



Cashline™

Software / Basic Setup

**for software O-Level
with Multi Denomination Feature**



Rev. 2.0

April 2005

Cashline™
Software
O-Level

Rev. 2.0

Rel. April 2005

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April 2005 / Rev. 2.0

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Introduction

This manual aims to describe Basic Setup procedures needed for commissioning and operating an Atronic Cashline™ machine, running O-Level Main Software with Multi Denomination support on Master Board #31.

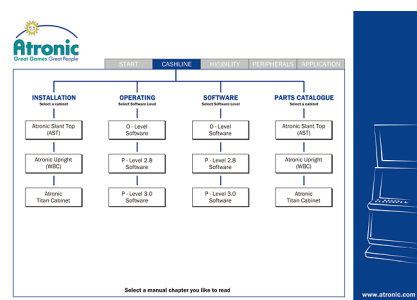


Topics covered by additional manuals

- Installation and Commissioning
(incl. safety instructions, technical data, etc.)
-> See manual "Installation" for a specific cabinet.
- Components, Operating procedures, Audit Menu, Service Menu.
-> See manual "Operating / O-Level".
- Linked Progressive Jackpot Configuration
-> See manual "Progressive Jackpots".
- OEM Peripherals
(Coin- and bill acceptors, hopper, printer, etc.)
-> See topic "Peripherals" on Atronic Service CD.
- Spare Parts
-> See "Parts Catalogue" for a specific cabinet.

Note:

All mentioned manuals can be found on a CD-ROM titled **Atronic Service Manual 2005**



If this manual did not come with this CD-ROM, please ask Atronic Technical Service for a free copy.

Setup Overview

Setup of Cashline™ gaming machines is structured in several main procedures.

1. DIP Switch Settings

By means of three DIP switch blocks on the Master Board it is possible to configure some basic hardware settings, exception procedures and special requirements. Master Board DIP switches are factory pre-set according to customer requirements.

(optional) Comm Board also requires configuration via DIP switch settings.

2. Clear Memory Procedure

The Clear Memory Procedure (RAM-Reset) is necessary to initiate the "Initial Setup" procedure. It will clear all statistical data and (according to execution) other machine settings.

3. Initial Setup

Initiated automatically after Clear Memory Procedure. Used to configure basic machine setting.

4. Paytable Configuration

(Only for selectable paytables) Is initiated automatically after Initial Setup, if a selectable payable is installed.

Note:

This lists below are intended to give a brief overview and do not include all possible settings.

Adjustable via DIP-settings:

- Bill validator (enable/disable)
- Top lamp type
- Hopper empty procedure
- Payout limit procedure
- Coin in procedure
- Win payout procedure
- Hopper jam procedure
- Game start procedure

Adjustable via Initial Setup:

- Multi Denomination support
- Coin/Token Value
- Denomination
- Tokenisation string
- Metering
- Credit Limit
- Handpay cancel allowed
- Bonusing
- Cashless Transactions
- Progressive group
- Commboard required
- Bill acceptor type
- Residual Credits payout
- Autoplay / Continuous play

Adjustable via Paytable Config.

- Player denominations*
- Accounting denomination*
- Number of lines
- Bet per line
- Percentage (RTP)
- Denomination / Percentage Assignment*

**with Multi Denomination Feature enabled only*

Setup Overview *continued*

5. PC Setup

PC Setup is carried out by means of an (dongle secured) external user program. It allows to change hardware configuration, upload JCM billtables and to activate additional features.

An Atronic PC-Setup Kit including PC-Setup software, dongle and setup cable is required.

Adjustable via PC-Setup:

- Change hardware configuration
- Upload bill table (JCM)
- Additional Jackpot Key function
- Win limit (enable/disable)
- Key off limit
- Progressive Jackpot meter mode (hits/credits)

6. Jackpot Configuration

Progressive Jackpot configuration is carried out by means of an external user program. Software "A-Link Config", dongle and setup cable is required.

This topic is covered by the "Progressive Jackpots" manual.

Adjustable via Jackpot Config.:

- Prog. Jackpot type
- Base value
- Increments
- Hidden Jackpot
- In machine display
- Display style and texts

7. Menu Setup

Menu Setup covers operator selectable machine configuration. It is part of the "Service Menu", which is directly accessible during normal operation. This topic is covered by the "Operating" manual.

Adjustable via Menu Setup

- Toplight patterns
- Remote credit increments
- Hopper payout limit
- Language
- Double up setup
- Hopper refill amount
- Bills enabled
- Animation mode
- Win presentation
- Jackpot music
- System lockup options
- Sound menu
- Door open sound
- Celebration limit
- Denomination window
- Residual handling with card

Required Equipment



Read this Manual carefully BEFORE performing any procedure described in this manual!

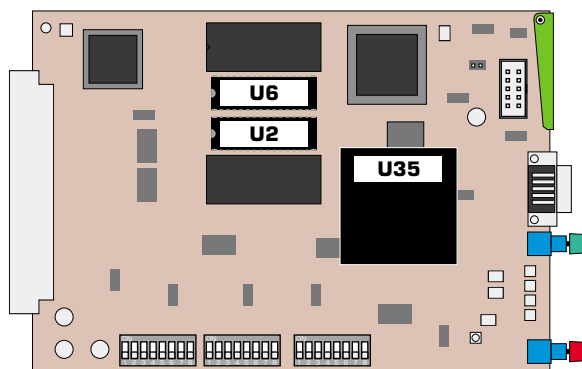
Following special equipment is needed to perform procedures described in this manual!

- **RAM Reset EPROM**
- **Comm board Clear EPROM**
- **CONFIG Key EPROM**
- **PC Setup Kit**
- **Jackpot configuration software "Alinkconfig for Windows"**
(if Jackpot configuration is required - see manual "Progressive Jackpots")

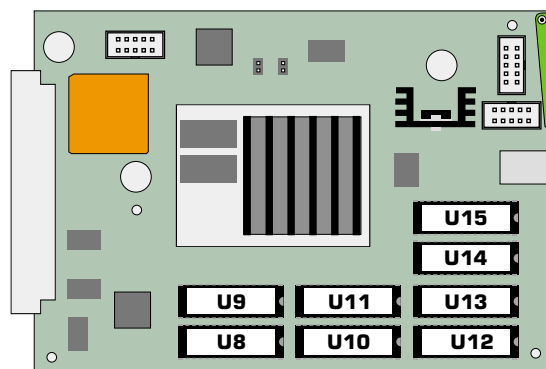
Please contact Atronic Technical Service to obtain appropriate equipment.

Location of Software EPROMs*

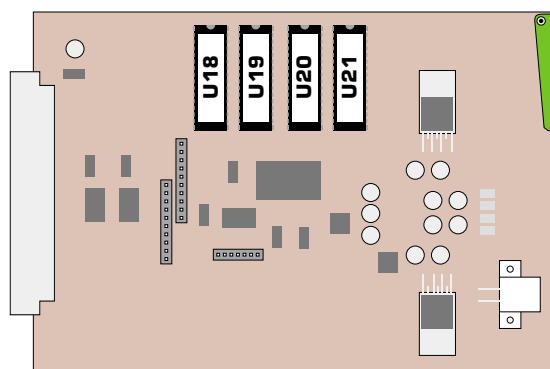
- **Main software** is installed on the Master Board, socket U2.
- **Paytable software** is installed on the Master Board, socket U6.
- **Security Device** is installed on the Master Board, socket U35.
- **Graphic software** is installed on the Graphic Board, sockets U8 to U15.
- **Sound software** is installed on the Sound Board, sockets U18 to U21.
- **Comm software** is installed on the Comm Board, sockets U34 and U35.



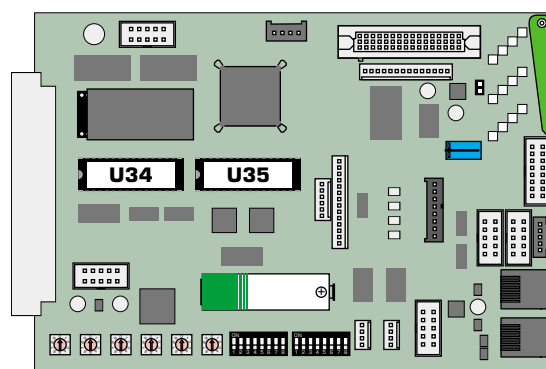
Master Board #31



Graphic Board #41



Sound Board #22



Comm Board 68k, Rev. 2.10

* Atronic Gaming Machines are equipped with One-Time-Programmable-ROM modules (OTP-ROM). For simplification they are named EPROM within this manual.

DIP Settings

Master Board #31 DIP Switch Settings

Table refers to O-Level Main software.

