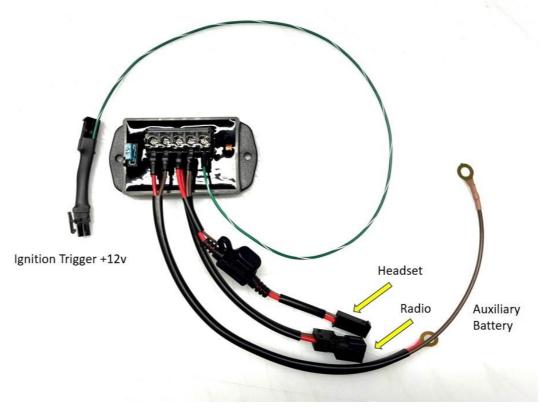
## Installation Instructions & Use Recommendations

## FMS Accessories – FMS LVD Power Timer – CHP Version

These instructions must be read carefully and thoroughly **before** beginning work. FMS Solutions, LLC accepts no liability for damage caused by failure to observe the installation instructions or use recommendations. **Installation of this accessory does not change the factory specified load limits for the motorcycle.** 



The FMS LVD Power Timer is designed to provide power to the CHP radio system to enable radio operation for up to 60 minutes after ignition-OFF, assuming that the auxiliary battery possesses sufficient capacity to do so without dropping below 9v. The timer is activated when the ignition is turned ON and has the following features:

- 1. Direct connection to the motorcycle battery, with minimal parasitic load (less than 50 μA) when OFF, so the battery will not discharge noticeably when parked even for long periods.
- 2. The CHP version has been permanently programmed for a run-time of 60 minutes after ignition-OFF. Non-CHP version has run-time adjustable via DIP switch.
- 3. LVD low voltage disconnect protection to save battery from severe discharge. The timer is programmed to shut-down when the voltage drops below 9v or 11v (set via DIP switch) for more than 30 seconds regardless of remaining run-time, so that battery is not deep discharged which can otherwise permanently damage the battery. The CHP version has been permanently programmed for 9v LVD disconnect and is not adjustable.
- 4. An LED indicator shows **steady** when IGN ON, **blinks slowly** after ignition-OFF to indicate runtime count-down function. **Fast blinking** indicates load in excess of 19A (often cold-start momentary loads) timer in self-protection mode. Remove excessive load and reconnect.
- 5. The battery power line is fused directly at 15A maximum for CHP use.
- 6. The timer can be secured with screws through the holes provided (3.5" on center), or by using high quality Velcro. The CHP version is attached with Velcro fastener.
- 7. The timer is potted to protect from weather, vibration and shock.
- 8. Made in USA exclusively for FMS Solutions, LLC

## Cautions:

- As with all wiring, ensure that wires flow freely with no contact with sharp objects / edges.
- Secure all wiring with cable ties, but never over-tighten cable ties. Cable ties are designed to keep the wiring in location only.
- Keep power wires separated from antenna cables or other communication cables / wires. Never cable tie them together.
- Watch that no screws or fasteners protrude onto the FMS Power Timer, the fuse, or any wiring.
- Ensure that there is sufficient clearance between the top of the fuse and any other object / casing to avoid contact. 1.5" of vertical clearance for the timer is the minimum recommended.



Gain access to the area under the radio box floor plate to install the LVD Timer. This may entail removal of the CHP radio equipment.

Remove the DB25 connector to gain access to the bolt.

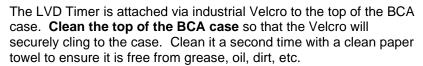
Remove the screws holding the radio box floor plate / radio mount as shown below.

Remove the two screws at the front of the radio box.

Lift the radio box floor plate w/trim up and support with a box.







**Note:** CHP recommends taping the top of the LVD Power Timer connection block and the 15A fuse to guard against any accidental shorting to the underside of the radio box floor plate.



Secure the LVD Power Timer to the top of the BCA case with the leads facing the auxiliary battery.

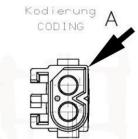
**Note:** Photos show the earlier version of the LVD Power Timer. The newest version is without DIP switch or disconnect in the battery power line.

Connect the LVD Power Timer battery leads to the auxiliary battery. Ensure that the terminals are tight and that the pad sitting on top of the auxiliary battery is reinstalled. That pad is critical to guard against shorting the battery terminals to the underside of the radio box floor plate.

The CHP radio power filter is connected to the BMW motorcycle via an adapter cable to the radio power plug, which has been located on the RH side of the auxililary battery. Unplug that connection. It is a std. BMW radio power plug connector.

Connect the CHP radio power plug to the LVD Power Timer Load plug. Always check / compare the polarity of the plugs before connecting them – just in case they don't match. If polarity is reversed, correct it prior to connecting it.

