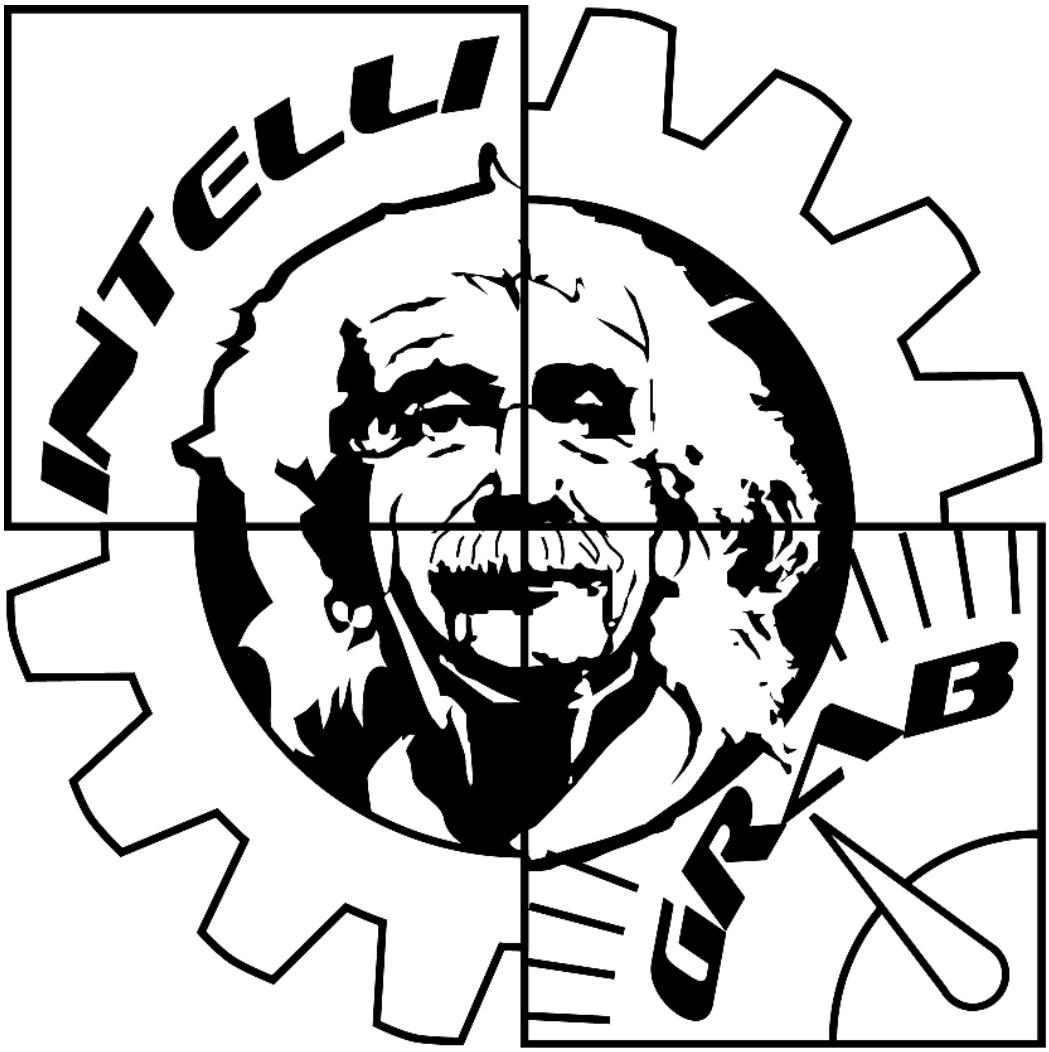

English Manual
Intelligrab
Operating System
01xx rev 06 +

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Table of contents

Introduction 3
Principal of operating 3
The course of the game 4
Result-oriented operating 4
Working with the Intelli Programmer 6
How to set a new crane 7
Grab models 8
How to set my claw 11
Intelli Controller : the complete menu 12
Possible warnings and errors 16
Equipment of a player 18
The Intelli Controller 19
The power supply 20
The gantry: functioning 20
The gantry : parts 21
The gantry : Bill of materials 22
Problems and solutions 23
Technical specifications 24

English manual
Intelli Controller 01xx rev 06+

Introduction

Congratulations with the purchase of your crane with Intelli Technology. We advise you to read this manual completely so you learn the possibilities and the use of this system.

The operator must know that he can not take any options or functions in use which are against the local security or legal prescriptions.

Principal of operating

There are a few keys that can not be lost out of sight:

A crane must be made attractive by good-looking toys, the right music and light, etc. A good looking crane attracts players and, don't forget: If they watch someone playing, they want to play themselves!

Key number 2 : a player must fall under the spell of the game. He must have the feeling that he controls the game, that the machine does what he wants and that the grab can pick up the merchandise easily, but that he played not accurate enough and wants to try again…
Don't let a persevering player go home with empty hands. A lot of onlookers have probably followed the game and also want to give it a try.

Key number 3: Businessmen among you already understand the story : It concerns turnover and margins of profit. As a operator, you must try to find the right proportion between both factors.
Our experience teaches us that a payout-percentage from 25% to 40% gives the best results.
To obtain this result, your machine is equipped with the most modern technology.

The operating system, the Intel Controller, is equipped with an Intelli Programmer. This is a unique and unequalled duo. Through the LCD display and a few pushbuttons, a lot of information about the functioning of the system can be displayed. Also a lot of settings can be made and a few testfunctions can be activated.

The system can be characterised by 2 essential qualities: on the one hand extremely powerful grabbers, of which the power can be set quick and accurate, and on the other hand the payment regulator that regulates that there is only won what is desired by the operator.

Very important is to tune the merchandise and the machine. The size of the merchandise must be adapted to the size of the machine.

Even more important: choose the right grab for the chosen merchandise and pay attention to the size and weight.

The course of the game

A player throws in money and gets credits to play. By means of the buttons or joystick, he can move the gantry above the playerfield (sometimes after the gantry has placed itself to a programmed point above the playerfield).
When he lets the button go exactly above the chosen object (or when the firebutton of the joystick is pushed), the grab is going down and takes the object with the set power.
The player wins when the merchandise falls right into the prizehole. Different aspects of the game can be set.

Result-oriented operating

We assume that your machine is completely set to your wishes. If this is not the case, go to 'How to set a new crane' (further in this manual).

Evaluation of the payout

When you turn on the crane, the Intelli Programmer shows the PAYOUT-INFORMATION display. Here you can see the results of your crane during a short time and compare it with the expected result ('current percentage xx%' and 'set percentage xx%').

Through the changing win-results, as a result of the random strong grabbing, as well as the skill of the player, this percentage can fluctuate considerably.
The payout regulator, which recalculates the result after every 'win', must be capable of approaching the set percentage.

The grab-success indicates in which extent a winning game leads to a prize. A grab-success of 100% is perfect: for each game with higher pick up power, a 'win' is registered. Values between 50 and 150% are fine. Extremely high values indicate a too strong grab, extremely low values indicate a too weak grab.

