Atronic
Great Games Great People

e-motion™ / Cashline™

Progressive Jackpot

How to setup a Progressive Jackpot
on Atronic slot machines

Including
- System Progressive
- Mikohn Progressive
- Atronic Progressive Link / APL™
- Cash Fever™

Rev. 2.0

January 2005

www.atronic.com

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Great Games Great People

CONTENT

What is this manual about

This document describes how to setup and configure an Atronic gaming machine to participate in a linked progressive Jackpot. It explains configuration of the three most important progressive Jackpot types in a detailed step-by-step guide.

This manual is intended to provide QUALIFIED TECHNICAL PERSONNEL ONLY. Please read it carefully **before** starting the Jackpot configuration.

Procedures described in this manual refer to both **Atronic Cashline™** machines using O-Level (STD) software and **Atronic e-motion™** / Hi(!)bility™ machines using Q-Level (STD) software, if not otherwise stated. *Please note that USA software versions (P-Level) may use different settings and procedures.*

Information in this manual includes the most up-to-date information available just before creation. All part numbers and descriptions have been carefully reviewed and checked for accuracy. All drawings and diagrams contain the newest revisions released by Atronic. If earlier revisions of diagrams or drawings are required, please contact your Atronic Technical Services representative.

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Jackpot Basics

Jackpots are a common method for casinos to give the probability of winning a large amount of money to the player. To play a few credits on a jackpot machine may come in for a win up to millions. Jackpots therefore will attract more and different people to the casino.

Usually optical and acoustical appliances promote jackpots. Large displays show current jackpot values and/or attracting messages. In case of a jackpot win displays or other optical attractors as well as sound systems inform the casino's visitors about the large win. All those kinds of multi media events motivate more people to play, and to play more.

Classical progressive jackpots are defined as a group of slot machines contributing a certain percentage of their turnover to a pot. Usually this pot is fed with a base value at the start and after each win, called jackpot hit. The pot then increments until a certain winning combination appears on the slot machine. This combination is said to „trigger the jackpot hit." Upon a hit event the current jackpot amount is paid to the player at the winning slot machine. Progressive games can either be single machine jackpots called stand alone jackpots or linked progressive jackpots, which consist of several machines contributing to one jackpot.

All contributions taken from the slot machines' turnover have to be contributed to people playing on those slot machines. Therefore they can be considered as additional payout of the slot machines. The basic payout percentage is given by the applied paytable of the machine. The additional payout generated by a progressive jackpot has to be considered in all calculation where the slot machine's theoretical payout is relevant.

Since the probability to win a jackpot has to be equal for all slot machines participating in that jackpot, only machines that match some link criteria, may be connected to a linked progressive jackpot (see also link criteria definition on page 7).

How to setup - Basic Overview

This chapter describes the basic principles to plan, setup, and configure a Progressive Jackpot.

1. Determine which machines are to be linked.

2. Check pre-requirements.

   - Does the game software support progressives?
   - Is new Paytable software necessary to adjust overall Return To Player Percentage (RTP)?
   - Does the Commboard software support progressives and matches to the Casino's online system?
   - Is a security chip with progressive support installed?
   - Does the game software comply with the 4 important link criteria? (described on next page)
   - Which configuration software version is needed?
   - Is additional hardware (such as cables or adapters) needed?

3. Order needed parts.

   - A-Link Setup Kit (for Jackpot configuration).
   - Security Chips with progressive support.
   - A-Link Cables and Power supply Adapter (for APL or Mikohn progressives)

   - Are there parts from other vendors needed? e.g. SMIBs or network equipment?

4. Prepare external PC for Jackpot Configuration.

5. Prepare gaming machines for Jackpot Configuration.

6. Link machines.

7. Jackpot Configuration with "A-Link Config" software.

8. Configure external Controller (if applicable).

9. Test the Progressive.

***Note**:*
Please contact Atronic Technical Service, if you are planning to setup up a Progressive Jackpot. Our team will give you best support in planning and realisation.

Which machines can be linked

The 4 important link criteria

In order to mix different game themes in a bank of progressive machines, following important criteria must be met. All machines in the bank must have:

- The same denomination
- The same top award hit frequency (given in pulls to hit)
- The same top award
- The same Jackpot trigger (achievable playing MAX BET or MAX BET PER LINE)

The machines also should have Paytable-software with the same Return to Player Percentage (RTP), even if this is not relevant for the Jackpot itself.

Game software versions

Please contact Atronic to find out which game versions are suitable for your Progressive Jackpot project.

Commboard software versions

Participating in a Progressive Jackpot environment the Commboard software has to match to the casino's online system and to the Atronic game software.
This manual refers to Q-Level software (for e-motion/Hi(!)bility) and to current O-Level software (for Cashline). Earlier O-Level software may require different settings. See "Commboard 68K - EPROM Naming" on page 54 for details or contact Atronic to find out which Commboard software version is suitable for your Progressive Jackpot project.

Security Chip / Security Device

Each Atronic machine participating in a Progressive Jackpot, has to be equipped with a security chip with progressive support. This chip has to be mounted to Masterboard socket U35 (for Cashline) or U22 (for e-motion/Hi(!)bility).

Preparing PC for configuration

Which version of A-Link Config to use

Jackpot configuration can either be carried out with **Alink Config for Windows** or with one of the DOS program versions. **Alink Config for Windows** covers all recent configuration versions in one application. ALink Config DOS versions are specific programms for one particular configuration version.

As most PCs use Windows® operating systems, procedures described in this manual refers to **Alink Config for Windows**.

***Note**:*
If you are using Windows XP® or Windows 2000®, please use A-Link Config for Windows 2.0 or higher.

Use A-Link Config for Windows 2.1 or higher for Cash Fever™ Jackpot Configuration.

How to find the appropriate A-Link for DOS version

1. Jackpot Configuration Menu

1. Open Main Door and press Service Button to enter Service Menu.

2. Enter "Jackpot Configuration" menu.

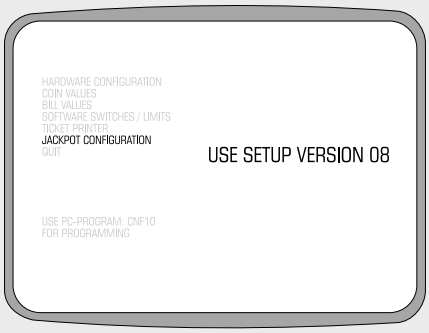
   - For Atronic Cashline series:
     Select "PC-Setup / Jackpot Configuration".

   - For Atronic Hi(!)bility / e-motion series:
     Select folder "Settings / Jackpot Configuration"

3. When all pre-requirements are fulfilled, the appropriate A-Link Config software version is displayed on screen.

   Example: "Use Setup Version 08" stands for the DOS version with the identifier "08". You have to use AC08xx.exe.

***Note**:*
If using A-Link Config for Windows, it is not necessary to figure out the setup version.



2. Commboard EPROM Naming

The A-Link version can also be identified by the Comm board software naming. The third last and the second last digit represents the version identifier.
See Appedix "Commboard 68K - EPROM Naming Scheme" on page 54 for details.

***Note (for Cashline only)**: Do not confuse the A-Link Config version with the PC-Setup program version which is displayed in the lower left corner.*

Preparing PC for configuration

Installing Alink Config for Windows

Alink Config for Windows requires installation of a Hardlock Dongle driver. This Hardlock Dongle is required to unlock the program and has to be connected to the PC's printer port (LPT) when using the program.

1. Connect Hardlock Dongle to PC's printer port (LPT), with the PC switched off.

2. Copy the two files "dongle_install.exe" and "Alink_Setup.exe" from floppy disk to a temporary folder on the PC's harddisk.

3. Run "dongle_install.exe" to install the Hardlock Dongle drivers and follow instructions on screen.

4. Reboot PC to initialize drivers.

5. Install Alink config for Windows by running "Alink_Setup.exe" and follow instructions on screen.

6. Double click the Alink Config icon on the desktop to start the program.

***Note**:*
The Hardlock Dongle (Type 0300) is part of the A-Link Set-up Kit, obtainable from Atronic.

Connecting PC to Atronic gaming machine

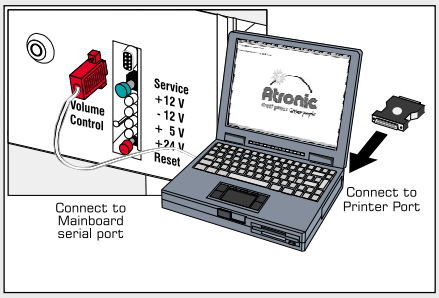
1. Connect Hardlock Dongle (type 0300) to PC's printer port (LPT), with the PC switched off.

2. Start the PC and run "A-Link Config for Windows".

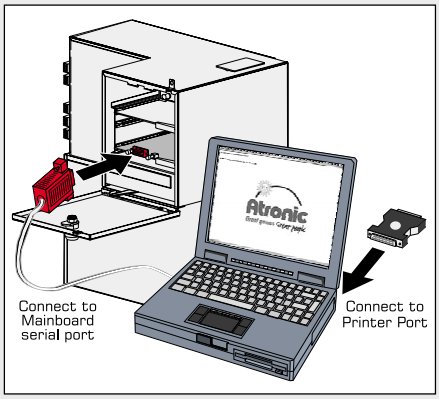
3. Connect the PC Setup Cable to the PC's serial interface (COM1) and to the gaming machine's serial interface (Mainboard J2).

   At e-motion™ machines the logic box must be open to get access to the serial interface.

4. Carry out Jackpot configuration as described in respective setup procedures.



Cashline™ series



e-motion™ / Hi(!)bility™ series

Setting up a System Progressive Jackpot

Setting up a System Progressive Jackpot

Overview

In a linked System Progressive Jackpot all participating machines are connected to the Accounting Host System. Data communication is carried out via a Slot Machine Interface Board (SMIB), a Machine Data Controller (MDC) or a similar device, which is connected to the Atronic Commboard 68k. The Jackpot is controlled by Jackpot features of the Accounting Host System or by a dedicated Jackpot controller.

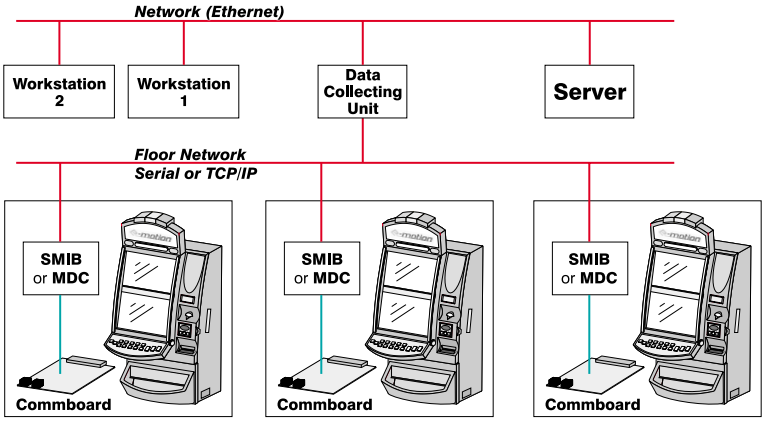
Requirements

- Commboard 68k with a software version according to the accounting system protocol (e.g. SAS 5.x).
- A progressive version security chip.
- Atronic PC-Setup cable.
- Software "Atronic Alink Config for Windows" (or appropriate DOS version) with Dongle 300.

***Note**: Please contact Atronic Technical Service to get information, if your machine setup is suitable for a System Progressive Jackpot.*

Link machines

The Commboard has to be connected to a Machine Data Controller (MDC) or a similar device that connects to the floor network. Depending on connected device, online protocol and different system features, there are several ways to connect to the Commboard. Please refer to "Commboard 68k Rev. 2.10 Connectors Overview" on page 51 or ask Atronic Technical Service.



