

Progressive Controller 4.0.0 User manual

TEC-EL-PROGCTRL
Version 1.0.0

2023-03-10



Version History

Version	Department	Initials	Date	Comments
1.0.0	R&D	E.B.	2022-03-10	-Document creation.



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3. Introduction

This document explains the installation procedure of the progressive controller and the configuration that need to be done in the EGM of the controller.

4. Hardware configuration

- The EGM used to configure the PC shall be connected on the same network as the PC.
- The ethernet switch shall allow the transmission of UDP broadcast packets on port 1024.

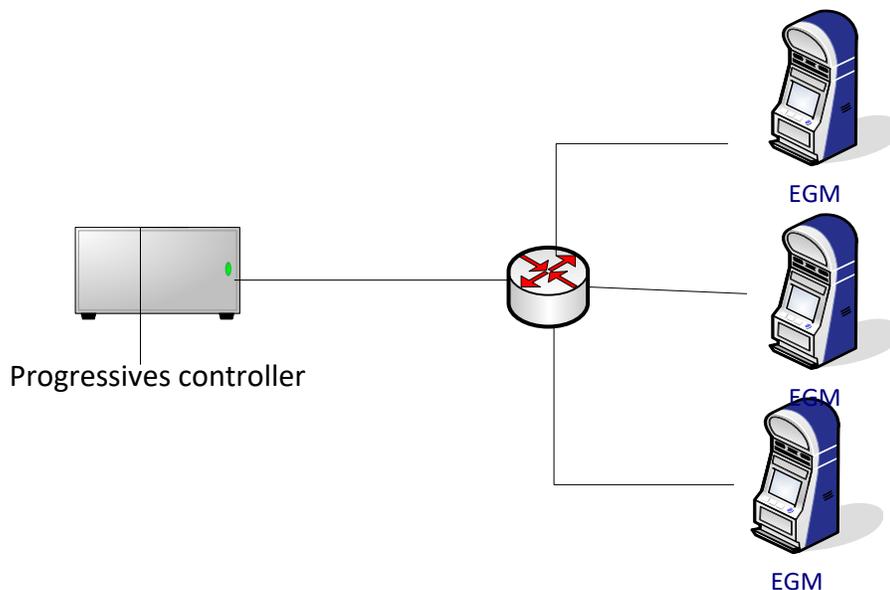


Figure 1: Network topology

- All the configurations can be done from the “PROGRESSIVE CONTROLLER” menu on the EGM. The EGM will act as a configuration terminal for the PC.
- There is also a secure web page on the progressive controller that can be used to configure the controller and view controller information like reports and logs. Most of the configurations are available from both methods, this user manual will focus on the Web page, most of the explanation apply also on the configuration terminal.



5. **Ram clear (SPIDER Board):**

- Connect the Ram Clear Factory Test CFast on the Progressive Controller.
- Power on the controller.
- Wait at least 30 seconds.
- Turn the CLEAR key on the controller.
- Wait at least 15 seconds.
- Turn the DIP switch 8 ON.
- Wait at least 3 seconds.
- Turn the DIP switch 8 OFF.

6. **Ram clear (Advantech Board):**

- Connect the Ram Clear Factory Test CFast on the Progressive Controller.
- Power on the controller.
- Wait at least 30 seconds.
- Turn the CLEAR key on the controller.
- Wait at least 15 seconds.
- Turn the DIP switch 3 ON.
- Wait at least 3 seconds.
- Turn the DIP switch 3 OFF.

7. Install CFast on SPIDER board:

- The PROG-CONTROLLER CFast shall be installed in the SPIDER's slot labeled CFAST#1
- The backup CFast media shall be installed in the slot labeled CFAST#2.

The printed labeled on the CFast shows at the end of the second like the mention DSK1 or DSK2 indicating that it goes to slot labeled CFAST#1 or CFAST#2 respectively.



- On Advantech board CFast can be installed in any position.



7.1. “Write-Protect” switch on CFast’s

Normally, the “Write-Protect” switch on the CFast’s installed the board are always on the **Protect** side to lock securely the content of it. This way we are sure the content will never be altered and the signature of the CFast will remain constant.

But in the case of the PROGRESSIVE CONTROLLER installation, the “Write-Protect” switch must be on the side to allow writings. Obviously, if we want application to daily backup stuff, it needs to be able to write on that second disk.

So make sure the switch on the CFast #2 will be on the non protect side.



7.2. Verification of the correct installation for version 3.0.0

Unfortunately, in the case of version 3.0.0, if the CFast's are wrongly installed and swapped, the Progressive Controller will give the impression everything is fine and will work anyway. But under the hood, the daily backup will not be created! We will not have these files if we ever need it one day for restoration in case of a catastrophic failure. This has already been fixed in any subsequent versions after the 3.0.0 but if we ever install that particular version, it could wise to take the time to validate it has been installed correctly from the start.

Here is a quick method to validate the CFast's have been correctly installed.

7.2.1. With a monitor hook to the Progressive Controller

In Operator Menu/System Information, in the section HARDWARE INFORMATION, see the Partition section.

If CFast's are installed in proper positions, we will see a partition with a the end something showing `bluberi_progcontrollerbackup(RW)`:

```
HARDWARE INFORMATION (Continued)
Hard disk 2 = 80GB SATA Flash Drive / 74.53GB / 122131104260
Partition 1 = /dev/sda3 / 59.38GB / Bluberi Fs
Partition 2 = /dev/sda1 / 128.00MB / Bluberi EFI
Partition 3 = /dev/sdb1 / 74.50GB / bluberi_progcontrollerbackup(RW)
Application Loader = 3.03
```



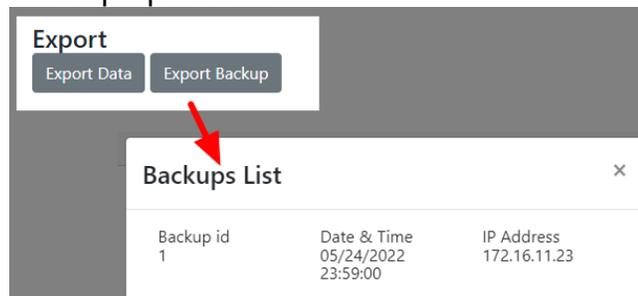
If CFast's are not installed in proper positions, we will see instead "Unknown":

```
HARDWARE INFORMATION (Continued)
Hard disk 2 = 80GB SATA Flash Drive / 74.53GB / 122131104260
Partition 1 = /dev/sdb3 / 59.38GB / Bluberi Fs
Partition 2 = /dev/sda1 / 74.50GB / Unknown
Partition 3 = /dev/sdb1 / 128.00MB / Bluberi EFI
```



7.2.2. With PC Web Page (see in later section...)

After logged to <https://1.blubericontroller.com>, go in the System / Configurations section. Then click on the Export Backup. If there is a Backup List that come up, it means the CFast's are in proper order.



Attention! This method will work ONLY if the progressive controller has been powered for more than 24 hours!!! If not, you may use this trick. In the same page, change the DateTime for 11:58 PM and then wait 2 minutes or wait that you have see the date change by one day then click the Export Backup for the verification. After the verification is done, put back the correct DateTime.



8. EGM and PC configuration steps:

After a “Ram Clear”, the communication port number of the PC will be set to a default value of 1024.

- From the EGM menu “Operator menu/Configuration/Network/Progressive Controller/Controller Mode”, configure the controller mode to Client.
- From the EGM menu “Operator menu/Configuration/Network/Progressive Controller/Controller port”, configure the controller port of the EGM to 1024.

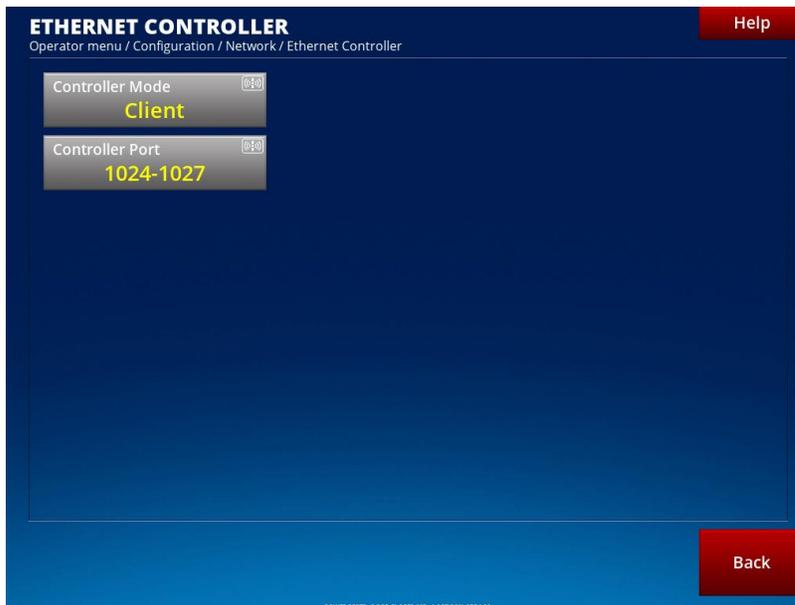


Figure 2: Port configuration



9. PC configuration from EGM terminal:

- The next step is to turn the menu key of the EGM.
- Click on Progressive Controller/Login
 - Enter the default credentials; After a Ram Clear the default username/password are the following: ctrladm/Changeme!now

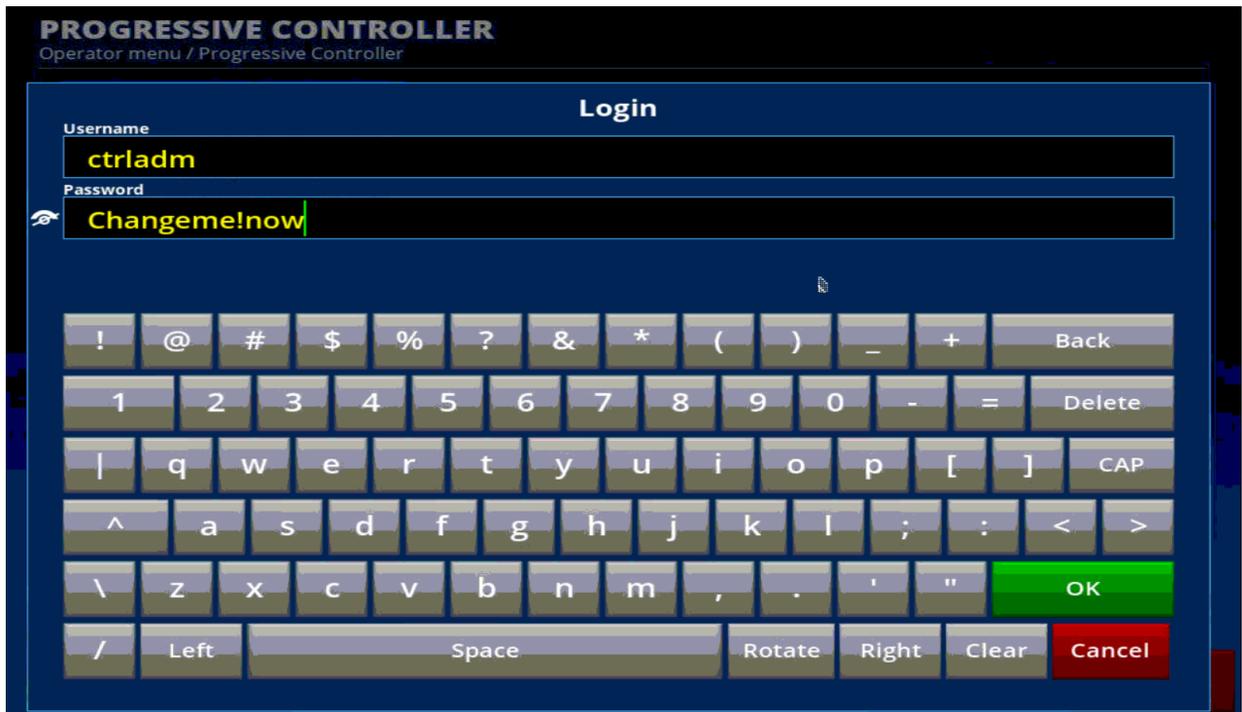


Figure 3: Login

- Click on OK



- The PC will ask you to change the default password:
- Set old password to “Changeme!now”.
- Type the new password in “New password” and “Confirm password” fields.
- Click on OK.

