



Type : E-Claw MKII
Models : E-Claw MKII
(refer to list) **E-Claw MKII Harmony**
E-Claw MKII Trailer
operator (user) manual
service manual
English
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TOP QUALITY ENTERTAINING THE WORLD

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9990.7304 ***E-Claw MKII 600 4pl***
9990.7301 ***E-Claw MKII 900 1pl***
9990.7302 ***E-Claw MKII 900 2pl***
9990.7801 ***E-Claw MKII Cosmic***
9990.7601 ***E-Claw Harmony MKII 600 1pl***
9990.7602 ***E-Claw Harmony MKII 600 2pl***
9990.7603 ***E-Claw Harmony MKII 600 3pl***
9990.7604 ***E-Claw Harmony MKII 600 4pl***
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9990.7401 ***E-Claw Trailer MKII 900 1pl***
9990.7402 ***E-Claw Trailer MKII 900 2pl***

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Introduction

Congratulations with the purchase of your crane with “IntraXion” Technology.

This revolutionary crane is equipped with weighing unit that determines if there is a prize in the grab. As such, the crane can adapt to a product rapidly and automatically.

A single color or an automatically change of colors can be set to your desire on the E-Claw

By means of the IntraXion Programmer with an LCD-screen and several push buttons, information about the functionality of the system can be displayed. Also settings can be adjusted and a test procedures can be activated via a user friendly menu.

Of course this Elaut product is fully compatible with the Intelli Link remote management system.

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't take any options or functions in use, which are against the local security or legal prescription.

Principal of operating

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

Key 1:

A crane must be made attractive by the right music, light and good-looking products.

A good-looking crane attracts players and, don't forget: *“If they watch someone playing, they want to play themselves”!*

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

Key 2:

A player must fall under the spell of the game through the fact that the grab can pick up the product easily, but that they played not accurate enough, cannot take it.

The player should have the feeling that they control the game and that the machine does exactly what they want.

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 3:

You must try to find the right proportion between turnover and margins of profit.

Our experience shows us that a payout-percentage from 25% to 40% gives the best results.

The course of the game

The player inserts money and obtains credits to play.

By means of the buttons or joystick, he can move the gantry above the playfield.

When he lets the button go exactly above the chosen product (or when the fire button of the joystick is pushed), the grab lowered and takes the product with the set power. The game is over when the gantry is back at the home position.

The player wins when the product falls into the prize chute.

Different aspects of the game can be set (look further in this manual).

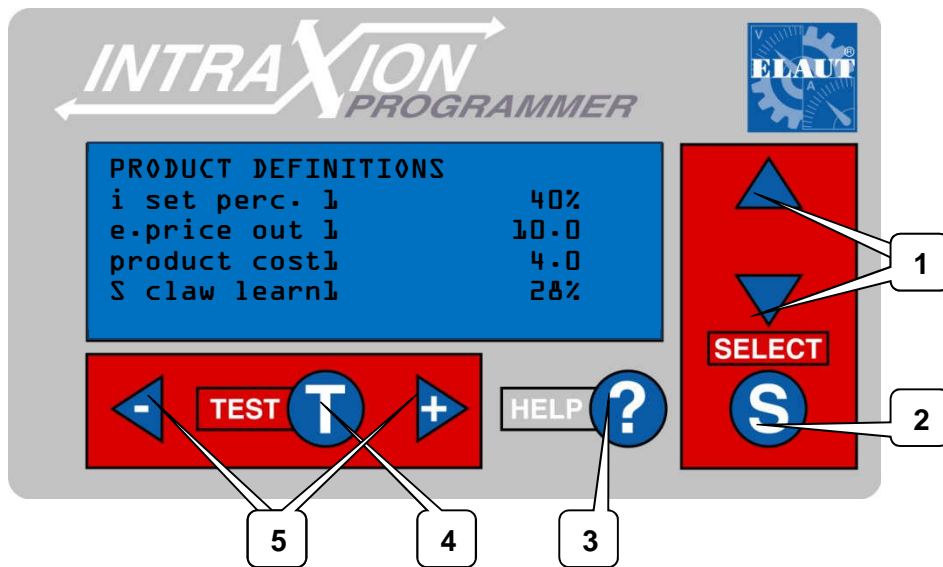
Maintenance :

Maintenance :

A key-locked sliding window gives access to the maintenance area. Hand this key to your operator and/or maintenance personnel for filling up the machine with prizes or for cleaning purposes. The machine can stay powered for these operations. However, beware of the (possibly) moving claw.


Always use dry or humid clothe for cleaning. Never use water or wet material. This might cause damage to parts or ingression of water may cause malfunction or dangerous situations.


Working with the IntraXion Programmer



- The arrows ▲ and ▼ (1) are used to navigate through the different menus and settings.
- The “**Select**” button (2) is used to open or close the different menus or to instigate commands such as clear counters, restart regulator etc.
- With the “**Help**” –button (3) can you get more information about each setting
- Under specific circumstances are there possibility’s to test the set values by pressing “**Test**” –button (4). E.g. If you press T when the cursor is in front of the line “T mechanical cycle” then the gantry will make a test cycle.
- The buttons“-“ and “+” (5) are for changing values.

This “i” indicates that the opposite line shows only information.
This value is unchangeable.

This “T” indicates a test function. Press  to activate.

This “S” indicates a function. Press  to activate.

If this is the opposite of a title or a menu, then you go back to the main menu

Directions

Some functions such as setting the size of the playfield or system settings a remark will appear on the display of the IntraXion programmer.

Possible remarks:

i please wait

remain patience while the action is being executed or the settings are being loaded.

I parameter locked!

The setting you are trying to change is locked and cannot be adjusted.

You can release this setting in the menu "INFO MANAGEMENT", this way you can change the setting.

It is possible that, once the settings are locked, you only have access via Intelli Link alter these settings.

Contact your distributor if you don't have an Intelli Link system

i accepted!

The setting that you changed or your request is accepted.

i not possible!

The setting you changed or your request is not possible.

Possibilities are that: the setting you want to change conflicts with other settings or your request is refused because e.g. a game is busy.

Error messages

An error message stops money from being accepted.

Press "S" to remove an ERROR or WARNING and to go back to the menu.

The problem must then be solved (with the pickup results, Test info, Module info, etc.).

Once the problem has been found and solved, we recommend restarting and/or testing the system extensively.

