



Kingfisher Company, inc.

# STAR SOFTWARE DEFINED RADIO TRANSMITTER

## Features:

- Box Number and Test Time can be easily programmed by a laptop computer or Kingfisher Programming Unit. (SMPU)
- Can transmit Emergency Response Signals such as Fire, Medical, Supervisory, Police, etc.
- **STAR** can be connected to standard fire panels and city master boxes
- FM approved
- Meets and exceeds NFPA 72 and 1221 standards
- F.C.C. Certificated—1W max output with 60-sec inter-transmit lockout
- NEMA-1 and NEMA-3R Cabinet
- Automatic Self-Testing
- Includes Kingfisher 211 lock
- Capable of operating on 100 to 120VAC power, without any modification.
- Optional keyed-alike locks - Cat 30, 702, A126, or user-specific
- Meets FCC and NTIA narrowband requirements (6kHz)
- 0-24 hr programmable self test interval



**STAR** Software Defined Radio Transmitter

## Description:

The **STAR** Software Defined Radio Fire Alarm transmitter, is a self-contained Auxiliary Signaling Device that responds to contact closures from standard fire panels, emergency switch devices, supervisory switch devices and auxiliary switch devices to generate an alarm message in a standard Kingfisher KFRA-C receiving processing unit format and transmits that message by radio. The **STAR** is contained in a NEMA-1 cabinet and derives power from a 120VAC circuit.

## Operation:

There are two basic units that make up the **STAR** subsystem. An interface circuit controls the power subsystem and monitors up to six Class B monitored inputs. It applies debounce logic to signals on these inputs to prevent responding to external noise, such as that due to lightning strikes in the area. When an alarm is warranted, the interface triggers the radio transmitter control circuitry to initiate the transmission of the alarm message. Input zones are independently monitored for fault conditions.

The radio circuitry monitors input signals and builds an alarm message that it transmits on a pre-selected VHF radio frequency channel. Several alarm message formats that conform to an existing Kingfisher messaging standard can be selected. Message format specifics are selected by the alarm technician using a laptop computer or the Kingfisher Cordless Programmer app (Android or iOS). When used with the KCi MCR2 receiver, up to 21 standard event types and unlimited user defined event types are supported. Per FCC requirements, the STAR transmitter employs a 60-second lockout after the completion of each full round cycle and limits output power to 1W.

## Specifications:

### Alarm Interface:

Monitored Dry Contact Inputs:	6, independently supervised
Monitored Local Energy Input:	1
Input Termination Resistance:	10 k $\Omega$
Dry Contact Trouble Output:	1

### Power Sources:

AC Voltage Range:	85-135 VAC
AC Frequency:	50-60 Hz
AC Current:	Standby 0.4 Amps @115 VAC @ 60Hz ( Model 99952 only) Maximum-fused at 1amp
Backup Battery Voltage:	12.6 V nominal
Backup Battery Capacity:	12 Volt, 2.5 Ah or the 5 Ah sizes will fit in enclosure (2.5 ah battery provides 72 hours standby and 15 min alarm at room temperature)

### Radio:

Frequency Range:	72 MHz through 174 MHz
Modulation:	AM
Power Source:	12-15 VDC
Power Limitation:	Transmitter output 1 watt maximum
Bandwidth:	Meets FCC and NTIA narrowband requirements

### Environmental:

Temperature Range (Operational):	-40°C (-40°F) through 60°C (140°F)
Temperature Range (Storage):	-40°C (-40°F) through 125°C (257°F)
Humidity:	<99% non-condensing

### Dimension:

NEMA 1:	18" H x 12" W x 3.3" D
NEMA 3R:	26" H x 20" W x 6.6" D

### Programmable Parameters

Box Number	Zone Enable / Disable
Number of Rounds	21 Standard + User Defined Event Types
Address Digits	Self-Test Time
Function Digits	Antenna Test
AC trouble delay (0—6 hrs)	Return-to-Normal Enable / Disable
Latching / Non-Latching	Time between rounds
NO / NC Zone Type	Time between messages (FCC 60 sec)
Self-Test Interval (1 min—24 hrs)	Power Out Attenuation Level

**Kingfisher Company, inc.** 81 Old Ferry Road - Lowell, MA 01854  
Phone: 978-596-0214 Fax: 978-596-0217 [www.kfci.com](http://www.kfci.com)

