

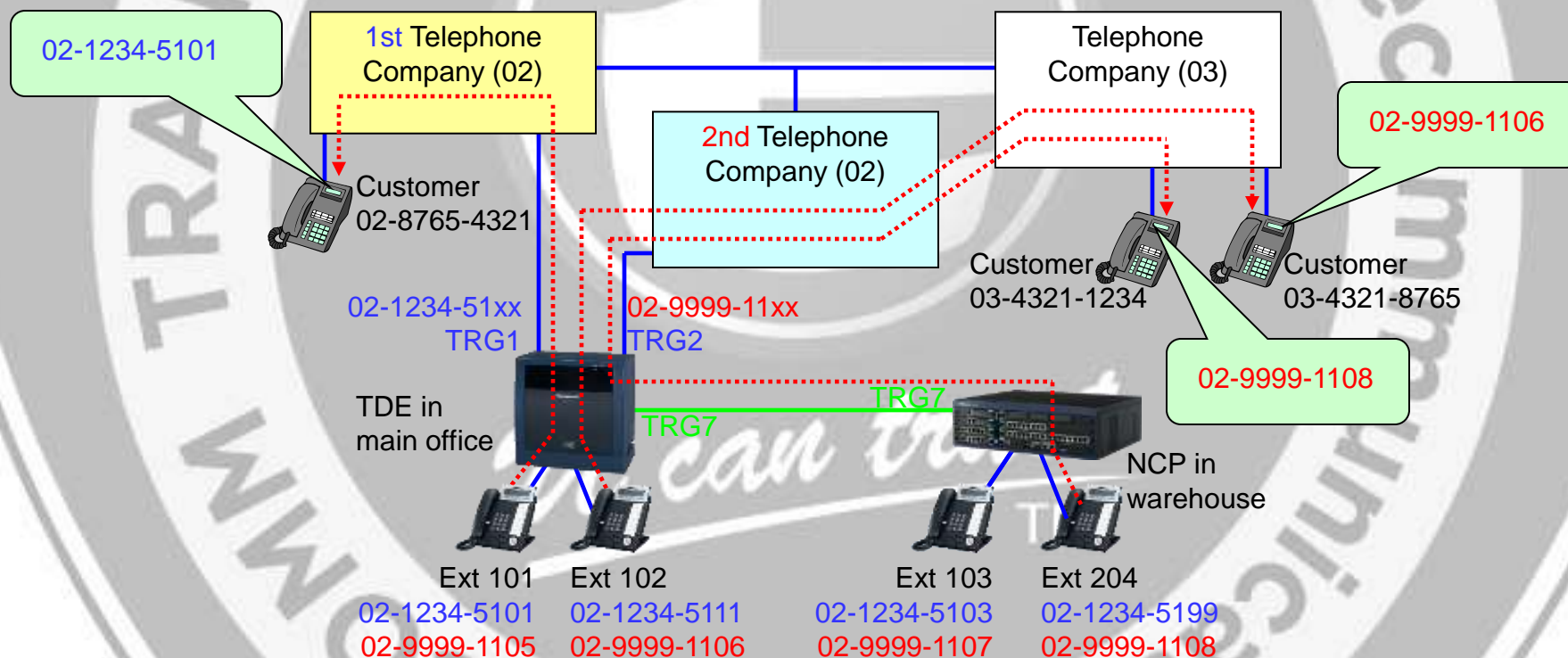
## 8 CLIP using ARS

**One extension user can have 8 CLIP numbers.  
This document explains how to program for above.**

# 1. Request

When PBX has trunk lines of two telephone companies, extension user has two telephone numbers for DDI incoming call. User wants to inform correct number as CLIP automatically for outgoing call.

This user wants to use 2nd telephone company for long distance call for example.



Incorrect CLIP number is changed to main number by the telephone company usually, and the main number is informed to a customer instead of incorrect CLIP.

For example, 02-1234-5101 is incorrect number for the 2nd telephone company.

