

# Sur-Gard System III



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The Next Generation Receiver... For the Next Generation Needs!



# Sur-Gard System III



The Most Versatile, Flexible and Powerful Receiver Ever!



# Sur-Gard System III Virtual Receiver



Any incoming signal of any incoming format to any line

One receiver for all needs!

- More Accounts
- Less Space
- Fewer Line Cards
- Less Time On-line
- Save Money

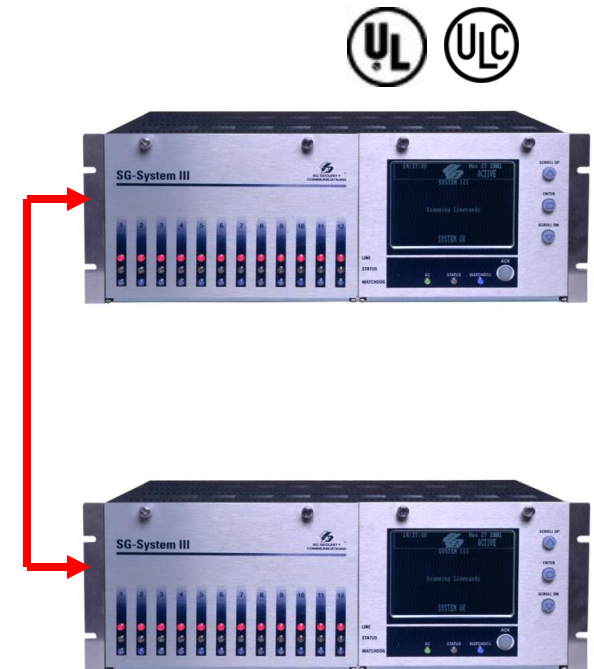


# Station Redundancy



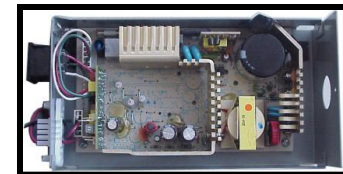
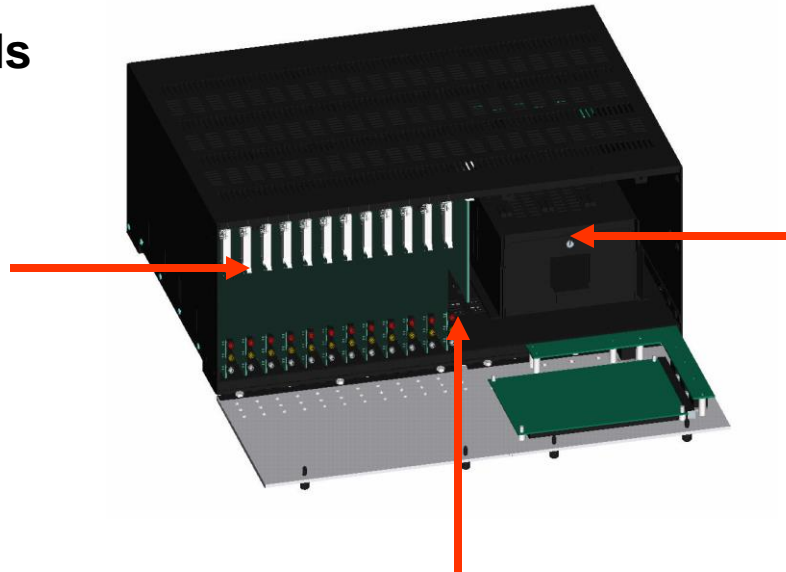
## Integrated redundancy for central station certification

- Automatic Switching from Primary to “hot” Secondary Hardware
- Dual CPM3 Receivers
- Dual PSU3 Power Supplies
- Virtual Line Cards
- Automatic Back-up to Redundant Automation Software Port



# Hot Swappable Components

## DRL3 Line Cards



**PSU3 Power Module**

- Hot Swap with Power On
- No Signal Loss
- No Information Loss



**CPM3**

# Easily and Economically Expandable



Start with the number of line cards that you need...

Expand System III to a total of 24 Virtual Line Cards



# Move to the Digital World



## Digital T1 / PRI Telco Service

- Eliminate “POTS” lines
- Point all telephone numbers to Digital Service
- Enhanced flexibility





# Communication Formats



## Increasing the number of formats

- Over 100 formats and growing
- SIA 1, 2, 3, 8, 20
- Contact ID, Pulse, Modem II, IIe, IIIA Squared, ITI, Silent Knight FSK1, FSK2, SESCOA Super Speed... and many more!
- Any format to any line card