Overview Menu

There could be some small differences in relation to your program depending on your local legislation.

* Not available when in the menu "Info management" advanced param. is set to OFF

IntraXion crane

```
INTRAXION CRANE
MACHINE TYPE XXXX
VERSIE XX REV XX
(C)ELAUTnv XX/XX/XX
program enable  OFF
firmware       2C/2D/3B
```

Identification of the program. Here you find the machine type, version, revision number and date. This information is the most important for the technical department.
program enable*: ON = updating via the Intelli Link connection possible. More info in [program update](#).

firmware*: firmware version of your controller. This enables recognition of whether or not a software-update is compatible with your system.

Info management

```
INFO MANAGEMENT
advanced param.  ON
lock adv.param.  OFF
lock all param.  OFF
hide money info  OFF
```

This menu allows the user to simplify the menu to hide or lock advanced settings. Hidden items (advanced parameters OFF) are marked with a *

advanced param.*: ON= access to all settings
lock adv param.*: locks all advanced settings.
lock all param.*: locks all settings.
hide money info*: On= accounts are no longer available via the programmer

Only via the Intelli Link can the access the accounts be accessed. This option can only be disabled via the Intelli link.

Accounts

```
ACCOUNTS
total out:      1250.0
total in:       3205.0
result:         39%
#total wins:    105
#tot refill:    125
S clear accounts
```

total out: total of won products, expressed in terms of money.
total in: total of income in money value
result: amount of payout expressed in percentage on long term. This percentage will not be reset after a "restart regulator".
#total wins: number of won products
#tot refill in*: number of products that were filled since the last reset.

The accounts are used as "long term counters". You can check the results of a certain period. They can be used as a base for the payment between manager and owner. Clear the accounts by placing the cursor next to the line "clear accounts" and press "S".

Cash boxes

```
CASH BOXES
coin in:      350.0
bill/tk in:   20.0
#wins:        15
#games:       714
#consolate out 241
S clear cashboxes
S prod. refill 20
S product alarm 16
S consolate al. 1900
```

coin in: amount of received coins.

bill/tk in: amount of received bills/tokens

#wins : total amount of won products

#games*: number of played games since last reset

#consolate out*: amount of won consolation prizes.

ex: ticket dispenser, chewing gum dispenser, ...

S clear cashboxes: The “cashboxes” are used as “short term counter”.

You can use them to check the earnings by emptying the cashbox. Clear this also by pressing “S”.

S prod. refill*: Fill in the number of prizes that are put in during

the filling. The number can be adjusted by pressing + and -. Press S to validate. The number must only be adjusted once. You have to validate each time the machine is filled with the set number. This is used for the stock management through Intelli Link.

S prod alarm*: : if the number of won products exceeds this number (0= not active) there will be switched on an alarm. Push ‘S’ to activate / reactivate. Function disabled when set to 0.

S consolate al.*: an alarm will be given when the number of consolation prizes is exceeded (0=not active). Push “S” to activate / reactivate

Manual control

```
MANUAL CONTROL
S assign win
S 1 free game
S free game w bonus
S bonus till win
free game mode    OFF
standby           OFF
```

S assign win: If a player wins but the action is not detected by the machine, this function can set counters, accounts, etc. right. This can be done only once at the end of the game.

Example: A bear is won but stays above the prize chute.

Throw the prize into the prize chute. Do this within 5 minutes. If this doesn't occur, you MUST execute a “S assign win”! This to adapt the accounts and to restart the regulator. If you don't do this, soon another prize will be won. If you hear a winning

sound (and the cabinet starts blinking) after you have thrown the prize in the prize chute, this won't be necessary. In this case the detector has detected the prize, the accounts are adapted and the regulator is restarted. Look further in this manual on pages 18-19.

S 1free game: free game with retaining power, no influence on the accounts or cashbox

S free game w bonus: free game with pick up power, no influence on the accounts or cashbox

S bonus till win: pick up power available until next win

S free game mode*: if this function is on, you can play without inserting any money. This has no influence on the counters or pay out regulator.

S standby*: with this function you can put the playfield in standby. It's impossible to insert money and on the display you see 1 bar lighting up.

Product definition

PRODUCT DEFINITION	
i trend	xx%
i set perc.	40%
e price out	10.0
product cost	4.0
automatic claw	0N
T claw learn	28%
S test normal game	
T retaining power	-%
pickup power	-%
pickup time	0.4
random pick up	0N
S restart game	

i trend: the percentage “i Trend xx %” represents the win percentage that has been established through the last 6 wins and will approach the “i set perc” after 4 wins.

Look further in this manual on page 18.

i set perc: the desired pay out percentage. This is not directly settable, but “e. price out” and “product cost” calculate this percentage (payout is minimum 20% and maximum 50%). When ERR% occurs, it means that the vending price is too high/low compared to the game price.

e price out: vending price: how much the product has to bring in. This can be a maximum of 950 times the game price. For example: Game price = €0,50 → The maximum vending price = €475,00.

product cost: purchase price: the cost of the merchandise

automatic claw: ON= The product can be set automatically and the claw power will adjust automatically if necessary.

OFF= manual mode, the controller will not adjust the claw power automatically.

The function retaining and pick up power will be active and adjustable with + and -.

T learn claw: Press T to activate the learn function for the product.

The gantry will move automatically to right hand side of the prize chute. The claw will drop and pick up the prize and measure it to determine to pick up and retaining power;

Make sure that:

- the product is gripped properly by the claw and in a normal position.
- The product drops due the reduced claw power and not tumbles out the claw.

Important: don't touch the claw during this procedure!!!! Just move the product a little so the claw can pick it up properly. Here, the weight is determined and stored for recognition.

The influence of unintentional wins (= accidental win %) and the previous claw power settings are deleted after a product is set again.

S test normal game: this function allows you to play games without winning changes.

This has no influence on the accounts or cashboxes. This function is meant as a test game and to fine tune automatically the adjusted settings.

T retaining power: Is only active when automatic claw is turned OFF. The retaining power is the power set with which the claw can no longer hold the prize, and can be set with + and -.