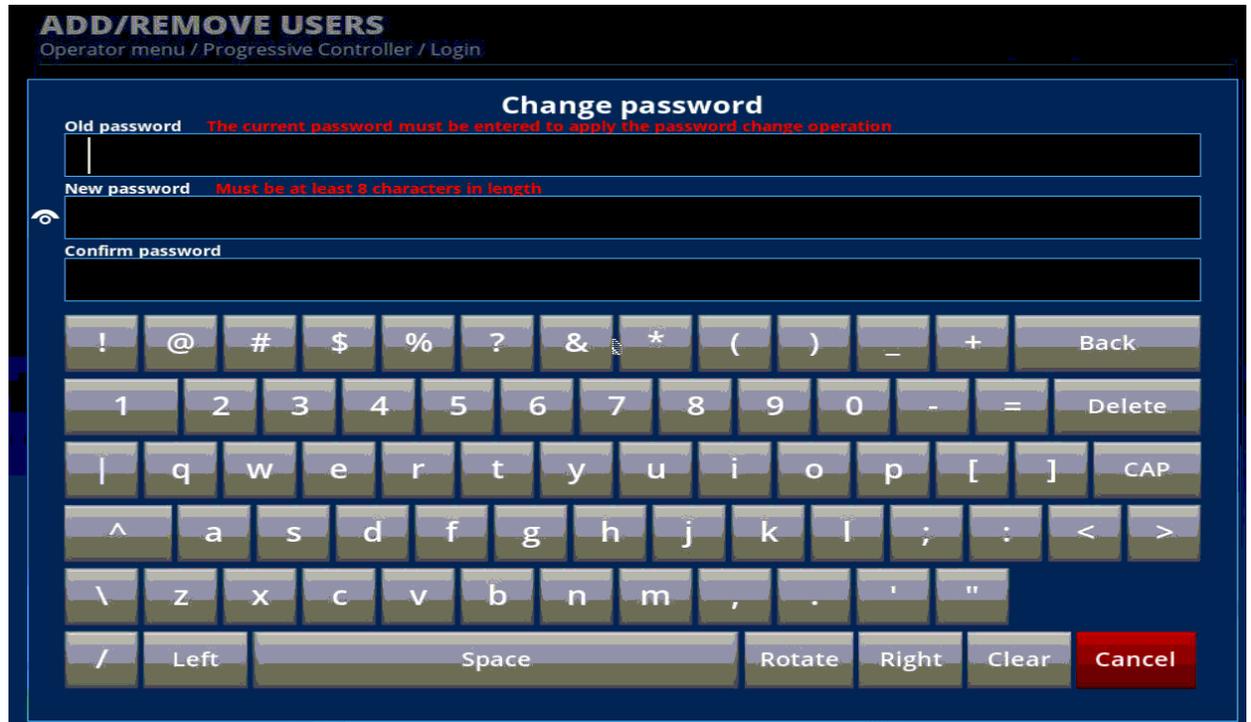


Figure 4: Change password



- The next step is to modify the PC controller port #:
 - Go to Configuration/System, then click on controller port, modify the port number to the UDP port of your choice.
 - Click on OK.

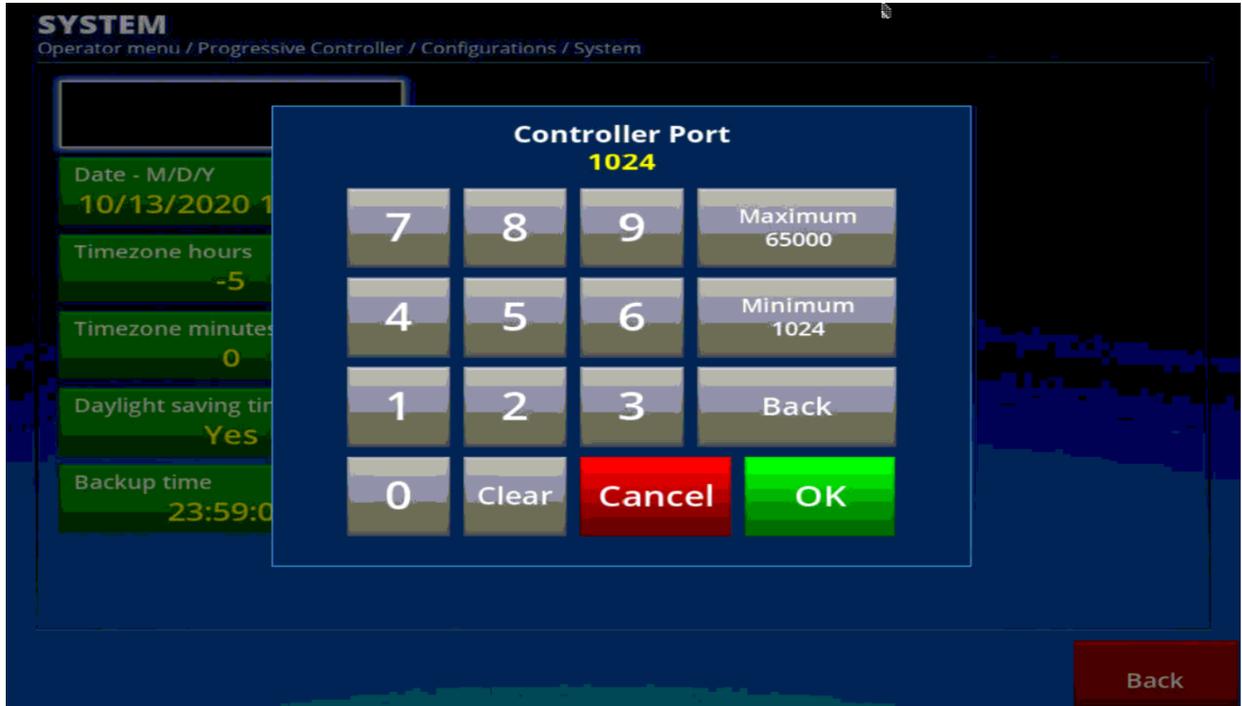


Figure 5: Controller port #



10. Link EGM to the PC using new UDP port

- From the EGM menu “Operator menu/Configuration/Network/Ethernet Controller/Controller port”, configure the controller port to the value that match the one configured in the last step:

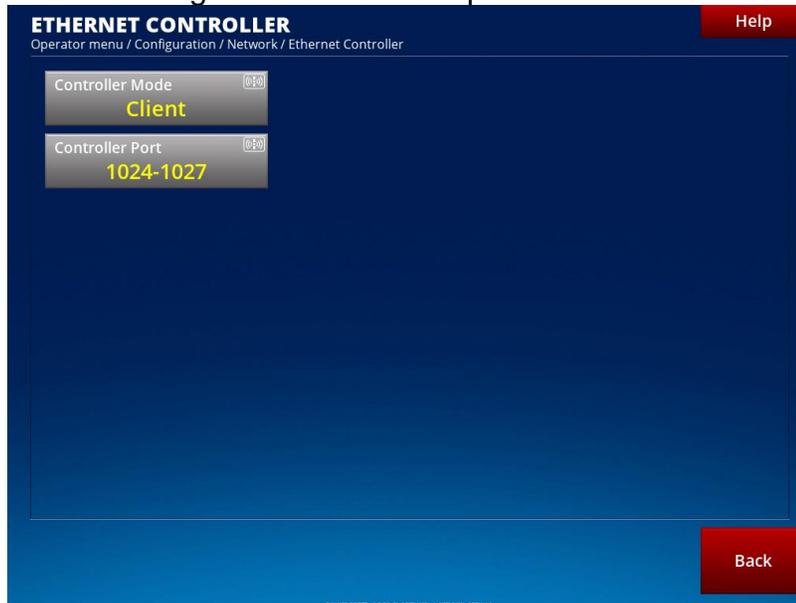


Figure 6: Controller port #

- The next step is to create the progressive groups in the controller and link game progressives to the PC progressives. There is 2 ways to create the progressives in the PC and link it to the game. The first option is the easiest one, we called it the “automatic link”, the other option is the “manual link”, the manual link is more versatile but much more complex than the automatic link.



10.1. Automatic link:

- Open the main door and the logic door.
- Turn the menu key
- Go to configuration/Progressives
- Click on automatic link, then click yes.

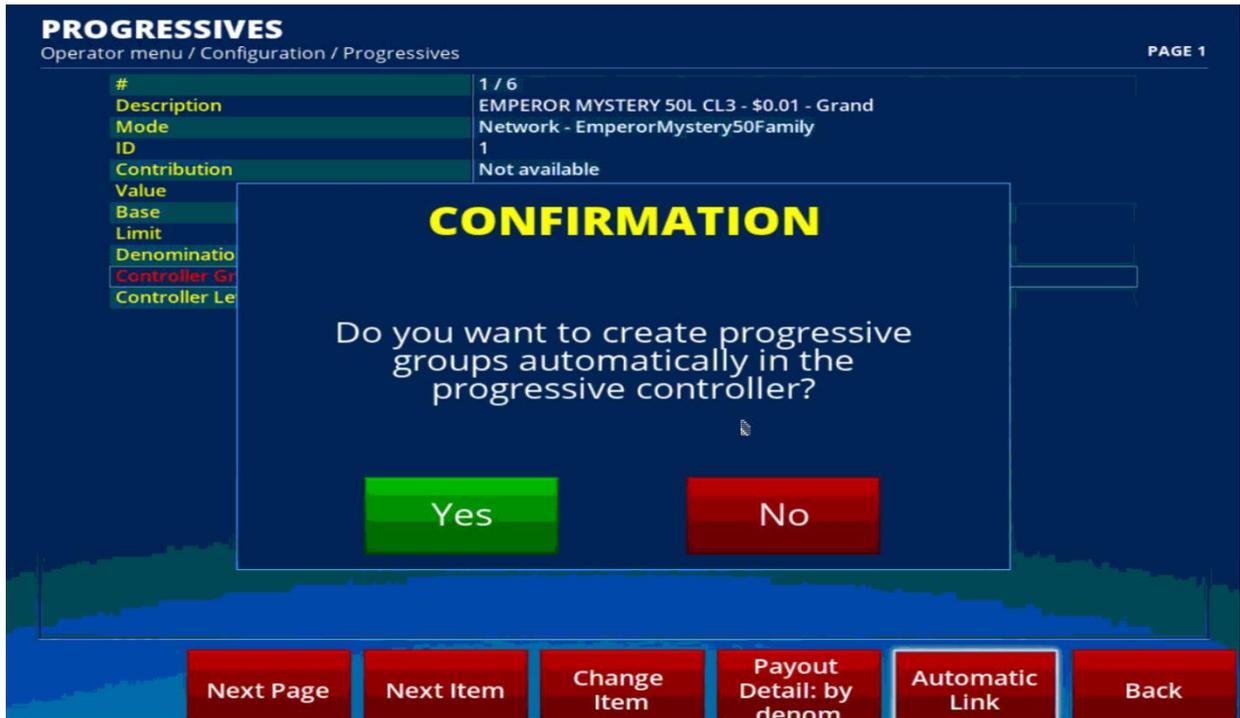


Figure 7: Automatic link

- The last step created the required progressives in the PC with default settings that match with the current game, then link the game progressives to the ones created in the PC.
- The PC progressive are now linked to the game progressives.



10.2. Manual link:

!!This step is not required if the automatic link technique was used!!

