

# Multi-Communication Setting



Version 5.0

Davit Co., Ltd. All rights reserved

Trademark Registration No. 40-0821015

For more information, visit our website at [www.davitsol.com](http://www.davitsol.com)

2012.04.23

## Content

<b>1.</b>	<b>DIBD MULTI-COMMUNICATION (GROUP MESSAGING).....</b>	<b>3</b>
1.1	Changing into Multi-communication Setting Mode .....	4
1.2	Description of "DIBD List Set" window .....	5
1.3	Description of "DIBD Register" window.....	6
1.4	DIBD Registration - LAN Communication .....	7
1.5	DIBD Registration - Serial Communication.....	9
1.6	Sending Data to DIBDs .....	11

# 1. DIBD Multi-communication (Group messaging)

In order to control multiple LED signs from the PC installed with DavitChe Software, you need to setup DIBD Multi-communication mode.

Once you register each LED Sign in the “DIBD list” with proper setting, you can control them in Individual/Group/Total mode for your preference anytime.

You can set up the Serial/LAN communication depending on the connection between PC and LED Sign. Each LED Sign can be set to display different image at the same time. DIBD address for multi-communication shall start from “address 1”.

**Note:** “DIBD 12x series” which do not support multi-communication has a fixed address of “0”.

At this chapter, you will explain the following for Serial/LAN multi-communication settings.

- [1] How to convert to DIBD Multi-communication mode.
- [2] How to register/setup each DIBD.
- [3] How to send data to DIBDs in a group.

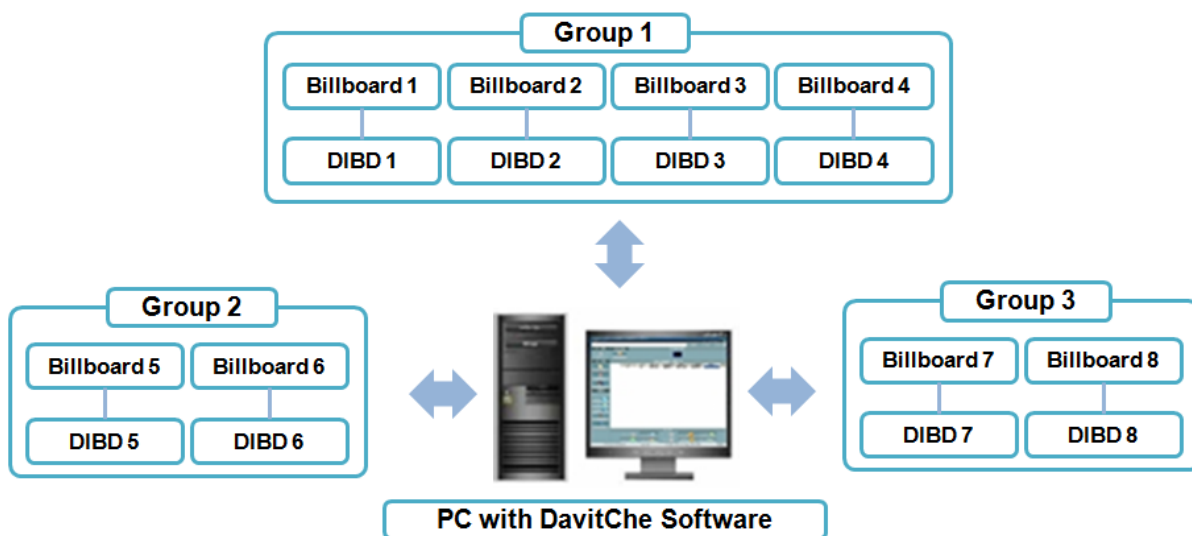
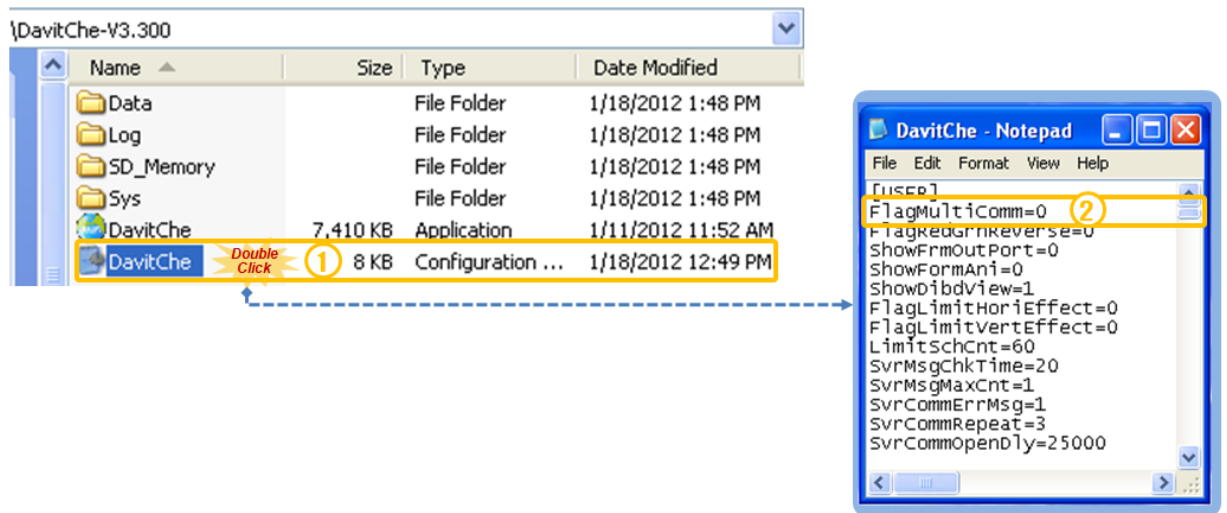