When we press T (Test button), the claw will close with pick up power and slacken to a power that is equal to the retaining power. If we hold a “product” in the claw at this point, this product must fall out of the claw again. If this is not the case, the retaining power must be reduced. Ideally, the retaining power is above 20. At too low a value (12-20) we work on the bottom limit of the claw and recommend that another coil and/or claw fingers be used.

pickup power: is only active when Automatic Claw is set to OFF. The pickup power is the power with which the claw lifts the product. The claw must lift the product from the playfield with this power, including when not in perfect positions. Pick up power and retaining power should, for visibility reasons, not be too far from the “picking and dropping process”. Pick up power about double the retaining power is OK. Adjustable with + and -.

pickup time: indicates how long a prize is held before it is dropped. This value is adjustable with + and - (between 0.4 and 3 sec.). Make sure that the retaining power is reached before the claw comes above. **Also see page 19 of this manual.**

random pickup: this function is used to vary the pickup time you set to maximum 0.5 seconds. (Only downwards). **Also see page 19 of this manual.**

S restart regulator: Restart the payout regulator. **Also see page 19 of this manual.**

Credit settings

game price: the price of 1 game

Bonus levels

CREDIT SETTINGS	
game price	0.5
5 credits for	
a total of (ref)	2.0
13 credits for	
a total of	5.0
27 credits for	
a total of	10.0
0 credits for	
a total of	0.0
credit limit	25
money limit	10.0

X credits for a total of xx.x:

The first bonus level = Reference channel.

You can set the number of credits (X) for a specific inserted amount (xx.xx) and this must correspond with the game prize OR entail an advantage.

The other bonus levels MUST entail at least one advantage! If incorrectly set, then the machine will automatically adjust the credit setting. Switch off the bonus level by setting 0 credits.

The amount has to be inserted without starting to play off any of the obtained credits.

Once the game has been started the accumulation for bonus credits will stop.

credit limit*: coin and bill acceptor will be disabled when you reach this limit. Once the credits fall below this limit, the coin and bill acceptor are again enabled.

money limit*: coin and bill acceptors will be disabled when you reach this limit. You have to play all credits before it will be enabled again.

Game settings

GAME SETTINGS	
game timer	30s
volume game	20/30
volume attr.	16/30
aux volume	16/30
attract timeout	10m
attr. movement	0N
return diagonal	0FF
drop distance	5
instant replay	0N
L-R speed	80%
F-B speed	80%
U-D speed	80%

game timer: the maximum playtime. This time starts from the moment that the first move is made.

volume game: volume during the game

volume attr.: volume during the attract mode

aux volume: volume of an external sound source (optional). This sound will be mixed with the standard sound

attr. time out*: the interval time between the attraction when there is not being played.

attr. movement: ON= gantry will move and start along with the attraction melody

attr. time out*: the

return diagonal*: ON= gantry returns diagonal.

OFF= the gantry will return first to the left hand side and then to the front.

Drop distance: how far the claw will go down before releasing the merchandise above the prize chute.

instant replay*: ON= the instant replay button will flash while the claw moves upwards Only when enough credits are available. When you press the flashing button, the crane will drop on the same position. With joystick you can start your game from that position or drop the claw from that position. Each time when you use this function a credit will be count off.

L-R speed*: the motor speed of the left/right movement of the gantry

F-B speed*: the motor speed of the front/back movement of the gantry.

U-D speed*: the motor speed of the up/down movement of the claw.

Color settings*

COLOR SETTINGS	
color	90
to color	30
fading speed	10
pattern phase	0
brightness	100%
saturation	100%

color*: the first color of the crane

to color*: the last color of the crane.

fading speed*: the transition speed between all shades of set colors. When set to 0, no color change. Only the first set color will light up. Adjustable between 0 and 12.

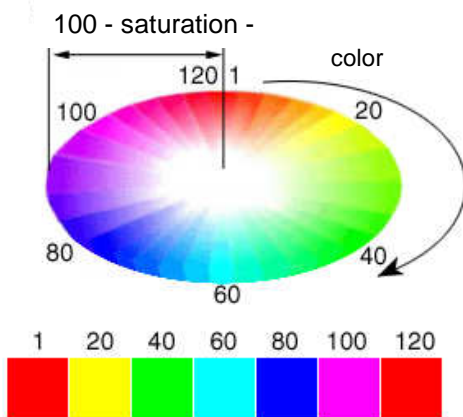
Pattern phase*: Setting to obtain matching colors or a rainbow effect if machines are linked. Adjustable between 0 and 40

(phase difference on circle). If pattern phase = 0, then there is no color difference between the machines. If rainbow effect is desired, each controller is set individually with the same value (e.g. 10: each machine has a color difference of 10 on the pattern below).

brightness*: brightness of the colors. 100% most bright

saturation*: saturation of colors, 0= white.

The numbers of the colors correspond with the numbers on the schematic below.



Important: the transition happens always clockwise and back. E.g. if you set from color 80 to color 100 the color will change from blue to purple and back to blue.

If you set from color 100 to color 80 the color will start at purple and then takes all other colors until blue and back all colors to purple again

If you set "color" and "to color" to the same number/color or the fading speed to 0, the crane will not change form color.

By changing the brightness, the colors will dim.

by changing the saturation the colors will get more pastel colors.

Consolation settings

CONSOLATION SETTING	
S pay awarded	0
S feed	
pay at lose	1
pay at start	0
pay at end	0
value 20.0 per 100	
S clear awarded	
dispenser type	1

S pay award the amount of tickets/chewing gums will be memorized if the dispenser is empty. By pressing "S" they will be paid.

S feed*: help function for filling the dispenser

#pay at lose: number of award that has to be paid at loss

#pay at start*: number of award that has to be paid at start of the game

#pay at end*: number of award that has to be paid at the end of the game

value 2.0 per: 100*: the value of 100 consolation prizes. (in this case 2€)

S clear awarded*: to clear the credit of unpaid consolation prizes.

dispenser type: : to adjust the dispenser type, 4 types available:

0 = none

1 = ex: ticket dispenser, hopper

2 = chewing gum dispenser

3 = Big dispenser

4 = systems with intern logic

Money settings*

MONEY SETTINGS	
coin 1	0.2
coin 2	0.5
coin 3	1.0
coin 4	2.0
coin 5	0.1
card (b2)	10.0
bill 1	5.0
last coin ch	5
money value	0.1
decimals	1
meter divider	1.0

To adjust the value for each channel

coin 1 – 5*: to adjust the value of a coin for each channel. Coin 1 is equal to the first channel of the coin acceptor.