10.2.1. Get the information from Game Math documentation:

For this step, the CL3 math information for the game will be required, for example Eternal Goddess game:

From the following file: *Eternal Goddess 5R-576Ways (ID 1114) Math ID 3658 - CL3 Configuration Options.pdf*, we have the following information:

Progressive Contribution for Jackpot #1 (by default)

Credit values	Bet per line										
	1	2	3	4	5	6	8	9	10	12	
\$0.01	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
\$0.02	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
\$0.05	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%

Progressive Contribution for Jackpot #2 (by default)

Credit values	Bet per line										
	1	2	3	4	5	6	8	9	10	12	
\$0.01	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%
\$0.02	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%
\$0.05	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%

Progressive Contribution for Jackpot #3 (by default)

Credit values	Bet per line										
	1	2	3	4	5	6	8	9	10	12	
\$0.01	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
\$0.02	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
\$0.05	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

Jackpot Amount at: 0.01

	\$0.75	\$1.50	\$2.25	\$3.00	\$3.75	\$4.50	\$6.00	\$6.75	\$7.50	\$9.00
JACKPOT #1:	\$750.00	\$1,500.00	\$2,250.00	\$3,000.00	\$3,750.00	\$4,500.00	\$6,000.00	\$6,750.00	\$7,500.00	\$9,000.00
JACKPOT #2:	\$37.50	\$75.00	\$112.50	\$150.00	\$187.50	\$225.00	\$300.00	\$337.50	\$375.00	\$450.00
JACKPOT #3:	\$15.00	\$30.00	\$45.00	\$60.00	\$75.00	\$90.00	\$120.00	\$135.00	\$150.00	\$180.00

Jackpot Amount at: 0.02

	\$1.50	\$3.00	\$4.50	\$6.00	\$7.50	\$9.00	\$12.00	\$13.50	\$15.00	\$18.00
JACKPOT #1:	\$1,500.00	\$3,000.00	\$4,500.00	\$6,000.00	\$7,500.00	\$9,000.00	\$12,000.00	\$13,500.00	\$15,000.00	\$18,000.00
JACKPOT #2:	\$75.00	\$150.00	\$225.00	\$300.00	\$375.00	\$450.00	\$600.00	\$675.00	\$750.00	\$900.00
JACKPOT #3:	\$30.00	\$60.00	\$90.00	\$120.00	\$150.00	\$180.00	\$240.00	\$270.00	\$300.00	\$360.00

Jackpot Amount at: 0.05

	\$3.75	\$7.50	\$11.25	\$15.00	\$18.75	\$22.50	\$30.00	\$33.75	\$37.50	\$45.00
JACKPOT #1:	\$3,750.00	\$7,500.00	\$11,250.00	\$15,000.00	\$18,750.00	\$22,500.00	\$30,000.00	\$33,750.00	\$37,500.00	\$45,000.00
JACKPOT #2:	\$187.50	\$375.00	\$562.50	\$750.00	\$937.50	\$1,125.00	\$1,500.00	\$1,687.50	\$1,875.00	\$2,250.00
JACKPOT #3:	\$75.00	\$150.00	\$225.00	\$300.00	\$375.00	\$450.00	\$600.00	\$675.00	\$750.00	\$900.00

Figure 8:CL3 Configuration Options



10.2.2. Information extracted from Math documentation:

From the math configuration, we can assume that we need 3 groups of progressives, one for each denomination (0.01,0.02 and 0.05), each progressive group will have 3 levels of jackpot.

Group #1: CollosalDragonFamily_ \$0.01		
Level	Base	Contribution
#1 (Jackpot #1)	750\$	0.10%
#2 (Jackpot #2)	37.50\$	0.9%
#2 (Jackpot #3)	15\$	1.0%

Group #2: CollosalDragonFamily_ \$0.02		
Level	Base	Contribution
#1 (Jackpot #1)	1500\$	0.10%
#2 (Jackpot #2)	75\$	0.9%
#2 (Jackpot #3)	30\$	1.0%

Group #3: CollosalDragonFamily_ \$0.05		
Level	Base	Contribution
#1 (Jackpot #1)	3750\$	0.10%
#2 (Jackpot #2)	187.50\$	0.9%
#2 (Jackpot #3)	75\$	1.0%



10.2.3. Creation of the progressive groups and levels in the progressive controller:

!!This step shall be done once for each new game title that is installed on the casino floor and linked on the progressive controller.!!

- Go in the operator menu of the EGM.
- Click on Progressive controller.
- Enter your username/password.
- Click on configuration.
- Click on add/remove group.
- Click on “Name of the new group”.
- Type the name of the group “ColossalDragonFamily_\$0.01”.
- Click on number of levels, set the number of levels to 3.
- Click on add the group.

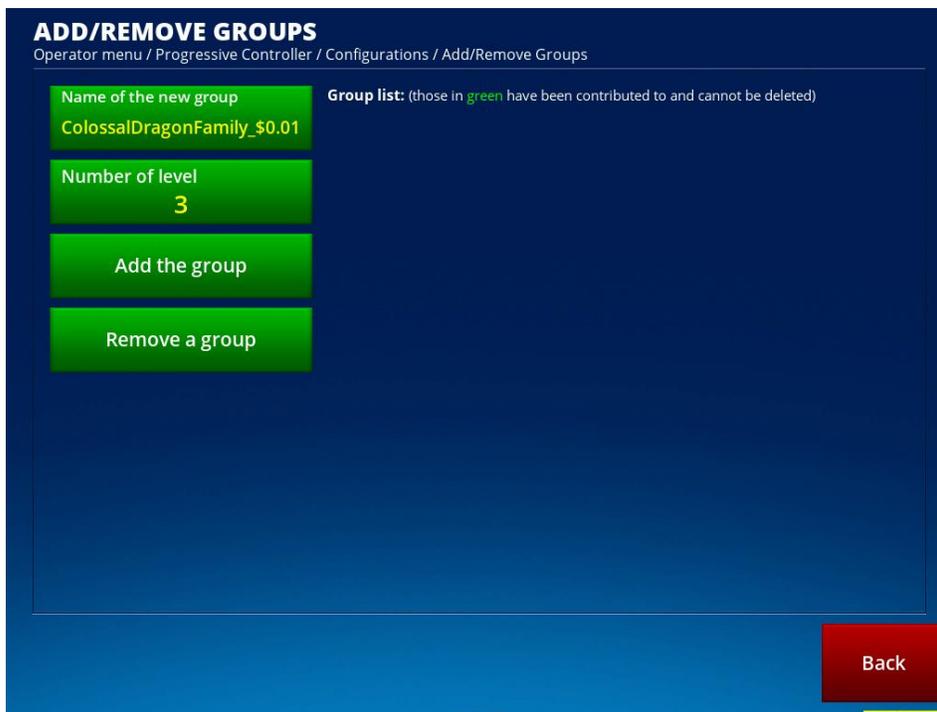


Figure 9: Add “ColossalDragonFamily_\$0.01” group



- Click on “Name of the new group”.
- Type the name of the group “ColossalDragonFamily_\$.02”.
- Click on number of levels, set the number of levels to 3.
- Click on add the group.



Figure 10: Add “ColossalDragonFamily_\$.02” group



- Click on “Name of the new group”
- Type the name of the group “ColossalDragonFamily_\$.05”.
- Click on number of levels, set the number of levels to 3.
- Click on add the group.

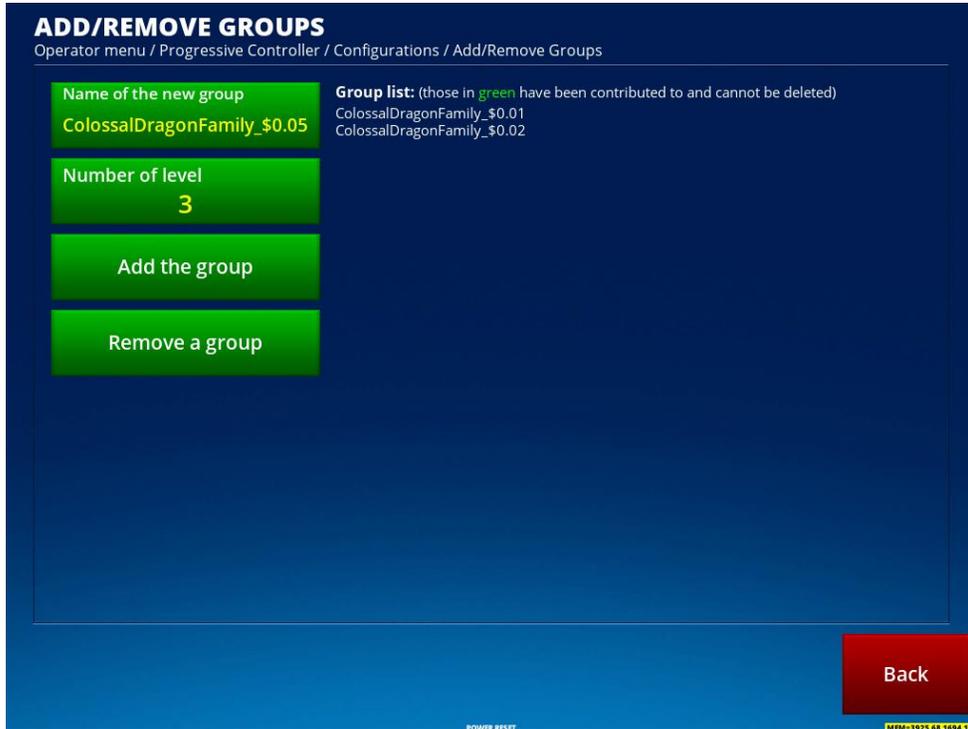


Figure 11: Add “ColossalDragonFamily_\$.05” group



The next step is to configure all the progressive levels of each group:

- Click on “Operator menu/Progressive controller/configurations/Progressives/”.
- Select “ColossalDragonFamily_\$0.01”.

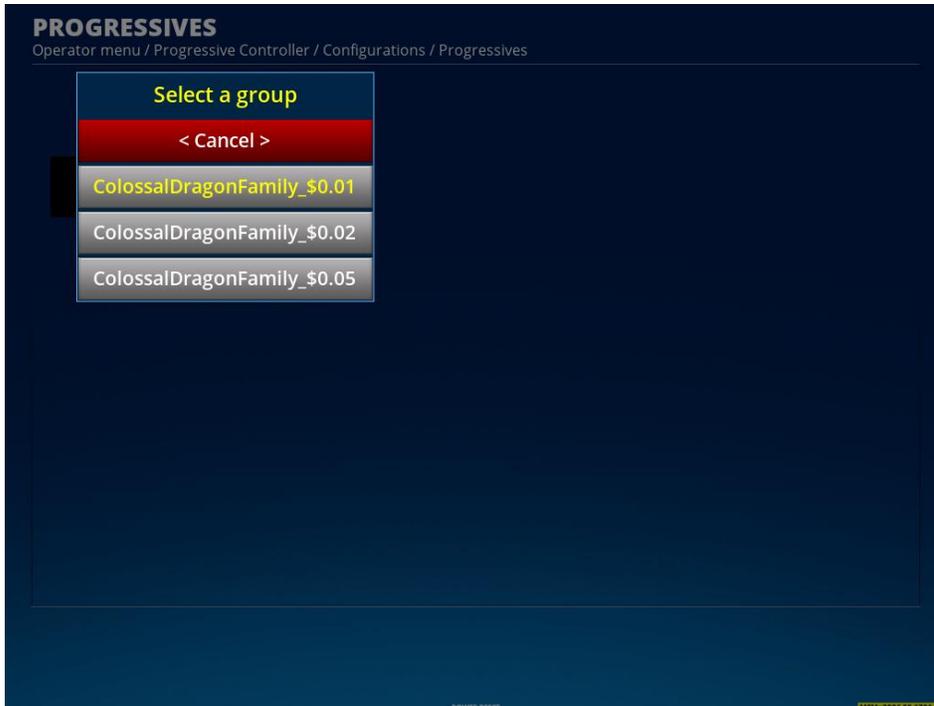


Figure 12: Select progressive group colossalDragonFamily_\$0.01



Configure the level#1 of the “CollosalDragonFamily_\$.01” group:

- Click on base, set the base to 750.
- Click on value, set the value to 750.
- Click on contribution, set the contribution to 0.10
- Click on next.