Fig. 1 Example of DIBD Multi-communication (Group Messaging Control)

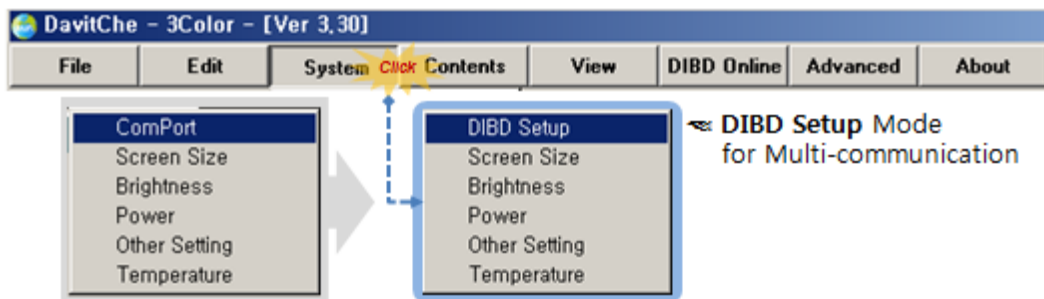
## 1.1 Changing into Multi-communication Setting Mode

To enable Multi-Communication Mode, close DavitChe Software, and proceed the followings.

- ① Double click on the file "DavitChe.ini" of DavitChe folder.
- ② Change "Frag MultiComm=0" to "Flag MultiComm=1"

