

## Panasonic NS700

### Linking 2 KSU's Together – Location B Direct Dial

### Telquest Tech Support

**You must have a VPN established between each of the locations.**  
**You must have/purchase IP Trunk Channel Activation Keys.**

**Note: It takes 2 IP Trunk Channel Activation Keys for each Port. (See Page 6)**

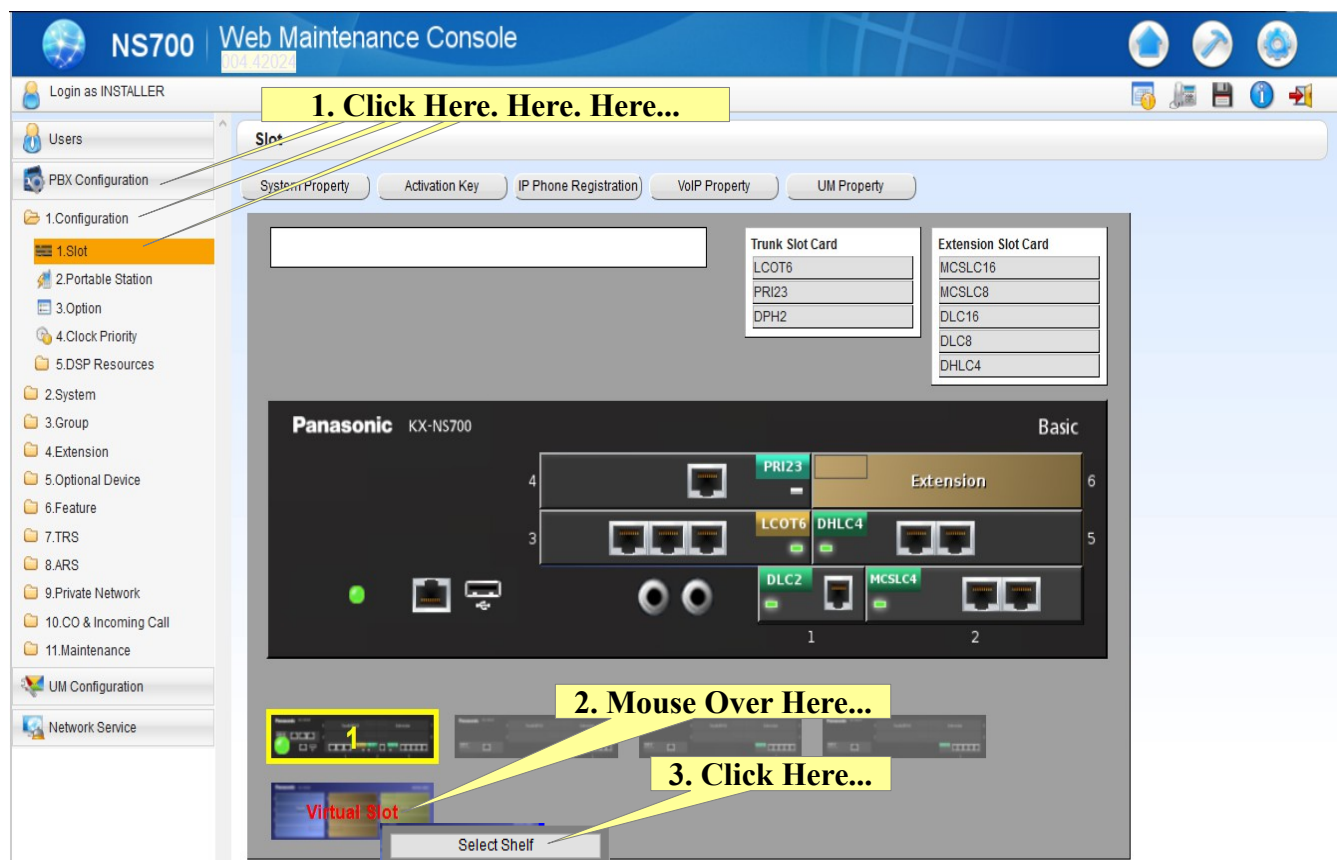
**First, install a V-IPGW16 card**

**It is a Virtual Card, not a Physical Card.** Extension Numbers **MUST** be different at each location.

**Location A has extensions 101 – 111 / LAN IP Address 10.10.0.222**

**Location B has extensions 201 – 211 / LAN IP Address 192.168.111.101**

**This is the programming for Location B**



**1. Click Here. Here. Here...**

**2. Mouse Over Here...**

**3. Click Here...**

**The LAN IP Addresses used in the Help Sheet are just examples.**  
**Yours may be different.**

**Note: This Help Sheet is about connecting 2 KSU's together. You can have more.**  
**Later on the Pages I will show you where to add info for more locations.**

**To activate virtual IP trunk activation keys**

Restart all virtual IP Trunk cards.

Execute

**After you install the Application Key,**  
**Click this button to activate.**

## Page 2 Location B Direct Dial

NS700 Web Maintenance Console

Login as INSTALLER

Users

PBX Configuration

1. Configuration

2. Slot

3. Option

4. Clock Priority

5. DSP Resources

2. System

3. Group

4. Extension

5. Optional Device

6. Feature

7. TRS

8. ARS

9. Private Network

10. CO & Incoming Call

11. Maintenance

UM Configuration

Network Service

Slot

System Property Activation Key IP Phone Registration VoIP Property UM Property

Virtual 16-Channel VoIP Gateway Card

V-IPGW16