Setting up a System Progressive Jackpot
(Continued)

Prepare machines

The following procedure has to be carried out on every Atronic machine participating in the link.

1. Check if all pre-requirements are fulfilled

2. Set the machines **accounting system address**. Each machine in the link must have a unique address.

   • SAS protocol
   Set address for channel 1 with switch S6 and S7.
   Set address for channel 2 with switch S3 and S4.
   Selecting an address other than 00 activates channel. Address 00 disables channel.

   • GRIPS protocol
   Set address with switch S6 and S7.
   Set adresses >99 with S3 and S4, if necessary.

3. *For dual channel mode with SAS protocol only*:
   Allocate communication functions to channel 1 or channel 2 with DIP-switches S8 / 2 - 6.
   See table "DIP-Switch S8" on pages 52-53 for details.

4. Set DIP switch S5 / 1 to ON
   and DIP switch S5 / 2 and S5 / 3 to OFF.
   to enable (accounting) system progressive mode.

5. Set DIP switch S5 / 6 to ON
   to enable accounting system communication.

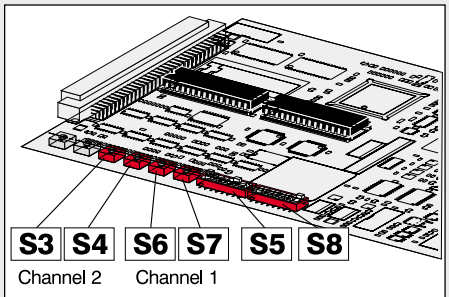
6. (optional) Aditionally set DIP switch S8 / 8 to ON
   to enable a machine lock, in case of a loss of communication to the accounting system.

7. Carry out a RAM Reset on Main- and Commboard. (described on pages 55-56 or in manual "Software").

8. Carry out Initial Setup. Necessary settings are:
   - Set a Progressive Group (other than #00)
   - Set "Commboard required" to YES

9. Link machines (connect SMIB or similar device).

10. Carry out Jackpot configuration (next page).



accounting system address

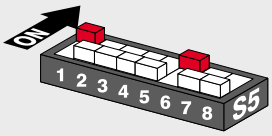
Comm software using SAS protocol

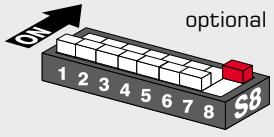
Address on channel 1
S6: x10
S7: x1

Address on channel 2
S3: x10
S4: x1

Comm software using GRIPS protocol

Address
S3: x100
S4: x1000
S6: x10
S7: x1





***Important**: Do **not** start any games or insert credits after RAM reset, until Jackpot configuration is finished.*

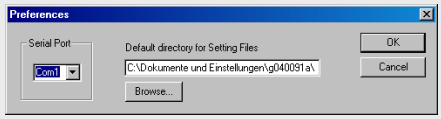
Setting up a System Progressive Jackpot
(Continued)

Jackpot configuration has to be carried out on every machine in the link. Settings made at the first machine can be saved to disk to configure further machines.

Jackpot Configuration (first machine)

1. Prepare and connect PC (as described on page 8) and start "A-Link Config" program.

2. Select menu "**Options**" and click on "**Preferences**".
   - Select the COM port where the PC-Setup cable is connected to (default is COM1).
   - Select a default directory to save setting files. Confirm with "OK".



3. Download current Jackpot configuration.

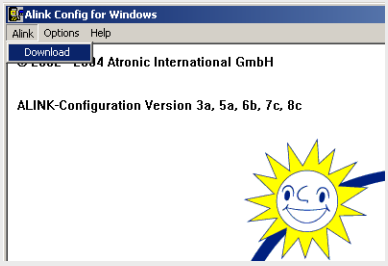
   - For Atronic Cashline series:
     Enter Service Menu and select "PC-Setup/Jackpot Configuration" and press **center lit button** on the button panel.

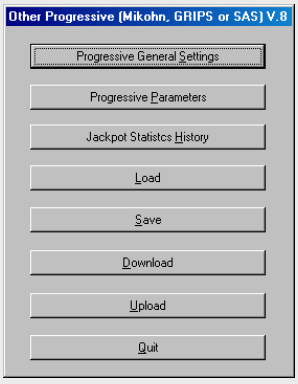
   - For Atronic Hi(!)bility / e-motion series:
     Enter Service Menu and select "Settings/Jackpot Configuration" and press "**Start Configuration**" button on the touch screen.

   Select menu "Alink" on the PC and click on "**Download**".

   Cashline only: Download has to be started simultaneous at PC and machine within a few seconds to prevent a "Communication time out" error.

   When download of current Jackpot Configuration data was successful, the "**Other Progressives**" menu is shown on screen.





Setting up a System Progressive Jackpot
(Continued)

Jackpot Configuration (first machine) (Continued)

4. Select "**Progressive General Settings**".

5. Enable and configure "In Machine Display".
   This will add an additional window to the game screen showing the current Jackpot value.

   Additional settings for in-machine display:

Currency	Enter a 3 digit ASCII string, which is displayed trailing or leading the JP value
Currency Position	Position of the currency string
Thousand Separator	Enter "," or "."
Decimal Separator	Enter "," or "."
Odometer	Enables a smooth counting of the JP value

6. Choose "Overhead Display Type", if a display is connected to P7 on the Commboard.

7. Confirm settings with "Save & Quit".

8. Select "**Progressive Parameters**".

9. Set "Type" of JP 1 to NORMAL, to enable a progressive Jackpot.
   Do **not** activate JP 2 to JP 8. These additional Jackpot levels are reserved for Multi Level Jackpot systems such as Cashfever™ or Towerline™.

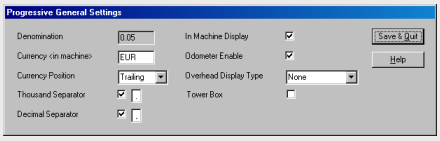
10. Edit "Jackpot Name", "Text Color" and "Value Color".

Jackpot Name	Is displayed alternating with the JP value on the in-machine display
Text color	Color of the "Jackpot Name" text
Value color	Color of the displayed Jackpot value.

11. Type in "Jackpot Won Text" and edit "Text Display Time" and "Value Display Time", if needed.

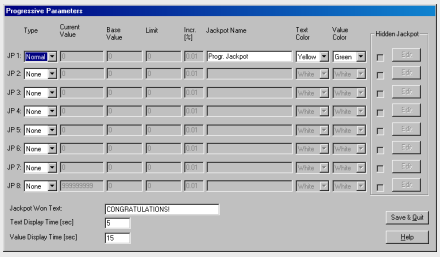
Jackpot Won Text	This text is displayed upon a Jackpot hit
Text Display Time	Timespan in sec. the "Jackpot Name" text is displayed
Value Display Time	Timespan in sec. the JP value is displayed.

12. Confirm settings with "Save & Quit".



***Note**: Currency strings "EUR" and "GBP" are interpreted by the software and will display "€" respective "£" symbol.*

***Note**: Do **not** enable the "Tower Box" feature, unless you configure a Towerline™ machine!*



***Note**: "Jackpot Name" and "Jackpot Won Text" supports max. 16 characters. Use only english alphabet. Country specific characters (such as "ö" or " é") are not displayed.*

Setting up a System Progressive Jackpot
(Continued)

Jackpot Configuration (first machine) (Continued)

13. Check all settings carefully and select "**Save**" to save settings to disk. Saved Jackpot Configuration settings can later be loaded into the program to configure further machines.

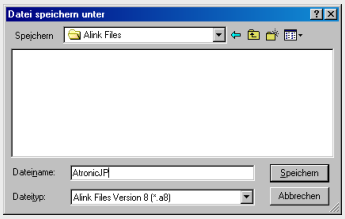
14. Select "**Upload**" to send data to the machine.

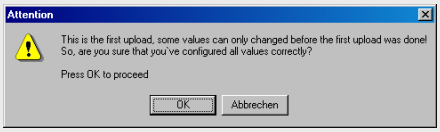
15. Pay attention to application notes and confirm with "OK" to start upload.

    • For Atronic Cashline series:
    Press **center lit button** to start upload.

16. When upload was successful, exit "Jackpot Configuration" menu, remove PC Setup Cable and close Logic Box (e-motion only) and Main Door.

17. *e-motion machines only:*
    Clear "Logic Door Open" message via Audit Key.





***Important**:*
Check all settings carefully before uploading. Any subsequent modification of "Progressive Parameters" needs a RAM reset on Main- and Commboard!

Jackpot Configuration (further machines)
(Brief description)

1. Connect PC and Atronic machine.

2. **Download** current Jackpot configuration.

3. **Load** previous saved Jackpot configuration settings into the program.

4. Select "**Upload**" to upload configuration data to the machine.

5. Confirm application notes with "OK" to start upload.

    • For Atronic Cashline series:
    Press **center lit button** to start upload.

6. When upload was successful, continue with next machine.

Setting up a Progressive Jackpot using a Mikohn controller

Setting up a Progressive Jackpot using a Mikohn Controller

This section describes how to setup a progressive Jackpot using an external Mikohn controller running protocol versions MS 10 Progressive, MS 27 Mystery or MS 27 Mystery & Progressive,

Overview

If using an external Jackpot controller such as the Mikohn Super Controller or the Mikohn DCU, the Jackpot is controlled by this device.

Data communication is carried out via RS485 half duplex bus interface (which is implemented to Atronic's Commboard 68k) using A-link™ wiring.

Requirements

- An Atronic Commboard 68k with a software that supports Mikohn MS10 and MS27, for every machine in the link.
- A progressive version security chip, for every machine in the link.
- One A-Link cable, for every machine in the link plus one A-Link cable that connects to the controller.
- A power supply adapter, if more than 16 machines are to be linked.
- The Atronic A-Link Setup Kit.

The standard **A-Link Setup Kit** contains:

- Power supply
- 230V main cable
- PC Setup cable
- Overhead display cable
- Hardlock Dongle 0300 G/E
- Dongle drivers
- A-Link Config software
- APL manual.

Please contact the Atronic Technical Service to obtain the latest version of the A-Link Setup Kit, according to your needs.

Additional parts:

A-Link cable, 5m
P/N: 65001250

Power supply adapter
WEB - 2xWEB
P/N: 65022845

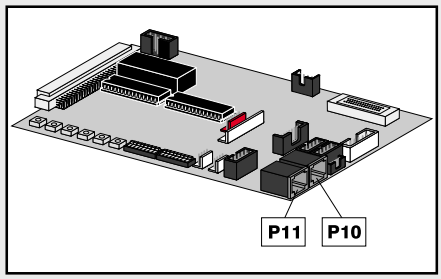
Setting up a Progressive Jackpot using a Mikohn Controller

Link machines

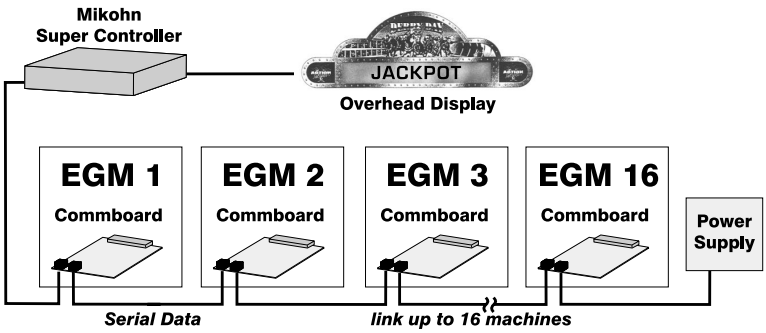
Using the MS 10 progressive protocol the **Mikohn Super Controller** can drive up to 32 EGMs in one Jackpot link.

The **Mikohn DCU Controller** using MS 27 protocoll can drive 3 different link lines with up to 32 EGMs on each link line.

