

PT-CTXM3



Please read the complete instructions before use.

platinum **MOTOR MASTER**

FOR 1/10, 1/12, 1/18, MINI-Z, TAMTEC GEAR BRUSHED MOTORS

OPERATION MANUAL

Motor Run CTX test Pulse Break In 99 Step Cycle
20 Data Memory ♦ RPM, Voltage, Amp Draw ♦ Quick Test



MuchmoreTM

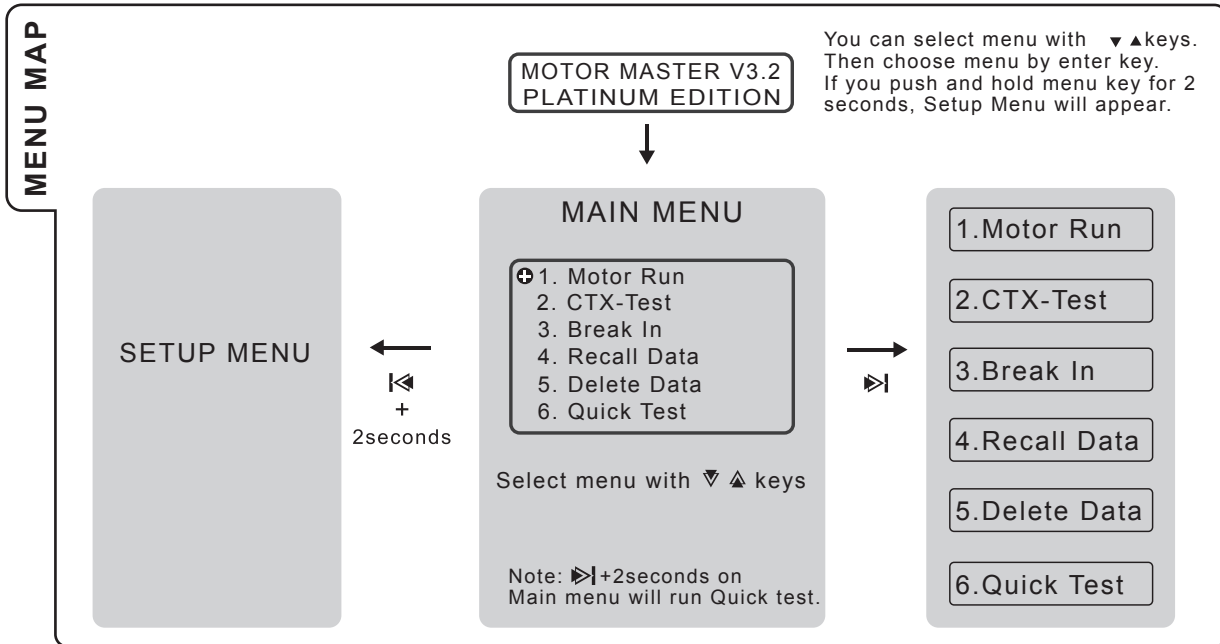
platinum **MOTOR MASTER**

The Motor master Platinum Edition come with new black LCD and perfectly checking for 540 size brushed motors.

- Motor break in
- Motor pulse break in
- CTX-Test 6cell/ 4cell mode
 - Peak amp - How much current flowed when motor starts)
 - 6 or 4 step's current(at 1.2V, 2.4V, 3.6V, 4.8V, 6.0V, 7.2V)
 - Average current of 6 or 4 steps
- QUICK TEST(">key+2 seconds" at main menu runs quick test)
- Power source for your tire warmers
- Power source for your commutator lathe.
- Black LCD window
- New round head buttons and LCD guide

SPECIFICATIONSs

LCD.....	Black LCD(white character)
Case size.....	125 x 114 x 47mm
Weight.....	470g
Input Voltage.....	10.5~17.0V
Output Voltage.....	0.1~8.0V
Max. Continuous Amps.....	25A
Cooling.....	Temp controlled Internal Fan
Pulse Speed.....	5step
Repeatable Break-In.....	99min.Motor Run/Delay
Sound.....	9Tones
Data Recall.....	20 Run Memory
Motor Speed up.....	5 Step Starting Speed
Customizable.....	Alphabet, Numeric & Symbols