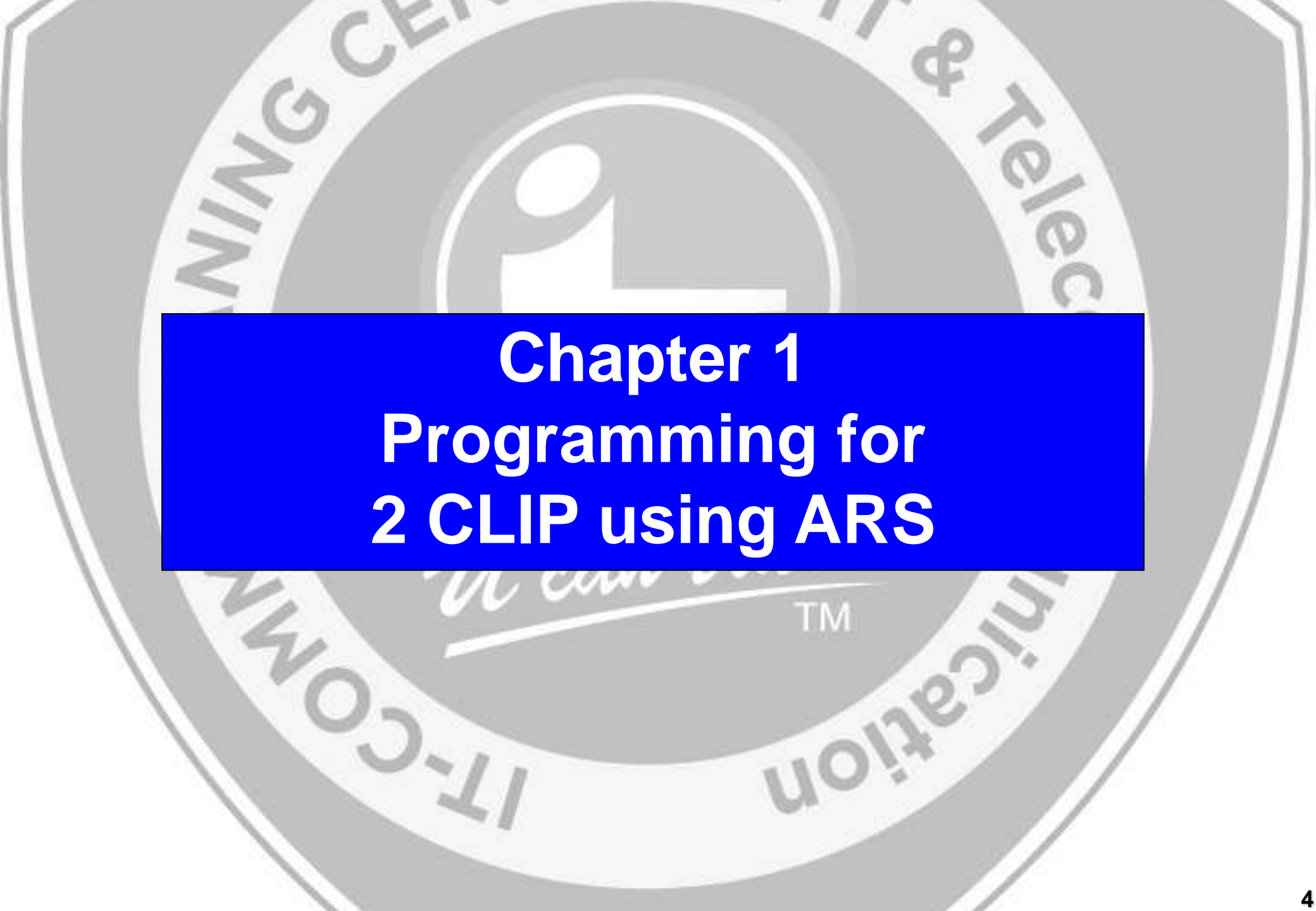
02-9999-1100 as main number is informed to a customer.

But extension user wants to send correct CLIP instead of main number as above picture.

## 2. Table of Contents

Chapter	Explanation
1	Programming for 2 CLIP using ARS (KX-TDE/NCP and KX-NS PBX)
2	Programming for 8 CLIP using ARS (KX-NS PBX only)
3	Programming for ARS Basic (KX-TDE/NCP and KX-NS PBX)





If 1 and 2 are used at the same time for KX-NS PBX, extension user can have 9 CLIP numbers.



**Chapter 1**  
**Programming for**  
**2 CLIP using ARS**

# Concept for Programming

2nd CLIP can be sent for outgoing call using ARS.