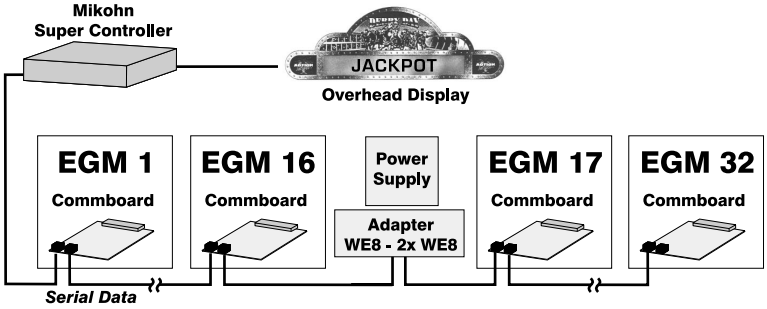
Machines are linked using A-Link™ wiring connected to P10 and P11 on the Commboard. P10 and P11 (RJ-45 Connectors) are parallel connected, so it does not matter which one is used.



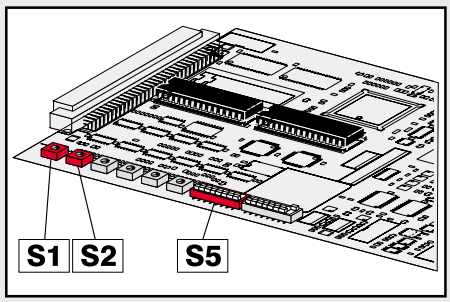
If less than 16 machines are linked, the Power Supply Unit can be connected at the end of the link.



If more than 16 machines are linked (max. 32), the Power Supply Unit has to be connected in the middle of the link, using the "Power Supply Adapter WEB - 2xWEB ALINK" (P/N: 65022845).



Setting up a Progressive Jackpot using a Mikohn Controller



Prepare machines

Following procedure has to be carried out on every Atronic machine participating in the link.

1. Check if all pre-requirements are fulfilled.

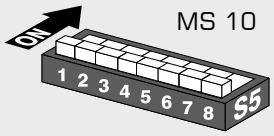
2. Set machines **progressive system address** with rotary-switches S1 and S2 on the Commboard. Each machine in the link must have a unique address from "01" to "32". Address "00" is not valid.

   S1: x10
   S2: x 1

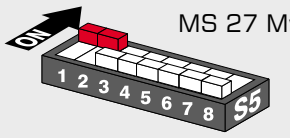
   ***Example**: Address 24 = S1 to 2 and S2 to 4*

3. Set one operation mode.

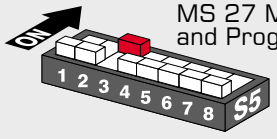
   For Mikohn MS 10:
   Set DIP switch S5 / 1 - 3 to OFF

   For Mikohn MS 27 Mystery:
   Set DIP switch S5 / 1 - 2 to ON
   Set DIP switch S5 / 3 to OFF

   For Mikohn MS 27 Mystery and Progressive:
   Set DIP switch S5 / 1 - 2 to OFF
   Set DIP switch S5 / 3 to ON

4. Carry out a RAM Reset on Main- and Commboard. (described on page 51-52 and in manual "Software").

5. Carry out Initial Setup. Necessary settings are:
   - Set Progressive Group to #00 (No group)
   - Set "Commboard required" to YES

6. Link machines using Atronic A-link™ wiring.

7. Carry out Jackpot configuration. (as described on next page)

***Important**: Do **not** start any games or insert credits after RAM reset, until Jackpot configuration is finished.*

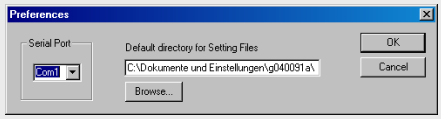
Setting up a Progressive Jackpot using a Mikohn Controller

Jackpot configuration has to be carried out on every machine in the link. Settings made at the first machine can be saved to disk to configure further machines.

Jackpot Configuration (first machine)

1. Prepare and connect PC or Laptop, (as described on page 9) and start "A-Link Config" program.

2. Select menu "**Options**" and click on "**Preferences**".
   - Select the COM port where the PC-Setup cable is connected to (default is COM1).
   - Select a default directory to save setting files. Confirm with "OK".

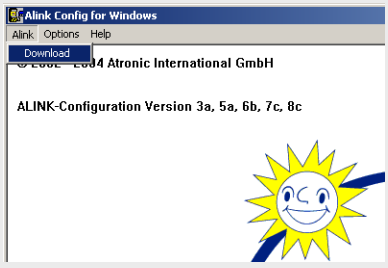


3. Download current Jackpot configuration.

   - For Atronic Cashline series:
     Enter Service Menu and select "PC-Setup/Jackpot Configuration" and press **center lit button** on the button panel.

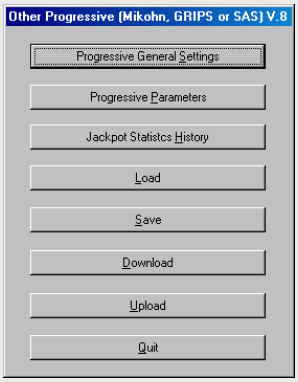
   - For Atronic Hi(!)bility / e-motion series:
     Enter Service Menu and select "Settings/Jackpot Configuration" and press "**Start Configuration**" button on the touch screen.

   Select menu "Alink" on the PC and click on "**Download**".



   Cashline only: Download has to be started simultaneous at PC and machine within a few seconds to prevent a "Communication time out" error.

   When download of current Jackpot Configuration data was successful, the "**Other Progressives**" menu is shown on screen.



Setting up a Progressive Jackpot using a Mikohn Controller (Continued)

Jackpot Configuration (first machine) (Continued)

4. Select "**Progressive General Settings**".

5. Enable and configure "In Machine Display".
   This will add an additional window to the game screen showing the current Jackpot amount.

   Additional settings for in-machine display:

Currency	Enter a 3 digit ASCII string, which is displayed trailing or leading the JP value
Currency Position	Position of the currency string
Thousand Separator	Enter "," or "."
Decimal Separator	Enter "," or "."
Odometer	Enables a smooth counting of the JP value

6. Choose "Overhead Display Type", if a display is connected to P7 on the Commboard.

7. Confirm settings with "Save & Quit".

8. Select "**Progressive Parameters**".

9. Set "Type" of JP 1 to NORMAL, to enable a progressive Jackpot.
   Do **not** activate JP 2 to JP 8. These additional Jackpot levels are reserved for Multi Level Jackpot systems such as Cashfever™ or Towerline™.

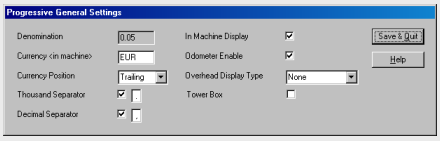
10. Edit "Jackpot Name", "Text Color" and "Value Color".

Jackpot Name	Is displayed alternating with the JP value on the in-machine display
Text color	Color of the "Jackpot Name" text
Value color	Color of the displayed Jackpot value

11. Type in the "Jackpot Won Text" and edit "Text Display Time" and "Value Display Time", if needed.

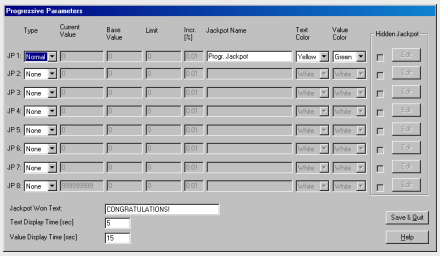
Jackpot Won Text	This text is displayed upon Jackpot hit
Text Display Time	Timespan in sec. the "Jackpot Name" text is displayed
Value Display Time	Timespan in sec. the JP value is displayed.

12. Confirm settings with "Save & Quit".



***Note**: Currency strings "EUR" and "GBP" are interpreted by the software and will display "€" respective "£" symbol.*

***Note**: Do **not** enable the "Tower Box" feature, unless you configure a Towerline™ machine!*



***Note**: "Jackpot Name" and "Jackpot Won Text" supports max. 16 characters. Use only english alphabet. Country specific characters (such as "ö" or " é") are not displayed.*

Setting up a Progressive Jackpot using a Mikohn Controller (Continued)

Jackpot Configuration (first machine) (Continued)

13. Check all settings carefully and select "**Save**" to save settings to disk. Saved Jackpot Configuration settings can later be loaded into the program to configure further machines.

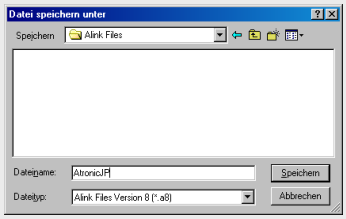
14. Select "**Upload**" to send data to the machine.

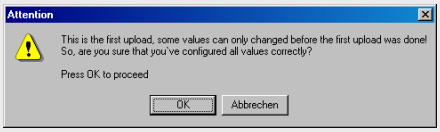
15. Pay attention to the application notes and confirm with "OK" to start upload.

    • For Atronic Cashline series:
    Press **center lit button** to start upload.

16. When upload was successful, exit "Jackpot Configuration" menu, remove PC Setup Cable and close Logic Box (e-motion only) and Main Door.

17. *e-motion machines only*
    Clear "Logic Door Open" message via Audit Key.





***Important**:*
Check all settings carefully before uploading. Any subsequent modification of "Progressive Parameters" needs a RAM reset on Main- and Commboard!

Jackpot Configuration (further machines)
(Brief description)

1. Connect PC and Atronic machine.

2. **Download** current Jackpot configuration.

3. **Load** the previous saved Jackpot Configuration settings into the program.

4. Select "**Upload**" to upload configuration data to the machine.

5. Confirm application notes with "OK" to start upload.

    • For Atronic Cashline series:
    Press **center lit button** to start upload.

6. When upload was successful, continue with next machine.

Setting up an Atronic Progressive Link / APL™

Setting up an Atronic Progressive Link

Overview

In an Atronic Progressive Link (APL) the participating machines are operating without external controller hardware. The APL Master machine controls the Jackpot. Data communication is carried out via RS485 half duplex bus interface, which is implemented to the Atronic Commboard (A-Link™ wiring).

In an APL **one** commboard is the dedicated progressive jackpot controller (Master). Jackpot configuration data is stored on **all** commboards allowing to change the master machine any time.

Requirements

- An Atronic Commboard 68k with a software that supports APL, for every machine in the link.
- A progressive version security chip, for every machine in the link.
- One A-Link™ cable, for every machine in the link.
- A power supply adapter, if more than 16 machines are to be linked.
- Atronic A-Link™ Setup Kit.

The **A-Link™ Setup Kit** contains:

- Power supply 230V or 115V
- Mains cable
- PC Setup cable
- Overhead display cable
- Hardlock Dongle 0300 G/E
- Dongle drivers
- A-Link Config software
- APL manual

Please contact Atronic Technical Service to obtain appropriate A-Link Setup Kit.

Additional parts:

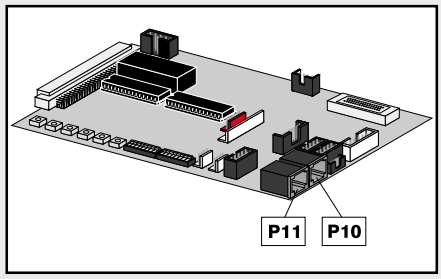
A-Link cable, 5m
p/n: 65001250

Power supply adapter
1x WE8 to 2x WE8
p/n: 65022845

Setting up an Atronic Progressive Link

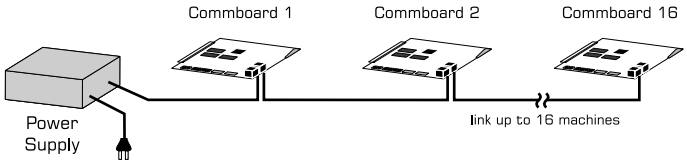
Link machines

In an Atronic Progressive Link (APL) machines are linked using Atronic A-Link™ cables connected to P10 and P11 on the Commboard. P10 and P11 (RJ-45 Connectors) are wired parallel, so it does not matter which one is used. The end of the link is automatically terminated by the Commboard.



