

**AMANO**

COMPUTERIZED TIME RECORDER

***MJR-8000*** **SERIES**

**PROGRAM MANUAL**

**ECP Time Equipment**  
**[www.ecpplus.com](http://www.ecpplus.com)**



# AMANO COMPUTERIZED TIME RECORDER MJR-8000 SERIES INITIAL PREPARATION AND PROGRAMMING INSTRUCTION

1. Unlock and remove cover case with case opening key #700, and peel off plastic seal on the display and keyboard.
2. Plug in battery connector (3P, blue and red wires) to CN-2, located at lower right, outside of frame, on the main Printed Circuit Board (JCU-1A). For full power reserve battery, (option: 200 imprints for IN/OUT or 4 hours display during power failure) plug in connector (4P, blue and red wires) to CN-11 on brown colored Printed Circuit Board (JPR-1A), located on right hand-side of frame, under keyboard.
3. Connect the power supply cord to AC 120/220/240V power outlet. The printer section will move back and forth several times, and display may show an error code 8-80. To reset this error code 8-80, slide the cover case back on and lock it, then put case opening key #700 into function key slot, located at top leftside of card pocket, and turn it to function mode, (toward an arrow mark) then press **CL** key.
4. Clear the data which may be in memory area, follow the procedures below:  
Press keys **3 2 E** then **6 4 E**
5. Now, memory area is clear and ready for programming.  
Press keys **1 0 E**  
Then, start programming according to programming manual.

## SPECIAL NOTE FOR PROGRAMMING

1. All time data must be entered in 0–23 hours (military time).
2. To clear the data.
  - (a). Calendar and clock data may be changed, but not cleared.
  - (b). To clear the data in memory, press the following keys:  
**3 0 E** then **8 8 E** . . . . . all employee's data cleared.  
**3 1 E** then **9 9 E** . . . . . all program data cleared.  
**3 2 E** then **6 4 E** . . . . . all employee and program data cleared.
  - (c). To clear data on the display:
    1. To clear simple key-in errors, before pressing **E** key, (before entering to memory area) just press **CL** key.
    2. To clear data on display that is in memory, press keys in sequence below:  
When there is only one step parameter within the program address number that needs to be cleared, **0 E**  
When there are two or three step parameters within the program address number that to be cleared, **0 # 0 # 0 E**

(d) To change data on the display:

When there is only one step parameter within the program address number:

When there are two or three step parameters within the program address number:

3. When data is cleared or new data is entered, be sure to press  key, before turning the function key switch to the "NORMAL" position, in order to enter all new data into main storage.

4. Programming of days (Monday through Sunday) will be in numeric code as follows:

- |   |  |  |
|---|--|--|
| <input type="text" value="1"/> ... Monday   | <input type="text" value="2"/> ... Tuesday | <input type="text" value="3"/> ... Wednesday                               |
| <input type="text" value="4"/> ... Thursday | <input type="text" value="5"/> ... Friday  | <input type="text" value="6"/> ... Saturday                                |
| <input type="text" value="7"/> ... Sunday   | <input type="text" value="8"/> ... Monday  | <input type="text" value="9"/> ... Monday through Sunday<br>through Friday |

5. There are four programming areas in the MJR-8000 series, as follows:

Section 1: Clock and Calendar programming area . . . . .     
This area covers clock and calendar program.

Section 2: Basic programming area . . . . .     
This area covers annual scheduled dates, such as daylight saving time and national holidays.

Section 3: Signal programming area (Option) . . . . .     
This area covers signal schedules in specified days.

Section 4: Work schedule programming area . . . . .     
This area covers all working schedules.

6. Programmed data can be printed out for verification on program check card. To have the programmed data imprint, press    . Then insert program check card.