Switch			Description
1-1			Holland specific requirements
ON			Holland requirements enabled
OFF			Holland requirements disabled
1-2			Hopper empty procedure
ON			Hopper must be refilled, payout continues after main door is closed
OFF			Left amount is hand paid
1-3 1-4			Over maximum payout limit procedure
OFF	OFF		Pay limit from hopper, rest hand paid
OFF	ON		Total amount is hand paid
ON	OFF		Pay coins from hopper until amount reaches next full hundred, rest is hand paid
1-5			ROM SIG calculation
ON			ROM SIG over first 128 byte of MAIN & PAYTABLE
OFF			ROM SIG over whole MAIN eprom
1-6			not used
1-7 1-8 2-2			Coin in procedure
ON	ON	OFF	Inserted coins are added to the BET or IN meter until maximum bet is reached, further coins are rejected
ON	ON	ON	Inserted coins are added to the BET or IN meter until maximum bet is reached, the game is started automatically at maximal bet
OFF	ON		Inserted coins are added to the BET or IN meter until maximum bet is reached, further coins are added to the CREDIT meter
OFF	OFF		Inserted coins are added to the CREDIT meter, the IN meter is not displayed

Switch			Description
2-1			Win payout procedure for all wins
ON			Pay win amount from the hopper
OFF			Add win amount to the credit meter
2-3			Hopper jam procedure
ON			Hopper jam must be cleared, payout continues after main door is closed
OFF			Left amount is hand paid
2-4			Bill validator usage
ON			Bill validator is enabled
OFF			Bill validator is disabled (not equipped)
2-5			Top prize won procedure
ON			GM assumes top prize is paid by some progressive system and will show win amount "0"
OFF			GM pays top prize amount according to pay table
2-6			not used
2-7			Game start
ON			Bet is forced before new game can be started
OFF			Game is started with last bet (only used by standard slot panel) (3 reel games)
2-8			Number of candles
ON			Top light with 2 lamps
OFF			Top light with 3 lamps

Switch			Description
3-1			not used
3-2			not used
3-3			not used
3-4			not used
3-5			not used
3-6			not used
3-7			Coin diverter malfunction procedure
ON			GM locks with error message
OFF			Diverter malfunction is not reported
3-8			Bill validator operation mode
ON			Accepted bills are changed immediately by paying bill value from the hopper
OFF			Value of accepted bill is added to the credit meter

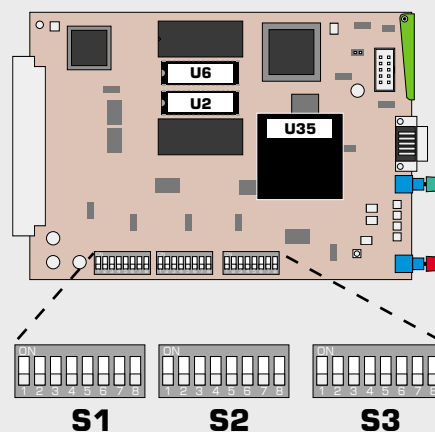
Note:

Master Board DIP switches are factory pre-set according to customer requirements.

Please check for correct settings before putting the machine into operation.

Note:

If Multi Denomination Feature is enabled, configuration of an BET or IN meter is not possible.



Clear Memory Procedure

Introduction

The Clear Memory Procedure is required

- To clear statistical data
- To change basic machine configuration via Initial Setup
- In case of a game conversion

The Clear Memory Procedure consists of 3 different parts, which always have to be carried out together. After Clear Memory Procedure has been carried out, the Initial Setup Procedure starts automatically.

Following special Atronic EPROMs are required:

Master Board RAM Reset 12

This EPROM (labelled *RRES-_-12*) replaces the Main software EPROM on Master Board socket U2 during Clear Memory Procedure. Depending on which Master Board button is pressed during power up, 4 different reset routines are available.

Button pressed during RAM Reset Power up	Statistical data and Softmeters cleared	Init Setup settings cleared	Menu Setup settings cleared	PC Setup settings cleared
None	Yes	No	No	No
Reset Button (red)	Yes	No	No	Yes
Service Button (green)	Yes	Yes	Yes	No
Both Buttons	Yes	Yes	Yes	Yes

Configuration Key (CONFIG Key)

This EPROM (labelled *CK-STD-A-x-STD*) replaces the Paytable software EPROM on Master Board socket U6 during Clear Memory Procedure.

Comm board Clear

These two EPROMs (labelled *Q_CB_RAM_CLEAR*) replace Comm software EPROMs on Comm Board socket U34 and U35 during Clear Memory Procedure.

Note:

If no Comm Board is installed, a Comm Board Clear is of course not required.

Note:

Do not use former versions of RAM Reset EPROM together with software with Multi Denomination Feature.

Note:

If a JCM bill acceptor is installed and PC Setup settings have been cleared, a bill table upload via PC Setup is necessary. See also page 32.

Note:

Configuration Key EPROM is available in different versions to comply with jurisdictional requirements.

Clear Memory Procedure

Clear Memory Procedure using RAM Reset 12

1. Switch power off and remove Master Board and Comm Board.
2. Replace EPROM U2 on the Master Board with RAM Reset EPROM "RRES-_-_-12".

Replace EPROM U6 on the Master Board with Config Key EPROM "CK-STD-A-x_STD".

Replace EPROMs U34 and U35 on the Comm Board with Comm Board Clear EPROMs "x_CB_RAM_CLEAR" U34 and U35.

3. Reinstall Master Board and Comm Board.
4. Switch on power while holding that Master Board button pressed, you have chosen from the table.

Button pressed during RAM Reset Power up	Statistical data and Softmeters cleared	Init Setup settings cleared	Menu Setup settings cleared	PC Setup settings cleared
None	Yes	No	No	No
Reset Button (red)	Yes	No	No	Yes
Service Button (green)	Yes	Yes	Yes	No
Both Buttons	Yes	Yes	Yes	Yes

Hold button(s) pressed until an audible signal confirms that RAM Reset was successful.
A flashing LED (D19) on the Comm Board confirms that Comm Board Clear was successful.

5. Switch power off and remove Master Board and Comm Board.
6. Replace EPROM "RRES-_-_-12" with original Main EPROM U2 on the Master Board.

Replace Comm Board Clear EPROMs U34 and U35 on the Comm Board with original Comm EPROMs U34 and U35.

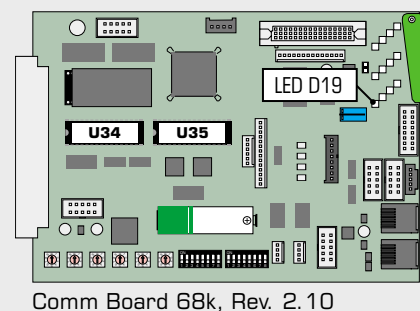
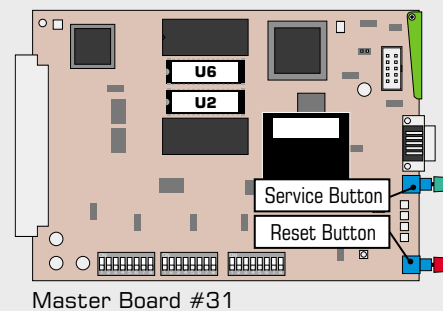
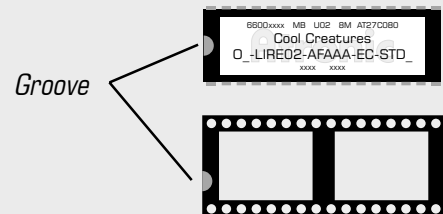
Continues on next page

Note:

Check and set Master Board and Comm Board DIP switch settings before performing Clear Memory Procedure.

Important:

Always make sure to mount EPROMs correctly. Socket groove and EPROM groove have to point to the same direction. Wrong insertion will cause permanent damage!



Clear Memory Procedure using RAM Reset 12

7. Reinstall Master Board and Comm Board.

Switch on power.

After about 3 minutes the message "CONFIG EPROM DETECTED, PLEASE RESTART WITH ORIGINAL PAYTABLE EPROM (U6)" is displayed.

8. Switch power off and remove Master Board.

9. Replace Config Key EPROM on the Master Board with original Paytable EPROM U6.

10. Reinstall Master Board and switch on power.

11. After power up the message "RAM ERROR" is displayed. Press and hold Master Board Reset Button for approx. 5 seconds until a confirmation sound is played.

12. Carry out Touch Screen calibration as shown on screen.

Clear Memory Procedure is now finished.

Following procedures

Depending on which Master Board button has been pressed during power up, following procedures are possible:

- *No button or Reset Button pressed:*
Initial Setup settings have not been cleared. Machine starts with the Initial Setup Summary screen. Settings can be confirmed or refused.
- *Service Button pressed:*
Initial Setup settings have been cleared. Machine starts Initial Setup with default settings. Carry out Initial Setup as described on pages 15-22.
- *Both buttons pressed:*
All settings have been cleared. Machine starts with message "MENU SETTINGS ERROR". Turn Audit Key to clear message and carry out Initial Setup as described on pages 15-22.

Clear Memory Procedure - Troubleshooting

MENU SETTINGS ERROR

This message is displayed if Menu Setup settings have been cleared during Clear Memory Procedure.

=> Clear message by turning Audit Key.

PAYTABLE EPROM ERROR

This message is shown if a wrong Paytable has been installed. Machine locks up.

=> Install the correct Paytable EPROM.

CONFIG CRC ERROR

This message is shown if a selectable paytable is used and a RAM Reset without Config Key EPROM has been performed.

=> Repeat the routine with Config Key EPROM.