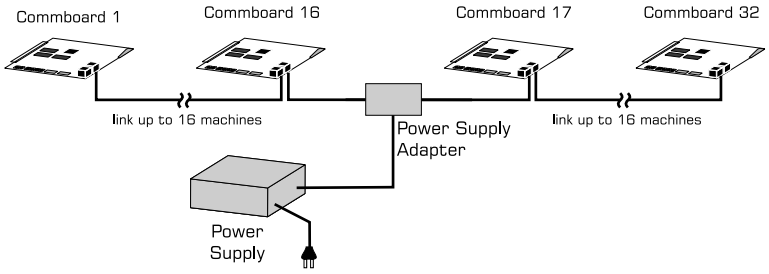
Link up to 16 machines

If less than 16 machines are linked, the Power Supply Unit can be connected at either end of the link.



Link 16 - 32 machines

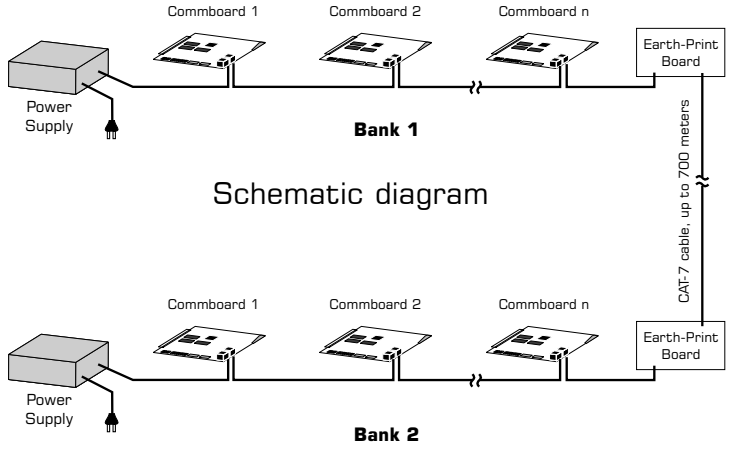
If more than 16 machines are linked (max. 32), the Power Supply Unit has to be connected in the middle of the link, using the "Power Supply Adapter WEB - 2xWEB ALINK" (P/N: 65022845).



Setting up an Atronic Progressive Link

APL Large Distance Link

Using the (optional) Atronic "Earth-Print" board and a CAT-7 network cable, machines can be linked over larger distances. Two banks of machines can be linked over a distance of up to 700 meters. Linking 3 banks, the maximum length between the banks is 500 meters. Linking 4 banks, the maximum length is 300 meters.



Schematic diagram

Cables needed for an APL Large Distance Link:

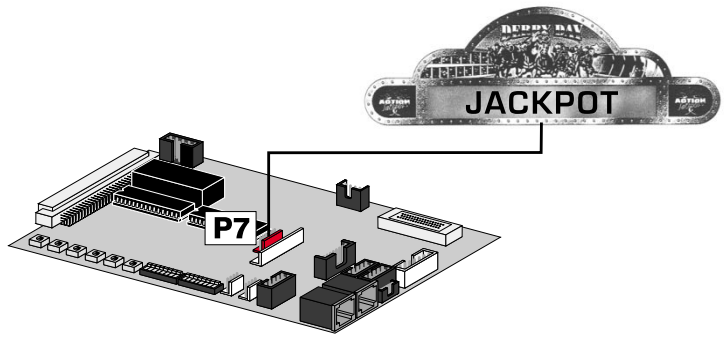
Cable from Commboard to Commboard:
A-Link cable, 5m
P/N: 65001250

Cable from Power Supply to Commbard:
Alink RJ45 12V / GND, 1.5m
P/N: 6503 3078

Cable from Commboard to Earth-Print board:
Alink RJ45 without 12 V
P/N: 6503 2570

Connect Overhead Display (optional)

Connect Overhead Display Cable to **P7** on any Commboard participating in the A-Link. Set matching "Overhead Display Type" by means of A-Link Config software.

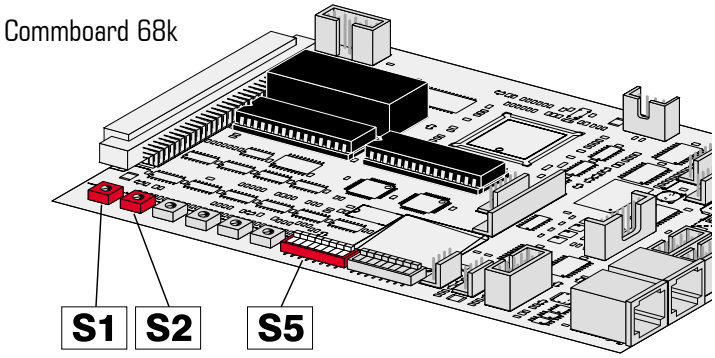


Setting up an Atronic Progressive Link

Prepare machines

Following procedure has to be carried out on every Atronic machine participating in the link (except step 4 and step 8).

1. Check if all pre-requirements are fulfilled.



2. Set machines **Progressive System Address** with rotary switches S1 and S2 on the commboard. Each machine in the link must have a unique address from "01" to "32". Address "00" is not valid.

   S1: x10
   S2: x 1

   ***Example**: For address 15 set S1 to 1 and S2 to 5*

3. Activate APL mode on **all** linked machines.
   Set Commboard switch S5 / 2 to ON.
   Set switch S5 / 1, S5 / 3 and S5 / 4 to OFF.

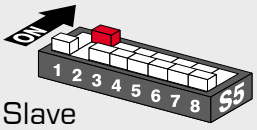
4. Define **one** machine as Master by setting Commboard switch S5 / 4 to ON. This activates implemented Jackpot controller functions.

5. Carry out a RAM Reset on Main- and Commboard. (described on page 51-52 and in manual "Software").

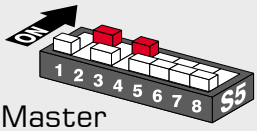
6. Carry out Initial Setup. Necessary settings:
   - Set Progressive Group to #00 (no group)
   - Set "Commboard required" to YES

7. Link machines using Atronic A-Link™ cables.

8. Carry out APL Jackpot configuration at the APL Master machine (as described on next page).



APL Slave



APL Master

***Important**: Do **not** start any games or insert credits after RAM reset, until Jackpot configuration is finished.*

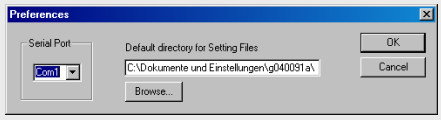
Setting up an Atronic Progressive Link

APL Jackpot Configuration

APL Jackpot configuration has to be carried out only on the APL Master machine. When configuration is done, the Master machine automatically sends the configuration data to all linked Slave machines.

1. Prepare and connect PC or Laptop, (as described on page 9) and start "A-Link Config" program.

2. Select menu "**Options**" and click on "**Preferences**".
   - Select the COM port where the PC-Setup cable is connected to (default is COM1).
   - Select a default directory to save setting files. Confirm with "OK".

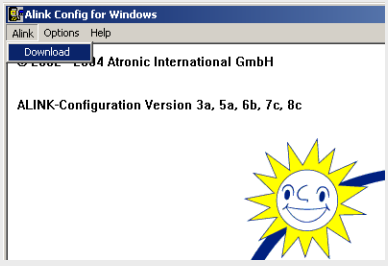


3. Download current Jackpot configuration.

   - For Atronic Cashline series:
     Enter Service Menu and select "PC-Setup/Jackpot Configuration" and press **center lit button** on the button panel.

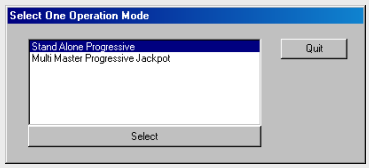
   - For Atronic Hi(!)bility / e-motion series:
     Enter Service Menu and select "Settings/Jackpot Configuration" and press "**Start Configuration**" button on the touch screen.

   Select menu "Alink" on the PC and click on "**Download**".



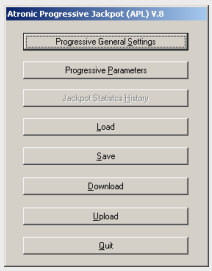
   Cashline only: Download has to be started simultaneous at PC and machine within a few seconds to prevent a "Communication time out" error.

4. If the "**Select one Operation Mode**" menu is displayed, select an operation mode
   Multi Master Progressive Jackpot - Several linked machines
   Stand Alone Progressive - One machine only



   If the program detects no link (stand-alone) this menu is not displayed.

5. The APL configuration main menu is displayed.



Setting up an Atronic Progressive Link
(Continued)

APL Jackpot Configuration (Continued)

6. Select "**Progressive General Settings**".

7. Enable and configure "In Machine Display".
   This will add an additional window to the game screen showing the current Jackpot amount.

   Additional settings for in-machine display:

Currency	Enter a 3 digit ASCII string, which is displayed trailing or leading the JP value
Currency Position	Position of the currency string
Thousand Separator	Enter "," or "."
Decimal Separator	Enter "," or "."
Odometer	Enables a smooth counting of the JP value

8. Choose "Overhead Display Type", if a display is connected to P7 on the Commboard.

9. Confirm settings with "Save & Quit".

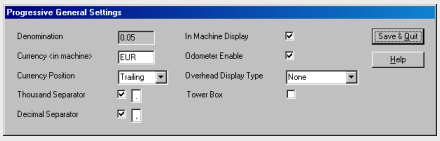
10. Select "**Progressive Parameters**".

11. Set "Type" of JP 1 to NORMAL, to enable a progressive Jackpot.
    Do **not** activate JP 2 to JP 8. These additional Jackpot levels are reserved for Multi Level Jackpot systems such as Cashfever™ or Towerline™.

12. Edit Jackpot settings for JP 1

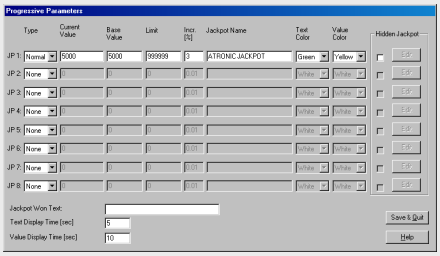
Current Value	Enter current Jackpot value (if reconfiguring a running Jackpot or as an initial value)
Base Value	Base Value + Hidden Value = New Jackpot start value after a Jackpot hit
Limit	Upper limit for Jackpot value. Further increments are paid into Hidden or Overflow. "0" = No limit.
Increment (%)	Percentage of credits wagered that accumulates to the Jackpot value

continues on next page.



***Note**: Currency strings "EUR" and "GBP" are interpreted by the software and will display "€" respective "£" symbol.*

***Note**: Do **not** enable the "Tower Box" feature, unless you configure a Towerline™ machine!*



***Note**: The "Base Value" should always exceed the machines (non-progressive) Top Award.*

Values for "Current Value", "Base Value" and "Limit" are given in currency.

Setting up an Atronic Progressive Link

(Continued)

APL Jackpot Configuration (Continued)

13. Edit "Jackpot Name", "Text Color" and "Value Color".
    - Jackpot Name — Is displayed alternating with the JP value on the in-machine display
    - Text color — Color of the "Jackpot Name" text
    - Value color — Color of the displayed Jackpot value.

14. Edit "Jackpot Won Text", "Text Display Time" and "Value Display Time", if needed.
    - Jackpot Won Text — This text is displayed upon Jackpot hit
    - Text Display Time — Timespan "Jackpot Name" text is displayed
    - Value Display Time — Timespan in sec. the JP value is displayed.