Warnings and possible errors

The operator is informed through warnings and errors on the display. They appear when a malfunction is detected. Problems that cause a system failure, are indicated by an error and the game is stopped by blocking the money-insertion. The problem must be solved and the error must be cleared before the game can restart.
Information about possible problems lead to a warning. This warning can be ignored.
For detailed information, refer to 'Possible warnings and errors.'
If you want to contact the technical department, keep the information of the identification-display ready. You can find it in the menu 'INTELLIGRAB'.

Emptying the crane

The menu 'CASHBOXES' indicates separately the contents of the different compartments. These meters are used to check the emptying of the cashboxes.
Besides the coin-meter there is the bill-meter that can be used for bills, tokens or creditcards. The unit of the meter is not always the same as the monetary unit. Although every coin-entry has a money value, some coin-entries can be set with a different unit (e.g pieces).

After emptying the cashbox, the meters can be copied and/or cleared.

Filling the crane

An important rule is that the merchandise shows little differences in shape, weight and cost price in each player-section.
After filling the crane with similar merchandise, the settings don't have to be changed.
It's advisable to evaluate the 'grab-succes' parameter so you can change the grab power if needed. Be aware that a change of only a few percentages can cause big changes.

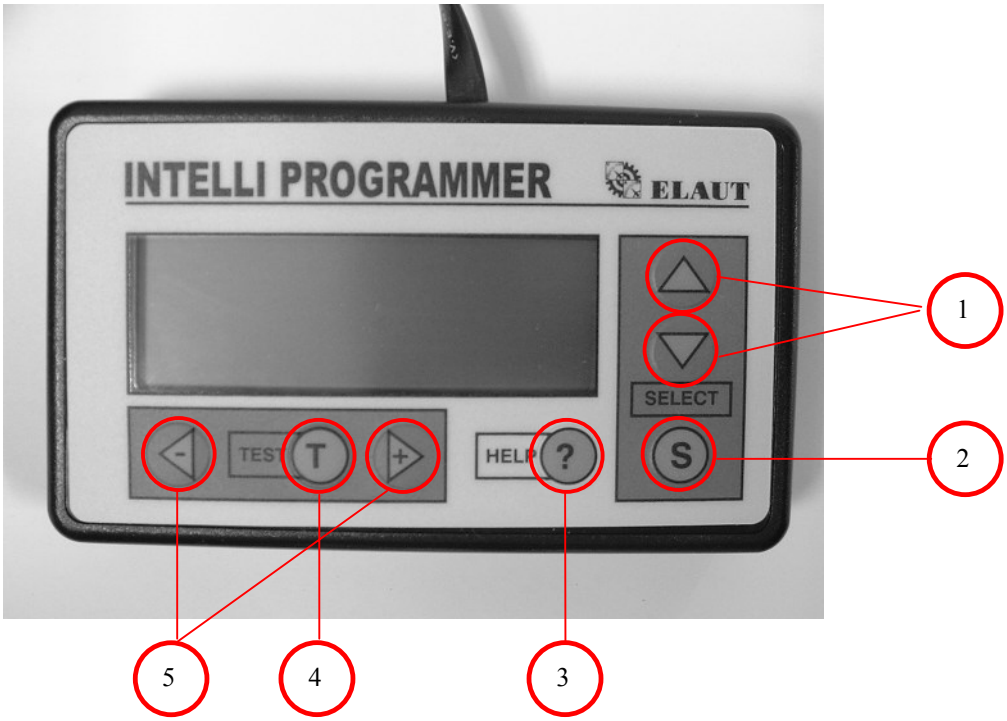
Long term results

To evaluate a long-term result, an accounting is kept. It makes it possible to measure during a certain period of time. The manager can determine the period (for example a season or a fair).
It allows the manager to settle up with the operator.
To avoid fraud, there is a warning when the mechanic meters can not be changed. The number of errors is indicated in diagnostics. These can only be cleared together with the accounts.
Also changes in the settings, which can influence the result of the mechanic meters, give an error!

Manual operation

In the menu ' MANUAL CONTROL' there are several functions to take action during the game: for example a free game or a bonusprize for an unlucky player.

Working with the Intelli Programmer



1 The arrows ‘UP’ and ‘DOWN’ are used to pass through the different menus and settings.

2 The ‘SELECT’-button is to open or close a menu and to carry out certain actions (for example clearing the meters).

3 The ‘HELP’-button gives information about each setting.

4 Under certain circumstances there’s a possibility to test a set value immediately, by pushing the ‘TEST’-button.

5 The buttons ‘-‘ and ‘+’ are to change settings.

Indicates that the line next to this symbol, is only an information-line. It can not be changed.

Indicates a test-function. Press

to activate it.

Indicates a function. Press.

to activate it.

If ‘S’ appears next to the title of a menu, it means that, by pushing it, you go to the main menu.

How to set a new crane

The crane is electronically controlled, but that doesn't mean that it sets itself. The operator stays the most important link.

There are a few settings to let the crane work as the operator and player desire. Don't let it frighten you, it's less complicated than it seems. The 'Programmer' (see photo on previous page) makes it very simple. You pass through the different menus that are mutually linked and you adjust the settings by a push of a button. The changed values appear immediately on the screen.

Take your time to overview the settings together with this manual. We will already give you a short summary:

Check if all the credits are played. You can erase them with the function 'Calibrate' in the menu 'PAYOUT INFORMATION'.

Go to the menu ' DEFAULT SETTINGS'(at the bottom of the main menu).
Choose your country or continent (or a country that corresponds to your coin and legal prescriptions).
Press 'S' to load the settings. If required, change 'language….x' and '# decimals….x' before leaving the menu.
Dollars and pounds are best displayed with 2 decimals, euros with 1decimal.

Go through all the settings of the menus and adjust them as you wish.
Important is that the game-settings correspond with the equipment of your crane.
Choose '4 directions…OFF' only if you have a crane with pushbuttons.
Choose 'commandmode….0 or 2' if the gantry is placed in the wide of the crane or
Choose 'commandmode….1 or 3' if the gantry is placed in the depth of the crane.

Above in the main menu, you see the menus 'bill/token values' and 'coin values'.
It's possible to count with 2 different cashboxes: coins and bills/tokens (or other). You can choose between 7 channels of which channel 5, 6 and 7 can be assigned to the bills/tokens-cashbox. The real money-value has to be entered to make the calculation of the total result possible (double definition).

In the menu'CREDIT VALUES' you have a choice between a fixed price/game and a setting/coin-channel.

With 'fixed value…ON' you only have to set the gameprice. There's a possibility to give in a bonus-level. For each indicated amount of money, there's an extra credit.
With 'fixed value….OFF' you can attribute a number of credits for each coin-channel.
It's important to fill in the number of the most used coin-channel under 'reference-channel……x'.
This is used for the regulation of the pay out.
Try every programmed coin and check the cashbox-meters. Also check the number of credits on the credit-display.

