

## DMR18S TECHNICAL MANUAL





2-wire Intercom System

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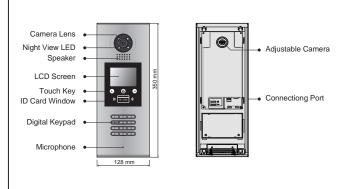
# INTRODUCTIONS Installation Guide



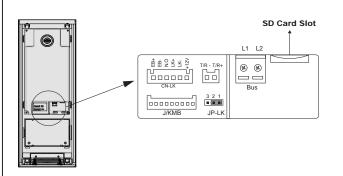
### DESCRIPTION

As an upgrade of DMR18, DMR18s has more stable and stronger ability of communication. It achieves call model of 128 families, expands capacity of the system. It also adds many special functions such as select by touching keypad, namelist, voice prompt, etc., which brings clients fresh and modernized experience. And for convenience, users can upgrade UI and Voice through SD card by themselves.

## PARTS AND FUNCTIONS



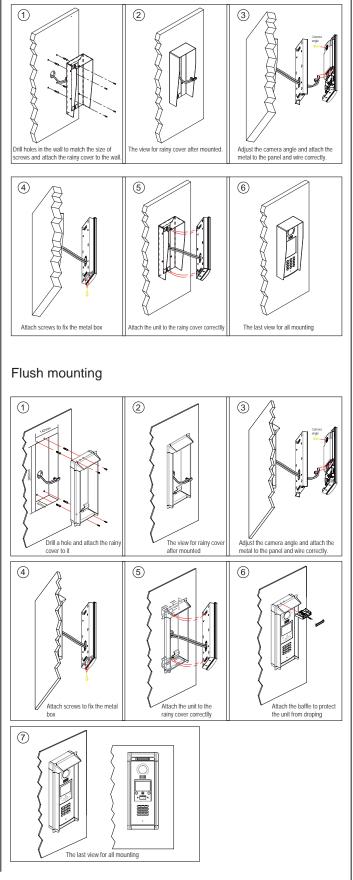
## **TERMINAL DESCRIPTION**



- +12V: 12VDC power output.
- LK-(GND): Power ground.
- LK+(COM): Common contact of the relay .
- NO.:Normally open contact of the relay(refer to DT technical guide for detail informations about lock connection).
- EB+: Exit button connection port.
- EB-: Exit button connection port.
- JP-LK: For electronic lock safety type setting(refer to door station lock connections).
- T/R-: USB-RS485 communication terminal negative.
- T/R+: USB-RS485 communication terminal positive.
- Bus(L1,L2): non-polarity bus line.

### MOUNTING

## Surface mounting

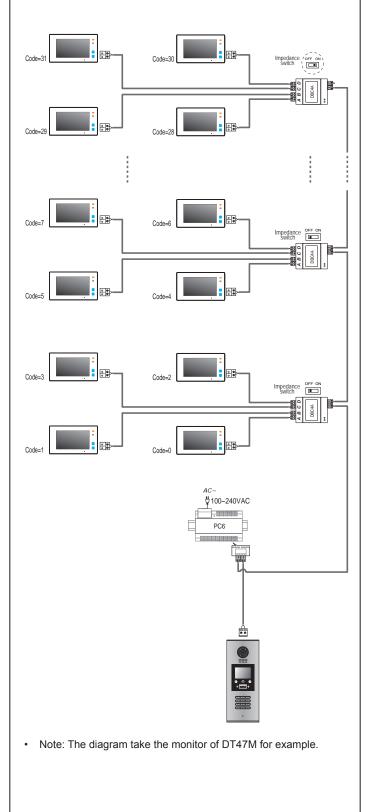




# INTRODUCTIONS Installation Guide



## SYSTEM CONNECTION



### ELECTRIC LOCK CONNECTION

### 1) Door Lock Controlled with Internal Power

1. The door lock is limited to 12Vdc, and holding current must be less than 250mA when using internal power supply mode.

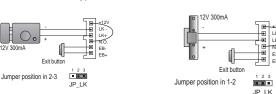
2. The Unlock Mode Parameter must be set to 0 (by default).