15. Enable "**Hidden Jackpot**", if needed.

16. Edit hidden Jackpot settings and confirm with "OK".
    - Current Value — Enter current hidden Jackpot value (if reconfiguring a running Jackpot or as an initial value)
    - Base Value — Hidden JP start value after a Jackpot hit
    - Limit — Upper limit for hidden JP value. Further increments are paid into Overflow. "0" = No limit.
    - Increment (%) — Percentage of credits wagered that accumulates to the hidden JP value.

17. Confirm "Progressive Parameters" with "Save & Quit".

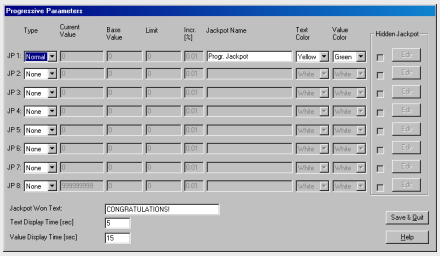
18. Check all settings carefully and select "Save" to save settings to disk (optional).

19. Select "**Upload**" to send data to the machine.

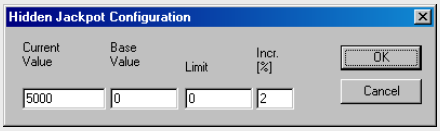
20. Pay attention to application notes and confirm with "OK" to start upload.
    - For Atronic Cashline series:
      Press **center lit button** to start upload.

21. When upload was successful, exit "Jackpot Configuration" menu, remove PC Setup Cable and close Logic Box (e-motion only) and Main Door.

22. *e-motion machines only*
    Clear "Logic Door Open" message via Audit Key.



***Note**: "Jackpot Name" and "Jackpot Won Text" supports max. 16 characters. Use only english alphabet. Country specific characters (such as "ö" or "é") are not displayed.*



***Note**: Values for "Current Value", "Base Value" and "Limit" are given in currency.*

***Important**:
Check all settings carefully before uploading. Any subsequent modification of "Progressive Parameters" needs a RAM reset on Main- and Commboard!*

Troubleshooting APL

APL: Duplicate Slave ID detected

This message occurs if at least two Slave machines have the same address.

Solution: Change 'Progressive System addresses' to unique addresses from "01" to "32". Powercycle machines with duplicate addresses for new initializing.

APL: Link Not Allowed

There is no Security Chip with progressive feature on the main board (P-GAL).

Solution: Install a Security Chip with progressive feature.

APL: Configuration required

There is no Jackpot configuration.

Solution: Carry out Jackpot Configuration.

***Note**:*
This message is displayed at APL Master machine prior to Jackpot configuration. Message expires when the Master machine is configured.

ALINK: Duplicate terminal ID detected

This message occurs, if at least two machines are defined as master (DIP-switch S5/4 on Commboard).

Solution: Ensure that only one machine in the link is defined as master.

APL: Progressive Not Connected
APL: Master not ready

Machine is not connected with APL master machine, the power supply of the Alink network is not connected or no master is defined in the link.

Solution: Connect machines with master. Connect power supply for A-link™ network. Define one master machine in the link.

***Note**:*
This message is also displayed at all APL Slave machines prior to Jackpot configuration. Message expires when the Master machine is configured.

ALINK: Please set valid terminal ID 1..32

Progressive system address has not been set or has been set higher than "32".

Solution: Set progressive system address to an address between "01" and "32" with commboard rotary switches S1 and S2.

Setting up a Cash Fever™ Jackpot

Setting up a Cash Fever™ Jackpot

Overview

Cash Fever™ is a complete gaming solution, which consists of a set of connected Cash Fever™ slot machines, a Cash Fever™ display system and a signage including a plasma display screen.

Cash Fever™ utilizes a 4-level progressive Jackpot, which is triggered by a special Bonus Game Session.

***Note**:*
Cash Fever™ supporting game software is only available for e-motion™ slot machines.

Basic setup

Cash Fever™ uses A-Link™ wiring and APL protocol to connect the participating slot machines. Hardware setup and basic software setup procedures are similar as used for APL setup (see pages 23 - 27).

Different from APL configuration, Cash Fever™ Jackpot configuration has some additional options and some limitations (see next pages).

Additional requirements

External PC software "**A-Link config for Windows 2.1**" or higher is required for Cash Fever™ Jackpot configuration.

Check version index in program menu "Help / About".

Cash Fever™ Paytable Software

Machines linked in a Cash Fever™ Jackpot must have a customized paytable software installed. Unlike standard paytable software, Cash Fever™ paytable software has a 4% Jackpot increment calculated into its Return to Player percentage (RTP).

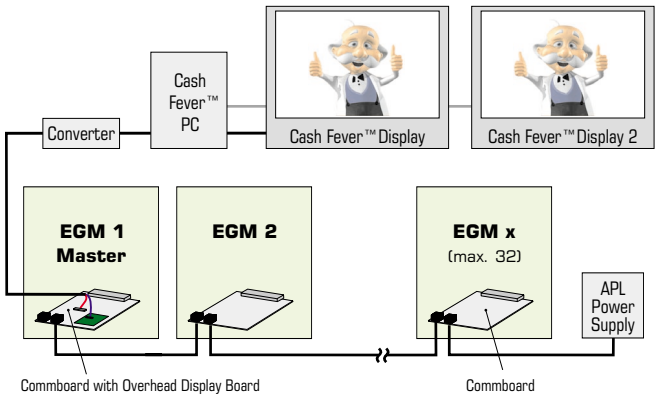
This has to be considered for Jackpot calculation, especially if a sum of increments other than (recommended) 4% has been set during Jackpot configuration.

***Example**:*
A Cash Fever™ paytable with a nominally RTP of 94% has a RTP of 90% in the base game plus a (assumed) sum of increments of 4% (which are payed into the Jackpot).

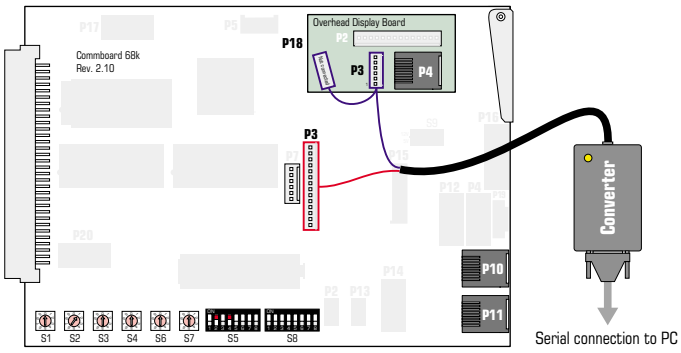
Setting up a Cash Fever™ Jackpot

Link machines

In a Cash Fever™ bank machines are linked using Atronic A-Link™ wiring connected to P10 and P11 on the Commboard. P10 and P11 (RJ-45 Connectors) are wired parallel, so it does not matter which one is used. The end of the link is automatically terminated.



- The *Overhead Display Board* is plugged into P18 of the Master machine's Commboard.
- The *Cash Fever™ Converter* is connected to Commboard P3 and Overhead Display Board P3 using cable *RS232_CF01A*.



Necessary parts are delivered as a Cash Fever™ Kit which consists of:

- Cash Fever™ Animation PC (with installed software)
- Cash Fever™ Connection Kit (Cables and converter)
- Atronic Overhead Display Board

***Note**:*
When linking more than 16 machines a Power Supply Adapter WE8 - 2x WE8 has to be connected in the middle of the link. See APL Wiring on page 25.

***Note**:*
The second 6-pole MT plug is reseved for future use. Do not connect.

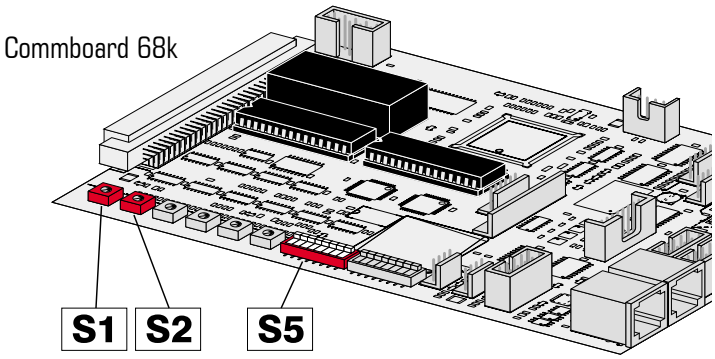
***Note**:*
See manual "Cash Fever™ Configuration Guide" provided by Atronic Systems for details about further Cash Fever™ display configuration.

Setting up a Cash Fever™ Jackpot

Prepare machines

Following procedure has to be carried out on every machine participating in the link (except step 4 and 8).

1. Check if all pre-requirements are fulfilled.



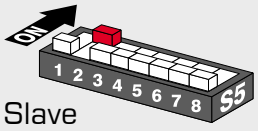
2. Set machines **Progressive System Address** with rotary switches S1 and S2 on the commboard. Each machine in the link must have a unique address from "01" to "32". Set the Cash Fever™ Master machine to adress "01".

   S1: x10 (digit)
   S2: x 1 (digit)

   ***Example**: For address "15" set S1 to "1" and S2 to "5"*

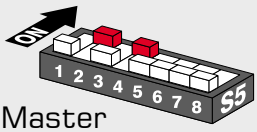
***Note**:*
Address "00" is not valid.

3. Activate APL mode on **all** linked machines.
   Set Commboard switch S5 / 2 to ON.
   Set switch S5 / 1, S5 / 3 and S5 / 4 to OFF.



APL Slave

4. Define **one** machine as Master by additionally setting Commboard switch S5 / 4 to ON. This activates implemented Jackpot controller functions.



APL Master

Setting up a Cash Fever™ Jackpot

Prepare machines

5. Carry out a RAM Reset on Main- and Commboard. (described on page 55 and in manual "Software").

6. Carry out Initial Setup.
   Necessary settings for Cash Fever™ are:

   - Set "InMachine Progressive" to disabled
   - Set Progressive Group to #00 (no group)
   - Set "Commboard required" to YES

   Other settings can be configured as needed.

7. Paytable Configuration
   (only if a selectable paytable is installed)

   - Select Configuration Code

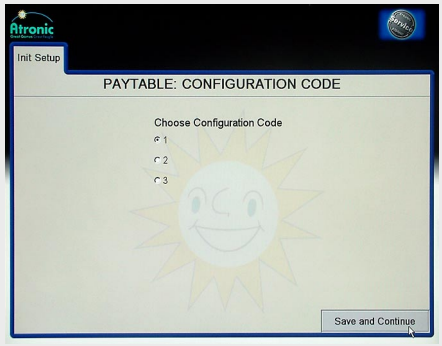
   Please do only use that Configuration Code stated on the Atronic Cash Fever™ Calculation Sheet. Any other configuration may lead to unpredictably Return to Player values.

   Configuration Code must be the same on all machines in the link. If a machine is configured to a different Configuration Code as the Master machine, this machine will be locked.

8. Carry out Cash Fever™ Jackpot configuration at the APL Master machine using "A-Link Config" for Windows program version 2.1 or higher.
   (as described on next pages).

***Important**: Do **not** start any games or insert credits after RAM reset, until Jackpot configuration is finished.*

***Note**:*
The Configuration Code defines Cash Fever™ Base Values, Jackpot Trigger Values (Bounds) and Hitfrequency and is assigned to a specific paytable RTP-Family.



Setting up a Cash Fever™ Jackpot

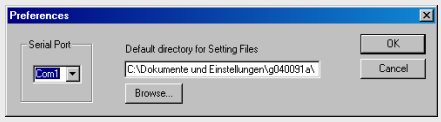
Cash Fever™ Jackpot Configuration

Jackpot configuration has to be carried out only on the APL Master machine. When configuration is done, the Master machine automatically sends the configuration data to all linked Slave machines.