Dial	ARS Carrier	CLIP to send
02	<div data-bbox="681 444 1002 615" style="border: 1px solid black; background-color: yellow; padding: 5px; text-align: center;">1st Telephone Company (02-1234)</div>	<div data-bbox="1243 401 1804 605" style="border: 1px solid black; padding: 5px;"><p>1st CLIP</p><div style="display: flex; justify-content: space-around; align-items: center;"><div style="text-align: center;"> Ext 101 02-1234-5101</div><div style="text-align: center;"> Ext 102 02-1234-5111</div></div></div>
Other 0x such as 01,03...	<div data-bbox="681 776 1002 948" style="border: 1px solid black; background-color: cyan; padding: 5px; text-align: center;">2nd Telephone Company (02-9999)</div>	<div data-bbox="1243 725 1804 993" style="border: 1px solid black; padding: 5px;"><p>2nd CIP</p><div style="display: flex; justify-content: space-around; align-items: center;"><div style="text-align: center;"> Ext 101 02-9999-1105</div><div style="text-align: center;"> Ext 102 02-9999-1106</div></div></div>

# Programming -1A

System Menu

- 1. Configuration
- 2. System
- 3. Group
- 4. Extension
  - 1. Wired Extension
    - 1. Extension Settings
- 5. Optional Device
- 6. Feature
- 7. TRS
- 8. ARS
- 9. Private Network
- 10. CO & Incoming Call
- 11. Maintenance

8.5 Carrier 4.1.1 Extension Settings

OK(O) Cancel(C) Apply(A) Find Next(N) Copy to(I)

Main Intercept Destination Intercept No Answer Time **ISDN CLIP** Option 1 Option 2 Option 3 Option 4

No.	Extension Number	Extension Name (20 characters)	CLIP ID	CLIP on Extension/CO	ARS Itemised Code /2nd CLIP (10 digits)	CLIR
1	101		0212345101	Extension	0299991105	Disable
2	102		0212345111	Extension	0299991106	Disable
3				Extension		Disable
4				Extension		Disable
5				Extension		Disable
6				Extension		Disable
7				Extension		Disable
8				Extension		Disable

Ext 101 02-1234-5101 02-9999-1105  
Ext 102 02-1234-5111 02-9999-1106

Batch Mode: Type: TDE200 05-000 Region006-017

This is programming example for TDE in office.

“ARS itemized code / 2nd CLIP” is sent instead of “CLIP ID” for ARS call, if “2nd CLIP” is enabled for the used ARS carrier. See “Programming -2”.

Above screen is for TDE-NCP version 5.

“ARS itemized code” is programmed in “Option 1” for TDE-NCP version 4, and it also can work as “2nd CLIP”.

# Programming -1B

The screenshot shows the 'KX-NCP Maintenance Console' window. The 'System Menu' on the left has '1. Wired Extension' > '1. Extension Settings' selected. The main window displays the 'ISDN CLIP' tab with a table of extension settings. The 'ARS Itemized Code /2nd CLIP' column is highlighted in red, indicating that this code is used instead of the 'CLIP ID' for ARS calls. A callout box at the bottom shows phone icons and numbers for Ext 103 and Ext 204.

No.	Extension Number	Extension Name (20 characters)	CLIP ID	CLIP on Extension/CO	ARS Itemized Code /2nd CLIP (10 digits)	CLIR
1	103		0212345103	Extension	0299991107	Disable
2	204		0212345199	Extension	0299991108	Disable
3				Extension		Disable
4				Extension		Disable
5				Extension		Disable
6				Extension		Disable
7				Extension		Disable
8				Extension		Disable

Ext 103      Ext 204  
02-1234-5103      02-1234-5199  
02-9999-1107      02-9999-1108

This is programming example for **NCP in warehouse**.

**“ARS itemized code / 2nd CLIP”** is sent instead of **“CLIP ID”** for ARS call, if **“2nd CLIP”** is enabled for the used ARS carrier. See **“Programming -2”**.

# Programming -2

System Menu

- 1. Configuration
- 2. System
- 3. Group
- 4. Extension
- 5. Optional Device
- 6. Feature
- 7. TRS
- 8. ARS
  - 1. System Setting
  - 2. Leading Number
  - 3. Routing Plan Time
  - 4. Routing Plan Priority
  - 5. Carrier
- 9. Private Network
- 10. CO & Incoming Call
- 11. Maintenance

8.5 Carrier

OK(O) Cancel(C) Apply(A)