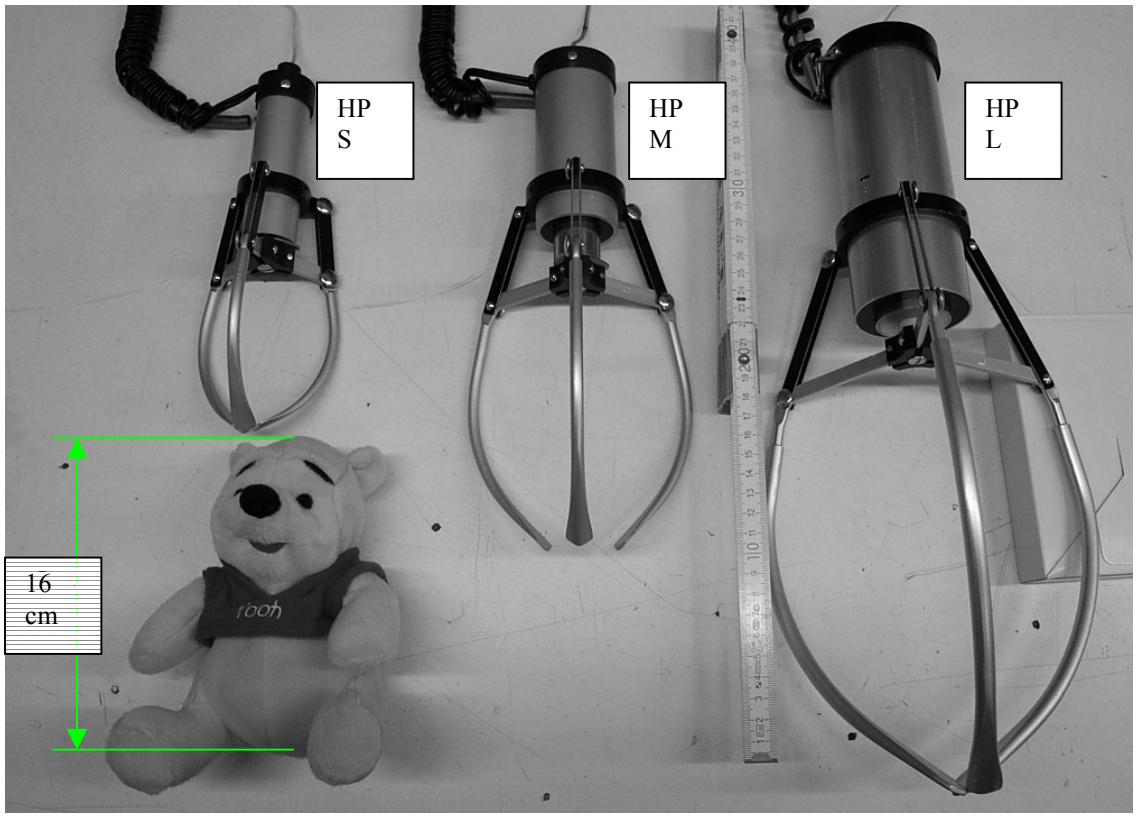
The most important settings in the display 'PAYOUT INFORMATION' are the estimate price out and the product cost of the merchandise. It is the basis for the payout. The percentage is immediately indicated. Before you leave the menu, you have to activate the function 'calibrate'. It's best to do this every time you have changed settings that could influence the winning.

Remark: The 'grab-success' starts at 100% and the current percentage is equal to the set percentage.
When the regulator is not capable to do what you desire, ' ERR' appears.
No games are then played with pick-up power and the expected payout will not be adjusted.

The last setting is the most important: the ‘claw-settings’. Therefore we devote a whole chapter to this subject.

Grab models

We distinguish 3 models:



Type 2	Type 3	Type 4
(Type 1 = Good Luck)		

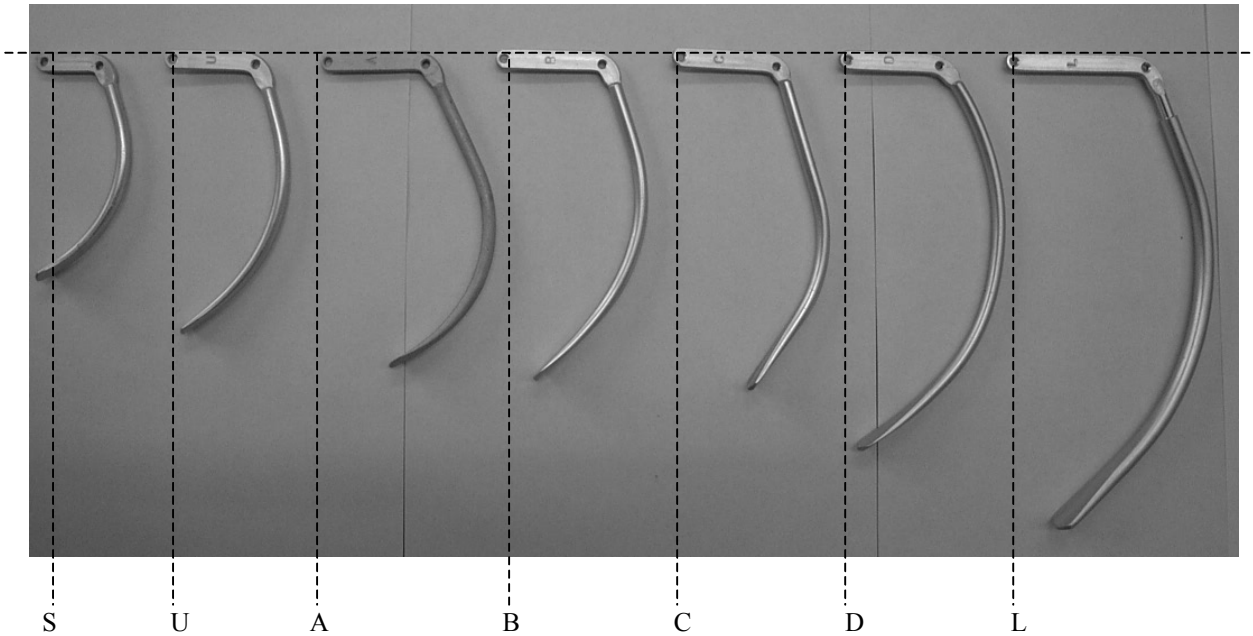
HP S: high power small	HP M: high power medium	HP L: high power large
Pulling-power on shaft: 600gr	Pulling-power on shaft: 1,5 kg	Pulling-power on shaft: 4 kg

ATTENTION : Pulling-power on shaft, indicates the weight that the centre with the magnet can lift up, with maximum settings of the grab-regulation. It is not the weight of the merchandise, which depends on the chosen claw and grab-settings.

By switching on the controller, the grabber-coil is being tested. The grab-type is automatically recognised and the controller will adjust itself (or will indicate a possible problem).
This total new concept of the controller of your crane allows a very flexible regulation of your grab.
The power remains independent of the cold, the heat and the mains voltage.

Remark: Because of the permanent magnetism of the shaft, it is not possible to use merchandise that contains magnetic material. It will stick to the shaft!

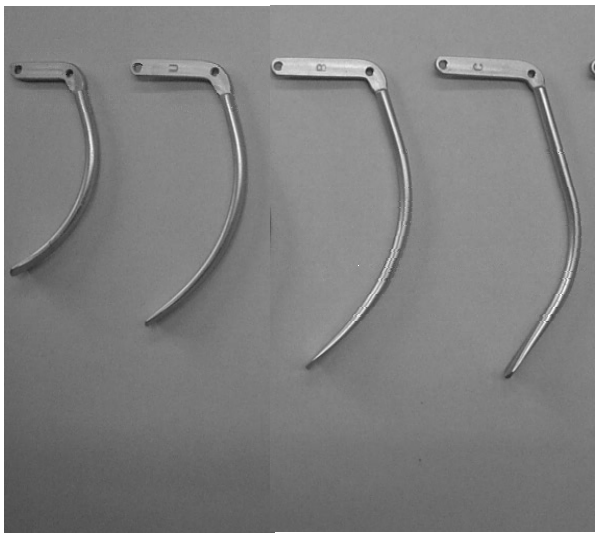
<u>Attention</u>: Not only the weight but also the size and shape of the merchandise are important for the choice of your grab.