b2 – bill 1*: to adjust the value of the bill acceptor channels. Please note that the card channel shares the hardware line with seldom simultaneous used coin 6 or bill 2 channel. The money value of this channel can be set up more widely. Also coin 5 could be set up as bill 3.

last coin ch*: this number determines up to which channel the money is counted as coins. The following channels will be counted as bills. Card input is not metered separately. It must be chosen to add to coins or to bills. E.g. when this figure is 4, the first 4 channels will be counted as coins. Everything from

the 5th channel will be counted as bills in the menu **accounts/cashbox**.

money value*: the basic value of coin and bills.

decimals*: the visual numbers after the comma. If there is indicated 1 than the money values will be displayed up to 1 number after the comma ex. 20,5.

meter divider*: the value of a pulse to the mechanical counters. e.g. if '1' is marked, then 1 pulse will be given to the counters by each Euro. A 2 Euro coin will count 2 units on the counter. The amount you see will be the amount in Euros..

System settings

SYSTEM SETTINGS	
link address	1
inactive alarm	5h
S delete picture	
S set video mode	
S load defaults	EUR
S load defaults	USA
S load defaults	UK

link address (link): every playfield in an Intelli network has a unique number that can be set in this menu. 1 is the standard number and if this is 0 than it will not be recognized as present in the link.

inactive alarm*: an alarm will appear on the Intelli link when not played during this time.

S delete picture*: press S to delete a picture showed on the screen at that moment. Only possible if this option is installed.

S set video mode*: this function shows a live camera image in

the screen. This way you can adjust the camera. This function will be disabled with a new action.

S load defaults xxx*: to load the default settings, specific for your country or continent and depending on your local legislation.

Playfield

PLAYFIELD	
S set for	'600mm'
S set for	'900mm'
S set for	Cosmic
S set	'780'/31i
S set	'1100'/43i
S set	'1460'/57i
game pos F-B	26
game pos L-R	30
back margin	5
size F-B	52
size L-R	53
drop corner F-B	22

S set for '600mm': to set the playfield size to a width of 600mm.

S set for '900mm': to set the playfield size to a width of 900mm

S set for cosmic: to set the playfield size to a width of 1200mm = Cosmic.

After loading the default settings some parameters can be adjusted as desired.

'780' – '1100' – '1460' = Creative Line !

game pos F-B*: the depth of the start position

game pos L-R*: the width of the start position

back margin*: the margin where the gantry stops in the back.

size F-B*: depth of the playfield.

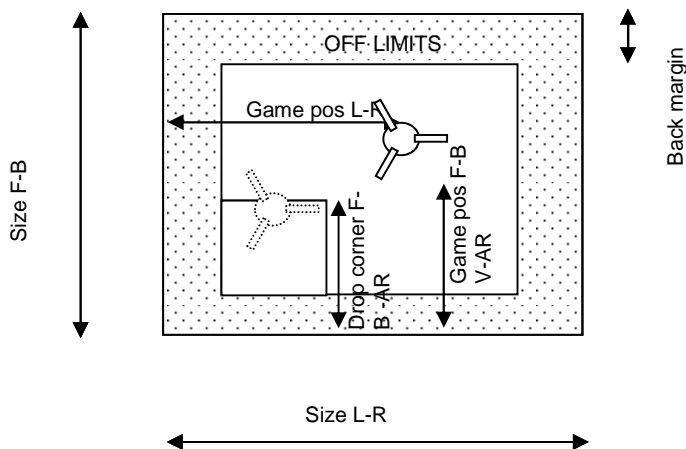
size L-R*: width of the playfield.

drop corner F-B*: to set the depth of the prize chute. The width

will be programmed automatically by S 600, 900 or 1200 function.

Playfield	'600'	'900'	'1200'
Ajustable:			
Game pos F-B	2	2	2
Game pos L-R	2	2	2
Back margin	2	2	2
Size F-B	50	50	73
Size L-R	37	62	81
Drop corner F-B	12	16	18

Video: 4 / Shelf: 8



Pick up results*

PICKUP RESULTS	
i weight actual	50
i weight result	12
i dropout power	45%
i prod. weight	12
i casual win	0%
i claw type	2

i weight actual*: this is the actual measured value of the weighing unit. With unrolled string and the claw in the bottom of the playfield the value has to be about 5. A technician can adjust this on hand of a pot meter on the Z-pcb.

i weight result*: indicates the last measured value of the load in the claw.

i dropout power*: indicates the set retaining power at which

the product falls from the claw.

i prod weight*: measured weight of the product.

i casual win: casual win% gives the reliability of the pickup and drop process. Values of up to 30% are acceptable. If this value becomes too high, a warning will be given. In automatic claw mode, the claw power will be reduced.

claw type*: indicates the claw type. F. e.g.: 2=small (or Xsmall)3=medium coil, or 4 = cosmic coil. Press "T" to measure the claw (again). (This does not change any settings).

Diagnostics*

DIAGNOSTICS	
last money	0.5
last error	40>42
i link errors	0

last money*: the value of the last insert money

"last error": The last two errors can be retrieved in the "Diagnostics" menu, where they are being displayed by showing their respective error codes. "last error" (e.g. 40>42)

i link errors*: number of errors related to communication with the Intelli Link system.

Mechanic diagn*

```
MECHANIC DIAGN.
T mechanical test
i #cycles      0
```

T mechanical test*: a complete test of the mechanical cycle. When you keep the instant replay button pressed in after activating this test, the mechanical cycle will repeat until the Instant Replay button is released.

I #cycles*: indicates the number of cycles during the last test

Test info *

```
TEST INFO
i coin in      00000000
i bill in      00000000
i ctrl but.    00000000
i set butt.    00000000
i det&ext      00000000
i gantry       00000000
i ctl lamp     00000000
i coinm.out    00000000
i data in (AD=0) 13
```

This menu shows if the input to the IntraXion controller is activated (=I) or not (=O), a very useful tool to track problems with the system.