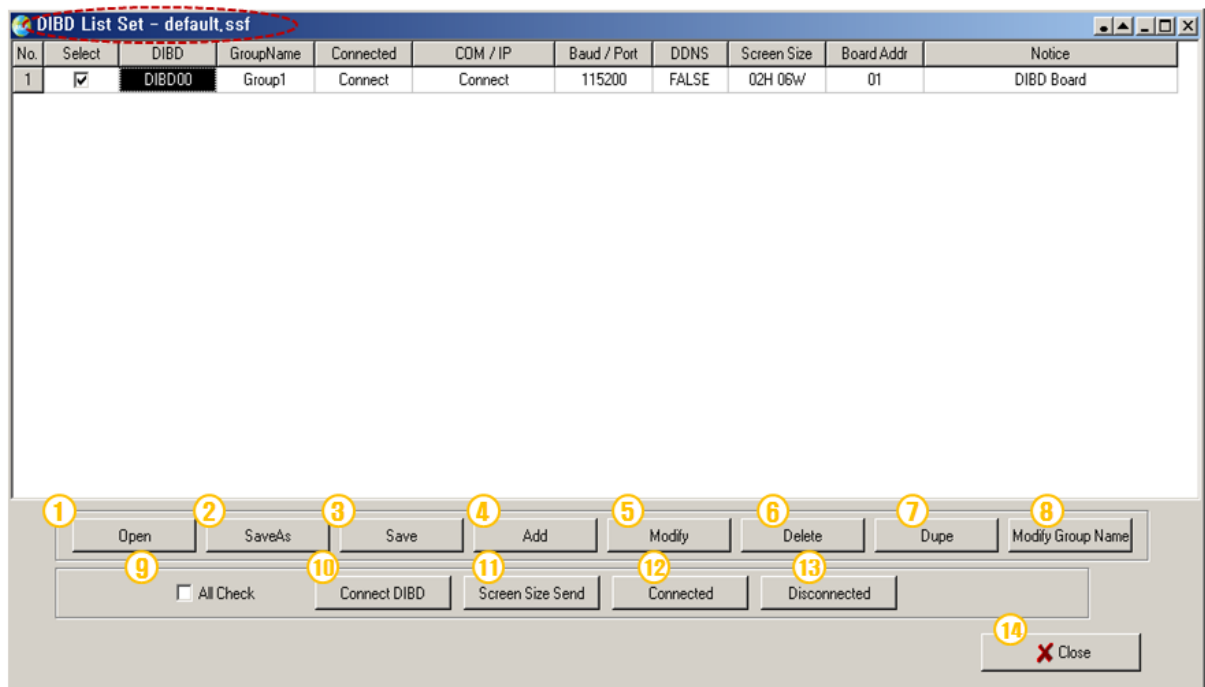


- ③ Save it and close the "DavitChe.ini" file.
- ④ Run DavitChe Software again, and you will see a sub-menu of **[System]** has been changed from **[ComPort]** to **[DIBD Setup]**.



## 1.2 Description of “DIBD List Set” window

When you click on **[System]→[DIBD Setup]**, you will see “DIBD List Set – default.ssf” window, as below, in which you can manage/edit a DIBD list file(\*.ssf) by using the toolbars on the bottom.



**Fig. 2 “DIBD List Set” window**

Tools	Description
Open ①	To open any “DIBD List Set” file(*.ssf) from “..Davitch/sys” folder.
Save As ②	To save the current DIBD List Set file as a new name.
Save ③	To save the current DIBD List Set file.
Add ④	To add a line on the list.
Modify ⑤	To open a “DIBD Register” window where you can modify the settings for the selected DIBD line.
Delete ⑥	To delete the selected line.
Dupe ⑦	To add a duplicated line below the selected one.
Modify Group Name ⑧	To open “Group Name Editor” window in which you can modify the group name.
Check box for All Check ⑨	To select(or release) all DIBD lines, at once, to execute <b>Connect DIBD, Screen Size Send, Connect, Disconnected</b> .
Connect DIBD ⑩	To confirm the communication status of the selected DIBD line by sending/receiving the test data packet.
Screen Size Send ⑪	To initialize the selected DIBD. When sending “screen size” command, the DIBD will be initialized with new screen size format.
Connected ⑫	To connect PC with the selected DIBD line.
Disconnected ⑬	To disconnect PC from the selected DIBD line.
Close ⑭	To close the “DIBD List Set” window.

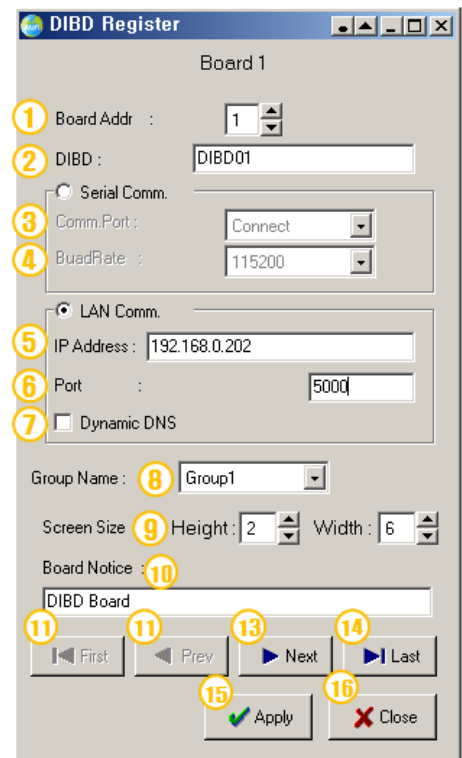
**Table 1 Description of Tools on “DIBD List Set” window**

### 1.3 Description of “DIBD Register” window

When you click on **[Modify]** icon after selecting any DIBD line on the list, “DIBD Register” window will appear as the right figure.

Here, you can setup/edit each DIBD and apply it to “DIBD List Set” window.