The + power side of the connector should be the side with the "ear" shown below with A arrow.





Store / locate the plug from the radio power adapter to the CHP power filter on the right rear side of the auxiliary battery as shown at right.

Locate the ACCI plug connector in the general area shown at right. The ACCI provides the switched power signal.





Auxiliary I (GMSF Pin 33 - 2A, 60 seconds after ign. off) GN RT

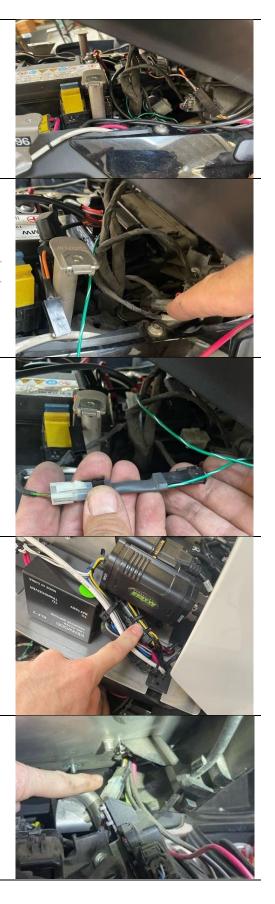
Ground BR

The LVD Power Timer uses that signal as the IGN-ON signal. Since it is already being used for the same purpose by another device, the LVD Power Timer has a male / female connector so that you can connect this between those connections.

Once connected, the ACCI lead should look like below.

The last connection is from the headset audio power amp shown at right.

The connection via a harness to the ACCII is right under the radio floor plate grommet.



The FMS adapter cable that plugged in to ACCII to the audio power amp is shown below. Abandon the ACCII plug.

Connect that to the fused leg of the load side of the timer (fused at 2A).

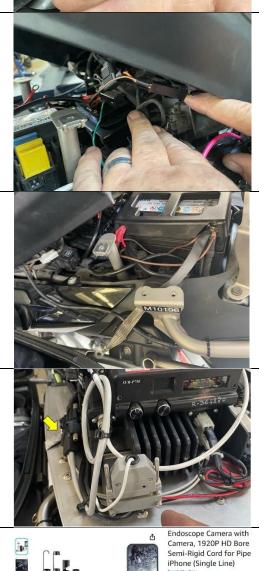
Ensure that all connections / cables are secured and free from being pinched between the radio box and supports when reassembled.

Ensure that when reassembling, the battery ground bonding strap is secured to the radio mounting bracket.

Make sure the route the bonding strap between the radio box floor plate and the back trim skirt. Secure to the radio mounting plate bolt.

FMS highly recommends technicians use a borescope inspection snake for your phone to double-check your work to ensure no wiring is pinched / compromised when the radio box floor plate is reinstalled! These tools are now amazingly good and affordable!

Also, great at locating the bolt that fell, did a Triple Lindy on the way down through the body work, but never fell out on the hoist!



List Price: \$30.99 petans leal Price: \$23.75 <mark>√prime</mark> Two-Day **Feedback:** Thank you for your purchase and we welcome your feedback as we too want to make every accessory exceed your expectations. Report any comments, suggestions, problems or concerns to FMS Solutions, LLC at <a href="mailto:info@fmsaccessories.com">info@fmsaccessories.com</a>.

## **FMS Solutions, LLC Limited Warranty**

FMS Solutions, LLC warrants to the first retail purchaser of new FMS Accessory products, to be free from defects in materials or workmanship, for a period of three (3) years from the original date of purchase as noted on the FMS Solutions, LLC invoice or original dealer invoice, except for paint and powder-coated finishes, which are warranted for the first 12 months only. LED lights from Feniex, Inc., Code 3, Inc. and Littlite are covered for 5 years by their manufacturer's respective warranties – processed through FMS Solutions, LLC.

This warranty extends only to the FMS accessory and does not include: damage caused by accidents or abuse; incorrect installation; labor to diagnose, remove, repair or replace; any consequential damage or loss of use. Any FMS Accessory suspected of being defective should be returned to FMS Solutions, LLC along with a copy of proof of purchase and warranty request form available on the FMS website. FMS Solutions, LLC will determine if the FMS accessory has a warrantable defect, and if so, will repair or replace the item and return it to the sender without charge. The decision to repair or replace said item is solely the prerogative of FMS Solutions, LLC.

**Note:** Police motors can operate in a very rough environment since police motors are a "tool". They can be dropped, knocked-over, etc. without concern as the officer has a job to do and determines what is necessary at any given moment. Warranty is for defects in materials or workmanship. Therefore, the ability of an item to become broken or damaged does not mean it is warranty ... it just means it is broken or damaged and in need of repair or replacement. No manufacturer warrants their products to be indestructible. Any questions should be directed to info@fmsaccessories.com.