## **Dot Matrix Indicator Programming**

### **Preparation:**

- USB Dongle and USB cable. Part No. 100-159 (see page 3 "Dongle Installation Instruction").
- Display Programmer V2.0 (see page 10 "Display Programmer V2 Installation Instruction")
- 24Vdc power supply. Connect 24V to P1, 0V to P2 and C terminals

#### **Programming:**

**Step 1:** Double click to good on the desktop to run the program. If the Serial Communications port has been setup, skip to step 4.



**Step 2:** Connect USB Serial dongle to the USB cable, then the cable to computer's USB port. Take note of the serial port number (must be registered from 1 - 4).

**Step 3:** Click "Setup – Serial Communications' and make sure correct serial port number has been selected then click OK button.

Display Programmer V2.0	) – 🗆 X	📕 Commu —	o x
File Program Maintain	Setup Help	Port	I OK
For software from	Serial Communications	С СОМ2 С СОМ3 С СОМ4	X Cancel

**Step 4:** Plug the 10 pin plug of USB dongle to the intended dot-matrix indicator. Connect the 24Vdc to 3 pin plug then power the unit up.

**Step 5:** If a programming message record has been created, skip to step 6. If not, click "Maintain – Display Configurations" to setup a new record.

Display Progr	ammer V2.	0 — 🗆	X
File Program	Maintain	Setup Help	
For softwa	Mess Mess	sage Data sage Sets	l
	Displ	lay Configurations	ľ
	Job	files	
	Cust	omer Address's	

Use the existing record as sample then click <u>CopyRecord</u> button to copy existing record or <u>+</u> button to create a new clean record. Modify the record then re-name it at "Configuration" field. Click <u>-</u> button to save.

-	Bisplay Configuration		<u></u>	12				1
	Configuration	MessageSet	DisplayType	Description	Chime Position	OutOfServMess	Input1	L
C	1-6 Decimal, Standard Message Set	Standard	All			~1	1	ľ
	1-63 Binary, Standard Message Set	Standard		3		~1	1	
ļ	1-63 Gray code, Standard Message Set	Standard				~1	1	
	c,		nana ang mana a				>	
	+ –	1	N	×	Copy Record	Close		
	1 C Desired Clauded Massag	- C-1	13		Chandrad			
	Configuration: 11-6 Decimal, Standard Message	5 3 61		Message Set	Standard		-	
	0     5 and Code       1     9     17       2     2     10     18       3     11     19     17       4     3     12     20       5     13     21     6       6     14     22     7       7     15     23     8       8     16     5     24	25 33   26 34   27 35   28 36   29 37   30 38   31 39 <b>32 6</b>	41     49       42     50       43     51       44     52       45     53       46     54       47     55       48     56	57 58 59 60 61 62 63	<sup>*1</sup> Dut of Service <sup>*2</sup> Car Overloaded <sup>*3</sup> Lift on Car Fire S. <sup>*4</sup> Hall fire service n <sup>*5</sup> Lift on Exclusive <sup>*6</sup> Lift on Independi <sup>*7</sup> Lift on Inspection <sup>*8</sup> Dut of Service <sup>*9</sup> Dut of Service <sup>*10</sup> Dut of Service <sup>*11</sup> <sup>*12</sup>	ervice ecall Service ent Service	^	
	Dut Of Service Message: 71				~14 ~15 ~16 ~17			

Step 6: Click "Program – Job Data" to open the Job data window for programming.

📕 Display Programmer V2.0 — 🗆 🗙										
File Program Maintain Setup Help										
Job Data										
For software from Ver 2.0 GHs only										

Click "Display Config." Field and select the intended programming record. Keep default settings or change any other fields if needed then click button to program to the indicator (ensure dongle is connected). Programming will take approx. 5 seconds.

Pro	ogram 🗕 🕂		-	-		×	Liose
Customer	Electronic Circuit Designs P/	Display Type	Double 50mm 10	00-144a	-	Job Name	
Address	11/30 Perry Street Matraville NSW 2036	Display Config.	1-6 Decimal, Sta	ndard Message Set	<u> </u>	Address Prog. Date	
Phone	61 2 93166909	Character Scro	olling 🕅	Scrolling Speed	6 💌	Quantity	
Fax.	61 2 93166797	OS Time	30 🗸	Message Speed Brightness	6 • 80 •	Ref No.	
		Arrow Type:		Serial Display		ouble 50mm 100-144a	

**Step 7:** Apply 24V to each floor input (1,2,4,8,16,32,UP,DN) to verify programming was completed correctly. Also check input configuration, decimal, binary or Gray code is correct.

Step 8: Repeat from step 4 to 7 to continue programming other indicators. Close the program when completed.

# USB Serial Dongle Installation Instruction

If the intended PC does not have a built-in serial 9 pin port, it is required to use an USB Serial dongle (ECD part # 100-159, connecting PC and Dot-matrix indicator) for programming.

