

ME-ARTR (VERSION 4.0) COMPATIBILITY MATRIX

Button	FEATURES/SETTINGS			Inverter Model/Level Required	Default setting	User setting	
	Main Menu	Menu Heading/Item	Selections/Adjustments Range				
CTRL	01 AC In Control		Auto Connect	≥Level 1	Auto Connect		
			VDC Connect, Time Connect, AC-In Disabled	≥Level 3 [1]			
			SOC Connect	≥Level 3 [1][6]			
	02 CHG Control		Multi-Stage, Start Float, Start Bulk	≥Level 4	Multi-Stage		
	03 Gen Control		OFF, ON, AUTO	≥Level 1 [7]	OFF**		
	04 ARTR Aux Relay		Force Open, Force Closed, Auto VDC, Auto VDC (BTS Comp), Auto Fault, Auto SOC [6]	≥Level 1	Force Open		
	05 PT Control [F]	05A PT Chg Ctrl		Multi-Stage, Charger Off, Start Float, Start Bulk, Start EQ	≥Level 1	Multi-Stage	
		05B PT Aux Relay		DISENGAGED, VDC, FAULT, ENGAGED, SOC[6]	≥Level 1	DISENGAGED	
		05C PT Alarm Ctrl		OFF, VDC, FAULT, ON	≥Level 1	OFF	
		05D PT MPPT Sweep		15 Min Sweep, 1 hour Sweep, Fixed Sweep	≥Level 1	15 Min Sweep	
METER	01 DC Meters	01A DC Volts to Inv	Read only display	≥Level 1	Read Only		
		01B Inv/Chg DC Amps	Read only display	≥Level 1	Read Only		
	02 AC Meters	02A AC Output Volts	Read only display	≥Level 4 [3]	Read Only		
		02B AC Output Hz	Read only display	≥Level 4	Read Only		
		02C System AC Amps:	AC Load (Read only display)	≥Level 4 [4]	Read Only		
			AC Input (Read only display)		Read Only		
		02D Inv/Chg Sys Amps	Read only display	≥Level 4 [4]	Read Only		
		02E AC Load Amps	Read only display	≥Level 4 [4]	Read Only		
		02F AC Input Amps	Read only display	≥Level 4 [4]	Read Only		
	02G Inv/Chg AC Amps	Read only display	≥Level 4 [4]	Read Only			
	02H Input Volts AC1	Read only display	MSH Models only	Read Only			
	02I Input Volts AC2	Read only display	MSH-RE Models	Read Only			
	03 Timers	03A Charge Time	INV (Read only display)	≥Level 1	Read Only		
			PT (Read only display) [F]	≥Level 1	Read Only		
		03B Days Since:	Absorb/CV Done (Read only display)	≥Level 1	Read Only		
		EQ Chg Started (Read only display)	≥Level 1	Read Only			
04 AGS Meters	04A AGS Status	Read only display	≥Level 1	Read Only			
	04B DC Volts to AGS	Read only display	≥Level 1	Read Only			
	04C Gen Run Time	Read only display	≥Level 1	Read Only			
	04D AGS Sensor Temp	Read only display	≥Level 1	Read Only			
	04E Since Run Days	Read only display	≥Level 1	Read Only			
	04F Since 100% Days	Read only display	≥Level 1	Read Only			
04G Gen Hour Meter	Read only display (Press SELECT to reset)	≥Level 1	Read Only				
05 BMK Meters	05A BMK SOC	Read only display	≥Level 1 [6]	Read Only			
	05B DC Volts-BMK	Read only display	≥Level 1 [6]	Read Only			
	05C DC Amps-BMK	Read only display	≥Level 1 [6]	Read Only			
	05D Amp Hours In/Out	Read only display	≥Level 1 [6]	Read Only			
	05E Resettable Ahrs	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only			
	05F Total kAhrs Out	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only			
	05G Minimum VDC	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only			
	05H Maximum VDC	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only			
05I Days Since 100%	Read only display	≥Level 1 [6]	Read Only				
06 ACLD Meters [F]	06A ACLD Status	Read only display	≥Level 1	Read Only			
	06B Pwr Divert (KW)	Read only display	≥Level 1	Read Only			
	06C ACLD Temperature	Read only display	≥Level 1	Read Only			
	06D Target Volts	Read only display	≥Level 1	Read Only			
	06E ACLD-40 Version:	Read only display	≥Level 1	Read Only			
PT Meters [F]	07A PT Status	Read only display	≥Level 1	Read Only			
	07B Aux Relay Status:	Read only display	≥Level 1	Read Only			
		PV Volts (Read only display)	≥Level 1	Read Only			
	07C PT Volts	Bat Volts (Read only display)	≥Level 1	Read Only			
		Read only display	≥Level 1	Read Only			
	07D Target Volts	Read only display	≥Level 1	Read Only			
	07E To Battery Now	Amps: (Read only display)	≥Level 1	Read Only			
		Power: (Read only display)	≥Level 1	Read Only			
	07F Power to Batt	Life: (Read only display)	≥Level 1	Read Only			
		Reset: (Read only display - Press SELECT to reset)	≥Level 1	Read Only			
07G Ground Fault	Read only display	≥Level 1	Read Only				
07H PT Data	Read only display (Press SELECT to see Log)	≥Level 1	Read Only				
07I Clear PT Data History	Read only display (Press SELECT button)	≥Level 1	Read Only				
07J PT-100 Version:	Read only display	≥Level 1	Read Only				
07K PT Active	Read only display	≥Level 1	Read Only				