The screenshot shows a configuration screen titled "PROGRESSIVES" with a breadcrumb path: "Operator menu / Progressive Controller / Configurations / Progressives". The screen displays configuration parameters for "Level: 1 Id: 28 Group: CollosalDragonFamily_\$.01 Id: 10".

Parameter	Value
Base	\$750.00
Value	\$750.00
Limit	\$0.00
Contribution	0.10
Reserve	\$0.00
Reserve Contribution	0.00
Overflow	\$0.00
Overflow enabled	No
Maximum Amount For Contribution	\$0.00

At the bottom of the screen, there are two red buttons: "Next Page" on the left and "Back" on the right. Small text at the bottom of the screen includes "POWER RESET" and "MEM=3921.82.1694.20".

Figure 13: Configure level 1 of \$.01 denomination



Configure the level#2 of the “CollosalDragonFamily_\$.01” group:

- Click on base, set the base to 37.50.
- Click on value, set the value to 37.50.
- Click on contribution, set the contribution to 0.90.
- Click on next.

PROGRESSIVES
Operator menu / Progressive Controller / Configurations / Progressives

Level: 2 Id: 29 Group:
ColossalDragonFamily_\$.01 Id:
10

Base	\$37.50	Overflow	\$0.00
Value	\$37.50	Overflow enabled	No
Limit	\$0.00	Maximum Amount For Contribution	\$0.00
Contribution	0.90		
Reserve	\$0.00		
Reserve Contribution	0.00		

Previous Page Next Page Back

POWER RESET MEM=392139-1694.05

Figure 14: Figure 13: Configure level 2 of \$.01 denomination



Configure level #3 of the “ColossalDragonFamily_\$.01” group:

- Click on base, set the base to 15.00.
- Click on value, set the value to 15.00.
- Click on contribution, set the contribution to 1.00.
- Click on back.

PROGRESSIVES
Operator menu / Progressive Controller / Configurations / Progressives

Level: 3 Id: 30 Group:
ColossalDragonFamily_\$.01 Id:
10

Base	\$15.00	Overflow	\$0.00
Value	\$15.00	Overflow enabled	No
Limit	\$0.00	Maximum Amount For Contribution	\$0.00
Contribution	1.00		
Reserve	\$0.00		
Reserve Contribution	0.00		

Previous Page Back

POWER RESET MPM=3023.02.1609.42

Figure 15: Configure level 3 of \$.01 denomination.



- Click on “Progressives”.
- Select “ColossalDragonFamily_\$0.02”.



Figure 16: Select progressive group “ColossalDragonFamily_\$0.02”.



Configure level #1 of the “ColossalDragonFamily_\$.02” group:

- Click on base, set the base to 1500.
- Click on value, set the value to 1500.
- Click on contribution, set the contribution to 0.10.
- Click on next.

The screenshot shows a configuration screen titled "PROGRESSIVES" with the breadcrumb "Operator menu / Progressive Controller / Configurations / Progressives". It displays settings for "Level: 1 Id: 31 Group: ColossalDragonFamily_\$.02 Id: 11". The settings are as follows:

Parameter	Value
Base	\$1,500.00
Value	\$1,500.00
Limit	\$0.00
Contribution	0.10
Reserve	\$0.00
Reserve Contribution	0.00
Overflow	\$0.00
Overflow enabled	No
Maximum Amount For Contribution	\$0.00

At the bottom of the screen, there are two red buttons: "Next Page" on the left and "Back" on the right. Small text at the bottom center reads "POWER RESET" and at the bottom right, "MPM-3022-RS-1694-14".

Figure 17: Configure level 1 of \$.02 denomination.



Configure level #2 of the “ColossalDragonFamily_\$.02” group:

- Click on base, set the base to 75.
- Click on value, set the value to 75.
- Click on contribution, set the contribution to 0.90.
- Click on next.

PROGRESSIVES
Operator menu / Progressive Controller / Configurations / Progressives

Level: 2 Id: 32 Group:
ColossalDragonFamily_\$.02 Id:
11

Base	\$75.00	Overflow	\$0.00
Value	\$75.00	Overflow enabled	No
Limit	\$0.00	Maximum Amount For Contribution	\$0.00
Contribution	0.90		
Reserve	\$0.00		
Reserve Contribution	0.00		

Previous Page Next Page Back

POWER RESET MEM-1923.62.1694.01

Figure 18: Configure level 2 of \$.02 denomination.



Configure level #3 of the “ColossalDragonFamily_\$.02” group:

- Click on base, set the base to 30.
- Click on value, set the value to 30.
- Click on contribution, set the contribution to 1.00.
- Click on back.



Figure 19: Configure level 3 of \$.02 denomination.



- Click on “Progressives”.
- Select “ColossalDragonFamily_\$0.05”.



Figure 20: Select progressive group “ColossalDragonFamily_\$0.05”.



Configure level #1 of the “CollosalDragonFamily_\$.05” group:

- Click on base, set the base to 3750.
- Click on value, set the value to 3750.
- Click on contribution, set the contribution to 0.10.
- Click on next.

The screenshot shows the configuration screen for 'PROGRESSIVES'. The breadcrumb trail is 'Operator menu / Progressive Controller / Configurations / Progressives'. The configuration details for Level 1 are as follows:

Parameter	Value
Level: 1 Id: 34 Group: ColossalDragonFamily_\$.05 Id: 12	
Base	\$3,750.00
Value	\$3,750.00
Limit	\$0.00
Contribution	0.10
Reserve	\$0.00
Reserve Contribution	0.00
Overflow	\$0.00
Overflow enabled	No
Maximum Amount For Contribution	\$0.00

Navigation buttons: 'Next Page' and 'Back'.

Footer: POWER RESET, MEM=3921.55.1693.15

Figure 21: Configure level 1 of \$.05 denomination.



Configure level #2 of the “ColossalDragonFamily_\$.05” group:

- Click on base, set the base to 187.50.
- Click on value, set the value to 187.50.
- Click on contribution, set the contribution to 0.90.
- Click on next.

PROGRESSIVES
Operator menu / Progressive Controller / Configurations / Progressives

Level: 2 Id: 35 Group:
ColossalDragonFamily_\$.05 Id:
12

Base	\$187.50	Overflow	\$0.00
Value	\$187.50	Overflow enabled	No
Limit	\$0.00	Maximum Amount For Contribution	\$0.00
Contribution	0.90		
Reserve	\$0.00		
Reserve Contribution	0.00		

Previous Page Next Page Back

POWER RESET MEMO1023 28 1693 23

Figure 22: Configure level 2 of \$.05 denomination.



Configure level #3 of the “ColossalDragonFamily_\$.05” group:

- Click on base, set the base to 75.
- Click on value, set the value to 75.
- Click on contribution, set the contribution to 1.00
- Click on back

PROGRESSIVES
Operator menu / Progressive Controller / Configurations / Progressives

Level: 3 Id: 36 Group:
ColossalDragonFamily_\$.05 Id:
12

Base	\$75.00	Overflow	\$0.00
Value	\$75.00	Overflow enabled	No
Limit	\$0.00	Maximum Amount For Contribution	\$0.00
Contribution	1.00		
Reserve	\$0.00		
Reserve Contribution	0.00		

Previous Page Back

POWER RESET MEM-3023.12.1603.35

Figure 23: Configure level 3 of \$.05 denomination.



10.2.4. Link the progressive levels to the game progressives.

- Go in “Operator Menu / Configuration / Progressives”, then select “Controller Group ID”, and click on change item, then select the group “ColossalDragonFamily_\$.01”



Figure 24: Select \$.01 group.



- Click on “Next Item” until Controller Level ID is selected.
- Click on change Item.
- Select the “Controller Level ID” 1.



Figure 25: Set controller level.

- Click on “Yes”

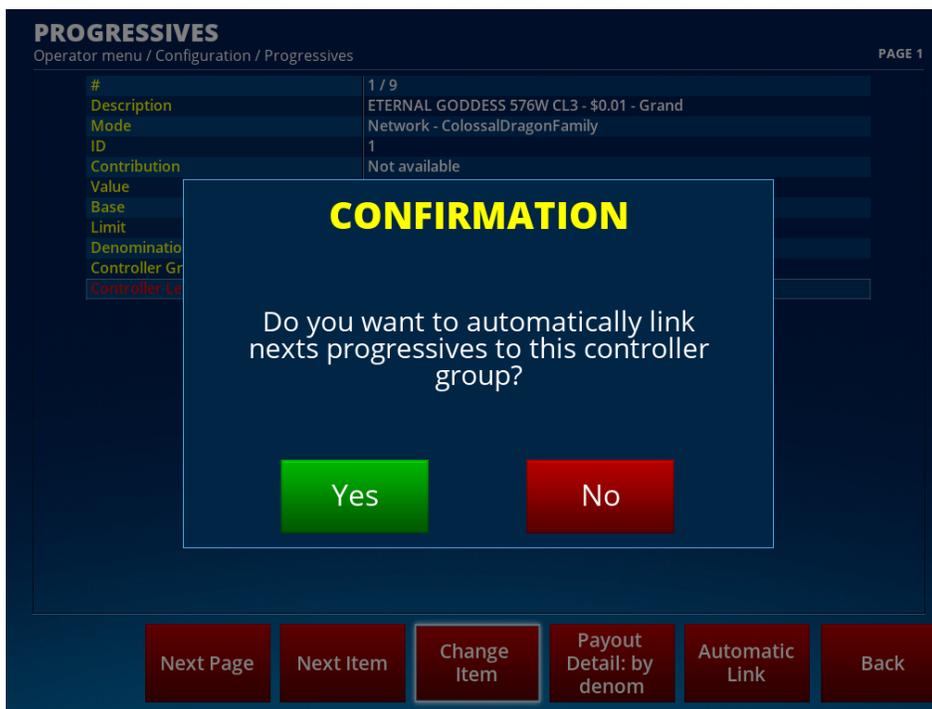


Figure 26: Do you want to link.



- Now the 3 progressive levels of the “ColossalDragonFamily_\$.01” group are now linked with the progressive of the game (Level 1-2-3 of the game).
- We will now configure the Level 4-5-6 of the game and link it to level 1-2-3 of the “ColossalDragonFamily_\$.02” group of the progressive controller.
- Click on next page until we are in progressive level configuration # 4/9.
- Click on change item until “Controller Group ID” is highlighted
- Click on “Change Item”
- Click on “ColossalDragonFamily_\$.02”.

The screenshot shows the 'PROGRESSIVES' configuration screen. At the top, it says 'Operator menu / Configuration / Progressives' and 'PAGE 4'. A table lists various parameters for a progressive level:

#	4 / 9
Description	ETERNAL GODDESS 576W CL3 - \$.02 - Grand
Mode	Network - ColossalDragonFamily
ID	4
Contribution	Not received
Value	\$1,500.00
Base	Not received
Limit	Not received
Denomination	\$.02
Controller Group ID	
Controller Level ID	

A modal window titled 'Controller Group ID' is open, showing a list of options:

- < Cancel >
- 10: ColossalDragonFamily_\$.01
- 11: ColossalDragonFamily_\$.02
- 12: ColossalDragonFamily_\$.05

At the bottom of the screen, there are several navigation buttons: Previous Page, Next Page, Next Item, Change Item, Payout Detail: by denom, Automatic Link, and Back.

Figure 27: Select 0.02\$ group.



- Click on next item until the Controller Level ID is selected.
- Click on Change Item.
- Select the Controller Level ID 1.



Figure 28: Select Level 1

- Click on yes.

