HIDDEN SCREEN INFORMATION



Warning: This information should be controlled by authorized personnel only! Do not distribute this information other than advanced-specialized maintenance person with full access authority of machines. Otherwise, you may loose all robot Info /Data

Information: This information is for HYNC-700 Control Units. This information include manufacture's set up of machine and other information. Only authorized personnel should have this information. Robot: NEXIA, ZEST, HYBRID

Handy Controller Power Switch

E-Stop Button



When Robot Start booting up, Robot will Read, TP, NAND, SC with it's program version.

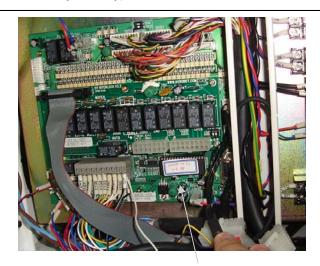
TP: Teach Pendant Chip: EEPROM (electrically erasable programmable read-only memory). Located back side of handy controller

NAND : NAND Flash Memory : This information include Robot Model information, Screen, Language, and Mold Program. : Located back side of handy controller

SC: Single Main Controller: <u>EEPROM</u> (electrically erasable programmable read-only memory). Located back side of Main Controller







SC Memory

For Service for Robot, Please collect version of all 3 memory information. Like TP V 6.4, NAND V 6.42 SC V 6.44



1. Booting Up.



As long as robot read all 3 program version, and blue bar goes all the way goes to end of white bar means robot Handy Controller, Main controller and communication is working properly between.

After end of bar if robot gets alarm, that means we need to check

- Sensor or Cable
- 2. Servo Motor or Driver
- 3. Servo Motor Cable
- 4. Servo Motor Encorder Cable.
- 5. Interlock Board
- 6. Relay
- 7. Motor Contactor.
- * This will be handled with other manual

2. End of Normal Booting



After read all TP, NAND, TP and turn on Servo Motor and check each sensor Robot will goes to servo motor origin point.

- 1. Each axis servo motor has sensor for finding servo motor origin location
- 2. If robot is not in safe position, we can move with manual key before starting to find motor origin location. * Before find servo motor origin point and tried to move robot to safe position, we need to be careful because robot will move over end of stroke because it didn't read robot stroke limitation yet
- 3. +, is key for speed setting for manual operation.
- 4. Start will start find servo motor origin position.

But we can not touch screen because Touch screen lock is not released yet.

3. Release lock of touch screen.



To Start, we need to touch button twice in 1 Seconds.

This will change left top corner circle from white color to Green color.

If want to lock back, touch button twice again in 1 Seconds, This will change left top corner circle from Green to White color.

Green Color: Touch Screen Unlocked (Touch Screen will work)

White Color: Touch Screen Locked (You can't touch anything)

* Next page, we will explain how to calibrate touch screen from hidden screen.



1. How to Calibrate Touch Screen

After booting up, unlock touch screen. You can start touch touch screen, once installed new memory chip or replace touch or LCD screen or whole handy controller, we may be required to calibrate touch screen.





There are two ways to reset touch screen. This is first way and need to go in to Hidden screen.

- 1. After unlock touch screen,
- 2. Touch left top corner and right top corner in 1 second.
- 3. It will beep and beep.
- 4. If it is successfully touched it will lead to hidden screen.
- 5. If not, wait 5 seconds and try it (Sometimes might need to touch left top corner and around of right top corner due to no calibration of touch screen). If it can't not be done, need to go to next page.

2. Inside of Hidden screen. (First Page)



Do not change this setting unless if required by Manufacture, Each model has different value

Once you get into hidden screen, it will display origin set for each axis.

- TRVS (Traverse Axis)
 Dir (CW), Direction of Clock wise, Offset 500 means (500 mm from Servo magnetic sensor to Program 0 Point)
 - * Proximity Green sensor need to touch in the middle of plate for safety.
- 2. PFBW (Product Arm Forward and Backward)
 Dir (CCW), Direction of Counter Clock wise, Offset 430 means 430mm from Servo magnetic sensor to Program 0 Point)
- 3. PASCDSC (Product Arm Ascending and Descending)

Press Next Page, if it didn't go to Next page, press left side of top side of Next

3. Inside of Hidden screen. (2nd Page)



Do not change this setting unless if required by Manufacture, Each model has different value

This information include limitation of robot

- 1. TRVS (Traverse Axis)
 - Limit -30 (From 0 Point to -30 mm)
 - + Limit 1300 (From 0 Point to 1300 mm)
- 2. PFBW (Product Arm Forward and Backward)
 - Limit 0 (From 0 Point to 0 mm)
 - + Limit 670 (From 0 Point to 670 mm): Kick Distance
- 3. PASCDSC (Product Arm Ascending and Descending)
 - Limit 0 (From 0 Point to 0 mm)
 - + Limit 700 (From 0 Point to 700 mm): Down Distance



4. Inside of Hidden screen.



Do not change this setting unless if required by Manufacture, Each model has different value

- 1. FullAutoSig: Yes (Robot will look for Molding machine auto signal)
- 2. DrSigCheck: (Auto): Safety Door Signal Check Robot can't go Automatic without Safety Door Signal from Machines
- 3. Detect Error: When robot miss parts, robot will move up and alarm.
- 4. Jog Step Speed: 10 (Do not change this setting)
- 5.Lanugage Set: English, Korean

Press Next Page, if it didn't go to Next page, press left side of top side of Next Page with big thumbs.

