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#### What is included

Attn: Handy Andy X Customer

Thank you for your purchase of the Handy Andy X dot-peen marking system.

The following items should be included in your package:

- 1. Handy Andy marking head on stand
- 2. FR Filter regulator attached to stand (gauge in box for shipment)
- 3. Power cable to connect marking head to 110V AC
- 4. Blue air hose to connect marking head to FRL
- 5. USB cable to connect marking head to PC
- 6. USB drive with software
- 7. Manual

Items required for marking:

- A. PC lap top or desktop with Windows operating system (not included)
- B. Power source
- C. Compressed DRY air supply and hose with 1/4" NPT fitting
- D. T nuts and vice or other fixture (sold separately) to hold part secure during marking process

Assembly required before marking:

- 1. Gauge installed on Regulator on side of stand
- 2. Air hose added between marking head and FRL
- 3. Power cable connected between marking head and power outlet
- 4. USB cable connected between marking head and computer

Turn on Handy Andy:

- 1. Black On Off switch is located on back of marking head
- 2. Air pressure on CMT recommend start pressure is at least 20psi. The amount of air pressure determines the depth of mark the more pressure the deeper the mark.

Once assembly of marking head is complete insert USB drive into PC. If the Handy Andy X Setup file does not run automatically – open the removable drive and click on this application to run the setup files. Follow the easy to use instruction s on the screen. The Handy Andy software will place an icon on the desktop for easy access.

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#### Handy Andy X with Stand



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### **Machine Connections**



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### Software Installation

This section will help you get the Handy Andy X marking software installed on your PC. The Handy Andy X is compatible with XP and newer will run on either 32 or 64 bit.

Handy Andy

### Installing Handy Andy Software:

Place the Handy Andy X Software installation USB into your computers USB port. The USB is programmed to Auto-Start with the software installation wizard.





The Installation guide will walk you through setup of the software. Read the on-screen instructions to take you through the installation painlessly. Be sure to use the default settings and installation locations when going through the installer wizard

idy-Andy X Setup	<b></b>	
A	dvanced Installer	Handy-Andy X Setup
Read me file		Choose the installation you want
		Choose the instantion you want
Please read the following text carefully		Blease choose www.mederred.tune.of Handu-Andu-X installation.helpur
Handwander V (HAV)		Prease choose your preferred type or manay-whay A instanation below.
HandyAndy-X (HAX) For Microsoft Windows®	â	
Version 1.1.0.427 - June, 17 2015	1	
What is HandyAndy-X?		
HandyAndy-X is a professional software package designed by Columbia Marking Tools use to interface with programmable industrial marking systems. This product is used to create	d 2	Install Now
and manage marking layouts and control the HandyAndy-X and PRO marking systems Real Time.	*	Installs most common features
System Requirements		
HAX has been designed to work with Windows® 2000(32bit), Windows® XP(32bit), Windows® Server 2001(12bit), Windows VistaTM(12bit) and Windows® XP(32bit).		Choose features to install
Minimum		
<ul> <li>Pentsum3: dass CPU - 1 Ghz minimum</li> <li>65536 color video card - 1024x768</li> </ul>		
<ul> <li>1024 Mb RAM</li> <li>Microsoft Windows ® XP or later</li> </ul>		
USB 2.0 Ports 32/6-bit Devration System		
Recommended		
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		- DACK
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Ny Andy X Setup Installation Progress A Installing Handy-Andy X	dvanced Institler	I lendy-Andy X Setur Mark Andre Handy-Andy X has been successfully installed.

Once the install is completed your desktop icon will appear on your desktop.



Select your Desktop icon to being using your Handy Andy X Software.





Once the Handy Andy X Program is loaded, select your communication ports on the Handy Andy X program to connect the software.

Select file in the upper left corner and select your preference settings.

Choose an available Com port from the drop down menu.

Application Preference	s		
Marking Machine Entities	Marking N	Machine Preferences	
Shifts Date & Time Strings	Display Units	English	
	COM Port	COM2 •	
		ОКС	ancel Appl



Manual Control	Log	Output	
Connected		Idle	Machine Coordinate: (0.0000, 0.0000) inches

If this status bar is not green, you are not connected and will have to manually select a com port in your device settings. The setting are located in control panel. (Follow the instructions on page 10.)

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Locate the Device Manager on your pc. Here you will see list of all the devices that are installed/attached on your computer where you can do a number of options with them.

