

D3-MFT1 / P44-MFT1 Multifunction Timer 1 Relay

Operating instructions and Guarantee Certificate

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Description:

This device is used for "on delay", "interval", or "repeating" functions and offers two time ranges: Hours and minutes OR minutes and seconds. In repeating mode, the "on" time may be in one range, and the "off" time in another. With the "save" function activated, timing will continue from where it left off after a power failure. The timer may be pulse controlled (see the "pulse type" menu option). The upper display can be set to indicate lapsed OR remaining time while the lower display indicates the pre set value. The menu can be reduced to allow changes to the timing value(s) only. (see menu configuration). The parameters may be locked with an access code to protect programmed values.

Menu functionality:

Press the menu "O" button repeatedly until the desired setting is reached.

The "♠" & "▼" buttons are used to change the value. "♂" will display the next menu item. To exit the menu hold "♂" button for 1 second.

Adjustable paramaters:

· Function ("Func") Use this setting to select the device's functionality.

The following sequences may be started by applying an the external pulse or removing and re-applying the power (see "PulS" setting)

· On delay ("on d")

The relay remains off for the period programmed into the "SEt" parameter whereupon it energises until pulsed or reset.

Interval ("int")

The relay energises immediately. After the period programmed into the "SEt" parameter has lapsed, it de-energises until the device is pulsed, or reset.

Repeating ("rEP")

The relay is energised for the period programmed into the "on t" parameter. Thereafter the relay de-energises for the "OF t" period. The device may be programmed to start with the off time first. (see "Firs" setting).

<u>Time range "rAnge"</u> ("on delay" and "interval" modes only)

Either hours and minutes (hh.mm) or minutes and seconds (mm.ss)

· Timing value ("Set") ("on delay" and "interval" modes only)

This is the period of the selected timing sequence. Depending on the selected time range, the value entered will represent hours and minutes, OR minutes and seconds.

· "on" Time range "on r" ("repeating" mode only)

Either hours and minutes (hh.mm) or minutes and seconds (mm.ss)

· Relay on time ("on t") ("repeating" mode only)

This is the period the relay is energised in a repeating configuration. Depending on the selected time range, the value entered will represent hours and minutes, OR minutes and seconds.

"off" Time range "OF r" ("repeating" mode only)

Either hours and minutes (hh.mm) or minutes and seconds (mm.ss)

Relay off time ("OF t") ("repeating" mode only)

This is the period the relay is de-energised in a repeating configuration. Depending on the selected time range, the value entered will represent hours and minutes, OR minutes and seconds.

Relay state at start-up ("FirS") ("repeating" mode only)

When the device is configured to repeat, this setting determines whether the "on" or "off" cycle is performed first. Relay on ("on"), or relay off ("OFF") at start-up or reset.

Wait for pulse ("PuLS") ("on delay" and "interval" modes only)

This setting determines whether the device will start timing immediately at power up, or wait for an external pulse before starting the selected timing sequence. ("OFF" = Start timing immediately), ("on" = wait for first pulse).

This parameter is disabled (OFF) if the timer function is set to repeat!

· Pulse type ("P.TyP")

Set the device to recognize a pulse / reset when the terminals are opened ("OPEN") or closed ("CLOS").

· Save timer status during power failure ("SAuE")

If set to "ON", the device will continue timing where it left off after a power failure. "OFF" resets the timer whenever the power is removed.

The SAVE function is ONLY applicable when the power is removed DURING a timing cycle. If the cycle was complete before the power was removed, the device will operate according to the PULSE parameter when the power is re-applied.

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Display format ("diSP") for the upper display

Lapsed time ("LA t")

Period since the start of the current timing sequence.

Remaining time ("rE t")

Period till the relay changes state.

Reset ("rESt)

Press "▲" and "▼" to reset all values to default.

Function = "on delay", range = min & sec, timers = zero,

display format = Lapsed time.

Menu options:

Exit the menu before making the following adjustments.

1. Lock / unlock parameters: (default: unlocked)

Press "▼", then "O" and hold the 2 buttons until the desired option is displayed. The display cycles between "Loc" (no changes allowed) & "u.Loc" (parameters may be adjusted)

2. Full / reduced menu (default: Full)

Press "A", then "O" and hold the 2 buttons until the desired option is displayed. The display cycles between "rEdu" (limited menu) & "Full"

(all parameters are accessible)

3. Access Code: (default: no code)

Once options 1 & 2 are set as required, Press "▼" and "▲" simultaneously until "CODE" is displayed. Now use the "▲" & "▼" to enter a code. (1-9999) Once a code is entered, access to options 1 & 2 is not permitted. To clear the code, re-enter the same code again. If the code is forgotten. Press and hold "A" & "V" until "CODE" is displayed while re-applying power to the device. To exit without setting a code, press "U" while "CodE" or "diSA" is displayed.

Example 1: Set the device for an interval time of 2 min and 10 seconds:

Press "♂" to display "Func". Press "▲" or "▼" to change the value to "int". Press "♂" to display "rAng". Use "▲" or "▼" to change the value to "nn.SS" (min & sec). Press "♂". "Set" is displayed. Use "▲" or "▼" to change the value to "2.10". Press and hold "O" for 1 second to exit the menu.

Notes:

- · If the pulse function is turned on, pulses received while the timing cycle is active, will be ignored. If the pulse function is off, pulses received will reset the current timing cycle.
- · When programming the timing values, the data pointer in the lower right corner of the display is lit when the current timer's range is hours & minutes.
- · When the time is displayed (lapsed or remaining), the data pointer in the lower right corner of the display flashes when the value is in the hours & min range.

Specifications:

Timing range: min & sec: 59 min : 59 sec

hours & min: 99 hours: 59 min

Accuracy: 0.05%

Display Resolution: hours & seconds or minutes & seconds

(depending on time range)

±15% of rated input Input voltage:

Led indication: Relay status

Response time: 0.5 sec (power supply reset)

0.05 sec (reset pulse)

Minimum pulse width 45ms (close or open – see menu options) proximity input: NPN 10 to 30V supply incorporated)

12 Month guarantee:

Our product is guaranteed for a 12 (twelve) month period from date of purchase. This guarantee is valid for defects arising from failure during specified conditions. This guarantee does not cover damage due to abuse, tampering or improper installation. Our company does not accept liability for any consequential damage or loss arising from product malfunction. Should this product prove to be defective, kindly return for inspection or repair. For further information contact your nearest distributor.

Relay specifications:

10A 250 VAC 2500VA (Resistive) Contact rating:

Mechanical life: 30 million operations

Electrical life: 250 000 operations (at maximum load)

For further information visit us at www.iconelectronics.co.za