3. Jumper set to 1-2 position for power-off-to-unlock safety type(*Normally closed mode*); set to 2-3 position for power-on-to -unlock type(*Normally open mode*).

4. If different unlocking time is needed to be configured, change the unlock time on door station, detail information refer to DT system technical guide .

Power-on-to-Unlock type:

Power-off-to-Unlock type:



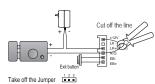
### 2) Door Lock Controlled with External Power

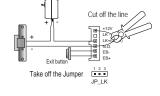
- 1. The external power supply must be used according to the lock.
- 2. The jumper must be taken off before connecting.
- 3. Setup the Unlock Mode Parameter for different lock types
- Power-on-to-unlock type:Unlock Mode=0(by default)
- Power-off-to-unlock type:Unlock Mode=1

4. If different unlocking time is needed to be configured, change the unlock time on door station, detail information refer to DT system technical guide .

Power-on-to-Unlock type:

Power-off-to-Unlock type:





### **SPECIFICATION**

- Power supply:
- Camera Lens:
- Power consumption:
- Screen:
- Resolution:
- Video signal:
- Wiring:
- Dimension:
- DC24V

3.5 inch TFT

1/4 ACS 4T image sensor

320(R, G, B)X240 pixels

350(H)×128(W)×46(D)mm

CCIR/EIA optional

2 wires, non-polarity

Standby 33mA; Working status 157mA.

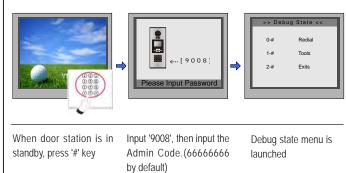


# CONFIGURATIONS Debug State



## DEBUG STATE

The Debug State is your starting point for using all the applications on DMR18S.



Descriptions:

- 0-#: Call Monitor again
- 1-#: Go to Tools setting item
- 2-#: Exit out Debug State

### TALK VOLUME ADJUST

In **Debug State**, calling the monitor and conversation are available, you can input 0-9 to select the volume you want, see the following picture shows.



## INSTALLER SETUP

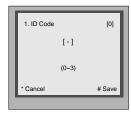


During working at debug state, press "1#" to enter tools page.

Press NO."1" to enter Installer setup item. Installer setup page overview.

### Descriptions:

**1.ID Code:** Select item 1 to enter **ID Code** setting page. You can input 0~3 to set as door 1 ~ door 4.



**2.Unlock Timing:** Select item 2 to enter **Unlock Timing** setting page, setting range is from 01~99s.

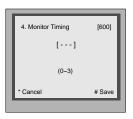


3.Unlock Output: Select item 3 to enter Unlock Output setting page.