Please follow the below steps to install the USB Serial dongle (for Windows XP OS, later Windows OS might automatically install certain driver):

### 1. Install USB Serial Port driver:

**Step 1:** Plug the dongle to an USB cable then to PC. A "Found New Hardware Wizard" will pop up.

Select "Install from a list of specific location (Advance)", then click "Next".



Step 2: Select "Don't search. I will choose the drive to install", then click "Next".



Step 3: Select "Ports (COM & LPT), then click "Next".

Found New Hardware Wizard	
Hardware Type.	E Como de la como de l
Select a hardware type, and then click Next. Common hardware types:	
PCMCIA adapters PCMCIA and Flash memory devices Portable Devices Ports (CDM & LPT) Printers Processors	
SECI and RAID controllers	
	Back Next > Cancel

Step 4: Click "Have Disk" to select drivers for the USB dongle.



**Step 5:** Click "Browse", and then locate driver files in the CD (or USB memory stick) drive, in folder "CDM20602 (RS232-USB driver)".

Install F	rom Disk	
3	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel
	Copy manufacturer's files from:	
	A:\	Browse

**Step 6:** There are two drivers needed to install. We now install the first driver. Select "ftdiport", and then click "Open".

Locate File			? 🗙
Look in:	CDM20602(RS232-USB driver)	🖌 🔇 🤌 📂 🛄-	
My Recent Documents Desktop My Documents	Commentation C		
	File name: ftdiport	<b>·</b>	Open
My Network	Files of type: Setup Information (*.inf)	C	Cancel

Step 7: Click "OK" to install.



Step 8: Select "USB Serial Converter", and then click "Next".

Select the manufacturer and model of your hardware device and then click Next. If y have a disk that contains the driver you want to install, click Have Disk. Show compatible hardware Model USB Serial Converter		Select the device unveryou want to in
Model USB Serial Converter	evice and then click Next. If you click Have Disk.	Select the manufacturer and model of y have a disk that contains the driver you
USB Serial Converter		Model
		USB Serial Converter
This driver is not digitally signed! Tell me why driver signing is important	Have Disk	This driver is not digitally signed! Tell me why driver signing is important

Step 9: Click "Continue Anyway".



Step 10: Click "Finish" to complete the Port driver installation.

Found New Hardware Wiz	ard Completing the Found New Hardware Wizard The wizard has finished installing the software for.
	USB Serial Converter
	Click Finish to close the wizard.
	< Back Finish Cancel

#### 2. Install BUS driver:

After complete the Port driver installation, a new "Found New Hardware Wizard" will pop up. Follow the instruction from step 2 to 10, but instead select "ftdbus" file in step 6.

Locate File		? 🔀
Look in:	CDM20602(RS232-USB driver)	
My Pecent Documents Desktop My Documents	Constant Sector	
My Network	File name: ftdibus   Files of type: Setup Information (".inf)	Open Cancel

### 3. Validate the USB Serial COM Port Number:

This instruction is intended for WindowsXP Operating System (OS). Please follow similar concept to change the port number for later Windows OS version.

Click Start, then Control Panel. Double click to "System".

🕑 Control Panel								
File Edit View Favorites Tools	Help							
🕝 Back 👻 🕥 - 🏂 🔎 Se	earch 🔀 Fo	Iders						
Address 🔂 Control Panel								
Control Panel	G.	N.	5	-	2		P	
Switch to Category View	Accessibility Options	Add Hardware	Add or Remov	Administrative Tools	Automatic Updates	BDE Administrator	Date and Time	Display
See Also		1		O				4
🌯 Windows Update	Java	Keyboard	Mail	Mouse	Network Connections	Wizard	Modem	Power Optic
Help and Support	O,	<u>\$</u>	Y		<u>8</u> 2	3	6	
	Sounds and Audio Devices	Speech	System	Taskbar and Start Menu	User Accounts	Windows CardSpace	Windows Firewall	Wireless Network Sel
			See infi perform	ormation about y nance, and autor	our computer s matic updates.	/stem, and char	nge settings for	hardware,

Select "Hardware" tab, and then click to "Device Manager" button.

System Re	store	Automa	tic Updates	Remote
General	Computer N	ame	Hardware	Advanced
Device Mana Sevice Mana	ager e Device Manaor	er lists all t	the hardware devic	es installed

Scroll down then click to "Ports (COM & LPT)" and look for USB Serial Port. The valid USB Serial Port number must be from 1 to 4. If not, then left click to select, right click to pop up menu, then left click to select "Properties".