## MJR-8000 PROGRAM MANUAL AND CHART

### SECTION 1: CLOCK AND CALENDAR PROGRAMMING AREA

TO CALL THE PROGRAM ADDRESS NUMBER – PRESS **1 0 E**

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
000 1	1 9 8 6 #	Calendar year (1986)	#
000 2	5 1 8 #	Month and Date (May 18th)	#
000 3	1 5 2 8 E	Hour and Minute (PM 3:28)	E

### SECTION 2: BASIC PROGRAMMING AREA

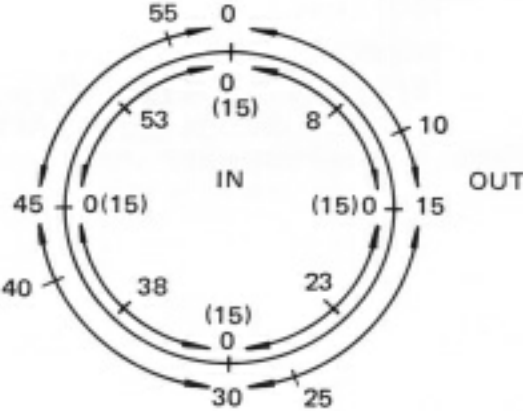
TO CALL THE PROGRAM ADDRESS NUMBER – PRESS **2 0 E**

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
001 1	4 2 8 #	Month and date Daylight Saving Time begins (April 28th)	#
001 2	1 0 2 7 E	Month and Date Daylight Saving Time ends (October 27th)	E
002 1	0 E	Machine number-programmable for 0–9. Single machine use, enter 0. More than one machine, enter the first digit of the timecard number assigned to the machine. Timecard Nos: 000–099, enter 0 Timecard Nos: 100–199, enter 1 Timecard Nos: 200–299, enter 2	E
003 1	1 #	Imprint of hours for IN/OUT time. 0 : 0–23 Hours (military time) 1 : 1–12/ <u>1–12</u> AM/PM Hours (Underline for PM Hours)	#
003 2	0 #	Imprint of the processed time. 0 : Regular minute (00–59) 1 : 1/100th of hour (00–98)	#
003 3	0 E	Imprint of Day of the week. 0 : English days (Mo . . . . SA, SU) 1 : Day numbers (1 . . . . . 6, 7)	E

PROGRAM ADDRESS NO.	SAMPLE DATA				PROGRAM CODES AND EXAMPLES	PROGRAM DATA			
004 1	1	0	1	E	Month and Date for Public and National Holidays (January 1st) Month and Date for Public and National Holidays (July 4th) Enter <input type="text" value="0"/> , if there is no Public and National Holiday to be programmed. Programmable for maximum 16 Public and National Holidays.				E
005 1	7	0	4	E					E
006 1			0	E					E
007 1				E					E
008 1				E					E
009 1				E					E
010 1				E					E
011 1				E					E
012 1				E					E
013 1				E					E
014 1				E					E
015 1				E					E
016 1				E					E
017 1				E					E
018 1				E					E
019 1				E					E

**IMPORTANT:** Upon completion of Basic Programming Area, be sure to press  key to enter the data into main storage.



PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
102 1	4 0 0 0 #	Maximum non-overtime hours per week. Hours exceeding this amount will be sorted as overtime category A.	#
102 2	4 8 0 0 E	Maximum weekly hours for overtime category A. Hours exceeding this amount will be sorted as overtime category B.  Example: The hours over 40 hours per week are sorted as overtime category A, and over 48 hours as category B.  Note: If overtime category B is not required, enter [0] in 2nd step parameter. If, no overtime classification is required, enter [0] in both 1st and 2nd step parameters.	E
103 1	1 5 #	IN/OUT time rounding. IN time, OUT time. 1st step parameter : Rounding time unit for both IN/OUT time	#
103 2	8 #	2nd step parameter: Rounding point for IN time.	#
103 3	1 0 E	3rd step parameter : Rounding point for OUT time.  	E
104 1	1 5 0 #	1st step parameter: Pay rate multiplier for overtime category A. (Multiply times regular pay rate).	#
104 2	2 0 0 #	2nd step parameter: Pay rate multiplier for overtime category B. (Multiply times regular pay rate).	#
104 3	1 E	3rd step parameter: Decimal point placement for 1st and 2nd step parameters. 0 : No decimal point 1 : Decimal point  Example: Overtime category A rate is 150% (1.5 times) of regular pay rate. And, overtime category B rate is 200% (2 times) of regular pay rate.	E