1. Motor Run

0.00 0.00 0
Set Voltage: 2.0

▼ ▲ Select voltage number
0.1V~8.0V



0.00 0.00 0
Set Voltage: 3.0

▶ Enter key starts motor run



VOLT	AMP	RPM
3.01	4.08	0
00:00:03		13.80
RUNTIME		INPUT VOLT



VOLT	AMP	RPM
s3.3	4.08	0
00:00:03		13.80
RUNTIME		INPUT VOLT

▼ ▲ Voltage can be changed
during motor run.



0.00 0.00 0
Set Voltage: 3.3

▶ Enter key stops motor run.

Motor run mode is simple motor running mode when you want to run your modified motor, Tire warmer, Comm lathe.

A. Key operations

- ◀◀ Return to main menu, backward
- ▼ ▲ Increment or Decrement Voltage, Y or N, Data No.0~9
- ▶▶ Motor start or stop, forward

B. Save data

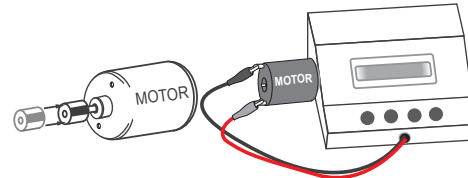
If you set "Save Data :ON" at Set up menu, CTX-M will ask you as below after every motor run.

3.01 4.08 0
Save:N, Data:No. 0

Determine Yes or No with ▼ ▲ keys,
then select where to save the data(No.0~9)
You can check data at 2.Recall data mode.

C. RPM Checking




When checking RPM, put small bushing into motor shaft. Put your motor into RPM sensor first, then start your motor. **Don't forget hold your motor during RPM checking.**



VOLT	AMP	RPM
3.01	4.08	38050
00:00:03		13.80
RUNTIME		INPUT VOLT



2. CTX-Test


A. Key operations

	Return to main menu, backward
	Increment or Decrement Voltage, 6cell mode or 4cell mode
	Test start or stop, forward

B. Selection of test mode

Ready to test! 6cell mode	Ready to test! 4cell mode
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-  Select to test mode 6cell(7.2V max) or 4 cell (4.8V max)mode.
-  Put RPM bushing into your motor shaft and place your motor on RPM hole, then enter.

Testing  Testing display.
Remain time 19

Peak Amp : 12.63
Max RPM : 51120

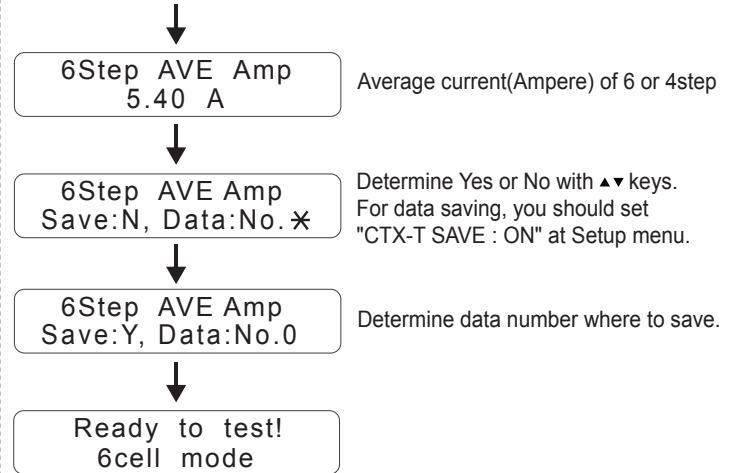
This data means how much current consumed(at peak) for your motor starts.

Maximum RPM at 7.2V(at 6cell mode) or 4.8V(at 4cell mode)

1.2v	2.4v	3.6v
4.8v	6.0v	7.2v




4.8 @1.2V	5.2 @2.4V	5.3 @3.6V
5.5 @4.8V	5.6 @6.0V	6.0 @7.2V

Each value means flowed current(Ampere) at each step.