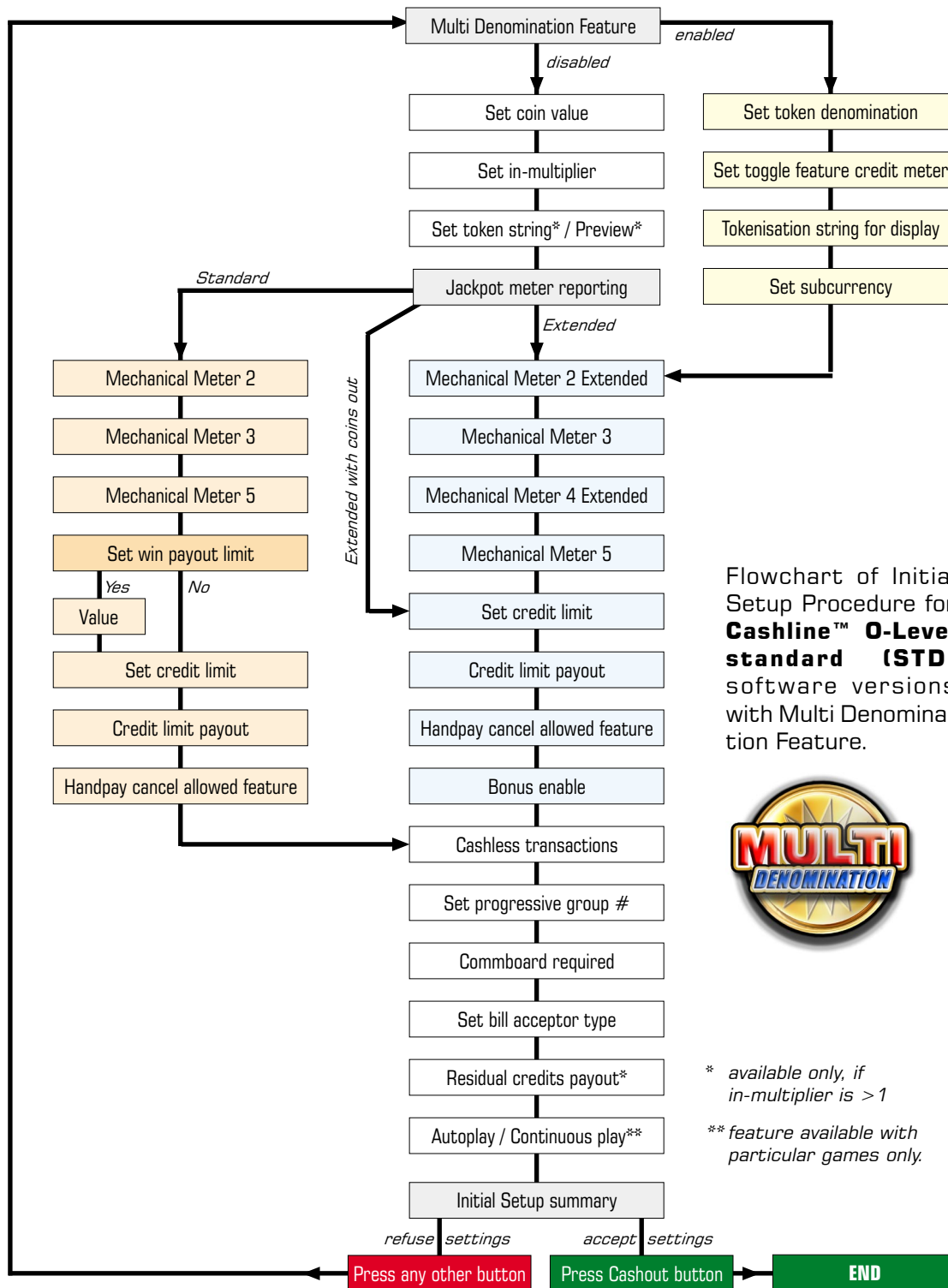
USE RAMCLEAR EPROM AND CHANGE DENOMINATION

This message is displayed if a wrong Paytable has been selected.

=> Perform Memory Clear Procedure.

Initial Setup Procedure - Flowchart

The Initial Setup Procedure is intended to change basic machine settings, which must not or should not be altered during normal operation.



Initial Setup

The Initial Setup Procedure is intended to change basic machine settings, which are not allowed to be altered during normal operation. Initial Setup will start automatically after Clear Memory Procedure has been carried out.

Initial Setup settings not cleared

If Initial Setup settings have not been cleared during Clear Memory Procedure (Service button not pressed during power up), Initial Setup will start with the Initial Setup Summary Screen. Press Cashout button to confirm settings or press any other button to refuse (and alter) settings. If settings were refused, Initial Setup will start from the beginning, allowing to change settings.

Multi Denomination Feature

The Multi Denomination Feature allows to enable up to five player selectable denomination presets. Each single preset can have a different payout percentage value, allowing to assign higher payout percentages to higher denominations.

With Multi Denomination Feature enabled Initial Setup has different setup options. Additionally Paytable Configuration has more options to be configured.



Comm Software with Multi Denomination support

If Multi Denomination Feature is enabled and a Comm Board is installed, a Comm software with protocol identifier "SM" (SAS Multidenom) has to be used. Otherwise the machine will lock at startup.

Jackpot Meter Reporting (Metering Modes)

With Multi Denomination Feature disabled, one out of three metering modes can be selected via function Jackpot Meter Reporting.

With Multi Denomination Feature enabled, metering mode is set fixed to *Extended* mode.

Initial Setup Procedure

MULTI DENOMINATION FEATURE

MULTI DENOMINATION FEATURE allows to configure up to five player selectable denomination settings.

Restrictions:

With MULTI DENOMINATION FEATURE enabled, JACKPOT METER REPORTING is set fixed to *Extended* mode. Progressive Jackpot, In Meter and residual credits Play Off Feature is not supported.

Following settings apply, if Multi Denomination Feature has been enabled. If Multi Denomination Feature has been disabled, proceed on next page.

SET TOKEN DENOMINATION

Set the money value of one token or coin.
Make sure that the coin decal shows the same value.

SET TOGGLE FEATURE CREDIT METER

If enabled, players can toggle the credit meter to show credits or currency by touching the credit meter area on screen.

SET TOKENISATION STRING FOR ON SCREEN DISPLAY

Select a currency from the list.
Selecting "****" allows to enter a 3-digit abbreviation.

SET SUBCURRENCY

Select a sub-currency from the list.
Selecting "****" allows to enter a 3-digit abbreviation.

If Multi Denomination Feature is enabled, metering mode is set fixed to "Extended" mode. Proceed on page 18.



Note:

Make sure to use only Comm software with SAS Multidenom support (SM), when enabling Multi Denomination Feature.

Initial Setup

Settings described on this page only apply, if Multi Denomination Feature has been disabled.

SET COIN VALUE

Set the money value of one token or coin.
Make sure that the coin decal shows the same value.
For coin-less operation set coin value = 1.

SET IN-MULTIPLIER

Define the number of credits that one coin will buy.

$$\text{COIN VALUE} / \text{IN-MULTIPLIER} = \text{DENOMINATION}$$

Select one value from the displayed list.
Selecting *** allows to enter a specific multiplier, which is then added to the list of multipliers. This specific multiplier can only be set once.

SET TOKENISATIONSTRING FOR ON SCREEN DISPLAY

(only if In-Multitplier > 1)

Select a currency from the list.
Selecting "****" allows to enter a 3-digit abbreviation.

PREVIEW TOKENISATIONSTRING FOR ON SCREEN DISPLAY

(only if In-Multitplier > 1)

Confirm preview or change the tokenisation string as desired. This string is displayed in the lower right corner of the game screen.

Initial Setup

Example:

Accepted coin is 1 US-Dollar
and should buy 4 credits.
(Denomination = 25 cent)

Set coin value = 1
(range 0.00 - 5000.00)

Set in-multiplier = 4
(range 1 - 100)

Set string = \$

1\$ BUYS 4 CREDITS

JACKPOT METER REPORTING

This function will define the metering mode. The metering mode defines which statistical data is counted. This data is saved in the machines statistics and can be fetched by an connected accounting system (optional). Main statistics are also counted by six Mechanical Meters.

Three different metering modes are available:

- **Standard**
- **Extended**
- **Extended with coins out**

Each metering mode has different ways of metering and different options. In *Standard* and *Extended* mode some meters are adjustable during Initial Setup. Availability of special functions "Win Payout Limit" and "Bonusing" also depends on metering mode setting.

	Standard	Extended or Multi Denomination enabled	Extended with coins out
Mechanical Meter 1	Credits wagered	Credits wagered	Credits wagered
Mechanical Meter 2	<ul style="list-style-type: none"> • Credits won • Coins out* 	<ul style="list-style-type: none"> • Credits won without JP • Coins won with JP 	Coins out
Mechanical Meter 3	<ul style="list-style-type: none"> • Drop with bills • Drop without bills 	<ul style="list-style-type: none"> • Drop with bills • Drop without bills 	Drop with bills
Mechanical Meter 4	Hand paid	<ul style="list-style-type: none"> • Hand paid without JP • Hand paid with JP 	Games won
Mechanical Meter 5	<ul style="list-style-type: none"> • Games • Bills in credits • Bills in currency 	<ul style="list-style-type: none"> • Games • Bills in credits • Bills in currency 	Games
Mechanical Meter 6	<ul style="list-style-type: none"> • Jackpot** • Hand paid won* 	Jackpot**	Jackpot**
Set win payout limit	available	not available	not available
Bonusing	not available	available	available

* If Mechanical Meter 2 has been set to count "Coins out", Mechanical Meter 6 is automatically set fixed to "Hand paid won".

** Mechanical Meter 6 can subsequently be adjusted to count Jackpot hits instead of Jackpot amount by means of PC-Setup software.

Note:

If Multi Denomination Feature has been enabled, metering mode is set fixed to Extended mode.

Note:

A "•" indicates that this meter is adjustable during Initial Set-up and will be displayed.

Non-adjustable meters are not displayed during Initial Setup.

See also Initial Setup Flowchart on page 14.

For a detailed Mechanical Meter definition see Appendix page 36 - 41.

Initial Setup

SET COIN SEPERATION

Select "Hopper Seperation", if a Residual Credits Hopper is installed. Select "Token Seperation", if a Multi Channel Coin Plate and a Token Box is installed to seperate Token from other coins.

Note:

Only available if the machine is configured for Token separation.

SET WIN PAYOUT LIMIT?

This limit determines the way wins are handled. The amount up to the limit will be paid either by the hopper or will go to the credit meter. The amount higher than the limit has to be hand paid.

