



## Fusion Splicing



Bluetooth®

90R

### Fujikura 90R Fusion Splicer

The Fujikura 90R is the mass fusion splicer workhorse of the splicing world. As data demand continues to rise, the solution to handle the increased traffic is to increase fiber counts. As a result, fiber counts being utilized in enterprise data centers, campus, and metro networks have grown enough to make single fiber splicing too costly and timely. High density cabling made possible by SpiderWeb Ribbon® (SWR®) and others like it are spurring ribbon splicing activity in places that have traditionally used loose fiber. The 90R is the answer to these changes in splicing demand. With automated splice start, tube heater, wind protector, cleave tracking, and blade rotations for up to 2 cleavers at a time, this splicer frees up operator time for other fiber preparation steps. New to the 90R, you can keep your splicer in the field longer with field replaceable V-grooves. When V-grooves can no longer be cleaned after extended use, or are accidentally damaged, you can resume splicing in minutes by installing the spare set included with your 90R kit.



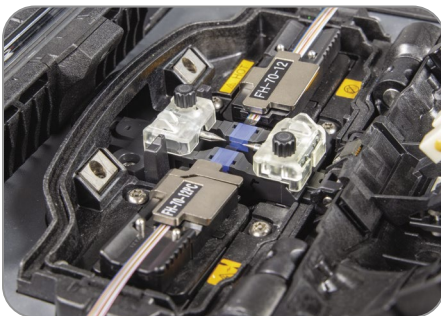
In Work Tray

#### Features

- Cleave tracking and upkeep with wireless communication
- Automated wind protector, tube heater and splice operation
- User replaceable v-grooves
- 200  $\mu$ m and 250  $\mu$ m SWR universal ribbon prep accessories
- Graphical User Interface with 5.0" Touchscreen
- PC software and 90R manual downloaded from splicer
- Multi-function transit case with integrated workstation

#### Applications

- Data Center cable installation
- High fiber count metro and campus networks
- Long-haul network installs and repair
- Trunk cable repair with Splice-on MPOs
- Ribbon splicing high density cables with 200  $\mu$ m loose fiber



Wind Protector Open

## Fujikura 90R Fusion Splicer

### Ordering Information

DESCRIPTION	AFL NO.
<b>90R Fusion Splicer (machine only)</b> <b>Includes:</b> BTR-15 Battery, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, Work Tray, CC-39 Transit Case with Carrying Strap and Two Year Warranty	<a href="#">S017509</a>
<b>90R Fusion Splicer Kit (with cleaver &amp; thermal stripper)</b> <b>Includes:</b> BTR-15 Battery, CT50 Cleaver, RS03 Stripper, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case with Carrying Strap and Two Year Warranty	<a href="#">S017511</a>
<b>90R Fusion Splicer without Bluetooth (machine only)</b> <b>Includes:</b> BTR-15 Battery, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case with Carrying Strap and Two Year Warranty	<a href="#">S017540</a>
<b>90R Fusion Splicer Kit without Bluetooth (with cleaver &amp; thermal stripper)</b> <b>Includes:</b> BTR-15 Battery, CT50 Cleaver, RS01 Stripper, ADC-20 AC Adapter, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair) with spare V-Grooves (VG12-01), FH-70-12 Fiber Holders (pair), USB Cable, Alcohol Dispenser, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Video Instruction Manual, CC-39 Transit Case with Carrying Strap and Two Year Warranty	<a href="#">S017510</a>
One Year Extended Warranty (must be ordered at time of Splicer purchase)	<a href="#">S012996</a>
Two Year Extended Warranty (must be ordered at time of Splicer purchase)	<a href="#">S013000</a>

### Recommended Products for the 90R

DESCRIPTION	AFL NO.
<b>Cleavers and Strippers</b>	
CT50 Cleaver	<a href="#">S017030</a>
RS01 Thermal Stripper	<a href="#">S016815</a>
RS02 Thermal Stripper	<a href="#">S016816</a>
RS03 Thermal Stripper	<a href="#">S016817</a>
<b>Fiber Holders (pair)</b>	
FH-70-2	<a href="#">S017114</a>
FH-70-4	<a href="#">S017115</a>
FH-70-6	<a href="#">S017116</a>
FH-70-8	<a href="#">S017117</a>
FH-70-10	<a href="#">S017118</a>
FH-70-12	<a href="#">S017119</a>
FH-70-12PC (pitch conversion holder for 200 µm loose fibers)	<a href="#">S017464</a>
FH-70-12-200 (200 µm pitch ribbons)	<a href="#">S017681</a>
FH-70-16	<a href="#">S017533</a>
FH-70-250 (250 µm coated single fiber)	<a href="#">S017111</a>
FH-70-900 (900 µm jacketed single fiber)	<a href="#">S017113</a>
FH-60-LT900 (Loose buffer 900 µm fiber)	<a href="#">S015181</a>
<b>FUSEConnect® Accessories</b>	
FH-FC-20 (900 µm within 2.0 mm sheathing) (each)	<a href="#">S014696</a>
FH-FC-30 (900 µm within 3.0 mm sheathing) (pair)	<a href="#">S014695</a>
FH-FC-900 (900 µm cable) (each)	<a href="#">S014697</a>
CLAMP-FC-2000 (pair)	<a href="#">S014705</a>
<b>Batteries and Power Cords</b>	
ADC-20 AC Adapter	<a href="#">S017513</a>
BTR-15 Battery	<a href="#">S017512</a>
DCC-11 splicer to ribbon stripper power cord	<a href="#">S013852</a>
DCC-20 Power Cord	<a href="#">S017527</a>
Connects ADC-20 to cigarette lighter socket	
DCC-21 Power Cord	<a href="#">S017528</a>
Connects ADC-20 to power source via alligator clips	
ACC-14 AC Power Cord	<a href="#">S014536</a>