The list below shows all in and outputs, and where you can activate them.

indicator	function	unit	connection
i coin in			
xxxxxxxO	coin1	ITX Controller	J9.7
xxxxxxOx	coin2	ITX Controller	J9.8
xxxxxOxx	coin3	ITX Controller	J9.9
xxxOxxx	coin4	ITX Controller	J9.10
xxOxxxx	coin5	ITX Controller	J9.3
i bill in			
xxxOxxx	bill1	ITX Controller	J9.11
xxOxxxx	card	ITX Controller	J9.12
xxOxxxxx	bill3 / inhibit 1	ITX Controller	J9.14
xOxxxxxx	bill4 / inhibit 2	ITX Controller	J9.15
Oxxxxxxx	bill error	ITX Controller	J9.13
i commande.			
xxxxxxxO	FWD (SW11)	Basic IO	J5.1
xxxxxxOx	BWD (SW12)	Basic IO	J5.7
xxxxxOxx	SWR (SW13)	Basic IO	J5.2
xxxOxxx	SWL (SW14)	Basic IO	J5.8
xxOxxxx	Fire (SW15)	Basic IO	J5.3
xOxxxxx	Inst Rep(SW16)	Basic IO	J5.9
Oxxxxxxx	4W feedback	Basic IO	J5.11
i gantry			
xxxOxxx	not used		
i det&disp			
xxxxxxOx	meters connected	ITX Controller	J12.3
xxOxxxxx	dispenser connected	ITX Controller	J13.5+9
xOxxxxxx	meters feedback	ITX Controller intern	
i lamps			
xxxxxxxO	lamp forw on	Basic IO	J5.6
xxxxxxOx	lamp sidew blinking		
xOxxxxxx	lamp Inst Rep on	Basic IO	J5.12
Oxxxxxxx	lamp Inst Rep blinking		
i coin out			
xxxxxxOx	coin acceptor on	ITX Controller	J9.6+16-17
xxOxxxxx	meter 1	ITX Controller	J12.4
xOxxxxxx	meter 2	ITX Controller	J12.5
Oxxxxxxx	meter 3	ITX Controller	J12.6
-	dispenser run	ITX Controller	J13.7

Module info*

```
MODULE INFO
i soundfile
  ID= ITXSN1000R01
  ID= ITXSN1000V00
i controls mod.    ON
  ID= ITBI0_D0101
i gantry XY mod    ON
  ID= ITXGX_B0005
i gantry Z mod.    ON
  ID= ITXGZ_B0012
i light module     ON
  ID= ITRGB_A0104
i video module     OFF
  ID= ITVID_E0203
```

This menu shows alle connected modules with their software version for this type of crane.

Indicates also if the module is online or offline

If a module is not available the system will mark this as OFF.

Only the Video module is optional

The new software 10.x allows you to separately change the attraction sound. You can check your sound version in the "Module info" menu. Should you wish to install another version, please get in touch with the Elaut team or contact your local distributor.

What to do if a problem occurs?

* Check the "Module ID." Is it available?

* Check whether the Module in ON or OFF. (It should be ON!).

* Check the control LEDs on the module:

Orange LED = Power supply

Red LED = Response (process activity = heartbeat)

Green LED = Demand

If there is no "ID" available, this could be a sign of a serious problem for the module concerned or of a cable failure. No connection was made with this module.

If an "ID" is available, but the module in question is OFF, this could indicate a problem with one of the components on this print or a cable failure. The connection was interrupted.

When the "orange" LED is off on the module in question, this means that the power supply is not forthcoming. In such a case, check the cabling and/or the power supply.

ID + ON -> Orange LED ON -> Problem on module or connected components.

(= in connection) -> Orange LED OFF -> Power supply problem!

ID + OFF -> Red LED ON/OFF -> Module is active, but no interactivity (= no communication) or the module does not fit in the system.

(= connection interrupted).

No ID + OFF -> Red LED OFF -> The module is not active.

(= not connected).

How to set up a new product (automatic claw on)