- 0 : Power-on-to-unlock mode
- 1 : Power-off-to-unlock mode

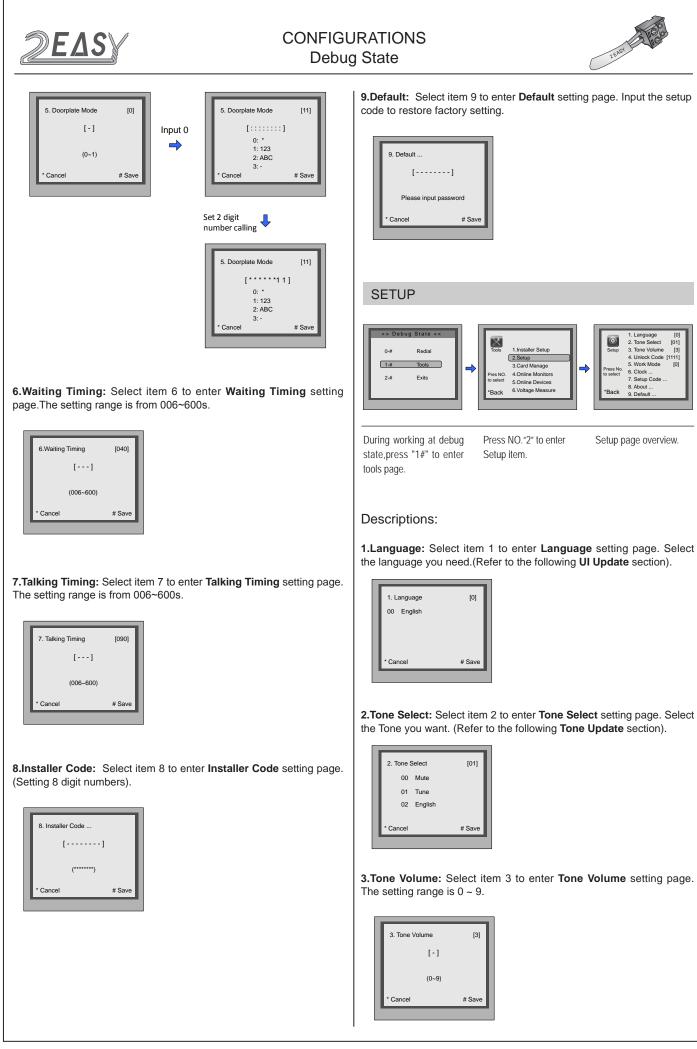


**4.Monitor Timing:** Select item 4 to enter **Monitor Timing** setting page .the setting range is from 006~600s.



**5.Doorplate Mode:** Select item 5 to enter **Doorplate Mode** setting page.

- 0 : Input room number to call monitor
- 1 : Input room number + '#' to call monitor
- \* Note:
- 1) the diagram take "0" mode for example.
- 2) Disable input 1 digit number to call





# CONFIGURATIONS Debug State



**4.Unlock Code:** Select item 4 to enter **Unlock Code** setting page. 1111 is the default unlock code. Input 4 digit numbers to set a new code(Except for 8001~8019 and 9008).



**5.Work Mode:** Select item 5 to enter **Work Mode** setting page. four modes can be available, the setting range is 0~3.(More details refer to the following **Work Mode** section)

- 0:32 apartments
- 1:128 apartments
- 2 : Router
- 3: Gateway



6.Clock: Select item 6 to enter Clock setting page.

6. Clock [ - ] 0: DD/MM/YY 1: MM/DD/YY * Cancel # Save	Input 0	6. Clock [ - ] 0: 24-Hour 1: 12-Hour * Cancel # Save
		Input 0
6. Clock 16/07/15 4 14/13 DD/MM/YY W HH/MM * Cancel # Save	Input time	6. Clock // DD/MMYY W HH/MM * Cancel # Save
* Note: the diagram take "0"	mode for ex	

7.Setup Code: Select item 7 to enter Setup Code setting page. Input

8 digit numbers to set a new setup code, then press '#' to save.

7. Setup Code	
[	-]
(******)	
* Cancel	# Save

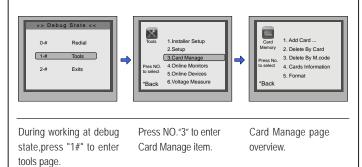
**8.About:** Select item 8 to enter **About** page. The information includes Hardware version, Software Version etc.



**9.Default:** Select item 9 to enter **Default** setting page. Input setup code to restore factory settings.



CARD MANAGE



1.Add Card: Select item 1 to enter Add Card setting page.

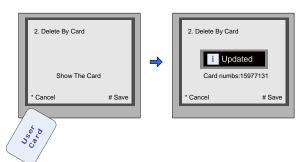
1. Add Card [] Please input room code * Cancel # Save	Input 001	1. Add Card [ 0 0 1 ] Show the card * Cancel # Save
		Show the card 🦊
		1. Add Card [0 0 1] i Updated Card Numbs.05410469 * Cancel # Save



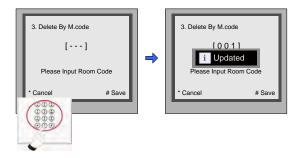


### 2.Delete Card:

• Select item 2 to Delete By Card.



