



## Firmware Updates Information 03.11.2019

Note: This Firmware Update Information is in reverse order - the latest update is listed first

### Version 3.50 – published 03.11.2019

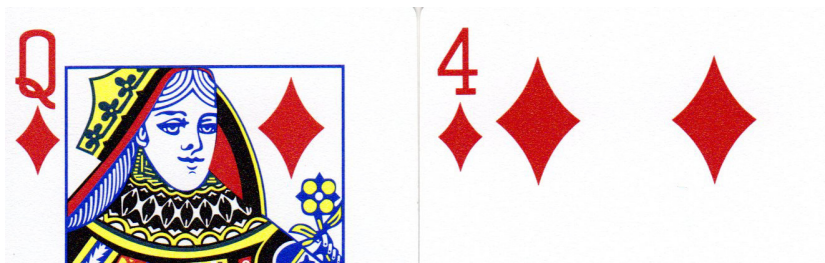
- fixed “Error 255” issue which happened while dealing from the Front Display using Small Card Index setting.
- automatically check and fix FRAM integrity. In rare cases FRAM corruption can cause “Runtime Error 6 - Overflow” in PC software.

### Version 3.46 – published 23.07.2019

- fixed some minor bugs causing communication problems.

### Version 3.44 – published 08.06.2019

- improved recognition of new ACBL plastic cards with long diamond symbol:



- added support for new hardware versions and new camera.
- corrected bug which caused dealing to incorrect pocket for “Read” function (this bug exists for versions 3.30 – 3.42)
- fixed most of communication issues (Lost communication errors)

### Version 3.28 – published 19.06.2018

- improved recognition of aces for Bridge Buddy cards
- improved recognition of 8 and B for Dutch cards
- added additional filtering to improve recognition of worn cards like the ones below:



To turn on this filtering:

- Go to "Maintenance"
- Change "Recognize Option" value to 66.
- Click on "Save parameters" to store change into machine.

Please note that this filtering only improves recognition such cards to a certain point – when the condition of cards becomes worse, recognition will eventually not be possible.

This filtering can decrease recognition performance for cards with small pips or with very fine prints – so it is recommended to not use this feature for such cards.

### Version 3.20 – published 17.05.2017

- changed gate operation to improve dealing for plastic cards with high static effect. This change does not completely eliminate plastic cards the static effect but does reduce it. This change decreases dealing time by 0.2s. New minimum dealing time is 5.6s.
- eliminated problems with recognition of the jumbo cards for machines with yellow feeder rollers.
- changed motor on sequence to reduce peak power during start up.

### Version 3.12 – published 06.09.2015

- improved recognition especially for 4 color cards (with orange diamonds and grey clubs)
- improved recognition for Swedish Svenska Bridgeforlaget cards (eliminated Duplicated Card errors on K)

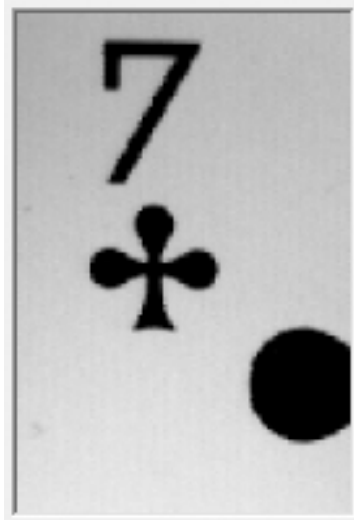
### Version 3.10 – published 12.10.2014

- added functions required by Dealer4+ machine
- improved recognition of cards with an outside frame (mostly French and Dutch cards)
- eliminated "Duplicate Card Error" which sometimes occurred for no reason at the start of dealing (this problem existed in versions 3.00 - 3.06)

### Version 3.06 – published 12.02.2014

- increased dealing speed (to average 5.4-5.5s)
- improved reading Danish cards

- added special option to recognize cards where the 7 has an elongated top left section as shown below. This option can be enabled by setting **Recognize Option** to 16 in the **Maintenance** screen.