Trunk Slot Card

V-SIPGW16

V-IPGW16

Extension Slot Card

V-IPEXT32

V-SIPEXT32

V-UTEXT32

V-IPCS4

Panasonic KX-NS700

Virtual

4

3

2

1

Trunk

V-SIPGW16

V-IPGW16

8

7

6

5

Extension

V-SIPEXT32

V-IPEXT32

12

11

10

9

16

15

14

13

IP-CS

IP-CS

Virtual Slot

If Slot 1 is already in use, use the next higher available Slot.

1

V-IPGW16

System Property

Shelf Property

Port Property

Ous

Virtual Slot

Page 3 Location B Direct Dial

This screen will appear:

1. Click Here...

NS700 Web Maintenance Console

004.42024

Login as INSTALLER

System Property - Main

Main System Status V-IPGW

DSP codec G.711 only (SIP Extension) : Disable

DSP codec G.711 only (IP-GW) : Disable

DSP codec Priority-1 Value only (Others) : Disable

System Speed Dial Download For UT Extensions : 100

This screen will appear:

1. Click Here...

NS700 Web Maintenance Console

004.42024

Login as INSTALLER

System Property - Main

Main System Status V-IPGW

GW Settings DN2IP

Call Signaling Model : Direct

Gatekeeper Connection Checking Interval (\*60s) : 0

This screen will appear:

1. The Name of Location A

2. The LAN IP Address of Location A

NS700 Web Maintenance Console

004.42024

Login as INSTALLER

System Property - Main - V-IPGW - GW Settings

Main Option 1 Option 2 Option 3

No.	GW Name (20 characters)	GW Address	GW Group	Connection for IP-GW	Protect	Send Mode
1	To Location A	10.10.0.222	None	Enable(TDA)	TCP	Internal
2	To Location C	10.10.2.123	None	Enable(TDA)	TCP	Internal
3	To Location D	192.168.5.14	None	Enable(TDA)	TCP	Internal
4	To Location E	10.20.4.25	None	Enable(TDA)	TCP	Internal

3. Click Here...

OK

Cancel

Apply

## Page 4 Location B Direct Dial

This screen will appear:

1. Click Here...



NS700 Web Maintenance Console  
004.42024

Login as INSTALLER

System Property - Main

Main System Status V:PGW

GW Settings DN2IP

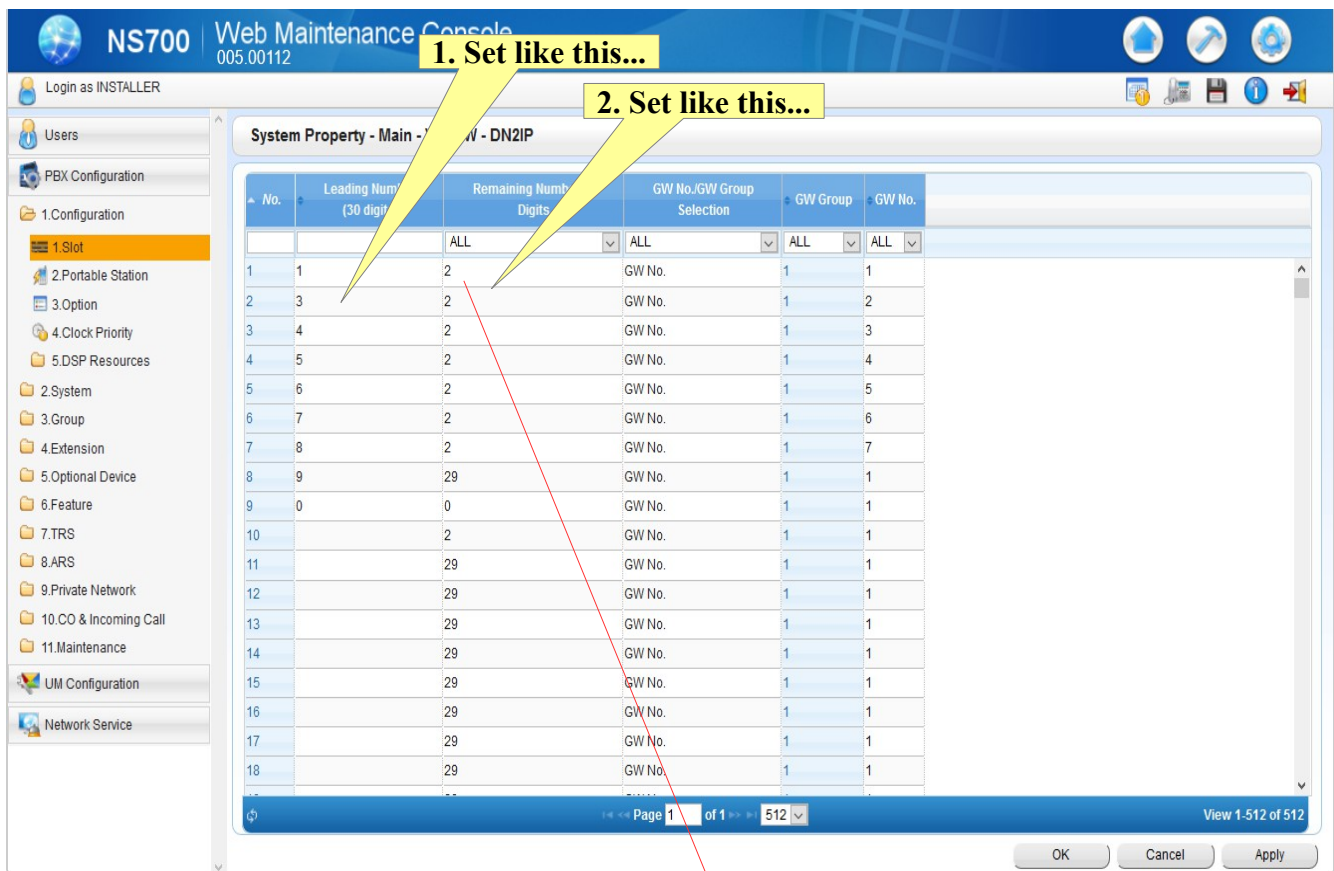
Call Signaling Model : Direct

Gatekeeper Connection Checking Interval (\*60s) : 0

This screen will appear:

1. Set like this...

2. Set like this...



NS700 Web Maintenance Console  
005.00112

Login as INSTALLER

System Property - Main - DN2IP

No.	Leading Num (30 digit)	Remaining Num Digits	GW No./GW Group Selection	GW Group	GW No.
		ALL	ALL	ALL	ALL
1	1	2	GW No.	1	1
2	3	2	GW No.	1	2
3	4	2	GW No.	1	3
4	5	2	GW No.	1	4
5	6	2	GW No.	1	5
6	7	2	GW No.	1	6
7	8	2	GW No.	1	7
8	9	29	GW No.	1	1
9	0	0	GW No.	1	1
10		2	GW No.	1	1
11		29	GW No.	1	1
12		29	GW No.	1	1
13		29	GW No.	1	1
14		29	GW No.	1	1
15		29	GW No.	1	1
16		29	GW No.	1	1
17		29	GW No.	1	1
18		29	GW No.	1	1

Page 1 of 1 512

View 1-512 of 512

OK Cancel Apply

If the extensions at Location A are 3 Digits, then set these to 2  
If the extensions at Location A are 4 Digits, then set these to 3  
If the extensions at Location A are 5 Digits, then set these to 4 Etc...

Set to 0 for Operator

Set to 29 for accessing CO Lines at remote location

## Page 5 Location B Direct Dial

### Set the Private network:

**NS700 Web Maintenance Console**  
005.00112

Login as INSTALLER

**1. Click Here...**

**2. Click Here...**

**3. Set like this...**

**4. Set like this...**

**5. Set like this...**

**6 Set to 2**

**Different**

ID	Leading Number (3 digits)	Removed Number of Digits	Priority 1 - Trunk Group
1	1	0	7
2	2	0	7
3	3	0	7
4	4	0	7
5	5	0	7
6	6	0	7
7	7	0	7
8	8	0	7
9	9	1	7
10	0	0	7
11		0	None
12		0	None
13		0	None
14		0	None
15		0	None

Page 1 of 2

View 1-20 of 32

OK Cancel Apply



I did not specify that you need to click the OK Button each screen.

click the SD Card Icon when done to SAVE your programming.



**1. Mouse Over...**

**2. Click Here...**

**This screen will appear:**

No.	Shelf	Slot	Port	Connection	Call Distribution Port Group	Ringback Tone to Outside Caller
1	Virtual	1	1	INS	1	Enable
2	Virtual	1	2	INS	1	Enable
3	Virtual	1	3	OUS	1	Enable
4	Virtual	1	4	OUS	1	Enable
5	Virtual	1	5	OUS	1	Enable
6	Virtual	1	6	OUS	1	Enable
7	Virtual	1	7	OUS	1	Enable
8	Virtual	1	8	OUS	1	Enable