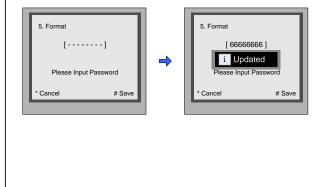
• Select item 3 to Delete By M.code.



**3.Card Information:** Select item 4 to enter **Card Information** page,the card count will be showed.



**4.Format:** Select item 5 to enter **Format** page.Input 8 digits password to start format.



## **ONLINE MONITORS**

To search the Gateway and Online Monitors, input the monitor code number to search.



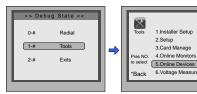
During working at debugPress Nstate,press "1#" to enterOnline Itools page.

Press NO."4" to enter Online Monitors item.

Input the search range, then press "#" to start search.

### ONLINE DEVICES

To search the online door stations(Max.4 door station can be searched) and the other accessories.





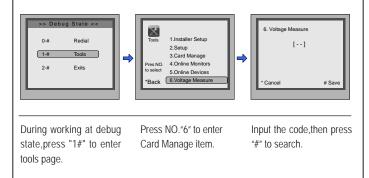
⇒

During working at debug P state,press "1#" to enter C tools page.

Press NO."5" to enter Online Devices item. All devices online or offline will be showed.

## VOLTAGE MEASURE

To check the voltage of the monitor, note that the monitor must be online.



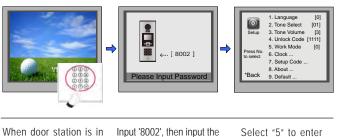


## CONFIGURATIONS Work Mode



## DEFINITION

Total four different work modes are available for DMR18S to accommodate different situation. In standby mode, input #8002 + code (666666666) and select " 5 " item to enter **Work Mode** setting page.



standby, press '#' key

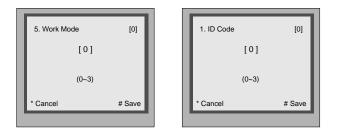
Input '8002', then input the Select "5" to enter Admin Code.(66666666 Work Mode page. by default)

### **STANDARD 32 APARTMENTS**

#### Work Mode set to 0;

The **Standard Mode** is applied in a small capacity system, which monitors are under 32 and without BDU unit. Generally dial 01~32 to call the monitor.

Work Mode set to 0, and ID code set to 0~3.



**Input Mode:** In standby mode. Input #8001+ Code( 66666666 by default), then select " 5 " item to set the **Doorplate Mode**, for example input the code 15 to call the monitor.

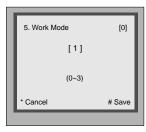


## DT-DJ MODE

#### Work Mode set to 1:

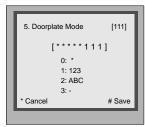
The **DT-DJ Mode** is used for the audio intercom system. When the system contains of the audio monitors, such as DJ4A, DJ5A, DJ6A, etc. The **DT-DJ Mode** can be assigned the address from 001 to 128 without BDU unit.

Work Mode set to 1, and ID code set to 0~3.



1. ID Code	[0]
[0]	
(0~3)	
* Cancel	# Save

**Input Mode**: In standby mode. Input #8001+ Code ( 66666666 by default), then select " 5 " item to set the **Doorplate Mode**, for example input the code 068 to call the monitor.







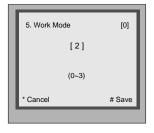
## CONFIGURATIONS Work Mode

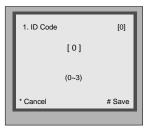


### DT-BDU ROUTER MODE

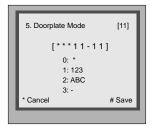
The **Router Mode** is used for the big capacity system which has plenty of apartments for blocks with BDU unit. The namelist can be updated by SD Card or DT-Config (More details refer to **Update Namelist Section**).

