

## OVERVIEW

This document is intended to be utilized as a user's guide for mounting the Digitex xWave - Digital Accelerometer Unit ONLY. Digitex produces a variety of Accelerometer products requiring alternate mounting procedures therefore verify your installation products to insure you are using the appropriate mounting procedures. Digitex is committed to ensuring a successful product installation. If further assistance is needed for installation purposes, contact Support at [support@digitex.me](mailto:support@digitex.me) or [www.digitexsystems.com](http://www.digitexsystems.com).

## DIGITEX XWAVE PRE-INSTALL INSPECTION

Carefully remove the xWave from its shipping package. Verify all hardware is accounted for. Perform a visual inspection of mounting plate, leveling screws, nuts and bubble level for signs of damage. The sensor box should appear sealed; no signs of dents or gouging, adjusting screws, hex nuts and the bubble level should appear undamaged. Even though Digitex takes great care in packaging its products, shipment damage can still occur. If a problem is detected during the inspection, note the condition of the shipping container, contact the freight forwarder and Digitex Systems, as soon as possible to resolve any problems.

|                    |                                              |
|--------------------|----------------------------------------------|
| Hardware included: | 1(one) mounting plate attached to sensor box |
|                    | 3(three) adjustment screws                   |
|                    | 3(three) hex nuts                            |
|                    | 1(one) bubble level                          |
|                    | 1(one) concrete strike anchor                |

### CAUTION!

**DROPPING THE XWAVE ONTO ANY HARDENED SURFACE CAN PERMANENTLY DAMAGE THE INTERNAL COMPONENTS. HANDLE PRODUCT WITH CARE TO PREVENT COSTLY DAMAGE.**

### NOTE!

**IF COMPONENT FAILURE IS FOUND TO BE CAUSED BY IMPROPER INSTALLATION/MOUNTING DIGITEX RESERVES THE RIGHT TO DENY LIABILITY FOR REPAIR OR REPLACEMENT COST.**

## REQUIREMENTS FOR INSTALLATION

Listed below are tools, supplies and equipment needed to have a successful installation of the Digitex xWave Digital Accelerometer. These instructions are meant for typical installation assuming all concrete pads and structures have been finished. Check with on-site contractors for limitations or restrictions on mounting surfaces.

## REQUIRED TOOLS AND SUPPLIES

- AC or battery powered Percussion/Hammer drill 3/8" or larger chuck
- Tape measure or ruler
- Masking tape or tubing (to set drill bit depth)
- 1/8" Allen wrench or hex ball driver
- 7/16" open ended wrench or ratchet and 7/16" socket
- Standard hammer
- Safety glasses
- 1/4" masonry drill bit for percussion/hammer drill
- Small hose or straw (to clean drilled hole of debris)

## MOUNTING XWAVE

Use all Digitex provided mounting hardware to attach sensor to mounting surface. Improper mounting can cause damage to internal components. Mounting plate is a circular aluminum plate with single anchor point, three leveling bolts, and integrated bubble level. Mounting plate has a diameter of 160 mm.

**NOTE:** Follow all manufacture precautions and guidelines when using power tools.

**Safety glasses are highly recommended when using any power tool.**

1. Locate the mounting area for xWave, keeping in mind the mounting plate size and workspace needed to level and adjust the sensor when mounting in small or confined spaces.

Tip: Applying tape or tubing 1- 1/4" up from drill bit tip will provide a visual guide to drilled depth. Take precautions to ensure that you are drilling in a vertical manner only.

2. Using a 1/4" masonry drill bit, drill to a depth of 1- 1/4"  $\pm$  1/8 inch using a percussion or hammer drill. Take caution not to exceed the needed depth, this will adversely affect anchor install height and render the drilled hole unusable. See Figure 1

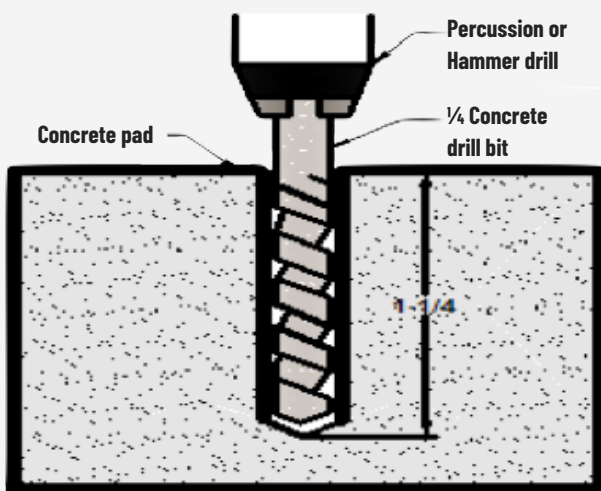


Figure 1 - Drilling xWave mounting anchor hole

3. Clean debris from drilled hole. (Blowing through a small hose or straw will clear all debris from the hole.) Use a pencil or narrow screw driver to verify drilled hole depth 1- 1/4"  $\pm$  1/8 inch prior to installing anchor.