📕 Device Manager		
File Action View Help		
	2 🛪 🗷 🙇	
ELECTRON-592473 Computer Disk drives Disk drives Disk drives Diplay adapters DVD/CD-ROM drives DVD/	ces OM1) Update Driver	
	Disable	
System devices Grad Diversal Serial Bus control	Scan for hardware changes	
Opens property sheet for the current s	Properties	

Click "Advanced" button:

eneral Port Settings	Driver Details		
	Bits per second:	9600	*
	Data bits:	8	~
	Parity:	None	~
	Stop bits:	1	*
	Flow control:	None	~
	Adv	vanced	Restore Defaults

Change COM Port Number to any available port from 1-4.

COM Port Number:		✓	ОК
USB Transfer Sizes			Cancel
Select lower settings to correct perfo	ormance problems at lo	w baud rates.	Defaulte
Select higher settings for faster perf	ormance.		Deradics
Receive (Bytes):	4096 💌		
Transmit (Bytes):	4096 💌		
BM Options		Miscellaneous Options	
Select lower settings to correct resp	onse problems.	Serial Enumerator	
Latency Timer (msec):	16	Serial Printer	
,		Cancel If Power Off	
Timeouts		Event On Surprise Removal	
Minimum Read Timeout (msec):	0 🗸	Set RTS On Close	

## 4. <u>Set USB Serial COM Port on Display Programmer</u>:

Double click to on the desktop to run the program (if not installed, see page 10 "Display Programmer V2 Installation Instruction").

D	isplay Prog	rammer V2.	0 -			Х
File	Program	Maintain	Setup	Help		1
Fo	r softwa	are fron	n Ver	2.0	GH	s only

Click "Setup - Serial Communications' and make sure correct serial port number has been selected.



Click OK button to complete.

# Display Programmer V2 Installation Instruction

Please follow the below steps to install the programmer:

**Step 1:** Insert "Display Programmer V2" USB to the computer. Open the USB drive then click to **Step 1:** Indicator.exe file to open the launcher or alternatively click "Setup.exe" file then continue step 3.

Na	me	Date modified	Туре	Size
	CDM20602(RS232-USB driver)	4/1/2014 5:28 PM	File folder	
8	Autorun	2/20/2014 10:48 AM	Setup Information	1 KB
3	bdemerge	2/19/2014 2:38 PM	Configuration sett	1 KB
W.C.	CDM20602(RS232-USB driver)	8/5/2015 10:18 AM	Compressed (zipp	1,180 KB
e pdf	Display Programmer Installation	6/8/2011 11:01 AM	PDF File	337 KB
e pdf	Display Programmer	12/12/2008 11:39	PDF File	97 KB
e pdf	DISPLAYwiring	8/28/2007 1:07 PM	PDF File	158 KB
e pdf	Indicator Sale Brochure	8/28/2007 12:57 PM	PDF File	232 KB
8	Indicator	8/28/2007 3:03 PM	Application	24 KB
	setup	10/9/2014 5:40 PM	Application	4,311 KB

**Step 2:** On "ECD Indicator Programmer Setup Launcher", click on "Install" button and follow prompted instructions to install the program.



Step 3: Follow the below prompt instruction to complete the installation.







🛽 Setup - Display Program				-1		×
Select Additional Tasks						
Which additional tasks should be perfo	ormed?				0	
Select the additional tasks you would li Program, then click Next.	ike Setup	to perform	while inst	alling Dis	play	
Additional icons:						
Create a desktop icon						
	_			_	_	
		< Back	Next	t >	Car	ncel

Setup - Display Program				
Ready to Install				
Setup is now ready to begin installing D	)isplay Program on your	computer.	6	
Click Install to continue with the installa change any settings.	ation, or click Back if you	u want to revie	ew or	
Start Menu folder: Display Program			^	1
Additional tasks: Additional icons: Create a desktop icon				
K			~	
				_
	< Back	Install	Can	cel

Tastalling					
Please wa	it while Setup install	ls Display Program on	your computer.		ð
Finishing i	nstallation				
				_	
and Database E	ngine Installation/	/Upgrade			
land Database E he Borland Datal irectory:	ngine Installation/ base Engine will be in	/Upgrade nstalled/upgraded in t	he following		
land Database E he Borland Datal irectory: :\\Program Files (	ngine Installation/ pase Engine will be in «86)\Common Files\	/Upgrade nstalled/upgraded in t Borland Shared\BDE	the following		



**Step 4:** Double click to **iiii** on the desktop to run the program



Step 5: Connect USB Serial dongle to the USB cable, then the cable to computer's USB port. Take note of the serial port number (must be registered from 1 - 4, see page 3 "Dongle Installation Instruction").

**Step 6:** Click "Setup – Serial Communications' and make sure correct serial port number has been selected, then click OK button.

Display Programmer V2.0	– – ×	📓 Commu — 🗆 🗙
File Program Maintain	Setup Help	
	Serial Communications	
For software from	Ver 2.0 GHs only	C COM3

Now it is ready to follow "Dot matrix Indicator Programming" instruction at page 1.