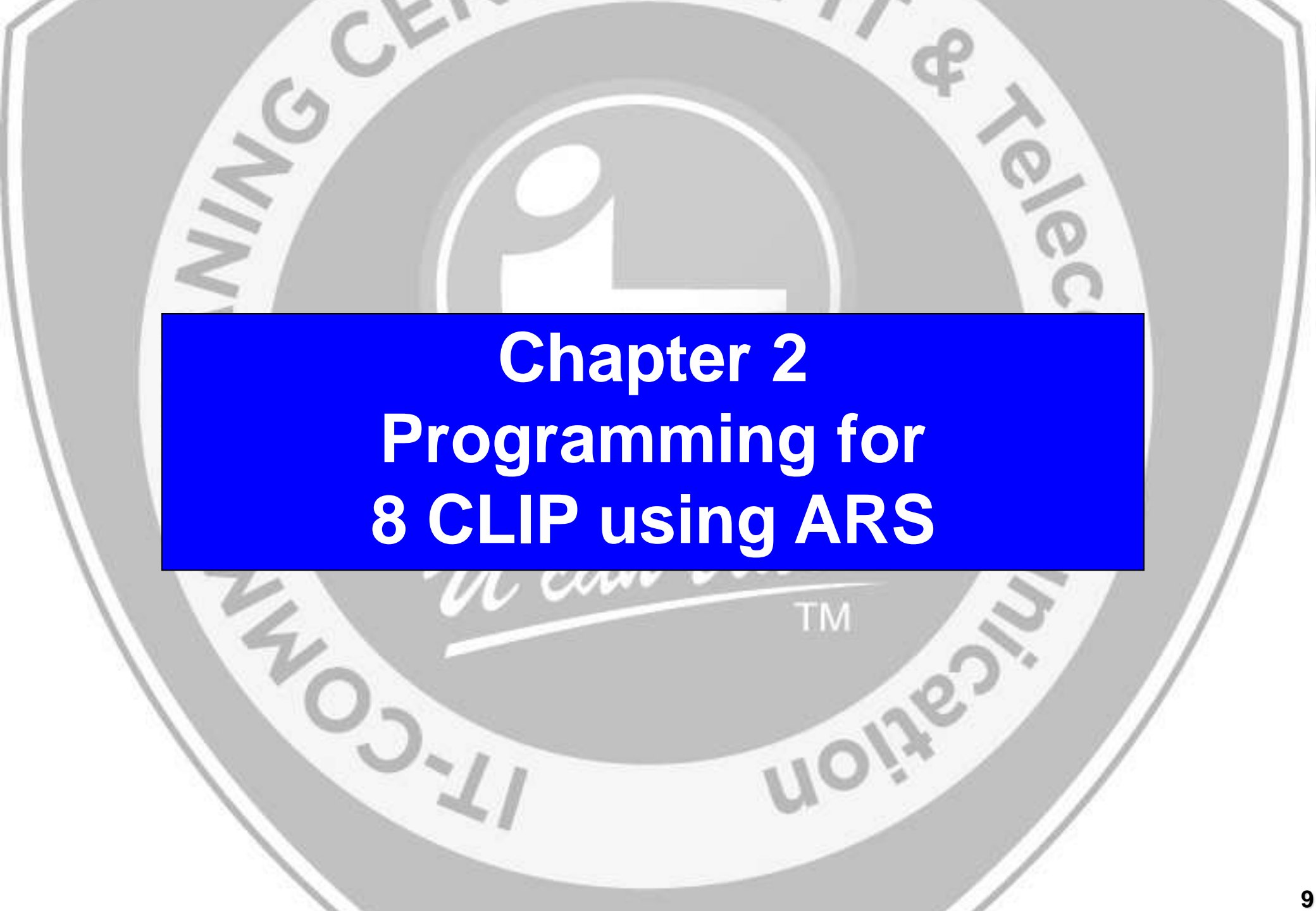
Carrier TRG 1 - 16 TRG 17 - 32 TRG 33 - 48 TRG 49 - 64 Authorisation Code for Tenant

Carrier	Carrier Name (20 characters)	Removed Number	Modify Command	Carrier Access Code (32 digits)
1	1st 02-1234	0	CH	
2	2nd 02-9999 X	0	CH	
3		0	CH	
4		0	CH	
5		0	CH	
6		0	CH	
7		0	CH	
8		0	CH	
9		0	CH	
10		0	CH	

Batch Mode: Type : TDE200 Level : Installer Version005-000 Region006-017

If 20th digit of “Carrier Name” is “X” or “x”, “ARS itemized code / 2nd CLIP” is sent as CLIP for call using this carrier, instead of “CLIP ID”.





