Data Restriction				
Date Display on Console(s)				
Diagnostics - Automatic				
Dial Access To Attendant				
Digital Clock on Attendant Position				
Direct Department Calling (DDC)				
Direct Inward Dialing (DID)				
Direct Outward Dialing (DOD)				
Direct Termination of Miscellaneous Circuits On Attendant Position (Paging)	•	•	•	•
Direct Trunk Group Selection (DTGS)				
Directed Call Pickup				
Hold-For-Pickup Option				
Distinctive Ringing				
DTMF And/Or DCKP On Attendant Position				
DTMF Calling			•	
DTMF To Dial Pulse Conversion				
Dump and Load of Customer Data	-		•	•
Executive Override			•	
Flash for Attendant	•		:	
FIGST TO AITENGUIT	•		•	•

	202	203	204	205
Flexible Numbering of Stations				
Foreign Exchange (FX) Access	•			
Fully Restricted Station				
Identified Trunk Group			•	
Immediate Audibie Ring on Attendant Handled Calls		•	•	•
Immediate Ring				
Incoming Call Identification (ICI)			•	
Indication of Camp-On				
Intercept Treatment				
Attendant Intercept	•	•	•	•
Intercept Tone	•		•	
Interposition Calling	•		•	•
Interposition Transfer				
Inward Restriction				
Line Lockout With Warning	•	•	•	
Listed Directory Number (LDN) Service	•	•		
Loudspeaker Paging				
Direct Access by Attendant	•		•	
Dial Access			•	
Multizone			•	*
Priority Paging		•	•	
Main/Satellite Service				
Manual Originating Line Service		•	•	
Manual Terminating Line Service			•	
Meet Me Conference				
Message Waiting (Audible)			•	
Message Waiting (Lamp)			•	
Miscellaneous Trunk Restriction				
Multiple Listed Directory Numbers (LDN)				
Multiple Access Codes for a single			ш	-
trunk group (10 max.) Music On Hold			•	
Music On Hold  Music on Attendant Position Hold	•		•	•
	-		•	-
Night Console Position Night Service	•	•	·	-
Fixed				
Flexible				
Night Station Service - Fixed Service				
Night Station Service - Full Service				
Off-Premise Stations				
Origination Restriction				
Outgoing Trunk Callback				
Outgoing Trunk Camp-On				
Outgoing Trunk Queuing				
Outward Restriction				
Power Failure Transfer - Station				
Priority Queue				
Privacy and Lockout				
Radio Paging Access			•	
Recall Dial Tone		•	•	
Recorded Telephone Dictation Access	-		_	
Remote Access to PBX Services	-			
Remote Administration and Maintenance			•	
(hardware option)				
Rering From Toll (on Toll Terminal)				
Reserve Power (hardware option)				
Room Audit				
Room Status			•	
Rotary Dial Calling				
Route Advance				

	202	203	204	205
Route Permanent Signal to Attendant				
Serial Call				
Sharing (4 Tenant)	Mary			
Shared Attendant Service				
Single Digit Dialing (Non-conflicting)				
Single Digit Dialing (Conflicting)				
Speed Call				
Splitting One-Way Manual Splitting				
Two-Way Manual Splitting				
One-Way Automatic Splitting				
Two-Way Automanual Splitting				
Station Hunting Terminal Hunting				
Circular Hunting				
Secretarial Hunting				
Station Message Detail Recording			15.5	
Station Message Register Service				
Electronic Storage and Display				
Internal Charging				
Station Override Security				
Station-to-Station Calling				
Straightforward Outward Completion				
Switched Loop Operation				
Tandem Tie Trunk Switching	HEL			
Termination Restriction				



	202 203 204 205			
Three-Way Conference Transfer				
Through Dialing				
Tie Trunk Access				
Timed Reminders				
Toll Restriction Battery Reversal				
0/1 Access				
Multi Digit				
Toll Terminal Access				
Total "Do Not Disturb" Display				
Total "Message Waiting" Display	NA DE			
Total "Room Status" Display	2000			
Traffic Data Collection		7.11		
Traffic Display to Customer				
Transfer into Busy				
Trunk Answer From Any Station			•	
Trunk Group Busy (TGB) Indicators on Attendant Position			•	
Trunk Status Field				
Trunk-To-Trunk Connections				
Trunk Verification by Customer (TVC)				
Trunk Verification by Station (TVS)				
Uniform Call Distribution (UCD)				
Wakeup Service				
WATS Access				
Wideband Data Switching				
Wide Frequency Tolerant Power Plant				

## More flexibility, less hardware

The unique system design provides Superswitch with the capability of meeting a broad range of switching requirements without additional equipment. Examples are:

• Main-satellite operation

• Private switching networks

- - -tandem office
  - -end office
- · Automatic call distribution
- Remote concentrator
- Data switch
- Intercom system
- Multi-customer PABX
- Hotei/Motel PABX

SX-200 cabinet with console and optional printer

SX-200 cabinet and console

# The Mitel Superswitch™ is more...and less

Mitel understands today's needs. That's why the Superswitch doesn't take up a lot of space. Or use a lot of power. Or cost a lot of money. What our innovative Superswitch does do is perform. Better than any other PABX on the market.

