INSTALLATION INSTRUCTIONS
EM-MFLX132-FT FIELD TUNABLE Flex "X"-NUT®"
132-1000 MHz

Congratulations on your selection of another quality antenna product from E/M Wave.
E/M Wave is committed to continually provide the greatest antenna VALUE for your wireless applications.

Please read instructions carefully before installing and tuning antenna.

1. Attach Antenna NMO Base to NMO mount (sold separately) with firm hand torque.
2. Refer to Table 1. Determine desired frequency and "W" length. **IMPORTANT: Add 8mm (5/16") to the "W" Length** to achieve required overall dimension to secure the whip with the set screws.
3. **Note:** Vehicle ground plane variations will affect final tuned length and VSWR match. Always make first cut longer than required. The tuned length "W" is indicated below in Fig. 1.
4. Loosen the whip from the adapter using a 1/16" hex wrench.
5. Measure the required length "W" as shown in Figure 1. **Add 8mm (5/16")** for total cut length.
6. During the tuning process, attach the whip to the adapter and secure using 1/16" hex wrench.
7. Verify that reflected power is minimized for best performance at desired frequency using VSWR meter or similar measurement device. Frequency tuning is best achieved by cutting the whip longer than specified, then begin to trim in small incremental cuts until desired frequency match is verified.
8. Secure whip to the adapter with both set screws, applying firm torque with hex wrench.

Automatic Car Wash Feature – Protect the NMO vehicle mount by **leaving the NMO base attached to the NMO mount** and **remove the whip and adapter only**. See Figure 1. Before re-installing the adapter, wipe the NMO Base stud dry with a clean cloth. Attach adapter to the NMO Base with firm hand torque.

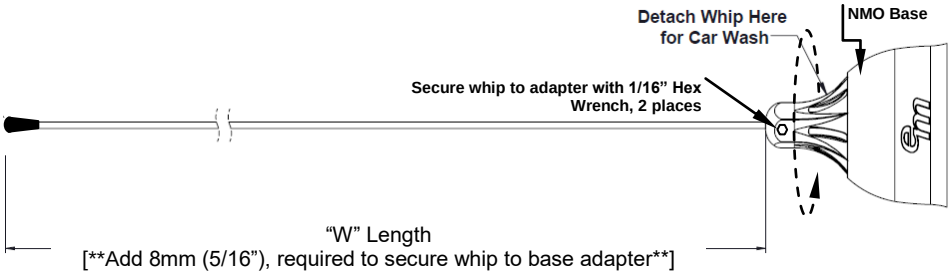

Figure 1

IMPORTANT: Add 8mm (5/16") to the "W" length in Table 1 and begin the tuning process with extra length before fine tuning the whip to the desired frequency. This is especially important at VHF frequencies where vehicle ground plane size, coaxial cable and variations from mount locations will impact the final center frequency and bandwidth. Interpolation can be used for frequencies not listed in the table.

Frequency MHz	"W" Length inch	(mm)
132	20-3/16	(512)
136	19-7/16	(493)
138	19-1/16	(484)
140	18-3/4	(475)
142	18-1/4	(463)
146	17-7/8	(443)
155	16-5/8	(423)
168	15-1/4	(386)

Frequency MHz	"W" Length inch	(mm)
222	11-1/4	(286)
245	9-7/8	(252)
418	5-7/16	(138)
460	4-13/16	(122)
480	4-5/8	(117)
520	4	(102)
746-894	2-5/16	(59)
890-960	1-7/8	(47)
950-1050	1-3/4	(45)

Table 1. (Add 8mm (5/16") to whip "W' length for adapter insertion.)