Note:

Only available if "Jackpot Meter Reporting" has been set to "Standard" mode.

WIN PAYOUT LIMIT

Set the desired limit between 100 and 1000.

Important: Limit is specified in currency!

Note:

Only available if "Set Win Payout Limit?" has been set to "Yes".

SET CREDIT LIMIT

Adjust the maximum amount of credits the machine will allow to accumulate to the credit meter.

Important: Limit is specified in currency!

SET CREDIT LIMIT PAYOUT

Select *whole win* or *partly*.

If set to *whole win*, the whole win amount is paid out directly by hopper/handpay if the limit is exceeded.

If set to *partly* the win amount up to the credit limit is added to the credit meter. Only the part exceeding the credit limit is paid out directly by hopper/handpay.

HANDPAY CANCEL ALLOWED FEATURE

If *enabled*, it is possible for a player to cancel a handpay request (after cash out) by starting a new game.

BONUS ENABLED

The bonusing feature allows player bonuses generated by an external tracking/accounting system.

If bonusing is enabled, it is not possible to configure a "Celebration Limit" via Menu Setup.

Note:

Not available, if "Jackpot Meter Reporting" has been set to "Standard".

CASHLESS TRANSACTIONS

If *enabled*, it is possible to transfer credits to and from the machine by an external system.

SET PROGRESSIVE GROUP#

Some progressive jackpot systems utilize progressive jackpot groups. In this menu the group number can be entered (1-254).

Leave Group at 0 (zero) for:

- non progressive mode
- Mikohn™ Progressives
- Atronic Progressive Link (APL)™

Set Group for:

- System Progressives

COMMBOARD REQUIRED

If this option is set to *Yes*, the machine locks after a Comm Board malfunction or loss of communication to the online system. If set to *No*, the machine runs with or without a Comm Board being detected.

Note:

Set to YES if online communication is vital (e.g. progressive jackpot).

SET BILL ACCEPTOR TYPE

Set according to the installed bill acceptor type.

- CBV V2 (IBS, IDS,...)
used for GPT™ GII and GIII Argus™ acceptors.
- JCM
used for JCM™ acceptors.

RESIDUAL CREDITS PAYOUT

Following payout modes for residual credits (not equaling the value of a tokenized coin) are available:

CASHABLE / PLAYABLE

When residual credits are remaining after a payout the following message is shown in the gameline: "PRESS CASH-OUT FOR HANDPAY OR CONTINUE GAMEPLAY". If the player presses the cash out button again the machine behavior depends on the HANDPAY CANCEL ALLOWED FEATURE setting.

- If the HANDPAY CANCEL ALLOWED FEATURE is set to *enabled*, the following message is shown: "CALL ATTENDANT FOR HANDPAY OR PRESS ANY PLAY BUTTON TO CONTINUE WITH GAMEPLAY". The player panel stays active and the player can place a new bet. In this case the handpay request will be cancelled.
- If the HANDPAY CANCEL ALLOWED FEATURE is set to *disabled*, the machine locks and "CALL ATTENDANT FOR HANDPAY" is displayed on screen. Player has to wait for handpay.

FORCED PLAY OFF

Residual credits remain on the creditmeter. No payout is possible. If cash out button is pressed the following message is shown: "INSERT MONEY OR PLAY OFF RESIDUAL CREDITS". The Player has to play off residual credits in normal gameplay.

PLAY OFF FEATURE

When residual credits are remaining after a payout the following message is shown in the gameline: "PRESS CASH-OUT TO GAMBLE RESIDUAL CREDITS OR CONTINUE GAMEPLAY".

- If the cash out button is pressed the Residual Credits Play Off Feature screen is displayed. This feature screen is similar to the Double Up screen. The residual credits can be gambled to a full coin, which is paid out immediately.
- If the player sets a new bet, the remaining credits can be played off in normal gameplay.

Note:

Only available if in-multipier has been set > 1.

Note:

If Multi Denomination Feature has been enabled, PLAY OFF FEATURE is not available.

AUTOPLAY / CONTINUOUS PLAY

This setting allows to enable / disable the Autoplay and Continuous Play Feature. If enabled an additional on-screen button allows to activate fast Autoplay.

SETUP SUMMARY

A summary of all Initial Setup settings is displayed.

- Press "Cash Out" button to confirm settings.
or
- Press any other button to refuse settings.
Initial Setup will restart from the beginning.



Check all settings thoroughly. Any subsequent modification of settings after pressing "Cash Out" requires a new Clear Memory Procedure.

Further procedures:

- The machine will automatically enter Paytable Configuration after Initial Setup Summary is confirmed.
- Perform PC Setup for hardware configuration, if necessary. For a detailed PC Setup description see pages 27 - 33.
- Set clock and configure further options via Menu Setup to customize the machine according to casino requirements. See manual "Operating" for details.

Menu Settings Error

If a Clear Memory Procedure has been performed, the machine tries to restore all Menu Setup settings out of the triple-stored memory areas. If Menu Setup settings have been cleared (by pressing the Service button during RAM reset power up), the machine locks with the error message MENU SETTINGS ERROR.

- Turn Audit Key to clear the message.
Menu Setup settings are reset to default values.
- Check all Menu Setup settings.
See manual "Operating" for details.

Initial Setup

Note:

Autoplay / Continuous Play is not available with all games themes. See manual "Operating" for feature description.

SETUP SUMMARY

```

MULTI DENOMINATION : DISABLED
COIN VALUE: 1.00
IN-MULTIPLIER: 10
DENOMINATION: 0.10
BILL ACCEPTOR TYPE: CBV V2 (1BS,1DS,...)
ACTIVE CREDITLIMIT: $ 500000
CREDIT LIMIT PAYOUT: WHOLE WIN
HANDPAY CANCEL ALLOWED FEATURE : ENABLED
BONUSING : DISABLED
CASHLESS TRANSACTIONS : DISABLED
PROGRESSIVE GROUP #: 0
COINBOARD REQUIRED : NO
JP REPORTING: EXTENDED
RESIDUAL CREDITS PAYOUT: CASHABLE/PLAYABLE
MECHANICAL METER 1: CREDITS WAGERED (not programmable)
MECHANICAL METER 2: CREDITS WON WITHOUT JP
MECHANICAL METER 3: DROP WITH BILLS
MECHANICAL METER 4: HAND PAID WITHOUT JP
MECHANICAL METER 5: GAMES
MECHANICAL METER 6: JACKPOT (not programmable)

CONFIRM SETUP SUMMARY (YES = CASHOUT BUTTON, NO = ANY OTHER BUTTON)
PLEASE CHECK THE BILLTABLE IN MENU PC-SETUP
  
```

Paytable Configuration with Multi Denomination enabled

Following settings apply, if Multi Denomination Feature has been enabled. If Multi Denomination Feature has been disabled, proceed on page 25.

SET PLAYER DENOMINATIONS

Choose up to five player selectable denominations, which are later accessible during game play. The left column shows all possible denominations.

Set at least two denominations and confirm settings with "Save & Quit". Selected denominations are arranged in correct order and double-entries are deleted automatically.

ACCOUNTING DEMONINATION

This setting defines the base denomination for accounting. Mechanical Meters will use this base denomination for accounting. Values sent to an accounting system are recalculated to this base denomination. Confirm settings with "Save & Quit".

HOW MANY REELS?

Number of reels is always 5.
Confirm with "Cash Out" button.

HOW MANY LINES?

Set appropriate number of pay lines according to button panel labelling.

WHICH BET PER LINE?

Set an appropriate max. bet per line setting according to button panel labelling.

*In some jurisdictions a hardcoded **Maxbet Limit** (in currency) is implemented. In this case no settings exceeding this Maxbet Limit are possible!*

Paytable Configuration

Use the lit buttons to navigate:

left lit button = up
right lit button = down
center lit button = step settings

CHOOSE PAYTABLE

Possible Denominations

0.01
0.02
0.05
0.10
0.20
0.25
0.50
1.00
2.00
2.50
...
10000.00

Set Player Denominations

1. Denom: 0.05
2. Denom: 0.10
3. Denom: 0.25
4. Denom: 0.50
5. Denom: 1.00
Save & Quit

CHOOSE PAYTABLE

Possible Accounting Denomination(s)

0.01
0.05

Accounting Denomination

Acc. Denom: 0.05
Save & Quit

Note:

See also page 25.

Paytable Configuration with Multi Denomination enabled

DENOMINATION / PERCENTAGE ASSIGNMENT

Use this setting to assign a specific payout percentage to a particular player denomination. This allows to assign higher payout percentages to higher denominations. The percentage value is shown by the last two digits of the paytable version. Confirm settings with "Save & Quit"

PAYTABLE SUMMARY

After configuration, a summary is displayed.

- Press "Cash Out" button to confirm settings *or*
- press any other button to reject settings.

By rejection the Paytable Configuration procedure will automatically restart from the beginning.



Check all settings thoroughly. Any subsequent modification of settings after pressing "Cash Out" requires a new Clear Memory Procedure.

CHOOSE PAYTABLE

Possible versions	Denomination	Percentage
5-21-10-A90	0.05	5-21-10-A90
5-21-10-A92	0.10	5-21-10-A90
	0.25	5-21-10-A90
	0.50	5-21-10-A92
	1.00	5-21-10-A92
	Save & Quit	

Proceed with PC Setup (if necessary) and Menu Setup.

Paytable Configuration with Multi Denomination disabled

Following settings apply, if Multi Denomination Feature has been disabled.

HOW MANY REELS?

Number of reels is always 5.
Confirm with "Cash Out" button.