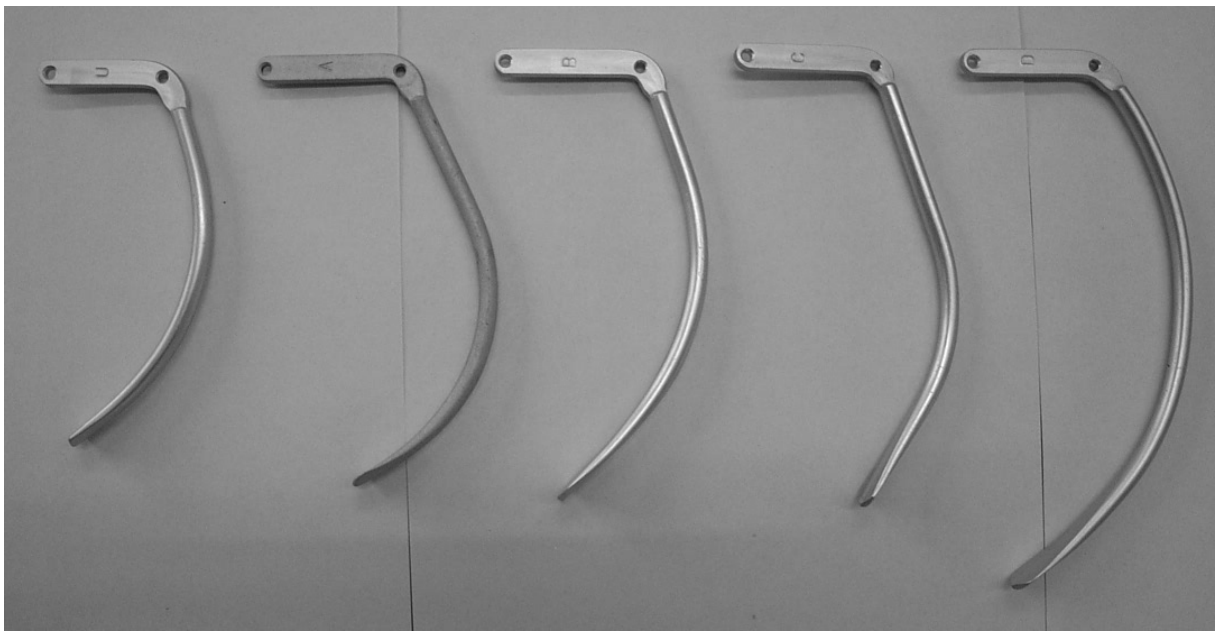
Because of the material that is used, it's inadvisable to bend the claw-fingers.

We give you a complete gamma of preformed claw-fingers so you can choose the right claw-finger for your merchandise.
The grab exists of 2 important parts: the claw upper part and the bottom part.
The claw upper part is the coil and determines the power that will be used. The claw bottom part is the part of the grab with the claw-fingers.
We distinguish:

De HP S can be equipped with following types of claw-fingers which are distinguished by shape
Claw S: Grab HP small type S
Claw U: Grab HP small type SU
Claw B: Grab HP small type SB
Claw C: Grab HP small type SC



The HP M can be equipped with 5 types of claw-fingers which are distinguished by shape.
Claw U: grab HP medium type U
Claw A: grab HP medium type A
Claw B: grab HP medium type B
Claw C: grab HP medium type C
Claw D: grab HP medium type D



For grab HPL exists the following claw-finger:
Claw L: grab HP Large type L

How to set my claw

After you have chosen the right merchandise for your crane, you do as follows:

Go to the menu 'CLAW SETTINGS'. Begin with ' pick up power…70%' and 'retaining power….35%'.

Select pick up power and keep the merchandise between the claw fingers. Push the TEST-button. The grab closes; he has to hold the merchandise easily. If this is not the case, than you have to increase the pick up power
When the merchandise can not be kept tight enough with a 100% grab power, than a stronger grab has to be installed.

Now select 'retaining power', keep the merchandise between the claw fingers and push the TEST-button. Increase this retaining power with the '+'-button when the merchandise still falls out of the grab, until it keeps hanging. Now reduce the retaining power with the '-'-button until the claw fingers start to open. This is approximately the right setting.

To obtain a visibly attractive game, you have to adjust the pick up power up to 1,5 times (for smooth, spherical merchandise) and up to 2,5 times (for irregular merchandise) the retaining power.

Remark: we advise you not to use the maximum grab power if this is not necessary. Use as less power as necessary. The grab is so strong that it will pick up everything in each situation.

Now we can set the 'pick up time'. This is the time, indicated in seconds, after which the pick up power becomes 'retaining power'. It's best to set longer times for bigger merchandise. The activation of the 'random pick up' time increases the pick up time with a value between 0 and 0,5 seconds. It can be used to avoid a visual pattern in the 'dropping'.

The pick up power is now set without playing. Use the functions 'game with retaining power' and 'game with pick up power' to try out the settings.
During this 'testplaying', the winning is ignored and the meters and regulator are not influenced. You can follow the immediate value of the pick up power and the switch over from pick up power to retaining power on the informationline 'indicator'.

As you can see, the settings of your crane are extensive but simple.

Intelli Controller : the complete menu

In the list below, you can see several **MAIN MENU**'S and underlying **settings** or **functions**.
We'll go through them and give some explanation.
Depending on your country and its legislation, there can be some changes.

```
INTELLI GRAB
MACHINE TYPE 016
VERSION 01 REV 06
(c)ELAUTnv 05/08/02
```

This is the identification plate of the program that determines the working of the Intelli Controller. Type of crane, version, revisionnumber and date are found here. When you have questions or problems, give this information to the technical department.

```
ACCOUNTS
total out      :100.0
total in       :285.0
payout         : 35%
#total wins    : 15
#dispenser out:570
S clear accounts
```

Long-term meters are used to measure the results over a certain period of time (for example a season or a weekend).
They can also be used as a base for payments between manager and operator.

>>With this function (S), you can clear the information in this window as well as the meter-error counter in the diagnostic menu (see further).

```
CASHBOXES
Coin in        :185.0
bill/tk in     :100.0
#wins          : 15
#dispenser out:570
S clear cashboxes
```

Cashbox meters are used to check the content of the cashbox. 'Dispenser out' counts the number of distributed pieces on an optional dispenser (tickets, chewing gum).