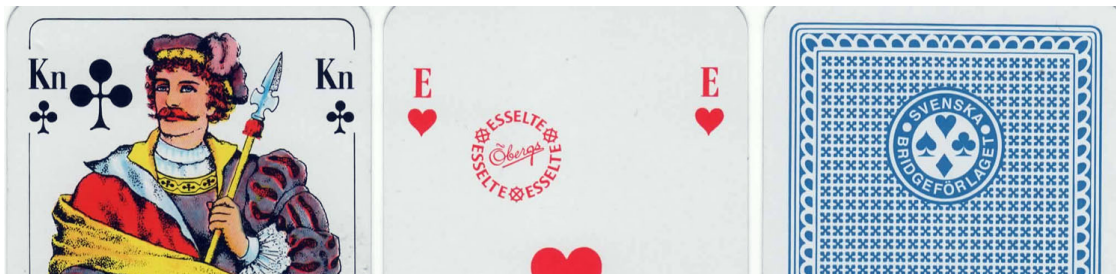
- some other modifications necessary due to a new version of electronic pcb.

### Version 2.92 – published 08.08.2013

- fixed a bug which caused recognition errors for Large Index (Jumbo) cards when "Use Board Number Reader as Board Switch" was selected

### Version 2.90 – published 17.02.2013

- added recognition for Swedish Svenska Bridgeforlaget cards:



These cards require following settings:

- **Card Index** should be set to **Small**
- **National Settings** should be set to **Swedish**

- **Card Type** should be set to **Standard**
- **Card Font** should be set to **Fine**

It is recommended to perform an Auto Setup before using these cards. See chapter 9.8 of Software Manual for more information.

Swedish cards require PC software version 4.50 or later.

Due to the very fine print on these cards it is expected that the number of errors will be higher than normal but it should be possible to deal them.

### Version 2.88 – published 30.01.2013

- fixed problem with duplicate card on Queens for certain types of cards - existed in version 2.86

### Version 2.86 – published 16.12.2012

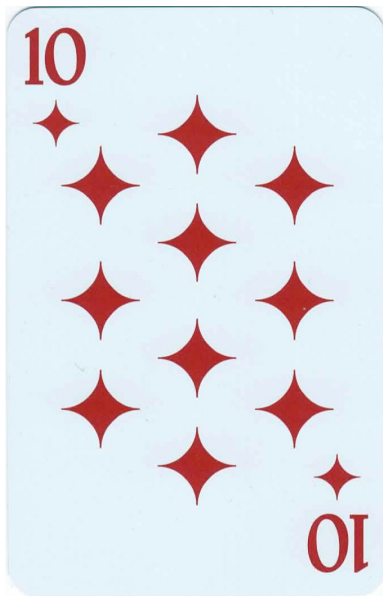
- changes required for new electronic board (machines with serial number 5028 or higher)
- corrected minor issue with clubs or spades recognition for jumbo cards (existed in version 2.78)
- improved recognition of clubs and spades for cards with outside frames.

### Version 2.78 – published 12.07.2012

- Corrected a problem with club recognition for Japan Nintendo Cards:



- added recognition of unusual diamond suit shapes for DESJGN cards:



NOTE: these cards require the MAX SYMBOL X value to be changed from the typical 64 to 75.

#### Version 2.76 – published 01.04.2012

- Improved recognition of the cards with outside frames when clubs and spades suits symbols have fine lines (French FFB cards)

#### Version 2.74 – published 15.01.2012

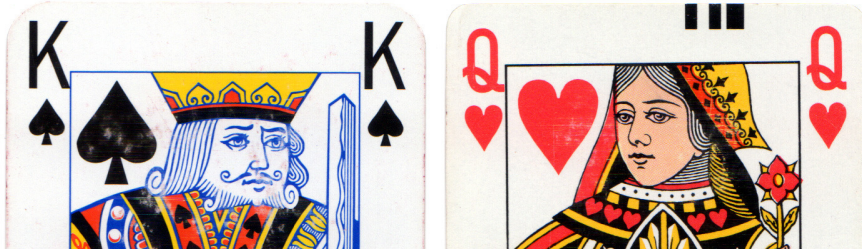
- Fixed a bug that existed in version 2.66 and 2.68 which caused recognition errors for French aces (1RDV cards)
- Added possibility of using Board Number Bar-coded Labels as Board Switch (Requires PC software version 4.40 or later).

#### Version 2.68 – published 05.11.2011

- Improved histogram procedure

#### Version 2.66 – published 26.11.2011

- Improved algorithm for cards with outside frame
- Changed recognition algorithm for cards when card index touches inside frame



- Added recognition of cards where outside frame touches the suit symbol (French Ecole de Bridge cards)



- Added recognition of cards where something touches the suit symbol from bottom (French Societe Generale cards)



- Changed algorithm to recognize diamond suit to make it more robust.