***Note**: Cash Fever™ Jackpot configuration requires "A-Link Config" version 2.1 or higher.*

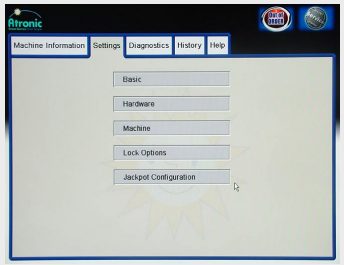
1. Prepare and connect PC or Laptop, (as described on page 9) and start "A-Link Config" program.

2. (On first program start)
   Select menu "**Options**" and click on "**Preferences**".
   - Select the COM port where the PC-Setup cable is connected to (default is COM1).
   - Select a default directory to save setting files. Confirm with "OK".

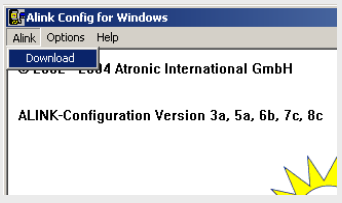


3. Download current Jackpot configuration.

   Enter Service Menu at the machine and select "Settings / Jackpot Configuration" and press "**Start Configuration**" button on the touch screen.

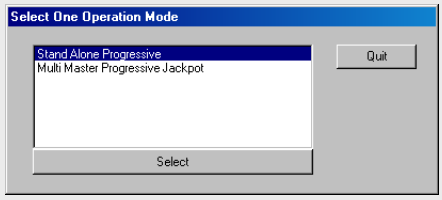


   Select menu "Alink" at the PC and click on "**Download**". Current settings are transfered from the machine to the A-Link Config program.



4. When the "**Select one Operation Mode**" menu is displayed, select operation mode "Multi Master Progressive Jackpot".

   If the program detects no link this menu is not displayed.

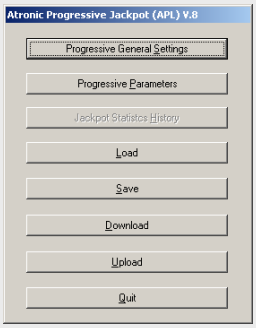


continues on next page.

Setting up a Cash Fever™ Jackpot

Cash Fever™ Jackpot Configuration (Continued)

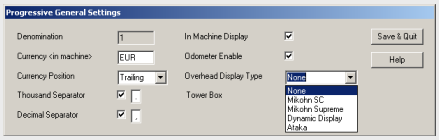
5. The APL configuration main menu is displayed.



6. Select "**Progressive General Settings**".

   This will configure the display style of the Jackpot values displayed on the machines upper screen.

   Always mark checkbox "In Machine Display".



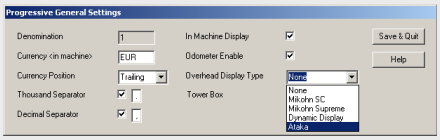
   Additional settings for in-machine display:

Currency	Enter a 3 digit ASCII string, which is displayed trailing or leading the JP value
Currency Position	Position of the currency string
Thousand Separator	Enter "," or "."
Decimal Separator	Enter "," or "."
Odometer	Enables a smooth upcounting of JP values

***Note**:*
Currency strings "EUR" , "USD" and "GBP" are interpreted by the software and will display "€" respective "$" or "£" symbol.

7. Choose "Overhead Display Type", ATAKA to comunicate to the Cash Fever™ PC.

***Note**:*
*Do **not** enable the "Tower Box" feature.*



8. Confirm settings with "Save & Quit".

continues on next page.

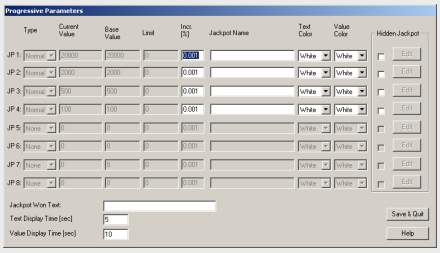
Setting up a Cash Fever™ Jackpot

Cash Fever™ Jackpot Configuration (Continued)

9. Select "**Progressive Parameters**".

10. Set an "Increment %" value for each Jackpot level JP1 to JP4.
If needed, enable a Hidden Jackpot by checking the corresponding checkboxes. Set an "Increment %" for each Hidden Jackpot.

Increment (%)	Percentage of credits wagered that accumulates to the Jackpot value



Important!: Please use only "Increment %" values calculated by means of the Atronic Cash Fever™ Calculation Sheet. Any other values may lead to unpredictably Return to Player (RTP) values including RTPs exceeding 100% !

Further settings are not necessary. Values for "Current Value" and "Base Value" are pre-defined by the paytable software and can not be altered. Other items are not needed and any entry will be ignored.

11. Confirm "Progressive Parameters" with "Save & Quit".

12. Check all settings carefully and select "Save" to save settings to disk (optional).

13. Select "**Upload**" to send data to the machine.

14. Pay attention to application notes and confirm with "OK" to start upload.

15. When upload was successful, exit "Jackpot Configuration" menu, remove PC Setup Cable and close Logic Box and Main Door.

16. Clear "Logic Door Open" message via Audit Key.

At this point Cash Fever™ Jackpot Configuration is finished.

***Important**: Check all settings carefully before uploading. Any subsequent modification of "Progressive Parameters" needs a RAM reset on Main- and Commboard!*

***Note**:*
The display style of the Overhead (Plasma) Display has to be configured seperately by means of a configuration application which is installed on the Cash Fever™ PC. See manual "Cash Fever™ Configuration Guide" provided by Atronic Systems for details.

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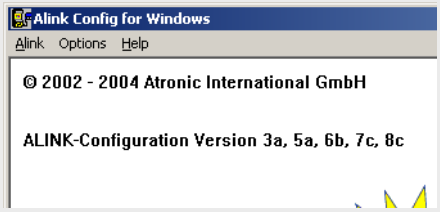
A-Link Config for Windows



Atronic's **Alink Config for Windows** (2.0 and higher) was developed for computers running Windows® 9x, ME, NT, 2000 or XP operating system.

***Note**: Alink Config for Windows 1.0 does not support Windows XP® and Windows 2000®.*

Alink Config DOS Versions

Jackpot configuration can either be carried out with **Alink Config for Windows** or with one of the DOS program versions. **Alink Config for Windows** covers all recent configuration versions in one application. ALink Config DOS versions are specific programms for one particular configuration version.

Alink Config for Windows 2.0 can be used instead of DOS program versions CNFA03xx ,CNFA05xx, CNFA06xx, CNFA07xx and AC08xx.

Installation

Alink Config for Windows requires installation of a driver for the Hardlock Dongle (0300). The dongle is required to unlock **Alink Config for Windows**.

1. Copy the two files "**dongle_install.exe**" and "**Alink_Setup.exe**" from floppy disk into a temporary folder on the PCs hard disk.

2. Run **dongle_install.exe** to install Hardlock Dongle drivers and follow instructions on screen.

3. Connect Hardlock Dongle to PCs printer port, with the PC switched off and reboot to initialize drivers.

4. Install **Alink config for Windows** by running **Alink_Setup.exe** and follow instructions on screen.

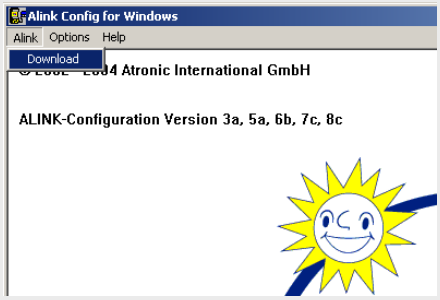
5. Double click **Alink Config** icon to start **Alink Config for Windows**.

Atronic A-Link Config for Windows Menu Structure

This section explains menu structure of Atronic's "A-Link Config for Windows" program.

Alink/Download

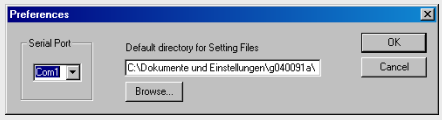
Starts download of Jackpot Configuration data from the machine into Alink Config program. This is always the first step of Jackpot Configuration.



Options/Preferences

Serial Port
Used to set the PCs COM port to which the PC-Setup cable is connected. Default is COM 1.

Default Directory for Setting Files
Click on "Browse" and choose a directory, where the Jackpot Configuration setting files are to be stored.



Help

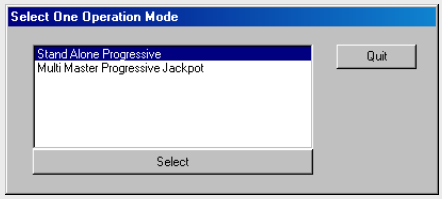
Opens help files.

Select one operation mode

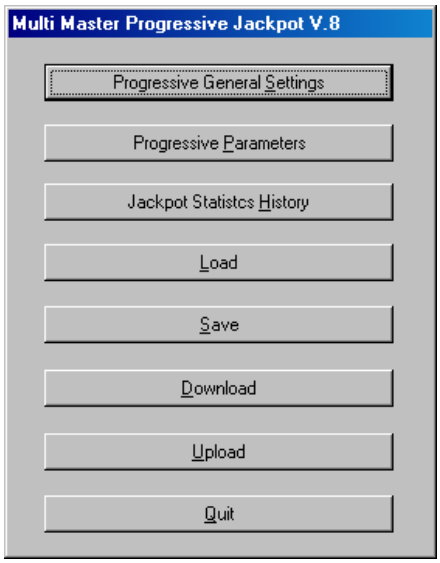
After download of current Jackpot settings, an operation mode has to be selected.

- Select "Stand Alone Progressive" for a progressive Jackpot with only one machine.
- Select "Multi Master Progressive Jackpot" for a link of several machines.

If the program detects no linked machines this menu is skipped.



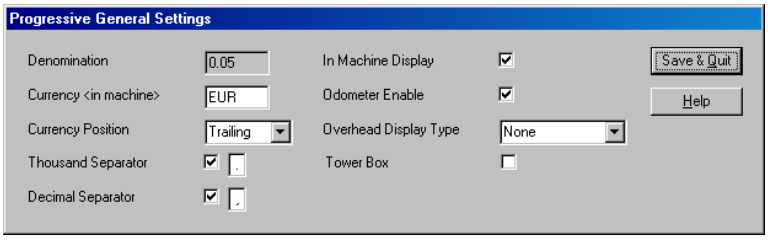
"Multi Master Progressive Jackpot V.8" - Menu
"Other Progressives (Mikohn, GRIPS or SAS)" - Menu
"Atronic Progressive Jackpot (APL)" - Menu



***Note**:*
Depending on the configured operation mode, this menu has correlatively heading.

Progressive General Settings
Configure in-machine display and external display type.
Progressive Parameters
Enable progressive Jackpot and configure main settings.
Jackpot Statistics History
Displays a summary of last Jackpots in credits or currency.
Load
Load a previous saved Jackpot configuration setting file into the program.
Save
Save current Jackpot configuration settings to disk.
Download
Download current Jackpot configuration data from the gaming machine into the program. This is the first step of every configuration procedure.
Upload
Upload Jackpot configuration data to the gaming machine.
Quit
Quit Alink for Windows.

"Progressive General Settings" - Menu



***Note**: Do **not** enable the "Tower Box" feature, unless you configure a Towerline™ machine!*

Denomination
Shows machine's denomination.

Currency
The 3-characters "Currency" string is shown in the in-machine display, trailing or leading the Jackpot value. Entering "EUR" or "GBP" will display a "€" respective "£" symbol.

Currency Position
The Currency string or symbol is displayed TRAILING or LEADING the Jackpot value.

Thousand Separator
If activated, the specified symbol is inserted after each third digit.

Decimal Separator
If activated, the specified symbol is inserted and the decimal is displayed.