HOW MANY LINES?

Set appropriate number of pay lines according to the button panel labelling.

WHICH BET PER LINE?

Set an appropriate max. bet per line setting according to the button panel labelling.

*In some jurisdictions a hardcoded **Maxbet Limit** (in currency) is implemented. In this case no setting which exceeds the Maxbet Limit is possible!*

Examples: Maxbet Limit = 5\$

9 lines x **5** credits per line x **0,10\$** denomination = **4.50\$** Maxbet is a valid selection.

5 lines x **10** credits per line x **1\$** denomination = **50\$** Maxbet is invalid, selection not possible.

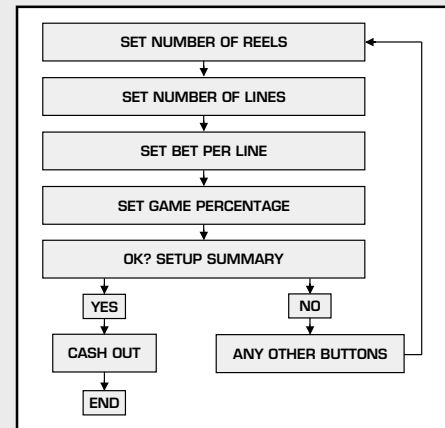
SET GAME PERCENTAGE

Depending on the versions available in the payable EPROM, the Operator can choose the required pay-out percentage. The percentage value is shown by the last two digits of the payable version.

Example: 5-09-05-A94 = 94%

PAYTABLE SUMMARY

After configuration, a summary is displayed and the operator can confirm or reject the settings. By rejection the procedure will automatically restart.



- blank page -

PC Setup

Introduction

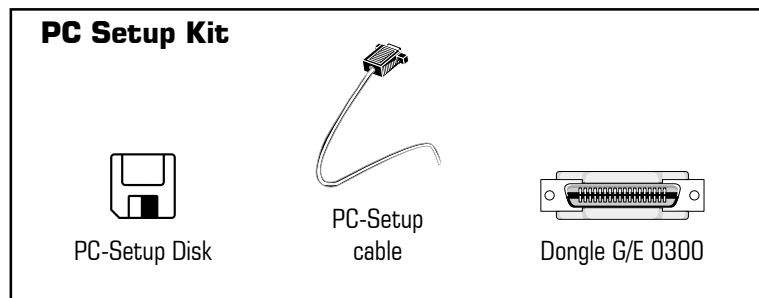
PC-Setup allows operators to

- Change basic hardware configuration
- Upload JCM™ bill tables
- Set additional Jackpot Key functions (remote)
- Enable a Win Limit
- Re-program Mechanical Meter 6 (Jackpot)

Atronic gaming machines are delivered preprogrammed according to customer specific requirements. Due to additional hardware installation, changed handling requirements, updated software or fault correction by the operator, it might be necessary to re-program these options by means of PC-Setup.

PC-Setup is carried out by means of an external computer program called **Mainconfig for Windows**. Also a setup cable and a hardlock dongle is necessary.

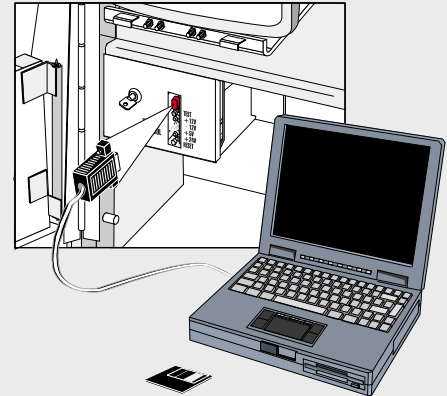
Complete PC Setup Kit is obtainable from Atronic.



Requirements for Notebook / PC

Notebook or PC used for PC-Setup must feature a SUB-D 25 printer port (LPT) to connect the dongle and a SUB-D 9 serial port (COM) to connect the setup cable. Also a floppy disk drive is necessary to read the setup disk.

PC Setup



Note:

PC-Setup program is also available for DOS environment.

Note:

PC Setup Kit also contains an adapter board for older Atronic machines. This board is not required for Cashline™ machines.

Program Installation

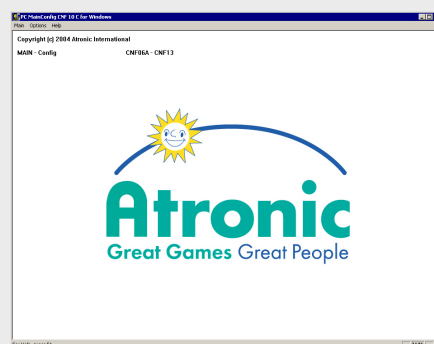
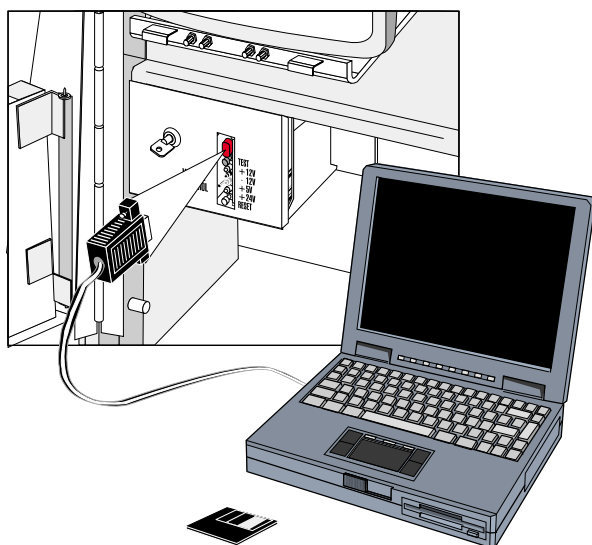
Installation of **Mainconfig for Windows** requires installation of a device driver for the Hardlock Dongle to unlock **Mainconfig for Windows** functionality.

1. Copy files **hldrv32.exe** and **Main_Setup_v6-v13.exe** into a temporary folder on your PC.
2. Execute **hldrv32.exe** and follow instructions on screen to install the Hardlock Dongle device drivers.
3. Reboot PC to initialize drivers.
4. Execute **Main_Setup_v6-v13.exe** and follow instructions on screen to install **Mainconfig for Windows**.

When the installation is completed, there will be a shortcut icon on the desktop called **Main Config**.

Connect Notebook / PC and Machine

1. With the notebook switched off, connect the PC Setup Dongle G/E 0300 to the printer port (LPT1).
2. Connect the PC Setup cable to the RS232 connector on the Master Board.
3. Connect the other end of the cable to the notebook serial port (COM).
4. Power up notebook and start **Mainconfig for Windows** by double clicking the **Main Config** icon.



"Mainconfig for Windows" start screen:

Check actual settings

1. Open machine main door and press Service button at front of the Master Board.
2. Select item "PC-Setup".
3. Step through HARDWARE CONFIGURATION, BILL VALUE, and SOFTWARE SWITCHES AND LIMITS to view actual settings.

Prepare Mainconfig for Windows for Programming

- **Identify and select required Main-Setup version**

1. Open machine main door and press Service button at front of the Master Board.
2. Select item "PC-Setup".

Information in the lower left of the PC Setup start screen indicates which Main-Setup version to select in Mainconfig for Windows (respective which DOS version to use). Current O-Level main software uses "CNF10" for programming.

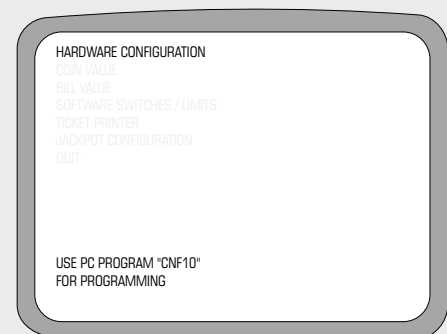
3. In Mainconfig for Windows click the "Options" tab to enter the Preferences Menu. Choose the Main-Setup version required by the machine.

- **Set COM port**

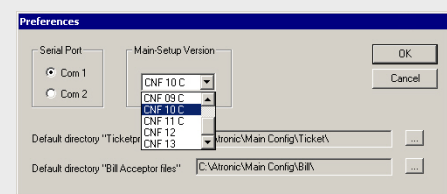
4. Set the serial port (COM 1 or COM 2) where the PC-Setup cable is connected.

- **Set bill table directory**

5. If needed, enter the default directory where your JCM™ bill table files (*.BT1) are stored.



PC-Setup menu at the machine.



Mainconfig for Windows Preferences Menu.

PC-Setup (Main-) Procedure

In order to transfer data between gaming machine and PC/notebook, the same routine (e.g. hardware configuration) has to be active on both the machine and the PC.



First download current configuration. Reconfigure by means of Mainconfig for Windows, then upload new configuration!

1. Enter Service Menu at the machine.
(Open main door and press Service button at front of the Master Board).
2. Select item "PC-Setup" and highlight the desired routine (figure 1).
3. Enter the corresponding routine in the configuration program on the PC (figure 2).
4. Press center lit button on the button panel to initiate data transfer. Following message is displayed:
START TRANSMISSION ON PC
5. Immediately (within a few seconds) click "Download" button on the PC.
6. Alter settings (see next pages for details).
7. Press center lit button on the button panel to initiate data transfer.
8. Immediately click "Upload" button on the PC.
9. If transfer has been successful machine will display current and new (altered) settings (figure 3).
Proceed with next routine or quit application.

