

## Chapter 4 Software

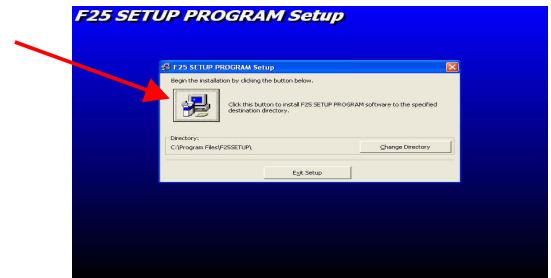
### 4-1 Software Installation

#### F25 Software Installation

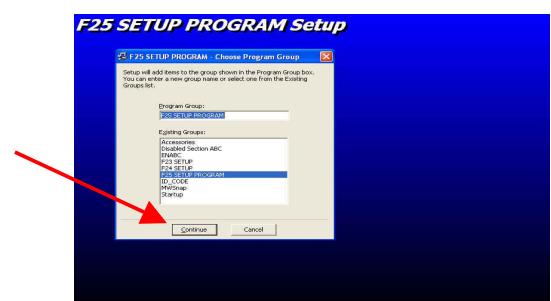
1. Insert F25 CD-ROM, the installation program will be executed automatically.



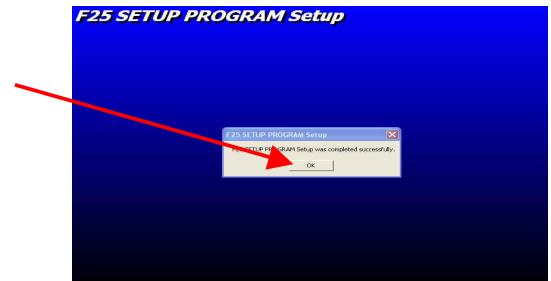
2. Press the “icon” and continue the installation



3. Press “Continue” button

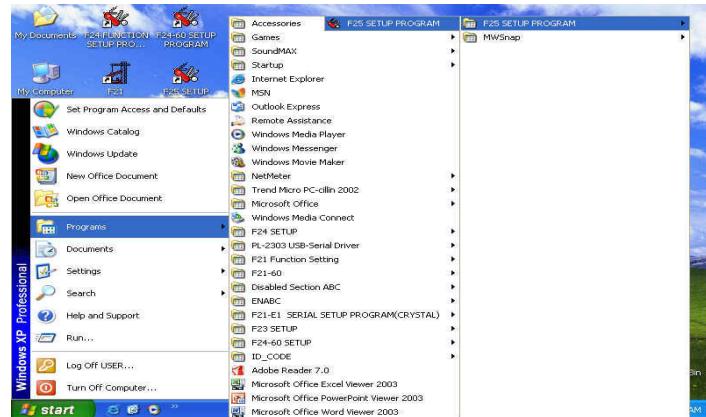


4. Press “OK” button and installation of F25 software program is completed.



## How to start F25 Program

1. Press “Start” button
2. Select “Programs”
3. Select “F25 SETUP PROGRAM”
4. Then select “F25 SETUP PROGRAM”



## How to use F25 Program

**Note:** Make sure both power of transmitter and receiver is remaining OFF when reading or writing the data.

### Reading Data

1. Connect program Interface Cable (USB) into transmitter or receiver.
2. Press “Read R/C”.
3. Press “OK” when finish.



### Writing Data

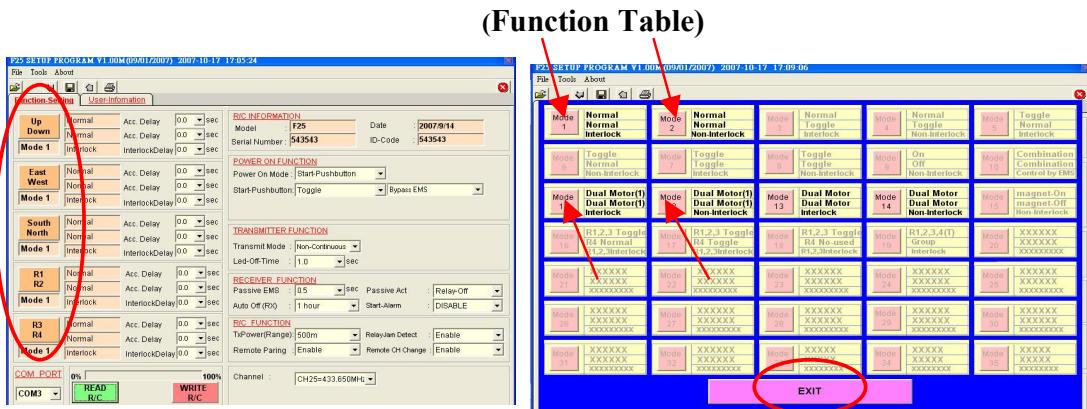
1. Connect program Interface Cable (USB) into transmitter or receiver.
2. Press “Write R/C”.
3. Press “OK” when finish.