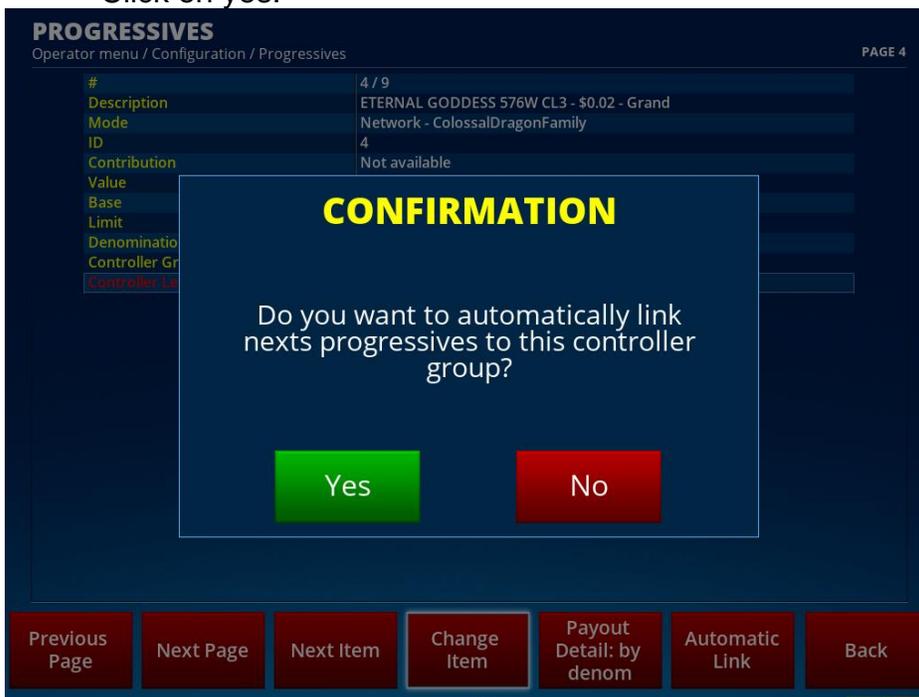


Figure 29: Do you want to link.



- Now the 3 progressive levels of the “ColossalDragonFamily_\$.02” group are linked with the progressive of the game (Level 4-5-6 of the game).
- We will now configure the Level 7-8-9 of the game and link it to level 1-2-3 of the “ColossalDragonFamily_\$.05” group of the progressive controller.
- Click on next page until we are in progressive level configuration # 7/9.
- Click on change item until “Controller Group ID” is highlighted
- Click on “Change Item”
- Click on “ColossalDragonFamily_\$.05”.

PROGRESSIVES
Operator menu / Configuration / Progressives PAGE 7

#	7 / 9
Description	ETERNAL GODDESS 576W CL3 - \$.05 - Grand
Mode	Network - ColossalDragonFamily
ID	7
Contribution	Not received
Value	\$3,750.00
Base	Not received
Limit	Not received
Denomination	\$.05
Controller Group ID	
Controller Level ID	

Controller Group ID

< Cancel >

10: ColossalDragonFamily_\$.01

11: ColossalDragonFamily_\$.02

12: ColossalDragonFamily_\$.05

Previous PageNext PageNext ItemChange ItemPayout Detail: by denomAutomatic LinkBack

Figure 30: Select 0.05\$ group.



- Click on next item until the Controller Level ID is selected.
- Click on Change Item.
- Select the Controller Level ID

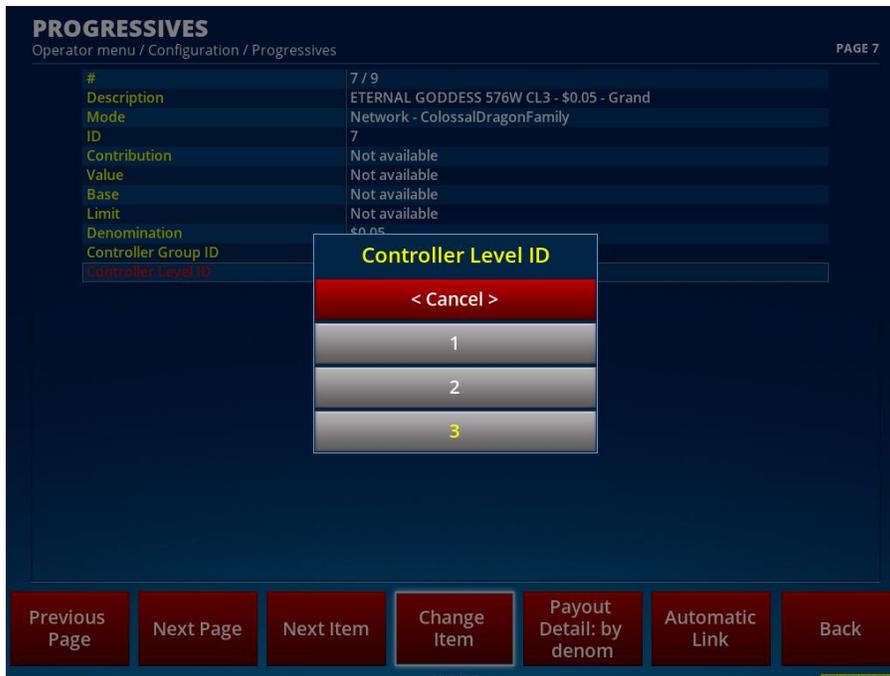


Figure 31: Select level 1.

- Click on yes.

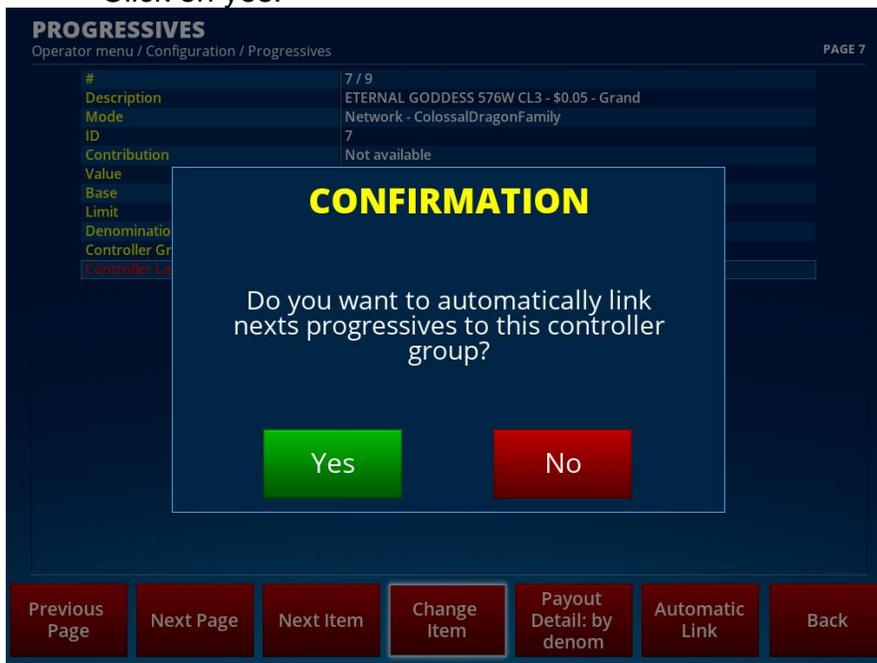


Figure 32: Do you want to link.

- The EGM is now linked to the PC, you can now exit to the game!

11. Computer configuration to access PC Web page

11.1. Web browser supported:

One of the following Web Browser shall be installed on the computer:

- Internet Explorer 11
- Chrome
- Microsoft Edge

*Ensure that there is no pop-up blocker extension add-on activated in your web browser.

11.2. Bluberi Self signed certificate:

To have a secure connection to the WEB server of the PC, a certificate generated by Bluberi shall be installed on the computer that will run the Web browser. Bluberi will provide this certificate.

11.3. How to install the bluberi certificate on windows 10:

- Run mmc command
- Click on file, Add/Remove snapin, then select certificates, then click add.
- Click on ok.