**I have 4 IP Trunk Channel Activation Keys, so you can see there are 2 Ports In Service (INS)**

**If I only had 2 IP Trunk Channel Activation Keys. Then only 1 Port would be In service. (INS)**

**INS does not indicate that there is a connection established between the 2 systems.**

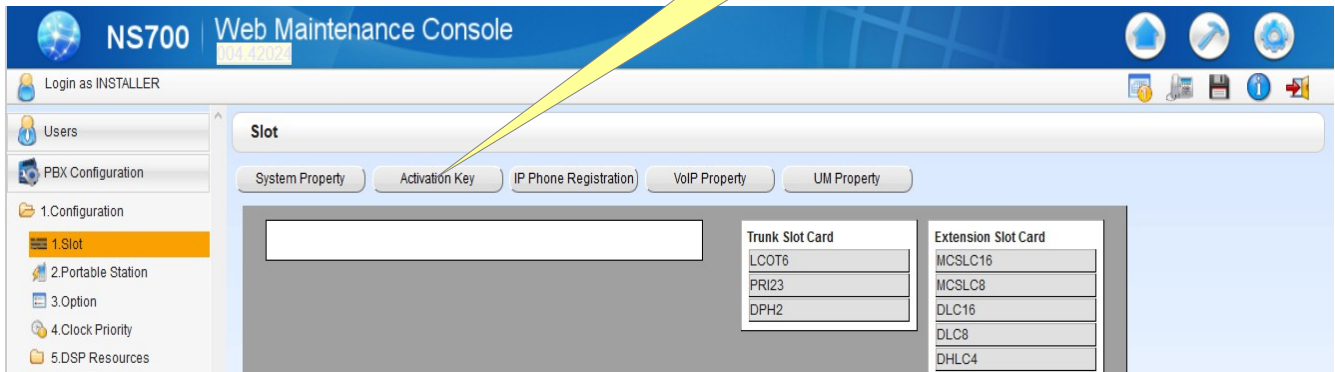
## Page 7 Location B Direct Dial

**Note:** The installation of Activation Keys is not included in the Help sheet.

**Set the Number of activated IP-GW**

**IP-GW = IP Gateway/V-IPGW16 card**

**1. Click Here...**

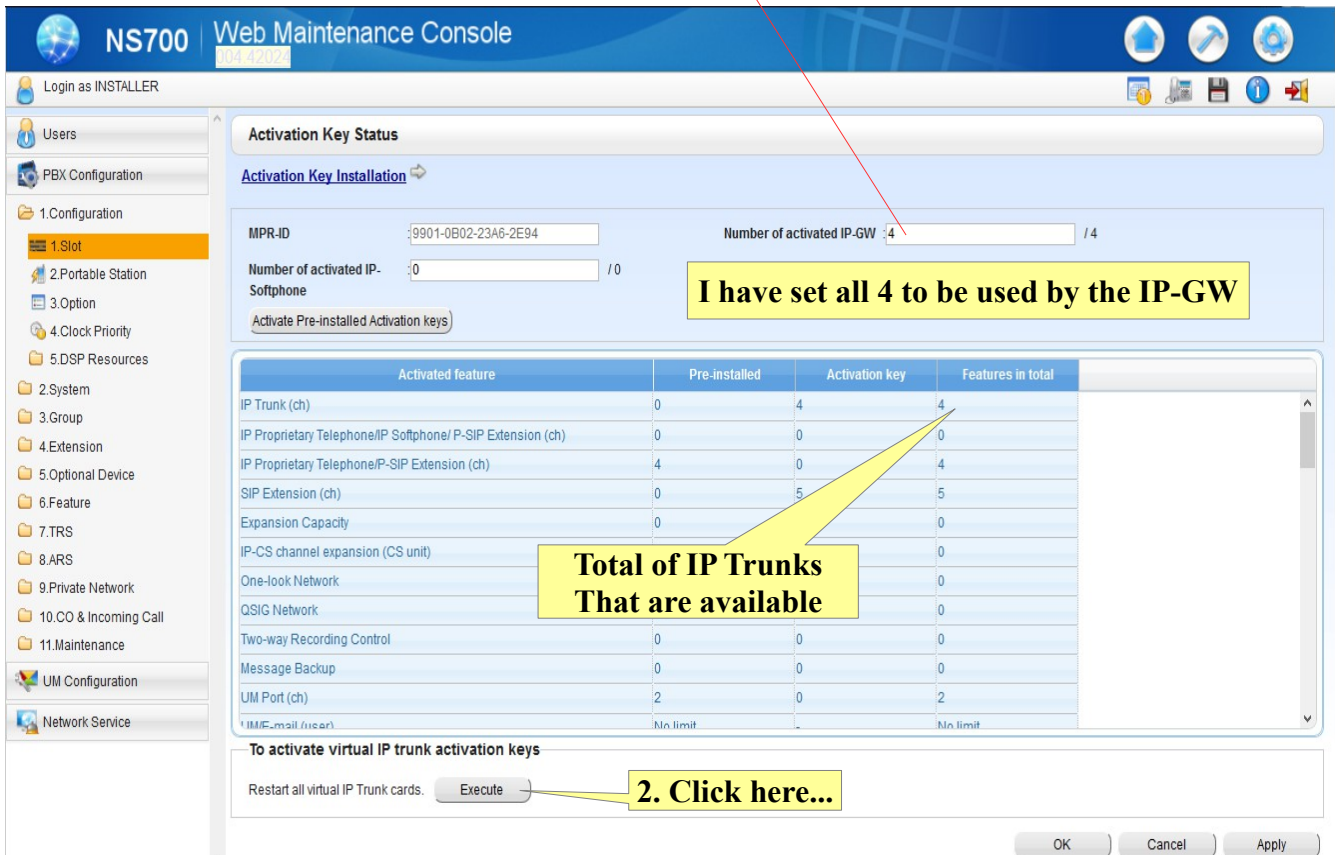


**1. Enter the number of "IP Trunks" to be used by the IP-GW.**

**This should be an even number.**

**Minimum of 2.**

**This screen will appear:**



## Operation

### Press your Intercom Button

To call Extension 201 from Location A to Location B you would dial 201

To call Extension 101 from Location B to Location A you would dial 101

To call the Operator 0 from Location A to Location B you would dial 720#

To call the Operator 0 from Location B to Location A you would dial 710#

To call 1 561 832 3801 from Location A using Location B CO Lines you would dial 7915618323801

To call 1 561 832 3801 from Location B using Location A CO Lines you would dial 7915618323801

### Or

Press a Link or Link Group Button (This eliminates the need to dial the 7)

To call Extension 201 from Location A to Location B you would dial 201

To call Extension 101 from Location B to Location A you would dial 101

To call 1 561 832 3801 from Location A using Location B CO Lines you would dial 7915618323801

To call 1 561 832 3801 from Location B using Location A CO Lines you would dial 7915618323801

