

ACT350 Quick Guide

Intended Use

Your weighing transmitter is used for weighing. Use the scale exclusively for this purpose. Any other type of use and operation beyond the limits of technical specifications without written consent from METTLER TOLEDO is considered as not intended.

It is essential for the buyer to closely observe the installation information, product and system manuals, operating instructions and other documentation and specifications. METTLER TOLEDO's warranty and any liability are expressly excluded for damages caused by non-compliance with the applicable manuals.

Documentation

For further details on system configuration and operation, refer to the documents provided on www.mt.com/ind-act350-downloads.

Safety Warnings

READ the Installation Guide on the enclosed ACT350 Transmitter Resource CD BEFORE operating or servicing this equipment, FOLLOW all instructions carefully, and SAVE all documentation for future reference.

THE ACT350 IS INTENDED TO BE USED FOR PROCESS CONTROL AND IS NOT APPROVED AS A SAFETY COMPONENT. WHEN USED AS A COMPONENT PART OF A SYSTEM, ANY SAFETY CIRCUITS MUST BE INDEPENDENT OF THE ACT350 AND REMOVE POWER FROM THE ACT350 OUTPUTS IN THE EVENT OF AN EMERGENCY STOP OR EMERGENCY POWER DOWN.

ONLY USE RECOMMENDED 12-24 VDC POWER SUPPLY APPROVED AS NEC Class 2 OR RATED AS LIMITED POWER PER IEC60950-1.

WHEN THIS EQUIPMENT IS INCLUDED AS A COMPONENT PART OF A SYSTEM, THE RESULTING DESIGN MUST BE REVIEWED BY QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF ALL COMPONENTS IN THE SYSTEM AND THE POTENTIAL HAZARDS INVOLVED. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

ONLY THE COMPONENTS SPECIFIED ON THE ACT350 DOCUMENTATION MEDIA CAN BE USED IN THIS TRANSMITTER. ALL EQUIPMENT MUST BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS DETAILED IN THE INSTALLATION MANUAL. INCORRECT OR SUBSTITUTE COMPONENTS AND/OR DEVIATION FROM THESE INSTRUCTIONS CAN IMPAIR THE SAFETY OF THE TRANSMITTER AND COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

BEFORE CONNECTING/DISCONNECTING ANY INTERNAL OR EXTERNAL ELECTRONIC COMPONENTS, LOAD CELLS, HARNESSES OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS BEFORE ANY CONNECTIONS OR DISCONNECTIONS ARE MADE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

NOT ALL VERSIONS OF THE ACT350 ARE DESIGNED FOR USE IN HAZARDOUS (EXPLOSIVE) AREAS. REFER TO THE DATA PLATE OF THE ACT350 TO DETERMINE IF A SPECIFIC TRANSMITTER IS APPROVED FOR USE IN AN AREA CLASSIFIED AS HAZARDOUS BECAUSE OF COMBUSTIBLE OR EXPLOSIVE ATMOSPHERES.

THE ACT350 IS NOT INTRINSICALLY SAFE! DO NOT USE IN HAZARDOUS AREAS CLASSIFIED AS DIVISION 1, ZONE 0, ZONE 20, ZONE 1 OR ZONE 21 BECAUSE OF COMBUSTIBLE OR EXPLOSIVE ATMOSPHERES.

INSTALLATION AND ANY SERVICE ON THIS EQUIPMENT MUST BE DONE ONLY AFTER THE AREA IS SECURED AS NON-HAZARDOUS BY THE RESPONSIBLE PERSON ON-SITE AUTHORIZED TO DO SO.

Front Panel and Display Features



Up/Down Arrow Keys Used for data entry

Enter Enter key/Zero scale/Enter Operator menu

Left Arrow Key Switch position/Return


Weight Display	000000	Displays weight information
~		Motion, weight is currently changing
>0<		Weight in center of zero range
X10		In expanded mode
B/G		Gross Mode
KG/G/LB		Weight Display Unit
SCL		Scales status: On okay, flashing indicates scale error
PWR		Power status: On okay, Off error
NW		Network (Fieldbus) status: On okay, flashing indicated network error
DEV		Device status: On okay, flashing contact service
NW/NW1		Green: Link, Yellow: Active
NW2		Green: Link, Yellow: Active


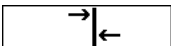

Bottom DIP Switches




Legal-for-trade switch	Reset switch	Description
Switch 1	Switch 2	
OFF	OFF	Normal state
ON	OFF	Legal-for-trade mode, calibration data protection
OFF	ON	Master Reset of all data during transmitter power-up
ON	ON	Reset (not calibration data) during transmitter power-up

Keypad Operator Menu Structure

The operator setup functionality via keypad is limited. Full configuration is possible via PC software Setup+.

