



## Flexi-Whip Antenna Installation Considerations Window Clip, Field Tunable, with Flexible Mast, 136MHz-1GHz

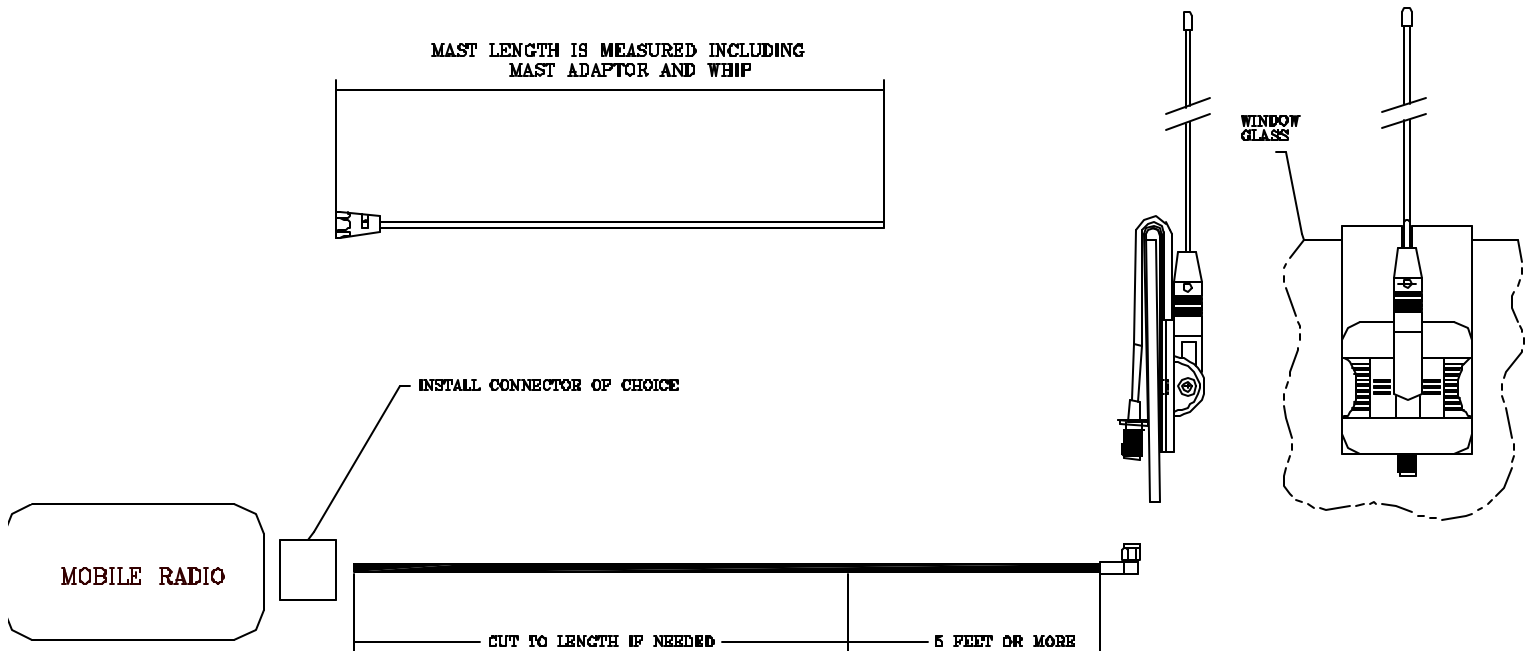
MODEL NUMBER: WCLP-FT-NITI

### VERIFY:

1. **Parts List:** The package includes an antenna-clip assembly, 17' cable kit with 90° connector already installed, cap and a connector for the two-way radio. Use only the components supplied with the antenna system.
2. **Frequency and Bandwidth:** The frequency is determined by mast length. The bandwidth varies depending on the frequency. Please refer to cutting chart included.

### INSTALLATION:

1. **Placement:** Select a desired location for the antenna; ideally it should be mounted on a rear door near the hinge. Placing the unit near the hinge will allow for the least amount of cable left hanging in the doorway while opening and closing.
2. **How to install:** Open window 6" and slide window clip over door window glass until seated properly to the top of glass. Close window, *be careful to watch for obstructions*.



3. **Run Cable:** The cable kit has a 90° connector already installed. Position that connector so that the feedline cable is running in the correct direction, depending on the location of the two-way radio. *Be careful not to tear the cable sheath when pulling it through sharp body panels. Should a cut appear in the cable's sheath, cover it with several layers of a high quality electrical tape.*
4. **Electromagnetic interference:** Do not coil feedline cable. Wind the cable upon itself or cut it rather than coiling it. Do not tape or secure feedline to data or vehicle cables during installation.



5. **Cable Cutting:** If preferred, cut the feedline cable to the length required to reach the transmitter leaving a minimum of at least 5 feet (see above Trunk Lip Mount Antenna diagram).
6. **Install Connectors:** Refer to Cable Stripping Dimensions diagram.
7. **Mast Cap:** If mast had to be cut to frequency in the field, STI-CO recommends using epoxy to secure the mast cap. Note: If the antenna has been cut to frequency in the factory the cap will already be epoxied.

## TESTING:

Installation testing if desired, must take place at the transmitter side of the feedline. Make sure all the doors, hood, and trunk are closed while performing tests.

1. **Reflected Power:** When measuring reflected power using a wattmeter, you can expect up to a maximum of 11%. If results are greater than 11%, recheck for proper grounding.
2. **SWR:** A measurement of SWR (**S**tanding **W**ave **R**atio) should yield better than 2:1. If greater than 2:1, recheck for proper grounding.
3. **Continuity:** A test of continuity between the center pin and ground for this antenna will show as an open. This will ensure that the cable connectors and cables have the proper continuity.



## WCLP-FT-NITI

CTR. FREQUENCY (MHz)	BANDWIDTH (MHz) VSWR <2:1	LOW FREQUENCY (MHz)	HIGH FREQUENCY (MHz)	MAST LENGTH (INCHES)*
136	10.5	132.5	143.0	22.4
140	10.0	135.0	145.0	21.8
145	7.5	139.5	147.0	21.0
150	14.5	143.5	158.0	20.5
155	8.0	152.0	160.0	20.1
160	15.5	153.0	168.5	19.6
165	16.0	158.0	174.0	18.8
170	20.5	163.0	183.5	18.1
175	18.5	169.5	188.0	17.3
180	18.5	169.5	188.0	17.3
185	19.0	178.0	197.0	16.8
190	19.0	181.5	200.5	16.3
195	24.5	185.0	209.5	15.8
200	25.0	188.0	213.0	15.4
220	25.5	208.0	233.5	14.0
240	28.0	228.5	256.5	12.4
260	35.0	241.5	276.5	11.7
280	31.0	271.5	302.5	10.6
300	31.5	282.5	314.0	9.9
350	37.0	332.0	369.0	8.6
400	42.0	383.0	425.0	7.3
450	74.0	420.0	494.0	6.4
500	83.0	456.0	539.0	5.8
600	35.0	585.0	620.0	5.0
700	111.0	666.0	777.0	4.1
800	229.0	698.0	927.0	3.6
900	150.0	835.5	985.5	3.2
1GHz	159.5	934.5	1094.0	2.7

\*Cut masts with threaded adaptor attached.

**Note:** You may want to save excess mast material for possible future use.