### Pushbutton function setting

1. Read data from Transmitter (Receiver).
2. From main (Function-Setting) page, press any button group you would like to program. The pushbutton function table will be pop up immediately. Select any function block from the table (as shown on the figure). Return to main page automatically when finish the selection.
3. Repeat the above procedure 1~3 if you wish to make any other function changes on the pushbutton.

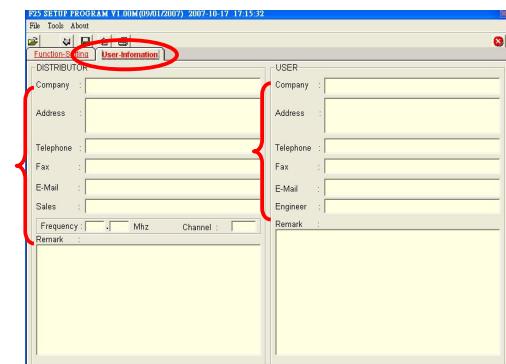
**Remark:** (1) For further information about the function definition, please refer to the annex 1 for more detail.  
(2) Press “EXIT” to close function table without change



## User-Information

Customer data sheet: Allow you to store the customer information such as company name, purchasing date, address, and phone etc.

1. Click “User-Information”
2. Fill the information.



## Saving data

To save radio function and customer data

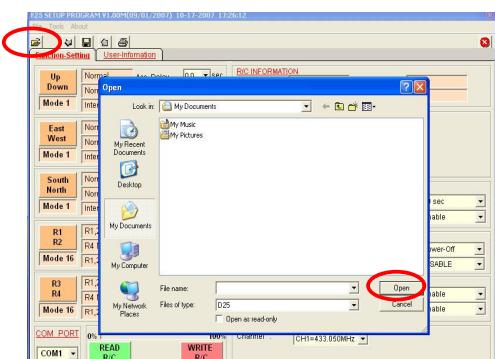
1. Press Save button 
2. Select the saving folder and file name then press **SAVE**



## Open File

To open file (data) 

1. Press open file button  or select LOAD
2. Select the file name then press **OPEN**

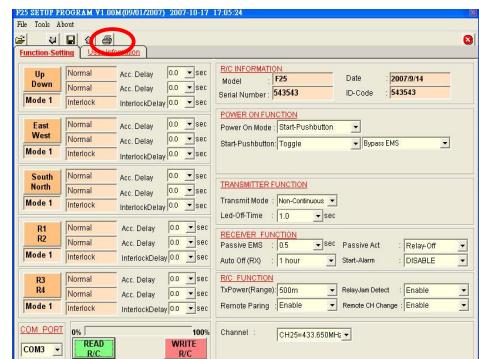


## Print

To print the screen

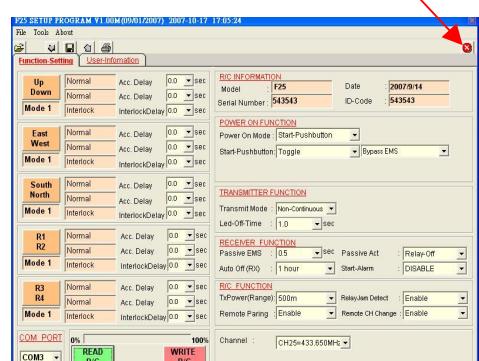
Press **Printing**  button

**Note:** Only in-use page will be printed when pressing printing button. In order to print other page, please switch to another page and press the print button again.