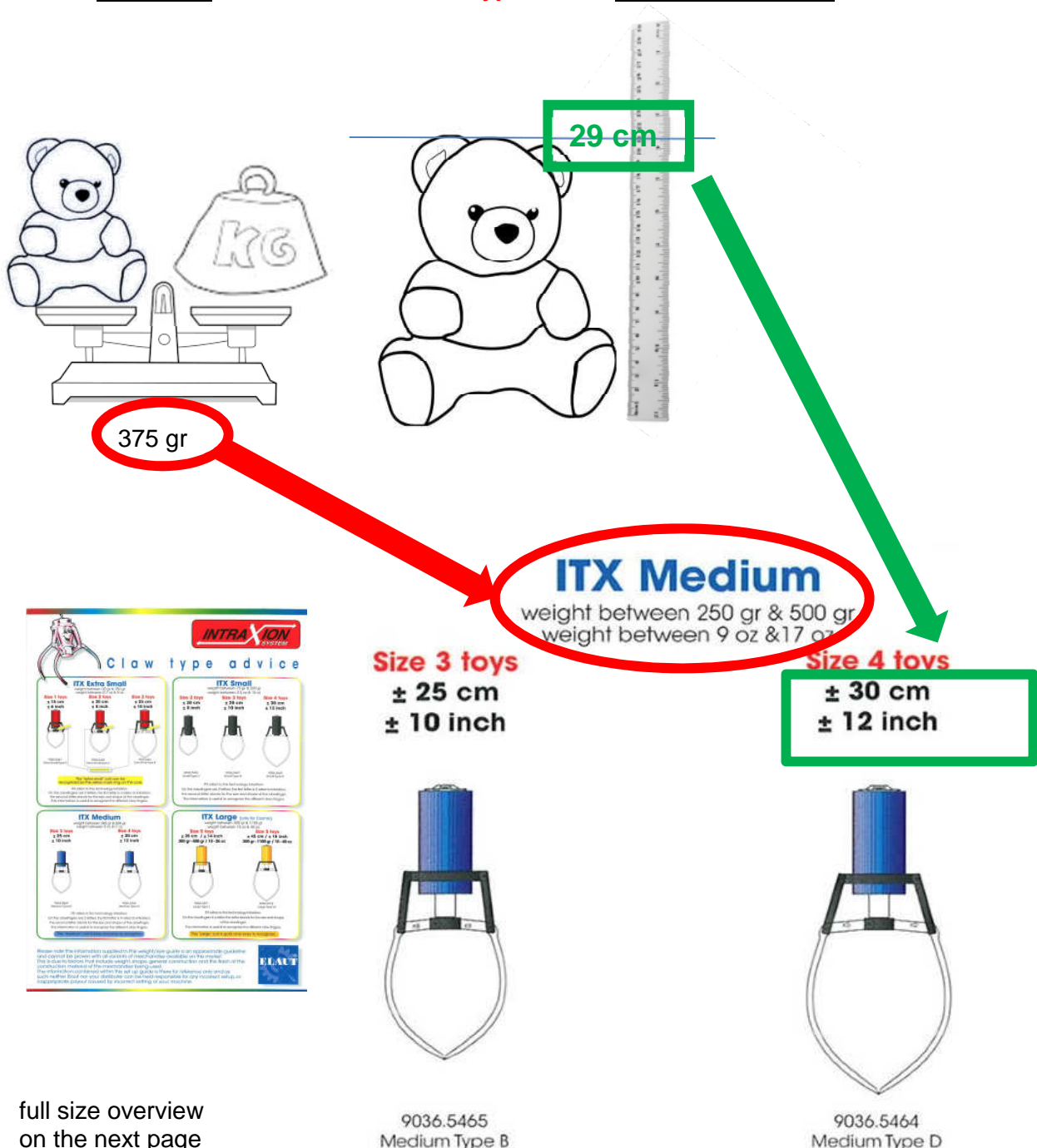
Step 1: Select the correct coil & claw

First we need to know the dimension and weight of the plush so we can choose the correct coil & claw by using the "Claw overview" file on the next page.

The below example:

- weight = 375g, we will need a Medium coil
- the height = 29 cm we require D type claw fingers

So for this plush we will need **Medium Type D claw** for the best results



full size overview on the next page



Claw type advice

ITX Extra Small

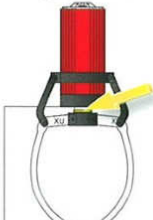
weight between 20 gr & 150 gr
weight between 0.7 oz & 5 oz.

Size 1 toys
± 15 cm
± 6 inch



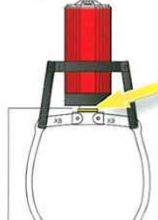
9036.5461
Extra Small Type S

Size 2 toys
± 20 cm
± 8 inch



9036.5462
Extra Small Type U

Size 3 toys
± 25 cm
± 10 inch



9036.5463
Extra Small Type B

The "extra small" coil can be recognized by the yellow mark ring on the core.

ITX refers to the technology IntraXion.

On the clawfingers are 2 letters, the first letter is X refers to IntraXion, the second letter stands for the size and shape of the clawfinger. This information is useful to recognize the different claw fingers.

ITX Small

weight between 75 gr & 300 gr
weight between 2.5 oz & 10 oz

Size 2 toys
± 20 cm
± 8 inch



9036.5466
Small Type U

Size 3 toys
± 25 cm
± 10 inch



9036.5467
Small Type B

Size 4 toys
± 30 cm
± 12 inch



9036.5469
Small Type D

ITX refers to the technology IntraXion.

On the clawfingers are 2 letters, the first letter is X refers to IntraXion, the second letter stands for the size and shape of the clawfinger. This information is useful to recognize the different claw fingers.

ITX Medium

weight between 250 gr & 500 gr
weight between 9 oz & 17 oz

Size 3 toys
± 25 cm
± 10 inch



9036.5465
Medium Type B

Size 4 toys
± 30 cm
± 12 inch



9036.5464
Medium Type D

ITX refers to the technology IntraXion.

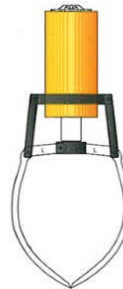
On the clawfingers are 2 letters, the first letter is X refers to IntraXion, the second letter stands for the size and shape of the clawfinger. This information is useful to recognize the different claw fingers.

The "medium" coil is blue and easy to recognize.

ITX Large (only for Cosmic)

weight between 300 gr & 1100 gr
weight between 10 oz & 40 oz

Size 5 toys
± 35 cm / ± 14 inch
300 gr - 800 gr / 10 - 28 oz



9036.5271
Large Type L

Size 5 toys
± 45 cm / ± 18 inch
300 gr - 1100 gr / 10 - 40 oz



9036.5272
Large Type M

ITX refers to the technology IntraXion.

On the clawfingers is a letter, the letter stands for the size and shape of the clawfinger.

This information is useful to recognize the different claw fingers.

The "Large" coil is gold and easy to recognize.

Please note the information supplied in this weight/size guide is an approximate guideline and cannot be proven with all variants of merchandise available on the market. This is due to factors that include weight, shape, general construction and the finish of the construction material of the merchandise being used. The information contained within this set up guide is there for reference only and as such neither Elaut nor your distributor can be held responsible for any incorrect setup, or inappropriate payout caused by incorrect setting of your machine.



Step 2: Set the price

PRODUCT DEFINITION	
i set perc.	40%
e price out	10.0
product cost	4.0
automatic claw	0N
T claw learn	28%
S test normal game	

Insert the correct purchase price of the plush on the line **product cost**.

Then insert the vending price at the line **e price out**

Due to these 2 settings the desired payout percentage will be visible on the lone **i set perc.**

Do note that this is not directly settable, but “e. price out” and “product cost” calculate this percentage (payout is minimum 20% and maximum 50%). When ERR% occurs, it means that the vending price is to high/low compared to the game price.

Once this is done, restart the game by pressing S in front of the line “Restart Game” This is very important so the payout regulator can start with the new values.

Step 3: Set the claw power

The claw power can be set automatically or manually.

We recommend choosing the automatic mode, as the claw power will be adjusted automatically if necessary during the game.

In manual setting, the operator will be responsible himself for the settings, and there is no correction on the claw power. (see manual for further explanation)

Automatic claw adjustment

PRODUCT DEFINITION	
i set perc.	40%
e price out	10.0
product cost	4.0
automatic claw	0N
T claw learn	28%
S test normal game	

Make sure “Automatic claw is ON “

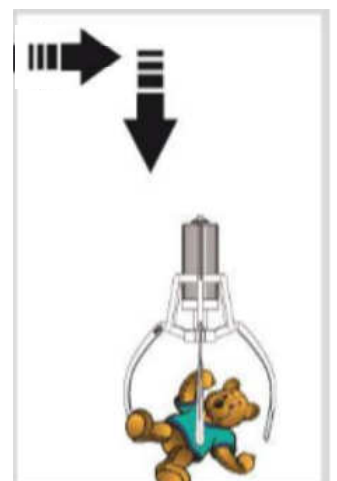


Clear the area on the right hand side of the prize chute and place the new plush on the bottom of the playfield.