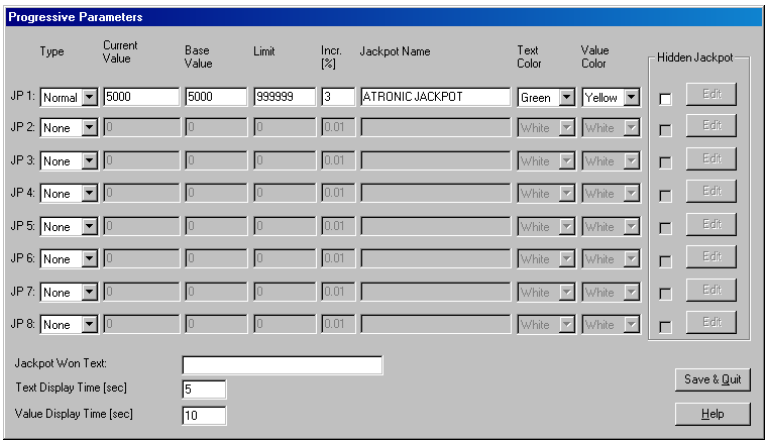
In Machine Display
If enabled, "Jackpot amount" / "Currency" and "Jackpot Name" is displayed in an additional window at the top of the game screen.

Odometer Enable
If enabled, the in-machine display smoothly counts up to a new Jackpot value. If disabled, a changed Jackpot value is displayed instantly.

Overhead Display Type
Depending on the display type (connected to Commboard P7) select: NONE, MIKOHN SC (Super Chameleon), MIKOHN SUPREME, DYNAMIC DISPLAY or ATAKA.

Tower Box
Use only for Atronic Towerline™ series. Please refer to Towerline configuration manual. Do **not** enable at other machines!

Progressive Parameters



Type (see next page for details)
Set to NORMAL for a Progressive (Money) Jackpot or to PRIZE for a Prize Jackpot. NONE disables Jackpot.

Current Value (in currency)
The "Current Value" is the Jackpot amount, which is in the Jackpot at the time of configuration. It is also used to set an initial value for the Jackpot.

Base Value (in currency)
The "Base Value" (plus the "Hidden Jackpot" value) is the new Jackpot start value, after a Jackpot hit.

***Note**: The "Base Value" should always exceed the machines (non-progressive) Top Award.*

Limit (in currency)
Sets an upper limit for the Jackpot value. If adjusted limit is exceeded, all additional increments are paid into the corresponding hidden Jackpot or into the overflow. Set to "0" to set no limit.

Increment %
Percentage of credits wagered that accumulates to the Jackpot value. Range is 0.01% to 18%.

***Note**: Please note that "Jackpot Increment Percentage" and "Hidden Jackpot Increment Percentage" add to the overall Return to Player Percentage (RTP).*

RTP (from paytable)
+ Jackpot Inc. %
+ Hidden Inc. %
= Overall RTP (in %)

Jackpot Name
This text is displayed on the in-machine display (if enabled) alternating with the Jackpot value.

Text Color
Adjust color of displayed "Jackpot Name" text.

Value Color
Adjust color of displayed Jackpot value.

Jackpot Won Text
This text is displayed in case of a Jackpot hit.

Text Display Time
Sets display time (in sec.) of "Jackpot Name" text, before display alternates to Jackpot value.

Value Display Time
Sets display time (in sec.) of Jackpot value, before display alternates to "Jackpot Name" text.

Progressive Parameters (continued)

Money Jackpot - Type set to NORMAL

The linked EGMs will distribute their bets to the Master. The Master will accumulate these bets into a Jackpot value, depending on the "Increment Percentage".

Jackpot Value = Denomination x Credits wagered x Increment Percentage (+ Base Value or *Current Value)*

The Master will broadcast the current Jackpot values to all Slaves in the link every 2.5 seconds. If the Slave doesn`t receive a Jackpot value within 10 seconds, it locks up and displays the message MASTER NOT READY or PROGRESSIVE NOT CONNECTED.

The Jackpot value can be limited, if a "Limit" value other than "0" is set. If the Jackpot value exceeds this limit, the increments are paid into the corresponding hidden jackpot. Set to "0" for no limit.

On first power up after Jackpot configuration, the Jackpot value will be set to the adjusted "Current Value".

In case of a Jackpot hit, the Jackpot value is awarded to that EGM, which has caused the trigger event. The EGM that hits the Jackpot locks up and displays the Jackpot value and the "Jackpot Won Text" and has to be cleared by an attendant.

After a Jackpot hit, the new (start) value is set to:

Jackpot Start Value = Base Value + Hidden Jackpot Value

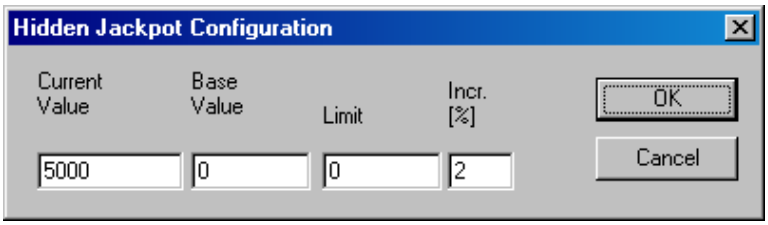
The hidden Jackpot value is then set to the hidden Base Value.

Prize Jackpot - Type set to PRIZE

If this Jackpot type is selected, the Jackpot level is associated to a fixed prize, which is displayed by a text message in case of a Jackpot hit.

***Note**:*
The Jackpot trigger event is defined in the paytable software. Usually it is the machine's Top Award win combination.

Hidden Jackpot Window



Current Value (in currency)
The "Current Value" is the amount, which is in the hidden Jackpot at the time of configuration (Initial value).
Base Value (in currency)
The "Base Value" is the new hidden Jackpot start value, after a Jackpot hit.
Limit (in currency)
This field sets an upper limit for the hidden Jackpot value. If this limit is exceeded, additional increments are paid into the overflow. Overflow value can be seen in the "Jackpot Statistics History". If set to "0", there is no limit for hidden Jackpot value.
Increment %
Sets percentage of credits wagered paid into the hidden Jackpot. Range is 0.01% to 18%.

Hidden Jackpot enabled

If enabled, the Hidden Jackpot increases with every credit wagered.

Hidden Value = Denomination x Credits wagered x Hidden Incr. Percentage
(+ Hidden Base Value or *Hidden Current Value)*

After a Jackpot hit, the Hidden Jackpot value is transferred to the normal Jackpot (added to the Jackpot Base Value).

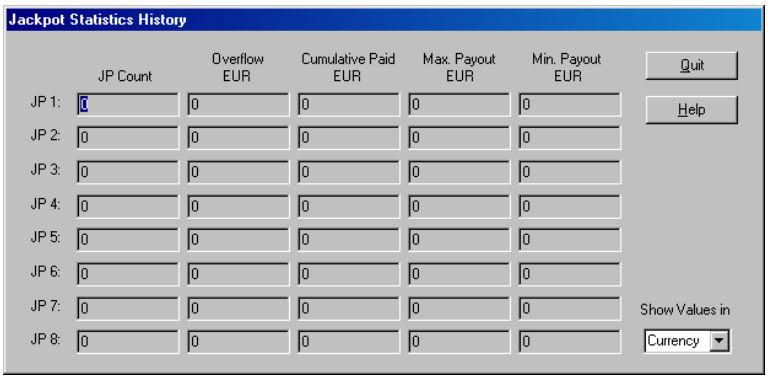
Jackpot Start Value = Base Value + Hidden Jackpot Value

New Hidden Jackpot (start) value is the hidden Base Value.

***Note**: Please note that "Jackpot Increment Percentage" and "Hidden Jackpot Increment Percentage" add to the overall Return to Player Percentage (RTP).*

RTP (from paytable)
+ Jackpot Inc. %
+ Hidden Inc. %
= Overall RTP (in %)

Jackpot Statistics History



Jackpot Count
Displays number of Jackpot hits.

Overflow
Displays the amount that could not be accumulated to the Jackpot or the hidden Jackpot.
Increments are paid into the "Overflow",

- if adjusted hidden Jackpot limit is exceeded
- if adjusted Jackpot limit is exceeded and hidden Jackpot is disabled.

Cumulative Paid
Displays sum of all Jackpot wins.

Max. Payout
Displays largest Jackpot win.

Min. Jackpot Payout
Display smallest Jackpot win.

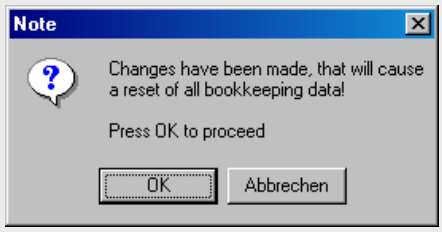
Show values in
Select CURRENCY or CREDITS.
Values in "Jackpot Statistics History" window can be displayed in currency or credits.

Application Messages

In order to inform users in important matters, the program will display certain messages.

Reset Confirmation:

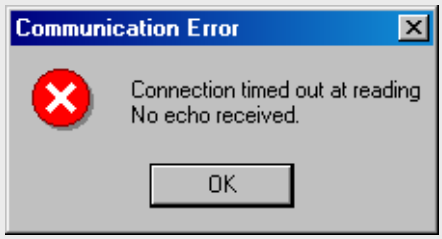
This message will appear, if the configuration requires a reset of bookkeeping data.



Communication Error:

This message will appear, if download of Jackpot data is not possible.
Possible reasons:

- Wrong or defective (serial) setup cable
  -> Use Atronic PC-Setup cable (from Alink setup kit)
- Cable not connected
  -> Check cable for proper connection
- Wrong COM port selected
  -> Set COM port via menu Options/Preferences
- Wrong program version
  -> Alink Config for Windows 1.0 does not support Windows XP and Windows 2000®.

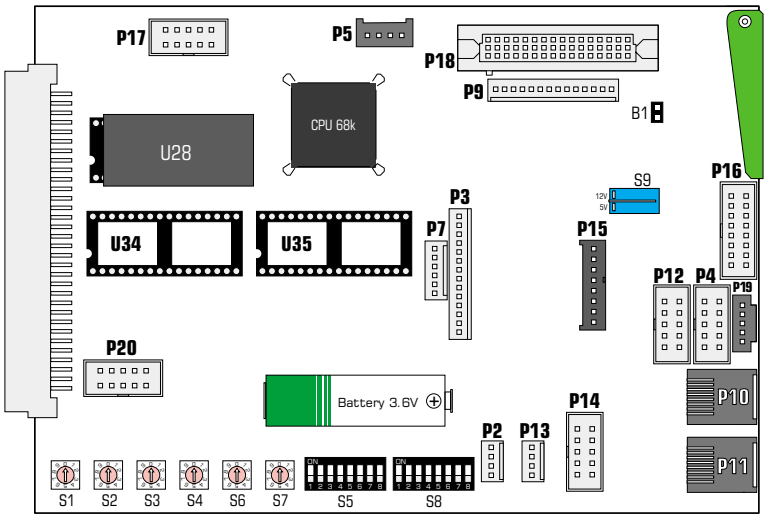


Press Start on Slot Machine:

This message will appear every time the communication between configuration program and the gaming machine is started.

Appendix

Commboard 68k Rev. 2.10
Connectors and Switches Overview



Connector	Interface	Protocol / Function
P2	TTL	**SAS channel 1** (current loop)
P3	-	Cash-Now trigger signals
P4	RS232	**SAS channel 2** *or* GRIPS
P5	-	Comm Key (Ticket in dongle)
P7	-	External Display
P9	-	+12V
P10, P11	RS485	A-LINK, Mikohn Controller *or* SAS channel 3
P12	RS232	**SAS channel 1**
P13	TTL	Bally
P14	TTL	DACOM
P15	-	not used
P16	RS422	VLC
P17	-	Manufacturer use
P18	RS422	Overhead Displayboard CL
P19	TTL	**SAS channel 2** (current loop)
P20	-	not used

S9	Close to apply +5V or +12V to pin 1 of connector P2
B1	Close jumper to bridge electrical (galvanic) isolation of ground connection.