SETUP

01 System Setup	01A System Clock	Clock: 12:00AM-11:59PM Date: MM/DD/YY [F]	≥Level 1	12:00AM** MM/DD/YY**	
	01B Screen Setup	Contrast = 0-100%	≥Level 1	50%**	
		Brightness = 0-100%	≥Level 1	50%**	
	01C Power Save	PowerSave [Min] OFF, 1-60 Minutes	≥Level 1	15 min	
		Port LEDs = Auto, OFF	≥Level 1	Auto	
	01D Temp Display	Fahrenheit, Celsius	≥Level 1	Fahrenheit	
	01E Viewing Ports	Auto Scroll = OFF, 1-60 sec	≥Level 1	OFF	
	01F ARTR Aux Relay	Open Volts = 8.0-17.0*	≥Level 1	10.0V	
		Close Volts = 8.0-17.0*	≥Level 1	14.0V	
		Open Delay = 0-127secs, 1-127mins	≥Level 1	10secs	
Close Delay = 0-127secs, 1-127mins		≥Level 1	10secs		
01G ARTR Relay SOC	Open = 20-100%	≥Level 4 [6]	50%		
	Close = 20-100%		100%		
01H Max System Charge Amps [F]	Disabled, 20-2500 ADC	≥Level 3	Disabled		
01I Days to remind when to EQ	OFF, 1-255 Days	≥Level 1	OFF		
01J Link PT Charge Settings [F]	YES, NO	≥Level 1	YES		
02 Invert Setup	02A Search Watts Sensitivity	OFF, 5-50 watts (1 watt increments)	≥Level 1	5 Watts	
	02B LBCO Volts	9.0-12.2* VDC	≥Level 2	10.0 VDC	
	02C AC In - Time	Connect = 12:00AM-11:45PM	≥Level 3 [1]	6:00AM	
		Disconnect = 12:00AM-11:45PM		6:00PM	
	02D AC In - Volts DC	Connect = 9.0-15.9* (12V)	≥Level 3 [1]	11.0	
		Disconnect = 9.1-16.0* (12V)		14.1	
	02E AC In - SOC	Connect = 20-99%	≥Level 3 [6]	80%	
Disconnect = 21-100%		100%			
02F Inverter Always Power-Up When DC is Connected	NO, YES	≥Level 1	NO		
02G Inverter Threshold to Start Parallel	OFF, 30-90%	MS-PAE & MS-PE only	60%		
03 Charger Setup	03A AC Input Amps	AC/AC1 Input= 5-60A	≥Level 1 [1]	30A	
		AC2 Input= 5-60A	MSH-RE Models	20A	
	03B Low VAC Dropout	AC/AC1 Input= 60-100 VAC, UPS Mode	US Models	80 VAC	
		AC Input= 110-190 VAC, UPS Mode	Export Models	150 VAC	
		AC2 Input= 60-100 VAC, UPS Mode	MSH-RE Models	70 VAC	
	03C Battery Type	Gel, Flooded, AGM 1, AGM 2	≥Level 1	Flooded	
			≥Level 4	Max Chg Rate = (0-100%)	100%
				CV Chg Volts = (12.0-16.0V)*	13.8V
				CV Chg Done= (Time, Amps, Hold VDC)	Time
				CV Chg Done Time= (0.1-25.5 Hrs)	2.0 Hrs
				Max CC/CV Time= (OFF, 0.1-25.5Hrs)	12.0Hrs
				DC Volts to ReCharge= (12.0-16.0V)*	12.0V
				CV Chg Done Amps= (0-250ADC)	20ADC
				Max CC/CV Time= (OFF, 0.1-25.5Hrs)	12.0Hrs
				DC Volts to ReCharge= (12.0-16.0V)*	12.0V
Hold CV Chg Volts					
Custom	Absorb Volts = (12.0-16.0V)*	≥Level 3 [2]	14.4V		
	Float Volts = (12.0-16.0V)*		13.2V		
	EQ Volts = (12.0-16.0V)*		15.6V		
	EQ Time = (0.1-25.5Hrs)		4.0 Hrs		
03D Absorb Done	Time, Amps, SOC [6]	≥Level 4 [4]	Time		
	Time= 0.1-25.5 Hrs		2.0 Hrs		
	Amps= 0-250 ADC		20 ADC		
03E Max Charge	Rate = 0-100%	≥Level 3	100%		
	Time = OFF, 0.1-25.5 Hrs	≥Level 4	12.0Hrs		
03F Final Charge Stage	Multi-Stage, Float, Silent	≥Level 1	Multi-Stage		
	Multi-Stage				
	Float				
03G Always Start Charge in Bulk [F]	Silent DC Volts to Rebulk = (12.0-16.0V)*	≥Level 4	12.0V		
	Disabled, Enabled	≥Level 4	Disabled		