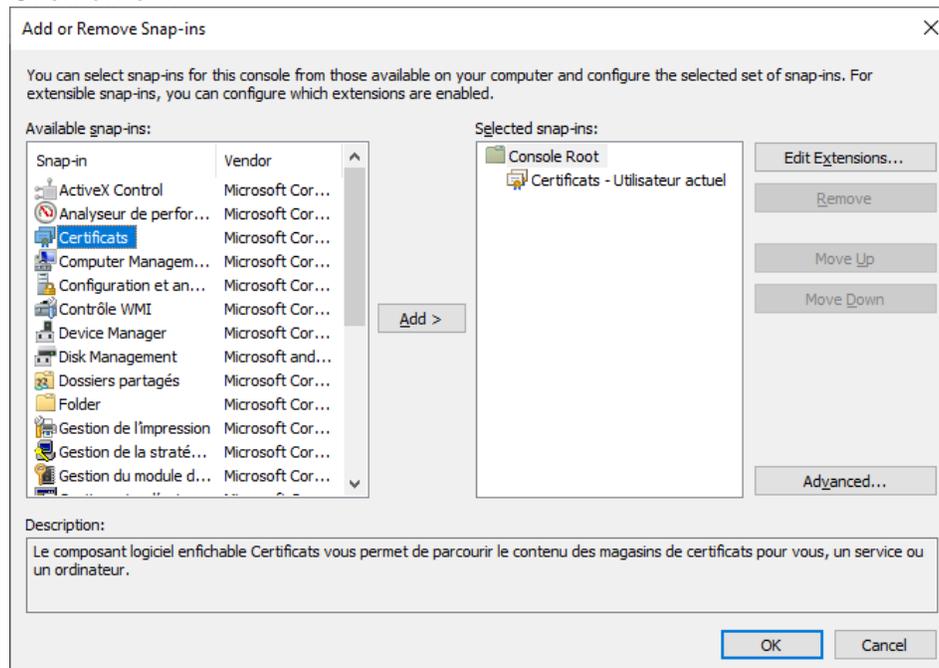


Figure 33: Add/Remove snapin

- Double click on certificates

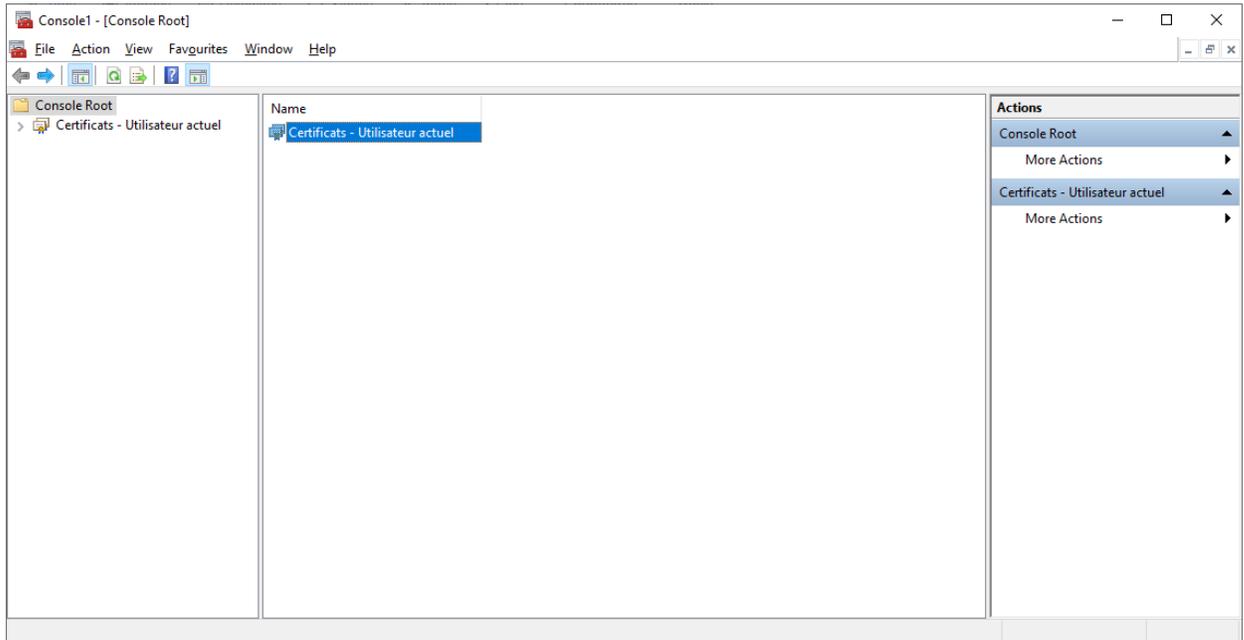


Figure 34: User certificate

- Double click on Trusted Root Certification Authorities

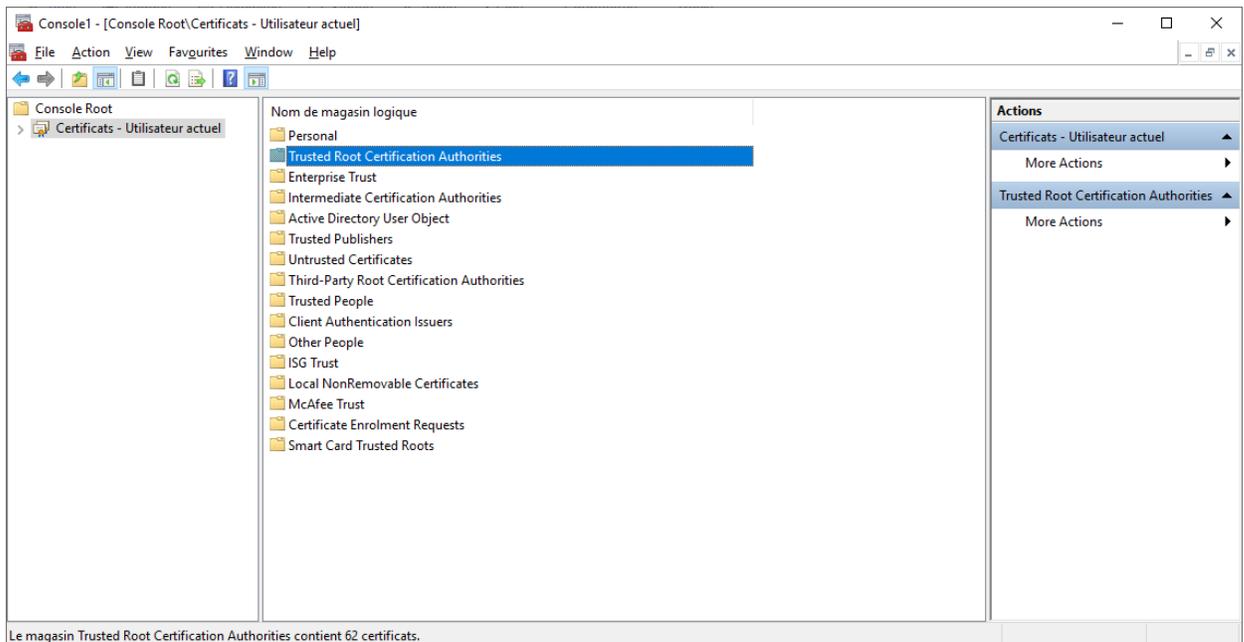


Figure 35: Trusted root Authorities

- Double click on certificates.

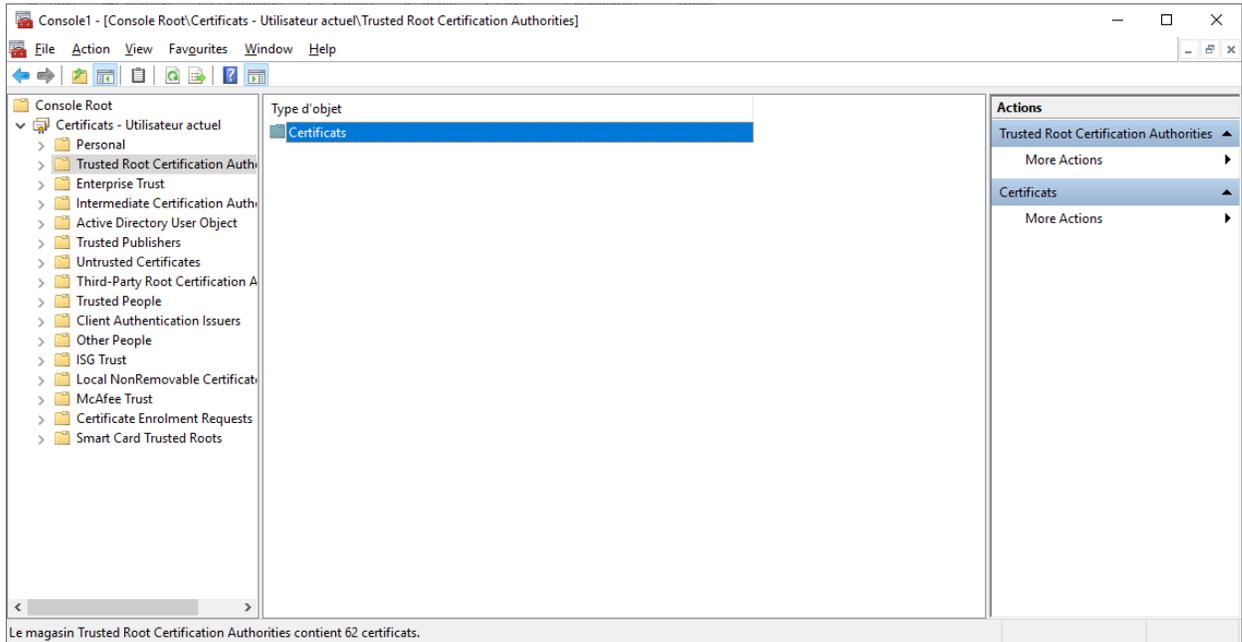


Figure 36: Trusted root certificate

- Click on actions/certificates/All tasks/Import...

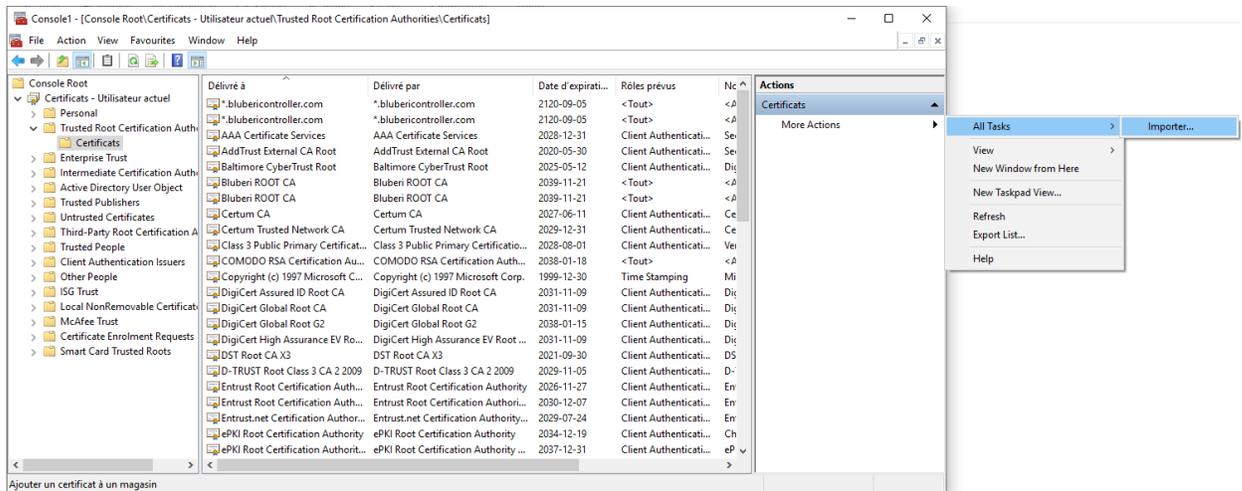


Figure 37: Import Certificate



- Click on next.
- Click on browse and select the file blubericontroller.com.crt (provided by Bluberi).

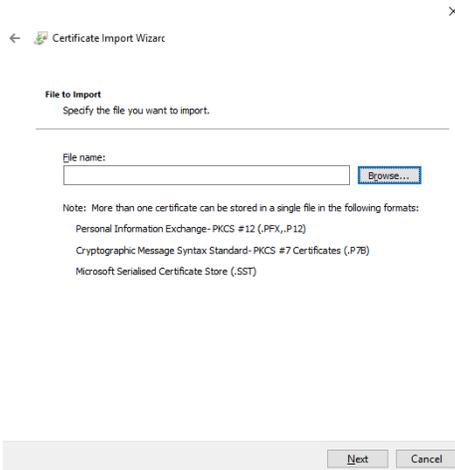


Figure 38: Browse for certificate

- Click on next.

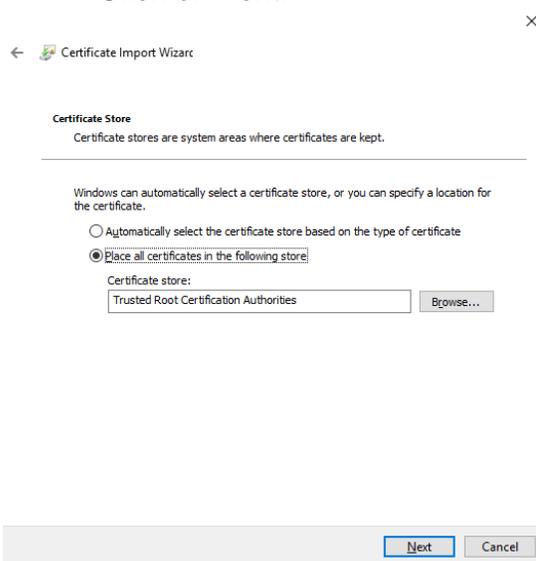


Figure 39: Place certificate in store



- Click on next

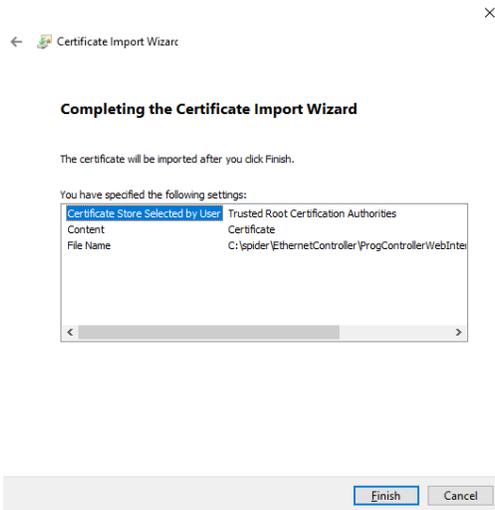


Figure 40: Completing Certificate Import

- Click on finished
- Click on ok, then the Bluberi certificate is installed.



11.4. Link the URL to the IP address of the controller

The first step is to get the IP address of the PC. You can get it from an EGM connected on the progressive controller:

- Turn the Operator menu key
- Click on progressive Controller
- Click on Login
- Enter the credentials
- Click on system information
- Get the IP Address field value of the PC

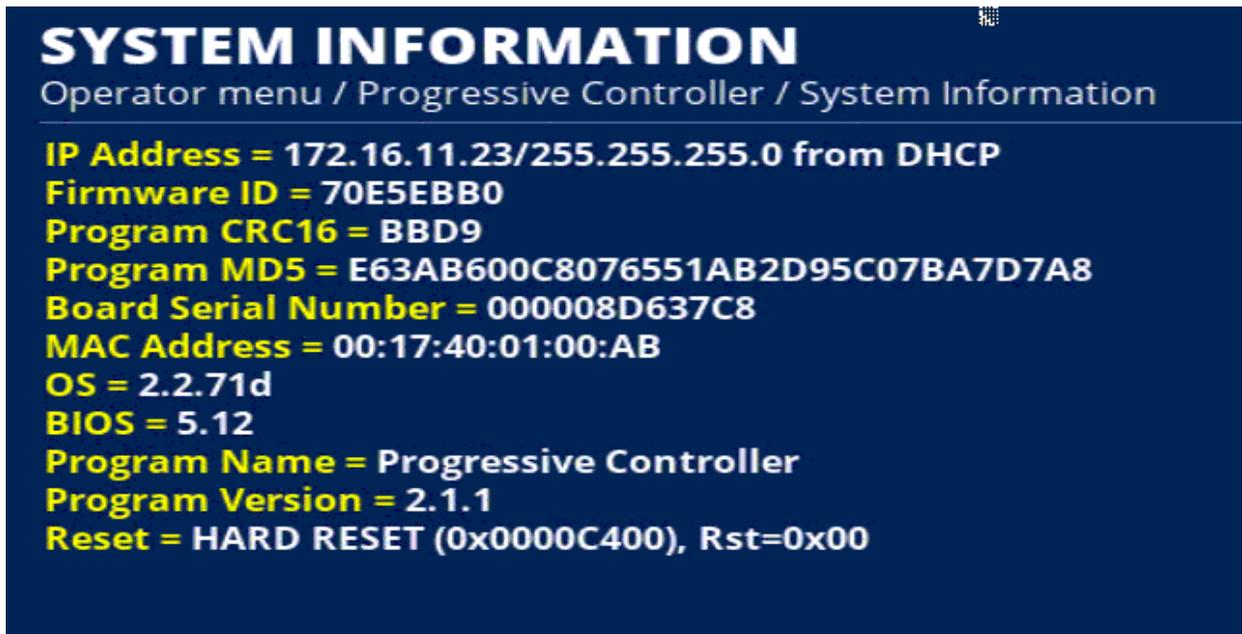


Figure 41: System information.