PC Setup

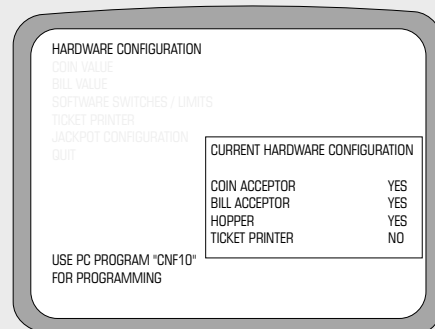


Figure 1: PC-Setup menu at the machine.



Figure 2: Corresponding routine in Mainconfig for Windows..

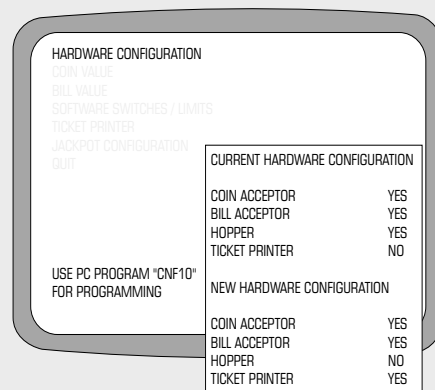


Figure 3: After data transfer.

Routine - HARDWARE CONFIGURATION

This routine allows to configure the machine according to the actual installed hardware. Enable or disable coin and bill acceptor, hopper and set ticket printer type.



A bill acceptor must additionally be enabled by setting the corresponding DIP-switch on the Master Board, S2-4 to ON!

Routine - COIN VALUE

Note:

In most configurations coin values are defined by the machine and are not adjustable via PC Setup. Selecting COIN VALUE in the PC Setup menu, will display message "OPTION NOT USED" or setup options are grayed out.

This routine allows to set the coin value for each channel. With coin comparitors which accept only one type of coin (e.g. CC16) all channels have to be set to the same value.

Additionally an "In-Multiplier" can be set. Accepted **coins and bills** are multiplied with the configured in-multiplier.

Edit the tokenisation string to change the denomination code. Changing the denomination code does not affect the machines coin value!

PC Setup

Hardware Configuration

Coin Acceptor	<input checked="" type="checkbox"/>	Quit
Bill Acceptor	<input checked="" type="checkbox"/>	Upload
Hopper	<input checked="" type="checkbox"/>	Download
Ticket Printer	None	Help

Coin Value

Coin Values		Quit
Channel 1:	1	Upload Download Help
Channel 2:	1	
Channel 3:	1	
Channel 4:	1	
Channel 5:	1	
Channel 6:	1	
In - Multiplier:	1	
Tokenisation String:	\$	

NOTE: If only one Coin Value is needed, all changes must be set to desired value!

WARNING: Changing the In-Multiplier causes a reset of all bookkeeping data!

Routine - BILL VALUE

This routine is intended to upload JCM™ bill table files and additionally allows to alter bill table settings for special applications.

Note:

In most configurations bill values are defined by the bill acceptor and it is not necessary and not recommended to alter bill value settings.

GPT™ Bill Validator:

Any upload of bill table files via PC Setup is not necessary, because acceptor supports automatically bill table upload. It is only possible to change settings in the column "VALUES" for special applications.

JCM™ Bill Validator:

If PC Setup settings have been cleared during Initial Setup (Reset button pressed during RAM Reset power up), it is necessary to upload a so called bill table file into the machine. This bill table file defines bill codes and bill values. Use the bill table file (*.BT1) that matches to a specific JCM™ bill validator firmware.



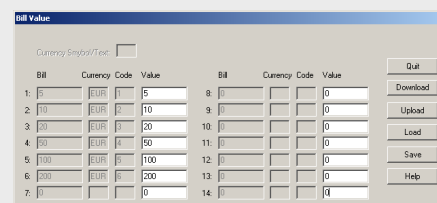
Machine will lock, if uploaded bill table file does not match to the acceptor firmware.

Example: *Bill acceptor is programmed to accept Euro currency but a bill table for \$ currency or no bill table at all is loaded.*

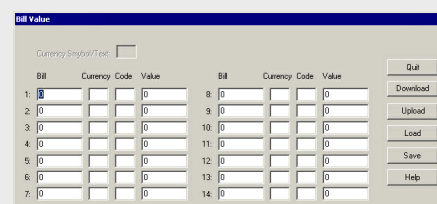
Upload procedure

1. Click "Load" and select the required bill table file (e.g. EURO.BT1).
2. Click "Upload" to send the bill table to the machine.

Machines configured to US-\$ (default) need no bill table configuration.



Bill	Currency Code	Value	Bill	Currency Code	Value
1	EUR	5	8		0
2	EUR	10	9		0
3	EUR	20	10		0
4	EUR	50	11		0
5	EUR	100	12		0
6	EUR	200	13		0
7		0	14		0



Bill	Currency Code	Value	Bill	Currency Code	Value
1		0	8		0
2		0	9		0
3		0	10		0
4		0	11		0
5		0	12		0
6		0	13		0
7		0	14		0

Routine - SOFTWARE SWITCHES & LIMITS

Key Mode

Allows to allocate additional functions to the Jackpot Key.

- **NONE**
No additional function.
- **KNOCK OFF**
If selected, turning the Jackpot Key will clear all player credits on the credit meter and book them to the "Key Credit Out" soft meter.
- **REMOTE**
Enables the remote credit function. Turning Jackpot Key allows to book credits to the credit meter.

Win Limit

- If enabled, a (single) win exceeding 1200 currency units causes the machine to lock up and the win amount has to be hand paid.

Key Off Limit

- Option not used. Setting will be ignored.

Progressive Jackpot Meter Mode

Allows to re-program Mechanical Meter 6 (Jackpot)

- **HITS**
Mechanical Meter 6 counts number of Jackpot hits.
- **VALUE**
Mechanical Meter 6 counts value (in credits) of Jackpot hits.

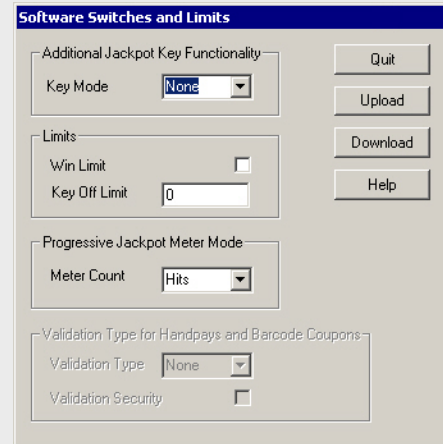
Validation Type for Handpay and Barcode Coupons

- Option not used.

Routine - TICKET TEXT WESTREX

- Option not supported. Any setting will be ignored by the machine.

PC Setup

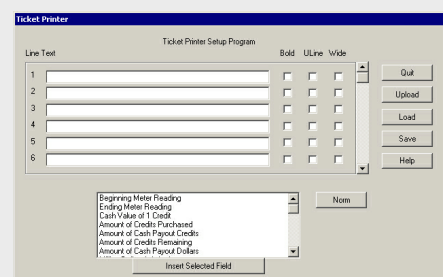


Note:

See manual "Operating" for details about remote credit function.

Note:

In some jurisdictions Win Limit must not be disabled. According software versions will ignore this setting.



Jackpot Configuration (Optional)

Jackpot Configuration is only necessary if the machine is part of a progressive Jackpot link. If Multi Denomination Feature has been enabled, progressive mode is not supported.

(Progressive) Jackpot Configuration is carried out by means of an external user program (similar to PC Setup).

Requirements for Jackpot Configuration

- Software "A-Link Config"
- Hardlock dongle (as used for PC Setup)
- Setup cable (as used for PC Setup)

Carry out Jackpot Configuration **before** the machine is put into play mode. Do not insert any credits.

Master Board has to be equipped with a progressive mode Security Device on U35.

Note:

*See manual "**Progressive Jackpots**" for detailed information about Jackpot Configuration. Manual provides information how to setup:*

- System Progressives
- Mikohn™ Progressives
- Atronic Progressive Link / APL™

At this point Basic Setup is finished, proceed with Menu Setup, which is described in manual "Operating".

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Mechanical Meter Definitions for STANDARD Metering

If more than one definition is stated in this description, this meter is programmable during Initial Setup. Enter Service Menu or Audit Menu and select "Configurations" to view actual settings.

MECHANICAL METER 1

(Mechanical Meter label: Credits Wagered)

- **CREDITS WAGERED**
Total number of credits which have been bet.

MECHANICAL METER 2

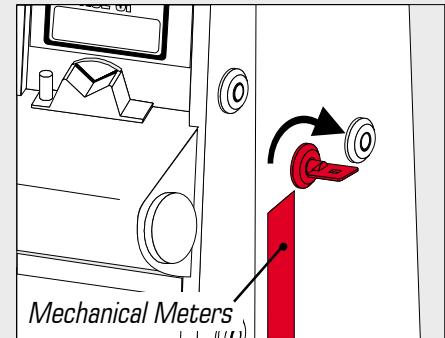
(Mechanical Meter label: Credits Won)

- **CREDITS WON**
Total number of credits which have been won, **except progressive Jackpot wins!**
- **COINS OUT**
Total value of won credits wagered + won credits paid from hopper + credits won booked to card.

MECHANICAL METER 3

(Mechanical Meter label: Coins Drop)

- **TOTAL DROP**
Total value of credits from stacked bills and coins to dropbox.
- **COINS DROP**
Total value of credits from coins to dropbox.



Turning Audit Key illuminates Mechanical Meters.

Mechanical Meter Definitions for STANDARD Metering

MECHANICAL METER 4

(Mechanical Meter label: Hand Paid)

- **HAND PAID**

Total value which has been hand paid (credits cancelled) **initiated automatically and/or by a cash out.** Including Key credit out and non progressive Jackpots.