Enter operator menu: Long Press 



<p>Information</p> 	<p>Model ACT350 Analog</p> <p>Terminal SN #####</p> <p>S/W Version #.##.#####.##</p> <p>PLC Fieldbus #.#.##.#</p> <p>Device Name</p> <p>IP Address ###.###.###.###</p> <p>MAC Address ##:##:##:##:##:##</p> <p>Node Address (Profibus DP)</p>
<p>On/Off X10 resolution</p> <p>x10</p>	<p>Switch ON/OFF X10 resolution, leave menu</p>
<p>Set Comperators</p> 	<p>Limit 1..5</p> <p>Input value with keypad</p>
<p>Calibration</p> 	<p>Geo Input Geo Code</p> <p>Linearity Input - None, 3 point, 4 point, 5 point</p> <p>Adjust Zero Empty Scale, then Press Enter</p> <p>Adjust Span Add test weight to scale Input test weight value, then press Enter Continue if linearization selected</p> <p>Step Adjust Input test weight Add test weight to scale, press Enter Remove test weight Fill load to former level Add test weight to scale, press Enter Finish with Left-Arrow key</p> <p>CalFree – Weightless Calibration Input total load cell capacity Input Unit of cell capacity Input Rated Cell Output, default 2.0000 mV/V</p>

Display Error Messages 	List of latest error messages	
Language Selection 	Language	Select English or Chinese
Setup 	Capacity & Incr.	Input scale unit Input scales capacity Input Scale increment
	Calibration	Input Geo .. CalFree – repeated from calibration before
	PLC	Assignment - SAI Input 1-Block/2-Block Format Input Acyclic Disable, Enable Input Byte Order – Automatic, Standard, Byte&Word Swap EtherNet/IP <ul style="list-style-type: none"> • MAC Address • Input DHCP – Disable, Enable • Input IP Address • Input Subnet Mask • Input Gate Way ProfiNet <ul style="list-style-type: none"> • Input Device Name • Input IP Address • Input Subnet Mask • Input Gate Way ProfiBus DP <ul style="list-style-type: none"> • Input Node Address
	Serial	Input Assignment – None, Remote Display Input Baudrate 300...115200 Input Data Bit 7 or 8 Input Parity None, Odd, Even Perform Serial Test

Errors Messages Shown on Display

Error value	ACT350 Display	Description	Action
002	"Local calib. in process" "Setup+ calib. in process"	Calibration in process	Wait for calibration to finish
005	"NW Module init.fail"	SAL initialize fail	Cycle power; call service if issue persists
006	"NW connection disconnected"	Lose connection to network	Check cable or connector
009	"Board info. err"	Hardware information error	Cycle power; call service if issue persists
010	"Calib. err"	Calibration data error; data is lost	Perform master reset Re-calibrate
011	"Scale err"	Scale data error; data is lost	Perform master reset Perform setup for scale
012	"Term. err"	Terminal (Transmitter) data error; data is lost	Perform master reset Perform setup for terminal
013	"APP. err"	Application data error; block data is lost	Perform master reset Perform setup for application
014	"NW. err"	Network data error; data is lost	Perform master reset Perform setup for network
015	"Maint. err"	Maintenance data error; data is lost	Perform master reset Perform setup for maintenance
016	"Analog system A/D fail"	Lost analog signal; abnormal functioning of scale	Call service
018	"Zero failed Motion"	Scale in motion when Zero attempted	Zero when scale is stable
019	"Zero failed net mode"	Scale in net mode when Zero attempted	Clear tare before zeroing
020	"Zero failed out of range"	Weight out of Zero range	Unload scale and zero
021	"Zero failed Zero disabled"	Zero attempted when function disabled in setup	Enable Zero function in Setup
022	"Tare failed Motion"	Tare failed as scale is in motion	Tare when scale is stable
027	"Tare failed Not rounded value"	Preset tare value not in display increment size	The preset tare value must be rounded to the same increment
028	"Tare failed Value too small"	Tare value too small	The preset tare value must be minimum of 1 display increment
029	"Tare failed Zero not captured"	Power-up zero not captured; Zero not captured after power cycle (with Zero capture enabled) then tare was attempted	Disable zero capture at power-up or unload scale and power-up again, then tare
030	"Tare Failed, Scale Over capacity"	Tare was attempted while scale was over capacity	Remove weight and tare within weighing range
031	"Tare failed Negative value"	Tare value under zero	The preset tare value must be positive
035	"Analog saturation"	A/D converter in overload	Reprogram Scale Capacity

Common Errors Shown on Display

Overcapacity	Weight overload. The weight display shows blanked condition:	
Undercapacity	Weight underload. The weight display shows blank condition:	
Zero failed out of range	Zero operation cannot be executed as out of allowed range. Unload scale.	

Cleaning the Transmitter

Use a soft, clean cloth and mild glass cleaner. Do not spray cleaner directly onto transmitter. **Do not use** industrial solvents such as acetone.

Disposal of Transmitter/WEEE Information



In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Thank you for your contribution to environmental protection.

www.mt.com

For more information

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