Work Mode Set to 2, and ID code set to 0~3.





**Input Mode**: In standby mode. Input #8001+ Code ( 66666666 by default), then select " 5 " item to set the **Doorplate Mode**, for example input 13-02 to call the monitor. As the following picture shows: 13 means the 13th floor, and 02 means the second room numbe.

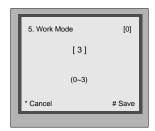


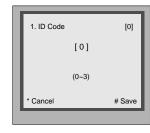


### DT-BDU GATEWAY MODE

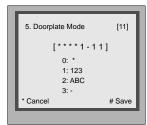
The **Gateway Mode** is used for the community network system, the common door station is connected in the system which can call all the monitors. Besides, if the door station is connected in each block, it can call the monitors in the block.

Work Mode set to 3, and ID code set to 0~3.





**Input Mode**: In standby mode. Input #8001+ Code ( 66666666 by default), then select " 5 " item to set the **Doorplate Mode**, for example input 3-06 to call the monitor. As the following picture shows: 3 means the third BDU, and 06 means the ID code of monitor is 06.









## DESCRIPTIONS

This section is used for the software version V000101 of DMR18S. (After 2015.07.10); In standby mode, please input "#+#" to check the DMR18S software version, see the following picture shows:



### How to enter update page:



When door station is in standby, press '#' key

Input '8014', then input the Code 87625761

Update setting page overview

## SOFTWARE UPDATE

### 1. Format SD card

2. Copy the update software file(  $\mathsf{DMR18S}.\mathsf{bin},\mathsf{provided}$  by our company ) to SD card by computer.

文件(F) 编辑(E) 畫	酒(V) 工具(T) 帮助(H)			
·夏洪 · 和章 ·	新建文件央			
★ 収蔵夫	8株 "	律改日期	(25)	大小
😹 T.St	DMR185.bin	2015/5/9 11:27	BIN 文件	141 KB
開 東田				
1 最近访问的位置				
ConeDrive				

4. Select 1 to enter **Firmware update**, the information of "update ready" will be showed.



5. Insert the SD card to slot, the information of "Download..." will be showed when the updated is in progress. After 3 seconds, a long sound "BP+" will be heard to start the updated.



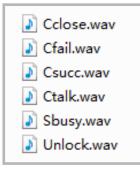


6. When update is finished, it will return to Standby Mode interface.



### TONE UPDATE

- 1. Format SD card
- 2. About the Ringtone file
- English is the standard audio file, as the picture shows:







- If other languages are needed for you, please record the audio file which language you want.
- Then provide the audio file to our company, a Ring.bin file will be created for you to update the tone.
- 3. Copy the Ring.bin file to SD card by computer.

編辑(E) 查	看(V) 工具(T) 帮助(H)			
共享▼	新建文件夹			
E	名称	类型	*	总大小
	Ring.bin	文件夹		

4. Select 2 (Voice update) to enter **Tone update**, the information of "update ready" will be showed.



5. Insert the SD card to slot, the information of "Download..." will be showed when the updated is in progress. After 3 seconds, a long sound "BP+" will be heard to start the updated.





6. When update is finished, it will return to **Standby Mode** interface.





7. Check the Tone





When door station is in standby, press '#8002'+code 66666666 to enter **Setup** page.

select item 2 to enter **Tone Select** setting page.

Select 02(English) to check your tone update, and press # to save.