**Chapter 2**  
**Programming for**  
**8 CLIP using ARS**

## 4.1.7 CLIP ID Table (4.2.5 for PS)

**CLIP ID Table**

CLIP Generate

No.	Extension Number	Extension Name (20 characters)	CLIP 1 (16 digits)	CLIP 2 (16 digits)	CLIP 3 (16 digits)	CLIP 4 (16 digits)	CLIP 5 (16 digits)	CLIP 6 (16 digits)	CLIP 7 (16 digits)	CLIP 8 (16 digits)
1	101		4770101							
2	102		4770102							
3	103		4770103							
4	104		4770104							
5	105		4770105							
6	106		4770106							
7	107		4770107							
8	108		4770108							
9	109		4770109							
10	110		4770110							
11	111		4770111							
12	112		4770112							
13	113		4770113							
14	114		4770114							
15	115		4770115							

**Set CLIP for each extension (CLIP1 – CLIP8)**

**Note: When modify CLIP1, then CLIP data on Extension will be changed automatically**

### 4.1.1 Extension Settings – [CLIP]

Copy to CLIP Generate

Main Intercept Destination Intercept No Answer Time CLIP UM Option 1

Extension Number	Extension Name (20 characters)	CLIP ID	CLIP on Extension/CO
1	101	4770101	Extension
2	102	4770102	Extension
3	103	4770103	Extension

**Set CLIP Table No. (1-8)**

**8.5 Carrier – [Carrier]**

The screenshot shows a configuration window for 'Carrier'. On the left is a navigation tree with '5. Carrier' selected. The main area contains a table with the following columns: Carrier, Carrier Name (20 characters), Removed Number of Digits, Modify Command, CLIP Table No., and Carrier Access Code (32 digits). The table lists 12 carriers, with the 8th row, 'Hongkong Telecom', highlighted in yellow. A red box highlights the 'CLIP Table No.' column, and a blue circle highlights the 'X' in the 20th character of the 'Carrier Name' for 'Hongkong Telecom'.

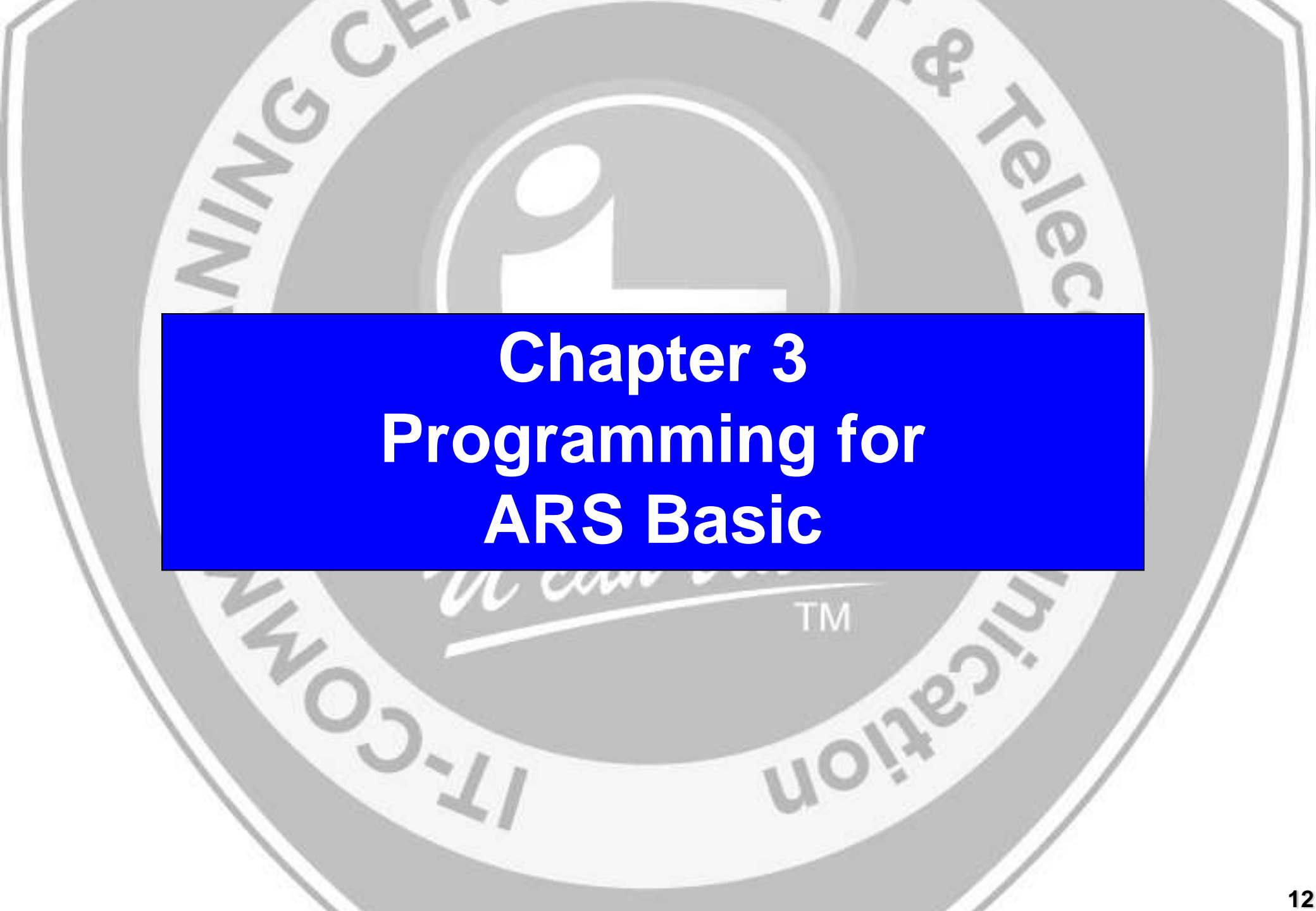
Carrier	Carrier Name (20 characters)	Removed Number of Digits	Modify Command	CLIP Table No.	Carrier Access Code (32 digits)
1	Japan Telecom	0	CH	1	
2	America Telecom	0	CH	2	
3	Latin Telecom	0	CH	3	
4	France Telecom	0	CH	4	
5	British Telecom	0	CH	5	
6	Deutsche Telekom	0	CH	6	
7	Singapore Telecom	0	CH	7	
8	Hongkong Telecom X	0	CH	8	
9	Ocean Telecom X	0	CH	1	
10		0	CH	1	
11		0	CH	1	
12		0	CH	1	

