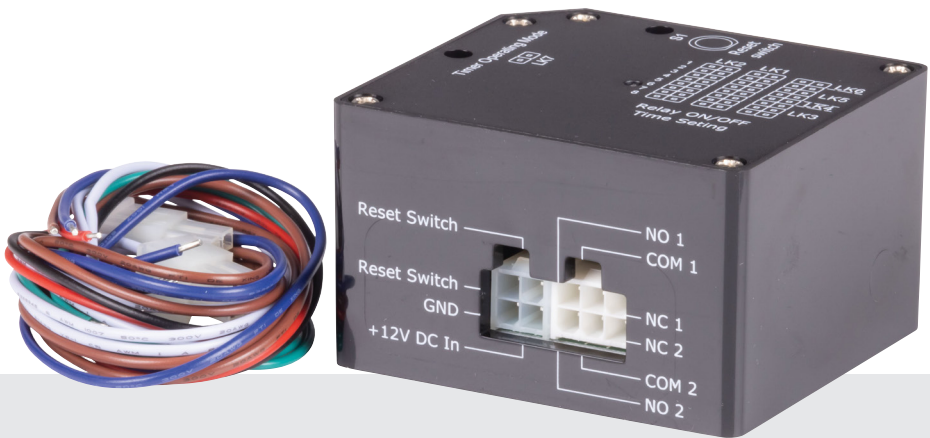# digitech

Programmable Interval 12V Timer Module

Model:
AA0378

Instruction Manual

BEFORE FIRST USE

Prior to using your product, please read all the safety and operating instructions thoroughly. Please ensure you follow the steps below before using the product. We recommend you keep the original packaging for storing the product when not in use.

Find a safe and convenient place to keep this instruction manual for future reference.

Unpack the product but keep all packaging materials until you have made sure your new product is undamaged and in good working order. Ensure you have all accessories listed in this manual.

WARNING: Never get any part of the module wet. Never attempt to open, modify or repair any part of the module.

INSTRUCTIONS

- Set the jumpers to program the timer, according to the connection diagram and jumper settings table included.
- Plug in the supplied to the module, and the black and red cables to a power supply 12V.
- Connect the device you want to switch to the NO and NC for normally open function or NC and COM for normally closed function.
- Press the reset button to restart the selected timer 0 function.

UNDERSTANDING RELAYS

Before use, it should be understood how a relay works. If you've used relays before, you can skip this section

A relay has a "COM" port, which can be thought of as an "input" which will then go to one of the two "Normally Open" and "Normally Closed" connections. Normally means when the power is off, as it is in its resting state.
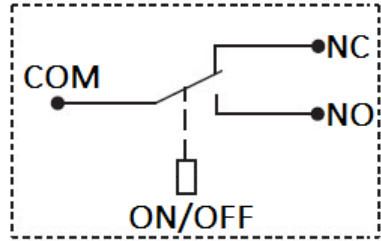
When power is applied, the relay will switch the connection from the Normally Closed NC position, to the Normally Open NO (ie: now closed).

You can try this by putting multimeter leads on the common and NO connections, to see when there is a continuity measurement (set the multimeter to beeper)

The AA0378 Programmable interval 12V timer module has one relay offering two connections like this, so it is a Double Pole Double Throw relay, or DPDT.

LINK JUMPER SETTINGS

RELAY ON PERIOD									RELAY OFF PERIOD								
Time	LK1 Jumper positions								Time	LK2 Jumper positions							
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
1	√								1	√							
2		√							2		√						
3			√						3			√					
4				√					4				√				
5					√				5					√			
6						√			6						√		
7							√		7							√	
8								√	8								√
9									9								

On Time Units&Mult	LK4 & LK3 jumper positions				OFF Time Units&Mult	LK6 & LK5 jumper positions			
	LK4 (x10)	LK3a (s)	LK3b (m)	LK3c (h)		LK6 (x10)	LK5a (s)	LK5b (m)	LK5c (h)
Seconds		√			Seconds		√		
Seconds x10	√	√			Seconds x10	√	√		
Minutes			√		Minutes			√	
Minutes x10	√		√		Minutes x10	√		√	
Hours				√	Hours				√
Hours x10	√			√	Hours x10	√			√

Timer Operating Mode(LK7)	Jumper In: Continuous On/Off Timing
	Jumper Out: One Timing Period(Relay On)

The link jumpers on this unit are used to program this unit.