### **UI UPDATE**

- 1. Format SD card
- 2. Edit UI file

Multi languages are supported on DMR18S, English is the standard language, if other languages are needed for you, please provide the translation to us. About the UI file, see the following picture shows:

,
Language





3. Copy the Update UI file to SD card by computer.

·····································	) I.B.(T) N10049				
	建文林来				
2.9	- 各作	#S	*	四大小	
FRE	Thinfo.bin	汉州史			
12	C fort.bin	SIN 2/F			
MCORPORE.	image.bin	BN 24			
MeDrive	screen.bin	即以文明			
	font.idx	100(交通			
	image.idx	DX 2/8			
2.0	wave.idx	10区文件			
	() configini	8898			
EP?	全部文件算制例的0	文本文計			

4. Select 3 to enter **UI update**,the information of "update ready" will be showed.



5. Insert SD card to slot, after that, the update progress will be showed.







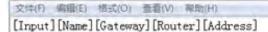
6. When update is finished, it will return to **Standby Mode** interface. And show the new UI.



## NAMELIST UPDATE

- 1) Namelist update by SD card
- 1. Format SD card
- 2. Namelist.txt file setting
- Create a TXT file, and named NameList.
  - 🗋 Namelist.txt
- Open the NameList.txt file, and input 5 [ ] symbols. Each [ ] symbol has its meaning, see the following picture.

NameList.txt - 记事本



#### Descriptions:

Input: Input the number to call the monitor

Name: It would be displayed on screen

**Gateway:** Set the gateway mode recording to BDU address. [08~15] means BDU address 01~08

Router: Set the Router mode recording to BDU address. [01~08] means BDU address 01~08

Address: Set the monitor address you want to call

Edit NameList.txt file, for example, as the following picture shows:

NameList.txt - 记事本

Sector Sector	10101	· 植式(O)		相助(日)	
		08[00]			
		[09[00]  [10[00]			
[104][	Terril	[11[00]]	041		

Input 101 or 1-01, it would call the monitor 01 in BDU 1.





3. Copy the Namelist file to SD card by computer.

▶ 计算机 ▶	可移动磁盘 (G:) 🕨			-
辑(E) 查看(V)	工具(T) 帮助(H)			
共享 ▼ 新建	<b>这件</b> 夹			
	名称	类型	*	
	🎳 Namelist.bin	文件夹		

4. Select 4 to enter **Namelist update**,the information of "update ready" will be showed.



5. Insert the SD card to slot, the information of "Download..." will be showed when the updated is in progress. After 3 seconds, a long sound "BP+" will be heard to start the updated.



6. When update is finished, it will return to Standby Mode interface.



7. Press  $\bigcirc$  touch button to show the Name list



### 2) Namelist update by DT-Config

DMR18S-Config software is for parameters setting, namelist setting etc. It is great convenience to installation.

The DMR18S-Config software operation is as follows:

1. Open "DMR18S-Config" software,connnect DMR18S to PC via USB-RS-485;Click "Setting" on the menu bar then click Com to select right Com.(Com information can be found in " My Computer -> Properties ->Device Manage->Ports")

	Setting Help						
, <b>I</b>	Con Language +	Parameter	Advance	Access Control	Room Table	Debug	Trace
De	rvice Information						
	Model	Unknowm					
	Hardware Version	Unknown					
	Software Version	Unknown					
	Access Control	Unknown					
	Access Card Numbe	rc Unknown					
	Access Card Numbe	r Unknown					
				Please co	nnect device		
In	staller's Information Tay	pi					
	Project Name				Clear Tags		
	Block Name				🕹 Download Tags		
	g Upload						

2. Then if DMR18s is connected to PC successfully, one tips of "Device connected" will be showed. Click "Room Table" tab to edit Name list.)

Information Parameter	Advance	Access Control	Room Table	Debug	Trace
Device Information					
Model Unknown					
Hardware Version Unknown					
Software Version Unknown					
Access Control Unknown					
Access Card Numberc Unknown					
Access Card Number Unknown					
		Device of	onnected		
Installer's Information Tags					
Installer's Information Tags Project Name			Clear Tags		
			Clear Tags		
Project Name -					

3. Then click "Insert" to create the first item.

Each item have 5 different properties:

Address: Monitor's address (can be find in "about");

User Code: The number you can dial to the monitor;

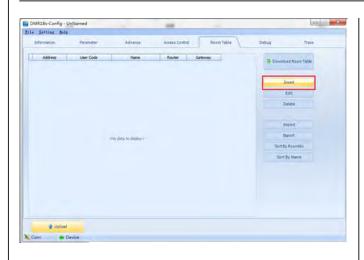
Name: The name of resident;

Router: Set the BDU address when it is in Router mode;

Gateway: Set the BDU address when it is in Gateway Mode.