## ORDERING INFORMATION

KCi #	Model #	Description
99952	STAR	STAR Transmitter—6 zone—Low or High Band, NEMA 1 Cabinet, 211 Key & Lock
99952-3R	STAR3R	STAR Transmitter—6 zone—Low or High Band, NEMA 3R Cabinet, 211 Key & Lock
79952		STAR Transmitter Subplate Replacement
97953	FPF	Factory Programmed Frequency—Required at time of order (no charge)
<b>Options</b>		
99954	FMK	Flush Mount Kit
66955	ZDS/6	Zone Bypass Module, includes a disconnect switch for each of (6) six zones
97960	SMPU	KFRA-C/STAR Maintenance / Programmer Unit
91954	KCI	Kingfisher Cordless Interface
99952-DTS		Specification Data Sheet

### Installations:

- All installations shall comply with the Kingfisher Antenna Installation manual part # 75092

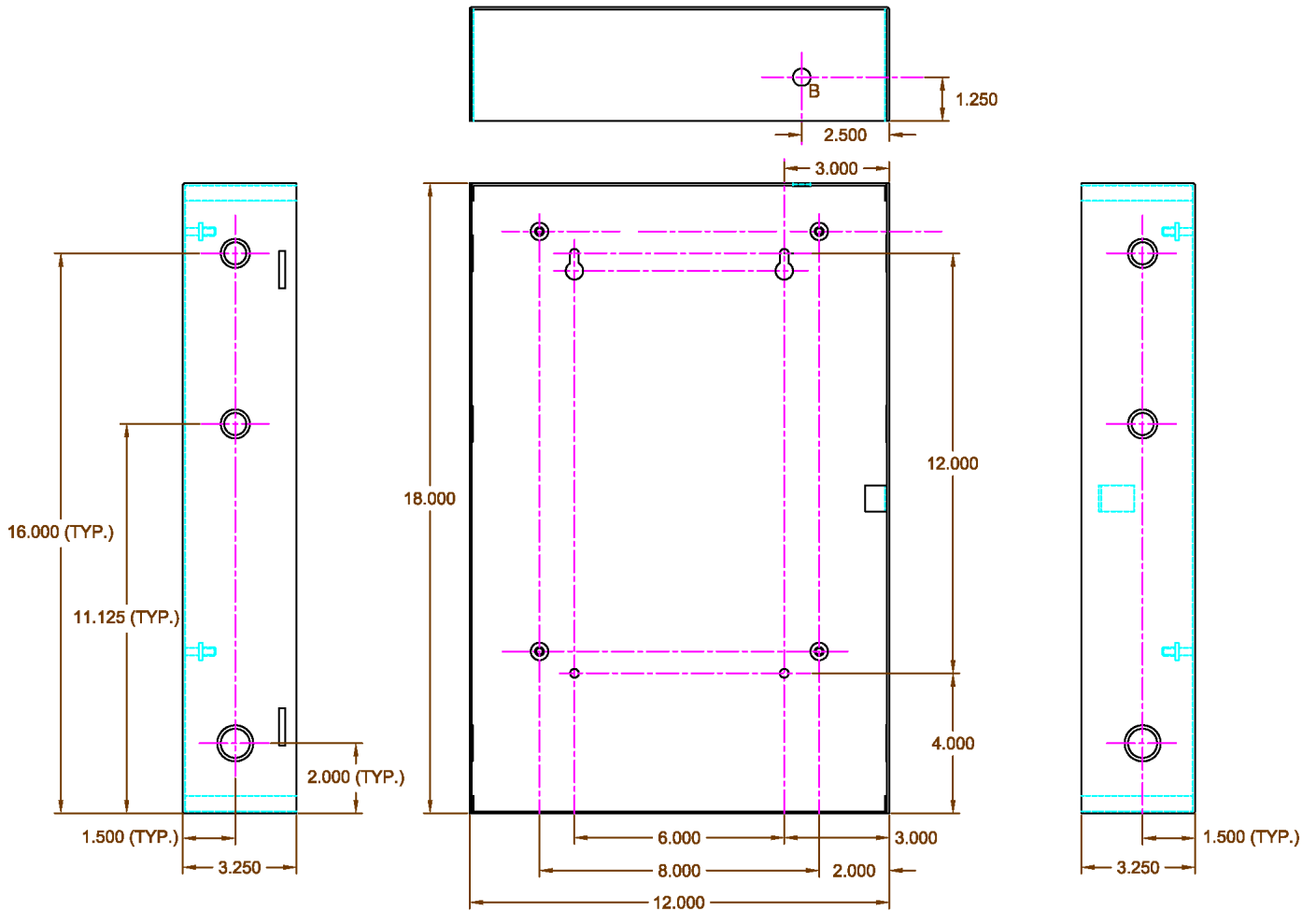
Kingfisher Company, inc., products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Kingfisher Company, inc., standard terms and conditions

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# DRAWINGS OR DIAGRAMS

## Dimensions:



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