### Version 2.64 – published 04.09.2011

- Minor corrections

### Version 2.62 – published 20.08.2011

- Fixed a bug in versions 2.56, 2.58 and 2.60 which may cause “Card Recognize Error” or “Duplicate Card Error” specially for older machines. It is recommended for everybody using above versions to update.

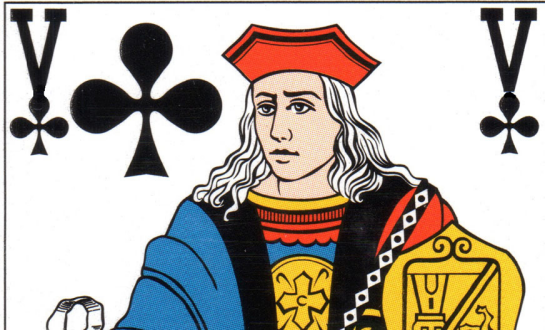
### Version 2.60 – published 05.08.2011

- Corrected recognition of 7s with serif to eliminate mistakes with 2s
- Improved recognition when something is touching the symbol from the right
- Improved recognition of spade and clubs for cards with very small print



### Version 2.58 – published 16.06.2011

- Improved automatic camera adjustment to make it less sensitive to external light
- Improved recognition of cards with outside frame
- Added recognition of French Bridge Diffusion cards with symbol touching or too close to the suit:



### Version 2.56 – published 29.04.2011

- Minor correction with 10 recognition

### Version 2.54 – published 09.04.2011

- Fixed problem with duplicate card on Kings for certain types of cards

### Version 2.52 – published 13.02.2011

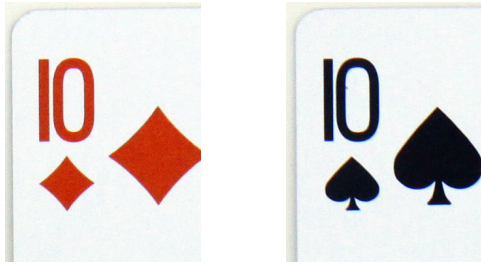
- Fixed problem with Error 43 happened during queen recognition for certain types of cards

### Version 2.50 – published 27.10.2010 (Includes changes in earlier versions 2.42 – 2.48)

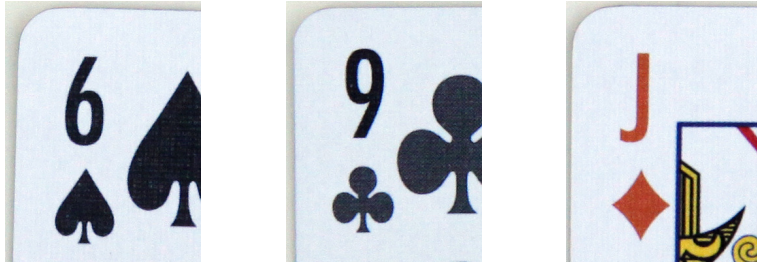
- Corrected recognize cards when something is touching the symbol on the right side:



- Added recognition of 10 with very close 1 to 0:



- Added recognition of the following shape of 6 and 9 and a narrow J:



- Switched off illumination LEDs when cards are not in the feeder.
- Fixed problem with Q and 10 recognition which was causing "Duplicate Card Error"

#### Version 2.40 – published 05.10.2009

- Improved reading clubs and spades with very fine print
- Added Board Reader support (required Delaer4 with serial number 4163 or higher)
- added Jumbo Card reading (required Dealer4 with serial number 4218 or higher)

#### Version 2.36 – published 23.10.2008

- Improved capture card picture quality
  - Sped up dealing process
  - Fixed problem with "Duplicate Card Error" which may happen for cards with orange diamond suit.
- (Please note that this version changes LED illumination behavior which are now on all the time during dealing).

#### Version 2.32 – published 07.08.2008

- added Danish cards (requires PC Software version 4.22 or later)

#### Version 2.30 – published 06.06.2008

- added French, Dutch and German cards (requires PC Software version 4.20 or later)
- Improved card recognition algorithms



### Version 2.26 – published 10.04.2008

- Improved recognition of cards with “grey” or “green” clubs suit symbols.

### Version 2.25 – published 01.04.2008

- Fixed Gate Error (usually “Card did not go to South” or “Extra Card in South”) which may happen on the last card in a dealt board.

### Version 2.24 - published 28.03.2008:

- German card support added – Dealer4 can now read German cards with AKDB symbols.
- Fixed problem with “Duplicated Card” Error which sometimes happened for no real reason.
- Allows use of Braille coded cards