 Locate Ports in the list and hit the + arrow to expand the option and view the available ports attached to your computer. The one you are looking for is USB Serial Port

Handy Andy

Device Manager	USB Serial Port (COM4) Properties	12	Advanced Settings for COM4			2 ×
File Action View Help	General Port Settings Driver Details					
			COM Port Number: COM	4	• 2	OK
Denali     Denali	Bits per second: Data bits:	9600 -	USB Transfer Sizes Select lower settings to correct per	formance problems at low	baud rates.	Cancel
<ul> <li>Display adapters</li> <li>DVD/CD-ROM drives</li> <li>Hoppy disk drives</li> </ul>	Party:	None •	Select higher settings for faster pe Receive (Bytes):	erformance.		
Elip Floppy drive controllers     Elip Human Interface Devices     Elip ATA/ATAPI controllers	Stop bits: Flow control:	1 • None •	Transmit (Bytes):	4096 💌		
<ul> <li>P IEEE 1394 Bus host controllers</li> <li>Imaging devices</li> <li>Keyboards</li> </ul>	Adv	ranced Restore Defaults	Select lower settings to correct res	sponse problems.	Serial Enumeration	
Mice and other pointing devices     Modems     Monitors		<b>†</b>	Latency Timer (msec):	16 💌	Cancel If Power Off	5
Network adapters     Network DCIs CDF Family Control			Timeouts		Event On Surprice Removal	15
Realtek PCIe GBE Family Control			Minimum Read Timeout (msec):	0 *	Set RTS On Clos Disable Modem C rl At Startup	
Ports (COM & LPT)		OK Cancel	Parameter interout (inter).	0 •		
USB Serial Port (COM4)				Salesperson	-	
r						

- 2. Then click on advanced to open up the advanced settings.
- **3.** Locate the COM port number with the drop down menu and select the COM Port number to be used with this device.

After you have finished this close out all of the windows you have open and continue to use your standard manual for setup and operations of the Handy Andy.

#### **Creating a New Layout**

To create a new layout, you select the grid with a green plus sine in the top right corner of your program ribbon.



After you select the new layout icon you will see a grid appear on your canvas.



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Now you will select what type of entity you would like to add to your layout.

Handy Andy



The options you have to choose from are:

- A line
- An Arc
- Text
- Arched text
- Graphic
- Waypoint.

Select your entity and select anywhere on your canvas to add your entity to the layout. (This can also be done under the layout menu at the top of the screen)

If you choose text or arched text it will bring up the text editor box where you type what you would like your text to read.

Text to	o Mark			
Text				
Previe	w of Text			
Text	5			
-				
lext	Codes			
Day	Codes	Time	Codes	
€d	Day of Month (2-Digit)	₹H	Hour (2-Digit, 24-Hour Format)	
€j	Day of Month	€G	Hour (24-Hour Format)	
€D	Day of the Week Name (Abbreviated	\$h	Hour (2-Digit, 12-Hour Format)	
\$1	Day of the Week Name (Full)	\$g	Hour (12-Hour Format)	
₩	Day of the Week (Numeric)	\$1	Minute (2-Digit)	
t z	Day of the Year (Julian)	85	Seconds (2-Digit)	
		\$A	AM/PM	
Wee	k Codes	-		
₩	Week of the Year (Monday Start)	Date/	Time Codes	
\$U	Week of the Year (Sunday Start)	\$x	Full Date (%m/%d/%Y)	
	1.6.1	₹X	Time (%h:%i:%A)	
Mor	th Lodes	%f	Full Date and Time (%x %X)	
€m.	Month (Numeric, 2-Digit)	\$T	Time Zone	
\$n	Month (Numeric)	0.1	Cala	
ъM	Month Name (Abbreviated)	Uthe	Codes	
₹F	Month Name (Full)	\$S	Shift Label	
Van	Coder	\$C	Value of Layout's Counter	
- cai	coucs	\$C	Value of Layout's Counter (Padded with Zeroes)	
€U.	Year (1-Digit)	\$###	ASCII Character ### (000-255)	
sy sv	Year (2-Digit)	**	Percent Sign (%)	
5 I	Year (4-Digit)			
				OK Cancel Apply



### Layout

After you have your desired text typed in select ok to place the text onto your marking canvas.