### Additional information for your routers:

Be sure that the Router to Router VPN is wide open and does not restrict or manipulate any Ports, IP Addresses or Protocols.

You may need to Port Forward the Range of 16000 through 16125 UDP to the IP Address of the DSP Card.

This will allow two way audio between the systems.



## Page 9 Location B Direct Dial

If you want to be able to make Outside Calls from either location using the CO Lines of the other location, you will need to do the following:

If you are using Analog CO Lines, they are in Trunk Group 1 by default.

**NS700 Web Maintenance Console**  
005.00112

Login as INSTALLER

**TRG Settings** 1. Click Here...

Main Tone Plan Extension PBX Access Code

Trunk Group	Group Name (20 characters)	COS	Line Hunting Order	CO-CO Duration Time (*60s)	Extension-CO Duration Time (*60s)	Caller ID Modification Table	DialingPlanTable
1		ALL	ALL	ALL	ALL	ALL	ALL
2		7	High -> Low	10	10	1	1
3		7	High -> Low	10	10	1	1
4		7	High -> Low	10	10	1	1
5		7	High -> Low	10	10	1	1
6		7	High -> Low	10	10	1	1
7		7	High -> Low	10	10	1	1
8		7	High -> Low	10	10	1	1
9		7	High -> Low	10	10	1	1
10		7	High -> Low	10	10	1	1
11		7	High -> Low	10	10	1	1
12		7	High -> Low	10	10	1	1
13		7	High -> Low	10	10	1	1
14		7	High -> Low	10	10	1	1
15		7	High -> Low	10	10	1	1

2. Set like this...

3. Set like this...

4. Set like this...

Page 1 of 4

View 1-20 of 64

OK Cancel Apply

## **Page 10 Location B Direct Dial**

**The Dialing Plan is used to make dialing an Outside Call over the VPN easier.  
It is constructed to determine when the KSU will dial the telephone number.  
It can be a bit tricky.**