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA																					
105 1		1st and 2nd step parameters: Weekly non-working days. (programmable for maximum two days. Example: Saturday & Sunday)  3rd step parameter: Pay schedule for hours worked on weekly non-working day or National holidays. Refer to chart below:	#																					
105 2			#																					
105 3			E																					
<table border="1"> <thead> <tr> <th>Data code#</th> <th>Weekly non-working days</th> <th>National holidays</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>OT. A</td> <td>OT. B</td> </tr> <tr> <td>1</td> <td>OT. A</td> <td>OT. A</td> </tr> <tr> <td>2</td> <td>OT. B</td> <td>OT. B</td> </tr> <tr> <td>3</td> <td>Reg.</td> <td>Reg.</td> </tr> <tr> <td>4</td> <td>Reg.</td> <td>OT. A</td> </tr> <tr> <td>5</td> <td>Reg.</td> <td>OT. B</td> </tr> </tbody> </table>		Data code#	Weekly non-working days	National holidays	0	OT. A	OT. B	1	OT. A	OT. A	2	OT. B	OT. B	3	Reg.	Reg.	4	Reg.	OT. A	5	Reg.	OT. B	Reg. : Regular pay rate OT. A : Overtime category A rate OT. B : Overtime category B rate  Example: Weekly non working days are Saturday & Sunday. Hours worked those days are paid at overtime category A. Hours worked on National holidays are paid at overtime category B.	
Data code#	Weekly non-working days	National holidays																						
0	OT. A	OT. B																						
1	OT. A	OT. A																						
2	OT. B	OT. B																						
3	Reg.	Reg.																						
4	Reg.	OT. A																						
5	Reg.	OT. B																						
106 1		0 #	#																					
106 2	0 0 0 0	0 E	E																					

**NOTE:** Day change time is referenced from Midnight forward on the Pay-ending day.  
 If you need Day change time before midnight, set the Pay-ending day code for the day before actual Pay-ending day and program Day change time.  
 Example:  
 Day code 6(SA), Day change time 23:00 would tell the machine to end the Pay-period on SUNDAY at 23:00.


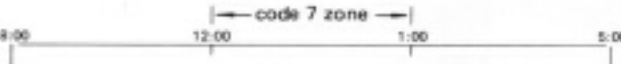


PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
107 1	6 0 0 #	Automatic break time deduction by daily worked hours.	#
107 2	3 0 E	1st step parameter : Daily worked hours. (Elapsed time)	E
108 1	1 0 0 0 #	2nd step parameter : Deductable break time.	#
108 2	1 5 E	NOTE: Programmable for maximum 3 sets of break times daily. Also, these 3 break times are cumulative function.	E
109 1	1 2 0 0 #	Example: If Total elapsed time in one day is 12 hrs. or longer, one hour break time will be deducted according to sample program.	#
109 2	1 5 E	(Daily elapsed hours – break time = Net worked hours) Programmable for maximum 4 hours cumulative break time. Example: Net worked hours	E
110 1	#	When programming the ADDRESS 110 – 149, refer to the explanation of codes below.	#
110 2	#	○ First data is selection of code number (0–7).	#
110 3	E	○ Second data is time zone beginning.	E
		○ Third data is time zone ending.	
111 1	#	<b>EXPLANATION OF CODES</b>	#
111 2	#	1) CODE NUMBER	#
111 3	E	0 : Not applicable	E
112 1	#	1 : First in-punch revision time zone (First in-punch time of each day)	#
112 2	#	2 : Out-punch revision time zone	#
112 3	E	3 : In-punch revision time zone	E
		4 : First in-punch lock out time zone	
		5 : Out-punch lock out time zone	
		6 : In-punch lock out time zone	
		7 : Fixed break time zone (Unpaid)	

NOTE: Code 7, the fixed break time zone, cannot be programmed at the same time as the automatic flexible break deduction(s) in address Nos. 107, 108, and 109.

You may use either one or the other, but not both simultaneously.