# Virtual Line Cards

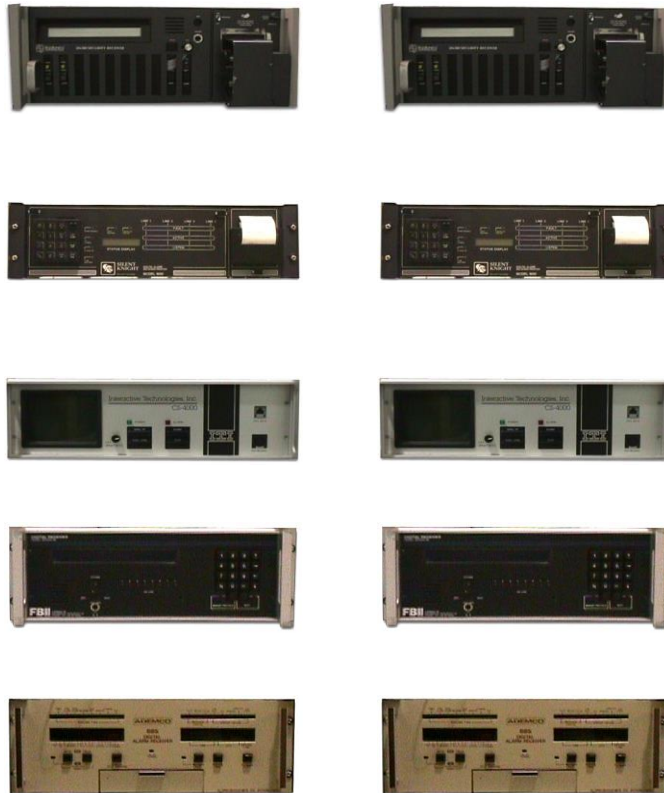


## Any line card can take any call

- Using the digital service information  
(DNIS and ANI)
- Maximum line use
- Minimum lines needed

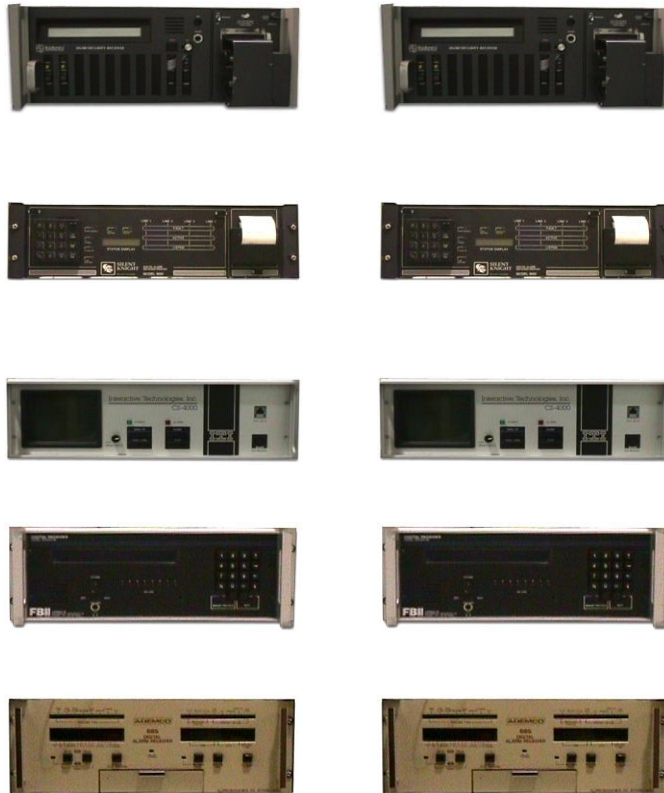


# Conventional Receivers



- Any call must go to receiver with format
- Incoming call must go to line card with telephone number

# Conventional Receivers



- Multiple receivers for multiple formats
- Duplication for redundant needs

# Conventional Receiving of Signals



Incoming call to Line-1

If busy roll over to Line-2 then  
Line-3 then Line-4 ...