Go to the line “Claw learn” in this same menu “Product definition “ and Press “T”

- the gantry will move to the right hand side.
- the claw will go down automatically.
- The claws grabs the merchandise.
- **Don't touch the claw**, but move the plush so the claw can picks it up

Note : If it's not possible to pick up the plush , than change the claw





Automatically the claws will go up and start calculating the required claw power to release the plush smoothly. If it doesn't work from the first time, try to repeat this 1 time more.

When the plush has fallen down, the calculated value is stored. The value will be shown after the line "T claw learn claw" in our example 28%.

This value should be between 20% and 30%

If it's lower than 20%, change the coil to a **lighter** type.

When higher than 30%, change the coil to a **stronger** type.



measurement Ok !! Signal and message : accepted !!
gantry goes back to home position .

measurement failed !!

Beep and message : **object not picked or weight to low dropped early or claw not powerful enough object stuck or claw to powerful.**

With this message, the claw comes up and stay in position. Change the coil or change the claw for the correct merchandise. Repeat this by pressing **S** (clear error) and **T** to repeat the procedure for learning the claw.

Note: due to the large range of claws there is always one for most common merchandise.

If you can't find the right adjustment with the automatic claw setup, then you can try the Manual Option. (see Automatic OFF)

Step 4: Set the pick-up time

PRODUCT DEFINITION	
i trend	xx%
i set perc.	40%
e price out	10.0
product cost	4.0
automatic claw	0N
T claw learn	28%
S test normal game	
T retaining power	-%
pickup power	-%
pickup time	0.4
random pick up	0N
S restart game	

The pick-up time is a setting that allows you to make the game more teasing. The higher the time is set, the higher the plush will be lifted from the playfield.

On automatically mode also this setting will be adjusted when necessary.

When the random pick up time is ON, the set pick up time will be changed every game (+ or - to the set time) this way the player has the impression that all games are different.

Step 5: test

```
PRODUCT DEFINITION
i trend          xx%
i set perc.      40%
e price out      10.0
product cost     4.0
automatic claw   0N
T claw learn     28%
S test normal game
```

Go to “test normal game” and press **S**

- There will be 1 free game available
- Play the game, make sure that the claw lift the plush
- You will hear a signal as confirmation
- repeat this 5 to 10 times to get the settings stable
- especially the value behind “claw learn”

Manual set up (automatic claw off)

```
PRODUCT DEFINITION
i trend          xx%
i set perc.      40%
e price out      10.0
product cost     4.0
automatic claw   OFF
T claw learn     -%
S test normal game
T retaining power 20%
pickup power     55%
pickup time      0.4
random pick up   0N
S restart game
```

Step 1: set price

Go to menu “Product definition”

Set up the “e price out” and “product cost” of the new product. (use + and -)

e price out: vending price: how much the product has to bring in.

This can be a maximum of 950 times the game price.

For example: Game price = 0,50 → The maximum vending price = 475,00.

product cost: purchase price: the cost of the merchandise

i set perc: the desired pay out percentage. This is not directly settable, but “e. price out” and “product cost” calculate this percentage (payout is minimum 20% and maximum 50%). When ERR% occurs, it means that the vending price is too high/low compared to the game price.

Automatic claw: change this to ‘ OFF’ by pressing “ + or - “ on the programmer

```
PRODUCT DEFINITION
i trend          xx%
i set perc.      40%
e price out      10.0
product cost     4.0
automatic claw   OFF
T claw learn     -%
S test normal game
T retaining power 20%
pickup power     55%
pickup time      0.4
random pick up   0N
S restart game
```

Step 2: adjust claw power and pick up time

Reboot controller to recognize the correct coil after changing.

Automatic claw should be ‘ **OFF**’

Retaining power: power to release merchandise.

Place merchandise in claw and press **T** . Claw closed and use ‘ + or - ‘ to change power until it drops down.

Power to pick up the merchandise (select manually)

Pickup power: select at minimum the double of the retaining power

Random time from pickup power to release power based on the installed pickup time (Random ON)

Note : When Automatic claw = OFF , T claw learn =

disabled

Random pick up: see page 22 for overview

Step 3: test

```
PRODUCT DEFINITION
i trend          xx%
i set perc.      40%
e price out      10.0
product cost     4.0
automatic claw   OFF
T claw learn     -%
S test normal game
T retaining power 20%
pickup power     55%
pickup time      0.4
random pick up   ON
S restart game
```

Go to test “normal game test” in the same menu. You will have a possibility to play by pressing **S**, this has no effect on the meters or payout regulator. Play about 10 test games with this function and try to lift the prize.

Step 4 : restart game

Adjust the claw power when necessary or change the pickup time to get a more exciting game. If the desired game is reached, you can change the “random pick up time” to have a more varied game.

The most important changes in comparison with previous versions:

1) “Trend xx %”:

The information “i Trend xx %” – which is to be found in the “Product definition” menu – represents the win percentage that has been established **through the last 6 wins** .

The distribution of won items keeps following a RANDOM pattern.

On average (that is, when using rather low selling prices) the E-Claw will have reached the desired percentage after 4 wins. **Wait at least 4 wins after pushing the “Restart regulator”.**

At a higher sales price the desired percentage will be reached faster.

Therefore you should not make use of the “Restart game” function unless it’s absolutely, positively necessary.

Actually the “Restart game” command should only be executed in case of radical changes in:

- **cost price / selling price**
- **product / grabber**
- **after changing “Credit settings”**

Note that the percentage in the “Accounts” menu is **long term** and is NOT set to zero when executing the “Restart game” command, simply because it’s NOT a short time variable.

2) Won = infrared detection:

Unlike previous versions, your E-CLAW is now only using its infrared detection to count the number of won items. So when a prize item is carried all the way to the win area but eventually falls aside, the player keeps his ‘win chance’. In the past such an event would have been registered as an

'Uncertain win', meaning that this particular 'win chance' could not materialize and often resulting in a payout percentage that was lower than the desired one.

2.1 When the detector is obstructed, you will see the following warning:

“Detector obstructed”

2.2 When the detector is broken, you will see the following warning:

“Detector malfunction”

ATTENTION: a broken detector allows for your players to empty your E-Claw!!