- Open the file `c:\windows\system32\drivers\etc\hosts` using notepad on the computer that run the web browser.
- Add the following line to the hosts file:
`172.16.11.23 1.blubericontroller.com`
 - `172.16.11.23` : is the PC IP address that you get from last step.
 - `1.blubericontroller.com`: Is the URL to access the PC
- `*.blubericontroller.com`:
The `*` can be replaced by anything. On that way we can add many PC address to the hosts file.
- You can now access the PC from the web browser using the URL:
`1.blubericontroller.com`



12. **PC Web page:**

12.1. **Login:**

- The same credentials are used to access the PC from EGM or from the Web page.

12.2. **Status:**

- The status page is used to report the events and “can’t play” conditions reported by the progressive controller.
- The refresh button is used to refresh the controller status.
- The clear error button can be used to clear the events that can be cleared.

12.3. **Progressives Groups:**

12.3.1. **Add groups:**

- Add Group of progressives.

12.3.1.1. **Group Name:**

- Name of the progressive group.

12.3.1.2. **Number of levels:**

- Number of progressive levels that are members of this progressive group.

12.3.2. **Remove Group:**

- Remove group of progressives.

12.3.3. **Level Configuration:**

- Value: Current value of the progressive.
- Base: Value that the progressive will reset on the next win.
- Contribution %: Contribution % of the bet that is added to the progressive.
- Maximum Amount For Contribution: Maximum bet that an EGM can send to this progressive level.
- Limit: Maximum value for the progressive. The excess money will be added to the overflow.
- Reserve: Current value of the reserve. This amount will be transferred to the value on the next win.
- Reserve Contribution %: Contribution % of the bet that is added to the reserve.



- **Overflow enable:** Enable or disable the transfer of the overflow to the value on the next win.
- **Overflow:** Current value of the overflow. If enabled, this amount will be transferred to the value on the next win.



12.4. Reports:

On each page of the report, the controller software version, date of the report and page number is displayed.

12.4.1. Summary

This page includes the following information:

- A list of the EGM connected on the controller, and a list of progressives linked to each EGM.
- For each Progressive Group:
 - Name of the group
 - Group ID
 - For each level of progressives:
 - Level
 - ID
 - % contribution
 - Value
 - Overflow
 - Base
 - Limit
 - Reserve contribution
 - Reserve
 - Reset value

12.4.2. Meters

This page includes the following meters for each progressive level:

- Number of wins: Total number of wins.
- Total win: Addition of all win.
- Min Win: Minimum value win for this progressive level.
- Max win amount: Maximum value win for the progressive level.
- Contribution: Total contribution to the Progressive value.
- Reserve: Total contribution to the reserve.
- Overflow: Total contribution to the Overflow.

12.4.3. Progressive Wins:

For each progressive level on the controller, the page includes the following information:

- A list of the 32 latest wins, each entry includes the following information:
 - Sequence: Sequence ID of the win.
 - Datetime: Timestamp of the win event.
 - Amount: Amount win.
 - Dallas Key: Dallas key of the EGM that win the progressive.
 - Asset No.: Asset number of the EGM.



12.4.4. **Events:**

The event report contains the list of events that happens on the controller, for each event, the following information is available:

- Name: Name of the event.
- Quantity: Number of occurrences of the event.
- Last occurrence: Time stamp of the last occurrence of the event.

12.4.5. **Credentials:**

For each user, the following information is available:

- Username: username used for login.
- Full Name: Full name of the user
- Title: Job title of the user.
- Account Lock status: locked or unlocked.
- Account creation date: Account creation date.
- Last login date: Last login date.
- Date of last password change: Date of last password change.
- Password expiration date: Password expiration date.
- Group Membership: List of the user groups that the user is member of.
- Permissions: A list of the permissions allowed to this user.

12.4.6. **Current Values:**

The current value report contains the following information for each progressive:

- Group: Progressive group name.
- Level: Progressive level in the current group.
- ID: Progressive Unique ID.
- Value: Current value of the progressive.
- Overflow: Current value of the progressive Overflow
- Reserve: Current value of the Reserve.



12.5. Logs:

12.5.1. Event:

- Each entry in the event log contains a timestamp and a description of the Event.

12.5.2. Ethernet:

- Each entry of the ethernet log contains a timestamp and a description of the event related to Ethernet communication link.

12.5.3. Progressive Controller:

- Each entry in this log contains a timestamp and a description of the event that happens in the progressive controller.

12.5.4. System Reset:

- Each entry in this log contains a timestamp and a description of some information logged at system reset.

12.5.5. ConfigIni:

- This log contains information about some configuration point of the progressive controller.

12.6. User management:

12.6.1. User Groups

- Add Group:
 - Group Name: Name of the user group.
 - Permissions: Configure permissions for each group. The permissions available are the following:
 - System config: Allow access to system configuration
 - Progressives config.: Allow access to progressive configuration.
 - Credentials config.: Allow access to User management.
 - System information: Allow access to system information.
 - Verification numbers: Allow access to verification numbers menu.
 - All reports: Allow access to all report available in the system.
 - Summary report: Allow access to summary report.
 - Meters report: Allow access to Meters reports.
 - Progressive Wins report: Allow access to Wins report.
 - Events report: Allow access to Events report.
 - Credentials report: Allow access to Credentials report.
 - Current values report: Allow access to Current values report.
 - All logs: Allow access to all Logs.
 - Event log: Allow access to Event log.
 - Ethernet log: Allow access to Ethernet log.
 - Prog. ctrl log: Allow Access to Prog. ctrl log.
 - System reset log: Allow Access to System reset log.



- ConfigIni log: Allow Access to ConfigIni log.

12.6.2. Remove:

- Click on remove at the right of the group name to remove a user group.

12.6.3. Users

- Full Name: User Full name
- Employee Title: Set user job title
- Locked: Lock or unlock a user account
- Groups: Select user groups that the user is member of.
- Change password: Change password of the selected user.

12.6.4. Locked Users:

- This menu allowed to see which user account are locked, and to unlock it.

12.7. System:

12.7.1. Configurations:

- UDPPort: Specify the UDB broadcast port number that the PC will use to detect the EGM's.
- DateTime: Set the controller's date and time.
- TimeZoneHours: Set the Timezone hours.
- TimeZoneMinutes: Set the Timezone minutes.
- DayLightSaving: Enable or disable the Daylight saving time.
- BackupTime: Set the time for the daily backup.
- RamClear: Trig a PC Ram clear, the PC will reboot after this operation.
- RestoreConfigFromSecondaryDisk: Restore the selected backup from the secondary disk, this operation can be done only after a Ram Clear.
- InactivityTimeout: Set the web page inactivity timeout. If a user is logged in and did not perform any action during this delay, the user will be logged out.
- ExportData: Ask to the PC a snapshot of the current PC configurations.
- ExportBackup: Ask to the PC a copy of the selected backup.
- ImportBackup: Import a backup file to the PC, this operation can be done only after a Ram Clear.



12.7.2. System information

This page includes the following information:

- IP Address: IP address of the PC.
- Firmware ID: Firmware ID of the PC software
- Program CRC16: CRC of the PC application
- Program MD5: MD5 of the PC application.
- Board Serial Number: Board serial number.
- MAC address: Mac address of the PC.
- OS version: OS version.
- Bios Version: BIOS version.
- Program Name: Program Name.
- Program Version: Program Version.
- Reset: Last reset status

12.7.3. Verification Numbers

- Firmware ID: Firmware ID of PC.
- BIOS: Computed SHA1 signature of the Bios
- EFI Partition: Computed SHA1 signature of the EFI partition.
- OS Partition: Computed SHA1 signature of the OS partition.
- FS partition: Computed SHA1 signature of the PC partition.

12.8. Account:

12.8.1. Change password:

- Change password of the current user

12.8.2. Log Out:

- Logout from web interface.



13. Behavior on progressive configuration

- An error message will appear on all EGMs that are linked on the progressive if any progressive settings are modified.
- The new progressive settings are sent to all machines that are linked on this progressive.
- The EGM validate that the base value of the progressive match with the math configuration of the game, otherwise a “can’t play” message will appear on the EGM. This validation is made in the connection process of the EGM to the PC, and when the progressives configurations changes.

14. Progressives operations:

Contributions:

When the progressive value is < limit:

When a GM bet:

- The (Contribution % * bet) is added to the progressive value.
- The (Reserve Contribution % * bet) is added to the reserve.

If the progressive value = Limit:

When a GM bet:

- the (Contribution % * bet) is added to the overflow value.
- the (Reserve Contribution % *bet) is added to the reserve.

When a progressive is win:

The progressive value is sent the EGM.

OverflowToAdd = 0

IF Overflow Enable

OverflowToAdd = overflow

ENDIF

IF (Base + Reserve + OverflowToAdd) < limit

Value = Base + Reserve + OverflowToAdd

Reserve = 0

IF Overflow Enable

Overflow = 0

ENDIF

ENDIF

IF (Base + Reserve + OverflowToAdd) > limit

Value = limit

Overflow = (Base + Reserve + OverflowToAdd – limit)

Reserve = 0

ENDIF

15. Ethernet controller limitations

- The total number of progressives is limited to 500
- The maximum number of groups is 83.
- The maximum number of machines allowed is 50.

16. Recover access to the PC when administrator lost credentials or administrator account is locked:

If the administrator lost their password or lock their account, it is possible to contact the Bluberi support to recover the access to the controller.

Here are the steps to follow:

- Turn the operator menu key of an EGM that is linked to the PC.
- Click on Progressive controller
- Click on Access code

The Access code window will appear:

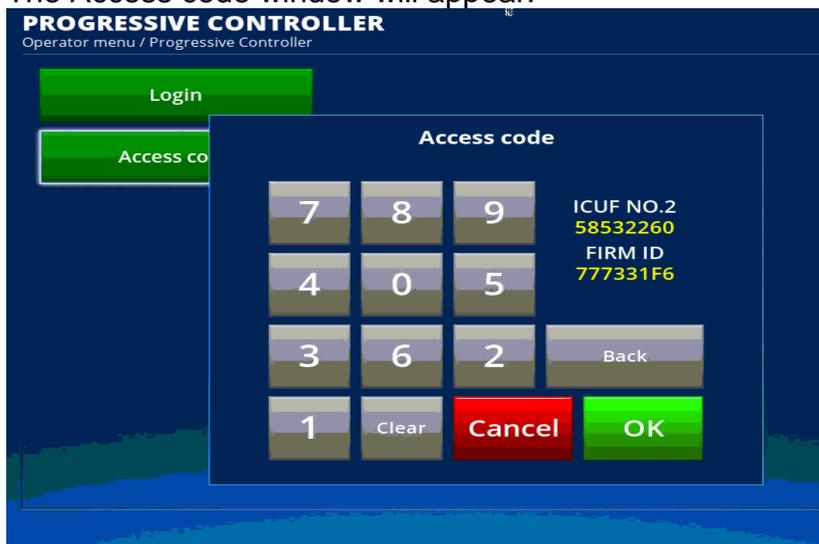


Figure 42: Access code

- Call the Bluberi technical support, tell them the ICUF NO and the FIRM ID, they will provide you the Access code numbers.
- Enter the access code, then click on OK.
- Now you will have access to the credentials menu that allow you to modify the password of your account, or to unlock it.