4. Insert strike anchor into hole drilled in previous step. You may need to gently tap the top of the anchor with a hammer in order to get the anchor to bottom out in the hole.

5. The anchor is now in position and should extend above the concrete surface approximately 1/2 inch; use a ruler or tape measure to confirm.

6. To lock the anchor in place, (see Figure 2) take the hammer and strike the anchors top with several sharp and square blows. The anchor should recess into the concrete approximately 1/8 inch. Grab a hold of the anchors exposed threads and attempt to pull up on the anchor. The set anchor should be tightly secured and should not be withdrawn from the surface when pulled upon.

**NOTE:** If anchor fails to lock into place and can be pulled from the surface discard defective anchor. Contact Digitex for a replacement anchor or visit your local hardware store for a comparable replacement anchor. Repeat steps above starting with step 4 to install and set a new anchor.

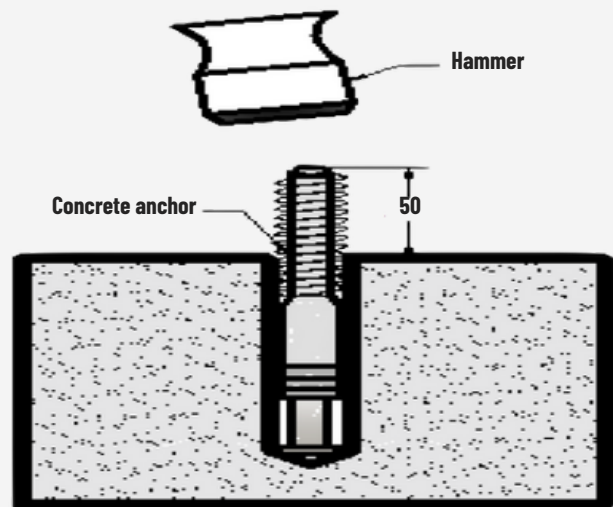


Figure 2 - Drilling xWave mounting anchor hole

7. Check the xWave mounting plate and confirm that leveling screws are extending approximately 1/4 inch from the bottom surface of the mounting plate.

8. Lower the xWave into place over installed anchor, match male threads from anchor with female threads at bottom of mounting plate. Rotate mounting plate clockwise to mate anchor and plate together, see Figure 3 and Figure 4 ).

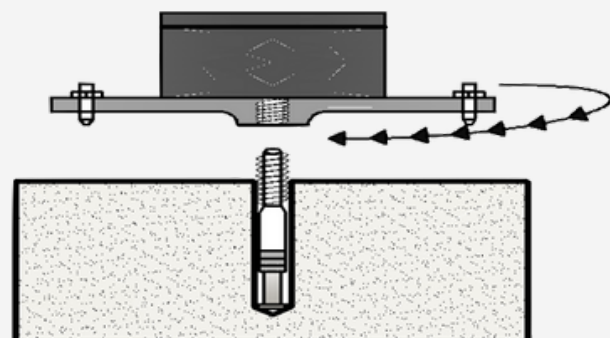


Figure 3 - Mating plate and anchor

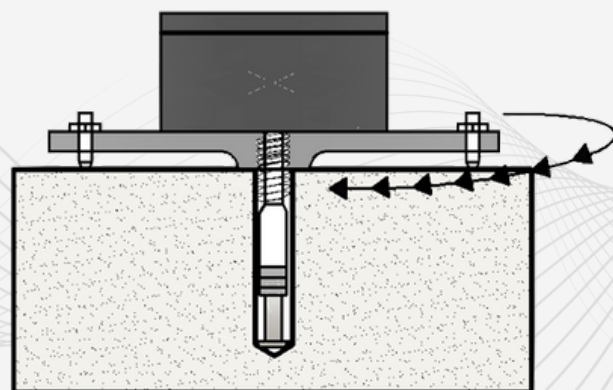


Figure 4 - Fully mated mounting plate

9. Continue rotating mounting plate until the 3 adjustment screws make light contact with the mounting surface. Using the 1/8-inch Allen wrench raise or lower the adjustment screws allowing the plate to rotate to orient the X, Y and Z axis. Now that the mounting plate is properly oriented, locate the circular bubble attached to the mounting plate and utilize it as a tool to assist with leveling the mounting plate; adjust the set screws up or down to move the bubble into the center black circle, see Figure 5.



**Figure 5 – Levelled mounting plate**

10. Now that all the adjustments have been made use the 1/8 Allen wrench to hold the adjustment screw in place while tightening the 7/16 hex nut to 20-25-inch pounds. Repeat on all remaining adjustment screws and nuts.

11. Installation is complete.

## SUPPORT

All customer support requests are handled via our online help desk. To generate a help desk ticket, read FAQs or view video tutorials, please visit our customer support website located at [www.digitexsystems.com](http://www.digitexsystems.com) or send email at [support@digitex.me](mailto:support@digitex.me).