DESCRIPTION	AFL NO.
<b>Miscellaneous</b>	
SS01 Single fiber stripper (1 hole)	<a href="#">S017099</a>
ELCT2-16B Electrodes	<a href="#">S017103</a>
Portable Tripod Workstation (see product profile for more detail)	<a href="#">S014773</a>
ASW-02 Splicing Workstation (see product profile for more detail)	<a href="#">S010532</a>
WT-09R Work Tray Right	<a href="#">S017515</a>
WT-09L Work Tray Left	<a href="#">S017516</a>
JP-09 Work Tray J-Plate	<a href="#">S017517</a>
JP-10 J-Plate (Cooling tray attaches to splicer)	<a href="#">S017522</a>
JP-10-FC J-Plate with Fiber Clamps	<a href="#">S017523</a>
TS-03 Tripod Screw (90 Series)	<a href="#">S017524</a>
ST-02 Fusion Splicer Strap	<a href="#">S017525</a>
CLAMP-DC-12 (Drop Cable clamp on work tray)	<a href="#">S017550</a>
FST-12 Fiber Separation Tool	<a href="#">S014012</a>
FAT-04 Fiber Arrangement Tool	<a href="#">S010212</a>
RT-02 Fiber Arrangement Tool	<a href="#">S017465</a>
VG12-01 12 fiber V-groove	<a href="#">S017548</a>
VG12-01-200 12 fiber V-groove (200µm pitch ribbons)	<a href="#">S017680</a>
VG04-01 4 fiber V-groove	<a href="#">S017551</a>
VG08-01 Spare 8 fiber V-grooves	<a href="#">S017508</a>
VG16-01 16 fiber V-groove	<a href="#">S017552</a>
FAA-03A Ribbon Forming Adhesive (4 oz. bottle)	<a href="#">S008720</a>
FAA-03A Ribbon Forming Adhesive (0.5 liter bottle)	<a href="#">S008622</a>
CC-39 Transit Case	<a href="#">S017514</a>
Splicer V-Groove Cleaning Kit	<a href="#">S014397</a>



#### Fiber Arrangement Tool

- Features an easy-to-use fiber arrangement method utilizing linear travel
- Includes a spare paste applicator



#### V-Groove Cleaning Kit

- Removes environmental contamination from the v-groove of the splicer
- Maintains performance and ensures fiber alignment

## Fujikura 90R Fusion Splicer

### Specifications

PARAMETER	VALUE	
Fiber Alignment Method	Self cladding alignment with melting surface tension	
Fiber Count Can Be Spliced	Up to 16 fiber ribbon	
Applicable Fiber	Fiber Type	Single mode optical fiber Multi mode optical fiber
	Cladding Dia.	Approx. 125 µm
Applicable Coating	Sheath Clamp	Coating shape : Refer to options Cleave length : 10mm
	Fiber Splice Performance	Splice Loss
ITU-T G.651 : Avg. 0.02 dB		
ITU-T G.653 : Avg. 0.08 dB		
ITU-T G.655 : Avg. 0.08 dB		
ITU-T G.657 : Avg. 0.05 dB		
Applicable Protection Sleeve	Splice Time	SM FAST mode : Avg. 14 to 15 sec. SM AUTO mode : Avg. 19 to 20 sec.
	Sleeve Type	Heat-shrinkable sleeve
Sleeve Heat Performance	Sleeve Length	Max. 66 mm
	Sleeve Dia.	Max. 6.0 mm before shrinking
	Heat Time	40 mm FP-05 mode : Avg. 38 to 40 sec. 40 mm FP-04T mode : Avg. 17 to 19 sec. Single 60 mm mode: Avg. 13 to 15 sec.
Fiber Tensile Test Force	Approx. 2.0 N	
Electrode Life	Approx. 1,500 splices	
Physical Description	Dimensions W	Approx. 170 mm without projection
	Dimensions D	Approx. 173 mm without projection
	Dimensions H	Approx. 150 mm without projection
	Weight	Approx. 2.6 kg including battery
Environmental Condition	Temperature	Operate : -10 to 50°C Storage : -40 to 80°C
	Humidity	Operate : 0 to 95% RH non-condensing Storage : 0 to 95% RH non-condensing
	Altitude	Max. 3,700 m
Ac Adaptor	Input	AC100 to 240 V, 50/60 Hz, Max. 1.5 A
Battery Pack	Type	Rechargeable Lithium Ion
	Output	Approx. DC14.4V / 6,380 mAh
	Capacity	Approx. 165 splice and heat cycles
	Temperature	Recharge : 0 to 30°C Storage : -20 to 30°C
	Battery Life	Approx. 500 recharge cycles
	Recharge Time	Approx. 5 – 8 hours from empty
Display	LCD Monitor	TFT 5 inches with touch screen
	Magnification	Approx. 20X : 12 Ribbon to 60X : Single
Illumination	V-Grooves	LED lamp
Interface	PC	USB2.0 Mini B type
	External Led Lamp	USB2.0 A type, Approx. DC5V, 500 mA
	Ribbon Stripper	Mini DIN 6 pin, DC12V, Max. 1A
	Wireless	Bluetooth 4.1 LE
Data Storage	Splice Mode	100 splice modes
	Heat Mode	30 heat modes
	Splice Result	10,000 splices
	Splice Image	100 images
Screw Hole For Tripod		1/4-20 UNC
Other Features	Automatic Functions	Splice mode select by fiber type analysis
		Discharge power calibration
		Wind protector : open/close
		Sheath clamp : open
		Heater lid : open/close
Reference Guide	Heater clamp : open/close	
	Video and PDF file stored in splicer	
	Electrode	Replaceable without tool