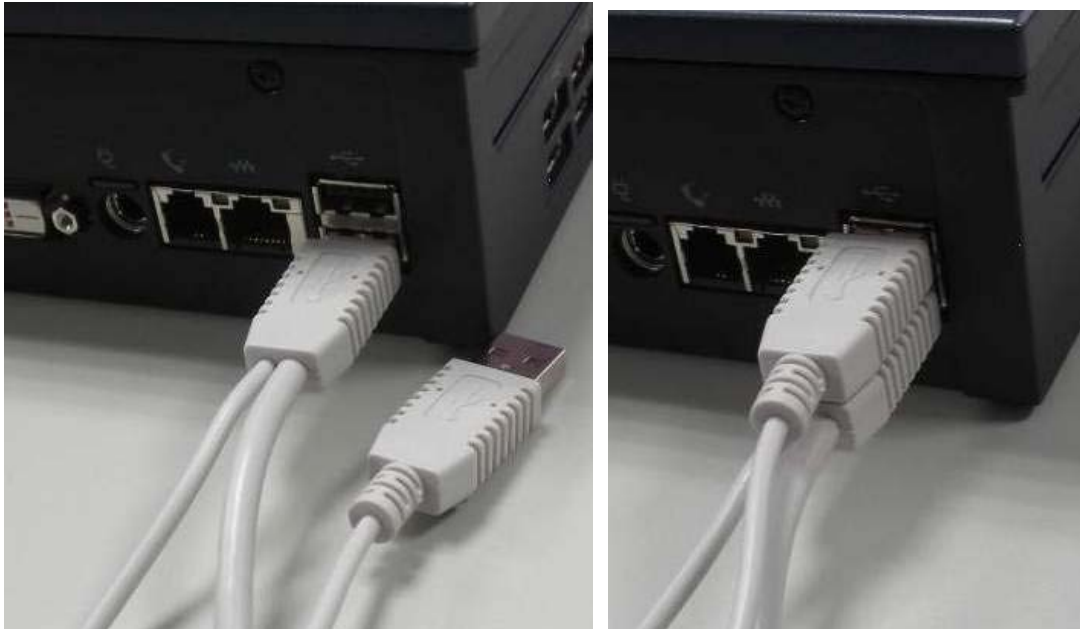


# SCW2750UP-33

# Installation & Test

## 1. SCW2750UP-33 cable connection

Connect at least the main USB plug of SCW2750UP-33 to a computer's USB Socket. One more USB plug is for higher swiping speed or in case system uses battery.



## 2. Device driver installation

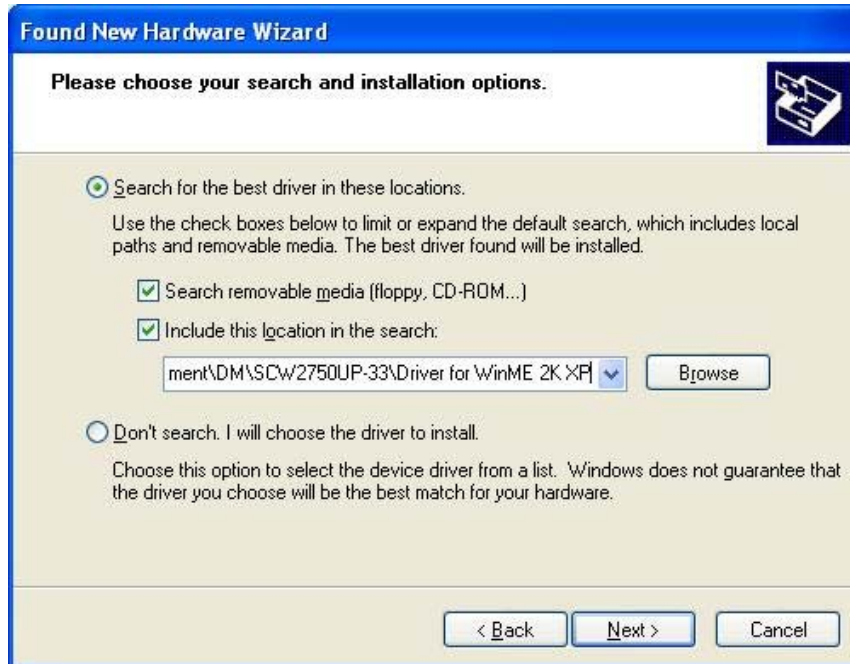
After you plug the main USB plug in to a computer, you will see a “Find New Hardware Wizard” dialogue box to guide you through the driver installation.