>>After payout or emptying the cashboxes, the meters are cleared with this function (S).

```
MANUAL CONTROL
S 1 free game
S game with bonus
S bonus till win

standby          OFF
free game mode   OFF
```

Offers a few functions to influence the game :
>> By pressing S a game starts without any money inserted
>> By pressing S a game with pick up power starts
>> By pressing S the grab turns to pick up power until the first win
>>'ON' puts the crane in standby
>>'ON' switches the crane to free game-mode. The accounts and meters are not registered!

```
CLAW-SETTINGS
pick up power  : 70%
retaining power: 35%
i indicator    :  0%
pick up time   :0.7s
random pick up : OUT

i pick up / G ago

S test normal game
S test pick up game
```

The grab closes with the pick up power during the total pick up time and switches to retaining power.

>>The indicator indicates the actual claw-power.
>>The pick up time can be prolonged with a random value between 0 and 0,5 s. by switching the 'random pick up' ON.

>>Indicates when the last game with pick up power was played.

>>The game and the pick up power can be tested with set power. The accounts are not adjusted!

```
PAYOUT INFORMATION
i current perc.:45%
i set perc.    :35%
est.price out  :10.0
products cost  :3.5
i grabsuccess  :82%



i win / games ago
S calibrate
```

The regulator determines the chance of winning out of est. price out, products cost and price/game. The regulator adjusts the winning chance continuously (after every win) to compensate the random pick up and play-attitude. Because of this, the current percentage (short term) can fluctuate considerably.
From the grabsucces can be told whether the grab does its job. If there's a win for every game played with pick up power, than the grab is set perfectly. (grabsucces = 100%) Values between 50% and 150% are OK.
>>This indicates when the last win was registered.
>>The regulator has to be calibrated after the parameters that influence the winning results, were changed. This function also clears the credits.

```
CREDIT VALUES
fixed value      OFF
game price       0.5
bonus level      3.0
reference channel 2
  1 CR for 3 x   0.2
  1 CR for 1 x   0.5
  2 CR for 1 x   1.0
  5 CR for 1 x   2.0
  1 CR for10 x   0.1
 30 CR for 1 x  10.0
 14 CR for 1 x   5.0
```

Two systems are available:

- The costprice/game is based on a fixed value and bonus credits can be given when a certain insert is reached. (fixed value=ON)
- Every coin channel is set on a number of credits for each insert (fixed value=OFF). In this case, the reference channel has to be set on the channel that is used the most (for example on 2 if channel 2 is used the most).

```
COIN VALUES
coin 1          0.2
coin 2          0.5
coin 3          1.0
coin 4          2.0
coin 5          0.1
coin 6         10.0
meter divider   1.0
```

Sets the coin value for each channel.
Even if that channel represents a bill or token, the real value has to be filled in.

>>The meter divider is the value of 1 pulse on the mechanic meter.

```
BILL/TOKEN VALUES
bill 1 r. value 5.0
bill 1 (indic)  5.0
bill 2 r.value 10.0
bill 2 (indic) 10.0
bill r.value    0.1
bill (indic).   0.0


meter divider   1.0
```

Sets the bill/token value for each channel.
>>Bill 1 is assigned to channel 7, bill 2 to channel 6, etc. The real value always has to be filled in. The indicative (indic.) value can remain 0, the channel will than be seen as a coinchannel and will be handled accordingly (cashbox and mechanic meter). There can also be filled in an indicative value. Then, this channel will be handled as bill/token. This way, a token with a value of 1,5 and an indicative value of 1 can be added on the bill/token meters.

>>The meter divider is the value of 1 pulse on the mechanic meter.

```
GAME SETTINGS
game timer       30s
4 directions      ON
command mode       0

carriage jump     ON
```

With a few settings, the gantry-command is determined.
Some functions exclude other functions. These are indicated with a '-'.
>>Command mode allows that the command is adapted to the crane.
>>By pushing T, the start position of the gantry is programmed.

```
play w nudges     OFF
return diagonal   ON

stop and drop      0

instant replay    ON
credit limit      25

money in lim.    14.0
```

Place the gantry manually or by the controls to the preferred start position and push the firebutton. The gantry comes back and the starting position is set.
>>Set ON to play several times forwards.
>>Set OFF to let the gantry return in 2 different movements.

>>The grab drops the set number of steps before opening.

>>If put to OFF, the instant-replay function is not active.
>>When this limit is reached, coin validator and bill-reader are inhibited until credits no longer exceed this level.

>>When this limit is reached, coin validator and bill-reader are inhibited until all credits are played.

```
MOTOR SPEEDS
forward motor    100%
sideward motor    70%
up/down motor     50%
```

Motor-settings.

```
DISPENSER SETTINGS

S pay awarded      0

S feed
#pay at win        0
#pay at loss       1
#pay at start      0
#pay at end        0
S clear awarded
dispenser type     0
```

An optional dispenser can be installed for tickets or chewing gum.
>>After ‘empty-detection’, the dispenser is not started anymore. After filling the dispenser, the awarded amount is paid out.
>>The filling is simplified through the function ‘feed’.
>>The number paid at ‘win’, ‘loss’, ‘start’ or ‘end’ is adjustable.

>>To achieve a correct functioning, the system has to be set on the type of dispenser. Set to 0 to switch off.

```
ATTRACT. SETTINGS
volume game       30
volume attr.      30
sound track        1
attr timeout   10min
attr movement     ON

auxiliary volum    0%
```

Through a few gadgets, you can draw the attention of a potential player.
The available melodies can be personalised (made especially for the operator) That way a theme or an atmosphere can be created.

>>A demo game is moving the gantry as if it looks like playing.

>>On the audio-in input you can add sounds. It will be mixed with the present sound. The soundvolume is here preset.

```
DEFAULT SETTINGS
S save settings.
S load settings
#decimals          1
language (2=FRA)   1
S load C.Europa
S load N.Europa
```

You can load a predefinitioned list of settings in 1 time to simplify the setting. Be aware that also the settings for the set-up of the machine belong to the standard settings. Therefore it is important to go through all the settings and to fill them in as you wish.
Your own settings can be memorised in the menu save settings and load settings.

```
S load USA
S load UK
S load Switzerland
```

In the menu ‘language’ you can choose your language. In the menu ‘# decimals’ you can set the number of figures after the comma for the coinvalues. Dollars and pounds are best displayed with 2 digits.

```
DIAGNOSTICS

i last money        4

i meters errors     0
i coin/bill         0
i dispenser errors  0
i pay out errors    0

i mech. Errors      0

i grabber errors    0
S clear diagnostics
```

Is used to inform you that a part is not functioning as it should:

>>Shows the channel-number that was last active.
Next lines indicate which items occured:
>>The meter was not present when it should have.
>>The coin validator or billreader gives an error.
>>The dispenser can’t pay (in time).
>>The pay out indicator shows payments that are too high (warning on a too high or a too low pay out are not registered).
>>A movement of the gantry does not reach the final stop in time.
>>The grab can not be recognised (when switched on).
>>The error-registration is cleared (except meters errors).

```
SELFTEST

T claw type         3

T cord replacement

T mech. cycle

T lamptest
T dispenser

i coin-in    00000000
i ctrl       00000000
i gantry-in  00000000
I extension  00000000
```

Offers a few testfunctions to check parts for good working during or after a repair.
>> By switching on, the grabcoil is measured. The type is made visible. Problems with cables or with the claw itself can cause incorrect results.
An unrecognisable coil gives a ‘0’-result. Press T to retest; the indicated figure as to correspond with the type of coil!
>> There are two functions :

1. Replacement of a cord : press T, until the cord is completely unrolled. Put the new cord correctly over the wheels (it is allowed to block the motor), hook up the knot behind the cut out in the pulley and pull the cord until it starts to roll up. The motor will stop automatically…ready!
2. Untie a wrongly rolled up cord: press T, the motor will first tighten the cord. Secondly, the pulley will be unrolled until the claw finger reaches the bottom. Now the cord can be put right manually. Press T again and help the cord while it rolls up.