MECHANICAL METER 5

(Mechanical Meter label: Games)

- **GAMES**

Total number of games played.

- **TOT. BILLS CRED**

Total value of accepted bills in credits.

- **TOT. BILLS CURR**

Total value of accepted bills in currency.

MECHANICAL METER 6

(Mechanical Meter label: Jackpot)

If Mechanical Meter 2 has been set to **CREDITS WON** during Initial Setup, Mechanical Meter 6 counts:

- **JACKPOT**

Non progressive configuration:

- Amount of Top award values won (in credits).
- Top Award hits.

Progressive configuration:

- Amount of progressive Jackpot values won.
- Progressive Jackpot hits.

If Mechanical Meter 2 has been set to **COINS OUT** during Initial Setup, Mechanical Meter 6 counts:

- **HAND PAID WON**

Total value of won credits hand paid + progressive and non-progressive Jackpot wins + key credit out.

Note:

*If set to **Jackpot**, meter 6 can be re-programmed via PC-Setup (PC Setup/Software Switches and Limits/Progressive Jackpot Meter Mode) to count either Jackpot value (in credits) or number of Jackpot Hits.*

Mechanical Meter Definitions for EXTENDED Metering

If more than one definition is stated in this description, this meter is programmable during Initial Setup. Enter Service Menu or Audit Menu and select "Configurations" to view actual settings.

MECHANICAL METER 1

(Mechanical Meter label: Credits Wagered)

- **CREDITS WAGERED**
Total number of credits which have been bet.

MECHANICAL METER 2

(Mechanical Meter label: Credits Won)

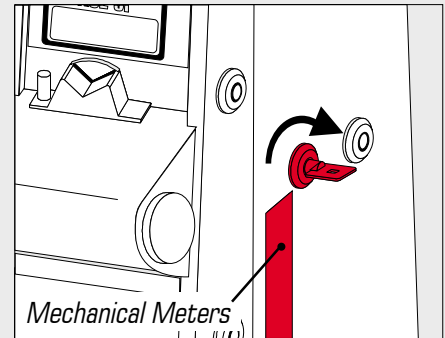
- **CREDITS WON W/O JP**
Total value which has been won, except wins/bonus wins that result directly in a hand pay because a limit was exceeded.
- **CREDITS WON WITH JP**
Total number of credits which have been won, except progressive Jackpots.

CREDITS WON W/O JP + Non progressive Jackpots + Bonus wins

MECHANICAL METER 3

(Mechanical Meter label: Coins Drop)

- **TOTAL DROP**
Total value of credits from stacked bills and coins to dropbox.
- **COINS DROP**
Total value of credits from coins to dropbox.



Turning Audit Key illuminates Mechanical Meters.

Mechanical Meter Definitions for EXTENDED Metering

MECHANICAL METER 4

(Mechanical Meter label: Hand Paid)

- **HAND PAID W/O JP**

Total value of hand pays **initiated by a cash out** (exceeding hopper payout limit; hopper empty or hopper jam) + key credit out.

- **HAND PAID WITH JP**

Total value of hand pays (credits cancelled) **initiated automatically and/or by a cash out**. Including Key credit out, bonus wins that directly end in a hand pay and non progressive Jackpots, **except progressive Jackpots**.

MECHANICAL METER 5

(Mechanical Meter label: Games)

- **GAMES**

Total number of games played.

- **TOT. BILLS CRED**

Total value of accepted bills in credits.

- **TOT. BILLS CURR**

Total value of accepted bills in currency.

MECHANICAL METER 6

(Mechanical Meter label: Jackpot)

- **JACKPOT**

Non progressive configuration:

All wins that **directly** end in a hand pay (wins above the celebration limit and active credit limit, including bonus wins that exceed these limits), **including Top Award wins!**

Progressive configuration:

All wins that **directly** end in a hand pay (wins above the celebration limit and active credit limit, including bonus wins that exceed these limits), **except progressive Jackpot wins!**

Note:

Mechanical Meter 6 (Jackpot) can be re-programmed via PC-Setup (PC Setup/Software Switches and Limits/Progressive Jackpot Meter Mode) to count either Jackpot value (in credits) or number of Jackpot Hits.

Mechanical Meter Definitions for EXTENDED WITH COINS OUT Metering

MECHANICAL METER 1

(Mechanical Meter label: Credits Wagered)

- **CREDITS WAGERED**

Total number of credits which have been bet.

MECHANICAL METER 2

(Mechanical Meter label: Credits Won)

- **COINS OUT**

Total value of won credits wagered + won credits paid from hopper + credits won booked to card.

MECHANICAL METER 3

(Mechanical Meter label: Coins Drop)

- **DROP WITH BILLS**

Total value of credits from stacked bills and coins to dropbox.

MECHANICAL METER 4

(Mechanical Meter label: Hand Paid)

- **GAMES WON**

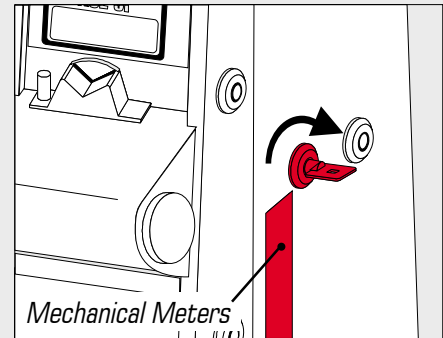
Total number of games won (games lost in Double-Up feature are **not** booked to this meter!).

MECHANICAL METER 5

(Mechanical Meter label: Games)

- **GAMES**

Total number of games played.



Turning Audit Key illuminates Mechanical Meters.

Mechanical Meter Definitions for EXTENDED WITH COINS OUT Metering

MECHANICAL METER 6

(Mechanical Meter label: Jackpot)

- **JACKPOT**

Non progressive configuration:

All wins that **directly** end in a hand pay (wins above the celebration limit and active credit limit, including bonus wins that exceed these limits), **including Top Award wins!**

Progressive configuration:

All wins that **directly** end in a hand pay (wins above the celebration limit and active credit limit, including bonus wins that exceed these limits), **except progressive Jackpot wins!**

Note:

Mechanical Meter 6 (Jackpot) can be re-programmed via PC-Setup (PC Setup/Software Switches and Limits/Progressive Jackpot Meter Mode) to count either Jackpot value (in credits) or number of Jackpot Hits.

Master Board #31 DIP Switch Settings

Table refers to O-Level Main software.

Switch			Description
1-1			Holland specific requirements
ON			Holland requirements enabled
OFF			Holland requirements disabled
1-2			Hopper empty procedure
ON			Hopper must be refilled, payout continues after main door is closed
OFF			Left amount is hand paid
1-3	1-4		Over maximum payout limit procedure
OFF	OFF		Pay limit from hopper, rest hand paid
OFF	ON		Total amount is hand paid
ON	OFF		Pay coins from hopper until amount reaches next full hundred, rest is hand paid
1-5			ROM SIG calculation
ON			ROM SIG over first 128 byte of MAIN & PAYTABLE
OFF			ROM SIG over whole MAIN eeprom
1-6			not used
1-7	1-8	2-2	Coin in procedure
ON	ON	OFF	Inserted coins are added to the BET or IN meter until maximum bet is reached, further coins are rejected
ON	ON	ON	Inserted coins are added to the BET or IN meter until maximum bet is reached, the game is started automatically at maximal bet
OFF	ON		Inserted coins are added to the BET or IN meter until maximum bet is reached, further coins are added to the CREDIT meter
OFF	OFF		Inserted coins are added to the CREDIT meter, the IN meter is not displayed

Switch			Description
2-1			Win payout procedure for all wins
ON			Pay win amount from the hopper
OFF			Add win amount to the credit meter
2-3			Hopper jam procedure
ON			Hopper jam must be cleared, payout continues after main door is closed
OFF			Left amount is hand paid
2-4			Bill validator usage
ON			Bill validator is enabled
OFF			Bill validator is disabled (not equipped)
2-5			Top prize won procedure
ON			GM assumes top prize is paid by some progressive system and will show win amount "0"
OFF			GM pays top prize amount according to pay table
2-6			not used
2-7			Game start
ON			Bet is forced before new game can be started
OFF			Game is started with last bet (only used by standard slot panel) (3 reel games)
2-8			Number of candles
ON			Top light with 2 lamps
OFF			Top light with 3 lamps

Switch			Description
3-1			not used
3-2			not used
3-3			not used
3-4			not used
3-5			not used
3-6			not used
3-7			Coin diverter malfunction procedure
ON			GM locks with error message
OFF			Diverter malfunction is not reported
3-8			Bill validator operation mode
ON			Accepted bills are changed immediately by paying bill value from the hopper
OFF			Value of accepted bill is added to the credit meter

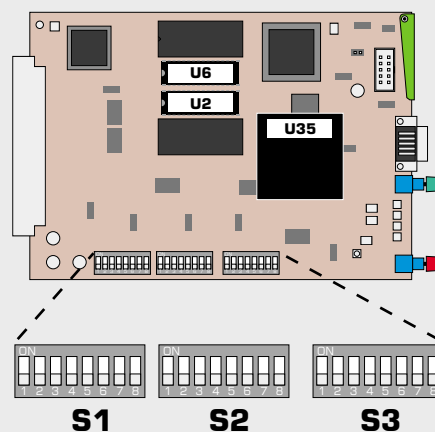
Note:

Master Board DIP switches are factory pre-set according to customer requirements.

Please check for correct settings before putting the machine into operation.

Note:

If Multi Denomination Feature is enabled, configuration of an BET or IN meter is not possible.