For details, please refer to the following table and Chapter “3.1 Communication Settings”.



**Fig. 3 “DIBD Register” window**

Setting items	Description
Board address ①	To set up DIBD address of LED sign. At Multi-communication, DIBD address shall start from “address 1”.
DIBD ②	You can name the DIBD such as DIBD01, DIBD02, DIBD03...
Comm. Port ③	To select the COM Port of your PC.
BaudRate ④	To select the communication speed of the DIBD.
IP Address ⑤	At LAN Multi-communication with using the static IP address, enter a static IP address of LAN gateway. If you use Dynamic IP, enter the host name provided by DDNS service.
Port ⑥	At LAN Multi-communication with using the static IP address, enter a Port number of LAN gateway. If you use Dynamic IP, enter a Port number which is Port-forwarded from the router.
Dynamic DNS ⑦	Only when you use Dynamic IP, check the box.
Group Name ⑧	You can assign the specific group name to each DIBD. Ex.) Group1, Group2..., Sign(2Hx6W), Sign(3Hx8W)....
Screen Size ⑨	You can set up the number of modules for the LED Sign.
Board Notice ⑩	You can write notes for the DIBD, if necessary. (Location, purpose, etc.)
First ⑪	To move to the first DIBD line on the List.
Prev. ⑫	To move to the previous DIBD line on the List.
Next ⑬	To move to the next DIBD line on the List.
Last ⑭	To move to the last DIBD line on the List.
Apply ⑮	To apply the current setting parameters to the selected DIBD line.
Close ⑯	To close “DIBD Register” window.

**Table 2 Setting items on “DIBD Register” window**

## 1.4 DIBD Registration – LAN Communication

No.	Select	DIBD	GroupName	Connected	COM / IP	Baud / Port	DDNS	Screen Size	Board Addr	Notice
1	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
2	<input checked="" type="checkbox"/>	DIBD02	Group1	Connect	192.168.0.202	5000	FALSE	02H 06W	02	Location B
3	<input checked="" type="checkbox"/>	DIBD03	Group1	Connect	192.168.0.203	5000	FALSE	02H 06W	03	Location C
4	<input checked="" type="checkbox"/>	DIBD04	Group1	Connect	192.168.0.204	5000	FALSE	02H 06W	04	Location D
5	<input checked="" type="checkbox"/>	DIBD05	Group2	Connect	192.168.0.205	5000	FALSE	02H 06W	05	Location E
6	<input checked="" type="checkbox"/>	DIBD06	Group2	Connect	192.168.0.206	5000	FALSE	02H 06W	06	Location F
7	<input checked="" type="checkbox"/>	DIBD07	Group3	Connect	192.168.0.207	5000	FALSE	02H 06W	07	Location G
8	<input checked="" type="checkbox"/>	DIBD08	Group1	Connect	192.168.0.208	5000	FALSE	02H 06W	08	Location H

Buttons: Open, SaveAs, Save, Add, Modify, Delete, Dupe, Modify Group Name  
 All Check, Connect DIBD, Screen Size Send, Connected, Disconnected, Close

**Fig. 4 Examples of “DIBD List Set” for LAN Communication**

- Click on **[System]** from menu → **[DIBD Setup]**, and “DIBD List Set(default.ssf)” window will appear as below.

No.	Select	DIBD	GroupName	Connected	COM / IP	Baud / Port	DDNS	Screen Size	Board Addr	Notice
1	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Location A

And then, Click on **[Modify]** button on the bottom, and “DIBD Register” window will pop up as below.

- Set up the “DIBD Register” window for the first DIBD as below. For more details, please refer to “Table 8. Setting items on DIBD Register”.

- Set up **Board Address** to “1”.
- Enter **DIBD name** as “DIBD01”
- Check “LAN Comm.”
- Set up **IP Address** of LAN gate way for the DIBD.
- Set up **Port number** which is set in the LAN gateway.
- Set up **Group Name** as “Group1”.
- Set up **Screen Size**(The number of modules of LED sign).
- Enter **Board Notice**, if necessary. (Ex. Location)

After that, click on **[apply]**, and you will see the parameters of the first line on “DIBD List Set” has been replaced with the setting.

Then, click on **[Close]**.