>> A complete mechanical cycle is done (the ‘balance-switch is not tested).
>>Lamps lit and go out one at a time.
>>The optional dispenser pays 1 object.

The information lines below indicate whether a certain input of the Intelli Controller is activated (=I) or not (=O).
(It is not important to know which position corresponds with which input. You count the entries from right to left.)
The switch of an input has to be visible at 1 position only.
>> Input on the ‘ COINMECH’ connector
>> Input on the ‘CONTROL’ connector
>> Input on the ‘ GANTRY’ connector
>> Input on the connectors ‘SENSOR’, ‘EXTENSION’ and ‘MECH METER’.

Possible warnings and errors

Warnings and errors are shown on the Intelli Programmer. When there's an error, the game is stopped by blocking the coin inserter. The error-message disappears by pressing 'S'.

```
! WARNING: Game price
too high
(check credit set.)
Press S to resume
```

The number of credit/game does not correspond with the coin value . Or the reference channel refers wrongly.
Check 'credit settings'.

```
! WARNING: Account
meters overflow
(clear first)
Press S to resume
```

Electronic account-meters overflow.

```
! WARNING: Cashbox
meters overflow
(clear first)
Press S to resume
```

Electronic cashbox-meters overflow.

```
! WARNING: Changing
these parameters
results in account
errors. Clear
accounts first
```

There were changes to settings that influence the mechanic meters. This error is registered in the diagnostics menu, but is only cleared after the accounts are cleared!

```
! WARNING:
Claw power
(temporary) not
guaranteed.
Press S to resume
```

Because of bad connections or big fluctuations in the power supply, the claw-power can not be regulated correctly.

```
! WARNING:
It took too many
games to win (check
settings and
detector)
```

It takes to long before a win is registered. Check the settings in the menu 'PAYOUT INFORMATION' and also check the working of the prize detector.

```
! WARNING: Payout
Payout over 100%,
Check (claw finger)
settings
```

The payout fluctuates above 100 %. Check your claw settings and keep an eye on the payout.
When the problem percists, an error will be shown.

```
! WARNING :
Detector obstructed
or non-functioning
properly.
Press S to resume
```

By switching on the crane, the detector becomes active. This can be caused by objects in the prizehole or a problem with the detector.
Remark: The controller can not determine whether the detector works correctly.

```
! ERROR: Meters
disconnected or
circuit defect
Press S to resume
```

The controller can not change the meters or is defect.

```
! ERROR : Dispenser
pay out was not
detected in time.
Press S to resume
```

The ticket-dispenser does not give a signal when a payout is made. The dispenser, the controller or the cable could be damaged.

```
! ERROR : Pay out to
high, check (claw)
settings + restart
regulator first
```

The payout-percentage is too high for a longer period. It can't be adjusted. Check the claw settings as well as the regulator. The regulator has to be restarted before continuing the game.

```
! ERROR : Coin- or
billacceptor
obstructed.
Press S to resume.
```

The coin– or billacceptor have reported a problem.

```
! ERROR: Grabber;
open circuit measured
Try claw
Type test to resume
```

The claw is damaged or of an unrecognisable type. Possibly the wiring has been interrupted. Use the 'Clawtype' function in the SELFTEST-menu to test the claw. A clawtype from 1 to 4 is OK.

```
! ERROR : Grabber;
shorted circuit
measured. Try claw
type test to resume
```

The claw is damaged or of an unrecognisable type. Possibly the wiring is shorted. Use the 'Claw-type' function in the SELFTEST-menu to test the claw. A clawtype from 1 to 4 is OK.

Mechanical problems and problems with the gantry:

The controller does not detect the switching of the limit switch(in time): When the motor does not move, you can check if it was blocked. It can be a power problem. Check if the 'power indicator' is lit (red). Check the wiring of the motors. If these are OK, it could be a problem with the limit switches or the wiring. The 'gantry-in' information in the SELFTEST-menu shows whether the limit switches are detected.

```
! ERROR: Mechanical
grab didn't reach
bottom (in time)
Press S to resume
```

There is a problem with the up/down motor or the balance-switch (SW4). 'Gantry-in' position 4 (to count from the right side).

```
! ERROR : Mechanical
grab didn't reach up
(in time)
Press S to resume
```

There is a problem with the up/down motor or the limit switch up. (SW3). 'Gantry-in' position 3 (to count from the right side).

```
! ERROR : Mechanical
grab didn't reach
any stop (in time)
Press S to resume
```

There is a problem with the sidewards or forwards motor, or the limit switch left and in front (SW2 and 1).
'Gantry-in' position 2 and 1 (to count from the right side).

```
! ERROR: Mechanical
gantry didn't reach
side (in time)
Press S to resume
```

There is a problem with the sidewards motor or the limit switch left and (SW2).
'Gantry-in' position 2 (to count from the right side).

```
! ERROR: Mechanical
gantry didn't reach
front (in time)
Press S to resume
```

There is a problem with the forwards motor or the limit switch in front (SW1).
'Gantry-in' position 2 (to count from the right side).

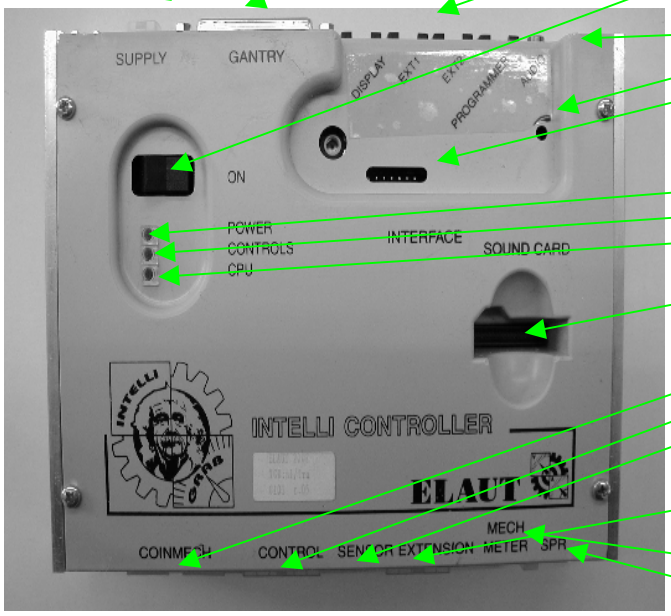
Equipment of a player

- Single power supply or double for multi-players (15VDC, 30VDC en 24VAC output)
- Intelli Controller and Programmer
- Coin validator: all brands and types on 12V : max. 6 channels, OC outputs
- Billreader: all brands and types on 12 and 30V (24V)
- Creditdisplay: with credit and time indication.
- 3 mechanical, secured meters
- Operation with 3 illuminated buttons or joystick and 1 illuminated button
- Prizedetector
- Loudspeaker
- Gantry and grabs with Intelli technology