**When 20<sup>th</sup> digit of Carrier Name is 'X', Itemized Code is sent out as CLIP. (Higher priority than Clip table).**

**4.1.1 Extension Settings – [Option1]**

The screenshot shows a configuration window for 'Extension Settings'. On the left is a navigation tree with '1. Extension Settings' selected. The main area contains a table with the following columns: No., Extension Number, Extension Name (20 characters), Wireless XDP / Shared Extension, Ring Pattern Table, Programmed Mailbox No., Transfer Recall Destination, and ARS Itemised Code (10 digits). The table lists 4 extensions, with the 1st row, extension 101, highlighted in yellow. A red dashed box highlights the 'ARS Itemised Code' column for extension 101. A blue arrow points from the 'X' in the 20th character of the extension name '101' to the 'ARS Itemised Code' field.

No.	Extension Number	Extension Name (20 characters)	Wireless XDP / Shared Extension	Ring Pattern Table	Programmed Mailbox No.	Transfer Recall Destination	ARS Itemised Code (10 digits)
1	101			1	101		
2	102			1	102		
3	103			1	103		
4	104			1	104		

The background features a large, faded circular logo. The outer ring contains the text "TRAINING CENTER for IT & Telecommunication". The inner circle contains a stylized icon of a person sitting at a desk with a computer monitor. Below the icon, the text "IT-COMMUNICATION" is written in a curved path, with a "TM" trademark symbol to its right.

# Chapter 3

## Programming for ARS Basic

# Programming -11

The screenshot displays the KX-TDE Maintenance Console interface. The main window is titled "8.1 System Setting" and contains the following elements:

- Buttons: OK(O), Cancel(C), Apply(A)
- Section: ARS System Setting
- ARS Mode: On for Local Access Operation (highlighted with a red box)
- Mode When Any Carrier is not programmed for the Dial: Local Access

An inset window titled "2.6.1 Main" shows the "Features" tab for extension "KX-T7710". It contains a table with the following data:

No.	Feature	Dial (4 digits)
1	Operator Call	9 or 0
2	Idle Line Access (Local Access)	0 or 9
3	Trunk Group Access	8
4	TIE Line Access	7
5	Redial	#
6	System Speed Dialling / Personal Speed Dialling	**
7	Personal Speed Dialling - Programming	*30
8	Doorphone Call	*31

ARS mode : ON

When user dials 0/9-xx-xxxxx-xxxxx, ARS feature works.