You can set the jumpers to your desired position according to this handy chart, which splits into two periods; the "ON" period where the relay is activated, and the "OFF" period.
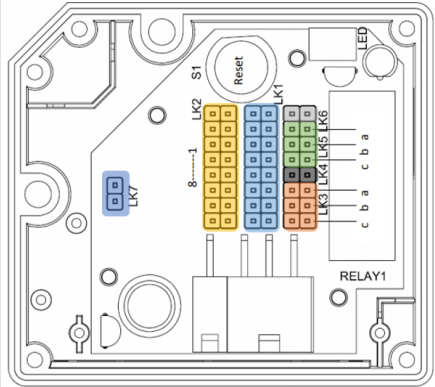
You set the amount of time ON by selecting the correct jumper position, the unit, and the multiple, such as:

(5) (minutes) (x10)

Meaning 50 minutes.

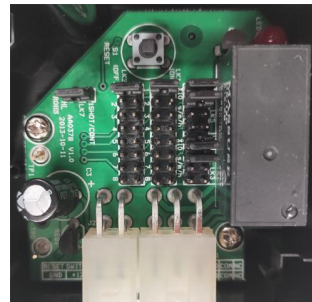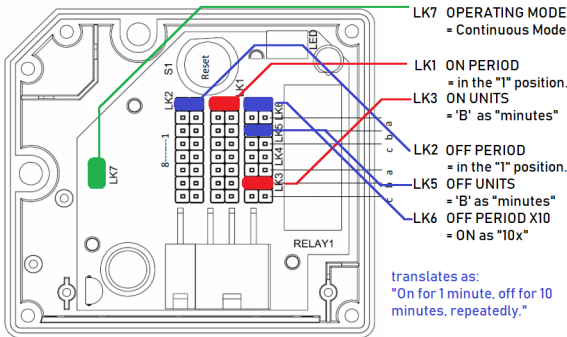We've provided a few examples for you to look at in case of any confusion.

Jumper Settings Table																		
RELAY ON PERIOD									RELAY OFF PERIOD									
Time	LK1 Jumper positions								Time	LK2 Jumper positions								
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
1	√								1	√							
2		√							2		√						
3			√						3			√					
4				√					4				√				
5					√				5					√			
6						√			6						√		
7							√		7							√	
8								√	8								√
9									9								

On Time Units&Mult	LK4 & LK3 jumper positions				OFF Time Units&Mult	LK6 & LK5 jumper positions			
	LK4 (x10)	LK3a (s)	LK3b (m)	LK3c (h)		LK6 (x10)	LK5a (s)	LK5b (m)	LK5c (h)
Seconds		√			Seconds		√		
Seconds x10	√	√			Seconds x10	√	√		
Minutes			√		Minutes			√	
Minutes x10	√		√		Minutes x10	√		√	
Hours				√	Hours				√
Hours x10	√			√	Hours x10	√			√

Timer Operating Mode(LK7)	Jumper In: Continuous On/Off Timing
	Jumper Out: One Timing Period(Relay On)

EXAMPLES

The linker positions are fairly easy to understand. Have a look at some examples:

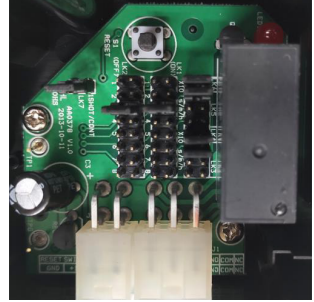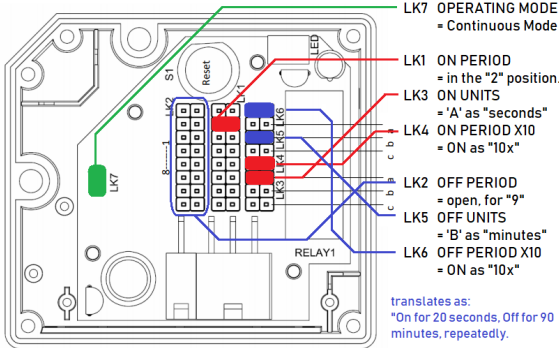## 1. On for 1 minute, off for 10, in a cycle:

LK7 OPERATING MODE
= Continuous Mode
LK1 ON PERIOD
= in the "1" position.
LK3 ON UNITS
= 'B' as "minutes"
LK2 OFF PERIOD
= in the "1" position.
LK5 OFF UNITS
= 'B' as "minutes"
LK6 OFF PERIOD X10
= ON as "10x"

translates as:
"On for 1 minute, off for 10 minutes, repeatedly."

ON 10S   OFF 10S
LK4 is set;   LK6 is set;
LK3 is set to S;   LK5 is set to S;
LK1 is set to 1;   LK2 is set to 1.

Note: Link 4 is missing, as we do not want to multiply '1' by 10

2. On for 20 seconds, off for 90 minutes, continuously

LK7 OPERATING MODE
= Continuous Mode

LK1 ON PERIOD
= in the "2" position.

LK3 ON UNITS
= 'A' as "seconds"

LK4 ON PERIOD X10
= ON as "10x"

LK2 OFF PERIOD
= open, for "9"

LK5 OFF UNITS
= 'B' as "minutes"

LK6 OFF PERIOD X10
= ON as "10x"

translates as:
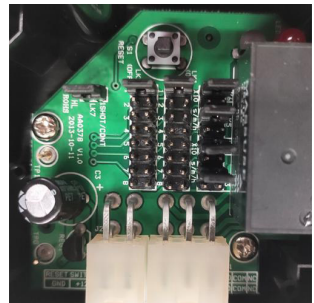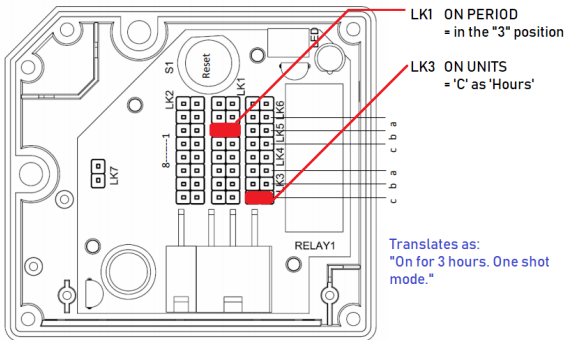"On for 20 seconds, Off for 90 minutes, repeatedly.

ON 30S
LK4 is set;
LK3 is set to S;
LK1 is set to 3;

OFF 30S
LK6 is set;
LK5 is set to S;
LK2 is set to 3.

Note: Link 2 is missing, as "9" is with "no link" as per chart above.

3. On for 3 hours when RESET button is pressed.

LK1 ON PERIOD
= in the "3" position

LK3 ON UNITS
= 'C' as 'Hours'

Translates as:
"On for 3 hours. One shot mode."

ON 1 Min
LK4 is set;
LK3 is set to M;
LK1 is set to 1;

OFF 1 Min
LK6 is set;
LK5 is set to M;
LK2 is set to 1.

Note: Link 7 is missing so this is configured in "one shot" mode. OFF settings have no effect, and it will not re-cycle itself. The device can be reset via the reset switch, cycling power, or by shorting the green wires from the wiring kit.

WARRANTY INFORMATION

Our product is guaranteed to be free from manufacturing defects for a period of 12 Months.

If your product becomes defective during this period, Electus Distribution will repair, replace, or refund where a product is faulty; or not fit for intended purpose.

This warranty will not cover modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim warranty, please contact the place of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by:

Electus Distribution
Address 46 Eastern Creek Drive, Eastern Creek NSW 2766
Ph. 1300 738 555