Line 1 - 80%

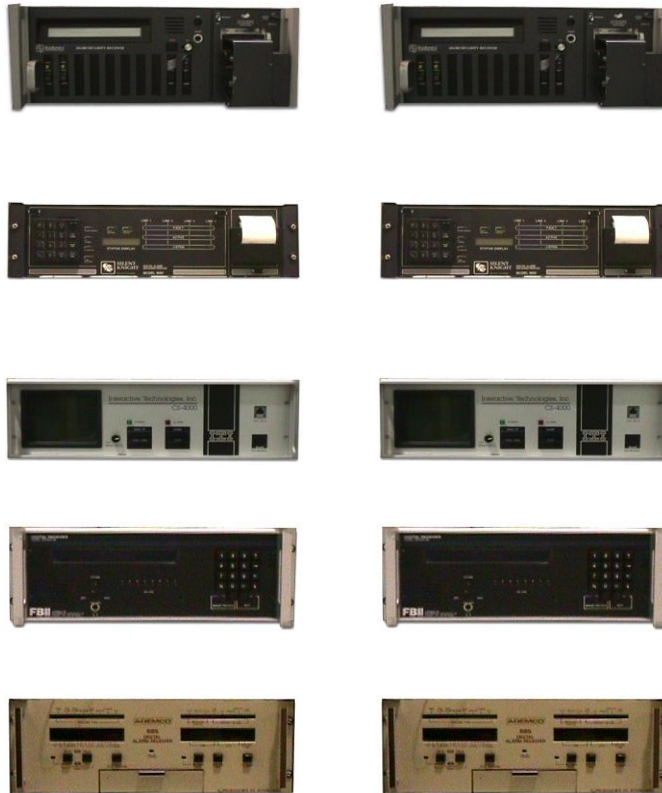
Line 2 - 60%

Line 3 - 40%

Line 4 - 20%

Line 5 - 0%

# Conventional Receiving of Signals



**The result is inefficient line usage and poor cost ratio**

- Last few lines only used at peak times

# Conventional Handshakes



## Handshakes, which one?

HS #1      ?

Wait

HS #2      ?

Wait

HS #3      ?

Wait

HS #4      OK

Time taken - 20 Seconds

Even if SIA or Contact ID is used, it could take 15 – 20 seconds before the correct handshake is provided

# The Virtual Receiver



## Fixed-line Hunt Groups become Software Profiles

- Any call to any line card
- 100% use of all line cards
- Fixed hunt groups are eliminated
- 2 to 1 ratio or less
- 48 conventional lines become 24 virtual lines





# The Virtual Receiver



Can we make communication formats faster?

**NO**

But can we recognize what format before the call picks up?

**YES**

How?



# ANI and DNIS



Know which handshake to use  
with  
the use of ANI and DNIS C.L.A.S.S. signals  
and  
the use of patented AHS



# Virtual Hunt Groups



## ANI and DNIS

System III sends the correct handshake with the use of ANI and DNIS and AHS.

- **C.L.A.S.S.**      *Custom Local Area Signalling Services*
  - **ANI**            *Automatic Number Identification*
  - **DNIS**          *Dialled Number Identification System*
  - **AHS**            *Automatic Handshake Service*
- 
- Communication begins much faster



# Virtual Hunt Groups



## How System III takes a call

1. Call comes in
2. ANI received: 416-665-4494
3. DNIS received: 1234
4. Check database
5. Check DNIS table
6. Send handshake SIA
7. Switch to profile 3

ANI	Handshake
416-665-4494	SIA
416-665-4595	99

DNIS#	Profile
1234	3
45678	2



665-4494  
ANI: 416-665-4494



800-418-7618  
DNIS: 1234



# Virtual Hunt Groups



665-4494  
ANI: 416-665-4494



800-418-7618  
DNIS: 1234

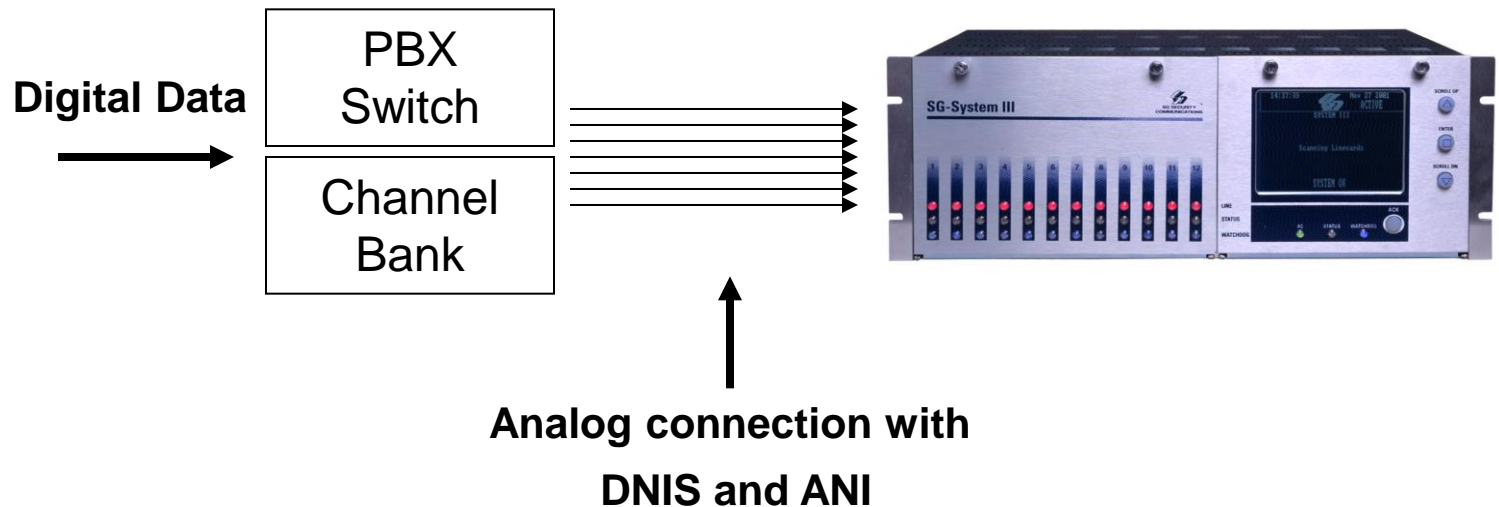


# Communicating with System III



## Convert from POTS line to Digital Service

- T1 or PRI provides 24 channels with data
- 24 channels are converted to analogue with DNIS and ANI



