## AR-12MF Quick Start

(for use with Windows XP\*, Vista, Windows Server, Windows 7, 8.1 or Windows 10)

\*XP requires Service Pack 3

(Step 1) Insert the installation CD or USB flash drive and wait for the security message (with a USB flash drive, you may need to browse to the drive icon from the My Computer link). OK or click the startup.exe file to start the installer dialog.

(Step 2) Connect to the Internet. This permits any security or software updates to occur during installation. If you do not have an Internet connection, you may skip this step (please note that if you are not connected to the Internet, the installer will delay for about 30 seconds while attempting to connect).

(Step 3) Install the USB Com driver from your CD by clicking on the "Install USB Com Driver" button (disconnect the AR-12MF USB cable from your computer if connected). Please note that you may have to remove any out of date Prolific Com drivers on your system before the current driver will install correctly. It is important that you use the remove feature on your CD (not the remove feature in Device Manager). The remove feature is shown after clicking the "Install USB Com Driver" button from the installer dialog window (allow up to 30 seconds for the installer to load and appear). Please note that

Keyboards

Network adapters

Ports (COM & LPT)

TOMMUNICATIONS Port (COM1)

P ECP Printer Port (LPT1)

Prolific USB-to-GPIO/PWM Port (COM4)

Print queues

Processors

an out of date driver may allow the AR-12MF to partially function and/or with erratic operation. When installing on a Windows 7 or 8.1 computer, it may be necessary to install the Com driver that is supplied on your installation CD due to the 2019 Windows security requirements (be sure to un-install any existing Prolific driver).

(Step 4) Connect your AR-12MF Relay Interface to any available USB port on your computer using a CC-USBB cable (1 to 15 foot). A high percentage of systems will be up to date and you will not see any activity or a pop-up message (allow up to 30 seconds for any system message). You may receive a message that your system is being updated or a new driver installed. Allow the update to occur before you move to the next step. If you do not see activity or receive a system message, proceed to step 3.

(Step 5) Check your USB Com driver by clicking on the "Open Device Manager" button in the installer dialog window and expanding the "Ports (COM & LPT)" category (see the AR-12MF Technical Reference if you have difficulty or go directly to Device Manager from Control Panel). If you see a "Prolific USB-to-GPIO Com Port" entry, this is your USB Com driver\* and the com port assigned is to the right of the entry. Right click on the entry and select "Properties" and click the "Driver" tab. Your USB Com driver must be Prolific version 3.8.25.0 or higher (dated 7/12/2018 or later). If your USB Com driver is not up to date, right

click on the entry and select "Update Driver Software". If your USB Com driver is up to date then please note the Com port number assigned and jump to step 5. If your entry does not show "Prolific USB-to-GPIO Com Port", disconnect from the Internet, disconnect the AR-12MF USB cable and re-install the USB Com Driver from your CD (use the remove feature after you click "Install USB Com Driver" to remove existing driver first).

\*verify that this is the com port assigned to the AR-12MF by unplugging the AR-12MF from your USB port and watching the entry in device manager. The entry should disappear and then reappear when you plug the AR-12MF back in.

(Step 6) After you have verified or installed the up to date USB Com driver, reconnect (if not already connected\*) your AR-12MF Relay Interface to the same USB port and install the AR-12MF device driver\*\* by clicking the "Install EECI Device Driver" button from the installer dialog window (if you have auto start disabled, you may browse to the Windows Driver folder and double click on setup.exe). When installing the AR-12MF device driver on a Windows XP or Vista computer, double click on setup.exe in the XP-Vista folder. If you receive an error message, this is usually caused by the recent SHA-2 security requirements for Windows operating systems (do a Windows Update to install the new SHA-2 security ciphers).

\*if you reconnect your AR-12MF to a different USB port, a different com port may be assigned.

Click the "Install Help Files" button to install important trouble-shooting and reference information before you close the installer.

\*\*Please note that the Microsoft .Net Framework must be installed on your system. The .Net Framework is already installed if you have Windows 7 or higher. If the .Net Framework is not installed on your computer, the installation program will attempt to download and install the .Net Framework from the Microsoft Update website through your internet connection. This may take 5 minutes or longer. In order for the .Net Framework to install correctly, your computer must be up to date with Windows Update. This is especially important with Windows XP\* and Vista. You may update your computer by clicking on the start button, All Programs, Windows Update and clicking on "Check for updates".

\*for XP, Service Pack 3 must be installed.

(Step 7) After the AR-12MF device driver is installed, the AR-12MF com port should be detected and a pop-up will prompt you for the com port to be used with your AR-12MF Relay Interface (correct com port should be shown). You may edit the com port if incorrect. The AR-12MF User Interface will now open and the label just under the COM port indicator should show that Com port open.

(Step 8) Test your relays by clicking the relay buttons for each relay. The relay should energize when the button is green. You may set your AR-12MF Relay Interface to input mode by reversing the opto isolators\* on the circuit board as shown below and connecting the RCT-8 terminal block to port A or B on your AR-12MF Relay Interface (unplug relay card - see AR-12MF Technical Reference).

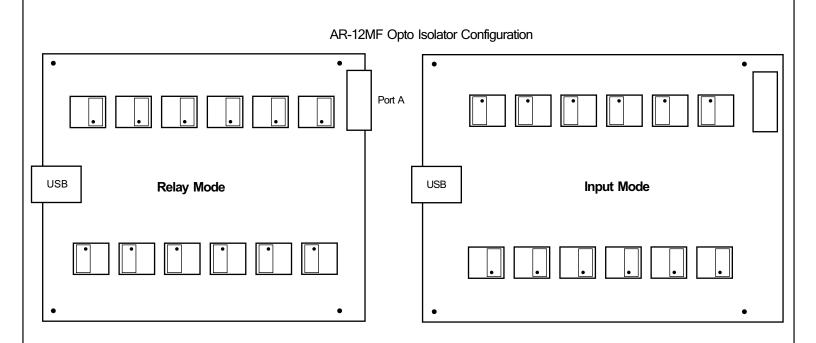
\*Note: when using the dual I/O mode, the opto isolators should be left in the relay mode (dual mode port required).

(Step 9) Test your inputs by clicking the Setup button on the AR-12MF user Interface and then checking all 12 input boxes. Click apply and then click OK. The indicator box to the right of the relay button will show a "0" when no voltage is applied to the input terminal on the RCT-8 and a "1" when voltage is applied to the input terminal. Terminal 10 on the RCT-8 is the common (- or +) for all eight inputs. The default voltage input range for the AR-12MF is 3.3V to 18 volts (DC or AC)

\*Please note that by default, the AR-12MF device driver is only loaded on demand to conserve system resources. You may install the AR-12MF device driver permanently by checking the "Driver Only" check box under Setup in the AR-12MF User Interface. You will then always see the AR-12MF system icon in your system tray along with the other system devices (such as your speaker, printer or display adapter). Click the blue 12 icon in your system tray to open the user interface. Please refer to the AR-12MF Technical Reference for additional info.



Call (937) 349-6000 or (800) 842-7714 for free technical support Complete Technical Reference is located on your Installation CD



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