04 AGS Setup	04A Gen Run DC Volts	Start = OFF, 9.0-15.9*	≥Level 1	11.5	
		Stop = 9.1-16.0*, Float		14.4	
		Start Delay= 0-127 sec, 1-127 min		120 Sec	
		Stop Delay= 0-127 sec, 1-127 min		120 Sec	
	04B Gen Run Time	OFF, ON= Set Gen Run Time	≥Level 1	OFF	
		Start Daily = OFF, 12:00AM-11:45PM		OFF	
		Stop Daily = 12:00AM-11:45PM		12:00AM	
	04C Gen Run AC Amps	Stop Gen Time= 12:00AM-11:45PM	≥Level 4	12:00AM	
		Start AC Amps= OFF, 5-60A		OFF	
		Stop AC Amps= 4-59A		4A	
Start Delay= 0-127secs, 1-127mins		120secs			
04D Gen Run SOC	Stop Delay= 0-127secs, 1-127mins	≥Level 1 [6]	120secs		
	OFF, Start Gen SOC= 20-90%		OFF		
	Stop Gen SOC= 21-100%		90%		
04E Gen Run Temp	Start Temp= OFF, Ext Input, 65-95F (18-35C)	≥Level 1	OFF		
	65-95F (18-35C)→Run Time= 0.5-25.5 Hrs		2.0Hrs		
04F Max Gen Run Time	OFF, 0.1-25.5 Hrs	≥Level 1	12.0 Hrs		
04G Gen Quiet Time	OFF, ON= Set Gen Quiet Time	≥Level 1	OFF		
	Begin Quiet= 12:00AM-11:45PM		12:00AM		
	End Quiet= 12:00AM-11:45PM		12:00AM		
	Quiet Time Topoff= OFF, 30-120Min		OFF		
04H Gen Exercise	Start Gen Days = OFF, 1-255 days	≥Level 1	OFF		
	Start Time = 12:00A-11:45P		8:00AM		
	Run Time= 0.1-25.5 Hours		1.0 Hours		
04I Gen No-Load Time	Warm-up = 0-127secs, 1-127mins	≥Level 1	60secs		
	Cool-down = 0-127secs, 1-127mins		60secs		
04J Gen 100% SOC Start	Start Gen Days = OFF, 1-255 days	≥Level 1 [6]	OFF		
	Start Time = 12:00A-11:45P		8:00AM		
05 BMK Setup	05A Charge Eff	≥Level 1 [6]	Auto		
	05B AmpHour Size	≥Level 1 [6]	400 AH		
06 RC Setup	06A Remote Control	System, Port 1 - Port 6	≥Level 1	System	
07 PT Setup [F]	07A Battery Type - Linked	Read only display	≥Level 1	Linked	
	07A Battery Type - Unlinked	CC/CV	Ge1, Flooded, AGM 1, AGM 2	≥Level 4	Flooded
			Max Chg Rate = (0-100%)		100%
			CV Chg Volts = (12.0-16.0V)*		13.8V
			CV Chg Done= (Time, Amps, Hold VDC)		Time
			CV Chg Done Time= (0.1-25.5 Hrs)		2.0 Hrs
			Max CC/CV Time= (OFF, 0.1-25.5Hrs)		12.0Hrs
			DC Volts to ReCharge= (12.0-16.0V)*		12.0V
			CV Chg Done Amps= (0-250ADC)		20ADC
			Max CC/CV Time= (OFF, 0.1-25.5Hrs)		12.0Hrs
			DC Volts to ReCharge= (12.0-16.0V)*		12.0V
	Custom	Hold CV Chg Volts			
		Absorb Volts = (12.0-16.0V)*	≥Level 3 [2]	14.4V	
		Float Volts = (12.0-16.0V)*		13.2V	
		EQ Volts = (12.0-16.0V)*		15.6V	
07B Absorb Done - Linked	EQ Time = (0.1-25.5Hrs)		4.0 Hrs		
	Read only display	≥Level 1	Linked		
07B Absorb Done - unlinked	Time, Amps, SOC [6]		Time		
	Time= 0.1-25.5 Hrs	≥Level 4 [4]	2.0 Hrs		
	Amps= 0-250 ADC	≥Level 4	20 ADC		
07C Max Charge	SOC= 50-100%	≥Level 4 [6]	100%		
	Rate = 0-100%	≥Level 1	100%		
07D Bulk Start	Time = OFF, 0.1-25.5 Hrs	≥Level 1	12.0Hrs		
	Daily/SunUp = YES, NO	≥Level 1	YES		
07E PT Relay VDC	Low VDC = 9.0-16.0V	≥Level 1	10.0V		
	SOC = OFF, 50-100%	≥Level 4 [6]	80%		
07E PT Relay VDC	Engage VDC = 8.0-17.0*	≥Level 1	10.0V		
	Diseng Volts = 8.0-17.0*	≥Level 1	14.0V		
	Engage Delay = 0-127secs, 1-127mins	≥Level 1	10secs		
	Diseng Delay = 0-127secs, 1-127mins	≥Level 1	10secs		
07G PT Alarm	ON Volts = 8.0-17.0*	≥Level 1	10.0V		
	OFF Volts = 8.0-17.0*	≥Level 1	14.0V		
	ON Delay = 0-127secs, 1-127mins	≥Level 1	10secs		
07H PT Power Save Display	OFF Delay = 0-127secs, 1-127mins	≥Level 1	10secs		
	OFF, 1-60 min	≥Level 1	15 min		