3. Break In

A. Key operations

-  Return to main menu, backward
-  Increment or Decrement of values.
-  Motor start or stop, forward

B. Standard break in

This mode runs motor at linear voltage.

Set Low voltage	Set this value equal to lower voltage.	If you set low & high voltages equal, this mark will appear. Voltage can be changed during standard break in.
Set the Running time(minutes) 1~99min.	Set the Delay time(minutes) 1~99min.	Set the Cycle time 1~99times

C. Pulse break in

This mode runs motor as pulse. You can set low and high voltage and pulse speed.

Set low voltage.	Set high voltage value. It must be 1V higher than the low for Pulse break in.	Choose Pulse speed 1~5. 5 is the fastest up and down mode.
Set the Running time(minutes) 1~99min.	Set the Delay time(minutes) 1~99min.	Set the Cycle time 1~99times

D. Break in example

If you set values as below, motor will run 3.0~4.0V with pulse speed 1. 2minutes runs-1minute delay-2minutes run then finish.

L: 3.0	H: 4.0	P: 1
T: 2	D: 1	C: 2

↓

VOLT	AMP	RPM
3.01	4.25	17100
T: 01: 52	Cycle: 2	

↓

VOLT	AMP	RPM
0.00	0.00	0
D:00:58	Cycle: 2	

↓

VOLT	AMP	RPM
3.01	4.25	17100
T: 01: 52	Cycle: 1	

↓

0.00	4.04	0
End Break In		

4.Recall Data

A. Key operations

- Backward, back to menu.
- Choose Motor Run or CTX-Test data.
Select Data Number 0~9,
Yes or No.
- Forward or go to CTX-T 0~9 data.

B. Select Data

- Select Data -
M-Run Save data.

- Select Data -
CTX-T Test data.

- Select data from Motor Run, CTX-test
then
- enter

C. Motor Run data

- Select Data -
M-Run Save data.

Voltage when you stopped motor run. Amp draw when you stopped motor run. RPM when you stopped motor run.

VOLT	AMP	RPM
3.01	4.25	17100
MXRPM: 17250		No. 0

Maximum RPM

Select data number.

D. CTX-Test data

- Select Data -
CTX-T Test data.

4. Recall Data
5.Delete Data

Select data number. Tested step (6cell mode or 4cell mode)

No.0 6 step
AVE Amp : 5.40

Average current(Ampere) of 6 or 4step

This data means how much current consumed(at peak) for your motor starts.

Peak Amp : 12.63
Max RPM : 51120

Maximum RPM at 7.2V(at 6cell mode) or 4.8V(at 4cell mode)

1.2v	2.4v	3.6v
4.8v	6.0v	7.2v

4.8 @1.2V	5.2 @2.4V	5.3 @3.6V
5.5 @4.8V	5.6 @6.0V	6.0 @7.2V

Each value means flowed current(Ampere) at each step.





No.0 6 step
AVE Amp : 5.40

Select data number.

5.Delete Data

This mode will clear all data of Motor Run or CTX-Test in 4.Recall Data.

A. Key operations





	Return to main menu
 	Select Motor-Run or CTX-Test data.
	Data deleting

B. LCD MONITOR


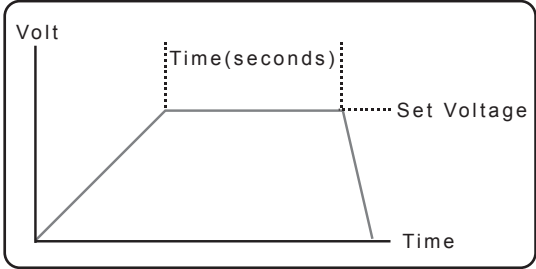
-Select Data-M-Run Save data.	Choose data with ▼▲ keys then enter.
↓	
-Select Data-CTX-T Test data.	If you push enter, all data will be deleted.
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CTX-T data all deleted !!	After twice blinking, it will back to main menu.
↓	
⊕ 5. Delete Data 1. Motor Run	

6.Quick Test

A. Key operations

	Return to main menu, Backward
 	Value change, Increment, Decrement
	Forward, Test start or stop





B. LCD MONITOR

Ready to test! Time:02 Volt:4.8	Set up time(seconds) and Voltage.
↓	
	
VOLT AMP RPM 4.8 8.62 34000 Time:03 12.60	Display during test
INPUT VOLT	
↓	
Set:4.8 R:34060 M:11.91 A:9.25	Test result
Max Ampere Average current(Ampere)	

Note:  +2seconds on Main menu will run Quick test.