1.1 Select “install from a list or specific location (Advanced)”.





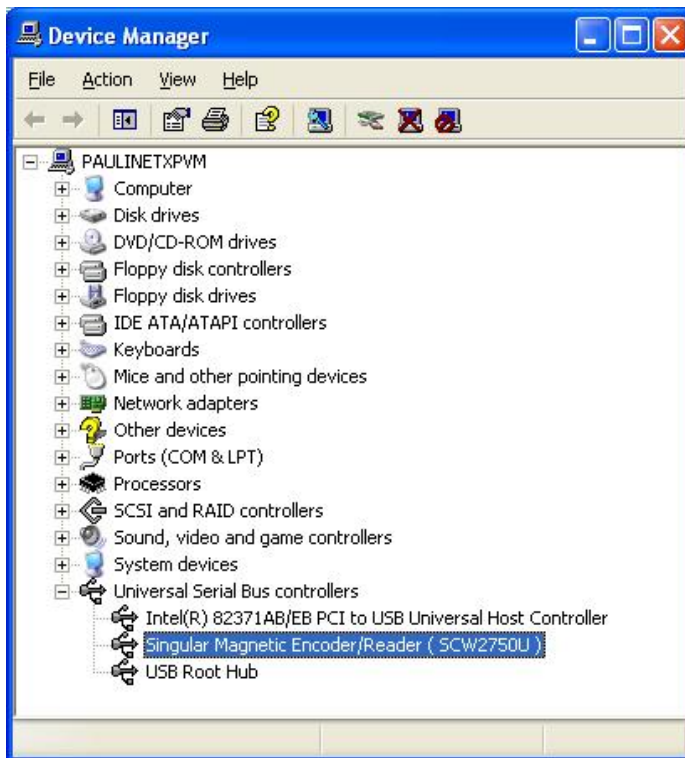
## 1.2 Specify the driver path <CD-ROM>:\SCW2750UP-33\Driver for WinME 2K XP\



## 1.3 Ignore the warning and complete the driver installation.

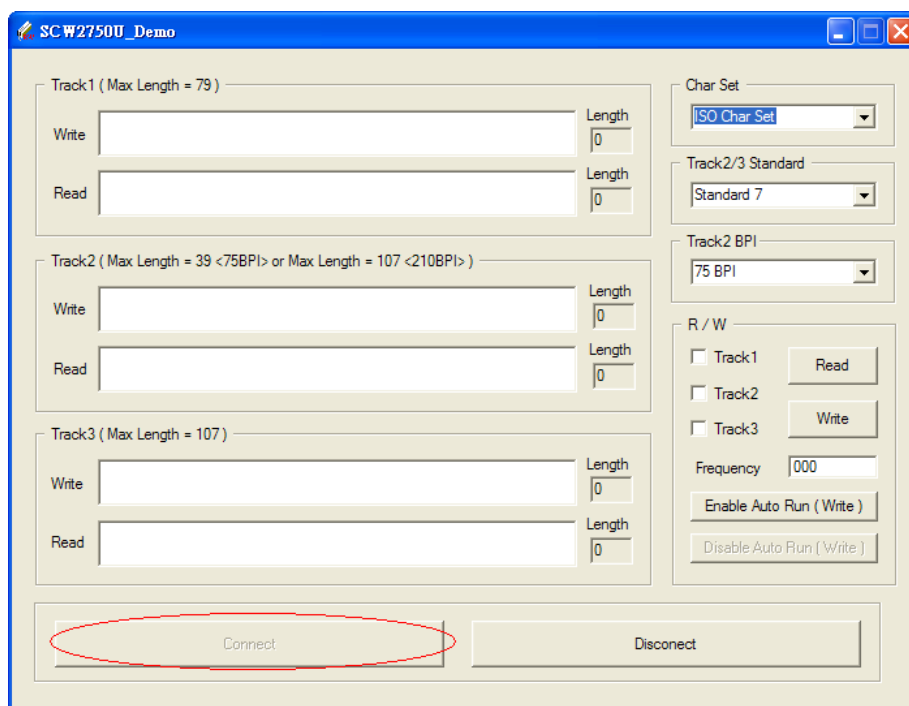


1.4 Check the “<Control Panel> / <Performance and Maintenance> / <System> / <Device Manager> and you will find a new USB device called “Singular Magnetic Encoder/Reader (SCW2750U)”