# Programming -12

The screenshot shows the 'KX-TDE Maintenance Console' window. The title bar reads 'KX-TDE Maintenance Console - [8. ARS - 2. Leading Number]'. The menu bar includes File(E), Disconnect(D), Tool(T), Utility(U), View(V), Window(W), and Help(H). The left sidebar shows a 'System Menu' with options 1 through 11. '2. Leading Number' is selected and circled in red. The main area is titled '8.2 Leading Number' and contains a table with columns: No., Leading Number (16 digits), Additional Number of Digits, and Routing Plan Number. The table has 11 rows. The first row has '02' in the 'Leading Number' column and '1' in the 'Routing Plan Number' column. The second row has '0' in the 'Leading Number' column and '2' in the 'Routing Plan Number' column. The remaining rows have '0' in the 'Leading Number' column and '1' in the 'Routing Plan Number' column. The status bar at the bottom shows 'Batch Mode:', 'Type : TDE200', 'Level : Installer', 'Version005-000', and 'Region006-017'.

No.	Leading Number (16 digits)	Additional Number of Digits	Routing Plan Number
1	02	0	1
2	0	0	2
3		0	1
4		0	1
5		0	1
6		0	1
7		0	1
8		0	1
9		0	1
10		0	1
11		0	1

Routing Plan 1 for 0/9-02  
Routing Plan 2 for other 0/9-0x

# Programming -13

The screenshot shows the 'KX-TDE Maintenance Console' window with the title '[8. ARS - 3. Routing Plan Time]'. The menu bar includes File(E), Disconnect(D), Tool(T), Utility(U), View(V), Window(W), and Help(H). The left sidebar shows a 'System Menu' with 11 items, where '3.Routing Plan Time' is highlighted with a red circle. The main area has three tabs: '8.1 System Setting', '8.2 Leading Number', and '8.3 Routing Plan Time'. At the top of the main area are buttons for 'OK(O)', 'Cancel(C)', and 'Apply(A)'. Below them is a 'Routing Plan' dropdown menu set to '1' and a 'Time Setting(I)' button. To the right are three colored buttons: 'Time A' (cyan), 'Time B' (yellow), and 'Time C' (blue). The main area contains a grid for programming time slots. The grid has columns for AM (12-11) and PM (12-7) and rows for Sunday, Monday, Tuesday, and Wednesday. The time slots are filled with cyan, yellow, and blue colors, corresponding to Time A, Time B, and Time C respectively. The time slots are labeled as follows:

	AM											PM								
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Sunday								Sun1-8:00:AM				Sun2-5:00:PM								
Monday								Mon1-8:00:AM				Mon2-5:00:PM								
Tuesday								Tue1-8:00:AM				Tue2-5:00:PM								
Wednesday								Wed1-8:00:AM				Wed2-5:00:PM								

At the bottom of the window, the status bar shows: Batch Mode: Type : TDE200 Level : Installer Version005-000 Region006-017

This will not be used usually.  
If lowest cost carrier is different depend on time even for same destination,  
this programming is required.

# Programming -14

KX-TDE Maintenance Console - [8. ARS - 4. Routing Plan Priority]

File(E) Disconnect(D) Tool(T) Utility(U) View(V) Window(W) Help(H)

System Menu

- 1. Configuration
- 2. System
- 3. Group
- 4. Extension
- 5. Optional Device
- 6. Feature
- 7. TRS
- 8. ARS
  - 1. System Setting
  - 2. Leading Number
  - 3. Routing Plan Time
  - 4. Routing Plan Priority
  - 5. Carrier
- 9. Private Network
- 10. CO & Incoming Call
- 11. Maintenance

8.1 System Setting | 8.2 Leading Number | 8.3 Routing Plan Time | 8.4 Routing Plan Priority

OK(O) Cancel(C) Apply(A)

Routing Plan 2

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

Week	Time-A	Time-B	Time-C	Time-D
Priority 1	02 : 2nd 02-9999 ...	02 : 2nd 02-9999 ...	02 : 2nd 02-9999 ...	02 : 2nd 02-9999 ...
Priority 2	None	None	None	None
Priority 3	None	None	None	None
Priority 4	None	None	None	None
Priority 5	None	None	None	None
Priority 6	None	None	None	None

Batch Mode: Type : TDE200 Level : Installer Version005-000 Region006-017

This programming is not required because default is enough.