**DIBD Register** Board 1

Board Addr : 1

DIBD : DIBD01

Serial Comm.  
 Comm.Port : Connect  
 BaudRate : 115200

LAN Comm.  
 IP Address : 192.168.0.201  
 Port : 5000  
 Dynamic DNS

Group Name : Group1

Screen Size Height : 2 Width : 6

Board Notice : Location A

Buttons: First, Prev, Next, Last, Apply, Close

- ③ Click on **[Dupe]** seven times, and you will see the duplicated lines of the 1<sup>st</sup> DIBD line on the list.

No.	Select	DIBD	GroupName	Connected	COM / IP	Baud / Port	DDNS	Screen Size	Board Addr	Notice
1	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
2	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
3	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
4	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
5	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
6	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
7	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A
8	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	192.168.0.201	5000	FALSE	02H 06W	01	Location A

And then, click on the 2<sup>nd</sup> DIBD line, and then click on **[Modify]** button to open “DIBD Register” window again.

- ④ Modify/setup the parameters for the 2nd DIBD registration properly.  
 After that, click on **[Apply]**, and then click on **[Next]** to continue setting for the 3rd DIBD registration.  
 In this way, continue setting up to the last DIBD.  
 Click on **[Close]** to close the “DIBD Register” window.
- ⑤ Click on **[SaveAs]** to save the current DIBD List file as new name(ex. “Sample1.ssf”).  
 ➡ DIBD List will be saved at “..DavitChe/sys” by “SignBoard Setup file(\*.ssf)” format.
- ⑥ Check “All check” box and click on **[Connect DIBD]** to test/check the communication status between PC and DIBDs.  
 If the communication status is normal, the check will finish within seconds. But if the communication is not normal, it could take minutes for DavitChe to check the communication status for all DIBDs one by one. You can read the communication status from Log window. Until finishing the check, Davitche software will be frozen.
- ⑦ If the communication is O.K., click on **[Screen Size Send]** to send the settings to DIBDs.



## 1.5 DIBD Registration - Serial Communication

No.	Select	DIBD	GroupName	Connected	COM / IP	Baud / Port	DDNS	Screen Size	Board Addr	Notice
1	<input checked="" type="checkbox"/>	DIBD01	Group1	DisConnect	COM6	115200	FALSE	02H 06W	01	Locatoin A
2	<input checked="" type="checkbox"/>	DIBD02	Group1	DisConnect	COM6	115200	FALSE	02H 06W	02	Locatoin B
3	<input checked="" type="checkbox"/>	DIBD03	Group1	DisConnect	COM6	115200	FALSE	02H 06W	03	Locatoin C
4	<input checked="" type="checkbox"/>	DIBD04	Group1	DisConnect	COM6	115200	FALSE	02H 06W	04	Locatoin D
5	<input checked="" type="checkbox"/>	DIBD05	Group2	DisConnect	COM6	115200	FALSE	02H 06W	05	Locatoin E
6	<input checked="" type="checkbox"/>	DIBD06	Group2	DisConnect	COM6	115200	FALSE	02H 06W	06	Locatoin F
7	<input checked="" type="checkbox"/>	DIBD07	Group3	DisConnect	COM6	115200	FALSE	02H 06W	07	Locatoin G
8	<input checked="" type="checkbox"/>	DIBD08	Group3	DisConnect	COM6	115200	FALSE	02H 06W	08	Locatoin H

Control Panel: Open, SaveAs, Save, Add, Modify, Delete, Dupe, Modify Group Name,  All Check, Connect DIBD, Screen Size Send, Connected, Disconnected, Close

Fig. 5 Examples of “DIBD List Set” for Serial Communication

- ① Click on **[System]**→**[DIBD Setup]**, and “DIBD List Set(default.ssf)” window will appear as below.

No.	Select	DIBD	GroupName	Connected	COM / IP	Baud / Port	DDNS	Screen Size	Board Addr	Notice
1	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A

- ② Set up the “DIBD Register” window for the first DIBD as below. For more details, please refer to “Table 8. Setting items on DIBD Register”.

- Set up **Board Address** to “1”.
- Enter **DIBD name** as “DIBD01”
- Check “Serial Comm.”
- Set up **Comm. Port** number of your PC
- Set up **Baud Rate** between DIBD and PC.
- Set up **Group Name** as “Group1”.
- Set up **Screen Size**(The number of modules of LED sign).
- Enter **Board Notice**, if necessary. (Ex. Location)

After that, click on **[apply]**, and you will see the parameters of the first line on “DIBD List Set” has been replaced with the setting.