Optional equipment

- Cardreader
- Tiltcontact
- Ticketdispenser, chewing-gum dispenser
- External audiosignal
- Error signal-maker
- Win signal-maker
- Intelli Link (control at distance)

The Intelli Controller



Power supply connection (15V DC, 30V DC, 24V AC)
Gantry connection
Display connection
2 connections for extensions
Programmer connection
On / Standby switch

External sound connection
External sound regulation
Intelli Link connection

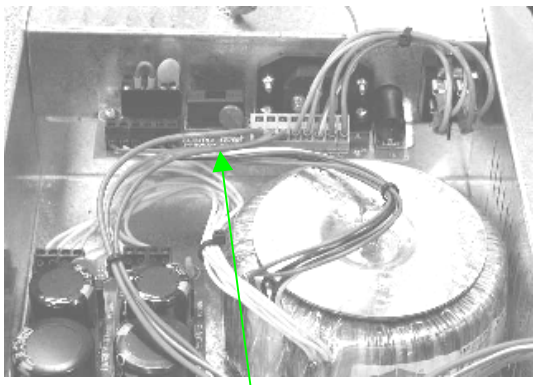
Red indicator ‘POWER’ (30V)
Red indicator ‘CONTROLS’ (15V)
Green indicator ‘CPU’ (blinking)

Soundcard

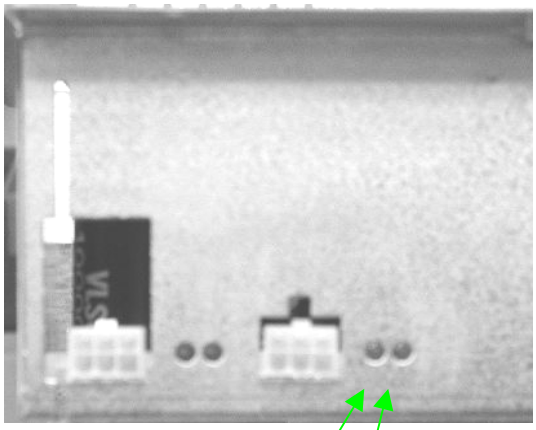
Coin validator and bill reader Connections
Control connection
Prize detection connection

External functions and options connection
Meters connection
Speaker connection

The power supply

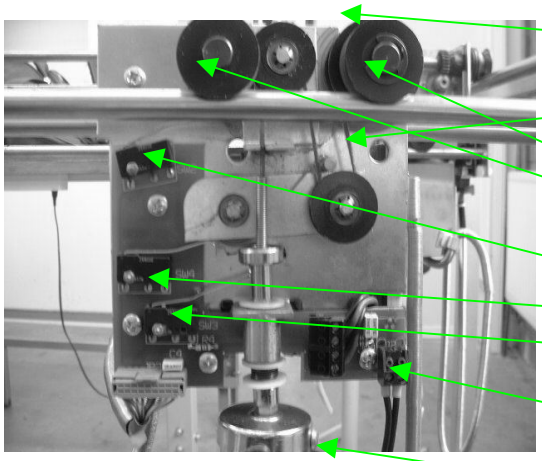


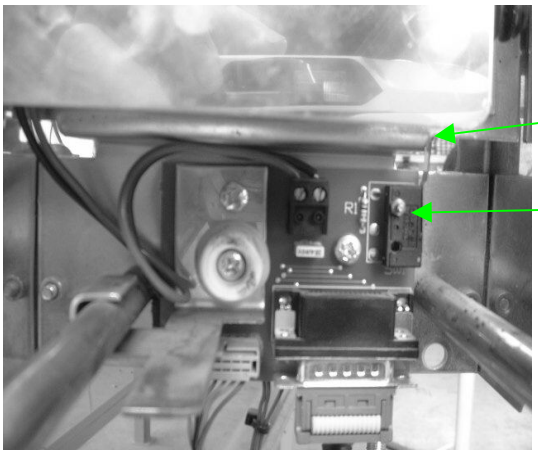
When there are several players, 2 players are connected on the same power supply. The fuse of the power supply is located IN the housing. Always replace with the same type of fuse:
1 player : T1.25A, 2 players : T1.6A (230V)
1 player : T2.5A, T3.15A (115V)



The power supply has a 15 VDC output for the controller and 30 VDC for power. They have a separate red indicator. The 24VAC provision is for optional parts.

The gantry: working





Manual control of the pulley

Trajectory of the cord.

up / down motor (mounted behind the plate)
sidewards motor (mounted behind the plate)