### 3. Test

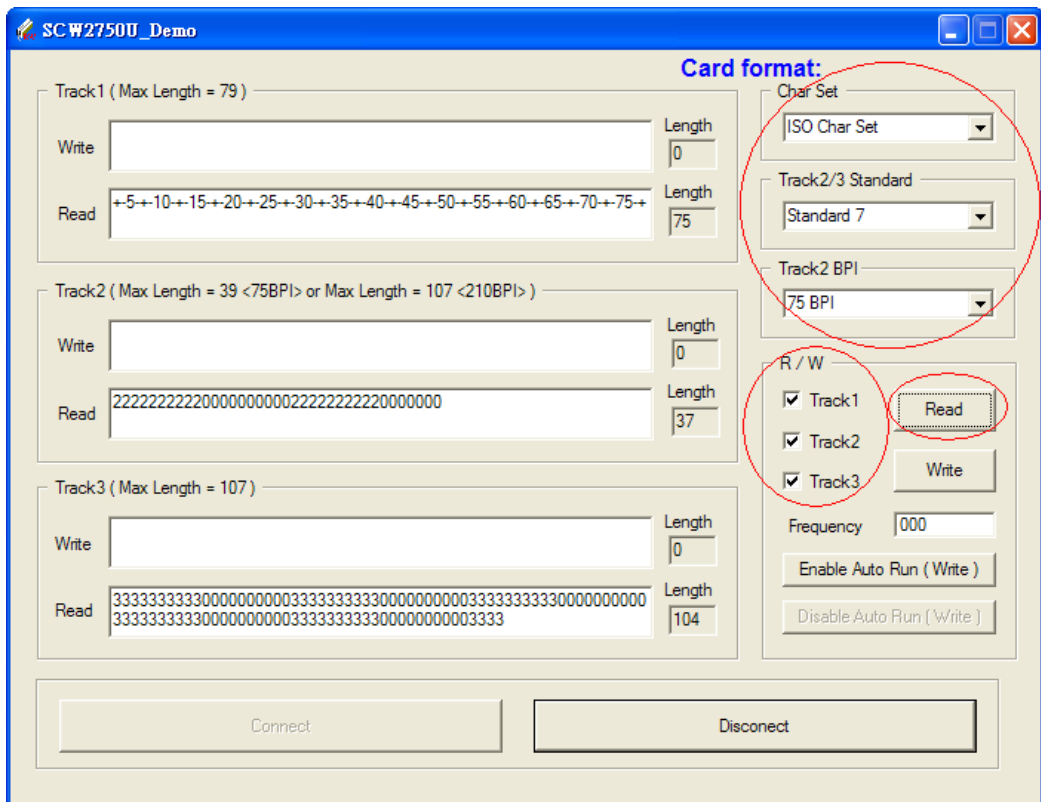
3.1 Run test program “SCW2750U\_Demo.exe” under path <CD-ROM>:\SCW2750UP-33\Program. You can find a dialog-box show as the following one. Press <Connect> button. If the connection is ok, SCW2750UP-33 will make “beep” twice.



- 3.2 Read Test: Select the card format (default setting is ISO7811 format). Select which tracks you want to read and then press <Read> button. The green LED for “Read” on the encoder will be lit up to prompt user to swipe a card like P1. Please notice the swipe direction. After you swipe a card, you will hear the encoder beep once for successful reading and get card data in “Read” edit-box controls like P2. If card data is not a standard format or user didn’t swipe a card smoothly, the encoder will beep twice and the orange LED for “Error” will be lit up like P3.