**The Dial Plan below is designed to work with the following conditions:**

**Leading Number: 9N11**

**9 is the Access Code to the other KSU**

**N is any digit from 2 through 9**

**XX is any two digits from 0 through 9**

**You can dial 411, 611, 911 or anything 11**

**Example: 911**

**Leading Number: 9NXXXXXX**

**9 is the Access Code to the other KSU**

**N is any digit from 2 through 9**

**XXXXXX is any six digits from 0 through 9**

**You can dial any 7 digit telephone number**

**Example: 2351234**

**Leading Number: 9PXXXXXXXXXX**

**9 is the Access Code to the other KSU**

**P is either a 1 or a 0 (This is what is used to determine a 1 Plus Long Distance call)**

**XXXXXXXXXX is any ten digits from 0 through 9**

**You can dial 1 followed by any 10 digit telephone number**

**Example: 12125551212**

**You cannot have 7 digit dialing and 10 digit dialing in a single Dial Plan.**

**A Dial Plan for 10 digit dialing would be:**

**Leading Number 1: 9N11**

**Leading Number 2: XXXXXXXXXXXXX (12 Capital X's)**

**Remaining Leading Numbers blank**

**Dialing a 7 digit number would require the End User to dial a # (POUND) at the end of the last digit to make the call go through.**

## Page 11 Location B Direct Dial

**This Dialing Plan is for:**

**411, 611, 911 or anything 11**

**7 digit telephone numbers**

**1 Plus Long Distance dialing**

**NS700 Web Maintenance Console**  
005.00112

Login as INSTALLER

**Dialing plan**

Auto Assign

Dialing Plan Table

No.	Leading Number (32 digits)	Removed Number of Digits	Added Number (32 digits)
1	19N11	0	
2	19NXXXXXX	0	
3	19/XXXXXXXXXXXX	0	
4		0	
5		0	
6		0	
7		0	
8		0	
9		0	
10		0	
11		0	
12		0	
13		0	
14		0	
15		0	
16		0	

Page 1 of 3

View 1-20 of 50

OK Cancel Apply

**If you need the Dial Plan characters:**

**N = 2 3 4 5 6 7 8 9**

**P = 0 or 1**

**X = 0 1 2 3 4 5 6 7 8 9 & #**

## Page 12 Location B Direct Dial

### Put the Links on Buttons

It makes it easier for the End Users if you put all your Links to the other KSU on buttons.

Just label the Buttons Link 1, Link 2 etc...

This way they can see if a Link is available, press an available link and dial a single digit followed by the remote extensions Intercom number.

I have 2 Links, so I put them on Buttons 23 and 24.

**NS700 Web Maintenance Console**  
005.00112

Login as INSTALLER

**Flexible Button**

Extension Number/Name: 101 / Receptionist  
Number of Connections NT505: None  
NT505 Location No.: 0

Copy to

Available Keys: 24

Key Location	Type	Parameter Selection	Extension Number	Extension Name	Dial (Max. 32 digits)	Label Name (Max. 12 characters)	Optional Parameter (or Ringing Tone Type Number)
	ALL	ALL					ALL
14	Single CO	14 :				14	Ringing Tone Type
15	Single CO	15 :				15	Ringing Tone Type
16	Single CO	16 :				16	Ringing Tone Type
17	Single CO	17 :				17	Ringing Tone Type
18	Single CO	18 :				18	Ringing Tone Type
19	Group CO	7 : Link Group				19	Ringing Tone Type
20	Single CO	20 :				20	Ringing Tone Type
21	Single CO	21 :				21	Ringing Tone Type
22	Not Stored					22	
23	Single CO	23 : Link 1				23	Ringing Tone Type
24	Single CO	24 : Link 2				24	Ringing Tone Type
25	Single CO	25 :				25	Ringing Tone Type
26	Single CO	26 :				26	Ringing Tone Type
27	Single CO	27 :				27	Ringing Tone Type

Page 1 of 3  
View 1-40 of 84

OK Cancel Apply

You can place the Links on any button.

Be sure to place all Links on buttons.

You could also use a Group CO Button as shown above on Button 19.

This would require only 1 button and have access to all Links...