SW2 : Left limit switch
SW4 : Balance switch (down)
SW3 : Up limit switch

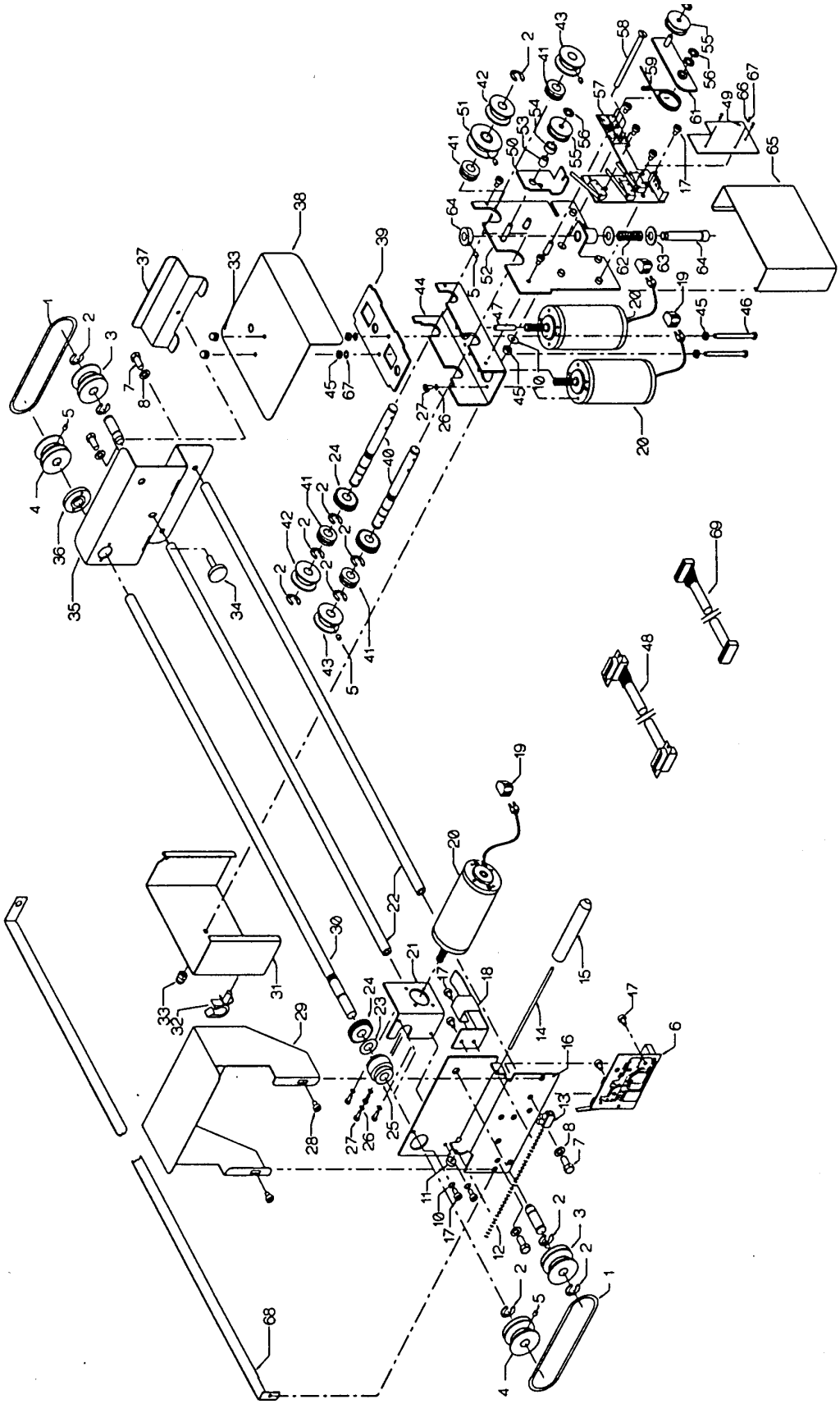
Connection of the grabcord

Grab

Forwards motor (mounted behind the plate)

SW1 : Front limit switch

The gantry : parts



The gantry : Bill of materials

N°	Article n°.	Description	N°	Article n°.	Description
1	3500.0010	Controller belt 3mm	35	3500.0293	Side plate r/h-side Eurograb st.st.
2	6241.0008	Retaining washer DIN 6799 8mm	36	3500.2114	Bearing sw right
3	3500.0030	Wheel free big	37	3500.0302	Brace plate / clamp (Eurograb)
4	3500.0060	Wheel fixed big	38	3500.0483	Top cover Eurograb
5	6052.0406	Allen bolt DIN 914 M4x6	39	3500.0135	Covering plate zw. Eurograb
6	9002.0021	PC board gantry stop Eurograb	40	3500.0441	Shaft universal
7	6056.0060	Bolt DIN 933 M6x12 galvanized	41	3500.0380	Bearing ring ertalon
8	6090.0006	Spring Lock Washer DIN 127 M6 Galvanized	42	3500.0190	Wheel free small
10	6090.0004	Spring Lock Washer DIN l27 M4 Galvanized	43	3500.0600	Wheel fixed small ertalon
11	6251.003	Starlock retaining washer capped 3mm	44	3500.0134	Motorfastening sideward Eurograb
12	3500.0241	Stop rod spring 104mm	45	6075.0004	Nut DIN 934 M4
13	2120.0006	Terminal block 6mm	46	6030.0445	Bolt M4x45 DIN 7985 galvanized
14	3500.0230	Stop rod stainless steel 140mm	47	6270.0524	Split pin Din7343 5x24mm
15	3500.0270	Stop rod end 68 mm black	48	9015.0222	Cable gantry - cabinet
15a	3500.0270	Stop rod end 80 mm black	50	3500.0731	Anti-theft plate claw finger
16	3500.1013	Terminal block 6 mm	51	3500.0540	String winder
17	6030.0408	Bolt DIN 7985 M4x8 galvanized	52	3500.0533	Central plate Eurograb
18	3500.1050	Disconnection clamp Eurograb stainless steel	53	3500.0570	Distance bush Cu 7.7mm
19	1763.2102	Connector screw 2p fem.	54	3500.0732	Distance tube anti-theft claw finger
20	3502.0145	Motor M42-24v	55	3500.0580	String lead Ertalon
21	3500.0132	Motorfastening forward Eurograb	56	6250.0005	Starlock fixing washer 5mm
22	3500.0342	Running rail 550 mm	57	9002.0031	Pc board grabber-stop Eurograb
22a	3500.0345	Running rail 830 mm	58	6060.0555	Bolt Din 965 M4x55 CH cross
23	6092.0062	Washer shim 10.2 x 22x 0.3	59	3500.0620	Torsion spring balance 1mm
24	3500.0211	Gear wheel (Eurograb)	61	3500.0630	Tension arm
25	3500.2113	Bearing forward left	62	3500.0761	Spring lifter 27.5mm
26	6090.0003	Spring lock washer DIN 127 M3 galvanized	63	6088.0008	Washer polyethylene 8mm
27	6030.0308	Bolt DIN 7985 M3x8mm galvanized	64	3500.0741	Tube chrome Eurograb
28	6030.0406	Bolt DIN 7985 M4x6mm galvanized	64a	3500.0742	Fixing-ring for chrome tube
29	3500.0124	Side cover Eurograb	65	3500.0672	Front cover EuroGrab
30	3500.0204	Controller shaft 564 mm	67	6240.0004	Lock washer Din6798 M4 galvanised
30a	3500.0205	Controller shaft 844mm	69	9015.0223	Cable central plate - gantry GL
31	3500.0174	Back cover Eurograb	69a	9015.0224	Cable central plate - gantry Jumbo
32	3500.0181	Cable holder nylon CH-2-01			
33	6075.0014	Domed cap nut DIN 1587 M4	for jumbo gantries		
34	6890.0035	Thumb bolt M5 - Din 912	68	3500.0128	Loom guide 900mm (Jumbo width)

Problems and solutions

Problems with the voltage :

If there are general problems (if nothing is working) check on the intelli-controller if the 2 indicators 'POWER' and 'CONTROLS' are red and the indicator ' CPU' is green (photo page 18).

Be aware that, in case there are multi players, per 2 players the power supply is installed in one housing.

Because of a failure of the mains voltage, the main fuse of the crane can be blown. Also the lights will be out. Remove the mains lead before you replace the mains fuse by an identical fuse (look at the identification-label on the crane). You can find the main fuse on the outside of the power supply (near the mains lead).

Also the fuse in the power supply-housing can be damaged. The power supply as well as the controller can be damaged (photo page 19).

Remove the cover of the power supply (remove with 1 screw) and check the red indicators next to the connection of the controller(s).
Unplug the supply lead at the controller. Now all the indicators in the power supply have to lit red (photo page 19). When they do not light, the fuse must be blown. Pull out the mains lead and replace it.
The power supply PCB of which the indicators do not light, are damaged and have to be replaced. Connecting a damaged PCB can blow a fuse again.

Problems with the functioning of a player :

Use the lines of the 'SELFTEST'-menu to test parts or to check if signals reach the controller.

Check if plugs are put in correctly and if bad contacts aren't at the base of the problem.

When you suspect a defect, switch the controller by a new one or by a controller from a next-door player.

If you want the support of our technical department, give us your type of crane, the revisionnumber of the controller as well as the current program which is indicated with a label on the cover.

Technical specifications

Power supply
Mains voltage : 230V±10% (205 – 255VAC)
temporary 195 – 265VAC
Low voltage : 15VDC (13V tot 18V) 1.75A
30VDC (28V tot 36V) 1.5A x 50% / 3.0A x 50%
Average max. power 105VA
Ambient temperature: 0-40°C

Controller
Lamp-output : 12V/2.2W
Input : 0 to 12V (24V for 5 sec)
Amplifierpower : 30W @ 4 Ohm
Motors : 24V/1.6A
Grabber-output : 24V/1.6A
Ambient temperature : 0-50°C