**DIBD Register**

Board 1

Board Addr : 1

DIBD : DIBD01

Serial Comm.

Comm.Port : COM6

BuadRate : 115200

LAN Comm.

IP Address :

Port :

Dynamic DNS

Group Name : Group1

Screen Size Height : 2 Width : 6

Board Notice : Locatoin A

First Prev Next Last

Apply Close

Then, click on **[Close]**.

- ③ Click on **[Dupe]** button seven times, and you will see the duplicated lines of the 1<sup>st</sup> line on the list.

No.	Select	DIBD	GroupName	Connected	COM / IP	Baud / Port	DDNS	Screen Size	Board.Addr	Notice
1	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
2	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
3	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
4	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
5	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
6	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
7	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A
8	<input checked="" type="checkbox"/>	DIBD01	Group1	Connect	COM6	115200	FALSE	02H 06W	01	Locatoin A

Then, click on the 2<sup>nd</sup> DIBD line on the list, and then click on **[Modify]** button to open “DIBD Register” window again.

- ④ Modify/setup the parameters for the 2<sup>nd</sup> DIBD registration properly.  
After that, click on **[Apply]**, and then click on **[Next]** to continue setting for the 3<sup>rd</sup> DIBD registration.

In this way, continue setting up to the last DIBD registration.

Click on **[Close]** to close the “DIBD Register” window.

- ⑤ Click on **[SaveAs]** to save the current DIBD List file as new name(ex. “Sample2.ssf”).

☞ DIBD List will be saved at “..DavitChe/sys” by “SignBoard Setup file(\*.ssf)” format.

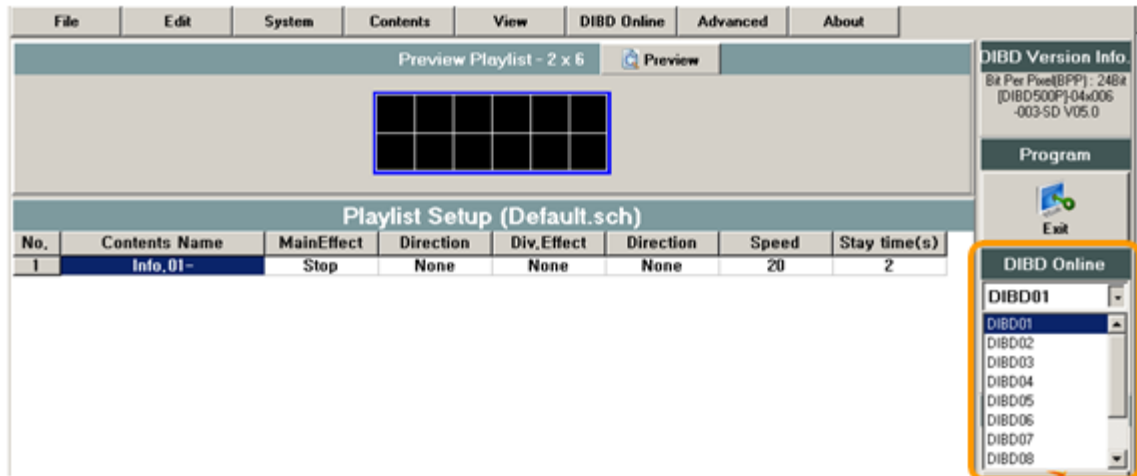
- ⑥ Check “All check” box and click on **[Connect DIBD]** to test/check the communication status between PC and registered DIBDs.

If the communication status is normal, the check will finish within seconds. But if the communication is not normal, it could take minutes for DavitChe to check the communication status for all DIBDs one by one. You can read the communication status from Log window. Until finishing the check, DavitChe software will be frozen.

- ⑦ If the communication is O.K., Click on **[Screen Size Send]** to send the settings to each DIBD.

## 1.6 Sending Data to DIBDs

- ① After saving "DIBD List Set" file(\*.ssf), close "DIBD List Set" window.
- ② Click on the combo button under **DIBD Online**, and you will see the latest DIBD list, as "DIBD01/02/03/04/05/06/07/08, Group1/2/3".



- ③ Open any Playlist file(\*.sch) you want to display on LED sign.
- ④ Select one of DIBDs from the comb box and click on "DIBD upload".  
**Here**, you can select any DIBD Group(1/2/3) and upload data to them at the same time.