#### More design, less space.

We've designed the Mitel SX-200 to be the most compact, full-capability PABX in the world. It is incredibly easy to handle and install — in almost any environment. And it doesn't take up a lot of space.

#### Less power, more savings.

You can safely assume that a smaller PABX uses less energy. In fact, the Mitel Superswitch cuts power consumption by more than half that required to run the most efficient of our competitors' models. How? By using CMOS components. Since power consumption is reduced, so is the amount of heat generated, and the need for special cooling is completely eliminated. So you can also assume that if the Superswitch saves you energy, it saves you money.

#### More features, less work.

The Superswitch is ready for any application. It comes with a complete range of operating features. If you can't use all of them, you simply activate those features you need.

The line/trunk configuration of the Superswitch has common card positions which accept either line or trunk cards. So the system can be easily reconfigured should your requirements change.

#### Less maintenance, more reliability.

Problems are not a problem with the Superswitch. Sophisticated, self-checking diagnostic routines are built-in. If a circuit malfunction occurs, Superswitch automatically triggers a fault alarm on the console, "busies-out" the problem circuit, and re-routes subsequent calls.

Maintenance is no problem either. The diagnostic routines identify faulty circuit cards for rapid replacement. System design requires few circuit cards, thus simplifying maintenance.

And, as if that weren't enough, the Superswitch has a back-up battery to guard against memory loss should there be a power failure. When we say reliable, we mean reliable.

#### More PABX, less money.

When our engineers were working on space, energy and reliability, they were also working on cost. With the Mitel Superswitch, you get a lot more PABX for a lot less money. And that might be the best feature of all.

### More flexibility, less hardware

The unique system design provides Superswitch with the capability of meeting a broad range of switching requirements without additional equipment. Examples are:

- Main-satellite operation
- Private switching networks
  - -tandem office
  - -end office
- Automatic call distribution
- Remote concentrator
- Data switch
- Intercom system
- Multi-customer PABX
- Hotel/Motel PABX

# **Technical Summary**



SX-200<sup>TM</sup> attendant console



Technology:	Stored program, Microprocessor controlled, CMOS logic
Switching:	Space Division, CMOS Switch
Control:	_Microprocessor Cantrolled
System Capacity:	208 Ports Lines (1 port per line) Trunks (2 or 4 ports per Trunk) Receivers (2 or 4 ports per Receiver)
StationLoop:	Maximum 1200 ohm including set
Central Office Loop:_	Maximum 1600 ohm
Tones:	_Standard precise tone plan
Console:	Switched loop maximum of 1000 ft. (300m) from equipment cabinet using 26 awg. cable.
Traffic:	7.5ccs/line min. at 100 lines at P=0.01 5ccs/line min. at 150 lines at P=0.01
Transmission:	Crosstalk 75dB down Idle Circuit Noise 15dBrnC Insertion Loss, Station to Station 5dB±0.5dB Insertion Loss, Station to Trunk 0.5dB±0.3dB Insertion Loss, Trunk to Trunk 0.5dB±0.3dB
Primary Power:	90-125 VAC, 47-63Hz, 4A maximum drain 230 VAC operation optional Backup battery optional
Equipment Cabinet:_	38in. (960mm) H, 23.5in. (600mm) W, 27.5in. (700mm) D
Console:	6.8in. (172mm) H, 13.75in. (338mm) W, 9.25in. (234mm) D
Environment:	0-40°C (32-104°F) 10-90% Relative Humidity

Specifications subject to change without notice

#### J.S.A.

P.O. Box 17170, 600 West Service Rd., Dulles International Airport, Washington, D.C. 20041; (703) 661-8600, TWX: 710-955-0026

#### Offices:

Bloomingdale, Illinois, (312) 980-4610; Birmingham, Alabama, (205) 822-7723; Dallas, Texas, (214) 387-5581; Lakewood, Colorado, (303) 989-3475; Mountainside, New Jersey, (201) 654-4550; Arlington, Virginia, (703) 243-0600; Emerville, California, (415) 428-2116; Overland Park, Kansas, (913) 492-1488

#### Canada

P.O. Box 13089, Kanata, Ottawa, Ontario K2K 1X3 (613) 592-2122, Telex: 053-4596, TWX: 610-562-8529

#### Offices

Halifax, Nova Scotia, (902) 422-1434; Toronto, Ontario, (416) 675-2169; North Vancouver, British Columbia, (604) 988-2510

#### Europe

Hamilton Road, Slough, Berkshire, England SL1 4QY 0753-36137 or 0753-36138, Telex: 847730

#### Offices

Copenhagen, Denmark, (01) 119302; Shannon, Ireland, 061-61433

#### Asia

Kowloon, Hong Kong, 3-318256