P1



P2

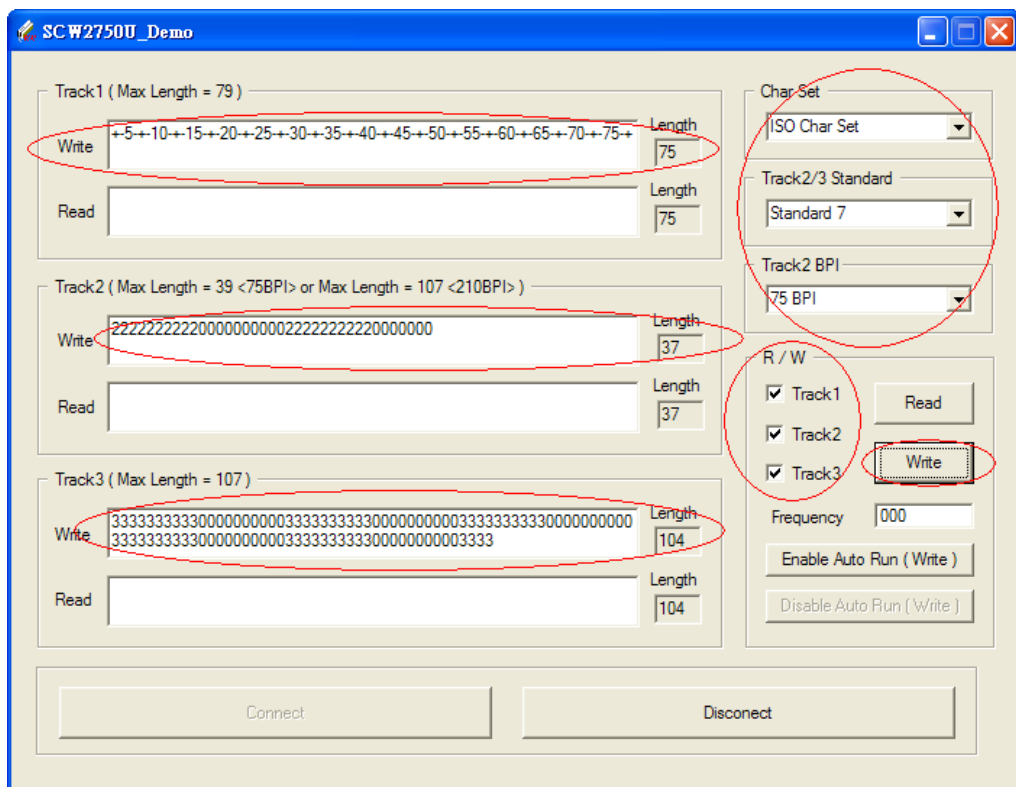


P3

3.3 Write Test: Select the card format (default setting is ISO7811 format). Select which tracks you want to write and then press <Write> button. The green LED for “Write” on the encoder will be lit up to prompt user to swipe a card like P1. Please notice the swipe direction. After you swipe a card, you will hear the encoder beep once for a successful writing. If user didn’t swipe a card smoothly or **user didn’t swipe a card for more than 10 seconds (to prevent the write head overheating)**, the encoder will beep twice and the orange LED for “Error” will be lit up like P3.



P1



P2



P3



- 3.4 Enable Auto Run Test: Select the card format (default setting is ISO7811 format). Select which tracks you want to write and then press < Enable Auto Run > button. The test program will fill in written number “000” in each track and start the loop to write and read a card automatically. The written number will plus one after a write/read loop. You can stop the test by pressing <Disable Auto Run> button.

## 4. Card format setting:

### 4.1. Track2&3 Character Sets

\*. ABA code: The code is actually recorded on the card

#### IBM Character Set 1

Char Set	0	1	2	3	4	5	6	7	8	9	:	#	@	'	=	?
ASCII Code	30	31	32	33	34	35	36	37	38	39	3A	23	40	27	3D	3F
ABA Code	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F

#### IBM Character Set 2

Char Set	0	1	2	3	4	5	6	7	8	9	:	#	@	'	=	?
ASCII Code	30	31	32	33	34	35	36	37	38	39	3A	23	40	27	3D	3F
ABA Code	0	1	2	3	4	5	6	7	8	9	A	B	C	D	D	F

When reading, all 'D' ABA codes will be translated into '\_' (0x27).



### IBM Character Set 3

Char Set	0	1	2	3	4	5	6	7	8	9	:	#	@	'	=	?
ASCII Code	30	31	32	33	34	35	36	37	38	39	3A	23	40	27	3D	3F
ABA Code	0	1	2	3	4	5	6	7	8	9	A	B	C	D	D	F

When reading, all 'D' ABA codes will be translated into '=' (0x3D).

### ISO Character Set (default)

Char Set	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
ASCII Code	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F
ABA Code	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F

## 4.2. Track2&3 Standards for Start Sentinel and End Sentinel

Functions	Explanation			
Track2&3 Recording Rules	Rule	Start Sentinel	End Sentinel	Possible Characters
	1	BA	F	0~9 D
	2	BA	F	0~9 DE
	3	BA	C	0~9 DE
	4	B	F	0~9 ADE
	5	D	F	0~9 ABE
	6	B	C	0~9 ADE
	7	B	F	0~9 ACDE
	8	D	F	0~9 ABCE

## 4.3. Track2 density: BPI (bits per inch)

- 75 BPI
- 210 BPI