Now the text will appear in the layout, you can now modify you text



### **Text Properties**

To the right of your layout in your properties panel you will find your text properties.

Properties		<b>▼</b> ₽	
Text : Text1			
Search		Q	
Categorized	Alpł	nabetical	
Axis Positi	ons		
н	orz	0.8974	
N	/ert	1.4625	
🔿 Data			
Alignm	ent	BottomLeft 🔹	
An	gle	0.000	
Rad	lius	0.0 Angle of this entity.	
Clockwi	se?		
<ul> <li>Miscellane</li> </ul>	ous		
In	dex	0	
Is Acti	ve?		
Na	me	Text1	
Text			
т	ext	HANDY HANDY X	
F	ont	Standard 🔻	
Char Hei	ght	0.1250	
Horizontal Stre	tch	1.0000	
Char Spac	ing	0.0350	

These fields can be modified by typing or using the drop down menu when applicable.

Handy Andy

- You will see where your current text location appears on screen.
- Set your alignment orientation.

- What your text reads
- What font currently have selected.
- Character height, stretch and spacing.

If you wish you change or modify your text. Double click on the text to bring your text editor box up. Change your text and select ok.

Te>	kt Editor				- • ×
Text to	o Mark				
HAN	DY HANDY X				
Previe	w of Text				
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<b>-</b> .					
lext	Codes				
Day	Codes	Time	Codes		
€d.	Day of Month (2-Digit)	ŧΗ	Hour (2-Digit, 24-Hour Format)		
\$j.	Day of Month	ŧG	Hour (24-Hour Format)		
₿D	Day of the Week Name (Abbreviated)	\$h	Hour (2-Digit, 12-Hour Format)		
\$1	Day of the Week Name (Full)	\$g	Hour (12-Hour Format)		
₩	Day of the Week (Numeric)	8i	Minute (2-Digit)		
₹z	Day of the Year (Julian)	83	Seconds (2-Digit)		
Wee	k Codes	₹A.	AM/PM		
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€U	Week of the Year (Sunday Start)	<b>%</b> x₿	Full Date (%m/%d/%Y)		
		¥Х	Time (%h:%i:%A)		
Mon	nth Codes	ŧf	Full Date and Time (%x %X)		
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\$n	Month (Numeric)	041	C-d		
€M	Month Name (Abbreviated)	Other	Codes		
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Year	Codes	5C 8C	Value of Layout's Counter		
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\$v	Vear (2-Digit)	****	ASCIL Cridideler ### (000-200) Dercent Sign (%)		
\$Y	Year (4-Digit)		recent sign (/o)		
				OK Ca	ncel Apply

The text editor will allow you to input fixed or dynamic text into a string.

Fixed test = Fixed text is any text string that does not change such as a name or part number.

Dynamic Text= Text that is constantly updating such as a counter, date or time.

Using the text editor you can create a string that contains fixed text, dynamic text or a combination of both.

Let's start with a simple date code containing fixed and dynamic text.

You will notice that once you enter text into the input field it will also appear in the preview window.

For dynamic text objects you can type in the code from the list below.

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As you build the string the preview window will show the results that the machine will print.

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After you click enter you will see the updated text appear in the marking layout.

#### Fonts

Handy Andy X comes pre-loaded with 24 different fonts to choose from.



You will notice that the font preview of will show how it will be marked on your part.

If you like a certain font you can make that font your default, along with any other defaults you would like to set in your preferences under Entity preferences.

### **Angular Text**

To create an angular text select the arc text entity in the layout.

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Your text editor will come up for you to type the text you want.

Once you select ok you will be able to move your mouse around to set your desired orientation.

Handy Andy

If you chose to change the angle of your text click on the rotate handle (circle) at that is outside edge of your first character.



Once you are in the location let go of the mouse button and your layout orientation will be set.



#### Graphics

Handy Andy X also allows you to add DXF graphics or logos to your marking layout,

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You can input a graphic by selecting graphic from the ribbon or dragging it for the entity tool box.



Once you click on the graphic icon a drop down menu will appear where you can select one of the pre -loaded graphics or chose to import your own.