17. How to restore a progressive controller

The situation may happen that a progressive controller shall be replaced by a new one. In that case we can import the configuration of the old progressive controller that is saved daily on the second CFast of the progressive controller. It is possible to make this replacement without any need to ram clear all the EGM that was connected on the previous progressive controller.

17.1. Step to setup the new progressive controller

- Connect the second CFast of the old progressive controller in the CFAST#2 connector of the new board.
- Run the following step (previous sections of the documents):
 - 5. Ram clear.
 - 6. Install CFast on progressive controller board.
 - 7. EGM and PC configuration steps.
 - 8. PC configuration from EGM terminal.
 - Connect on the controller web page using a web browser.
 - Using the controller ip address eg: “172.16.11.23”
 - Or Using 1.blubericontroller.com, if the step “Computer configuration to access PC Web page” was done on your computer.
- Login using “ctrladm” username, and password configured in previous steps.
- Click on configuration.
- Click on RestoreConfigFromSecondaryDisk.
- Select the backup you want to restore from the “Backup List”.

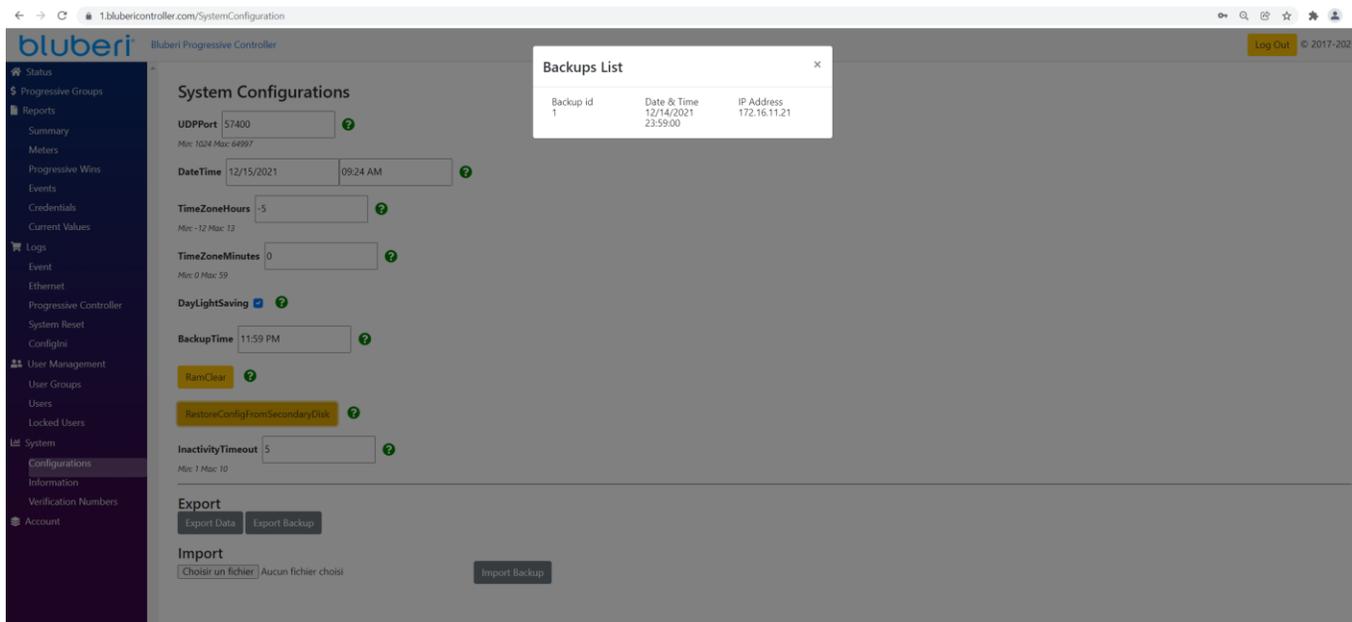


Figure 43: Restore progressive controller configuration.



- Your new controller is now up and running with the configuration of the previous controller.
- No need to Ram clear any games connected on the controller.

18. Backup/Restore a controller on demand

18.1. Get live backup

It's possible to backup the entire controller configuration and download that configuration from the web page. This can be useful if a casino technician wants to keep a backup of the entire controller after an installation. This backup can be used later to restore a progressive controller configuration.

- To get a real time snapshot of the controller configuration, login on the controller web page, click on System, Configurations, Export Data.



Figure 44: Export current configuration.

- The progressive controller backup will be downloaded from the progressive controller.



18.2. Get daily backup configuration

- To get a daily backup of the controller configuration, login on the controller web page, click on System, Configurations, Export Backup.
- Click on the backup that you want to download from the backup list.

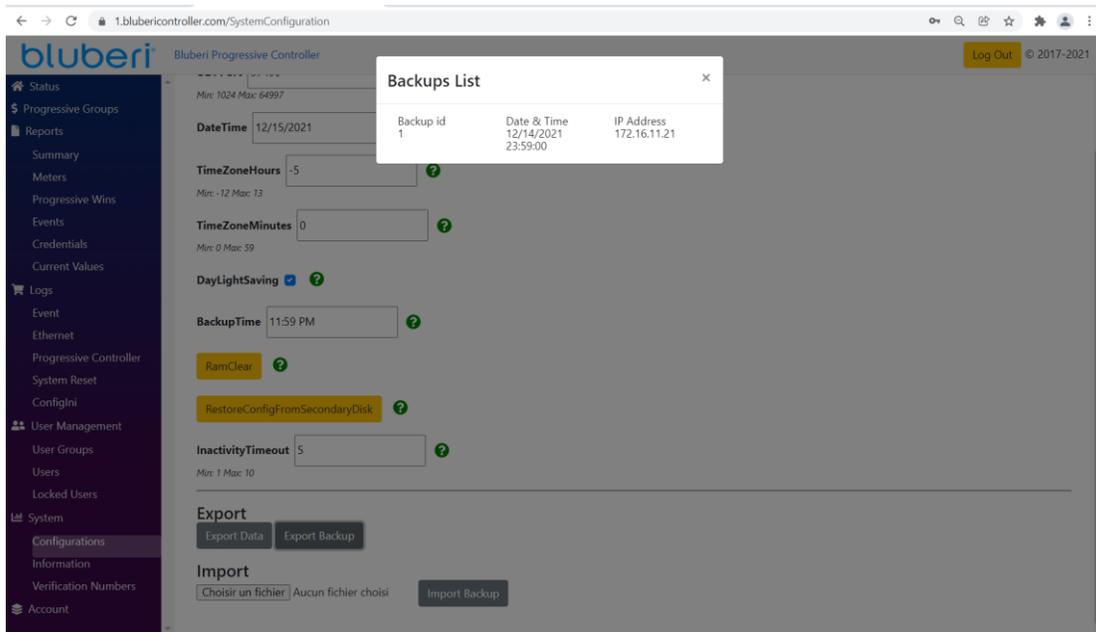


Figure 45: Export Backup.

18.3. Restore controller by uploading a backup file

- Run the following step:
 - 5. Ram clear
 - 6. Install CFast on progressive controller board
 - 7. EGM and PC configuration steps
 - 8. PC configuration from EGM terminal
 - Connect on the controller web page using a web browser
 - Using the controller ip address eg: “172.16.11.23”
 - Or Using 1.blubericontroller.com, if the step “Computer configuration to access PC Web page” was done on your computer.
- Login using “ctrladm” username, and configured password.
- Click on Configurations, choose file.
- Select the backup file from your disk.
- Then click on Import Backup.

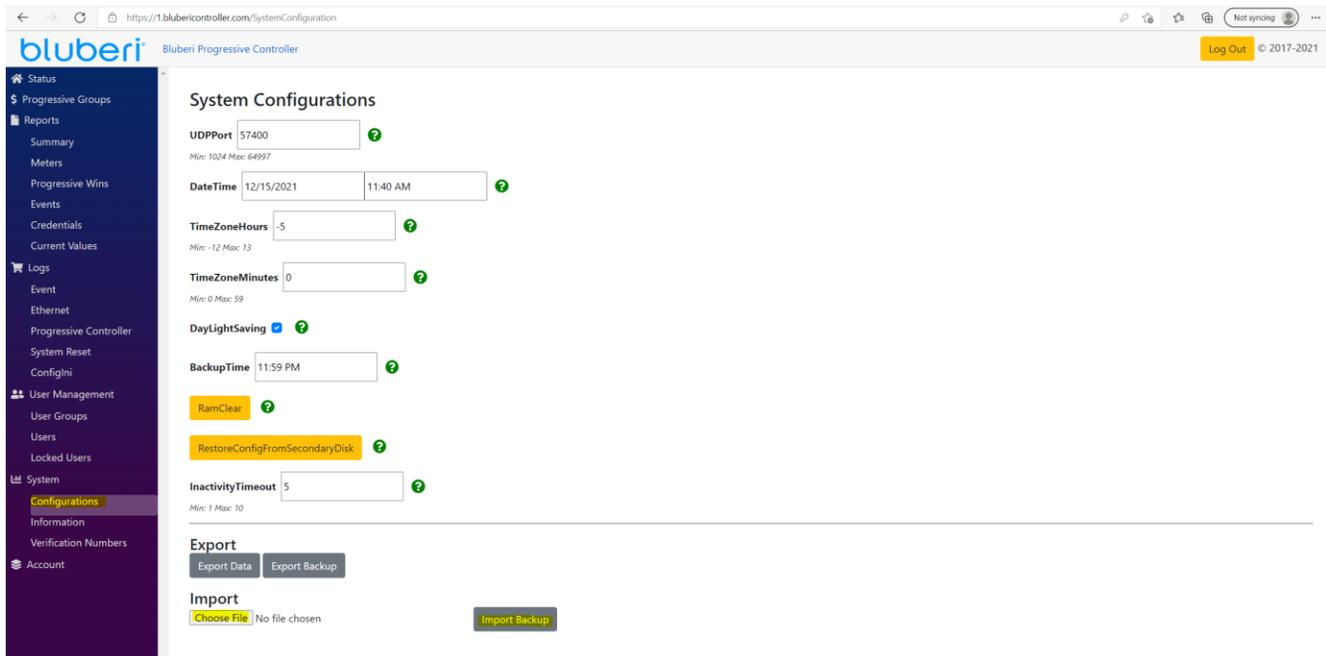


Figure 46: Import backup.

- The progressive controller configuration is now restored from the backup file.



19. **Link different Game titles to the same progressives:**

The progressives of some of the games that was designed previously on “Progressive” point of view are compatibles and can be linked together, but the automatic link will not link them together. The Automatic link for theses older games will create a new set of progressives for each game title.

This is the case for the following games:

SP-BLUS-SUPER-LIGHTNIN-SPIN 1·0·1 - FECD7B6C
SP-BLUS-HIGHBORN-DRAGON 1·2·1 - C738201B
SP-BLUS-MAJESTIC-PHOENIX 1·2·0 - B58C52B3
SP-BLUS-ETERNAL-GODDESS 1·0·1 - AB222338
SP-BLUS-SUPER-FLAMIN-SPIN 1·0·0 - 258011CD
SP-BLUS-ROYAL-BENGAL 1·0·0 - AF8B82D2

If there is a need to link the progressive of theses games to the progressives of another “progressive” compatible game, it is always possible to do it by using the procedure describe in the section: “Link the progressive levels to the game progressives.”

The “Automatic link” of the games that was released after theses games, will create the progressive group on the controller on a way that other “Progressive” compatibles game will be able to link to it using the automatic link.

20. **Glossary**

PC: Progressive controller



Contact Us

If you have any question, comment or feedback, please use the contact details provided below.

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