5. Inside of Hidden screen.



Do not change this setting unless if required by Manufacture, Each model has different value

- 1. StepRunSpeed: 10 (Do not change this setting)
- 2. EOATMoveSpeed: 10 (Do not change this setting)
- 3. Collision Avoidance : No (0.0) This is for special robot

Press Next Page, if it didn't go to Next page, press left side of top side of Next Page with big thumbs.

6. Inside of Hidden screen.

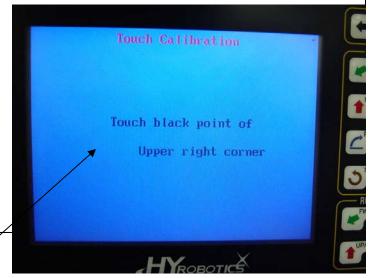


Do not change this setting unless if required by Manufacture, Each model has different value

Touch Set: Set: This is calibrating touch screen.

Press Set. (might need to touch around of SET BUTTON to bring touch screen cali-

bration screen)



Touch Calibration Screen

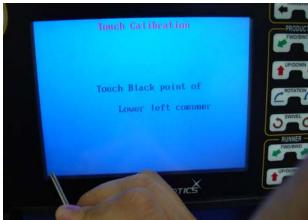


7. Inside of Hidden screen.



1) Touch Black Point of Upper Right corner, It will show black small dot on right upper corner. * Use ball pen to touch. (Do not use Knife or too sharp products)

Once touch screen recognize your touch, it will lead to next screen.



2) Touch Black Point of Left bottom corner, It will show black small dot Once touch screen recognize your touch, it will lead to next screen.

It will ask one more time to calibrate









2nd Way to Calibrate Touch Screen.



There are two ways to reset touch screen.

This is 2nd way and doesn't need to go in to Hidden screen.

- 1. Press E-stop button. Do no release E-Stop yet
- 2. Turn on Robot



Turn on Robot

Robot will not read TP, NAND,SC

Robot will go to Error Screen.

Some old program version doesn't have Full Restore or Initialization for in this screen.



Press Touch Button (or Membrane Key)

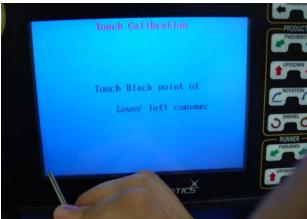


It will go directly to calibration screen.



1) Touch Black Point of Upper Right corner, It will show black small dot on right upper corner. * Use ball pen to touch. (Do not use Knife or too sharp products)

Once touch screen recognize your touch, it will lead to next screen.



2) Touch Black Point of Left bottom corner, It will show black small dot Once touch screen recognize your touch, it will lead to next screen.

It will ask one more time to calibrate







Once it's done, turn off power wait 10 sec and turn on Power.

Touch Screen has been calibrated.



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Information: This information is for HYNC-700 Control Units. 2ND Hidden screen included servo motor parameter, acceleration of speed and special setting of robot.

1. Go to Option Page



This option page is gate way to go to 2nd hidden screen



2. Access 2nd Hidden Screen

Touch Middle Top and Bottom Top to access 2nd hidden screen.





3. Release lock of touch screen.

It will ask password, Put 0000, it will show invalid password and time and date Write down CurTime Six digit: 110916 (Last 4 digit is password: Like 0916)







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4. Access 2nd Hidden Screen

Touch Middle Top and Bottom Top to access 2nd hidden screen.

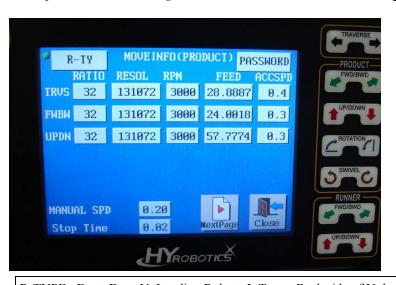




5. Input Password. Last 4 digit of fist line: Write down CurTime Six digit: 110916 (Last 4 digit is password: Like 0916)



6. Input Password. Last 4 digit of fist line: Write down CurTime Six digit: 110916 (Last 4 digit is password: Like 0916)





R-TYPE: Front Door UnLoading Robot: L Type: Back side of Unloading

Password: Resetting Password for Login

Ratio Resol, RPM, Feed ACCSPD: is all servo Related value: Do not change this value unless authorized by manufactures.

Each Robot has different value, please contact to get this value information for your robot if required.