Execute the ***“Assign win”*** command to assign the regulator and not counted win.

2.3 What to do when the prize item is stuck (be it inside the grabber or above the detection)?

Take the prize item and pass it through the detection. If the cabinet starts blinking and playing its win sound, that means the item has been detected.

Attention : this action should be taken within a well-defined time frame.

In case the cabinet does NOT start blinking and playing its win sound, it is imperative that you execute the ***“Assign win”*** (manual setup) !

3) Pickup time / automatic claw (ITXGZ B0012 and ITXGZ B0106)

Golden rule : “Random pickup = ON”:

PICKUP TIME – 0.1 sec and up to PICKUP TIME + 1.5 x PICKUP TIME

For example:

Pickup time is set 0.4 sec Random “ON” :
=> MIN 0.3 sec and MAX 0.6 sec.

Pickup time with “Automatic claw = ON” the minimum pickup time is **0.4 sec**
Pickup time with “Automatic claw = OFF” the minimum pickup time is **0.2 sec**

TIP : If you think that prizes are still being lifted too high, deactivate the ‘Automatic claw’ and adjust the pickup power manually. You may even consider another grabber type. Pay attention that the prize can still be lifted.

4) Errors / warnings :

4.1 "Payout error" (code 34):

This error occurs when the "Trend" percentage exceeds the 100% right after a win. The machine will automatically cease to accept coins and bills. If the 'Automatic claw' is deactivated, you should reduce the retaining power. In the other case, you should replace the coil being used by a less powerful one.

4.2 "Difficult to win" (code 20):

This warning appears when too many 'win chances' are not being materialized. If the 'Automatic claw' is deactivated, you should raise the pickup power. If not, you should replace the coil being used by a more powerful one.

Warnings

Example:

```
WARNING.  
system malfunction  
  
Press S to resume.
```

code 01: system malfunction

Reboot the machine. Contact your local dealer if the failure repeats

code 02 : door open

Check if all doors are closed well. Otherwise check the door contacts and wiring for signs of damage.

code 03 : machine inactive

There is not played during the set time.

Check if the machine works properly or the coin/bill acceptor is not obstructed. If necessary, adjust the inactive alarm in the menu system settings.

code 05 : claw tuning problem

check the menu product definitions. Learn the prize once again if necessary.

code 06 : object weight diff.

The weight of the product is too low, and the claw may not recognize the product. Light products can be set manually only.

code 07 : game price n corr

Check the money settings.

code 08: account meter ovl

Electronic account meters overflow , clear the account meter

code 09: cashbox meter ovl

Electronic cashbox meters overflow , clear the cashbox meters meter

code 10: coin/bill accept.

The coin- or bill acceptor has reported a problem. Check the coin/bill acceptor on their functionality.

code 11: detector obstruc.

By switching on the crane, the detector becomes active. Objects in the prize chute or a problem with the detector can cause this.

Remark: the controller can't determine whether the detector works correctly.

code 12: consolate low al.

the minimum level of the consolation prizes is reached. Refill and restart the alarm in the menu CASH BOXES with the function S consolate alarm.

code 13: prizes low al.

the minimum level of products is reached. Refill and restart the alarm in the menu CASH BOXES with the function S product alarm.

code 15: detector malfunction

The prize detector is malfunctioning. Check the cabling and clean if necessary.

code 16: detector covered

Check whether there is something blocking the detector. Check the cabling and clean if necessary.

code 18: pick up time too high

Lower pick up time.

Code 19: claw is too strong.

The claw is too strong for the products. Change the claw fingers and/or the coil with another type (XS / S or Medium).

code 20: too difficult to win

This warning appears when too many 'win chances' are staying unused. In manual set up, you should raise the pickup power. In automatic set up, you should replace the coil being used by a more powerful one.

Errors

Example:

```
ERROR!  
meters disconnect  
Press S to resume
```

code 31: meters disconnect

the system cannot detect mechanical meters, check if the meters are connected.

code 32: consolate payout

the dispenser could not pay out a mercy prize. Check if the dispenser is blocked or empty. In CONSOLATION SETTINGS you have a help function to test the dispenser.

code 34 = excessive payout

This error occurs when the "Trend" percentage exceeds the 100% right after a win. The machine will automatically no longer accept coins and bills. In the manual setup, you should reduce the retaining power. In automatic set up, you should replace the coil being used by a less powerful one.

code 38: grabber circuit

A shorted circuit is detected. Check the gantry and power line cord on damage. Try with another the coil on another gantry and check if this is working.

code 39: home : module

no communication with the XY module on the
Check the connection between the IntraXion controller and the gantry.

code 40: home : open circuit

The controller is try to drive the motor but no movement detected. Check the mechanical functions of the gantry.

code 41: home overcurrent

Over current measured on motor. Check if mechanical parts are blocked and the correct suspension of the gantry.

code 42_: home : mov. det.

The gantry didn't reached the home position in time. Check the mechanical functions of the gantry.

code 43: bottom n. reached

The claw didn't reached the bottom in time. Check the mechanical functions of the gantry.

code 44: up not reached

The claw did not reached the up (in time). Check the mechanical functions of the gantry.

Software update

By means of the Elaut Program Loader a software update is possible via the IntelliLink connection.

- *To obtain the right functionality
- *To solve known problems
- *To adjust a new (or replaced) module to the system.

Attention: Modules and programs must remain attuned to each other. If 1 module is adjusted, the other modules must be adjusted as well.

The modules are up to date if:

IntraXion controller = ITX_10xxR**10.x**

Attention: Firmware Controller : 2C or 2D or 3B

IntraXion sound	= ITXSND1000R01	(or more recent of specifically chosen)
	= ITXATT1000V00	(or more recent of specifically chosen)
Intraxion control	= ICTLS_C0100	(or more recent)
(or)	= ITBIO_D0101	(or more recent)
Gantry controller_XY	= ITXGX_B0005	(or more recent)
Gantry controller_Z	= ITXGZ_B0012	(or more recent)
(or for Cosmic)	= ITXGZ_B0106	(or more recent)
ITX_RGB_controller	= ITRGB_B0104	(or more recent)
Video controller	= ITVID_C0203	(or more recent)

(x means: each figure or letter).

If the Firmware = 2A or 2B, the controller has to be reprogrammed by an Elaut technician.