Using Master Board #31 with previous software versions

Master Board #31 has been developed to meet enhanced technical requirements of game software with Multi Denomination Feature. To obtain full downwards compatibility, correct jumper setting is required.

Master Board #31 Jumper setting

Master Board #31 uses a jumper for clock frequency selection. Whether this jumper has to be set is indicated by the "Hardware Index" of the main software.

Current EPROM Naming:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
O	_	-	B	A	B	O	0	2	-	A	A	A	A	A	-	C	A	-	S	T	D	S

Position 17 indicates the Hardware Index.

Old EPROM Naming:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
O	_	-	B	A	B	_	-	A	-	A	-	C	A	-	S	T	D	S

Position 13 indicates the Hardware Index.

Clear Memory Procedure

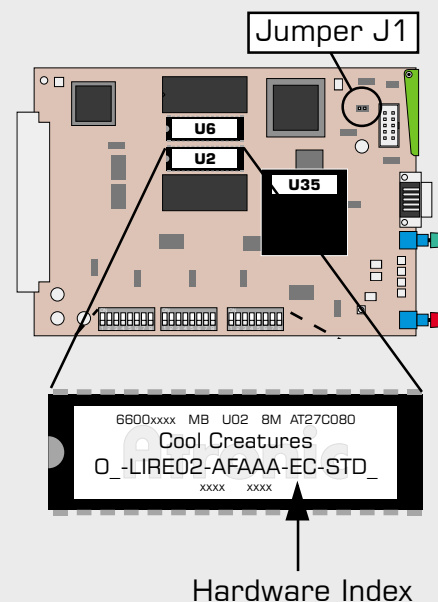
If a main software without Multi Denomination Feature is installed, also previous versions of RAM Reset EPROM can be used. See table for jumper setting during Clear Memory Procedure.

Jumper J1 setting during Clear Memory Procedure	Hardware Index "C"	Hardware Index "D"	Hardware Index "E"
RAM Reset 09	OFF	n/a	n/a
RAM Reset 11	OFF	OFF	n/a
RAM Reset 12	ON	ON	ON

Operation

See table for jumper setting during normal operation.

	Hardware Index "C"	Hardware Index "D"	Hardware Index "E"
Jumper J1 setting during operation.	OFF	ON	ON



n/a = not allowed

Comm Board 68k, Rev. 2.10

DIP Switch Settings for SAS Protocol

Tables refer to recent O-Level Comm software.

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

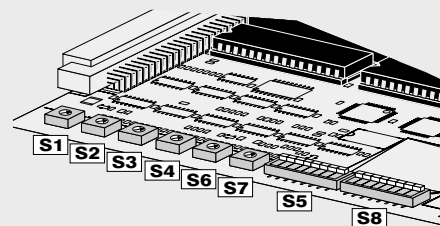
Switch			Function
5-1	5-2	5-3	
OFF	OFF	OFF	Mikohn MS-10 Progressive
ON	OFF	OFF	Accounting Progressive
OFF	ON	OFF	APL Progressive (if included in eprom)
ON	ON	OFF	Mikohn MS-27 Mystery
OFF	OFF	ON	Mikohn MS-27 Mystery + Progressive
ON	OFF	ON	Accounting System 3rd Channel
OFF	ON	ON	not used, defaults to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

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

Rotary Switches
S1-S4, S6, S7

DIP-Switch 5

DIP-Switch 8



Appendix

Note:

Only Comm software with protocol identifier "SM" (SAS Multidenom) will support Multi Denomination Feature.
Example: 0_-SM-MA-STD_-B-07A

Comm Board 68k, Rev. 2.10

DIP Switch Settings for Grips Protocol

Tables refer to recent O-Level Comm software.

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

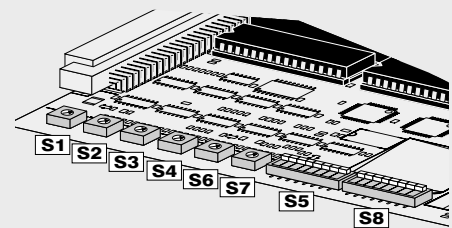
Switch			Function
5-1	5-2	5-3	
OFF	OFF	OFF	Mikohn MS-10 Progressive
ON	OFF	OFF	Accounting Progressive
OFF	ON	OFF	APL Progressive (if included in eprom)
ON	ON	OFF	Mikohn MS-27 Mystery
OFF	OFF	ON	Mikohn MS-27 Mystery + Progressive
ON	OFF	ON	not used, defaults to Mikohn MS-10
OFF	ON	ON	not used, defaults to Mikohn MS-10
ON	ON	ON	not used, defaults to Mikohn MS-10
5-4			
ON			APL EGM act as Master
OFF			APL EGM act as Slave
5-6			
ON			Activate implemented Accounting System
OFF			Disable implemented Accounting System
5-7			
ON			not used
5-8			
ON			not used

Switch	Function
8-1	
ON	not used
8-2	
ON	not used
8-3	
ON	not used
8-4	
ON	not used
8-5	
ON	not used
8-6	
ON	not used
8-7	
ON	not used
8-8	
ON	Message if accountingsystem isn't connected
OFF	No message if accountingsystem isn't connected

Rotary Switches
S1-S4, S6, S7

DIP-Switch 5

DIP-Switch 8



Appendix

Note:

Comm software using GRIPS protocol does not support Multi Denomination Feature.

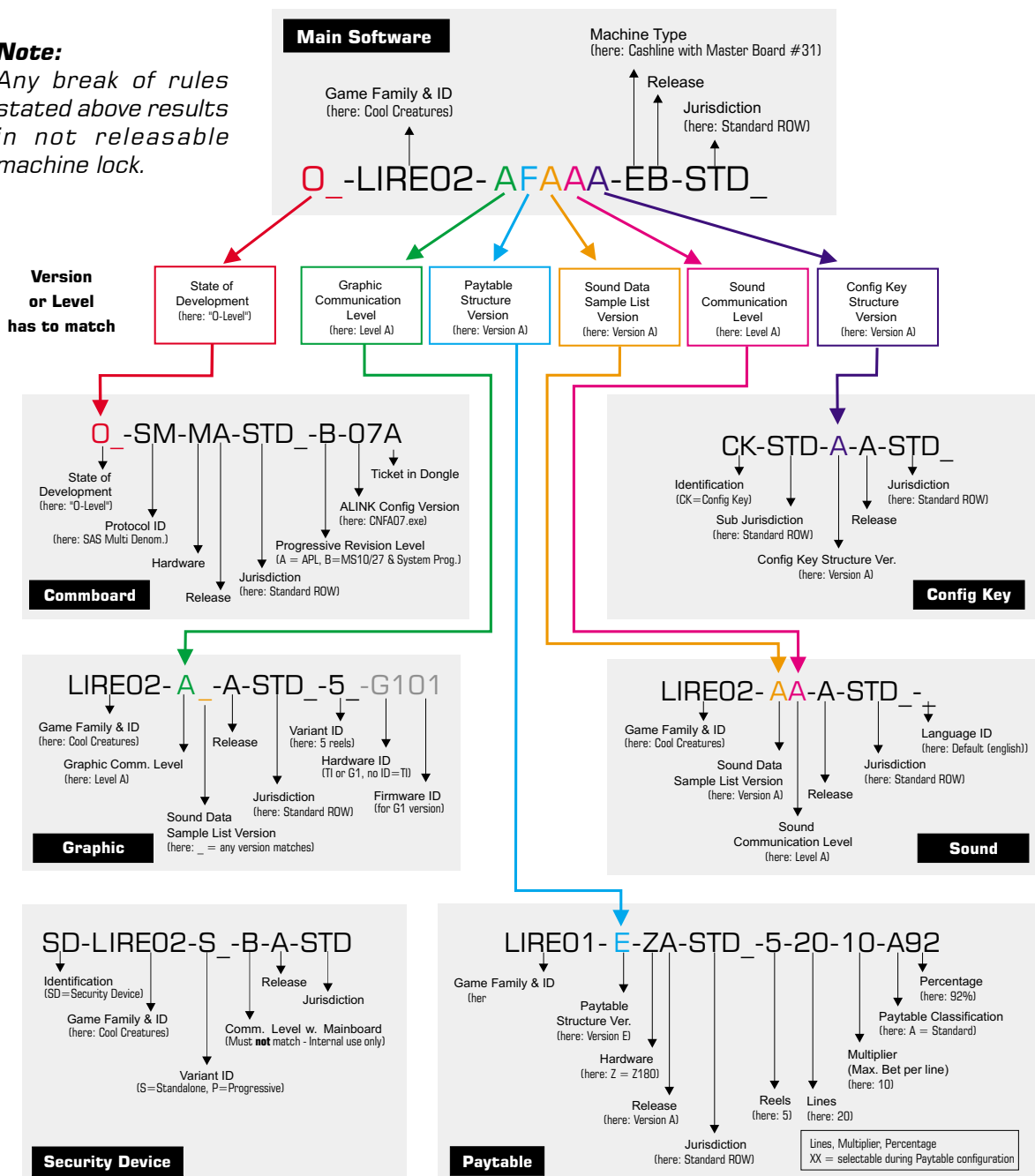
Definition of EPROM naming

Atronic EPROMs are named according to Atronic's Definition of EPROM Naming. This helps to identify and match Software versions. Naming of a particular software is stated on EPROM labels or can be checked via "Audit Menu / Configuration".

- *Game Family* must match for Main, Paytable, Graphic, Sound and Security Device.
- *Communication Level* and *Structure Version* has to match.
Exception: Main Software is downwards compatible with Paytable software.

Note:

Any break of rules stated above results in not releasable machine lock.



Note: All software versions stated here are only given for example to explain EPROM namings.