Graphic:	Bell	•		0.5
	Bell		*	
	BH_LOGO			
	Cancel	1		
	CE			
	Circle			1
	CMT-Logo			
	CSA2			
	Curved_Arrow			
	Heptagon			
_	Hexagon			
	Key		=	
	Lock			
	MOPAR			
	NB			
	Octagon			
	Pentagon			
_	Square			
	Star			
	STURM no tm		_	
	Triangle			
	UID-Cross_Out_:	1		
	UID-Cross_Out_2	2	-	
		2	-	

Once you have your graphic chose. Select anywhere in your layout to insert onto your canvas.

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If you double click on your graphic, your graphic properties will open on the right hand on the layout. Here is where you can alter as necessary.

Handy Andy X does come preloaded with some graphic files. However a DXF converter is built into the software if you would like to create your own.

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## Handy Andy

Handy Andy X (1.00.000	)	a second
File Edit Handy Andy	Help	7
📑 New Layout	Ctrl+N	In al
📴 Open Layout	Ctrl+O	
🛃 Close Layout	Ctrl+W	<b>→</b> İ
Save Layout	Ctrl+S	
😫 Save Layout As		
import	•	TXF Graphic
-		
Preferences		
L Exit		
44		

Found under the File menu Import DXF Graphic

\*\*Currently only supports DXF format.



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DXF conversion algorithm Close gap in points Shape order optimization Shape direction optimization Removes overlapping or duplicate entities Layer support to allow multi-layer DXF Files File saved in public Dir as.cmtg Supports Arc, Polyline.



### **Teach Function**

Manually teach your marking head to the location that you would like your text starting point on your part to be.



Click on your text in your marking layout. To highlight the entity.

In the bottom left hand corner you will see the manual controls panel.

	Image: Description     Jog Speed       Pin     Jog Distand       Image: Description     Image: Description	d: 5	Axis Position X 0.0000 inches Y 0.0000 inches
Manual Control Log	Output		

Handy Andy

You will use the open and down arrows to move your marking pin along the X-Axis

The left and right arrows will move along the Y- Axis

Once you have the marking pin over the part where you want to start marking right click on the text and select Teach Position.

Your text should move to the new taught position.

#### **Setting up Counter**

You will need to setup up the values of your counter in the counter set up. (This is found in the layout menu in the top of your screen.)

Counter Setup	X
Reset Type:	Final 🔻
Final Value:	0
Increment Amount:	1
Reset Value:	100
	OK Cancel Apply

Now create a new layout.

Select the text entity



In the pre-programed codes select the option of counter you would like.

%c Value of layouts counter %C Value of layouts counter (padded with zeros)

Text Editor	
Text to Mark	
%c	
Preview of Text	
0	

Select apply, teach your program and begin marking.

### **PM Schedule**

Part Part Number Frequency
----------------------------

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And a second sec	IM-ID-PINEX10-1'' Extended pin replacement 45 degree	3-6 Months average lifespan for moder- ate production. May be re- sharpened 2-3 times.
And International Anti-Anti-Anti-Anti-Anti-Anti-Anti-Anti-	IMIDPHEX10A- 1" Extended Pin assembly including: A) IM-IDPINEX10 (extended pin 1") B) IM-IDPHEX10 (Extended pin housing) C) Spring D) O Ring	Once per year
And I And	IMIDSPRING- Pin spring	Once every 6-12 months. Depending on usage.
Parte IMIDPHEXIO	IMIDPHEX-10 extended pin housing (for use with IM-ID-PINEX10)	Once a year.

Email <u>Quotes@columbiamt.com</u> for spare parts. Spare parts generally ship with 1 week or less.

### **Trouble Shooting Guide**

\*\*\*Make sure your part is properly fixture.\*\*\*

1. Light mark

- a. Pin chipped
- b. Worn pin housing
- c. Air supply restricted
- d. Dirt in pin cartridge
- 2. Poorly shaped characters
  - a. Speed and/or dwell time need adjustment
  - b. Drive belt loose (should rotate ~ 90deg)
  - c. Failed linear bearing assembly(will have lateral movement)

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- d. Drive belt clamping cleat loose
- e. Drive pulley loose on motor shaft
- 3. No Mark
  - a. Failed head cable
  - b. Failed internal wiring
  - c. Failed solenoid valve
  - d. Interrupted air supply
  - e. Broken pin
- 4. Miss-Located Characters
  - a. Home limit flag problem (Possibly loose and inaccurately homing)
  - b. Drive pulley loose on motor shaft
  - c. Speed too high for program
  - d. Head orientation not allowed (M-Series machines always pin towards earth)
- 5. Missing Characters