7.Setup menu

A. Key operations

	Setup menu change Press & hold : exit setup menu, Backward
 	Value change, Increment, Decrement On/Off
	Forward

B. Key operations

*** SetUpMenu V3.2 *
Motor Spd UP : 1**

↓

Adjust the speed of motor starting speed. 5 is the fastest acceleration mode. If you use less than 14 Amp 12V power supply, set this value at 1(slow start).

*** SetUpMenu V3.2 *
M-RUN SAVE : ON**

↓

If you choose ON, you can save Data after every 1.Motor Run.

*** SetUpMenu V3.2 *
CTX-T SAVE : ON**

↓

If you choose ON, you can save Data after every 2.CTX-Test.

*** SetUpMenu V3.2 *
Hook-up: OFF**

↓

This mode is for severe motor tuner who must tune tons of motor!
If you select OFF, CTX-M will not make "Hook up motor!" error messege. You don't have to push enter button every time. Just connect or disconnect alligator clips!

*** SetUpMenu V3.2 *
Sound Lev. : 1**

↓

You can select button sound 0~10. 0 is off, 1~5 are single sound, 6~9 are double sound.

8.ERROR MESSAGES

Hook up Motor!

Check aligator clips, brushes, brush springs.

Amps too high!

Your motor consumes over 25A!
"Set Motor Spd UP: 1" at Setup menu.

Temps too hot!

Motor master is too hot to operate!
Cool down it, then operate.

Supply is poor!

Use power supply that has higher capacity(more than 20A).

Input volt high!

Decrease output voltage of power supply down to 17.0V.

Out of order
Call for service

Motor master's FET is dead,
pls send us for repair.

INPUT VOLT ERROR
VOLT : 10.04

Adjust output voltage of power supply at 10.5~17.0V.

Power supply tip

Motor master V3.2 Platinum, Marc Rheinard, Andy Moore Editions and Surikarn V3.0 allow 10.5~17.0V input voltage.

If you set your output voltage of power supply as high as possible, CTX-M will consume less capacity.

For example, If you set your supply output volt at 16.9V, you can run even 7 turn motor(cunsuming 19ampere) with 10ampere power supply!



REPAIR PROCEDURE / PRODUCT WARRANTY

- MUCHMORE RACING warrants Motor Master manufactured by it to be from defects in material and workmanship for a period of 120days from the date of purchase by the original purchaser for use. MUCHMORE RACING (or their associated distributors), at this option, will repair or replace without charge, or refund the purchase price of, any product which fails during warranty period by reason of defect in material or workmanship found upon examination by MUCHMORE RACING to have been the cause of failure. This warranty does not cover any failures attributable to abuse, mishandling, failure to follow operating instruction, alteration or accident. To make claim under this warranty, the purchaser must return the product to MUCHMORE RACING (or their associated distributors) at the address shown below, properly packed and with shipping charges prepaid. All claims must be made in thirty(30) days after the product failure and, in any event, with in thirty(30) days after the expiration of the 90day warranty. All claims must be accompanied by sales slip or other written proof of date of purchase. Maximum repair costs for the purchaser error are 50% of retail price(original purchase price). Since we cannot supervise the proper use of our products, we can accept no liability for direct or indirect damage of any type arising from their use or occurring to the property of the user and/or third parties. Therefore, any use of this product shall take place at the user's own risk. The warranty claim may not exceed the value of this product in any case. By putting this product into operation you accept the above conditions and assume full responsibility for use of this product.



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