## **Exit F25 Program**

Press exit button



## 4-2 Definition of Function Setting Terms

Normal	The relative relay is “ON” when the pushbutton is pressed and held; and relay is “off” when the pushbutton is released.
Toggle	Maintained function: the relay is operated by pressing and releasing. Press the pushbutton and release once for “on”; press and release again to turn off the relay.
ON/OFF	Both pushbuttons are used to operate the same relay. Press the ON pushbutton to activate the relay and press the OFF pushbutton to de-activate the relay.
Interlock	The two pushbuttons are interlocked; it’s not possible to operate two opposite functions at same time.
Non-Interlock	The two pushbuttons can be operated at the same time: When the application allows operating at the same time two functions which are usually opposite to one another.
Interlock Delay Time	“Interlock Delay Time” is delay time between 2 opposite pushbuttons are being press one after another. i.e.: while crane is moving one direction (forward), moving opposite direction (backward) immediately would be dangerous specially when crane is hooking up the heavy object. The object may sway if crane does not completely stop before moving into opposite direction. Therefore the interlocked delay time could potentially prevent it. Normally, the interlocked delay time should be larger than the duration of crane stop.
Bypass EMS	“Bypass EMS” means that the relay relating to pushbutton will not be controlled by EMS mushroom or emergency stop signal.
Control By EMS	“Control by EMS” means that the relay relating to pushbutton is controlled by EMS mushroom or emergency stop signal.
Acc. Delay	This function uses to set the time interval between acceleration relay (i.e. conduction-delayed time of acceleration relay). It is suitable for accelerative operation only in order to prevent the cranes directly runs to highest speed to damage the motor.

Dual Motor	When 1 <sup>st</sup> step pushbutton is pressed, the 1 <sup>st</sup> step relay turns ON, if 2 <sup>nd</sup> step is being pressed then 2 <sup>nd</sup> step relay turns ON and 1 <sup>st</sup> step relay turns OFF. (For dual motor hoist)												
	<table border="1"> <thead> <tr> <th>Pushbutton</th> <th>Relay</th> <th>1<sup>st</sup> Step Relay</th> <th>2<sup>nd</sup> Step Relay</th> </tr> </thead> <tbody> <tr> <td>1<sup>st</sup> Step</td> <td></td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>2<sup>nd</sup> Step</td> <td></td> <td>OFF</td> <td>ON</td> </tr> </tbody> </table>	Pushbutton	Relay	1 <sup>st</sup> Step Relay	2 <sup>nd</sup> Step Relay	1 <sup>st</sup> Step		ON	OFF	2 <sup>nd</sup> Step		OFF	ON
Pushbutton	Relay	1 <sup>st</sup> Step Relay	2 <sup>nd</sup> Step Relay										
1 <sup>st</sup> Step		ON	OFF										
2 <sup>nd</sup> Step		OFF	ON										
Dual Motor (1)	The main function characteristic of <b>Dual Motor (1)</b> is same as <b>Dual Motor</b> except the 1 <sup>st</sup> step relay will not be activated (bypass) while pushbutton is returning from 2 <sup>nd</sup> step to 1 <sup>st</sup> step.												
Combination	When 2 buttons are being pressed simultaneously, it would result for an additional relay output (as toggle) to suit some of the special application such as lighting system.(No any extra pushbutton required to save the space and cost) <i>*Combination setting is prohibited for magnetic devices.</i>												
Magnetic ON/OFF	Both pushbuttons are used to operate the same relay. Press the “Magnetic ON” pushbutton to activate the relay. If the operator wants to de-activate the relay, he must keep pressing the “Magnetic ON” pushbutton and then press the “Magnetic OFF” pushbutton in the mean time. The purpose is to prevent the operator from accidentally pressing the “Magnetic OFF” pushbutton and dropping the load held by the magnetic sucking disc.												
R1,2,3 Toggle, R4 Normal	R1, R2, R3 pushbuttons are set as Toggle and R4 pushbutton set as Normal. This function is applied when the crane has 2 trolleys and need to control the trolleys separately or simultaneously. Press R1 pushbutton to control Trolley A, Press R2 pushbutton to control Trolley B, and Press R3 pushbutton to control both Trolley A & B. Furthermore, R4 can independently perform the Normal function and with 2 speed.												
R1,2,3 Toggle, R4 Toggle	R1, R2, R3 pushbuttons are set as Toggle and R4 pushbutton set as Toggle. This function is applied when the crane has 2 trolleys and need to control the trolleys separately or simultaneously. Press R1 pushbutton to control Trolley A, Press R2 pushbutton to control Trolley B, and Press R3 pushbutton to control both Trolley A & B. Furthermore, R4 can independently perform the Toggle function.												