SETUP (continued)

TECH	01 Temperatures	01A INV BTS Temp	Read only display	≥Level 1	Read Only
		01B INV Tfmer Temp	Read only display	≥Level 1	Read Only
		01C INV FETs Temp	Read only display	≥Level 1	Read Only
		01D AGS Sensor Temp	Read only display	≥Level 1	Read Only
		01E ACLD Temperature [F]	Read only display	≥Level 1	Read Only
	01F PT Temps [F]	BTS, FETs, Inductor	≥Level 1	Read Only	
	02 Port Versions / ARTR Version	Read only display / ARTR=4.0	≥Level 1	Read Only	
	03 Acc Port Versions	Read only display	≥Level 1	Read Only	
	04 PT-100 Version: [F]	Read only display	≥Level 1	Read Only	
	05 Fault History	INV Faults	Read only (press/rotate SELECT for history)	≥Level 1	Read Only
		AGS Faults	Read only (press/rotate SELECT for history)	≥Level 1	Read Only
		PT Faults [F]	Read only (press/rotate SELECT for history)	≥Level 1	Read Only
		Clear All Faults	Press SELECT (x5 Secs) to clear fault history	≥Level 1	Read Only
	06 SETUP PIN	Lock SETUP, Unlock SETUP, Change PIN (PIN= 0000)	≥Level 1	Set New PIN	
	07 Ext Control	Read only display	≥Level 1	Read Only	
08 Show all Menus	YES, NO	≥Level 1	NO**		
09 Load New Firmware [F]	Insert SD Card	≥Level 1			
10 Load all Defaults	Press & hold SELECT knob to Load in 5.0 (secs)	≥Level 1			

* 12-volt values shown; for 24-volts systems - multiply by 2, and for 48-volt systems - multiply by 4.

** These settings return to the factory default setting when power to the remote is removed.

[F] Features added from RTR Version 3.1.

ME-ARTR Compatibility Matrix Notes:

[1] Not available on MM/MM-E/MM-AE/MMS/MMS-E models.

[2] AC Couple Mode can be activated using Battery Type: Custom with MS-PAE Series ≥Rev 4.1 or MS/MS-PE Series ≥5.0 .

[3] The AC meter displays are accurate only when used with MS-PAE, MS-PE or MSH Series inverters.

[4] Level 2 and 3 inverters can be used, but level 2 inverters are limited from 1.0 hour to 4.5 hours, level 3 inverters <Rev 4.1 are limited from 1.0 hour to 6.5 hours, and level 3 inverters ≥Rev. 4.1 (and MMS Rev 1.5) are limited from 1.5 hours to 6.5 hours; any setting outside these limited ranges are not recognized and reverts to the inverter's default absorption time (2.0 hours).

[5] Requires ≥Level 4 to display.

[6] SOC features require the ME-BMK (Battery Monitor Kit) to be installed.

[7] To manually turn the generator "ON" with the remote, ME-AGS-N rev 5.2 or higher is required.