# Seamless Communication



## Automation software and network

- Ethernet output to automation software
- Full TCP-IP output for network capability
- Serial outputs
- Parallel output

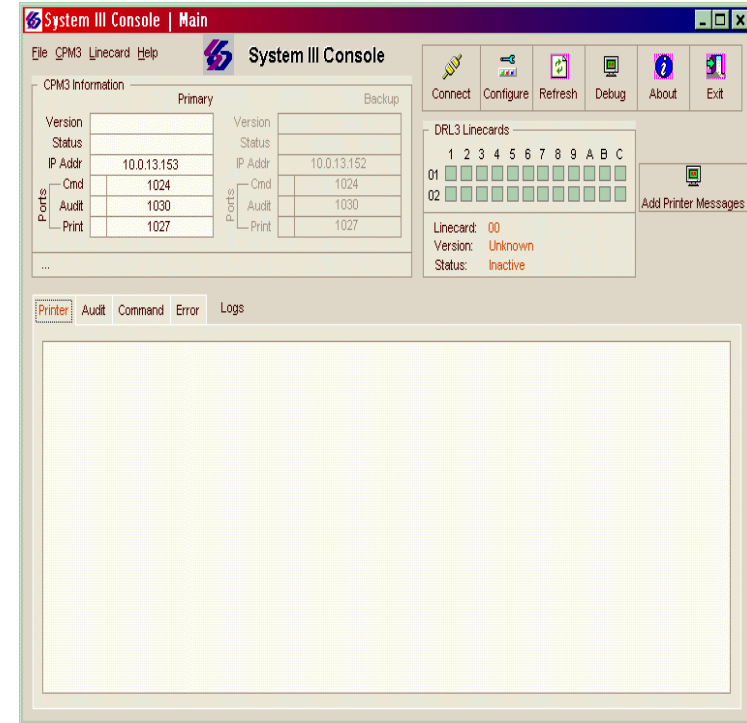


# Console Software



## Fast and easy upgrades

- 'Flash' memory upgrades and configuration while other components remain active
- Remote diagnostic tools
- Communication debug tool
- Real time status of subsystem
- Scheduled or manual integrated line card testing
- Virtual printer option

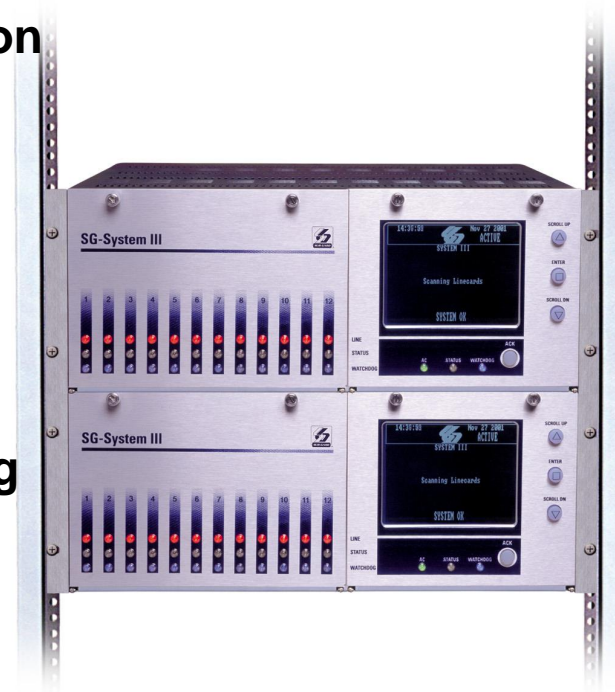




# System III Benefits



- Eliminates 'idle' backup units
- Reduces phone charges
- Advanced two-way audio integration
- Fully 'hot-swappable' modules
- Fewer line cards needed
- Eliminates fixed-line hunt groups
- Faster signal processing
- Integrated receiver line card testing
- Blocks unwanted "Ghost" calls
- Requires less physical space
- User-friendly configuration tools
- Upgradeable 'Flash' memory



# Sur-Gard System III Summary



## System III Summary

- Save Time
- Save Space
- Save Money



**“The pinnacle of digital receiver technology”**



# Sur-Gard System III



**Thank You**