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
113 1		Code 1: Time zone for round-off of first IN time of the day.	#
113 2		Example:	#
113 3			E
114 1			#
114 2			#
114 3		If employee clocks in between the hours of 7:00 and 7:30, calculation of worked hours does not begin until 7:30.	E
115 1		<b>IMPORTANT</b>	#
115 2		Code 1 functions only on first clock in time of each day. Subsequent clock in punches entered in code 1 time zones will not be rounded off.	#
115 3		Code 2: Time zone for round-off of OUT-time.	E
116 1		Example:	#
116 2			#
116 3			E
117 1			#
117 2			#
117 3		If employee clocks out between 5:00 and 5:30, calculation of hours worked ends at 5:00. Applies to all clock out punches in code 2 time zones each day.	E
118 1		Code 3: Time zone for round-off of IN time. Same function as code 1, except that it may be used any number of times per day, i.e. round-off of IN time occurs in all code 3 time zones.	#
118 2			#
118 3		Code 4: Lock out time zone for first IN-punch of the day.	E
119 1		Example:	#
119 2			#
119 3			E
120 1			#
120 2		If employee inserts time card for first IN-punch of the day, between 8:00 and 8:35, the time card will be rejected.	#
120 3			E

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
1 2 1 1		# Code 5: Lock out time zone for OUT-punch. Example:	#
1 2 1 2		#	#
1 2 1 3		E 	E
1 2 2 1		# If employee inserts time card for OUT-punch, between 5:30 and 6:00, the time card will be rejected.	#
1 2 2 2		#	#
1 2 2 3		E Code 6: Lock out time zone for IN-punch. This lock out zone applies to any IN-punch, except to first IN-punch of the day.	E
1 2 3 1		# Code 7: Unpaid break time zone. Deducts fixed period of time from hours worked. Employee need not punch IN and OUT for this break.	#
1 2 3 2		#	#
1 2 3 3		E Example:	E
1 2 4 1		# 	#
1 2 4 2		#	#
1 2 4 3		E If employee works during code 7 time zone, the amount of that zone is deducted regardless of number of hours worked, or starting/ending time of shift.	E
1 2 5 1		#	#
1 2 5 2		#	#
1 2 5 3		E	E
1 2 6 1		#	#
1 2 6 2		#	#
1 2 6 3		E	E
1 2 7 1		#	#
1 2 7 2		#	#
1 2 7 3		E	E
1 2 8 1		#	#
1 2 8 2		#	#
1 2 8 3		E	E

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
129 1		SPECIAL MEMO FOR PROGRAMMING	#
129 2		1) Day change time cannot be programmed within a programmed time zone (lock out, revision, & break zones).	#
129 3		2) Beginning & ending time itself are considered as the effective time for that zone.	E
130 1		3) Two time zones of same category cannot be overlapped.	#
130 2		4) If a lock out and a revision time zone are programmed at the same time, the lock out will over ride the revision time zone.	#
130 3		5) The rounding of IN/OUT times will not be affected in the revision time zone.	E
130 1		6) The first IN-punch time zone overrides the feature of fixed break time zone.	#
130 2		The break time zone will be effective in other IN/OUT revision time zones.	#
130 3			E
131 1			#
131 2			#
131 3			E
132 1			#
132 2			#
132 3			E
133 1			#
133 2			#
133 3			E
134 1			#
134 2			#
134 3			E
135 1			#
135 2			#
135 3			E

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
136 1			#
136 2			#
136 3			E
137 1			#
137 2			#
137 3			E
138 1			#
138 2			#
138 3			E
139 1			#
139 2			#
139 3			E
140 1			#
140 2			#
140 3			E
141 1			#
141 2			#
141 3			E
142 1			#
142 2			#
142 3			E
143 1			#
143 2			#
143 3			E

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
1 4 4 1			#
1 4 4 2			#
1 4 4 3			E
1 4 5 1			#
1 4 5 2			#
1 4 5 3			E
1 4 6 1			#
1 4 6 2			#
1 4 6 3			E
1 4 7 1			#
1 4 7 2			#
1 4 7 3			E
1 4 8 1			#
1 4 8 2			#
1 4 8 3			E
1 4 9 1			#
1 4 9 2			#
1 4 9 3			E

**IMPORTANT:** Upon completion of Work schedule programming area, be sure to press **I** key to enter the data into main storage.