R1,2,3 Toggle, R4 No Use	R1, R2, R3 pushbuttons are set as Toggle and R4 pushbutton no use. This function is applied when the crane has 2 trolleys and need to control the trolleys separately or simultaneously. Press R1 pushbutton to control Trolley A, Press R2 pushbutton to control Trolley B, and Press R3 pushbutton to control both Trolley A & B (Once R3 pushbutton is pressed, R4 relay is also activated with R3 relay. At this time, R4 pushbutton is no longer available even if it has been pressed.
R1,2,3 Toggle, R4 Group	R1, R2, R3, and R4 pushbuttons are all set as Toggle. This function is applied when the crane has 4 trolleys and need to control the trolley A, trolley B, trolley C, trolley D separately by pressing each individual pushbutton respectively.
Power On Mode	<p>Start-Pushbutton/Password:</p> <p><b>Start-Pushbutton:</b> It is the regular way to power on the receiver.</p> <p><b>Password:</b> The selection menu of key1, key2, key3, and key4 are popped up when Password is chosen. Allow the operator to select any combination of these 4 keys. Operator has to enter password before turning on the transmitter. The purpose is to prevent the unauthorized person from operating the remote controller or machine.</p>
Inching	<p>The relative relay will be conducted within a certain time, in order to operate with short and precision movement. There are 2 ways to perform this function:</p> <p><b>Dual Buttons Inching:</b> Press and hold “START” pushbutton and press the relative motion pushbutton to perform inching motion. (When “Dual Buttons Inching” is chosen.)</p> <p><b>Single Button Inching:</b> Once “START” pushbutton is pressed, just presses the relative motion pushbutton, then can perform inching motion. To release this function, just press “START” pushbutton again. (When “Single Buttons Inching” is chosen.)</p>
Inching time	“Inching time” can be set from 0.01~2.0 seconds. This function is used to operate crane with short and precise movement (e.g. accurate position). “Inching Time” is the same as the working time for the relative relay that is controlled by executing “Inching” control function.

Transmit Mode	“Non-continuous transmitting mode”: After “Power-On”, the transmitter will transmit the signal only when the pushbutton is pressed. This mode can save the power of transmitter. “Continuous transmitting mode”: Transmitter will continuously transmit signal once transmitter is being Power-On.
Save Power	This function is used to turn off the Transmitter after a given idle time. *Only available under “continuous transmitting” mode.
Auto-OFF(TX)	This function refers to turn off the Transmitter after a given idle time while transmitting the signal to switch off the receiver main relay. *Only available under “continuous transmitting” mode.
LED OFF-Time	This setting allows you to select the LED intermittent time to save transmitter power. i.e.: If 1 second is selected, the LED will be lighted every 1 second.
Passive Act	This function ensures safe operations, including when there are disturbances that may affect the normal operating conditions. This assures that when the machine operates, the control is not subject to temporary and unexpected stops. Possible short interferences are bypassed. The passive act can be select in 2 mode as below, <b>“Ry Off”</b> If the interferences are larger than the pre-set time, the receiver will turn off all the relays under “NORMAL” function except the MAIN relay. <b>“Power-Off”</b> If the interferences are larger than the pre-set time, the receiver will turn off all the relays under “NORMAL” function and “Control by EMS” including MAIN relay. The receiver must be restart to operate again, follow the “Power-On” procedure to restart the system.
Passive EMS	This setting allows the user to select the duration for the interferences to be bypassed. If the interferences were within the duration, then the receiver is still in operation, not affected. When the interference is longer than the duration, then the receiver will stop working. Usually, this action is called “Passive EMS”.
AUTO OFF (RX)	This function refers to turn off receiver after a given idle time. Receiver MAIN relay will be turned off automatically. Normally this function is cooperated with “non-continuous “transmitting” mode to prevent any unintentional radio.

Start-Alarm	This function allows the user to activate the alarm of the receiver to work or not to work. If the “Enable (2 sec)” is chosen, then the alarm will make a 2-second sound when the receiver is powered on/off.
TxPower(Range)	The emission power of the transmitter is adjustable according to the user’s requirement. This options is shown as transmission distance ranging from 20m to 500m, 8 steps to choose. The transmission distance is strictly subject to the local environmental factors. Therefore, it might be different from place to place and it is for reference only.
Jam Detect	This function is to allow the user to activate the “relay jam detect circuit” of the motion relays, UP/DOWN, EAST/WEST, SOUTH/NORTH, or not. If the option “Enable” is chosen, then the circuit is activated and it will control the EMS relay to stop working when the jammed relay is detected.
Remote Channel Changing	When the option “Enable” is chosen, then the “Remote Channel Changing” is allowed to perform. See Section 3-5-1 for the procedure of remote setting. When the option “Disable” is chosen, then the “Remote Channel Changing” cannot be performed.
Remote Pairing	When the option “Enable” is chosen, then the “Remote Pairing” is allowed to perform. See Section 3-5-2 for the procedure of remote setting. When the option “Disable” is chosen, then the “Remote Pairing” cannot be performed.
Channel	This setting allows the user to choose the Operating Frequency for the remote controller. There are 70 channels in total can be selected, CH1~CH70.