Connector function depends on implemented protocol version of Comm board software.

***Note**: Connectors P10 and P11 are parallel wired.*

Commboard 68k Rev. 2.10
DIP Switch Overview for SAS Protocol

DIP Switch S5

1	2	3	4	5	6	7	8	
Off	Off	Off						Mikohn MS-10 Progressive
ON	Off	Off						Accounting Progressive
Off	ON	Off						APL Progressive (if included in eprom)*
ON	ON	Off						Mikohn MS-27 Mystery
Off	Off	ON						Mikohn MS-27 Mystery + Progressive
ON	Off	ON						Accounting System 3rd Channel on P10 and P11
Off	ON	ON						not used, defaults to Mikohn MS 10
ON	ON	ON						not used, defaults to Mikohn MS 10
			ON					APL EGM act as Master
			Off					APL EGM act as Slave
					ON			Activate implemented Accounting System
					Off			Disable implemented Accounting System
						ON		Handpay AND ticket overwritten if not read
							ON	Ticket info only will be overwritten if not read .

DIP Switch S8

1	2	3	4	5	6	7	8	Affected LongPolls		
	Off							Prog JP	Chan 1	0x80, 0x86
	On							Prog JP	Chan 2	
		Off						EFT	Chan 1	0x22 to 0x26, 0x28, 0x29
		On						EFT	Chan 2	0x62 to 0x67, 0x28, 0x29
			Off					Bonus	Chan 1	0x2E, 0x8A, 0x8B
			On					Bonus	Chan 2	
				Off				Control	Chan 1	0x03 to 0x07, 0x0A to 0x0C
				On				Control	Chan 2	0x94, 0xA8
					Off			Coupon	Chan 1	0x4C, 0x4D 0x57, 0x58, 0x70, 0x71
					On			Coupon	Chan 2	0x7D (Exp 0x3F, 0x57, 0x67, 0x68)
						Off				CB sends Total drop meter to host
						On				CB sends Coin drop meter **
							On			Message if accountingsystem isn't connected
							Off			No message if accountingsystem isn't connected

Rotary Switches

Switch	Function
S1	EGMs Progressive System Address
S2	EGMs Progressive System Address
S3	EGMs Accounting System Address Channel 2 (Automatically enable 2nd Channel if set)
S4	EGMs Accounting System Address Channel 2 (Automatically enable 2nd Channel if set)
S6	EGMs Accounting System Address Channel 1
S7	EGMs Accounting System Address Channel 1

Tables refer to Commboard software using SAS protocol
Cashline™ - O-Level (Update 2003-1) and Hi(!)bility™- Q-Level

Commboard 68k Rev. 2.10
DIP Switch Overview for GRIPS Protocol

DIP Switch S5

Dip Switch S5								Function
1	2	3	4	5	6	7	8	
Off	Off	Off						Mikohn MS-10 Progressive
ON	Off	Off						Accounting Progressive
Off	ON	Off						APL Progressive *
ON	ON	Off						Mikohn MS-27 Mystery
Off	Off	ON						Mikohn MS-27 Mystery + Progressive
ON	Off	ON						not used, defaults to Mikohn MS 10
Off	ON	ON						not used, defaults to Mikohn MS 10
ON	ON	ON						not used, defaults to Mikohn MS 10
			ON					APL EGM act as Master
			Off					APL EGM act as Slave
					ON			Activate implemented Accounting System
					Off			Disable implemented Accounting System
						On		Not Used
							ON	Not Used

DIP Switch S8

Dip Switch S8								Function	Additonal Information
1	2	3	4	5	6	7	8		
ON								Not Used	
	ON							Not Used	
		ON						Not Used	
			ON					Not Used	
				ON				Not Used	
					ON			Not Used	
						ON		Not Used	
							ON	Message if accountingsystem isn't connected	
							Off	No message if accountingsystem isn't connected	

Rotary Switches

Switch	Function
S1	EGMs Progressive System Address
S2	EGMs Progressive System Address
S3	EGMs Accounting System Address
S4	EGMs Accounting System Address
S6	EGMs Accounting System Address
S7	EGMs Accounting System Address

Tables refer to Commboard software using GRIPS protocol
Cashline™ - O-Level (Update 2003-1) and Hi(!)bility™- Q-Level

Commboard 68k - EPROM Naming Scheme

By means of the EPROM naming scheme the Commboard software version can be identified. EPROM naming is available on EPROM label or in menu "Audit Menu/ Configuration".

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Q	**_**	**-**	**S**	**5**	**-**	**M**	**J**	**-**	**S**	**T**	**D**	**_**	**-**	**B**	**-**	**0**	**8**	**A**

1-2	Communication Level with Mainboard (O-, P-, or Q-Level)
4-5	Protocol Identifier, Accounting / Communication System
7	Hardware (M= Commboard 68K)
8	Release
10-12	Jurisdiction (STD= Standard)
13	Release Type (_= Final)
15	Progressive Revision Level
17-18	Structure Version Progressive / Alink Config program version
19	Dongle Version

Protocol Identifier:

03	VLC Australia
04	Xseries
06	Qcomm
B0	Bally Simple Serial
S4	SAS 4.xx
S5	SAS 5.xx
G4	GRIPS 4.00x

Progressive Revision Level

_	No progressive available
A	APL
B	MS10, MS27, APL, System Progressive (SAS, GRIPS), Three Channel Progressive (SAS only)
C	Same as "B" with additional Cash Fever™ functionality via APL.

Progressive/Alink Structure Version:

07	Use "CNFA07xx.exe" or "A-Link Config for Windows" for Jackpot configuration.
08	Use "AC08xx.exe" or "A-Link Config for Windows" for Jackpot configuration.
__	Progressive/ALINK Setup not available

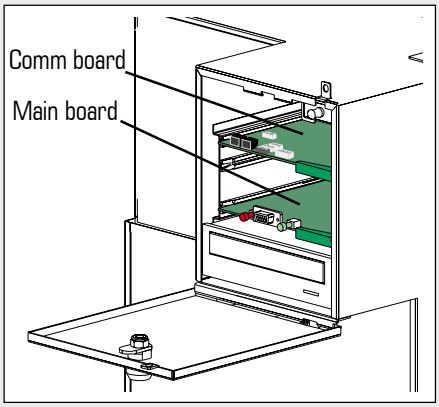
Dongle Version:

A	Dongle for „Ticket In“ (Comm Key)
B-Z	Future Versions/Types of dongles
_	Dongle not available or not supported

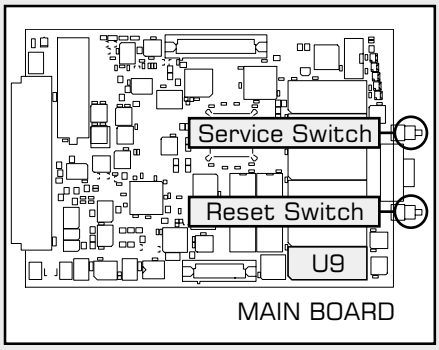
RAM Reset / Clear Memory Procedure for e-motion / Hi(!)bility series

1. Open Main Door and switch machine power off.
2. Open the Logic box door and remove Main board and Comm board.
3. Replace Paytable EPROM on Main board socket U9 with RAM Reset EPROM "HMB-RRES01".
4. Replace EPROMS on Comm board socket U34 and U35 with two Comm board Clear EPROMS "Q-CB-RAM-CLEAR". The socket to use is labeled on the EPROMs. Check for correct mounting!
5. Reinstall Main board and Comm board and switch machine power on.
6. Wait approximately 2 minutes until an audible signal and a message on the main display confirms that RAM Reset was successful.
   A flashing LED (D19) on the Comm board confirms that Comm board Clear was successful.
7. Switch machine power off and remove Main board and Comm board.
8. Replace RAM Reset EPROM "HMB-RRES01" with original Paytable EPROM U9.
   Check for correct mounting!
9. Replace both Comm board Clear EPROMS with original Comm Software EPROMS U34 & U35.
   Check for correct mounting!
10. Reinstall Main board and Comm board and switch machine power on.
11. Wait approximately 2 minutes until a message is displayed on the main display and follow the instructions on screen (Press red reset button).
12. The machine will now automatically enter Initial Setup for basic setup.

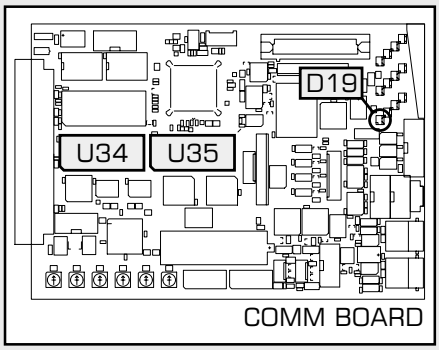
    Proceed with Initial Setup



Caution!
Make sure to have the EPROM mounted correct. The sockets' groove and the EPROMs groove have to point to the same direction. Wrong insertion will cause permanent damage to EPROMs and boards.



MAIN BOARD



COMM BOARD

RAM Reset / Clear Memory Procedure for Cashline series

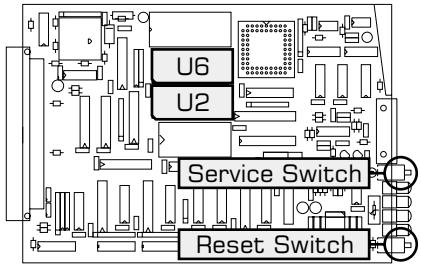
using **RAM Reset 09** (RRES_09) EPROM

1. Switch off power and remove Master- and Comm board.
2. Replace Main EPROM U2 on the Master board with RAM Reset EPROM "RRES_09".
3. *Replace Paytable EPROM U6 on the Master board with CONFIG Key EPROM.*
4. Replace Comm EPROMS U34 & U35 on the Comm board with COMM CLEAR EPROMS.
5. Reinstall Master- and Comm board and switch on power.
6. Wait approx. 10 seconds. An audible signal confirms RAM RESET and a flashing LED (D19) on the Comm board confirms COMM BOARD CLEAR.
7. Switch off power and remove Master- and Comm board.
8. Replace RAM Reset EPROM "RRES_09" with original Main EPROM.
9. Replace COMM CLEAR EPROMS with original Comm software EPROMS U34 & U35.
10. Reinstall Master- and Comm board and switch on power.
11. *After some seconds the message "CONFIG EPROM DETECTED, PLEASE RESTART WITH ORIGINAL PAYTABLE EPROM (U6)" is displayed.*
12. *Switch off power and remove Master board.*
13. *Replace CONFIG Key EPROM U6 with original paytable EPROM.*
14. *Reinstall Master board and switch on power.*
15. After some seconds the message "RAM ERROR" is displayed.
16. Press and hold the red reset button for approx. 5 seconds (until you hear an audible signal).

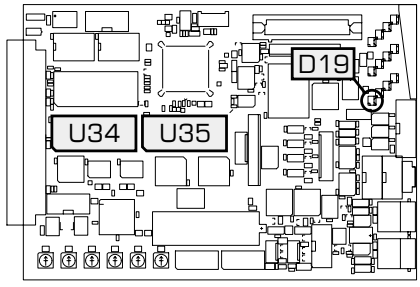
    Proceed with Initial Setup.

Perform step 3, 11, 12, 13 and 14 only when using a selectable paytable!

Caution!
Make sure to have the EPROM mounted correct. The sockets' groove and the EPROMs groove have to point to the same direction. Wrong insertion will cause permanent damage to EPROMs and boards.



MASTER BOARD



COMM BOARD