1st carrier 02-1234 for Routing Plan 1 (02)

2nd carrier 02-9999 for Routing Plan 2 (Other 0x)



# Programming -15A

The screenshot shows the 'KX-TDE Maintenance Console - [8. ARS - 5. Carrier]' window. The 'System Menu' on the left has '5. Carrier' selected. The main window is divided into tabs: '8.1 System Setting', '8.2 Leading Number', '8.3 Routing Plan Time', '8.4 Routing Plan Priority', and '8.5 Carrier'. The '8.5 Carrier' tab is active, showing a table of carrier settings. The 'Carrier' tab in the sub-menu is also selected. The table below shows the carrier configuration:

Carrier	Carrier Name (20 characters)	Removed Number	Modify Command	Carrier Access Code (32 digits)
1	1st 02-1234	0	CH	
2	2nd 02-9999 X	0	CH	
3		0	CH	
4		0	CH	
5		0	CH	
6		0	CH	
7		0	CH	
8		0	CH	
9		0		
10		0		

Below the main table, there is a sub-table for 'Trunk Group for Carrier' with columns for TRG01 through TRG08. The 'TRG 1 - 16' tab is selected, and the sub-table shows the following configuration:

Carrier	TRG01	TRG02	TRG03	TRG04	TRG05	TRG06	TRG07	TRG08
1	ON							
2		ON						
3								

This is programming example for **TDE in office**.

Trunk Group 1 is lines for 1st telephone company.

Trunk Group 2 is lines for 2nd telephone company.

Dial is not modified.

# Programming -15B

The screenshot shows the 'KX-NCP Maintenance Console' window with the '8.5 Carrier' tab selected. The 'System Menu' on the left has '5. Carrier' highlighted. The main area displays a table of carrier settings and a detailed view for 'TRG 1 - 16'.

**Carrier Settings Table:**

Carrier	Carrier Name (20 characters)	Removed Number	Modify Command	Carrier Access Code (32 digits)
1	1st 02-1234	0	CH	0 or 9
2	2nd 02-9999 X	0	CH	0 or 9
3		0	CH	
4		0	CH	
5		0	CH	
6		0	CH	
7		0	CH	
8		0	CH	
9		0	CH	
10		0	CH	

**Carrier Detail View (TRG 1 - 16):**

Carrier	TRG01	TRG02	TRG03	TRG04	TRG05	TRG06	TRG07	TRG08	TRG09
1							<input checked="" type="checkbox"/>		
2							<input checked="" type="checkbox"/>		

This is programming example for **NCP in warehouse**.  
 Trunk Group 7 is lines for VoIP.  
 Dial "0/9" is added as CO access code of **PBX in office**.

# Programming -16

KX-TDE Maintenance Console - [10. CO & Incoming Call - 1. CO Line Settings]

File(E) Disconnect(D) Tool(T) Utility(U) View(V) Window(W) Help(H)

System Menu x 10.1 CO Line Settings

- 1.Configuration
- 2.System
- 3.Group
- 4.Extension
- 5.Optional Device
- 6.Feature
- 7.TRS
- 8.ARS
- 9.Private Network
- 10.CO & Incoming Call
  - 1.CO Line Settings**
  - 2.DIL Table & Port Settings
  - 3.DDI / DID Table
- 11.Maintenance

CO Line Number	Shelf	Slot	Port	Card Type	CO Name (20 characters)	Trunk Group Number
26	Physical	1	1	PRI30		1
27	Physical	1	1	PRI30		1
28	Physical	1	1	PRI30		1
29	Physical	1	1	PRI30		1
30	Physical	1	1	PRI30		1
31	Virtual	1	1	V-IPGW16		7
32	Virtual	1	1	V-IPGW16		7
33	Virtual	1	2	V-IPGW16		7
34	Virtual	1	2	V-IPGW16		7
35	Virtual	1	3	V-IPGW16		7
36	Virtual	1	3	V-IPGW16		7
37	Virtual	1	4	V-IPGW16		7

Batch Mode: Type : TDE200 Level : Installer Version005-000 Region006-017

Default of VoIP IP-GW (H.323) is Trunk Group 7.

Default of other trunk is Trunk Group 1.

Lines for 2nd telephone company of "PBX in office" should be Trunk Group 2.

For VoIP, DN2IP table programming is also required.



**End of Document**