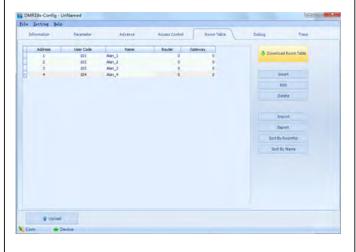




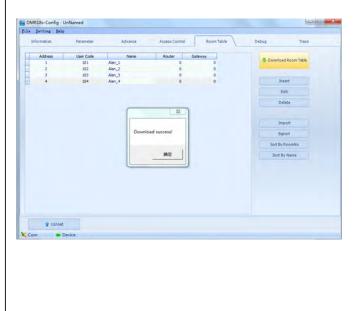
### 4. Edit Namelist

### 4.1 Apartments

• For example: Dial 101 to call the Apartment 01 without BDU. See the following picture shows:



 After edited, click "Download Table" to download Name List to DMR18S; After a few seconds, a window will be displayed if it is updated successfully.



Check Name List on DMR18S

Set the DMR18S **Work Mode** as 0 (more details refer to **Work Mode** setting section).

Press touch button to enter Name List page. See the following picture shows.

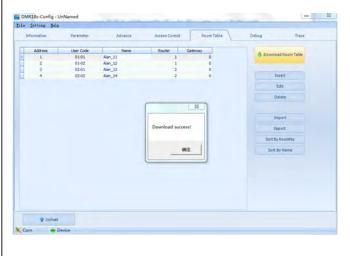


#### 4.2 Router

• Input 01-01 to call the monitor 01 in the BDU 1 when it is in **Router mode**, And input 02-02 to call the monitor 02 in the BDU 2 when it is in **Router mode**, see the following picture:

	Setting	Derb										
Þ	formation		Parameter		Advance	Access C	ontrol	Roo	m Table	Debug	Trace	
Т	Address	-	User Code		Name	Router	1	Gateway			ownload Room Table	
2	1		01-01	Alan_1			1		0		ownioad koom Jacke	
	2		01-02	Alan_1			1		0			
	3		02-01	Alan_1			2		0			
1	4		02-02	Alan_3	4		2		0		Insert	
											Edit	
											Delete	
											Import	
											Export	
											iart By RoomNo	
											Sort By Name	

• Click Download Room Table to download the namelist.







Check Name List on DMR18S

Set the DMR18S **Work Mode** as 2 (more details refer to **Work Mode** setting section).

Press touch button to enter Name List page. See the following picture shows.



### 4.3 Gateway

 Input 1-01 to call the monitor 01 in the BDU 1 when it is in Gateway mode, And input 2-02 to call the monitor 02 in the BDU 2 when it is in Gateway mode, see the following picture:

Setting	Derb	Parameter	-	Advance	Access C	locho	Rás	m Table	Debug	Trace	
								Course T			
Address		User Code		Name	Router		Gateway	1		winicad Room Table	
1		1-01	Alan_21			0		8	-0 DO	Which a Room Fabre	
2		1-02	Alan_22			0		8			
3		2.01	Alan_23			0		9			
4		2.02	Alan_24			0		9		Insert	
										Edit	
										Delete	
										Import	
										Eport	
									54	nt By RoomNo	
									1 1	iort By Name	
	biolog										

• Click Download Room Table to download the namelist.



Check Name List on DMR18S

Set the DMR18S **Work Mode** as3 (more details refer to **Work Mode** setting section).

Press touch button to enter Name List page. See the following picture shows.

